

components for pneumatic automation

Vesta's concept of Quality: a belief that we can always do things better and that resultant benefits for customers may strongly contribute to the success of the company.

Over 25 years of experience in production of pneumatic components leads Vesta to provide the market with very competitive and reliable solutions.

A whole team working next to you in order to grant the right answer.

componenti per l'automazione pneumatica

Il concetto di Qualità per Vesta consiste nella convinzione che è sempre possibile lavorare meglio, perchè solo la qualità percepita dal cliente è quella che accompagna il successo dell'azienda.

Con oltre 25 anni di esperienza nella progettazione e produzione di apparecchiature per l'automazione pneumatica, Vesta è in grado di offrire al mercato idee e soluzioni affidabili e competitive.

Una azienda al tuo fianco per garantire sempre la giusta risposta.



**Designed
TO YOUR NEEDS**





Tel. +39 0425.474.838
Fax +39 0425.474.670
www.vesta.it
info@vesta.it

Il nostro lavoro è rivolto verso clienti di ogni settore per sviluppare e fornire giuste soluzioni a prezzi competitivi.

Diamo voce alle tue richieste per sviluppare e fornire giuste soluzioni a prezzi competitivi.

5667 PLEF L'ALFA C-FVJC DCC SURXFWC VRFKFL ZLK RXL NCHZOHG DOI HSHLHOF LI RUGI W RIIHI L ZLGI D'ILA RI DFWXDV DOI L FRPSOH DVV(WPHI RI YD YFV

Valvole e cilindri al 100% concepiti e fabbricati in Italia con l'esperienza, la competenza e l'impegno dello staff Vesta.

DESIGN

I nostri ingegneri e tecnici si occupano di progettare e sviluppare sistemi e componenti per automazione. Investire in tecnici e strumenti selezionati ed innovativi.

Ricerca e sviluppo di sistemi e componenti per automazione. Investire in tecnici e strumenti selezionati ed innovativi.



31RGHJ KLJI SHIRLP LQ SURGHV PHDCV IR SLA DMFWLI W AKH FKRLF RI AKH EHV LQZ P'D'HLQV DCC W SHIRLP PDK CLQ RI KIKK SUHLVRL

Una gamma di prodotti ad elevate prestazioni ed alta affidabilità. Grande impegno nella scelta dei materiali e nella costanza e precisione delle lavorazioni.

MANUFACTURING

70VXLLQ KLK TXLQV SHGXFV PHDOV SHIRLP TXDOIDOI GLPHC VLRC WHV RI HDF VLQJ SLA RI ZKLF SURGXF DU PDGT XS

Garantire la qualità del prodotto. Controllare ogni singolo particolare con cui è costruito il prodotto.



CONTROL

PRODUCTS

7KF C-FYHORSPI DOI SURGXFV RI 5667 ODGT L'WD SURGXF PHDOV IRI 9HVM W DFFH W FKDOOH RI WK ZHOGZL FRPSHWL ZLV WK LIPI RI VLWLICJ AKH OFHC RI RXL F-XVWFH-V

Produrre e garantire componenti per automazione al 100% costruiti in Italia. Accettare la sfida tecnologica sulla competizione globale ed ottenere in cambio la soddisfazione dei clienti.



Vesta Automation srl - via Martiri di Belfiore, 69/A - 45100 Rovigo (Italy)

SPOT LIGHT

67\$,1/(66)67((/31(80\$7,&)<,1'(56))3))

&,/,1'5, 31(80\$7,&, ,12;

ROUND MAGNETIC S.S. PNEUMATIC CYLINDERS / CILINDRI PNEUMATICI INOX TONDI CON PISTONE MAGNETICO



RSSC
Standard magnet
Cilindro magnetico

RSSC

Bore / Alesaggio (mm):
Ø32 32
Ø40 40
Ø50 50
Ø63 63

Stroke
Corsa (mm):

P Through rod cylinder
Cilindro stelo passante

VV Viton all seals
Tutte le guarnizioni in Viton

?32)3233(7+,*+))2:9\$9(6)25)\$,5)25)9\$&880))3))9\$92/(?)32)\$'27785\$725/(3(5)\$5,\$)(98272



Pneumatic Pilot / Comando Pneumatico P
Solenoid Pilot / Comando Elettropneumatico W

Normally Closed (NC) / Normalmente Chiusa 6
Normally Open (NO) / Normalmente Aperta 9

Air inlet with servoassisted Air pilot / Alimentazione aria servopilotaggio aria M

External pilot Air Supply / Alimentazione Pilotaggio Esterno E

Vacuum inlet with servoassisted Vacuum pilot / Alim.Vuoto servopilotaggio Vuoto V

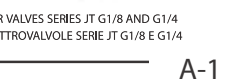
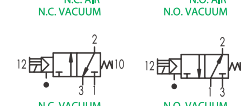
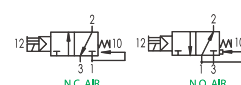
PV32

1

S

Size / Taglia
12 G 1/2"
34 G 3/4"
10 G 1"
15 G 1 1/2"
20 G 2"

A Air / Aria
V Vacuum / Vuoto



9\$9(6)\$1'62/(12,)'9\$9(6)6(5,(6)-7)*03CH)*03B))3))9\$92/(/)(/77529\$92/(/6(5,(7)*03CH)*03B

VALVES 3/2, 5/2 AND 5/3 SERIES JT G1/8, G1/4
ELETTRORVALVOLE 3/2, 5/2 SERIE JT G1/8, G1/4

JT32V1P618
JT32V1P614

JT32V1P918
JT32V1P914

JT32V2P018
JT32V2P014

JT53P2318
JT53P2314

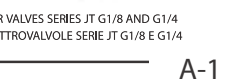
JT53P2618
JT53P2614

JT53P2918
JT53P2914

JT52P1018
JT52P1014

JT52DP218
JT52DP214

JT52P2018
JT52P2014



SOLENOID VALVES 3/2, 5/2 AND 5/3 SERIES JT G1/8, G1/4

ELETTRORVALVOLE 3/2, 5/2 E 5/3 SERIE JT G1/8, G1/4

JT32W1S618
JT32W1S614

JT32W1S918
JT32W1S914

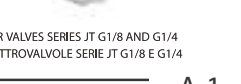
JT32W2S018
JT32W2S014

JT52W1018
JT52W1014

JT52W2018
JT52W2014

JT52W10E8
JT52W10E4

JT52W20E8
JT52W20E4



MPV ☐ - ☐
Size 1 T1 S n° 0-16
Taglia 1 D n° 17-32
Size 2 T2 D n° 17-32
Taglia 2



MPV ☐ - ☐ SBD25
Size 1 T1 S n° 0-16
Taglia 1 D n° 17-32
Size 2 T2 D n° 17-32
Taglia 2



MPT ☐ - ☐ - ☐ - ☐ - ☐ - ☐
Max 16 valve stations / Max 16 posti valvole
Valves / valvole JT 1/4 14
Valves / valvole JT 1/8 18
Valve functions and priority sequence
Funzioni valvole e sequenza di assemblaggio
CS Solenoid Solenoide CS
00 24V dc
50 24V ac

KME .18
KME .14

KPCH018
KPCH014



ENBLOC FOR VALVES SERIES JT G1/8 AND G1/4
BASI PER ELETTROVALVOLE SERIE JT G1/8 E G1/4



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DVM(#) ____ pag. A-07
DRM ____ pag. A-09
Pneumatic cylinders ISO 6432 (#)
Cilindri pneumatici ISO 6432 (#)



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DVMT ____ pag. A-12
Round magnetic pneumatic cylinders
Cilindri pneumatici tondi con pistone magnetico



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Cartridge cylinders
Cilindri a cartuccia



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Pneumatic cylinders ISO 15552
Cilindri pneumatici ISO 15552



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Pneumatic cylinders ISO 15552
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Cilindri antirotazione a doppio stelo



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Cilindri senza stelo



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Cilindri senza stelo a trascinamento magnetico



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Gamma cilindri Atex



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Valvole ed elettrovalvole ISO 5599



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Microvalvole automatiche



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Gamma valvole Atex.

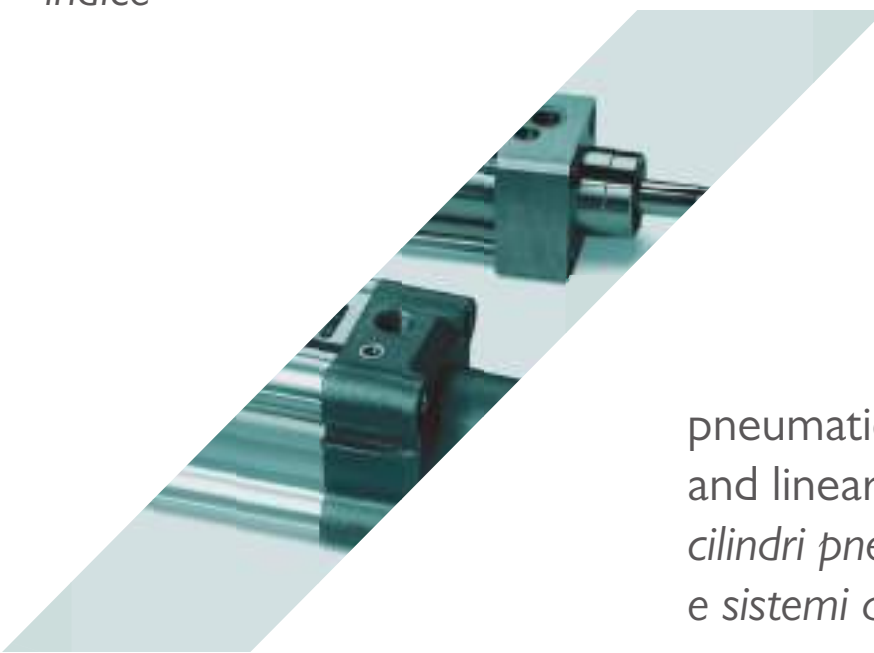


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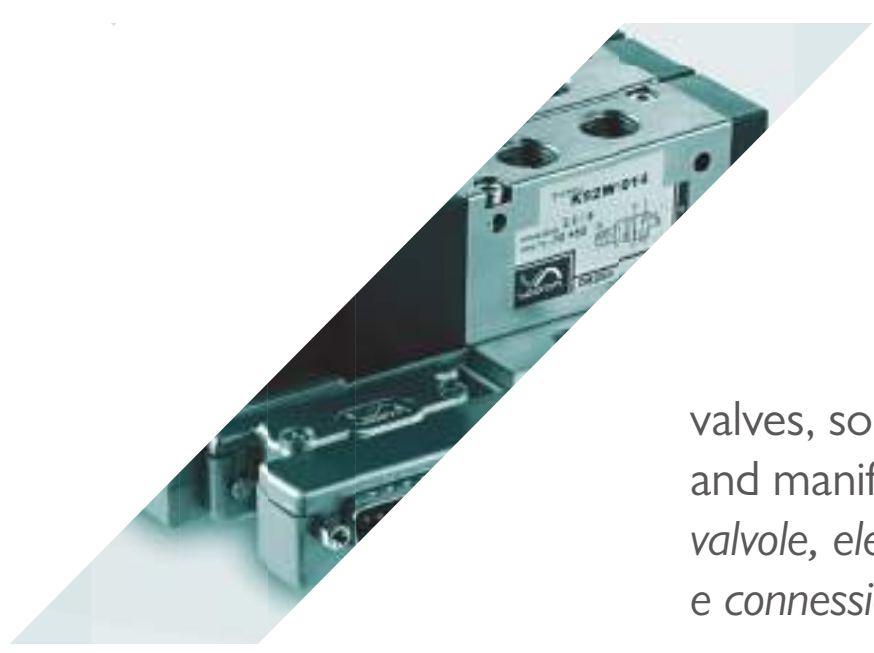


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pneumatic cylinders, actuators
and linear control units
*cilindri pneumatici, attuatori
e sistemi di guida*



valves, solenoid valves
and manifolds
*valvole, elettrovalvole
e connessioni multipolari*



air treatment units
gruppi trattamento aria

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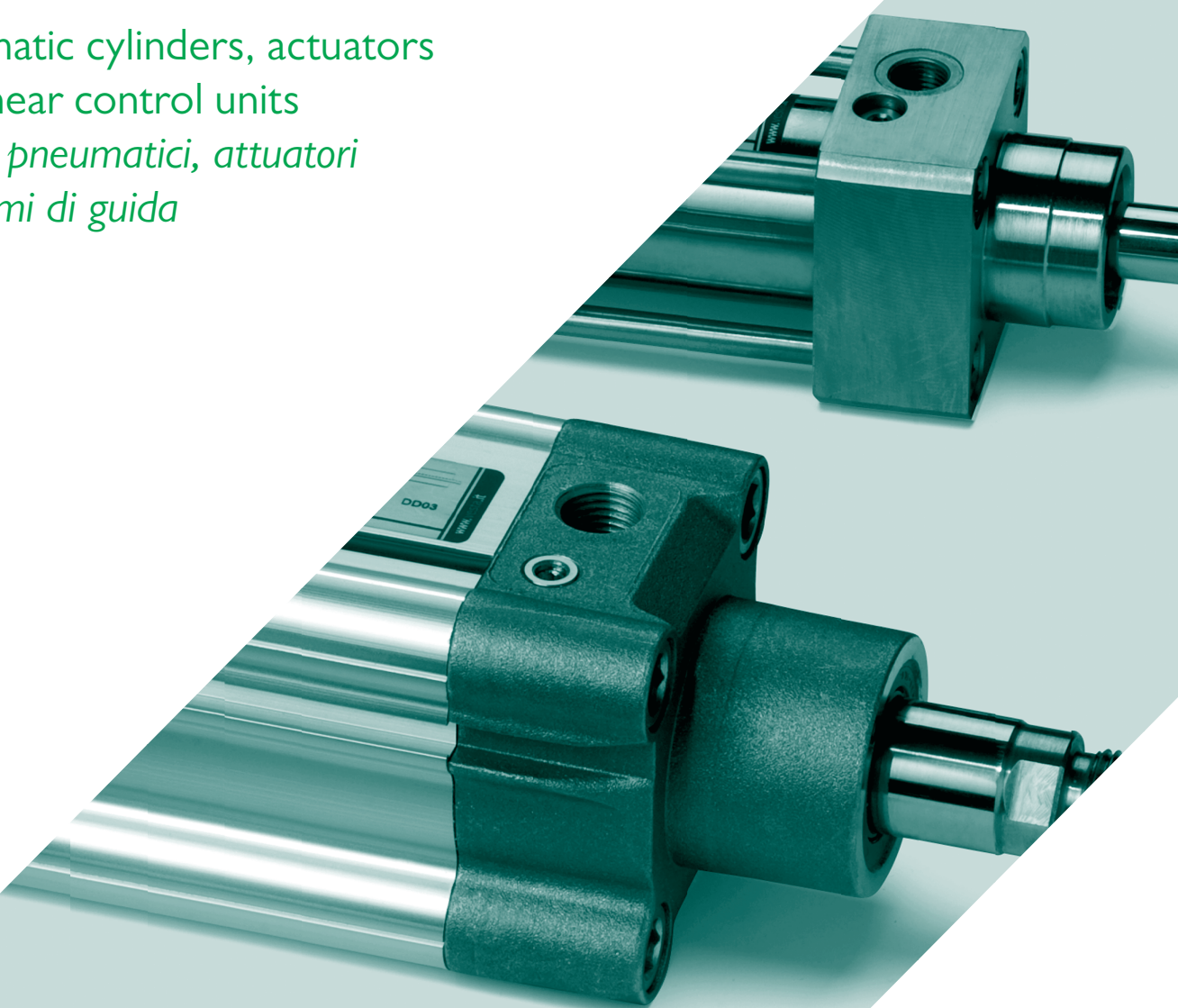
NOTE / NOTA

In case of electric arc welding, please strongly insulate or remove cylinders.

In caso di saldatura ad arco nelle vicinanze, rimuovere il cilindro.



pneumatic cylinders, actuators
and linear control units
*cilindri pneumatici, attuatori
e sistemi di guida*





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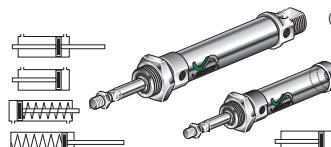
PNEUMATIC CYLINDER ISO 6432 / CILINDRI PNEUMATICI ISO 6432



(*) **ACM**

pag. A-06

MAGNETIC PISTON, SCREW END CAPS,
CUSHIONED
CILINDRO MAGNETICO, ISPEZIONABILE,
AMMORTIZZATORI PNEUMATICI REGOLABILI

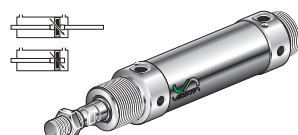


(*) **DVM**

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DRM

MAGNETIC PISTON, SCREW END CAPS,
MECHANICAL BUFFERS
CILINDRO MAGNETICO, ISPEZIONABILE,
CON SMORZATORI D'URTO



ACMT

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CILINDRO MAGNETICO, ISPEZIONABILE,
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CZ

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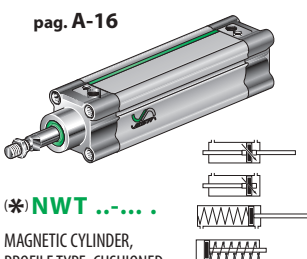
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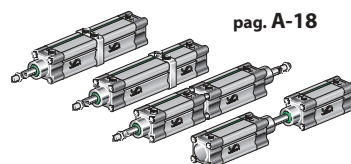
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(*) **NWT**

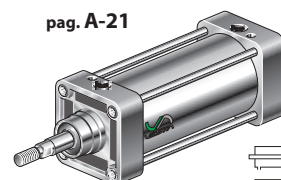
MAGNETIC CYLINDER,
PROFILE TYPE, CUSHIONED
CILINDRO MAGNETICO CON CAMICIA A
A PROFILO PULITO, AMMORTIZZATO,
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NWT ...BS..
NWT ...CNP..
NWT ...CNF..

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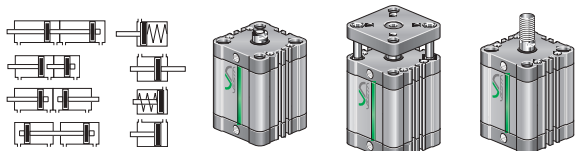
XJC

MAGNETIC TIE ROD TYPE, CUSHIONED,
TANDEM.
CILINDRO MAGNETICO, ESECUZIONE A
TIRANTI, AMMORTIZZATO, VERSIONE
TANDEM.

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COMPACT PNEUMATIC CYLINDER / CILINDRI PNEUMATICI COMPATTI



(*) **NSK**

(ISO 21287 - UNITOP)

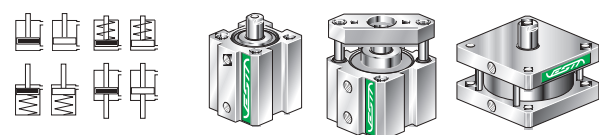
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ACCESSORI DI FISSAGGIO E FINECORSA MAGNETICI PER CILINDRI SK

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SH

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CILINDRI A CORSA BREVE CON AMMORTIZZATORI MECCANICI D'URTO

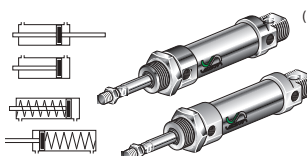
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ACCESSORI DI FISSAGGIO E FINECORSA MAGNETICI PER CILINDRI SH

pag. A-37 ÷ A-38

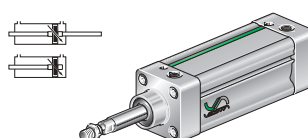
CYLINDER FOR HARSH ENVIRONMENT CONDITION / CILINDRI PNEUMATICI ANTICORROSIONE



(*) **DSM**

pag. A-40

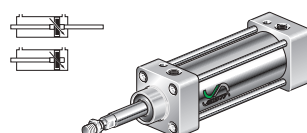
STAINLESS STEEL ISO 6432 CYLINDERS,
SCREW END CAPS, MAGNETIC, MECHANICAL BUFFERS
CILINDRO ISO 6432 INOX, MAGNETICO,
ISPEZIONABILE, CON SMORZATORI D'URTO



XPN

pag. A-44

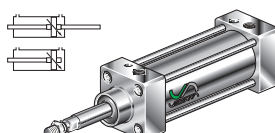
MAGNETIC ISO 15552,
ACETALIC RESIN CAPS, PROFILE TUBE
ISO 15552 MAGNETICO, TESTATE IN RESINA
ACETALICA, CAMICIA PROFILO PULITO



XJS

pag. A-45

MAGNETIC ISO 15552, ACETALIC RESIN CAPS,
STAINLESS STEEL TIE RODS AND TUBE
ISO 15552 MAGNETICO, TESTATE IN RESINA
ACETALICA, CON CAMICIA E TIRANTI INOX



(*) **XJSS**

pag. A-46

MAGNETIC ISO 15552,
COMPLETELY STAINLESS STEEL
ISO 15552 MAGNETICO,
COMPLETAMENTE INOX

STAINLESS STEEL FIXING / ACCESSORI DI FISSAGGIO INOX PER CILINDRI ANTICORROSIONE

pag. A-43; A-47 ÷ A-48



AIR CONSUMPTION FOR PNEUMATIC CYLINDERS / CONSUMO D'ARIA DEI CILINDRI PNEUMATICI

Air consumption in NL/ min of a double acting pneumatic cylinder must be calculated as follows:

Il consumo d'aria in NL/ min di un cilindro pneumatico a doppio effetto è calcolato in base alla seguente formula:

$$Q = \frac{\emptyset^2 \pi PCN}{2}$$

(For simple acting cylinders $Q = Q/2$
Per il cilindro a semplice effetto tale valore è circa dimezzato)

Q = Air consumption in NL / min / Consumo d'aria in NL / min

Ø = Bore of cylinder in decimeter / Alesaggio del cilindro in decimetri (Dm)

P = Absolute working pressure (relative pressure +1) in Kg/cm²
Pressione assoluta di lavoro (pressione effettiva di lavoro +1) in Kg/cm²

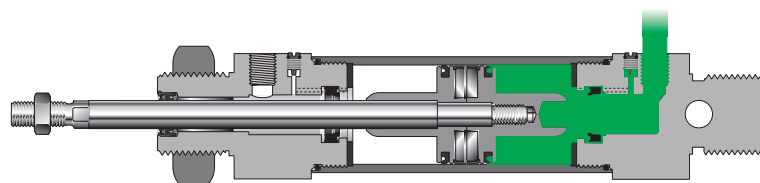
C = Stroke of cylinder in decimeter / Corsa del cilindro in decimetri (Dm)

N = Number of cycles per minute / Numero di cicli per minuto

THEORETICAL THRUSTS / FORZE TEORICHE SVILUPPATE

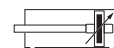
Bore Alesaggio	Available area Area superficie utile mm ²	Thrusts (N) at pression (Bar) Forze sviluppate (N) alla pressione (Bar)									
		1	2	3	4	5	6	7	8	9	10
10	thrust / spinta draught / tiro 78 66	7,8 6,5	15,6 13,2	23 19	31 26	39 33	47 40	54 48	62 53	70 59	78 66
12	thrust / spinta draught / tiro 113 85	11 8,5	23 17	34 25	45 34	56 42	68 51	79 59	90 68	102 76	113 85
16	thrust / spinta draught / tiro 201 173	20 17	40 35	60 52	80 69	100 86	121 104	141 121	161 138	181 156	201 173
20	thrust / spinta draught / tiro 314 264	31 26	63 53	94 79	126 106	157 132	188 158	220 185	251 211	283 238	314 264
25	thrust / spinta draught / tiro 491 412	49 41	98 82	147 124	196 165	245 206	295 247	344 288	393 330	442 371	491 412
32	thrust / spinta draught / tiro 804 691	80 69	161 138	241 207	322 276	402 345	482 414	563 484	643 553	724 622	804 691
40	thrust / spinta draught / tiro 1256 1056	125 105	251 211	376 316	502 422	628 528	754 633	879 739	1005 844	1130 950	1256 1055
50	thrust / spinta draught / tiro 1962 1649	196 165	393 330	588 494	785 660	981 824	1178 990	1373 1154	1570 1320	1765 1484	1963 1650
63	thrust / spinta draught / tiro 3116 2802	311 280	623 560	934 840	1246 1120	1558 1401	1869 1680	2181 1961	2493 2240	2804 2521	3116 2800
80	thrust / spinta draught / tiro 5024 4533	502 453	1005 907	1507 1360	2010 1814	2512 2266	3014 2722	3516 3173	4019 3629	4521 4079	5024 4536
100	thrust / spinta draught / tiro 7850 7143	785 714	1570 1429	2355 2143	3140 2857	3925 3571	4710 4286	5495 5000	6280 5715	7065 6428	7850 7143
125	thrust / spinta draught / tiro 12266 11599	1226 1160	2453 2319	3679 3479	4906 4639	6133 5799	7359 6959	8586 8119	9812 9279	11039 10439	14719 11559
160	thrust / spinta draught / tiro 20096 18840	2009 1884	4019 3768	6028 5652	8038 7536	10048 9420	12057 11304	14067 13188	16076 15072	18086 16956	20096 18840
200	thrust / spinta draught / tiro 31400 30144	3140 3014	6280 6028	9420 9043	12560 12057	15700 15072	18840 18086	21980 21100	25120 24115	28260 27129	31400 30144

CYLINDERS **ACM-** AND **DVM-** TECHNICAL FEATURES / CARATTERISTICHE TECNICHE **ACM-** E **DVM-**



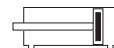
ISO 6432

Ø16; 20; 25

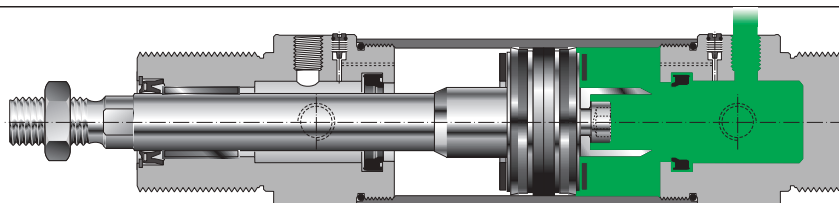


ACM..

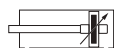
Ø12; 16; 20; 25



DVM..

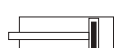


Ø32; 40; 50



ACMT..

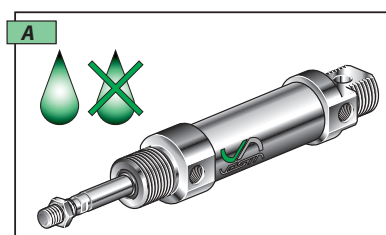
Ø32; 40; 50



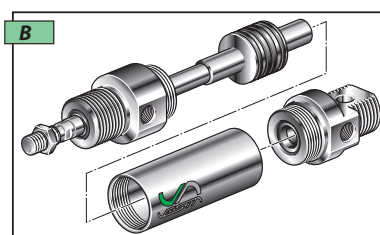
DVMT..

The cushioned double acting Vesta **ACM(T)** cylinders with magnetic pistons and adjustable cushioning are available in the following bore sizes: 16, 20, 25, 32, 40 and 50 in a wide range of standard strokes. The Vesta cylinder type **DVM(T)** is available in diameters of 12, 16, 20, 25, 32, 40 and 50, with mechanical buffers at both ends, and magnetic piston. **ACM(T)** and **DVM(T)** series are built with screw heads. Stroke tolerance follows ISO 6432 standard.

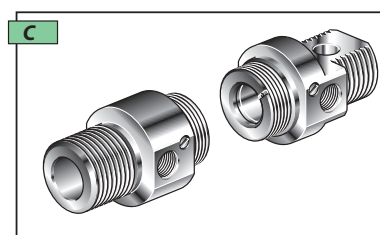
I cilindri Vesta serie **ACM(T)** a doppio effetto ammortizzati e con pistone magnetico sono disponibili negli alesaggi 16, 20, 25, 32, 40 e 50 mm, in una vasta gamma di corse standard; mentre i cilindri serie **DVM(T)** con smorzatori meccanici d'urto, magnetici, sono disponibili negli alesaggi 12, 16, 20, 25, 32, 40 e 50 mm. Le particolari caratteristiche costruttive, le soluzioni tecniche adottate ed i materiali impiegati, garantiscono una lunga durata ed un ottimo funzionamento del cilindro. La costruzione è del tipo "teste avvitate", quindi cilindri ispezionabili con possibilità di manutenzione. I cilindri serie **ACM(T)** e **DVM(T)** sono predisposti per il montaggio di sensori magnetici. Le tolleranze sulle corse dei cilindri sono conformi alla normativa ISO 6432.



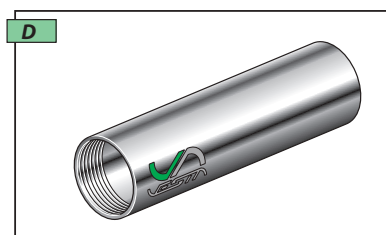
Lubrication not required.
*Possibilità di funzionamento continuo
privo di lubrificazione.*



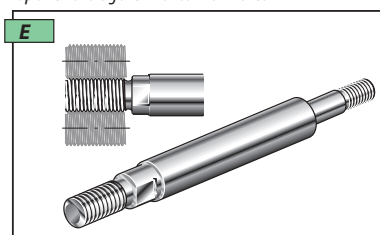
"Screw head" construction allows
immediate check up of cylinders.
*Le teste filettate consentono di
ispezionare agevolmente il cilindro.*



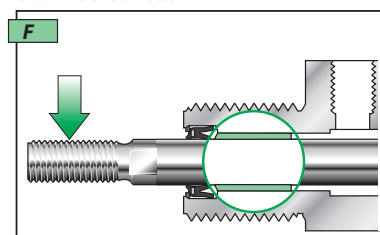
Caps in a light alloy of anodized
aluminium.
*Le teste sono in lega leggera di
alluminio anodizzate.*



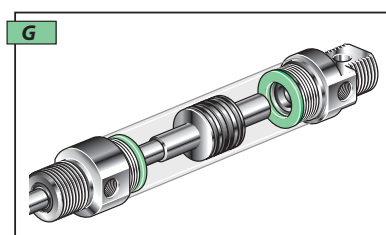
Tubes in anodized aluminium.
Le camicie sono in alluminio anodizzato.



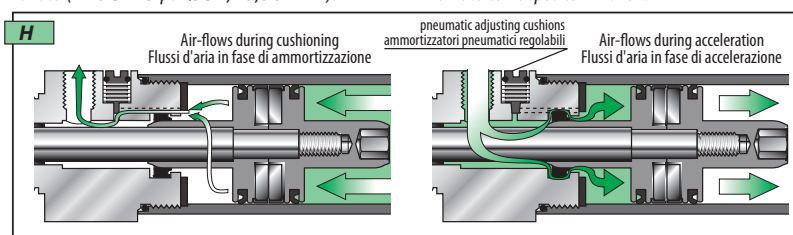
Piston rods in rolled stainless steel
X5CrNi 1810 (X20Cr 13 for Ø32,40,50).
*Steli in acciaio INOX X5CrNi 1810
rullato (X20Cr 13 per Ø32,40,50 mm).*



Self lubricating bearing in a copper-steel
alloy, with teflon covering.
*Boccole autolubrificanti in acciaio
ramato con deposito in Teflon.*



Mechanical buffers at both ends for **DVM**
and **DVMT** series.
*Smorzatori d'urto meccanici per **DVM** e **DVMT**.*



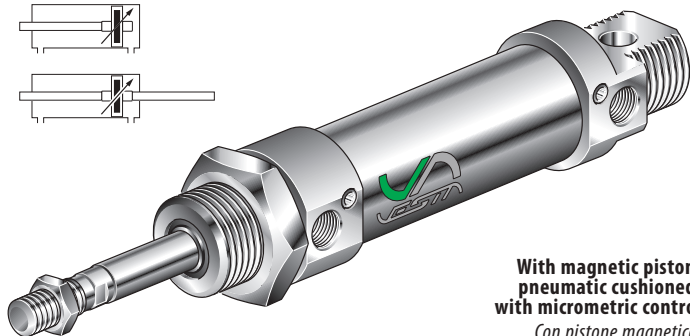
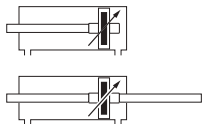
Very efficient and progressive adjustable cushioning for **ACM** and **ACMT** series.
*Ammortizzatori pneumatici progressivi ed efficienti per la serie **ACM** ed **ACMT**.*



SERIE **ACM**

CUSHIONED PNEUMATIC CYLINDERS STANDARD ISO 6432 CILINDRI PNEUMATICI AMMORTIZZATI ISO 6432

ATEX versions see / Versioni ATEX vedi .. P. A-109



With magnetic piston,
pneumatic cushioned,
with micrometric control
*Con pistone magnetico,
ammortizzatori pneumatici progressivi
con regolazione micrometrica*

With magnetic piston / Con pistone magnetico

ACM /

Bore
Alesaggio
(mm):
Ø16 **16**
Ø20 **20**
Ø25 **25**

VS Viton rod seal
Guarnizione dello stelo in Viton

VV Viton all seal
Tutte le guarnizioni in Viton

P Through rod cylinder
Cilindro stelo passante

Standard stroke / Corse Standard	
Bore Alesaggio	
16	10 25 50 80 100 125 160 200 250 300 350 400 450 500
20	10 25 50 80 100 125 160 200 250 300 350 400 450 500
25	10 25 50 80 100 125 160 200 250 300 350 400 450 500

Effective cushion length Lunghezza utile ammortizzatore	
Bore Alesaggio	Length Lunghezza
16	24
20	27
25	30

ISO 6432 cylinder fixing see:
Fissaggi per cilindri ISO 6432 vedi:
..... **Pag. A-10 ÷ A-11.**

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-11, A-19.**

TECHNICAL FEATURES

End caps Anodized aluminium.
Piston rod Rolled burnished stainless steel X5CrNi 1810.
Barrel Anodized aluminium.
Seals NBR rubber.
Cushioning Pneumatic adjusting cushions.

Environment temperature range -10 °C ÷ +80 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium Filtered air.
Max operating pressure 10 bar.

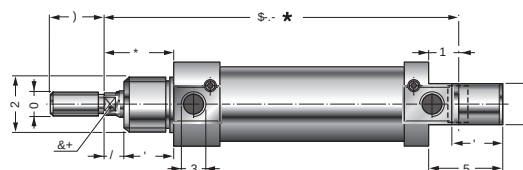
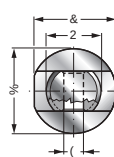
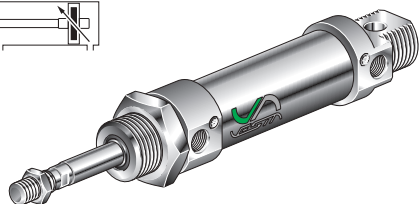
CARATTERISTICHE TECNICHE

Testate Alluminio anodizzato.
Stelo Acciaio inox X5CrNi 1810 rollato.
Camicia Alluminio anodizzato.
Guarnizioni Tutte in NBR.
Ammortizzatori Pneumatici regolabili.

Temperatura ambiente -10 °C ÷ +80 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

ACM .. /...

SINGLE ROD
CILINDRO BASE STELO SEMPLICE



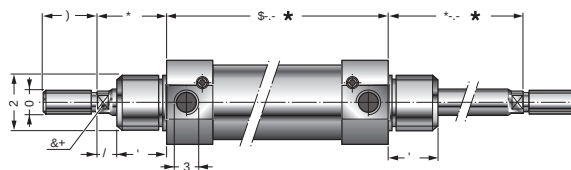
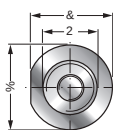
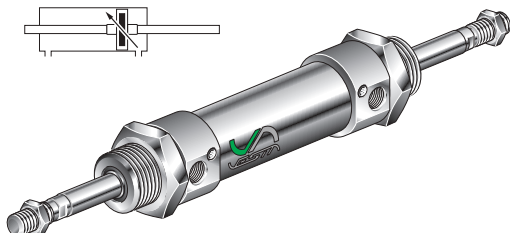
* = Stroke / Corsa

ATEX versions see / Versioni ATEX vedi .. P. A-109

Bore Alesaggio	A	ØB	C	CH	D	ØE ^{H9}	F	G	I	L	ØM	N	ØO	ØP	R	Code Codice
16	82	22	21,2	5	15	6	16	22	12	7	M6x1	9	M16x1,5	M5	22	ACM 16/...
20	95	28	26,2	7	19	8	20	24	16	5	M8x1,25	12	M22x1,5	G1/8	30	ACM 20/...
25	104	34	32,5	8	20	8	22	28	16	8	M10x1,25	12	M22x1,5	G1/8	30	ACM 25/...

ACM .. /... P

THROUGH ROD
STELO PASSANTE



* = Stroke / Corsa

ATEX versions see / Versioni ATEX vedi .. P. A-109

Bore Alesaggio	A	ØB	C	CH	D	F	G	L	ØM	ØO	ØP	Code Codice
16	56	22	21,2	5	15	16	22	7	M6x1	M16x1,5	M5	ACM 16/... P
20	68	28	26,2	7	19	20	24	5	M8x1,25	M22x1,5	G1/8	ACM 20/... P
25	69	34	32,5	8	20	22	28	8	M10x1,25	M22x1,5	G1/8	ACM 25/... P

PNEUMATIC CYLINDERS WITH MAGNETIC PISTON STANDARD ISO 6432 CILINDRI PNEUMATICI CON PISTONE MAGNETICO ISO 6432

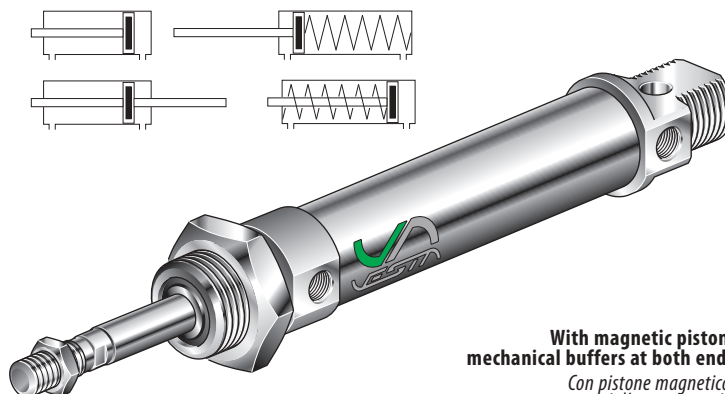
SERIE **DVM**

With magnetic piston / Con pistone magnetico

DVM /

Bore Alesaggio (mm):	Stroke Corsa (mm):	VS Viton rod seal Guarnizione dello stelo in Viton
Ø12 12		VV Viton all seal Tutte le guarnizioni in Viton
Ø16 16		
Ø20 20	P Through rod cylinder Cilindro stelo passante	
Ø25 25	SEA Simple acting front spring Cilindro semplice effetto molla anteriore	
	SEP Simple acting rear spring Cilindro semplice effetto molla posteriore	

ATEX versions see / Versioni ATEX vedi .. P. A-109



With magnetic piston,
mechanical buffers at both ends
Con pistone magnetico,
smorzatori d'urto meccanici

ISO 6432 cylinder fixing see:
Fissaggi per cilindri ISO 6432 vedi: **Pag. A-10 ÷ A-11.**

Features of reed switches see:
Caratteristiche finecorsa magnetici: **Pag. A-11, A-19.**

Bore Alesaggio	10	25	50	80	100	125	160	200	250	300	350	400	450	500
12	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Standard stroke / Corse Standard

End caps	Anodized aluminium.
Piston rod	Rolled burnished stainless steel X5CrNi 1810.
Barrel	Anodized aluminium.
Seals	NBR rubber.
Cushioning	Mechanical buffers.

Environment temperature range	-10 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.

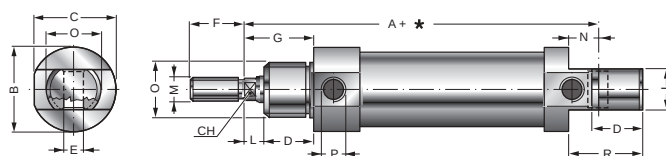
TECHNICAL FEATURES

Testate	Alluminio anodizzato.
Stelo	Acciaio inox X5CrNi 1810 rollato.
Camicia	Alluminio anodizzato.
Guarnizioni	Tutte in NBR.
Ammortizzatori	Meccanici in poliuretano.

Temperatura ambiente	-10 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.

CARATTERISTICHE TECNICHE

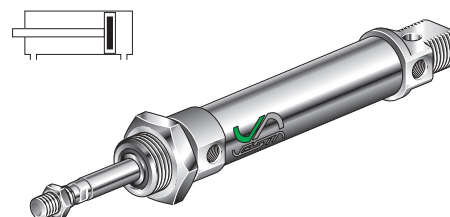
* = Stroke / Corsa



Bore Alesaggio	A	ØB	C	CH	D	ØE ¹⁰⁹	F	G	I	L	ØM	N	ØO	ØP	R	Code Codice
12	75	18	17,2	5	15	6	16	22	12	7	M6x1	9	M16x1,5	M5	22	DVM 12/... P
16	82	22	21,2	5	15	6	16	22	12	7	M6x1	9	M16x1,5	M5	22	DVM 16/... P
20	95	28	26,2	7	19	8	20	24	16	5	M8x1,25	12	M22x1,5	G1/8	30	DVM 20/... P
25	104	32	32,5	8	20	8	22	28	16	8	M10x1,25	12	M22x1,5	G1/8	30	DVM 25/... P

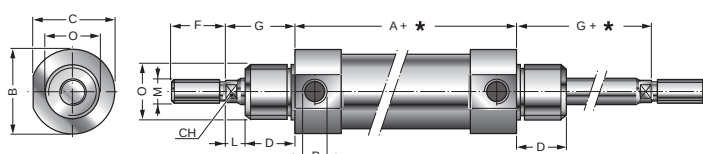
SINGLE ROD
CILINDRO BASE STELO SEMPLICE

DVM .. /...



ATEX versions see / Versioni ATEX vedi .. P. A-109

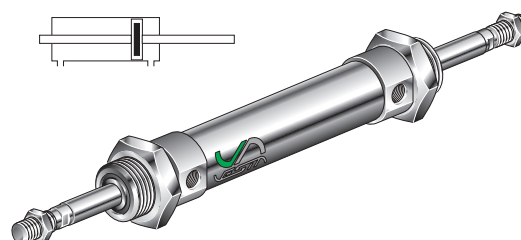
* = Stroke / Corsa



Bore Alesaggio	A	ØB	C	CH	D	F	G	L	ØM	ØO	ØP	Code Codice
12	49,5	18	17,2	5	15	16	22	7	M6x1	M16x1,5	M5	DVM 12/... P
16	56	22	21,2	5	15	16	22	7	M6x1	M16x1,5	M5	DVM 16/... P
20	68	28	26,2	7	19	20	24	5	M8x1,25	M22x1,5	G1/8	DVM 20/... P
25	69	32	32,5	8	20	22	28	8	M10x1,25	M22x1,5	G1/8	DVM 25/... P

THROUGH ROD
STELO PASSANTE

DVM .. /... P



ATEX versions see / Versioni ATEX vedi .. P. A-109

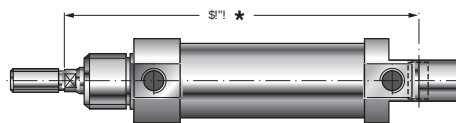
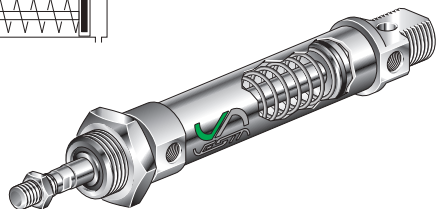
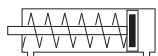


DVM .. /... SEA

SIMPLE ACTING FRONT SPRING
SEMPLICE EFFETTO MOLLA ANTERIORE

For overall dimensions see DVM single rod
Dimensioni di ingombro vedi DVM base stelo semplice

* = Stroke / Corsa



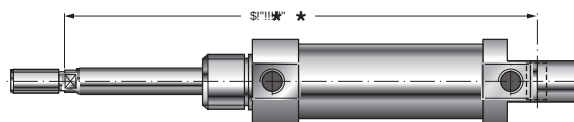
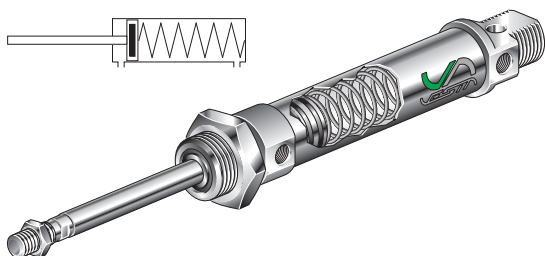
Bore Alesaggio	A	Code Codice
12	75	DVM 12/... SEA
16	82	DVM 16/... SEA
20	95	DVM 20/... SEA
25	104	DVM 25/... SEA

DVM .. /... SEP

SIMPLE ACTING REAR SPRING
SEMPLICE EFFETTO MOLLA POSTERIORE

For overall dimensions see DVM standard
Dimensioni di ingombro vedi DVM standard

* = Stroke / Corsa

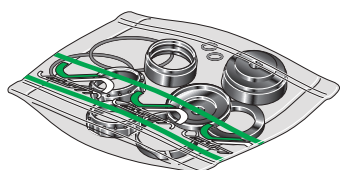


Bore Alesaggio	A	Code Codice
12	75	DVM 12/... SEP
16	82	DVM 16/... SEP
20	95	DVM 20/... SEP
25	104	DVM 25/... SEP

Strokes Corse (mm)	Spring force - Forza molla (daN)								..SEA	..SEP
	Ø12 mm		Ø16 mm		Ø20 mm		Ø25 mm			
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
10	2,1	2,4	2,2	2,5	2,3	2,6	2,3	2,6	●	●
25	1,6	2,4	1,6	2,5	1,7	2,6	1,7	2,6	●	●
50	0,35	2,4	0,5	2,5	1	2,6	1	2,6	●	●

..... - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO



Seals kit code = **Cylinder code** + **Bore** + **Versions** + - **SG**:
(The kit includes all seals).

Codice del kit = **Codice del cilindro** + **Alesaggio** + **Versions** + - **SG**:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **DVM 16 VS - SG**

AXIAL REAR INLET AIR CYLINDERS CILINDRI PNEUMATICI CON ALIMENTAZIONE POSTERIORE IN ASSE

SERIE **DRM**

With magnetic piston / Con pistone magnetico

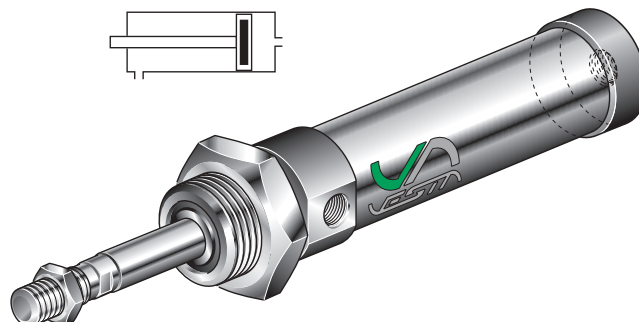
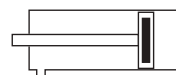
DRM ☐ ☐ / ☐ ☐ ☐ ☐

Bore
Alésaggio (mm):
Ø12 **12**
Ø16 **16**
Ø20 **20**
Ø25 **25**

Stroke
Corsa
(mm):

VS Viton rod seal
Guarnizione dello stelo in Viton
VV All viton seals
Tutte le guarnizioni in Viton

SEA Simple acting front spring
Cilindro semplice effetto molla anteriore



With magnetic piston, mechanical buffers at both ends.
Con pistone magnetico, smorzatori d'urto meccanici.

Cylinder fixing see:
Fissaggi per cilindri vedi: **Pag. A-10, A-11.**

Features of reed switches see:
Caratteristiche finecorsa magnetici: **Pag. A-11, A-19.**

Standard stroke / Corse Standard

Bore Alésaggio	10	25	50	80	100	125	160	200	250	300	350	400	450	500
12	.	.	.	.	.	.	.	.	.	.	.	.	.	.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25	.	.	.	.	.	.	.	.	.	.	.	.	.	.

TECHNICAL FEATURES

End caps Anodized aluminium.
Piston rod Rolled burnished stainless steel X5CrNi 1810.
Barrel Anodized aluminium.
Seals NBR rubber.
Cushioning Mechanical buffers.

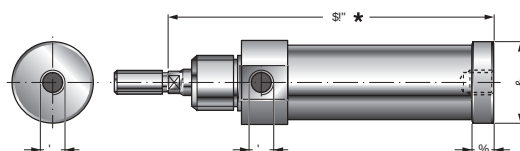
Environment temperature range -10 °C ÷ +80 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium Filtered air.
Max operating pressure 10 bar.

CARATTERISTICHE TECNICHE

Testate Alluminio anodizzato.
Stelo Acciaio inox X5CrNi 1810 rollato.
Camicia Alluminio anodizzato.
Guarnizioni Tutte in NBR.
Ammortizzatori Meccanici in poliuretano.

Temperatura ambiente -10 °C ÷ +80 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

* = Stroke / Corsa

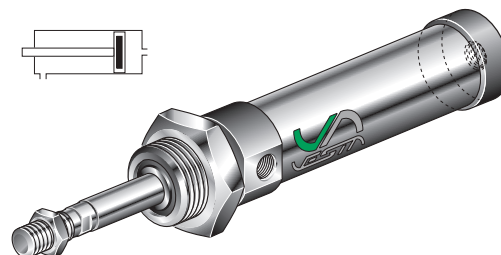
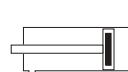


For other dimensions please see
DVM standard cylinder
Per altre dimensioni vedere
cilindri **DVM** standard

Bore Alésaggio	A	B	ØC	D	Code Codice
12	69	6,5	18	M5	DRM 12/...
16	74	6,5	22	M5	DRM 16/...
20	85	8,5	28	G1/8	DRM 20/...
25	90	8,5	34	G1/8	DRM 25/...

BASIC CYLINDER
CILINDRO BASE

DRM .. /...



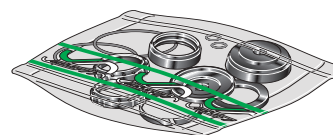
Seals kit code = **Cylinder code** + **Bore** + **Versions** + **- SG**:
(The kit includes all seals).

Codice del kit = **Codice del cilindro** + **Alésaggio** + **Versions** + **- SG**:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **DRM 16 VV - SG**

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

..... - SG





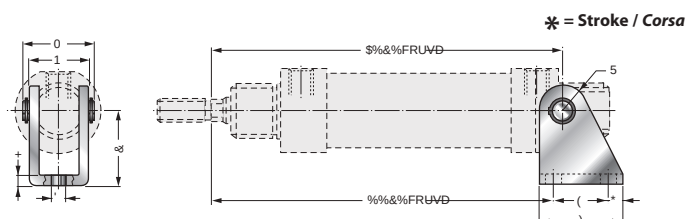
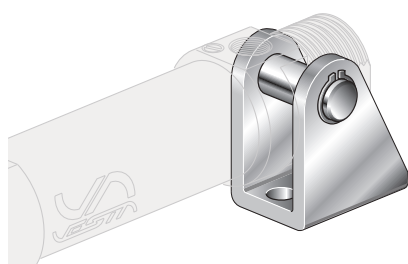
FIXING ACCESSORIES / ACCESSORI DI FISSAGGIO PER CILINDRI ISO 6432

Fixing accessories in steel grant a correct mounting for all usage of the Vesta cylinders. (Note: the fixing screws are not included in the supply of the fittings)

Gli accessori di fissaggio garantiscono montaggi stabili e resistenti alle sollecitazioni. Sono realizzati in acciaio per soddisfare ogni possibile tipo di impiego. (Nota: le viti di fissaggio non sono comprese nella fornitura degli accessori.)

AS/..

REAR HINGE HORIZONTAL MOUNTING
MONTAGGIO A CONTROCERNIERA

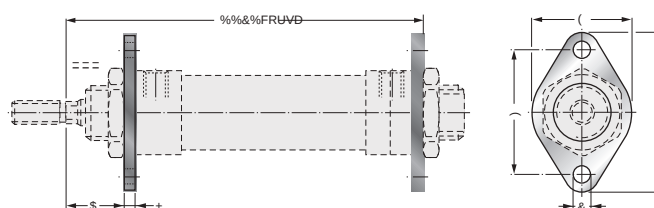
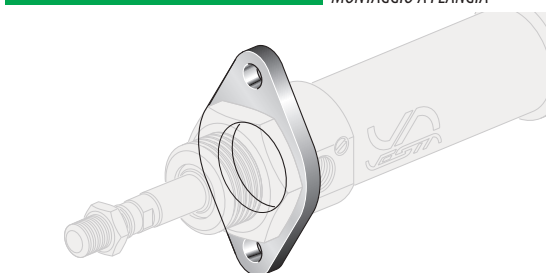


Bore Alesaggio	A	B	C	ØD	E	F	G	H	M	N	R	Code Codice
12	75	73	27	5,5	15	25	5	3	23	18	7	AS/12
16	82	80	27	5,5	15	25	5	3	23	18	7	AS/16
20	95	91	30	6,6	20	32	6	4	30	24	10	AS/20
25	104	100	30	6,6	20	32	6	4	30	24	10	AS/25

* = Stroke / Corsa

FL/..

FLANGE MOUNTING
MONTAGGIO A FLANGIA

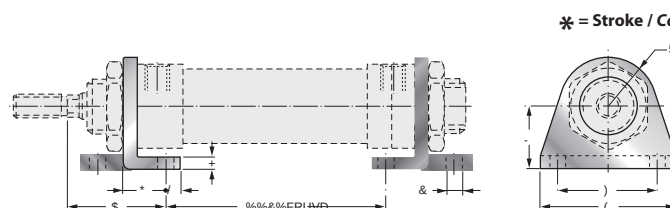
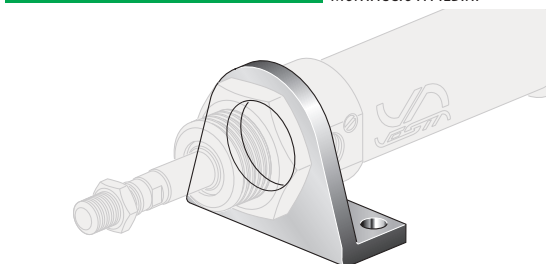


Bore Alesaggio	A	B	ØC	D	E	F	H	Code Codice
12	18	77	5,5	52	30	40	4	FL/12
16	18	84	5,5	52	30	40	4	FL/16
20	19	99	6,6	66	40	50	5	FL/20
25	23	107	6,6	66	40	50	5	FL/25

* = Stroke / Corsa

P/..

FOOT MOUNTING
MONTAGGIO A PIEDINI

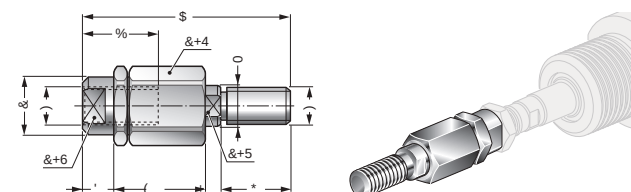


Bore Alesaggio	A	B	ØC	D	E	F	G	H	L	R	Code Codice
12	32	31	5,5	20	42	32	14	4	7	13	P/12
16	32	38	5,5	20	42	32	14	4	7	13	P/16
20	36	46	6,6	25	54	40	17	5	7	20	P/20
25	40	50	6,6	25	54	40	17	5	7	20	P/25

* = Stroke / Corsa

SAS/..

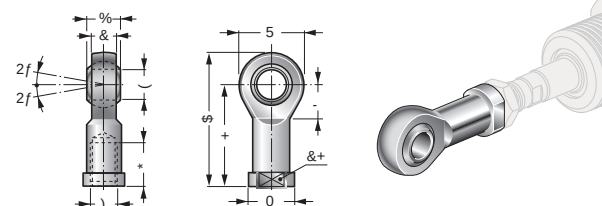
FLOATING JOINT TYPE "S"
SNODO AUTOALLINEANTE



Bore Alesaggio	A	B	ØC	CH1	CH2	CH3	D	E	ØF	G	H	ØM	Code Codice
12	35	10	8,5	7	5	13	4	17,5	M6x1	10	3,5	6	SAS/6x1
16	35	10	8,5	7	5	13	4	17,5	M6x1	10	3,5	6	SAS/6x1
20	57	20	12,5	11	7	17	4,5	28,5	M8x1,25	20	4	8	SAS/8x1,25
25	71	20	22	19	12	30	11	35	M10x1,25	20	5	14	SAS/10x1,25

SNS/..

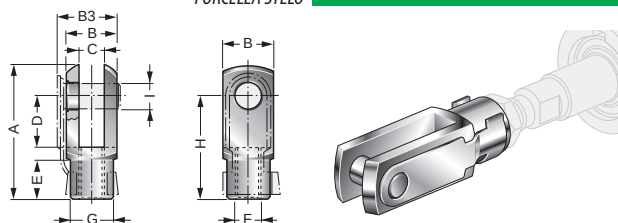
ROD EYE MOUNTING
SNODO SFERICO



Bore Alesaggio	A	B	C	CH	D	ØE ^{H7}	ØF	G	H	ØM	ØR	Code Codice
12	40	9	6,8	11	10	6	M6x1	12	30	13	20	SNS/6x1
16	40	9	6,8	11	10	6	M6x1	12	30	13	20	SNS/6x1
20	48	12	9	13	12	8	M8x1,25	16	36	16	24	SNS/8x1,25
25	57	14	10,5	17	15	10	M10x1,25	20	43	19	28	SNS/10x1,25

CLEVIS (ROD) MOUNTING
FORCELLA STELO

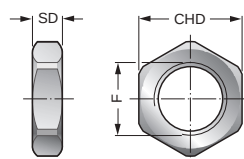
FS../x..



Bore Alesaggio	A	B	B3	C ^{B12}	D	E	ØF	ØG	H	ØI ^{H9}	Code Codice
12	31	12	16	6	12	9	M6x1	10	24	6	FS/6x1
16	31	12	16	6	12	9	M6x1	10	24	6	FS/6x1
20	42	16	22	8	16	12	M8x1,25	14	32	8	FS/8x1,25
25	52	20	26	10	20	15	M10x1,25	18	40	10	FS/10x1,25

CAP NUT
DADO TESTATA

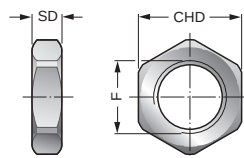
DM../..



Bore Alesaggio	CHD	SD	ØF	Code Codice
12	24	8	M16x1,5	DM12/16
16	24	8	M16x1,5	DM12/16
20	32	10	M22x1,5	DM20/25
25	32	10	M22x1,5	DM20/25

ROD NUT
DADO STELO

DS../..

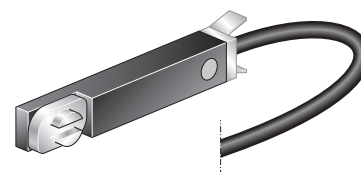
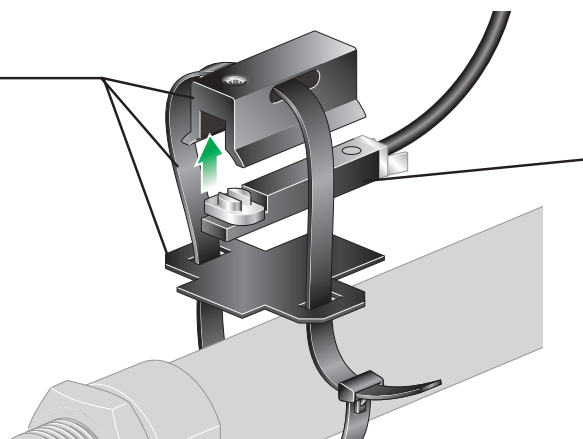


Bore Alesaggio	CHD	SD	ØF	Code Codice
12	10	4	M6x1	DS12/16
16	10	4	M6x1	DS12/16
20	13	5	M8x1,25	DS/20
25	17	6	M10x1,25	DS/25

MAGNETIC SWITCHES FOR ISO 6432 CYLINDER / FINECOSA MAGNETICI PER CILINDRI ISO 6432

FFS 0 1 VN

Bore Alesaggio (mm):	
Ø12 ...	12
Ø16 ...	16
Ø20 ...	20
Ø25 ...	25

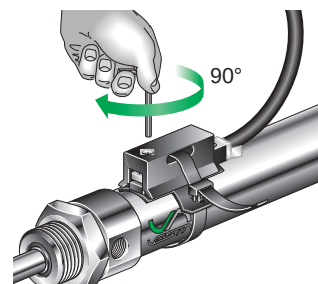
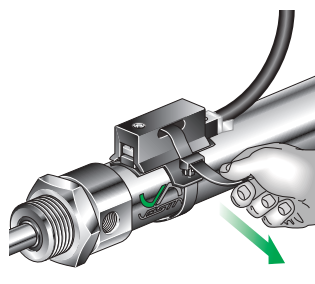
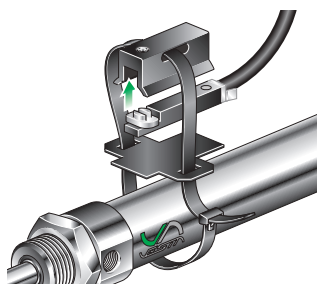
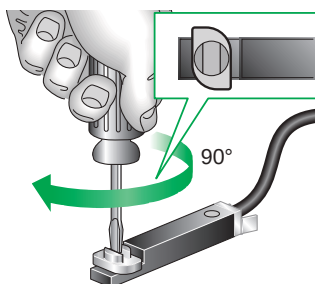


For magnetic switches features see:
Caratteristiche finecorsa magnetici vedi:

VNCR2, VNPR2,
VNCE3, VNPE3.

Pag. A-19

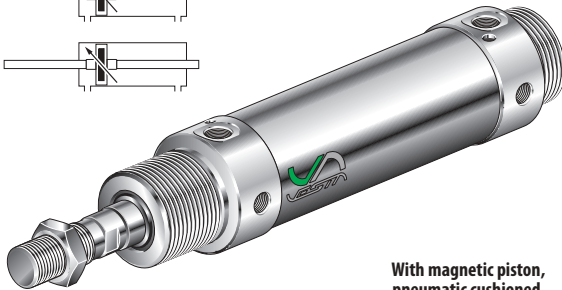
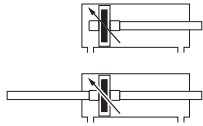
MAGNETIC SWITCH POSITIONING / POSIZIONAMENTO DEI FINECOSA MAGNETICI





SERIE ACMT - DVMT

ROUND MAGNETIC PNEUMATIC CYLINDERS CILINDRI PNEUMATICI TONDI CON PISTONE MAGNETICO



With magnetic piston,
pneumatic cushioned,
with micrometric control for ACMT
or mechanical buffers for DVMT
Con pistone magnetico,
ammortizzatori pneumatici regolabili per la serie ACMT
oppure con smorzatori d'urto per la versione DVMT

With magnetic piston / Con pistone magnetico



AC Pneumatic cushioned
Ammortizzatori pneumatici

DV Mechanical buffers
Smorzatori d'urto meccanici

VS Viton rod seal
Guarnizione dello stelo in Viton

VV Viton all seal
Tutte le guarnizioni in Viton

P Through rod cylinder
Cilindro stelo passante

Bore
Alesaggio (mm):

Ø32 **32**

Ø40 **40**

Ø50 **50**

Upon request available with
piston rod ISO 15552 threaded.
A richiesta fornibile
con stelo filettato ISO 15552.

Standard stroke / Corse Standard	
Bore Alesaggio	25 50 80 100 125 160 200 250 300 400 500
32	•
40	•
50	•

Effective cushion length Lunghezza utile ammortizzatore	
Bore Alesaggio	Length Lunghezza
32	24
40	27
50	30

Cylinder fixing see:
Fissaggi per cilindri vedi: **Pag. A-13.**

Features of reed switches see:
Caratteristiche finecorsa magnetici: **Pag. A-13, A-19.**

TECHNICAL FEATURES

End caps Anodized aluminium.
Piston rod Rolled burnished stainless steel X20 Cr13.
Barrel Anodized aluminium.
Seals Polyurethane rubber.
Cushioning Pneumatic with micrometric control.

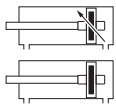
Environment temperature range -10 °C ÷ +80 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium Filtered air.
Max operating pressure 10 bar.

Testate Alluminio anodizzato.
Stelo Acciaio inox X20 Cr13 rollato.
Camicia Alluminio anodizzato.
Guarnizioni Tutte in Poliuretano.
Ammortizzatori Pneumatici con regolazione micrometrica.

Temperatura ambiente -10 °C ÷ +80 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

ACMT .. /... DVMT .. /...

SINGLE ROD
CILINDRO BASE STELO SEMPLICE

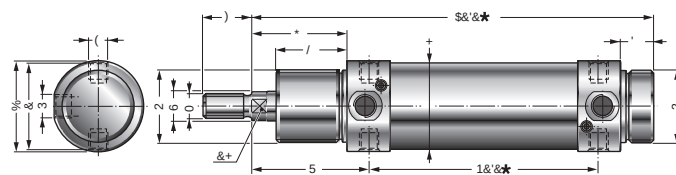


ACMT../...

DVMT../...



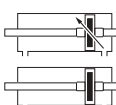
* = Stroke / Corsa



Bore Alesaggio	A	ØB	C	CH	D	ØE	F	G	H	L	ØM	N	ØO	ØP	R	ØS	Code Codice
32	148	38	36,8	10	14	M8x1	20	38	36	30	M10	78	M30x1,5	G1/8	47	12	ACMT 32/...
40	174	46	44,8	13	16	M10x1	24	45	45	35	M12	89	M38x1,5	G1/4	57	16	ACMT 40/...
50	188	58	55,8	17	18	M12x1,5	32	50	55	38	M16	96	M45x1,5	G1/4	62	20	ACMT 50/...

ACMT .. /... P DVMT .. /... P

THROUGH ROD
STELO PASSANTE

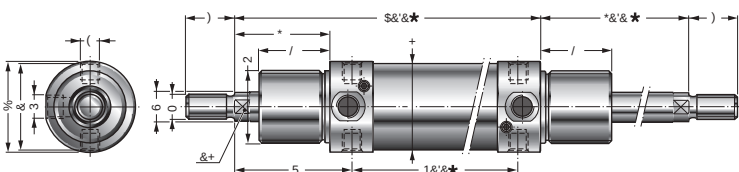


ACMT../...P

DVMT../...P



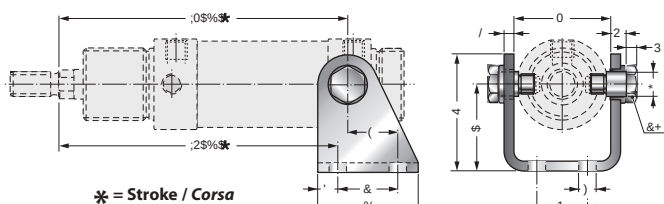
* = Stroke / Corsa



Bore	A	ØB	C	CH	ØE	F	G	H	L	ØM	N	ØO	ØP	R	ØS	Code Codice
32	134	38	36,8	10	M8x1	20	38	36	30	M10	78	M30x1,5	G1/8	47	12	ACMT 32/...P
40	158	46	44,8	13	M10x1	24	45	45	35	M12	89	M38x1,5	G1/4	57	16	ACMT 40/...P
50	170	58	55,8	17	M12x1,5	32	50	55	38	M16	96	M45x1,5	G1/4	62	20	ACMT 50/...P

FIXING ACCESSORIES FOR ACMT AND DVMT / ACCESSORI DI FISSAGGIO PER ACMT E DVMT

Note: the fixing screws are not included in the supply of the fittings / le viti di fissaggio non sono comprese nella fornitura degli accessori.

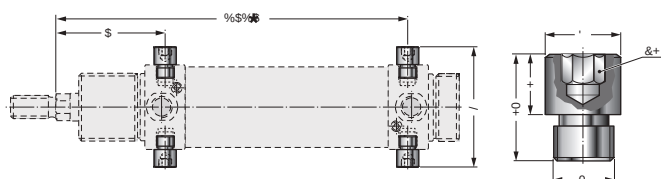
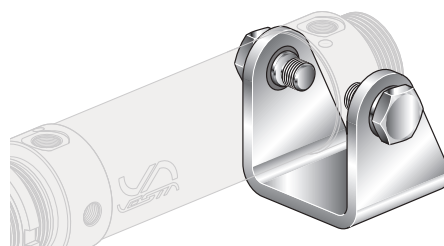


* = Stroke / Corsa

Bore Alesaggio	X1	X2	A	B	C	CH	D	E	ØF	ØG	L	M	N	O	P	Q	Code Codice
32	125	121	35	40	24	13	8	20	7	10	4	38,1	20	6	4	47	AS/32
40	146	143	40	50	30	17	10	27	9	12	5	46,1	28	7	5	53	AS/40
50	158	154	45	54	34	19	10	30	9	14	6	57,1	36	8,5	6	59	AS/50

REAR HINGE HORIZONTAL MOUNTING
MONTAGGIO A CONTROCERNIERA

AS/..

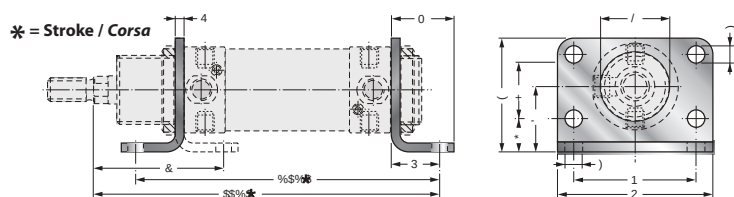
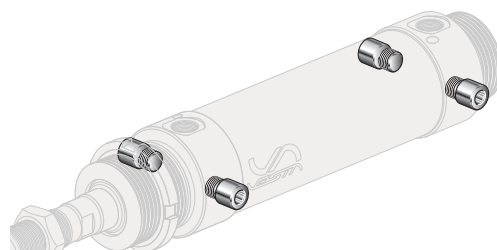


* = Stroke / Corsa

Bore Alesaggio	A	B	CH	ØD	H	H1	L	M	Code Codice
32	47	125	5	10	8	14	51	M8x1	CBF/32
40	57	146	6	12	9,5	16,5	61	M10x1	CBF/40
50	62	158	6	14	11	20	75	M12x1,5	CBF/50

PIVOT FOR FLOATING HINGE MOUNTING
PERNI PER MONTAGGIO A CERNIERA OSCILLANTE

CBF/..



Bore Alesaggio	A	B	C	D	E	F	G	H	L	M	N	O	P	Q	Code Codice
32	148	124	48	28	49	7	14	28	30	21	52	66	14	4	P/32
40	178	153	60	33	58	9	18	30	38	30	60	80	20	5	P/40
50	190	160	64	40	70	9	20	40	45	30	70	90	20	6	P/50

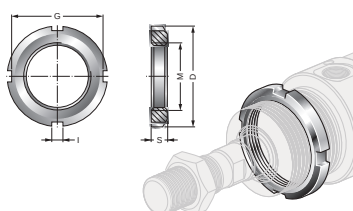
FOOT MOUNTING
MONTAGGIO A PIEDINI

P/..



RING NUT FOR FIXING
GHIERA DI FISSAGGIO

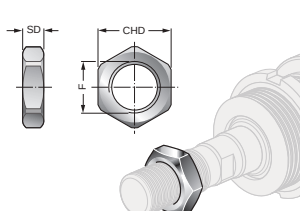
GM/..



Bore Alesaggio	ØD	G	I	M	S	Code Codice
32	45	40	5	M30x1,5	7	GM/32
40	50	46	5	M38x1,5	8	GM/40
50	58	52	6	M45x1,5	9	GM/50

ROD NUT
DADO STELO

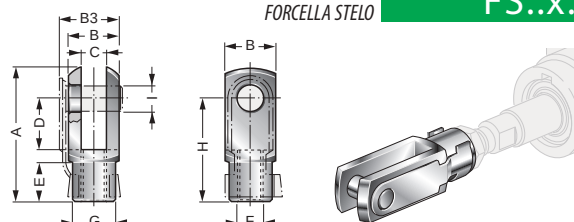
DST/..



Bore Alesaggio	CHD	F	SD	Code Codice
32	17	M10x1,5	6	DST/32
40	19	M12x1,75	7	DST/40
50	24	M16x2	8	DST/50

CLEVIS (ROD) MOUNTING
FORCELLA STELO

FS..x..



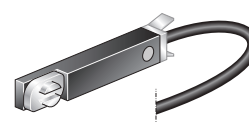
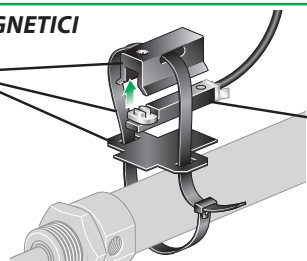
Bore Alesaggio	A	B	B3	C ^{B12}	D	E	ØF	ØG	H	ØH ¹⁹	Code Codice
32	52	20	26	10	20	15	M10 x 1,5	18	40	10	FS/10x1,5
40	62	24	32	12	24	18	M12 x 1,75	20	48	12	FS/12x1,75
50	83	32	40	16	32	24	M16 x 2	26	64	16	FS/16x2

MAGNETIC SWITCHES / FINECORSA MAGNETICI

FFS 0 2 VN

Bore
Alesaggio (mm):

Ø32 ... **32**
Ø40 ... **40**
Ø50 ... **50**

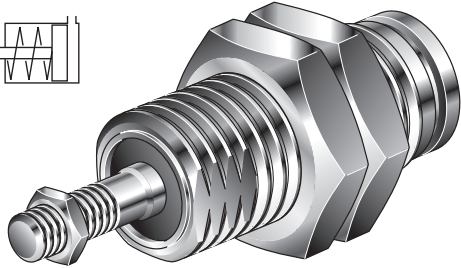
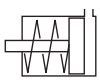


For magnetic switches features see:
Caratteristiche finecorsa magnetici vedi:
VNCR2, VNPR2, VNCE3, VNPE3.
General catalogue **Pag. A-19**



SERIE **CZ**

CARTRIDGE CYLINDERS CILINDRI A CARTUCCIA



Minicylinder single acting front spring.
Microcilindro semplice effetto molla anteriore

CZ /

Bore
Alesaggio
(mm):

Ø6 **6**
Ø10 **10**
Ø16 **16**

T Threaded piston rod (standard)
Stelo filettato (standard)
S Not threaded piston rod
Stelo non filettato

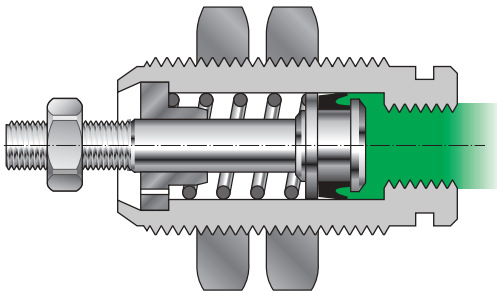
Stroke / Corsa
(mm):

5, 10, 15

Bore Alesaggio	Weight / Pesì (g)		
	5	10	15
6	10	12,8	15
10	27	32	36
16	70	78	87

Bore Alesaggio	Thrust / Spinta (6 Bar)	Thrusts / Forze sviluppate (N)	
		Spring forces / Carico molla	
		Stroke 0 Stelo dentro	End stroke Stelo esteso
6	12	1,2	3,8
10	35	2,7	7,3
16	102	3,3	6,6

OPERATING INSTRUCTION / PRECAUZIONI PER L'USO



Series **CZ** cylinders don't need maintenance or lubrication.
Avoid high piston rod loads to enable a long cylinder life.
Cylinder supplied without O-Ring.

Seals kit is not available for **CZ** series

*I cilindri serie **CZ** non necessitano di manutenzione e lubrificazione,
E' consigliabile evitare carichi radiali eccessivi sullo stelo.
Il cilindro è fornito senza O-Ring.*

*Per la serie **CZ** non sono disponibili guarnizioni di ricambio*

TECHNICAL FEATURES

Piston rod	Stainless steel X10 Cr Ni S 18-09.
Bush	Nickel plated brass.
Spring	Steel.
Body	Nickel plated brass.
Seals	NBR rubber.

Nuts	Zinc coated steel.
Environment temperature range	-20 ÷ +80 °C.
Temperature range of medium	0 ÷ +40 °C.
Lubrication	Not required.
Medium	filtered air.
Operating pressure range	2 ÷ 7 bar.

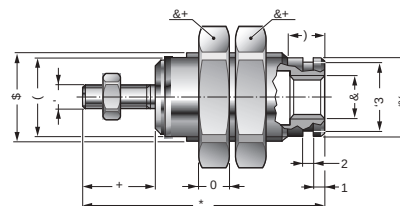
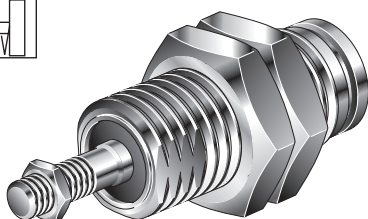
CARATTERISTICHE TECNICHE

Stelo	Acciaio inox X10 Cr Ni S 18-09.
Boccola	Ottone nichelato.
Molla	Acciaio.
Corpo	Ottone nichelato.
Guarnizioni	In NBR.

Bussola e dado	Acciaio zincato.
Temperatura ambiente	-20 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione di esercizio	2 ÷ 7 bar.

CZ .. /...

BASIC CYLINDER
CILINDRO BASE



Bore Alesaggio	A	B	C	D	E	F	G			H	M	CH	N	O	P	Code Codice
							5	10	15							
6	M10X1	8,5	M5	M3	9	5	27,5	34,5	41,5	8	3	14	1,5	1,2	7,3	CZ 06/..
10	M15X1,5	12	M5	M4	14	7	33,5	40	47	10,5	4	19	1,5	1,7	9,8	CZ 10/..
16	M22X1,5	19	M5	M5	20	6	40	45	50	13	5	27	2	1,7	16,8	CZ 16/..

PNEUMATIC CYLINDERS STANDARD VDMA - ISO 15552 CILINDRI PNEUMATICI VDMA - ISO 15552

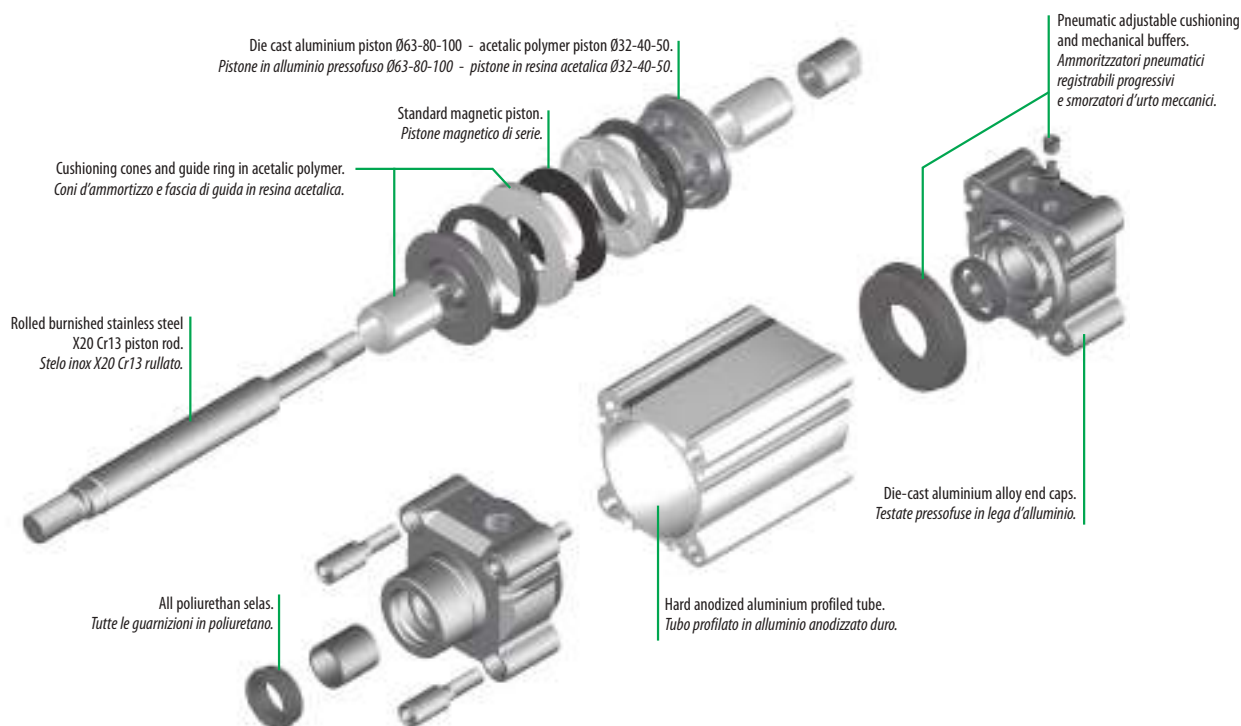
SERIE **NWT**

NWT is a new range of ISO 15552 cylinders with new design and new technology in production process, to satisfy needs of high quality performances and more competitiveness. Vesta has developed **NWT** project by using new materials for parts and new ways of producing those parts as well as new assembling and testing methods. As results, **NWT** cylinders are solid, high performing, very reliable and much competitive.

NWT è la nuova gamma di cilindri ISO 15552 caratterizzati da un nuovo design e dall'utilizzo di nuove tecnologie produttive. Vesta soddisfa in questo modo l'esigenza di alta qualità del prodotto con sempre maggiore competitività. Per questa nuova serie Vesta ha studiato nuovi componenti progettati ed ingegnerizzati utilizzando nuovi materiali e nuovi metodi di produzione. Lo scopo raggiunto è quello di unire la nota robustezza ed affidabilità dei cilindri Vesta a prestazioni e criteri di competitività ancora più spinti.



Nwt
cylinders series



Heads	Die-cast aluminium alloy.
Piston rod	Rolled burnished stainless steel X20 Cr13.
Barrel	Anodized profiled aluminium tube.
Seals	Poliurethan.
Cushioning	Pneumatic adjusting cushions.
Buffers	Mechanical.

Testate	Pressofuse in lega di alluminio.
Stelo	Acciaio inox X20 Cr13 rullato.
Camicia	Tubo profilato ed anodizzato in alluminio.
Guarnizioni	Tutte in poliuretano.
Ammortizzatori	Pneumatici progressivi regolabili.
Smorzatori d'urto	Meccanici.

Environment temperature range	-10 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.

Temperatura ambiente	-10 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.

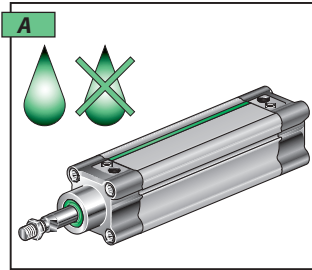
TECHNICAL FEATURES

CARATTERISTICHE TECNICHE

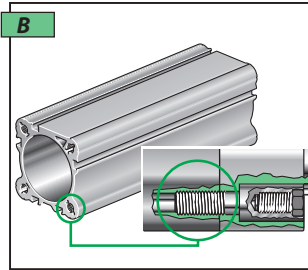


SERIE NWT

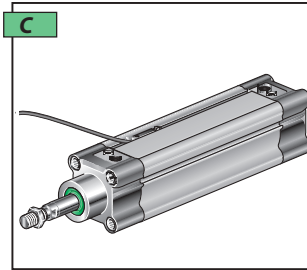
PNEUMATIC CYLINDERS STANDARD VDMA - ISO 15552 CILINDRI PNEUMATICI VDMA - ISO 15552



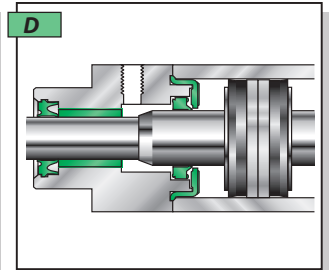
Lubrication not required.
Possibilità di funzionamento continuo
privo di lubrificazione.



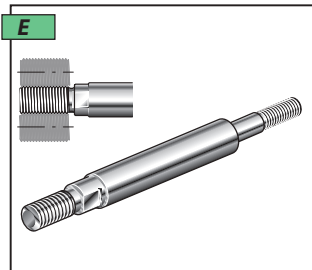
Vesta clean profile tube in anodized aluminium,
threaded.
I profili delle camicie sono in lega di alluminio,
anodizzate e filettate.



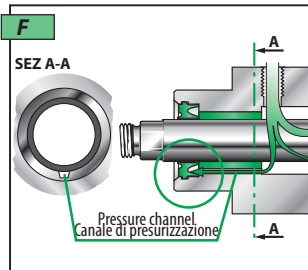
Flush mounted magnetic switches, suitable for easy
insertion on any of the cylinder faces
Finecorsa magnetici a scomparsa con
inserimento radiale direttamente da ogni lato



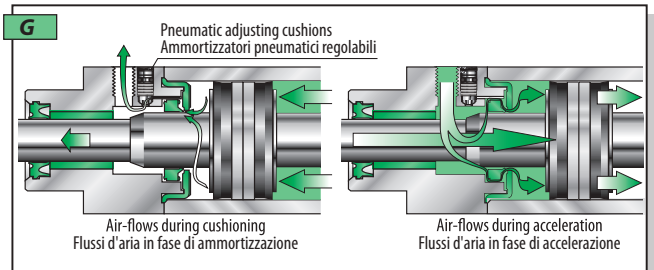
Guided magnetic piston.
Pistone magnetico guidato.



Piston rods in rolled stainless steel X20 Cr 13
Steli in acciaio INOX X20 Cr 13 rullato



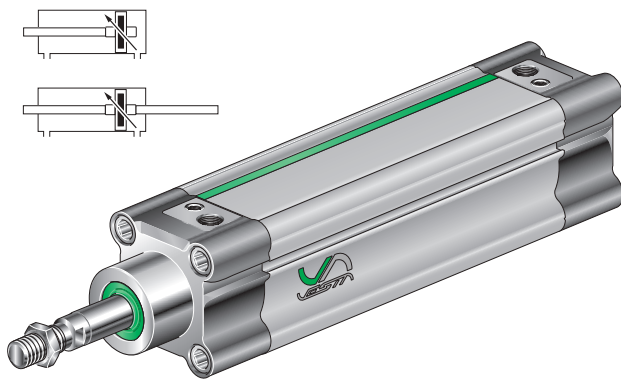
Quick pressurisation of piston rod seal, even after
long unuse.
Pressurizzazione rapida della guarnizione dello stelo
dopo lunga inattività.



Very efficient and progressive adjustable cushioning with mechanical buffers.
Ammortizzatori pneumatici progressivi ed efficienti con smorzatori d'urto di fine corsa.

CYLINDERS ISO 15552 TECHNICAL FEATURES / CARATTERISTICHE TECNICHE CILINDRI ISO 15552

ATEX versions see / Versioni ATEX vedi .. P. A-109



Cushioned cylinder, profile aluminium tube.
Ammortizzato, con camicia profilata di alluminio.

** On request NWT Ø125 is available with piston rod = Ø32 mm

** A richiesta NWT Ø125 è disponibile con stelo = Ø32mm

ISO 15552 cylinder fixing see:
Fissaggi per cilindri ISO 15552 vedi:
..... Pag. A-22 ÷ A-26

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... Pag. A-19

With magnetic piston / Con pistone magnetico

NWT ☐ ☐ ☐ ☐ ☐ ☐

Bore / Alesaggio
(mm):

Ø32 32

Ø40 40

Ø50 50

Ø63 63

Ø80 80

Ø100 ... 100

Ø125 ... 125**

Stroke
Corsa
(mm):

Though rod
cylinder
Cilindro stelo
passante

Simple acting front spring
Semplice effetto molla anteriore

Simple acting rear spring
Semplice effetto molla posteriore

Multi - thrust tandem
Tandem multispianta

Multi - position
Multiposizione

Rear opposed
Contrapposti posteriori

Front opposed
Contrapposti anteriori

P

SEA

SEP

TN2

BS

CNP

CNF

VS Viton rod seal (-5°C / +150°C)
Guarnizione dello stelo in Viton (-5°C / +150°C)

VV Viton all seal (-5°C / +150°C)
Tutte le guarnizioni in Viton (-5°C / +150°C)

KS Chromium plated steel piston-rod
Stelo in acciaio cromato

SS Stainless Steel X5 Cr Ni 18-10 piston-rod
Stelo in Acciaio Inox X5 Cr Ni 18-10

KSS Chromium plated Stainless Steel
X5 Cr Ni 18-10 piston-rod
Stelo in Acciaio Inox X5 Cr Ni 18-10 cromato

LFC Low friction cushioned
Basso attrito, ammortizzato

LF Low friction non-cushioned
Basso attrito, non ammortizzato

H =mm Extended Piston-rod (mm.= length)
Stelo prolungato (lunghezza in mm.)

NBX Assembling screws and nuts
in stainless steel
Viti, dadi in acciaio Inox

R32 Piston rod Ø 32 (only NWT 125)
Stelo Ø 32 (solo NWT 125)

LT Low temperature version (-30°C / +80°C)
Versione per bassa temperatura (-30°C / +80°C)

Effective cushion length
Lunghezza utili ammortizzatore

Bore Alesaggio Length Lunghezza

32 24

40 27

50 30

63 30

80 36

100 38

125 38

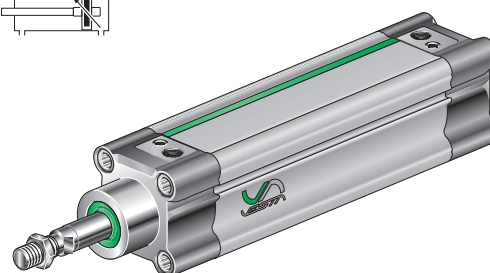
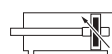
Bore Alesaggio	25	50	80	100	125	160	200	250	300	350	400	450	500	600	700	800	900	1000
32																		
40																		
50																		
63																		
80																		
100																		
125																		

* = Stroke / Corsa

Bore Alesaggio	A	B	C	ØD	ØE	ØF	G	H	I	L	M	N	ØO	ØP	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	8	18	4	45	32,5	M6	G1/8	16	10	NWT 32/... P
40	135	105	30	35	16	M12x1,25	24	8,5	21,5	4	54	38	M6	G1/4	16	13	NWT 40/... P
50	143	106	37	40	20	M16x1,5	32	9	28	4	64	46,5	M8	G1/4	16	17	NWT 50/... P
63	158	121	37	45	20	M16x1,5	32	8,5	28,5	4	75	56,5	M8	G3/8	16	17	NWT 63/... P
80	174	128	46	45	25	M20x1,5	40	11,5	34,5	4	93	72	M10	G3/8	18	21	NWT 80/... P
100	189	138	51	55	25	M20x1,5	40	13	38	4	110	89	M10	G1/2	18	21	NWT 100/... P
125	225	160	65	60	30**	M27x2*	54*	30	35	5	142	110	M12	G1/2	22	27	NWT 125/... P

* = on request / a richiesta F=M24x2, G=48
 ** = on request piston rod / a richiesta stelo ØE = 32 mm

SINGLE ROD
 CILINDRO BASE STELO SEMPLICE **NWT .. /...**



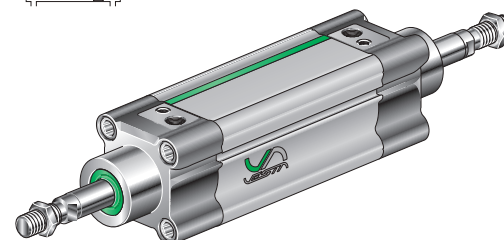
ATEX versions see / Versioni ATEX vedi .. P. A-109

* = Stroke / Corsa

Bore Alesaggio	A	B	C	ØD	ØE	ØF	G	H	H1	I	M	N	ØO	ØP	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	8	26	18	45	32,5	M6	G1/8	16	10	NWT 32/... P
40	135	105	30	35	16	M12x1,25	24	8,5	30	21,5	54	38	M6	G1/4	16	13	NWT 40/... P
50	143	106	37	40	20	M16x1,5	32	9	37	28	64	46,5	M8	G1/4	16	17	NWT 50/... P
63	158	121	37	45	20	M16x1,5	32	8,5	37	28,5	75	56,5	M8	G3/8	16	17	NWT 63/... P
80	174	128	46	45	25	M20x1,5	40	11,5	46	34,5	93	72	M10	G3/8	18	21	NWT 80/... P
100	189	138	51	55	25	M20x1,5	40	13	51	38	110	89	M10	G1/2	18	21	NWT 100/... P
125	225	160	65	60	30**	M27x2*	54*	30	65	35	142	110	M12	G1/2	22	27	NWT 125/... P

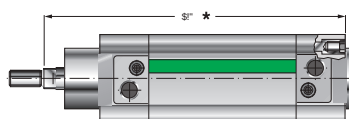
* = on request / a richiesta F=M24x2, G=48
 ** = on request piston rod / a richiesta stelo ØE = 32 mm

THROUGH ROD
 STELO PASSANTE **NWT .. /... P**



ATEX versions see / Versioni ATEX vedi .. P. A-109

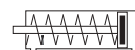
For overall dimensions see NWT standard
 Dimensioni di ingombro vedi NWT standard



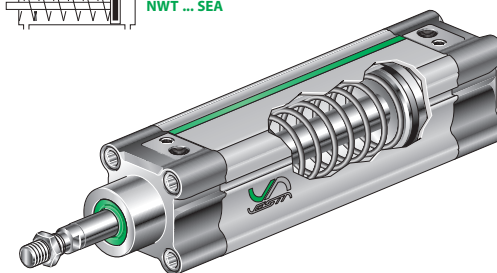
* = Stroke / Corsa

Bore Alesaggio	A	Code Codice
32	120	NWT32/... SEA
40	135	NWT40/... SEA
50	143	NWT50/... SEA
63	158	NWT63/... SEA
80	174	NWT80/... SEA
100	189	NWT100/... SEA

SIMPLE ACTING FRONT SPRING
 SEMPLICE EFFETTO MOLLA ANTERIORE **NWT .. /... SEA**

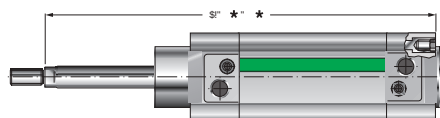


NWT ... SEA



Strokes Corse (mm)	Spring force - Forza molla (N)												..SEA	..SEP
	Ø32 mm		Ø40 mm		Ø50 mm		Ø63 mm		Ø80 mm		Ø100 mm			
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
10	50	54	72	82	110	123	110	123	166	180	166	180	•	•
20	44	54	62	82	98	123	98	123	152	180	152	180	•	•
30	40	54	52	82	86	123	86	123	137	180	137	180	•	•
40	35	54	42	82	73	123	73	123	123	180	123	180	•	•
50	30	54	32	82	60	123	60	123	110	180	110	180	•	•

For overall dimensions see NWT standard
 Dimensioni di ingombro vedi NWT standard



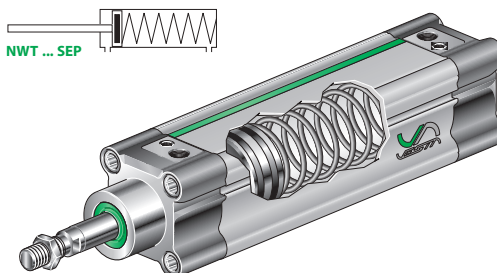
* = Stroke / Corsa

Bore Alesaggio	A	Code Codice
32	120	NWT32/... SEP
40	135	NWT40/... SEP
50	143	NWT50/... SEP
63	158	NWT63/... SEP
80	174	NWT80/... SEP
100	189	NWT100/... SEP

SIMPLE ACTING REAR SPRING
 SEMPLICE EFFETTO MOLLA POSTERIORE **NWT .. /... SEP**



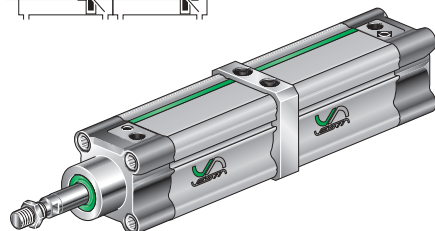
NWT ... SEP





NWT ... TN2 ...

MULTI-THRUST TANDEM
TANDEM MULTISPINTA



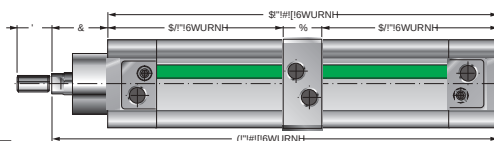
NWT □□ / □□□ TN2 □□

Stroke
Corsa (mm):

Bore /
Alesaggio
(mm):
Ø32 ... **32** Ø80 ... **80**
Ø40 ... **40** Ø100 ... **100**
Ø50 ... **50** Ø125 ... **125**
Ø63 ... **63**

P Through rod cylinder / Cilindro stelo passante

VS Viton rod seal / Guarnizione dello stelo in Viton
VV Viton all seals / Tutte le guarnizioni in Viton



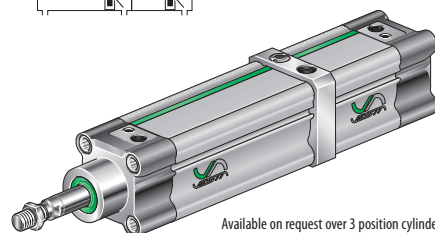
Bore Alesaggio	A	A1	B	C	D	E	Code Codice
32	156	68	20	26	20	182	NWT 32/... TN...
40	175	73,5	28	30	24	205	NWT 40/... TN...
50	171	76,5	18	37	32	208	NWT 50/... TN...
63	191	85	21	37	32	228	NWT 63/... TN...
80	205	91,5	22	46	40	251	NWT 80/... TN...
100	224	98,5	27	51	40	275	NWT 100/... TN...
125	265	115	35	65	54*	330	NWT 125/... TN...

For other dimensions please see
NWT standard cylinder
Per altre dimensioni vedere
cilindri NWT standard

* = on request / su richiesta D=48

NWT ... BS ...

MULTI-POSITION
MULTIPOSIZIONE



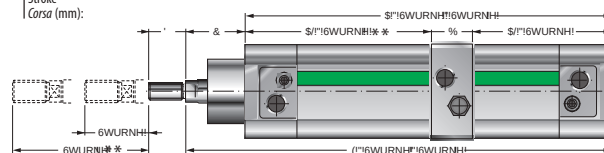
Available on request over 3 position cylinders
A richiesta cilindri da 3 a più posizioni

**Attention: Stroke 2 = Addition of the two strokes of the cylinder
**Attenzione: Corsa 2 = Somma delle due corse del cilindro

NWT □□ / □□□ - □□□ BS □□

Bore / Alesaggio
(mm):
Ø32 ... **32**
Ø40 ... **40**
Ø50 ... **50**
Ø63 ... **63**
Ø80 ... **80**
Ø100 ... **100**
Ø125 ... **125**

1° Stroke
Corsa (mm):
2° ** Stroke / Corsa (mm):



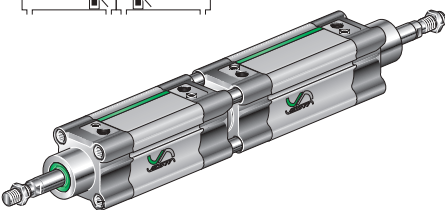
Bore Alesaggio	A	A1	B	C	D	E	Code Codice
32	156	68	20	26	20	182	NWT 32/... BS...
40	175	73,5	28	30	24	205	NWT 40/... BS...
50	171	76,5	18	37	32	208	NWT 50/... BS...
63	191	85	21	37	32	228	NWT 63/... BS...
80	205	91,5	22	46	40	251	NWT 80/... BS...
100	224	98,5	27	51	40	275	NWT 100/... BS...
125	265	115	35	65	54*	330	NWT 125/... BS...

For other dimensions please see
NWT standard cylinder
Per altre dimensioni vedere
cilindri NWT standard

* = on request / su richiesta D=48

NWT ... CNP ...

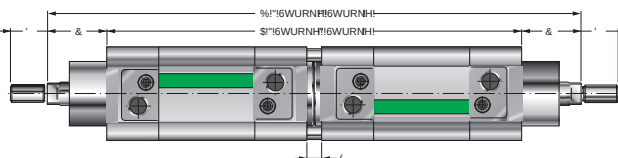
REAR OPPOSED
CONTRAPPOSTI POSTERIORI



NWT □□ / □□□ - □□□ CNP □□

Bore / Alesaggio
(mm):
Ø32 ... **32**
Ø40 ... **40**
Ø50 ... **50**
Ø63 ... **63**
Ø80 ... **80**
Ø100 ... **100**
Ø125 ... **125**

1° Stroke
Corsa (mm):
2° Stroke / Corsa (mm):



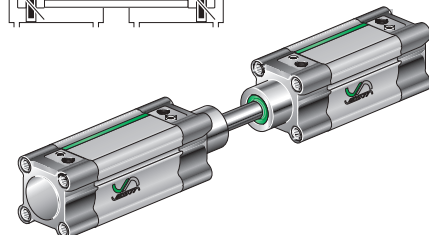
Bore Alesaggio	A	B	C	D	E	Code Codice
32	196	248	26	20	8	NWT 32/... CNP...
40	218	278	30	24	8	NWT 40/... CNP...
50	220	294	37	32	8	NWT 50/... CNP...
63	250	324	37	32	8	NWT 63/... CNP...
80	264	356	46	40	8	NWT 80/... CNP...
100	284	386	51	40	8	NWT 100/... CNP...
125	330	460	65	54*	10	NWT 125/... CNP...

For other dimensions please see
NWT standard cylinder
Per altre dimensioni vedere
cilindri NWT standard

* = on request / su richiesta D=48

NWT ... CNF ...

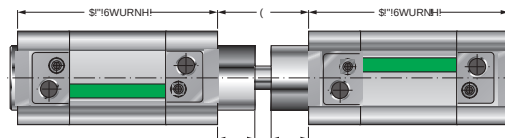
FRONT OPPOSED
CONTRAPPOSTI ANTERIORI



NWT □□ / □□□ - □□□ CNF □□

Bore / Alesaggio
(mm):
Ø32 ... **32**
Ø40 ... **40**
Ø50 ... **50**
Ø63 ... **63**
Ø80 ... **80**
Ø100 ... **100**
Ø125 ... **125**

1° Stroke
Corsa (mm):
2° Stroke / Corsa (mm):

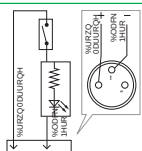


Bore Alesaggio	A	E	I	Code Codice
32	94	48	18	NWT 32/... CNF...
40	105	54	21,5	NWT 40/... CNF...
50	106	69	28	NWT 50/... CNF...
63	121	69	28,5	NWT 63/... CNF...
80	128	86	34,5	NWT 80/... CNF...
100	138	91	38	NWT 100/... CNF...
125	160	100	35	NWT 125/... CNF...

For other dimensions please see
NWT standard cylinder
Per altre dimensioni vedere
cilindri NWT standard

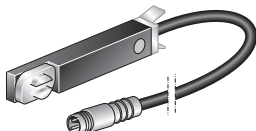
MAGNETIC SWITCHES FOR NWT CYLINDERS / FINECOSA MAGNETICI PER CILINDRI NWT

circuit / circuito



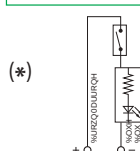
WITH CONNECTOR
CON CONNETTORE
REED

VNCR2



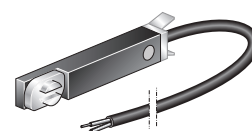
Cable standard length / Lunghezza cavo standard: 300 mm

circuit / circuito



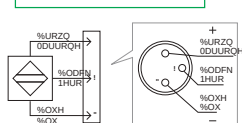
(*) WITH DIRECT CABLE
CON CAVO DIRETTO
REED

VNPR2



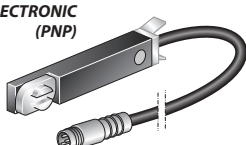
Cable standard length / Lunghezza cavo standard: 3000 mm

circuit / circuito



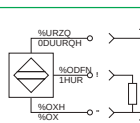
WITH CONNECTOR 3 POLES
CON CONNETTORE 3 POLI
ELECTRONIC
(PNP)

VNCE3



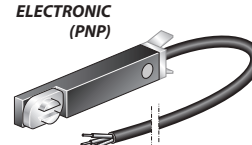
Cable standard length / Lunghezza cavo standard: 300 mm

circuit / circuito



WITH DIRECT CABLE 3 POLES
CON CAVO DIRETTO 3 POLI
ELECTRONIC
(PNP)

VNPE3

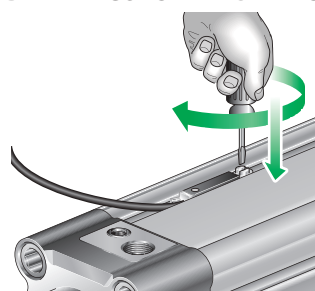
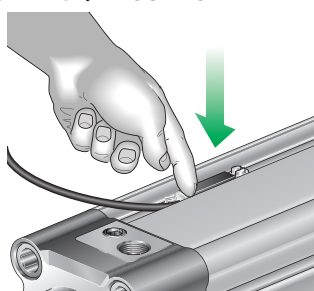
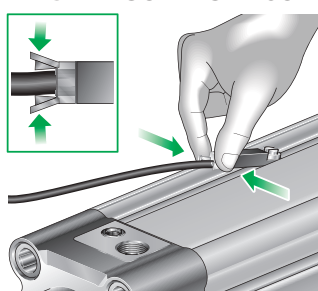
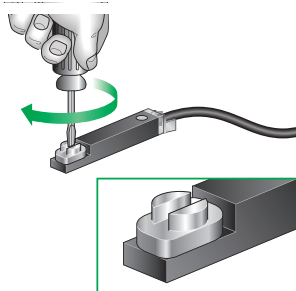


Cable standard length / Lunghezza cavo standard: 3000 mm

(*) Available on request **VNPR2** for series connection of switches, order code **VNPR3**.
A richiesta è fornibile il sensore **VNPR2** adatto al collegamento in serie di più sensori, con codice **VNPR3**.

Code Codice	Voltage range Tensione max	Switching current Corrente a 25 °C	Switching capacity Potenza Induttiva	Degree of protection Grado di protezione	Working temperature Temperatura di lavoro	ON time Tempo di inserzione	OFF time Tempo di disinserzione	Electric life Vita elettrica	Contact resistance Resistenza di contatto	Contact function Contatto
VNCR2	3-48 AC-DC	100	6	IP67	-20 ÷ +85	0,5 msec	0,1 msec	10 ⁷	0,1	
VNPR2	3-48 AC-DC	100	6	IP67	-20 ÷ +85	0,5 msec	0,1 msec	10 ⁷	0,1	
VNCE3	6-30 DC	200	4	IP67	-20 ÷ +85	0,8 µsec	0,3 µsec	10 ⁹	-	
VNPE3	6-30 DC	200	4	IP67	-20 ÷ +85	0,8 µsec	0,3 µsec	10 ⁹	-	

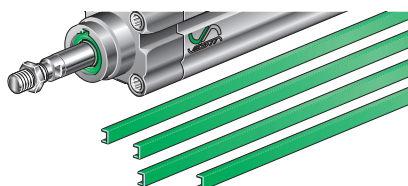
MAGNETIC SWITCH POSITIONING / POSIZIONAMENTO DEI FINECOSA MAGNETICI



SPARE PARTS FOR NWT CYLINDERS / RICAMBI PER CILINDRI NWT

PLASTIC SLOT COVER
BANDELLA DI COPERTURA CAVA

NWT-PCC



EXTENSION FOR MAGNETIC SWITCH CABLE
PROLUNGA CAVO SENSORE MAGNETICO

VSC-P3 030

3 poles, for reed or electronic switch
3 fili, per sensore reed od elettronico

Standard length / Lunghezza standard

3000 mm



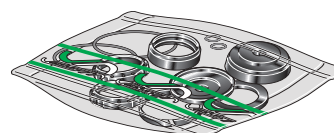
Seals kit code = **Cylinder code + Bore + Versions + - SG:**
(The kit includes all seals).

Codice del kit = **Codice del cilindro + Alesaggio + Versioni + - SG:**
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **NWT 63 P VS - SG**

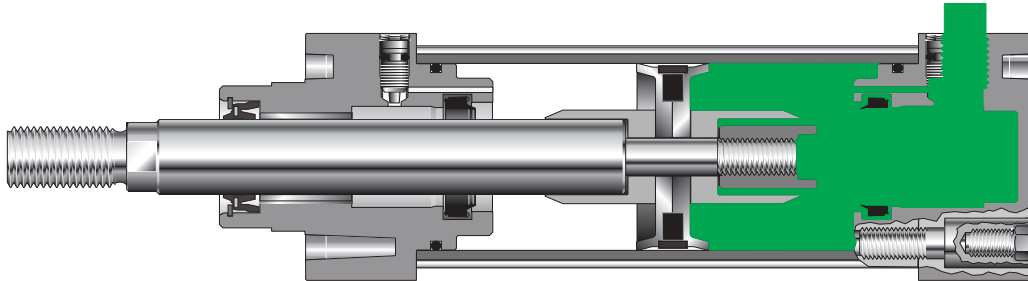
SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

..... - SG





CYLINDERS ISO 15552 TECHNICAL FEATURES / CARATTERISTICHE TECNICHE CILINDRI ISO 15552

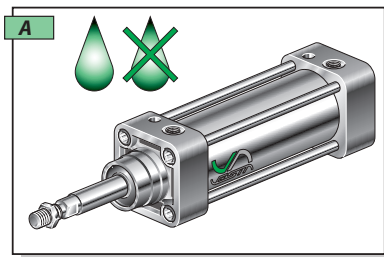


VESTA cylinders tie rods version **XJC** series are available from 160 to 320 mm bores.

The cylinders are built in accordance with ISO-VDMA standards and are available in double acting version with magnetic piston in a wide range of standard strokes. Stroke tolerance follows ISO 15552 standard.

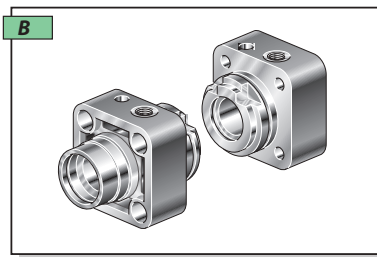
*I cilindri serie **XJC** a tiranti sono fornibili negli alesaggi dal 160 al 320.*

Questi cilindri sono costruiti secondo le norme ISO-VDMA e sono disponibili nella versione a doppio effetto con pistone magnetico, in una vasta gamma di corse standard. Le tolleranze sulle corse dei cilindri sono conformi alla normativa ISO 15552.



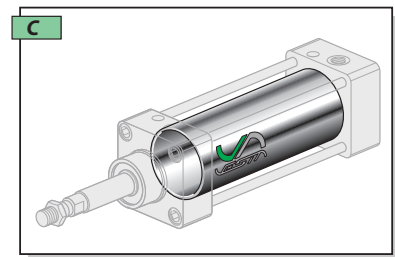
Lubrication not required.

Possibilità di funzionamento continuo privo di lubrificazione.



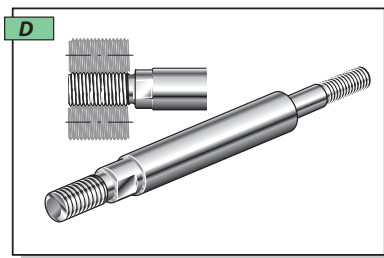
Caps in a light aluminium alloy.

Le testate sono in lega leggera di alluminio.



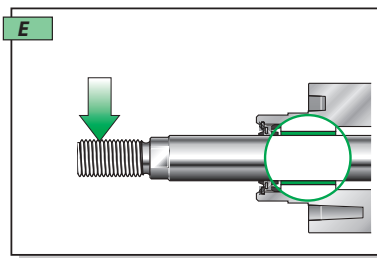
Barrel in anodized aluminium tube.

Le camicie sono in lega di alluminio anodizzate.



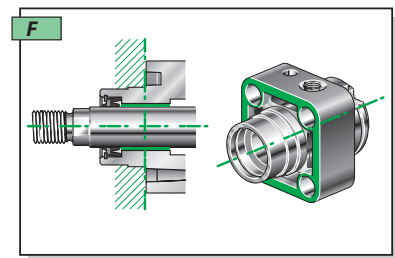
Piston rods in chromium-plated steel.

Steli in acciaio cromato.



Self lubricating bearing in a copper-steel alloy, with teflon covering.

Boccole autolubrificanti in acciaio ramato con deposito in Teflon.



Machined to get centering and surface finishing.

Piani di riferimento e centraggi sono ottenuti con lavorazione meccanica.

TECHNICAL FEATURES

End caps	Aluminium alloy.
Piston rod	Chromium-plated steel, on request stainless steel X5CrNi 1810.
Tie rods	Stainless steel.
Barrel	Anodized aluminium tube.
Seals	NBR rubber. - Pistone poliuretan

Cushioning	Pneumatic adjusting cushions.
Environment temperature	-10 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	filtered air.
Max operating pressure	10 bar.

CARATTERISTICHE TECNICHE

Testate	Lega di alluminio.
Stelo	Acciaio cromato, a richiesta acciaio inox X5CrNi 1810.
Tiranti	Acciaio inox.
Camicia	Tubo di alluminio.
Guarnizioni	Tutte in NBR. - Pistone poliuretano

Ammortizzatori	Pneumatici regolabili progressivi.
Temperatura ambiente	-10 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.

PNEUMATIC CYLINDERS, STANDARD VDMA - ISO 15552 CILINDRI PNEUMATICI, VDMA - ISO 15552

SERIE **XJC**

With magnetic piston / Con pistone magnetico

XJC ☐ ☐ ☐ / ☐ ☐ ☐ ☐ ☐

Bore / Alesaggio (mm):
Ø160 **160**
Ø200 **200**
Ø250 **250**
Ø320 **320**

Stroke
Corsa (mm):

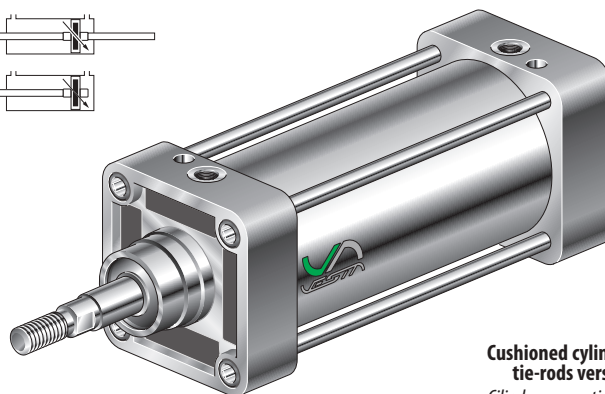
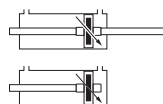
VS Viton rod seal
Guarnizione dello stelo in Viton

VV Viton all seal
Tutte le guarnizioni in Viton

TN2 Multi-thrust tandem (Ø160 - Ø200)
Tandem multispinta (Ø160 - Ø200)

SS Stainless Steel X5 Cr Ni 18-10 piston-rod
Stelo in Acciaio Inox X5 Cr Ni 18-10

Through rod cylinder **P**
Cilindro stelo passante



Cushioned cylinder,
tie-rods version.
Cilindro ammortizzato,
esecuzione a tiranti.

ISO 15552 cylinder fixing see:
Fissaggi per cilindri ISO 15552 vedi:
..... **Pag. A-22 ÷ A-26**

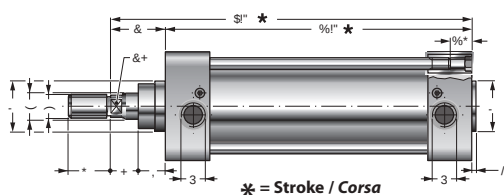
Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-26**

Effective cushion length
Lunghezza utile ammortizzatore

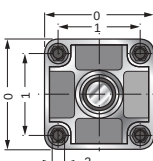
Bore Alesaggio	Length Lunghezza
160	45
200	45
250	45
320	45

Bore Alesaggio	25	50	80	100	125	160	200	250	300	350	400	450	500	600	700	800	900	1000
160	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
250	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
320	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

CILINDRI PNEUMATICI PNEUMATIC CYLINDERS

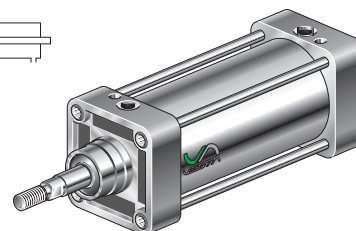
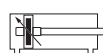


* = Stroke / Corsa



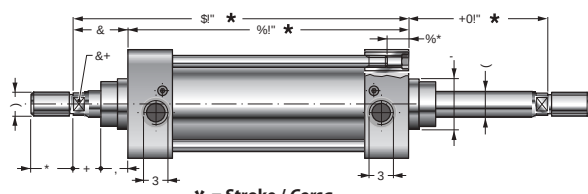
SINGLE ROD
CILINDRO BASE STELO SEMPLICE

XJC ... / ...

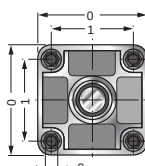


* On request / a richiesta : F = M24x2, e G = 48.

Bore Alesaggio	A	B	C	ØD	ØE	ØF	G	H	I	L	M	N	ØO	ØP	BG	CH	Code Codice
160	260	180	80	65	40	M36x2	72	35	45	5	180	140	M16	G3/4	22	36	XJC 160/...
200	275	180	95	75	40	M36x2	72	50	45	5	220	175	M16	G3/4	22	36	XJC 200/...
250	305	200	105	90	50	M42x2	84	30	75	8	270	220	M20	G1	25	46	XJC 250/...
320	340	220	120	110	63	M48x2	96	30	90	10	350	270	M24	G1	28	55	XJC 320/...

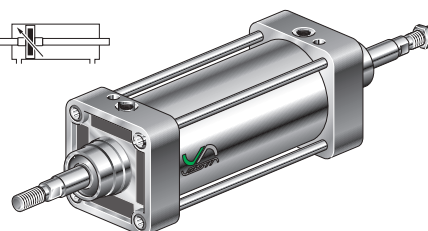


* = Stroke / Corsa



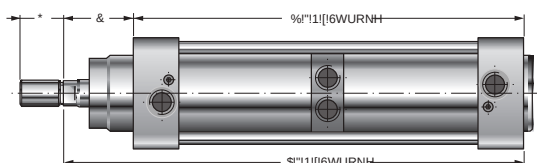
THROUGH ROD
STELO PASSANTE

XJC ... / ... P



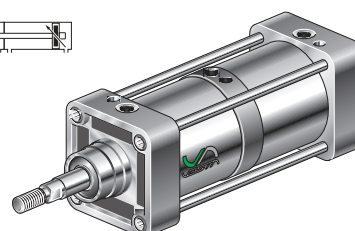
* On request / a richiesta : F = M24x2, e G = 48.

Bore Alesaggio	A	B	C	ØD	ØE	ØF	G	H	H1	I	M	N	ØO	ØP	BG	CH	Code Codice
160	260	180	80	65	40	M36x2	72	35	80	45	180	140	M16	G3/4	22	36	XJC 160/... P
200	275	180	95	75	40	M36x2	72	50	95	45	220	175	M16	G3/4	22	36	XJC 200/... P
250	305	200	105	90	50	M42x2	84	30	105	75	270	220	M20	G1	25	46	XJC 250/... P
320	340	220	120	110	63	M48x2	96	30	120	90	350	270	M24	G1	28	55	XJC 320/... P



MULTI-THRUST TANDEM
TANDEM MULTISPINTA

XJC ... TN2 ...



Bore Alesaggio	A	B	C	G	Code Codice
160	356	276	80	72	XJC 160/... TN...
200	395	300	95	72	XJC 200/... TN...

For other dimensions please see
XJC standard cylinder
Per altre dimensioni vedere
cilindri **XJC** standard

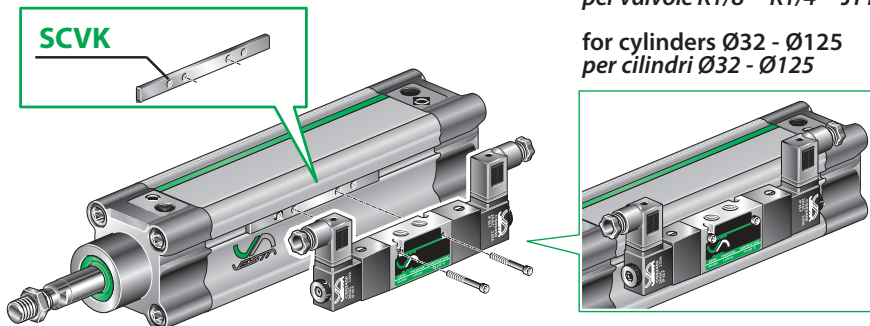
FIXING ACCESSORIES / ACCESSORI DI FISSAGGIO PER CILINDRI ISO 15552

Note: the fixing screws are not included in the supply of the fitting / le viti di fissaggio non sono comprese nella fornitura dell'accessorio.

SCVK

BRACKET FOR ASSEMBLING CYLINDER-VALVE
FISSAGGIO VALVOLA AL CILINDRO

SCVK

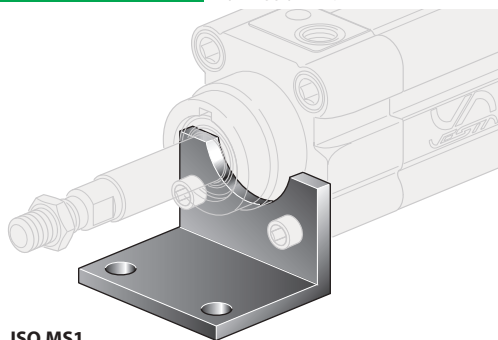


for valves K1/8" - K1/4" - JT1/8" - JT1/4" - E1/8" - E1/4"
per valvole K1/8" - K1/4" - JT1/8" - JT1/4" - E1/8" - E1/4"

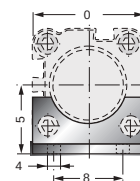
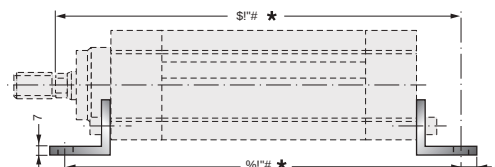
for cylinders Ø32 - Ø125
per cilindri Ø32 - Ø125

XP/..

FOOT MOUNTING
MONTAGGIO A PIEDINI



REF. ISO MS1



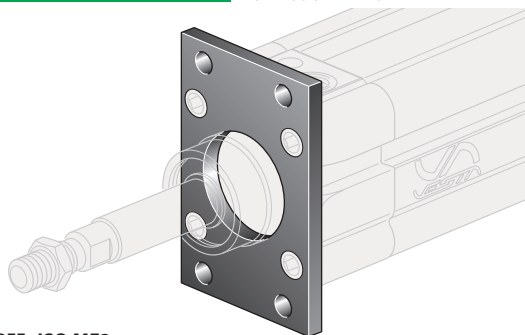
* = Stroke / Corsa

Bore Alesaggio	A1	B1	M	ØQ	R	S	T	U	Code Codice
32	144	142	45	7	32	11	4	32	XP/32
40	163	161	52	9	36	15	4	36	XP/40
50	175	170	65	9	45	15	5	45	XP/50
63	190	185	75	9	50	15	5	50	XP/63
80	215	210	95	12	63	20	6	63	XP/80
100	230	220	115	14	71	25	6	75	XP/100
125	270	250	140	16	90	15	8	90	XP/125
160	320	300	180	18	115	20	9	115	XP/160
200	345	320	220	22	135	50	12	135	XP/200

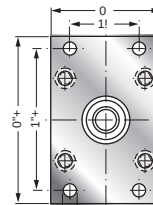
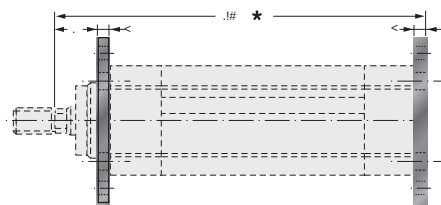
Cylinders fixing for Ø250
and Ø320 on request
Fissaggi per cilindri Ø250
e Ø320 a richiesta

XFL/..

FLANGE MOUNTING
MONTAGGIO A FLANGIA



REF. ISO MF2



* = Stroke / Corsa

Bore Alesaggio	K	K1	M	M2	N1	N2	ØQ	Y	Code Codice
32	16	130	45	80	32	64	7	10	XFL/32
40	20	145	52	90	36	72	9	10	XFL/40
50	25	155	65	110	45	90	9	12	XFL/50
63	25	170	75	120	50	100	9	12	XFL/63
80	30	190	95	150	63	126	12	16	XFL/80
100	35	205	115	170	75	150	14	16	XFL/100
125	45	245	140	205	90	180	16	20	XFL/125
160	60	280	180	260	115	230	18	20	XFL/160
200	70	300	220	300	135	270	22	25	XFL/200

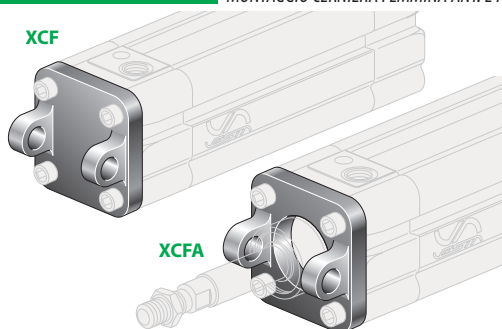
Cylinders fixing for Ø250
and Ø320 on request
Fissaggi per cilindri Ø250
e Ø320 a richiesta

XCF ./..

FRONT AND REAR CLEVIS (FEMALE) MOUNTING
MONTAGGIO CERNIERA FEMMINA ANT. E POST.

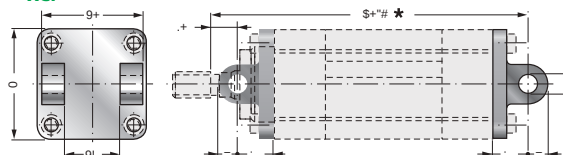
XCF

XCFA



REF. ISO MP2

XCF



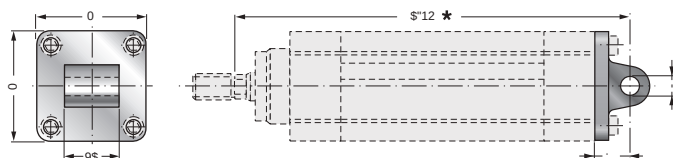
* = Stroke / Corsa

Bore Alesaggio	A2	ØJ ^{H9}	K2	M	V1	V2	D	W	Z	Code front Cod. ant.	Code rear Cod. post.
32	142	10	4	45	26	45	30	22	11	XCFA/32	XCF/32
40	160	12	5	52	28	52	35	25	13	XCFA/40	XCF/40
50	170	12	10	65	32	60	40	27	13	XCFA/50	XCF/50
63	190	16	5	75	40	70	45	32	17	XCFA/63	XCF/63
80	210	16	10	95	50	90	45	36	17	XCFA/80	XCF/80
100	230	20	10	115	60	110	55	41	21	XCFA/100	XCF/100
125	275	25	15	140	70	130	-	50	26	XCFA/125	XCF/125
160	315	30	25	180	90	170	-	55	31	XCFA/160	XCF/160
200	335	30	35	220	90	170	-	60	31	XCFA/200	XCF/200

XCFA

Cylinders fixing for Ø250 and Ø320
on request
Fissaggi per cilindri
Ø250 e Ø320
a richiesta

FIXING ACCESSORIES / ACCESSORI DI FISSAGGIO PER CILINDRI ISO 15552



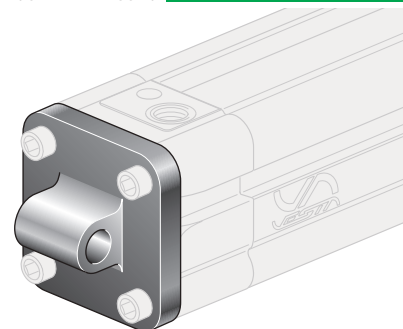
* = Stroke / Corsa

Cylinders fixing for Ø 250 and Ø 320 on request
Fissaggi per cilindri Ø 250 e Ø 320 a richiesta

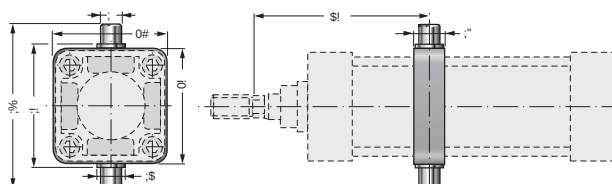
Bore Alesaggio	A2	ØJ ^{H7}	M	V1	W	Code Codice
32	142	10	45	26	22	XCM/32
40	160	12	55	28	25	XCM/40
50	170	12	65	32	27	XCM/50
63	190	16	75	40	32	XCM/63
80	210	16	95	50	36	XCM/80
100	230	20	115	60	41	XCM/100
125	275	25	140	70	50	XCM/125
160	315	30	180	90	55	XCM/160
200	335	30	220	90	60	XCM/200

CLEVIS (MALE) MOUNTING
MONTAGGIO A CONTROCERNIERA MASCHIO

XCM/..



REF. ISO MP4



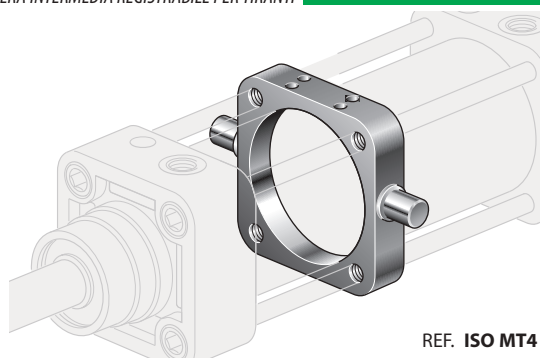
Cylinders fixing for Ø 250 and Ø 320 on request
Fissaggi per cilindri Ø 250 e Ø 320 a richiesta

Available not adjustable trunnion **XCI** ... series for tie rods cylinders.
Specify dimension **A3** when trunnion is supplied assembled.
E' disponibile anche la cerniera intermedia fissa **XCI** ... per la versione a tiranti,
bisogna quindi specificare la quota **A3** per la fornitura premontata sul cilindro richiesto.

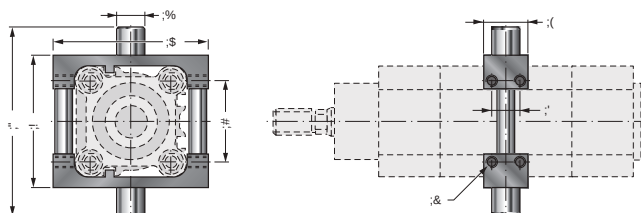
Bore Alesaggio	A3 min.	A3 max.	M3	M6	ØX ^{e9}	ØX1	X2	X3	X4	Code Codice
160	153	187+(*)	190	190	32	45	40	200	264	XCI/160
200	173	197+(*)	240	240	32	45	40	250	314	XCI/200

ADJUSTABLE TIE ROD TRUNNION MOUNTING
CERNIERA INTERMEDIA REGISTRABILE PER TIRANTI

XCIR/..



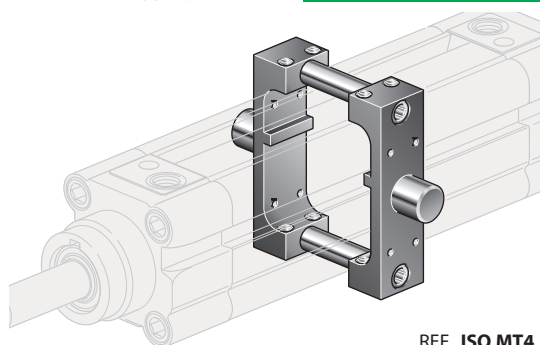
REF. ISO MT4



Bore Alesaggio	X1	X2	X3	ØX4 ^{H7}	X5	X6	X7	X8	Code Codice
32	64	80	50	12	20	32,5	12,4	M5	NWCIR/32
40	72	95	63	16	20	38	12,6	M5	NWCIR/40
50	88	107	75	16	25	46,6	16,2	M6	NWCIR/50
63	100	130	90	20	25	56,6	16,2	M6	NWCIR/63
80	120	150	110	20	25	72	16,2	M6	NWCIR/80
100	140	182	132	25	30	89	18	M8	NWCIR/100
125	166	210	160	25	40	110	26,8	M10	NWCIR/125

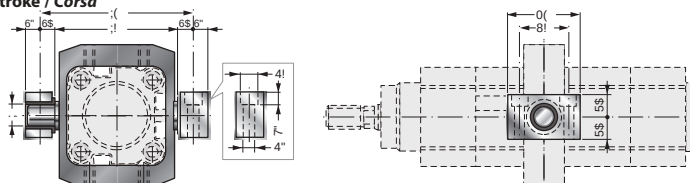
NWT ADJUSTABLE TRUNNION MOUNTING
CERNIERA INTERMEDIA REGISTRABILE PER NWT

NWCIR/..



REF. ISO MT4

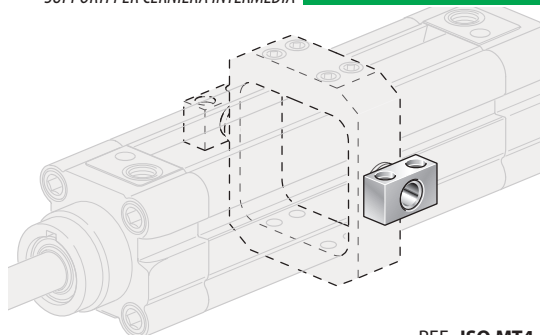
* = Stroke / Corsa



Bore Alesaggio	M5	ØQ2	ØQ3	R1	S1	S2	T2	U3	ØX	X3	X5	Code Codice
32	46	6,6	11	15	10,5	10,5	7	32	12	50	71	SU-CI/32
40	55	9	15	18	12	9	9	36	16	63	87	SU-CI/40
50	55	9	15	18	12	9	9	36	16	75	101	SU-CI/50
63	65	11	18	20	13	13,5	11	42	20	90	116	SU-CI/63
80	65	11	18	20	13	13,5	11	42	20	110	138	SU-CI/80
100	75	13	20	25	16	15,5	13	50	25	132	165	SU-CI/100
125	75	13	20	25	16	15,5	13	50	25	160	192	SU-CI/125
160	92	18	26	30	22,5	19,5	17	60	32	200	245	SU-CI/160
200	92	17	26	30	22,5	19,5	17	60	32	250	295	SU-CI/200

TRUNNION BEARING
SUPPORTI PER CERNIERA INTERMEDIA

SU-CI/..



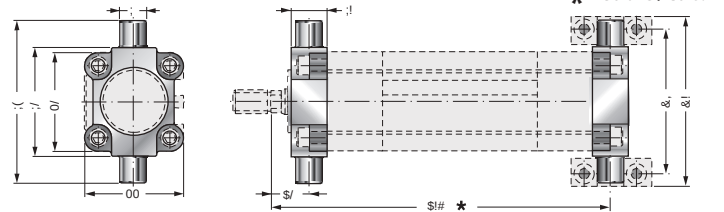
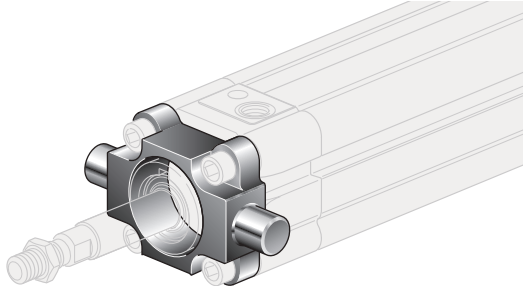
REF. ISO MT4

FIXING ACCESSORIES / ACCESSORI DI FISSAGGIO PER CILINDRI ISO 15552

Note: the fixing screws are not included in the supply of the fittings / *le viti di fissaggio non sono comprese nella fornitura degli accessori.*

XCBF/..

FLOATING FRONT HINGE MOUNTING
MONTAGGIO CERNIERA OSCILLANTE ANTERIORE

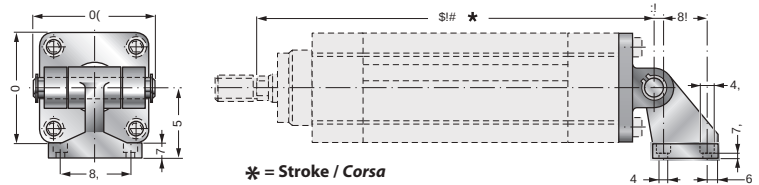
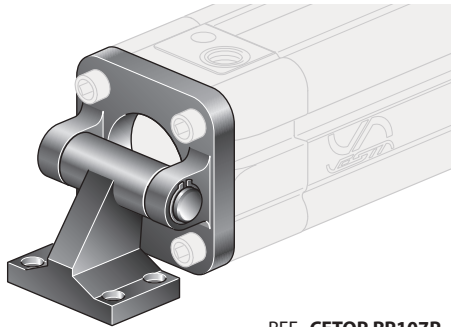


Bore Alesaggio	A2	A3	C1	C2	M3	M6	ØX ^{e9}	X2	X3	X4	Code Codice
32	128	18	71	86	45	45	12	15	50	74	XCBF/32
40	145	20	87	105	54	54	16	20	63	95	XCBF/40
50	155	25	99	117	64	64	16	20	75	107	XCBF/50
63	170	25	16	136	75	75	20	25	90	130	XCBF/63
80	188	32	36	156	93	93	20	25	110	150	XCBF/80
100	208	36	64	189	110	110	25	30	132	182	XCBF/100

REF. **ISO MT4**

XAS/..

REAR HINGE HORIZONTAL MOUNTING MONTAGGIO A CONTROCERNIERA ORIZZONTALE



Bore Alesaggio	A2	M	M4	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Code Codice
32	142	45	54	7	11	32	6,5	8	6,5	38	18	3	XAS/32
40	160	52	63	7	11	36	6,5	10	8,5	41	22	2	XAS/40
50	170	65	71	9	15	45	7,5	12	10,5	50	30	3	XAS/50
63	190	75	81	9	15	50	7,5	14	12,5	52	35	2	XAS/63
80	210	95	101	11	18	63	10	14	11,5	66	40	7	XAS/80
100	230	115	123	11	18	71	10	17	14,5	76	50	5	XAS/100
125	275	140	141	14	20	90	15	20	17	94	60	10	XAS/125
160	315	180	182	14	20	115	19	25	21	118	88	9	XAS/160
200	335	220	182	18	26	135	20	30	26	122	90	15	XAS/200

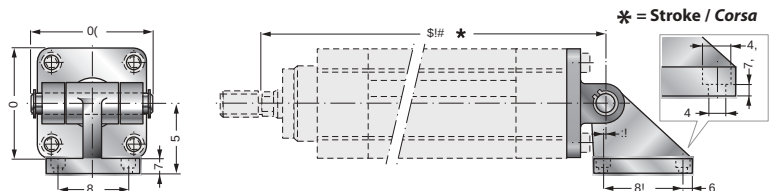
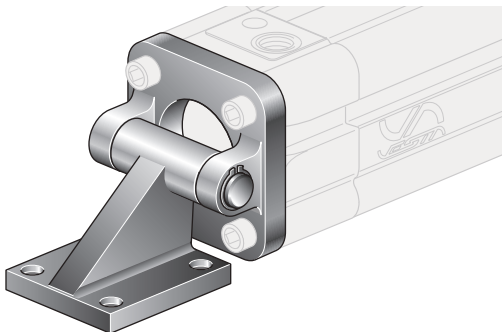
REF. **CETOP RP107P**

**Cylinders fixing for
Ø 250 and Ø 320
on request**

***Fissaggi per cilindri
Ø 250 e Ø 320
a richiesta***

XASV/..

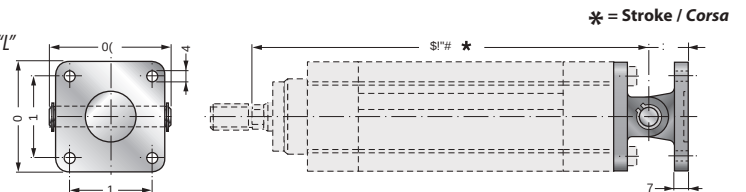
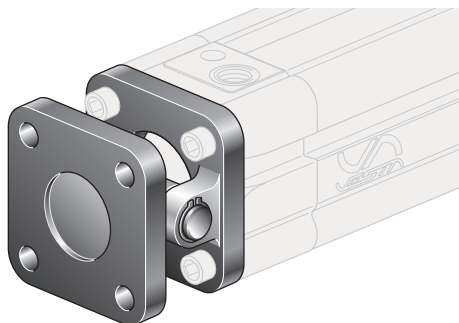
REAR HINGE HORIZONTAL MOUNTING
MONTAGGIO A CONTROCERNIERA ORIZZONTALE



Bore Alesaggio	A2	M	M4	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Code Codice
32	142	45	54	7	11	32	8	10	5	32,5	32,5	0	XASV/32
40	160	52	63	7	11	36	8,5	10	5	38	38	0	XASV/40
50	170	65	71	9	15	45	10	12	5	46,5	46,5	0	XASV/50
63	190	75	81	9	15	50	10	12	5	56,5	56,5	0	XASV/63
80	210	95	101	11	18	63	12,5	16	6	72	72	0	XASV/80
100	230	115	123	11	18	73	13	16	6	89	89	0	XASV/100
125	275	140	141	14	-	90	16,5	16	-	50	70	-40	XASV/125
160	315	180	182	18	-	140	22	20	-	63	110	-50	XASV/160
200	335	220	182	18	-	140	22	20	-	63	110	-50	XASV/200

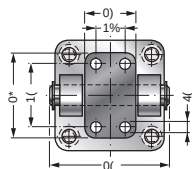
XANL/..

REAR HINGE VERTICAL MOUNTING "L" SERIES
MONTAGGIO A CONTROCERNIERA VERTICALE SERIE "L"

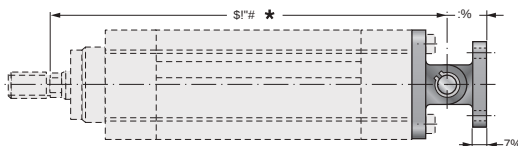


Bore Alessaggio	A2	M	M4	N	ØQ	T	W	Code Codice
32	142	45	54	32,5	7	10	22	XANL/32
40	160	52	63	38	7	10	25	XANL/40
50	170	65	71	46,5	9	12	27	XANL/50
63	190	75	81	56,5	9	12	32	XANL/63
80	210	95	101	72	11	16	36	XANL/80
100	230	115	123	89	11	16	41	XANL/100
125	275	140	141	110	14	20	50	XANL/125
160	315	180	182	140	18	20	55	XANL/160
200	335	220	182	175	18	25	60	XANL/200

FIXING ACCESSORIES / ACCESSORI DI FISSAGGIO PER CILINDRI ISO 15552



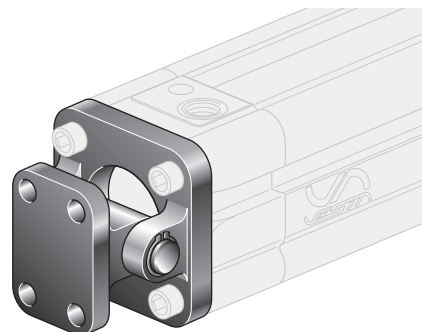
* = Stroke / Corsa



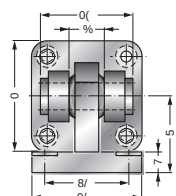
Bore Alesaggio	A2	M4	M7	M8	N3	N4	ØQ4	T3	W3	Code Codice
32	142	54	25	40	-	28	7	8	18	XANN/32
40	160	63	28	52	16	38	9	10	26	XANN/40
50	170	71	32	52	16	38	9	10	26	XANN/50
63	190	81	40	75	25	54	11	12	34	XANN/63
80	210	101	50	75	25	54	11	12	34	XANN/80
100	230	123	60	115	32	90	14	16	41	XANN/100
125	275	141	70	115	32	90	14	16	41	XANN/125
160	315	182	90	180	43	150	18	20	55	XANN/160
200	335	182	90	180	43	150	18	20	55	XANN/200

REAR HINGE VERTICAL MOUNTING "N" SERIES
MONTAGGIO A CONTROCERNIERA VERTICALE SERIE "N"

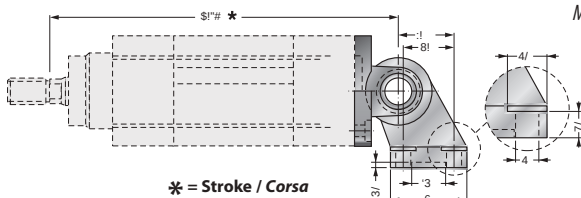
XANN/..



CILINDRI PNEUMATICI / PNEUMATIC CYLINDERS



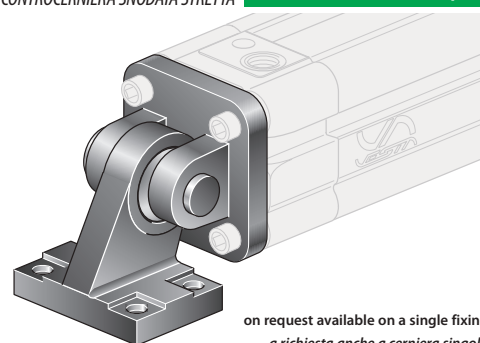
* = Stroke / Corsa



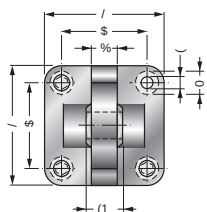
Bore Alesaggio	A2	B	M	M1	M4	ØP	P1	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Code Codice
32	142	14	45	51	41	20	3	6,6	11	32	31	10	8,5	38	18	21	XAS-SN/32
40	160	16	52	54	48	20	3	6,6	11	36	35	10	8,5	41	22	24	XAS-SN/40
50	170	21	65	65	54	20	3	9	15	45	45	12	10,5	50	30	33	XAS-SN/50
63	190	21	75	67	60	20	3	9	15	50	50	12	10,5	52	35	37	XAS-SN/63
80	210	25	95	86	75	20	3	11	18	63	60	14	11,5	66	40	47	XAS-SN/80
100	230	25	115	96	85	20	3	11	18	71	70	15	12,5	76	50	55	XAS-SN/100
125	275	37	140	124	110	20	3	13,5	20	90	90	20	17	94	60	70	XAS-SN/125

REAR HINGE MOUNTING WITH NARROW ROD EYE
MONTAGGIO A CONTROCERNIERA SNODATA STRETTA

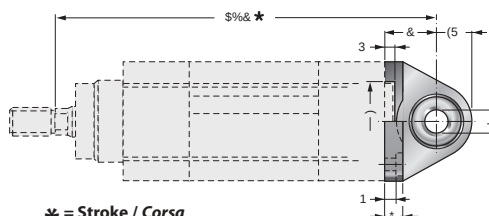
XAS-SN/..



on request available on a single fixing
a richiesta anche a cerniera singola



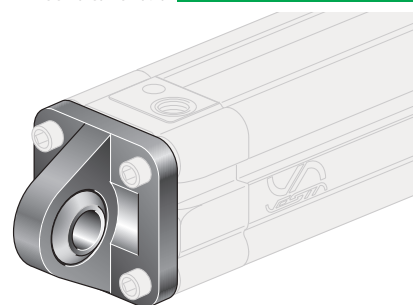
* = Stroke / Corsa



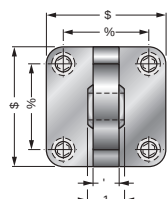
Bore Alesaggio	A2	A	B	C	ØD	EN	ER	F	G	E	L	M	N	P	Code Codice
32	142	32,5	10,5	22	10	14	15	30	10	6,6	45	10,5	5,5	5	XCM-SN-AC/32
40	160	38	12	25	12	16	18	35	10	6,6	55	11	5,5	5	XCM-SN-AC/40
50	170	46,5	15	27	16	21	20	40	10	9	65	15	6,5	5	XCM-SN-AC/50
63	190	56,5	15	32	16	21	23	45	12	9	75	15	6,5	5	XCM-SN-AC/63
80	210	72	18	36	20	25	27	45	14	11	95	18	10	5	XCM-SN-AC/80
100	230	89	18	41	20	25	30	55	16	11	115	18	10	5	XCM-SN-AC/100
125	275	110	25	50	30	37	40	60	20	13,5	140	20	10	7	XCM-SN-AC/125

CLEVIS (MALE) WITH ROD EYE
CERNIERA MASCHIO CON SNODO

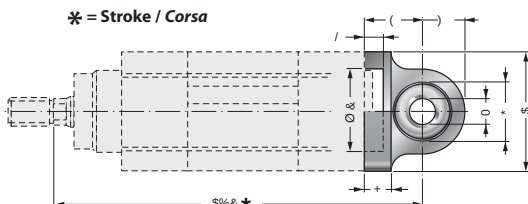
XCM-SN-AC/..



STEEL / ACCIAIO



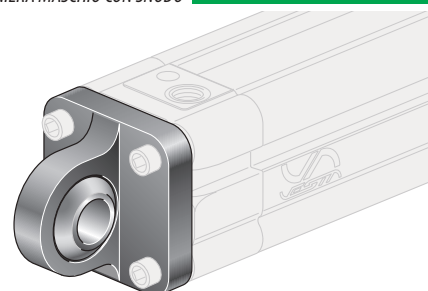
* = Stroke / Corsa



Bore Alesaggio	A2	A	B	C	D	E	F	H	L	ØM	N	Code Codice
32	142	45	32,5	30	10,5	22	16	9	5	10	14	XCM-SN-AL/32
40	160	52	38	35	12	25	19	9	5	12	16	XCM-SN-AL/40
50	170	65	46,5	40	15	27	21	11	5	16	21	XCM-SN-AL/50
63	190	75	56,5	45	15	32	24	11	5	16	21	XCM-SN-AL/63
80	210	95	72	45	18	36	28,5	14	5	20	25	XCM-SN-AL/80
100	230	115	89	55	18	41	30	14	5	20	25	XCM-SN-AL/100
125	275	140	110	60	25	50	40	20	7	30	37	XCM-SN-AL/125
160	315	180	140	65	28	55	45	20	7	35	43	XCM-SN-AL/160
200	335	220	185	70	28	60	48	25	7	35	43	XCM-SN-AL/200

CLEVIS (MALE) WITH ROD EYE
CERNIERA MASCHIO CON SNODO

XCM-SN-AL/..



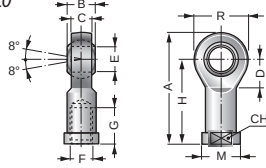
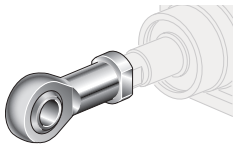
ALUMINIUM ALLOY / LEGA DI ALLUMINIO



Cylinders fixing for Ø 250 - Ø 320 on request - Fissaggi per cilindri da Ø 250 a Ø320 a richiesta

SNS/..

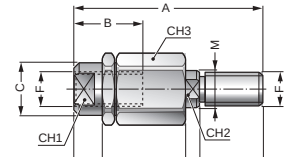
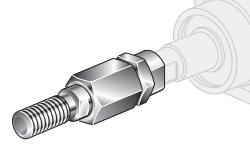
ROD EYE MOUNTING
SNODO SFERICO



Bore Alesaggio	A	B	C	CH	D	ØE ¹⁷	ØF	G	H	ØM	R	Code / Codice
32	57	14	10,5	17	15	10	M10x1,25	20	43	19	28	SNS/32
40	66	16	12	19	17	12	M12x1,25	22	50	22	32	SNS/40
50	85	21	15	22	23	16	M16x1,5	28	64	27	42	SNS/50-63
63	85	21	15	22	23	16	M16x1,5	28	64	27	42	SNS/50-63
80	102	25	18	30	27	20	M20x1,5	33	77	34	50	SNS/80-100
100	102	25	18	30	27	20	M20x1,5	33	77	34	50	SNS/80-100
125	145	37	25	41	36	30	M27x2	51	110	50	70	SNS/125
160	165	43	28	50	41	35	M36x2	56	125	58	80	SNS/160-200
200	165	43	28	50	41	35	M36x2	56	125	58	80	SNS/160-200

SAS/..

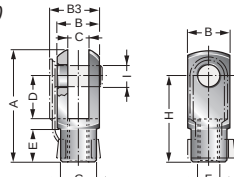
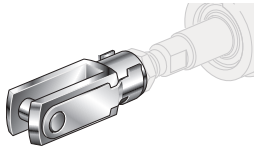
FLOATING JOINT TYPE "S"
SNODO AUTOALLINEANTE



Bore Alesaggio	A	B	ØC	CH1	CH2	CH3	D	E	ØF	G	H	ØM	Code / Codice
32	71	20	22	19	12	30	11	35	M10x1,25	20	5	14	SAS/32
40	75	20	22	19	12	30	11	35	M12x1,25	24	5	14	SAS/40
50	103	32	32	30	20	41	9	54	M16x1,5	32	8	22	SAS/50-63
63	103	32	32	30	20	41	9	54	M16x1,5	32	8	22	SAS/50-63
80	119	40	32	30	20	41	17	54	M20x1,5	40	8	22	SAS/80-100
100	119	40	32	30	20	41	17	54	M20x1,5	40	8	22	SAS/80-100
125	-	-	-	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-	-	-	-

FS..x..

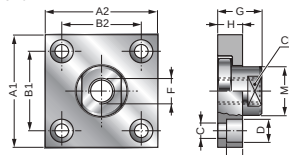
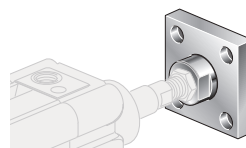
CLEVIS (ROD) MOUNTING
FORCELLA STELO



Bore Alesaggio	A	B	B3	C ¹²	D	E	ØF	ØG	H	ØI ¹⁹	Code / Codice
32	52	20	26	10	20	15	M10x1,25	18	40	10	FS/10x1,25
40	62	24	32	12	24	18	M12x1,25	20	48	12	FS/12x1,25
50	83	32	40	16	32	24	M16x1,5	26	64	16	FS/16x1,5
63	83	32	40	16	32	24	M16x1,5	26	64	16	FS/16x1,5
80	105	40	48	20	40	30	M20x1,5	34	80	20	FS/20x1,5
100	105	40	48	20	40	30	M20x1,5	34	80	20	FS/20x1,5
125	148	55	-	30	54	38	M27x2	48	110	30	FS/27x2
160	188	70	-	35	72	40	M36x2	60	144	35	FS/36x2
200	188	70	-	35	72	40	M36x2	60	144	35	FS/36x2

SAF/..

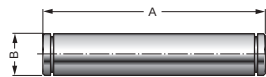
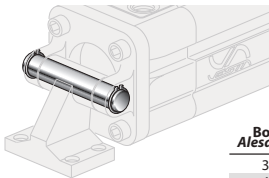
FLOATING JOINT TYPE "F"
FLANGIA AUTOALLINEANTE



Bore Alesaggio	A1	A2	B1	B2	ØC	ØD	E	ØF	G	H	M	CH	Code / Codice
32	60	37	36	23	6,6	11	7	M10x1,25	24	15	20	17	SAF32
40	60	56	42	38	9	15	9	M12x1,25	30	20	25	19	SAF40
50	80	80	58	58	11	18	11	M16x1,5	32	20	30	24	SAF50-63
63	80	80	58	58	11	18	11	M16x1,5	32	20	30	24	SAF50-63
80	90	90	65	65	14	20	13	M20x1,5	35	20	40	36	SAF80-100
100	90	90	65	65	14	20	13	M20x1,5	35	20	40	36	SAF80-100
125	90	90	65	65	14	20	13	M27x2	35	20	40	36	SAF125
160	125	125	90	90	18	26	17	M36x2	55	30	60	50	SAF160
200	125	125	90	90	18	26	17	M36x2	55	30	60	50	SAF200

USC/..

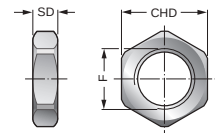
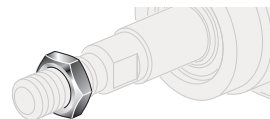
CLEVIS PIN
PERNO CERNIERA



Bore Alesaggio	A	ØB ¹⁷	Code Codice
32	54	10	USC/32
40	63	12	USC/40
50	71	12	USC/50
63	81	16	USC/63
80	101	16	USC/80
100	123	20	USC/100
125	141	25	USC/125
160	182	30	USC/160
200	182	30	USC/200

DM..x..

ROD NUT
DADO STELO



Bore Alesaggio	CHD	SD	F	Code Codice
32	17	6	M10x1,25	DM10x1,25
40	19	7	M12x1,25	DM12x1,25
50	24	8	M16x1,5	DM16x1,5
63	24	8	M16x1,5	DM16x1,5
80	30	9	M20x1,5	DM20x1,5
100	30	9	M20x1,5	DM20x1,5
125	41	12	M27x2	DM27x2
160	55	18	M36x2	DM36x2
200	55	18	M36x2	DM36x2

FIXING, MAGNETIC SWITCHES AND SEALS KIT FOR XJC CYLINDER / ACCESSORI E RICAMBI PER CILINDRI XJC

FJS ... VN

FIXING FOR TIE RODS MOUNTING
SUPPORTO PER MONTAGGIO SU TIRANTI

For tie rods cylinder
Per cilindri a tiranti



For magnetic switches features see:
Caratteristiche finecorsa magnetici vedi:
VNCR2, VNPR2, VNCE3, VNPE3.

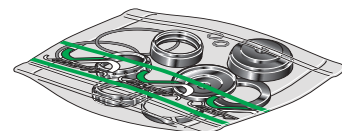
Pag. A-19

FJS ... VN

Bore Alesaggio (mm):
Ø 160 ... **160** Ø 200 ... **200**

..... - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO



Seals kit code:

Cylinder code + Bore + Versions + - SG
(The kit includes all seals).

Codice del kit:

Codice del cilindro + Alesaggio + Versioni + - SG
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **XJC 160 PVS - SG**

ISO 21287 - UNITOP COMPACT CYLINDERS SERIES CILINDRI PNEUMATICI COMPATTI ISO 21287 - UNITOP

SERIE **NSK**

**PATENTED
BREVETTATO**

NSK series is a completely new range of Vesta compact cylinders. It has been worked out in one set of common basic components for a final assembly to ISO 21287 standard as well as UNITOP standard, which is covered by patent.

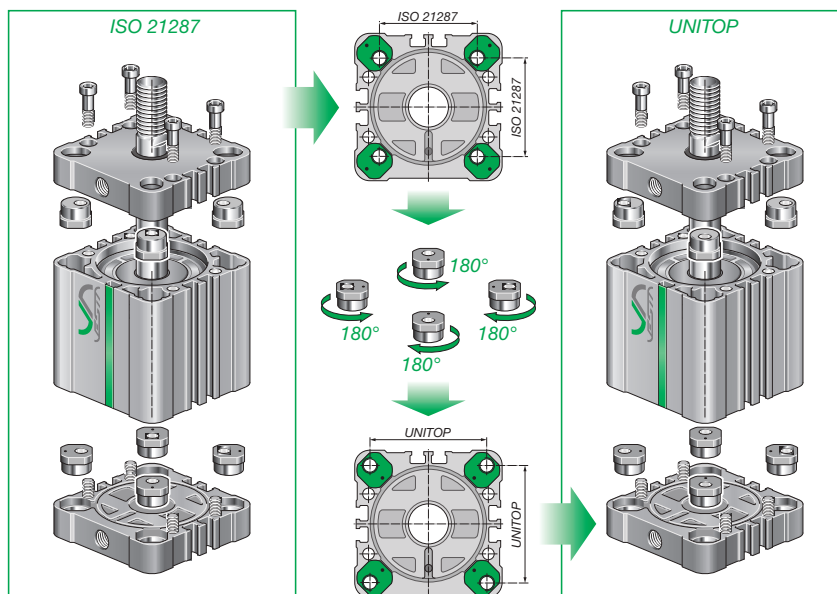
An extremely construction simplicity, new design and advanced technology make the compact series NSK highly competitive, able to meet even the hardest request of performance and reliability and give it a wide duty flexibility.

What also greatly significant is the advantage of a drastic reduction in construction elements, though saving the need of offering 2 standard version of product.

Nuova gamma di cilindri compatti **NSK**, che con un unico set di componenti base è studiata per l'assemblaggio finale in versione standard ISO 21287 oppure in standard UNITOP (soluzione protetta da brevetto).

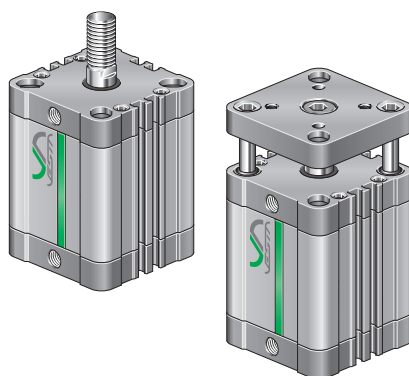
L'estrema semplicità costruttiva, il nuovo design e la innovativa tecnologia di produzione, rendono la serie compatta NSK molto competitiva ed in grado di soddisfare le più esigenti richieste di prestazioni ed affidabilità, unite a grande flessibilità nel servizio.

Di particolare evidenza il vantaggio ottenuto con la drastica riduzione di elementi costruttivi, salvaguardando l'esigenza di offrire due versioni standard di prodotto.



TECHNICAL FEATURES **NSK** CYLINDERS / CARATTERISTICHE TECNICHE CILINDRI **NSK**

ATEX versions see / Versioni ATEX vedi .. P. A-109



NSK		ISO 21287 I		UNITOP U	
		Stroke / Corsa (mm):			
Bore / Alesaggio (mm):		Male thread M		Female thread F	
Ø16		Filetto maschio		Filetto femmina	
Ø20					
Ø25					
Ø32					
Ø40					
Ø50					
Ø63					
Ø80					
Ø100 ...					

VS High Temperature (-25 / +120 °C)
Polyurethane rod seal

Guarnizione dello stelo in Poliuretano
per alte Temperature (-25/+120°C)

VV High Temperature (-25 / +120 °C)
Polyurethane all seals

Tutte le guarnizioni in Poliuretano
per alte Temperature (-25/+120°C)

SEA Single acting front spring
Semplice effetto molla anteriore

SEP Single acting rear spring
Semplice effetto molla posteriore

P Through rod cylinder
Cilindro stelo passante

AR Non rotating
Cilindro antirotazione

Characteristic magnetic switches see **GENERAL CATALOGUE - Pag. A-19; A-33.**
Caratteristiche finecorsa magnetico vedi **CATALOGO GENERALE - Pag. A-19; A-33.**

TECHNICAL FEATURES

Head	Die-cast aluminium alloy.
Piston rod	Ø16 ÷ 25 stainless steel X5CrNi1810, Ø32 ÷ 100 stainless steel X20Cr13.
Barrel	Anodized profiled aluminium tube.
Seals	Polyurethane.
Cushioning	Mechanical buffers.

Ambient temperature range	-20 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +30 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.

CARATTERISTICHE TECNICHE

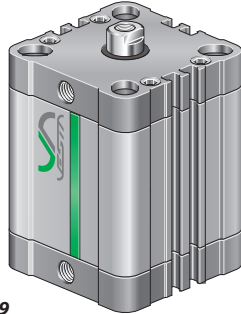
Testate	Pressofusione in lega di alluminio.
Stelo	Ø16 ÷ 25 acciaio inox X5CrNi1810, Ø32 ÷ 100 acciaio inox X20Cr13.
Camicia	Tubo profilato ed anodizzato d' alluminio.
Guarnizioni	In poliuretano.
Ammortizzatori	Smorzatore meccanici d'urto.

Temperatura ambiente	-20 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +30 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata
Pressione max d'esercizio	10 bar.

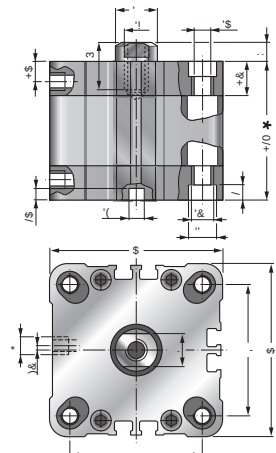
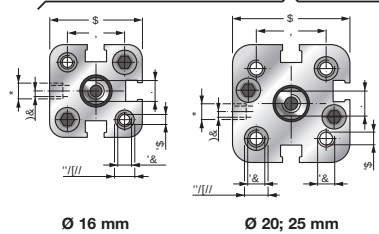


NSK . - ..

DOUBLE ACTING MAGNETIC CYLINDER
CILINDRO A DOPPIO EFFETTO MAGNETICO



* = Stroke / Corsa



Ø 32; 40; 50; 63; 80; 100 mm

ATEX versions see
Versioni ATEX vedi .. P. A-109

STANDARD ISO 21287

Ø	A	ØD	ØD2	ØD3	ØD4	ØD5	G	H3	H4	I	K	L	L3	W	F4	H	Code / Codice
16	29,2	8	6	3,3	M4	6	M5	7	12,8	18	6	3,5	2,2	4,5	0	37 (±0,5)	NSKI 16-...
20	37	10	6	4,2	M5	7,5	M5	7	12,3	22	8	4,2	2,5	6	4	37 (±0,5)	NSKI 20-...
25	41	10	6	4,2	M5	7,5	M5	7,5	13,5	26	8	4,2	2,5	6	3	39 (±0,5)	NSKI 25-...
32	49,2	12	6	5,2	M6	9	G1/8	7,5	15	32,5	10	4,5	2	7	0	44 (±0,5)	NSKI 32-...
40	57,2	12	6	5,2	M6	9	G1/8	7,5	15	38	10	4,2	2	7	0	45 (±0,7)	NSKI 40-...
50	67	16	8	6,7	M8	10,5	G1/8	7,5	14,6	46,5	13	4,7	2,5	8	0	45 (±0,7)	NSKI 50-...
63	80	16	8	6,7	M8	10,5	G1/8	8	15,5	56,5	13	5,2	2,5	8	0	49 (±0,8)	NSKI 63-...
80	102,6	20	8	8,5	M10	13,5	G1/8	9	17	72	17	5,2	2,5	10	0	54 (±0,8)	NSKI 80-...
100	124*	25	8	8,5	M10	13,5	G1/4*	10	20	89	22	5,2	3	10	0	67 (±1,0)	NSKI 100-...

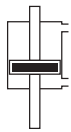
STANDARD UNITOP

Ø	A	ØD	ØD2	ØD3	ØD4	ØD5	G	H3	H4	I	K	L	L3	W	F4	H	Code / Codice
16	29,2	8	6	3,3	M4	6	M5	7	12,8	18	6	3,5	2,2	4,5	0	38 (±0,5)	NSKU 16-...
20	37	10	6	4,2	M5	7,5	M5	7	12,3	22	8	4,2	2,5	4,5	4	38 (±0,5)	NSKU 20-...
25	41	10	6	4,2	M5	7,5	M5	7,5	13,5	26	8	4,2	2,5	5,5	3	39,5 (±0,5)	NSKU 25-...
32	49,2	12	6	5,2	M6	9	G1/8	7,5	15	32	10	4,5	2	6	0	44,5 (±0,5)	NSKU 32-...
40	57,2	12	6	5,2	M6	9	G1/8	7,5	15	42	10	4,2	2	6,5	0	45,5 (±0,7)	NSKU 40-...
50	67	16	8	6,7	M8	10,5	G1/8	7,5	14,6	50	13	4,7	2,5	7,5	0	45,5 (±0,7)	NSKU 50-...
63	80	16	8	6,7	M8	10,5	G1/8	8	15,5	62	13	5,2	2,5	7,5	0	50 (±0,8)	NSKU 63-...
80	102,6	20	8	8,5	M10	13,5	G1/8	9	17	82	17	5,2	2,5	8	0	56 (±0,8)	NSKU 80-...
100	124	25	8	8,5	M10	13,5	G1/4	10	20	103	22	5,2	3	10	0	66,5 (±1,0)	NSKU 100-...

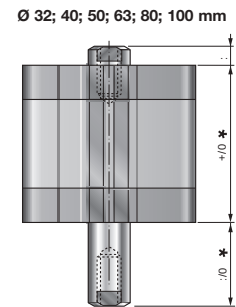
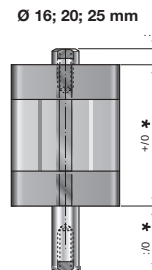
Bore / Alésaggio	5	10	15	20	25	30	40	50	60	70	80	90	100	125	160	200	250
16	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

NSK . - .. P

DOUBLE ACTING MAGNETIC THROUGH ROD CYLINDER
CILINDRO MAGNETICO A DOPPIO EFFETTO STELO PASSANTE



* = Stroke / Corsa



ATEX versions see
Versioni ATEX vedi .. P. A-109

STANDARD ISO 21287

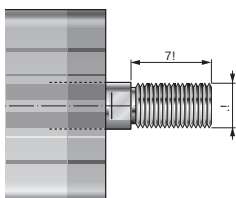
Ø	W	H	Code - Codice
16	4,5	37 (±0,5)	NSKI 16/... P
20	6	37 (±0,5)	NSKI 20/... P
25	6	39 (±0,5)	NSKI 25/... P
32	7	44 (±0,5)	NSKI 32/... P
40	7	45 (±0,7)	NSKI 40/... P
50	8	45 (±0,7)	NSKI 50/... P
63	8	49 (±0,8)	NSKI 63/... P
80	10	54 (±0,8)	NSKI 80/... P
100	10	67 (±1,0)	NSKI 100/... P

STANDARD UNITOP

Ø	W	H	Code - Codice
16	4,5	38 (±0,5)	NSKU 16/... P
20	4,5	38 (±0,5)	NSKU 20/... P
25	5,5	39,5 (±0,5)	NSKU 25/... P
32	6	44,5 (±0,5)	NSKU 32/... P
40	6,5	45,5 (±0,7)	NSKU 40/... P
50	7,5	45,5 (±0,7)	NSKU 50/... P
63	7,5	50 (±0,8)	NSKU 63/... P
80	8	56 (±0,8)	NSKU 80/... P
100	10	66,5 (±1,0)	NSKU 100/... P

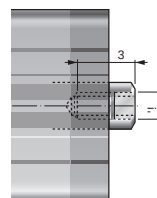
NSK . - M

THREADED MALE PISTON ROD VERSION
VERSIONE STELO FILETTATO MASCHIO



Ø	K1	T1
16	M6x1	12
20	M8x1,25	16
25	M8x1,25	16
32	M10x1,25	19
40	M10x1,25	19
50	M12x1,25	22
63	M12x1,25	22
80	M16x1,5	28
100	M16x1,5	28

Ø	K1	T1
16	M8x1,25	20
20	M10x1,25	22
25	M10x1,25	22
32	M10x1,25	22
40	M10x1,25	22
50	M12x1,25	24
63	M12x1,25	24
80	M16x1,5	32
100	M20x1,5	40



NSK . - F

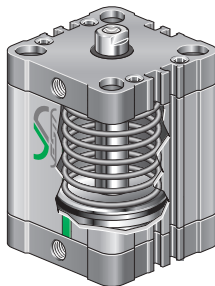
THREADED FEMALE PISTON ROD VERSION
VERSIONE STELO FILETTATO FEMMINA

Ø	ØD1	P
16	M4	8
20	M6	10
25	M6	10
32	M8	12
40	M8	12
50	M10	16
63	M10	16
80	M12	20
100	M12	20

Ø	ØD1	P
16	M4	8
20	M5	10
25	M5	10
32	M6	12
40	M6	12
50	M8	12
63	M8	14
80	M10	15
100	M12	20

NSK . - .. SEA

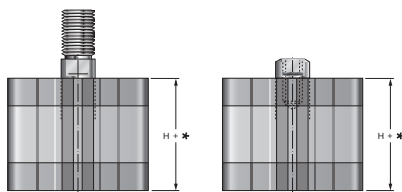
SIMPLE ACTING FRONT SPRING
SEMPLICE EFFETTO MOLLA ANTERIORE



SEA/SEP SPRING FORCE (N) STROKE 0 - 25 mm
SEA/SEP FORZE MOLLA (N) CORSA 0 - 25 mm

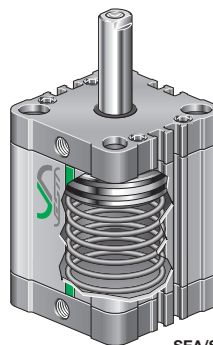
Ø	F spring max (stroke 0 mm) F molla max (corsa 0 mm)	F spring min (stroke 25 mm) F molla min (corsa 25 mm)	H ISO 21287	H UNITOP
16	21	12	37 (±0,5)	38 (±0,5)
20	39	22	37 (±0,5)	38 (±0,5)
25	45	28	39 (±0,5)	39,5 (±0,5)
32	45	28	44 (±0,5)	44,5 (±0,5)
40	61	39	45 (±0,7)	45,5 (±0,7)
50	90	58	45 (±0,7)	45,5 (±0,7)
63	95	62	49 (±0,8)	50 (±0,8)
80	150	115	54 (±0,8)	56 (±0,8)
100	160	125	67 (±1,0)	66,5 (±1,0)

SEA



NSK . - .. SEP

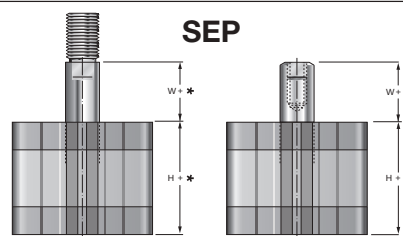
SIMPLE ACTING REAR SPRING
SEMPLICE EFFETTO MOLLA POSTERIORE



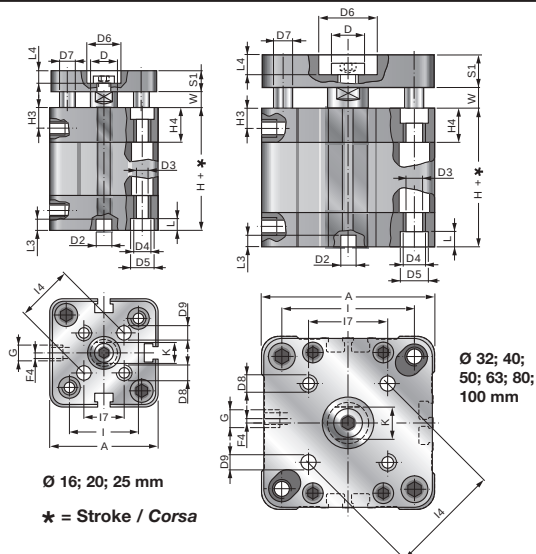
SEA/SEP SPRING FORCE (N) STROKE 26 - 50 mm
SEA/SEP FORZE MOLLA (N) CORSA 26 - 50 mm

Ø	F spring max (stroke 26 mm) F molla max (corsa 26 mm)	F spring min (stroke 50 mm) F molla min (corsa 50 mm)	H ISO 21287	H UNITOP
16	21	12	47 (±0,5)	48 (±0,5)
20	39	22	47 (±0,5)	48 (±0,5)
25	45	28	59 (±0,5)	59,5 (±0,5)
32	45	28	64 (±0,5)	64,5 (±0,5)
40	61	39	65 (±0,7)	65,5 (±0,7)
50	90	58	65 (±0,7)	65,5 (±0,7)
63	95	62	69 (±0,8)	70 (±0,8)
80	150	115	84 (±0,8)	86 (±0,8)
100	160	125	97 (±1,0)	96,5 (±1,0)

SEP



* = Stroke / Corsa

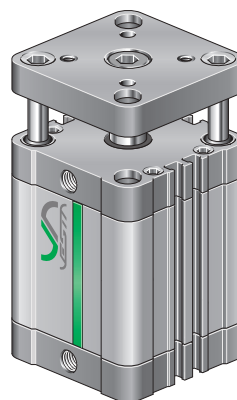


Ø 16; 20; 25 mm

* = Stroke / Corsa

NSK . - .. AR

DOUBLE ACTING MAGNETIC CYLINDER NON ROTATING
CILINDRO MAGNETICO A DOPPIO EFFETTO ANTITROTATIVO



STANDARD ISO 21287

Ø	A	ØD	ØD2	ØD3	ØD4	ØD6	ØD7	ØD8	ØD9	G	H3	H4	I	I4	I7	K	L	L3	L4	F4	S1	W	H	Code / Codice
16	29,2	8	6	3,3	M4	9	5	M3	3	M5	7	12,8	18	14	9,9	6	3,5	2,2	4	0	6	4,5	37 (±0,5)	NSKI 16-... AR
20	37	10	6	4,2	M5	11	5	M4	4	M5	7	12,3	22	17	12	8	4,2	2,5	5	4	8	6	37 (±0,5)	NSKI 20-... AR
25	41	10	6	4,2	M5	14	6	M5	5	M5	7,5	13,5	26	22	15,6	8	4,2	2,5	5	3	8	6	39 (±0,5)	NSKI 25-... AR
32	49,2	12	6	5,2	M6	17	8	M5	5	G1/8	7,5	15	32,5	28	19,8	10	4,5	2	6,5	0	10	7	44 (±0,5)	NSKI 32-... AR
40	57,2	12	6	5,2	M6	17	10	M5	5	G1/8	7,5	15	38	33	23,3	10	4,2	2	6,5	0	10	7	45 (±0,7)	NSKI 40-... AR
50	67	16	8	6,7	M8	22	10	M6	6	G1/8	7,5	14,6	46,5	42	29,7	13	4,7	2,5	7,5	0	12	8	45 (±0,7)	NSKI 50-... AR
63	80	16	8	6,7	M8	22	10	M6	6	G1/8	8	15,5	56,5	50	35,4	13	5,2	2,5	7,5	0	12	8	49 (±0,8)	NSKI 63-... AR
80	102,6	20	8	8,5	M10	28	14	M8	8	G1/8	9	17	72	65	46	17	5,2	2,5	9	0	14	10	54 (±0,8)	NSKI 80-... AR
100	124*	25	8	8,5	M10	30	14	M10	10	G1/4*	10	20	89	80	56,6	22	5,2	3	10	0	14	10	67 (±1,0)	NSKI 100-... AR

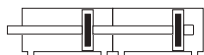
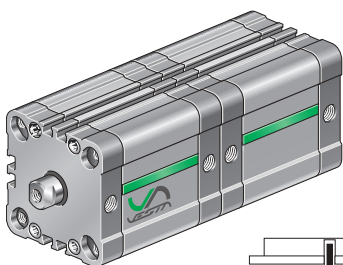
STANDARD UNITOP

Ø	A	ØD	ØD2	ØD3	ØD4	ØD6	ØD7	ØD8	ØD9	G	H3	H4	I	I4	I7	K	L	L3	L4	F4	S1	W	H	Code / Codice
16	29,2	8	6	3,3	M4	9	5	M3	3	M5	7	12,8	18	14	9,9	6	3,5	2,2	4	0	6	4,5	38 (±0,5)	NSKU 16-... AR
20	37	10	6	4,2	M5	11	5	M4	4	M5	7	12,3	22	17	12	8	4,2	2,5	5	4	8	4,5	38 (±0,5)	NSKU 20-... AR
25	41	10	6	4,2	M5	14	6	M5	5	M5	7,5	13,5	26	22	15,6	8	4,2	2,5	5	3	8	5,5	39,5 (±0,5)	NSKU 25-... AR
32	49,2	12	6	5,2	M6	17	8	M5	5	G1/8	7,5	15	32	28	19,8	10	4,5	2	6,5	0	10	6	44,5 (±0,5)	NSKU 32-... AR
40	57,2	12	6	5,2	M6	17	10	M5	5	G1/8	7,5	15	42	33	23,3	10	4,2	2	6,5	0	10	6,5	45,5 (±0,7)	NSKU 40-... AR
50	67	16	8	6,7	M8	22	10	M6	6	G1/8	7,5	14,6	50	42	29,7	13	4,7	2,5	7,5	0	12	7,5	45,5 (±0,7)	NSKU 50-... AR
63	80	16	8	6,7	M8	22	10	M6	6	G1/8	8	15,5	62	50	35,4	13	5,2	2,5	7,5	0	12	7,5	50 (±0,8)	NSKU 63-... AR
80	102,6	20	8	8,5	M10	28	14	M8	8	G1/8	9	17	82	65	46	17	5,2	2,5	9	0	14	8	56 (±0,8)	NSKU 80-... AR
100	124	25	8	8,5	M10	30	14	M10	10	G1/4	10	20	103	80	56,6	22	5,2	3	10	0	14	10	66,5 (±1,0)	NSKU 100-... AR



NSK ... TN2 ...

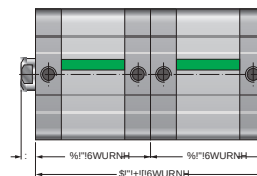
MULTI-THRUST TANDEM
TANDEM MULTISPINTA



NSK		/		TN2	
ISO 21287 I					
UNITOP U					
Bore / Alesaggio (mm):					
Ø32	32	Ø63	63		
Ø40	40	Ø80	80		
Ø50	50	Ø100	100		
				P	Through rod cylinder Cilindro stelo passante
				M	Threaded male piston rod Cilindro stelo filettato maschio
				F	Threaded female piston rod Cilindro stelo filettato femmina

		ISO 21287		UNITOP	
Ø	A	B	Code - Codice	Code - Codice	
32	88,4	44,2	NSKI 32/... TN...	NSKU 32/... TN...	
40	90,4	45,2	NSKI 40/... TN...	NSKU 40/... TN...	
50	90,4	45,2	NSKI 50/... TN...	NSKU 50/... TN...	
63	99	49,5	NSKI 63/... TN...	NSKU 63/... TN...	
80	110	55	NSKI 80/... TN...	NSKU 80/... TN...	
100	133,4	66,7	NSKI 100/... TN...	NSKU 100/... TN...	

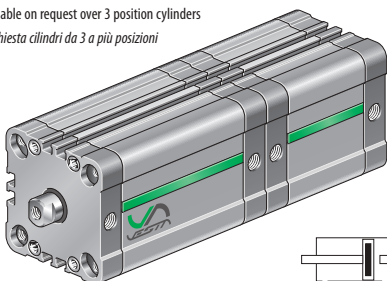
For other dimensions please
see **NSK** standard cylinder
Per altre dimensioni vedere
cilindri **NSK** standard



NSK ... BS ...

MULTI-POSITION
MULTIPOSIZIONE

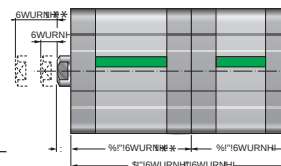
Available on request over 3 position cylinders
A richiesta cilindri da 3 a più posizioni



NSK		/		BS	
ISO 21287 I					
UNITOP U					
Bore / Alesaggio (mm):					
Ø32	32	Ø63	63		
Ø40	40	Ø80	80		
Ø50	50	Ø100	100		
				M	Threaded male piston rod Cilindro stelo filettato maschio
				F	Threaded female piston rod Cilindro stelo filettato femmina

		ISO 21287		UNITOP	
Ø	A	B	Code - Codice	Code - Codice	
32	88,4	44,2	NSKI 32/... BS...	NSKU 32/... BS...	
40	90,4	45,2	NSKI 40/... BS...	NSKU 40/... BS...	
50	90,4	45,2	NSKI 50/... BS...	NSKU 50/... BS...	
63	99	49,5	NSKI 63/... BS...	NSKU 63/... BS...	
80	110	55	NSKI 80/... BS...	NSKU 80/... BS...	
100	133,4	66,7	NSKI 100/... BS...	NSKU 100/... BS...	

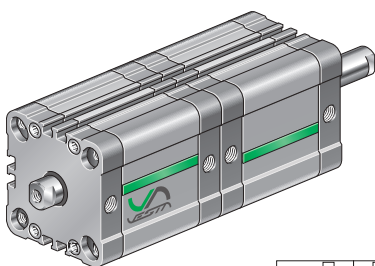
For other dimensions please
see **NSK** standard cylinder
Per altre dimensioni vedere
cilindri **NSK** standard



**Attention: Stroke 2 = Addition of the two strokes of the cylinder
**Attenzione: Corsa 2 = Somma delle due corse del cilindro

NSK ... CNP ...

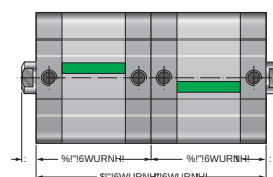
REAR OPPOSED
CONTRAPPOSTI POSTERIORI



NSK		/		CNP	
ISO 21287 I					
UNITOP U					
Bore / Alesaggio (mm):					
Ø16	16	Ø32	32	Ø63	63
Ø20	20	Ø40	40	Ø80	80
Ø25	25	Ø50	50	Ø100	100
				M	Threaded male piston rod Cilindro stelo filettato maschio
				F	Threaded female piston rod Cilindro stelo filettato femmina

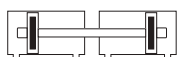
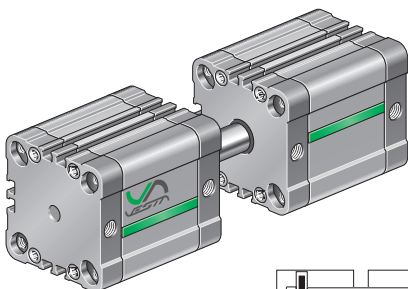
		ISO 21287		UNITOP	
Ø	A	B	Code - Codice	Code - Codice	
16	76	38	NSKI 16/... CNP...	NSKU 16/... CNP...	
20	76	38	NSKI 20/... CNP...	NSKU 20/... CNP...	
25	79	39,5	NSKI 25/... CNP...	NSKU 25/... CNP...	
32	88,4	44,2	NSKI 32/... CNP...	NSKU 32/... CNP...	
40	90,4	45,2	NSKI 40/... CNP...	NSKU 40/... CNP...	
50	90,4	45,2	NSKI 50/... CNP...	NSKU 50/... CNP...	
63	99	49,5	NSKI 63/... CNP...	NSKU 63/... CNP...	
80	110	55	NSKI 80/... CNP...	NSKU 80/... CNP...	
100	133,4	66,7	NSKI 100/... CNP...	NSKU 100/... CNP...	

For other dimensions please
see **NSK** standard cylinder
Per altre dimensioni vedere
cilindri **NSK** standard



NSK ... CNF ...

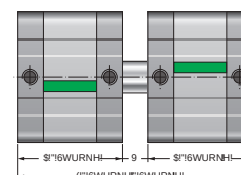
FRONT OPPOSED
CONTRAPPOSTI ANTERIORI



NSK		/		CNF	
ISO 21287 I					
UNITOP U					
Bore / Alesaggio (mm):					
Ø16	16	Ø32	32	Ø63	63
Ø20	20	Ø40	40	Ø80	80
Ø25	25	Ø50	50	Ø100	100
				M	Threaded male piston rod Cilindro stelo filettato maschio
				F	Threaded female piston rod Cilindro stelo filettato femmina

		ISO 21287		UNITOP	
Ø	E	A	V	Code - Codice	Code - Codice
16	85	38	9	NSKI 16/... CNF...	NSKU 16/... CNF...
20	85	38	9	NSKI 20/... CNF...	NSKU 20/... CNF...
25	90	39,5	11	NSKI 25/... CNF...	NSKU 25/... CNF...
32	100,4	44,2	12	NSKI 32/... CNF...	NSKU 32/... CNF...
40	103,4	45,2	13	NSKI 40/... CNF...	NSKU 40/... CNF...
50	105,5	45,2	15	NSKI 50/... CNF...	NSKU 50/... CNF...
63	114	49,5	15	NSKI 63/... CNF...	NSKU 63/... CNF...
80	126	55	16	NSKI 80/... CNF...	NSKU 80/... CNF...
100	153,4	66,7	20	NSKI 100/... CNF...	NSKU 100/... CNF...

For other dimensions please
see **NSK** standard cylinder
Per altre dimensioni vedere
cilindri **NSK** standard



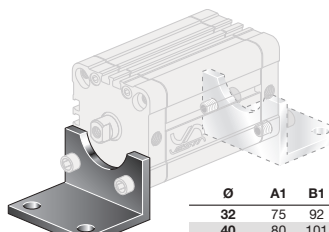
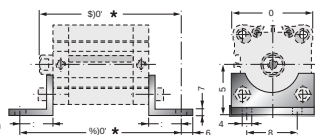
FIXING ACCESSORIES FOR ISO 21287 CYLINDERS / ACCESSORI DI FISSAGGIO PER CILINDRI ISO 21287

Note: the fixing screws are not included in the supply of the fittings / le viti di fissaggio non sono comprese nella fornitura degli accessori.

XP/ ..

FOOT MOUNTING
MONTAGGIO A PIEDINI

* = Stroke / Corsa

Ø	A1	B1	M	ØQ	R	S	T	U	W	Code - Codice
32	75	92	45	7	32	11	4	32	24	XP/32
40	80	101	52	9	36	15	4	36	28	XP/40
50	85	109	65	9	45	15	5	45	32	XP/50
63	89	113	75	9	50	15	5	50	32	XP/63
80	105	136	95	12	63	20	6	63	41	XP/80
100	118	149	115	14	71	25	6	75	41	XP/100

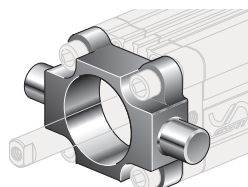
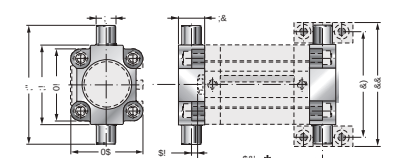
REF. ISO 15552

XCBF/ ..

FLOATING FRONT HINGE MOUNTING
MONTAGGIO CERNIERA OSCILLANTE ANTERIORE

REF. ISO 15552

* = Stroke / Corsa

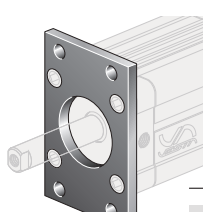
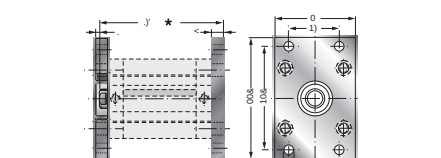



Ø	A2	A3	C1	C2	M3	M6	Øx ⁶⁹	X2	X3	X4	Code - Codice
32	58,5	0,5	71	86	45	45	12	15	50	74	XCBF/32
40	62	3	87	105	54	54	16	20	63	95	XCBF/40
50	63	2	99	117	64	64	16	20	75	107	XCBF/50
63	69,5	4,5	16	136	75	75	20	25	90	130	XCBF/63
80	76,5	2,5	36	156	93	93	20	25	110	150	XCBF/80
100	92	5	64	189	110	110	25	30	132	182	XCBF/100

XFL/ ..

FLANGE MOUNTING
MONTAGGIO A FLANGIA

* = Stroke / Corsa

Ø	K	K1	M	M2	N1	N2	ØQ	Y	Code - Codice
32	3	61	45	80	32	64	7	10	XFL/32
40	3	62	52	90	36	72	9	10	XFL/40
50	4	65	65	110	45	90	9	12	XFL/50
63	4	69	75	120	50	100	9	12	XFL/63
80	6	80	95	150	63	126	12	16	XFL/80
100	6	93	115	170	75	150	14	16	XFL/100

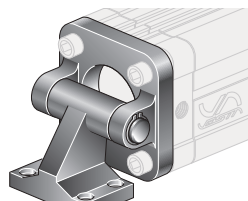
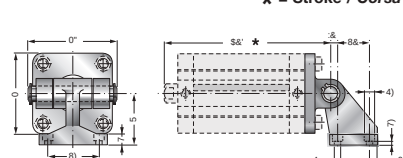
REF. ISO 15552

XAS/ ..

REAR HINGE HORIZONTAL MOUNTING
MONTAGGIO A CONTROCERNIERA ORIZZONTALE

REF. CETOP RP107P

* = Stroke / Corsa

Ø	A2	M	M4	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Code - Codice
32	73	45	54	7	11	32	6,5	8	6,5	38	18	3	XAS/32
40	77	52	63	7	11	36	6,5	10	8,5	41	22	2	XAS/40
50	80	65	71	9	15	45	7,5	12	10,5	50	30	3	XAS/50
63	89	75	81	9	15	50	7,5	14	12,5	52	35	2	XAS/63
80	100	95	101	11	18	63	10	14	11,5	66	40	7	XAS/80
100	118	115	123	11	18	71	10	17	14,5	76	50	5	XAS/100

XCF/ ..

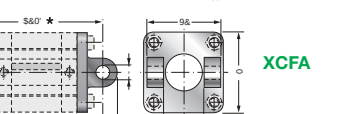
FRONT AND REAR CLEVIS (FEMALE) MOUNTING
MONTAGGIO CERNIERA FEMMINA ANT. E POST.

XCF

XCFA

REF. ISO 15552

* = Stroke / Corsa

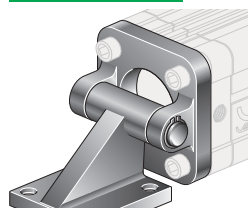
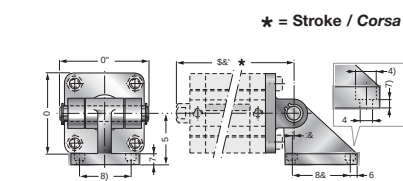



Ø	A2	ØJ ^{H9}	K2	M	V1	V2	W	Z	Front code - Cod. ant.	Rear code - Cod. post.
32	73	10	15	45	26	45	22	11	XCFA/32	XCF/32
40	77	12	18	52	28	52	25	13	XCFA/40	XCF/40
50	80	12	19	65	32	60	27	13	XCFA/50	XCF/50
63	89	16	24	75	40	70	32	17	XCFA/63	XCF/63
80	100	16	26	95	50	90	36	17	XCFA/80	XCF/80
100	118	20	31	115	60	110	41	21	XCFA/100	XCF/100

XASV/ ..

REAR HINGE HORIZONTAL MOUNTING
MONTAGGIO A CONTROCERNIERA ORIZZONTALE

* = Stroke / Corsa

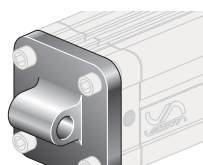
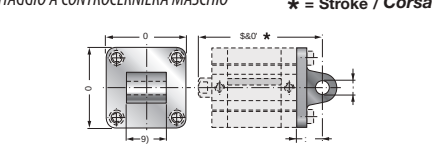



Ø	A2	M	M4	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Code - Codice
32	73	45	54	7	11	32	8	10	5	32,5	32,5	0	XASV/32
40	77	52	63	7	11	36	8,5	10	5	38	38	0	XASV/40
50	80	65	71	9	15	45	10	12	5	46,5	46,5	0	XASV/50
63	89	75	81	9	15	50	10	12	5	56,5	56,5	0	XASV/63
80	100	95	101	11	18	63	12,5	14	6	72	72	0	XASV/80
100	118	115	123	11	18	73	13	16	6	89	89	0	XASV/100

XCM/ ..

CLEVIS (MALE) MOUNTING
MONTAGGIO A CONTROCERNIERA MASCHIO

* = Stroke / Corsa

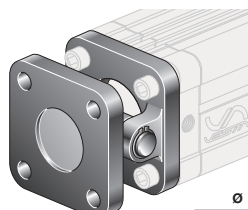
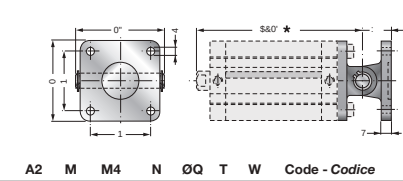
Ø	A2	ØJ ^{H7}	M	V1	W	Code - Codice
32	73	10	47	26	22	XCM/32
40	77	12	54	28	25	XCM/40
50	80	12	66	32	27	XCM/50
63	89	16	78	40	32	XCM/63
80	100	16	98	50	36	XCM/80
100	118	20	115	60	41	XCM/100

REF. ISO 15552

XANL/ ..

REAR HINGE VERTICAL MOUNTING "L" SERIES
MONTAGGIO A CONTROCERNIERA VERTICALE SERIE "L"

* = Stroke / Corsa

Ø	A2	M	M4	N	ØQ	T	W	Code - Codice
32	73	45	54	32,5	7	10	22	XANL/32
40	77	52	63	38	7	10	25	XANL/40
50	80	65	71	46,5	9	12	27	XANL/50
63	89	75	81	56,5	9	12	32	XANL/63
80	100	95	101	72	11	16	36	XANL/80
100	118	115	123	89	11	16	41	XANL/100

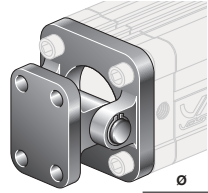


FIXING ACCESSORIES FOR ISO 21287 CYLINDERS / ACCESSORI DI FISSAGGIO PER CILINDRI ISO 21287

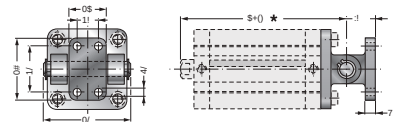
Note: the fixing screws are not included in the supply of the fittings / le viti di fissaggio non sono comprese nella fornitura degli accessori.

XANN/ ..

REAR HINGE VERTICAL MOUNTING "N" SERIES
MONTAGGIO A CONTROCERNIERA VERTICALE SERIE "N"



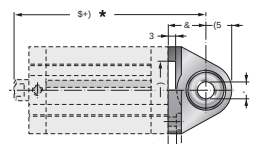
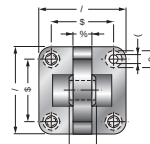
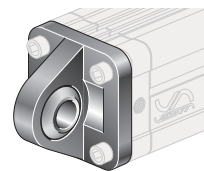
* = Stroke / Corsa



Ø	A2	M4	M7	M8	N3	N4	ØQ4	T3	W3	Code - Codice
32	73	54	25	40	-	28	7	8	18	XANN/32
40	77	63	28	52	16	38	9	10	26	XANN/40
50	80	71	32	52	16	38	9	10	26	XANN/50
63	89	81	40	75	25	54	11	12	34	XANN/63
80	100	101	50	75	25	54	11	12	34	XANN/80
100	118	123	60	115	32	90	14	16	41	XANN/100

XCM-SN-AC/ ..

CLEVIS (MALE) WITH ROD EYE
CERNIERA MASCHIO CON SNODO



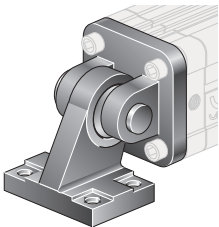
* = Stroke / Corsa

STEEL / ACCIAIO

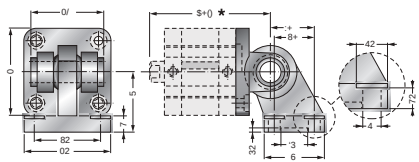
Ø	A2	A	B	C	ØD	EN	ER	F	G	E	L	M	N	P	Code - Codice
32	73	32,5	10,5	22	10	14	15	30	10	6,6	45	10,5	5,5	5	XCM-SN-AC/32
40	77	38	12	25	12	16	18	35	10	6,6	55	11	5,5	5	XCM-SN-AC/40
50	80	46,5	15	27	16	21	20	40	10	9	65	15	6,5	5	XCM-SN-AC/50
63	89	56,5	15	32	16	21	23	45	12	9	75	15	6,5	5	XCM-SN-AC/63
80	100	72	18	36	20	25	27	45	14	11	95	18	10	5	XCM-SN-AC/80
100	118	89	18	41	20	25	30	55	16	11	115	18	10	5	XCM-SN-AC/100

XAS-SN/ ..

REAR HINGE MOUNTING WITH NARROW ROD EYE
MONTAGGIO A CONTROCERNIERA SNODATA STRETTA



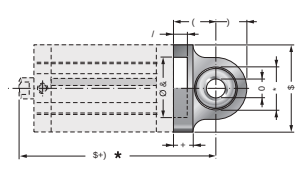
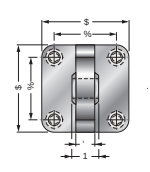
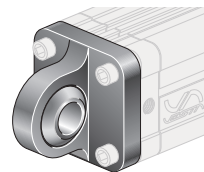
* = Stroke / Corsa



Ø	A2	M	M1	M4	ØP	P1	ØQ	ØQ1	R	S	T	T1	U1	U2	W2	Code - Codice
32	73	45	51	41	20	3	6,6	11	32	31	10	8,5	38	18	21	XAS-SN/32
40	77	52	54	48	20	3	6,6	11	36	35	10	8,5	41	22	24	XAS-SN/40
50	80	65	65	54	20	3	9	15	45	45	12	10,5	50	30	33	XAS-SN/50
63	89	75	67	60	20	3	9	15	50	50	12	10,5	52	35	37	XAS-SN/63
80	100	95	86	75	20	3	11	18	63	60	14	11,5	66	40	47	XAS-SN/80
100	118	115	96	85	20	3	11	18	71	70	15	12,5	76	50	55	XAS-SN/100

XCM-SN-AL/ ..

CLEVIS (MALE) WITH ROD EYE
CERNIERA MASCHIO CON SNODO



* = Stroke / Corsa

ALUMINIUM ALLOY / LEGA DI ALLUMINIO

Ø	A2	A	B	C	D	E	F	H	L	ØM	N	Code - Codice
32	73	45	32,5	30	10,5	22	16	9	5	10	14	XCM-SN-AL/32
40	77	52	38	35	12	25	19	9	5	12	16	XCM-SN-AL/40
50	80	65	46,5	40	15	27	21	11	5	16	21	XCM-SN-AL/50
63	89	75	56,5	45	15	32	24	11	5	16	21	XCM-SN-AL/63
80	100	95	72	45	18	36	28,5	14	5	20	25	XCM-SN-AL/80
100	118	115	89	55	18	41	30	14	5	20	25	XCM-SN-AL/100

PISTON-ROD FIXING ACCESSORIES FOR ISO 21287 CYLINDERS SEE PAGE A-26

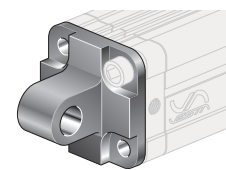
ACCESSORI DI FISSAGGIO ALLO STELO PER CILINDRI ISO 21287 VEDI PAGINA A-26

FIXING ACCESSORIES FOR UNITOP CYLINDERS / ACCESSORI DI FISSAGGIO PER CILINDRI UNITOP

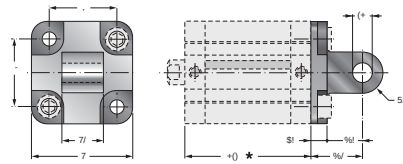
Note: the fixing screws are not included in the supply of the fittings / le viti di fissaggio non sono comprese nella fornitura degli accessori.

SKCM/ ..

MALE CLEVIS MOUNTING
MONTAGGIO A CERNIERA MASCHIO



* = Stroke / Corsa

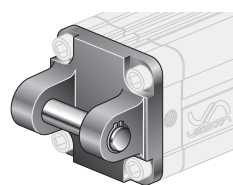


H = See previous pages
Vedi pagine precedenti

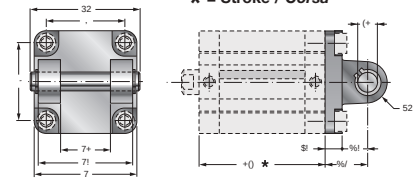
Ø	A3	B3	B4	E2	H	I	R1	T	T2	Code - Codice
16	6	10	16	6	38	18	6	27	12	SKCM/16
20	6	14	20	8	38	22	8	34	16	SKCM/20
25	6	14	20	8	39,5	26	8	38	16	SKCM/25

SKCF/ ..

FEMALE CLEVIS MOUNTING
MONTAGGIO A CERNIERA FEMMINA



* = Stroke / Corsa

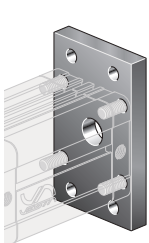


H = See previous pages
Vedi pagine precedenti

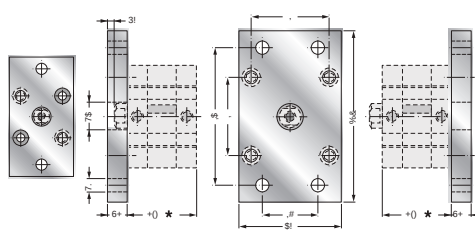
Ø	A3	B3	B4	E2	H	I	P1	R1	T	T2	T3	Code - Codice
32	9	13	22	10	44,5	32	53	10	48	26	45	SKCF/32
40	9	16	25	12	45,5	42	60	12,5	58	28	52	SKCF/40
50	11	16	27	12	45,5	50	68	12,5	63	32	60	SKCF/50
63	11	21	32	16	50	62	78	15	83	40	70	SKCF/63
80	13	23	36	16	56	82	98	15	102	50	90	SKCF/80
100	15	26	41	20	66,5	103	118	20	123	60	110	SKCF/100

SKFL/ ..

FLANGE MOUNTING
MONTAGGIO A FLANGIA



* = Stroke / Corsa

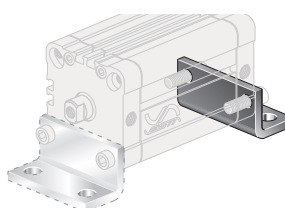


H = See previous pages
Vedi pagine precedenti

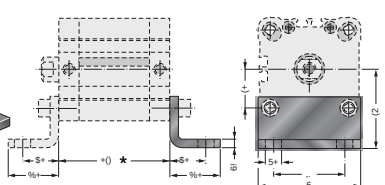
Ø	A3	B5	H	I	I7	I8	P3	S2	T6	T7	Code - Codice
16	29	55	38	18	43	-	5,5	10	5,5	10	SKFL/16
20	36	70	38	22	55	-	5,5	10	6,5	12	SKFL/20
25	40	76	39,5	26	60	-	4,5	10	6,5	12	SKFL/25
32	50	80	44,5	32	65	32	4	10	7	14	SKFL/32
40	60	102	45,5	42	82	36	3,5	10	9	14	SKFL/40
50	68	110	45,5	50	90	45	4,5	12	9	18	SKFL/50
63	87	130	50	62	110	50	7,5	15	9	18	SKFL/63
80	107	160	56	82	135	63	7	15	12	23	SKFL/80
100	128	190	66,5	103	163	75	5	15	14	28	SKFL/100

SKP/ ..

FOOT MOUNTING
MONTAGGIO A PIEDINI

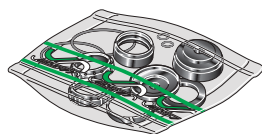


* = Stroke / Corsa



H = See previous pages
Vedi pagine precedenti

Ø	A2	B2	E1	E2	H	I6	R2	S	S3	Code - Codice
16	13	17,5	22	9	38	18	5,5	30	3	SKP/16
20	16	22	27	11	38	22	6,5	36	4	SKP/20
25	16	22	30	13	39,5	26	6,5	40	4	SKP/25
32	18	26	32	16	44,5	32	6,5	50	5	SKP/32
40	20	28	42,5	21	45,5	42	9	60	5	SKP/40
50	24	32	47	25	45,5	50	9	68	6	SKP/50
63	27	39	59,5	31	50	62	11	84	6	SKP/63
80	30	42	65,5	41	56	82	11	102	8	SKP/80
100	33	45	78	51,5	66,5	103	13,5	123	8	SKP/100



SEALS KIT - KIT GUARNIZIONI DI RICAMBIO

..... - SG

Seals kit code = **Cylinder code** + **Bore** + **Versions** + **- SG**: (The kit includes all seals).

Codice del kit = **Codice del cilindro** + **Alesaggio** + **Versions** + **- SG**: (Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **NSK 40 CNP - SG**

MAGNETIC SWITCHES FOR NSK CYLINDERS / FINECORSA MAGNETICI PER CILINDRI NSK

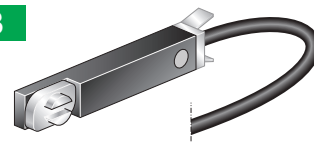
VNCR2

VNPR2

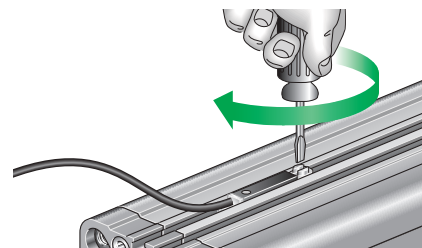
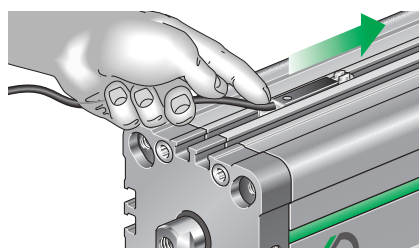
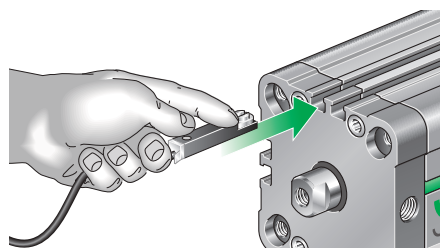
VNCE3

VNPE3

Characteristic magnetic switches see **GENERAL CATALOGUE** - Pag. A-19; A-33.
Caratteristiche finecorsa magnetico vedi **CATALOGO GENERALE** - Pag. A-19; A-33.



MAGNETIC SWITCH POSITIONING / POSIZIONAMENTO DEI FINECORSA MAGNETICI



SHORT STROKE CYLINDERS CILINDRI A CORSA BREVE

SERIE **SH**

SH - - -

D Double acting
Cilindro doppio effetto
S Single acting
Cilindro semplice effetto
DM Double effect magnetic
Doppio effetto magnetico
SM Simple effect magnetic
Semplice effetto magnetico

Stroke / Corsa
(mm):

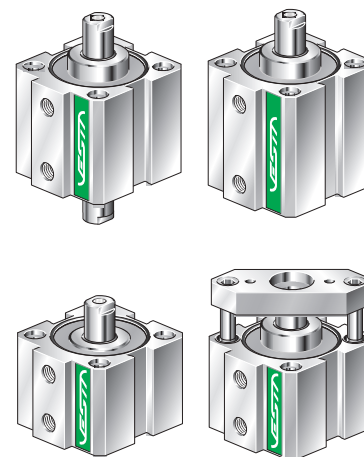
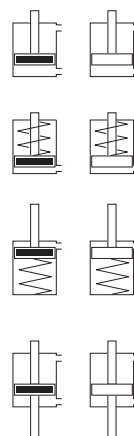
VS Viton rod seal
Guarnizione dello stelo in Viton
VV Viton all seals
Tutte le guarnizioni in Viton

P Through rod cylinder
Cilindro stelo passante

AR Non rotating
Cilindro antirotazione

Bore / Alesaggio (mm):

Ø12	12	Ø63	63
Ø16	16	Ø80	80
Ø20	20	Ø100	100
Ø25	25	Ø125	125
Ø32	32	Ø160	160
Ø40	40	Ø200	200
Ø50	50		



Features of reed switches see:
Caratteristiche finecorsa magnetici: **Pag. A-38**

Piston rod	Stainless steel X10 Cr Ni S 18-09 (ø125÷200 X 20 Cr 13)
Barrel	Anodized profiled aluminium tube.
Seals	NBR rubber and polyurethane.
Cushioning	Mechanical buffers.

Ambient temperature range	-20 °C ÷ +60 °C.
Temperature range of medium	0 °C ÷ +30 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.

TECHNICAL FEATURES

Stelo	Acciaio inox X10 Cr Ni S 18-09 (ø125÷200 X 20 Cr 13)
Camicia	Tubo profilato ed anodizzato d' alluminio.
Guarnizioni	NBR e poliuretano.
Ammortizzatori	Smorzatore meccanici d' urto.

Temperatura ambiente	-20 °C ÷ +60 °C.
Temperatura fluido	0 °C ÷ +30 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.

CARATTERISTICHE TECNICHE

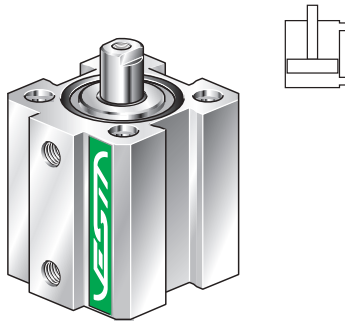


SHORT STROKE WITHOUT MAGNET Ø12 ÷ 100 / CORSA BREVE NON MAGNETICI Ø12 ÷ 100

SHD .. -...

Without magnet / Non magnetico

DOUBLE ACTING SINGLE ROD
CILINDRO BASE DOPPIO EFFETTO

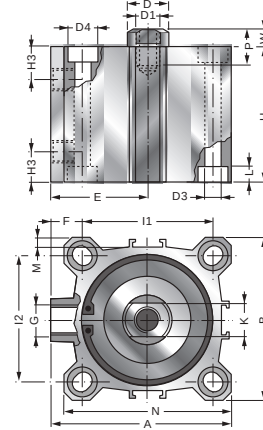
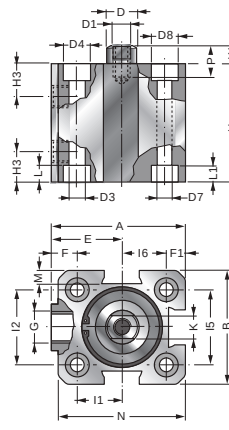
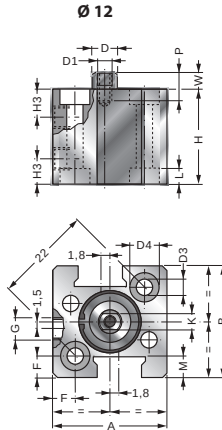


* = Stroke / Corsa

Ø 16; 20; 25

Ø 32; 40; 50; 63; 80; 100.

Ø 12

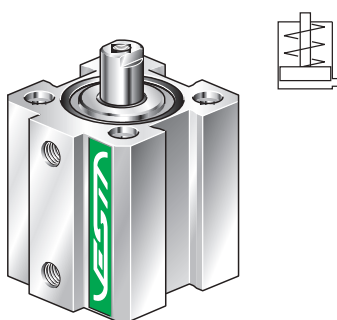


Ø	A	B	ØD	D1	ØD3	ØD4	ØD7	ØD8	E	F	F1	G	H3	I1	I2	I5	I6	K	L	L1	M	N	P	W	Code Codice	H Stroke / Corsa (mm):																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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SHS .. -...

Without magnet / Non magnetico

CYLINDER SINGLE ACTING FRONT SPRING
CILINDRO SEMPLICE EFFETTO MOLLA ANTERIORE

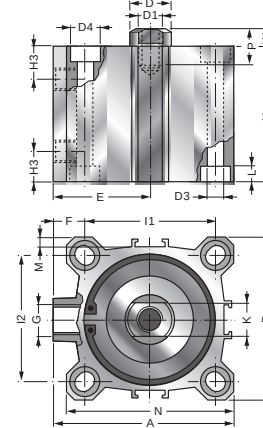
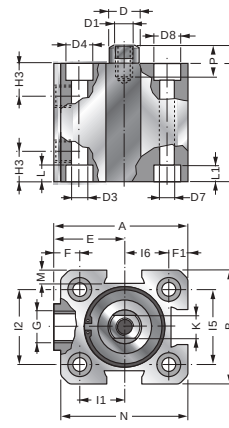
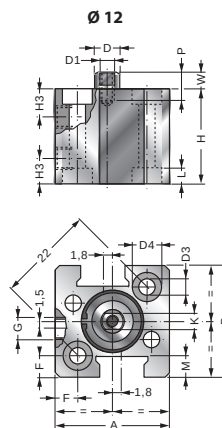


* = Stroke / Corsa

Ø 16; 20; 25

Ø 32; 40; 50; 63; 80; 100.

Ø 12



Ø	A	B	ØD	D1	ØD3	ØD4	ØD7	ØD8	E	F	F1	G	H3	I1	I2	I5	I6	K	L	L1	M	N	P	W	Code Codice	Stroke / Corsa (mm):									
																										5	10	15	20	25	30	40	50		
12	25	25	6	M3	3,7	5,6	-	-	-	4,7	-	M5	5,5	-	-	-	5	3,5	-	4,7	-	6	3,5	SHS 12	22	27	-	-	-	-	-	-	-	-	-
16	34	30	8	M4	4,7	7,5	3,7	5,6	19	7	5	M5	8	12	18	20	10	6	4,6	3,5	4	32	8	4,5	SHS 16	32	37	42	47	52	-	-	-	-	-
20	40	36	10	M5	5,8	9	5,8	9	22	7	5,2	M5	8	15	20	25,5	12,7	8	5,7	5,7	5,7	38,5	10	5	SHS 20	32	37	42	47	52	-	-	-	-	-
25	44,5	40	10	M5	5,8	9	5,8	9	24,5	9	6	G1/8	10,5	15,5	26	28	14	8	5,7	5,7	4,5	42	10	5,5	SHS 25	33,5	38,5	43,5	48,5	53,5	-	-	-	-	-
32	51	46	12	M6	5,8	9	-	-	27	9	-	G1/8	11,5	36	32	-	-	10	5,7	-	4	48	12	6	SHS 32	34,5	39,5	44,5	49,5	54,5	59,5	69,5	79,5	89,5	
40	58	55	12	M6	5,8	9	-	-	30,5	9,5	-	G1/8	11	42	42	-	-	10	5,7	-	4	55	12	6	SHS 40	34,5	39,5	44,5	49,5	54,5	59,5	64,5	74,5	84,5	94,5
50	70	65	16	M8	6,8	11	-	-	37,5	12,5	-	G1/8	11,5	50	50	-	-	13	6,8	-	4	65	12	7,5	SHS 50	-	44,5	49,5	54,5	59,5	64,5	74,5	84,5	94,5	
63	86	80	16	M8	9	14	-	-	46	15	-	G1/8	11	62	62	-	-	13	8,8	-	5	80	14	7	SHS 63	-	47	52	57	62	67	77	87	97	
80	105	100	20	M10	9	14	-	-	55	14	-	G1/4	14	82	82	-	-	17	9	-	6	100	15	8	SHS 80	-	56	61	66	71	76	86	96	106	
100	131	124	25	M12	11	17,2	-	-	69	17,5	-	G1/4	16	103	103	-	-	22	11	-	7,5	124	20	10	SHS 100	-	66	71	76	81	86	96	106	116	

SHORT STROKE WITH MAGNET Ø12 ÷ 100 / CORSA BREVE MAGNETICI Ø12 ÷ 100

* = Stroke / Corsa

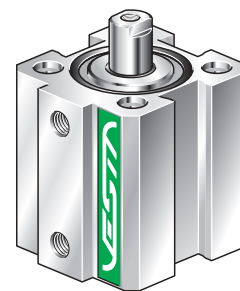
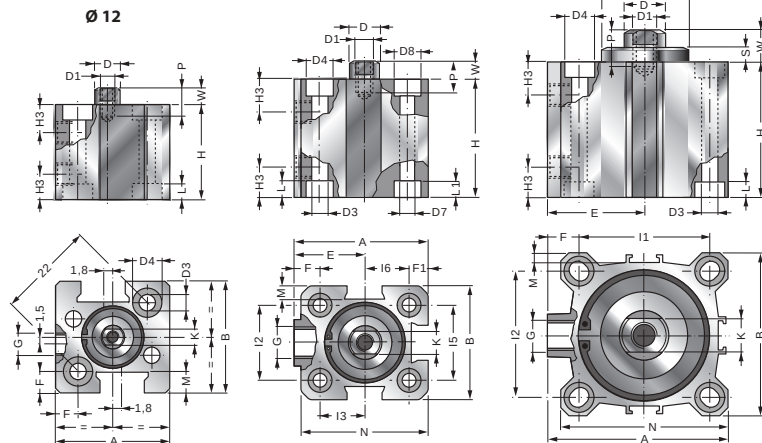
Ø 16; 20; 25

Ø 32; 40; 50; 63; 80; 100.

SHDM .. -...

With magnet / Magnetico

DOUBLE ACTING SINGLE ROD
CILINDRO BASE DOPPIO EFFETTO



Bore Alesaggio	A	B	ØD	D1	ØD2	ØD3	ØD4	ØD7	ØD8	E	F	F1	G	H3	I1	I2	I3	I5	I6	K	L	L1	M	N	P	S	W	Code / Codice
12	25	25	6	M3	-	3,7	5,6	-	-	-	4,7	-	M5	5,5	-	-	-	-	5	3,5	-	4,7	-	6	-	3,5	SHDM 12 - ...	
16	34	30	8	M4	-	4,7	7,5	3,7	5,6	19	7	5	M5	8	-	18	12	20	10	6	4,6	3,5	4	32	8	-	4,5	SHDM 16 - ...
20	40	36	10	M5	-	5,8	9	5,8	9	22	7	5,2	M5	8	-	20	15	25,5	12,7	8	5,7	5,7	5,7	38,5	10	-	4,5	SHDM 20 - ...
25	44,5	40	10	M5	-	5,8	9	5,8	9	24,5	9	6	G1/8	10,5	-	26	15,5	28	14	8	5,7	5,7	4,5	42	10	-	5,5	SHDM 25 - ...
32	51	46	12	M6	24,5	5,8	9	-	-	27	9	-	G1/8	11,5	36	32	-	-	-	10	5,7	-	4	48	12	5	11	SHDM 32 - ...
40	58	55	12	M6	28	5,8	9	-	-	30,5	9,5	-	G1/8	11	42	42	-	-	-	10	5,7	-	4	55	12	6	12,5	SHDM 40 - ...
50	70	65	16	M8	34	6,8	11	-	-	37,5	12,5	-	G1/8	11,5	50	50	-	-	-	13	6,8	-	4	65	12	6	13,5	SHDM 50 - ...
63	86	80	16	M8	38,5	9	14	-	-	46	15	-	G1/8	11	62	62	-	-	-	13	8,8	-	5	80	14	8	15	SHDM 63 - ...
80	105	100	20	M10	44	9	14	-	-	55	14	-	G1/4	14	82	82	-	-	-	17	9	-	6	100	15	10	18	SHDM 80 - ...
100	131	124	25	M12	56	11	17,2	-	-	69	17,5	-	G1/4	16	103	103	-	-	-	22	11	-	7,5	124	20	10,5	20,5	SHDM 100 - ...

Bore Alesaggio	Stroke / Corsa (mm):															
	5	10	15	20	25	30	40	50	60	80	100	125	160	200	250	
12	32	37	42	47	52	57	-	-	-	-	-	-	-	-	-	-
16	37	42	47	52	63	68	78	88	98	118	138	-	-	-	-	-
20	37	42	47	52	63	68	78	88	98	118	138	163	-	-	-	-
25	43,5	48,5	53,5	58,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	-	-	-	-
32	44,5	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	199,5	-	-	-
40	44,5	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	199,5	-	-	-
50	-	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	199,5	239,5	-	-
63	-	52	57	62	67	72	82	92	102	122	142	167	202	242	-	-
80	-	56	61	66	71	76	86	96	106	126	146	171	206	246	296	-
100	-	66	71	76	81	86	96	106	116	136	156	181	216	256	306	-

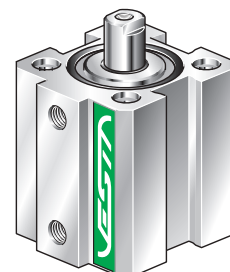
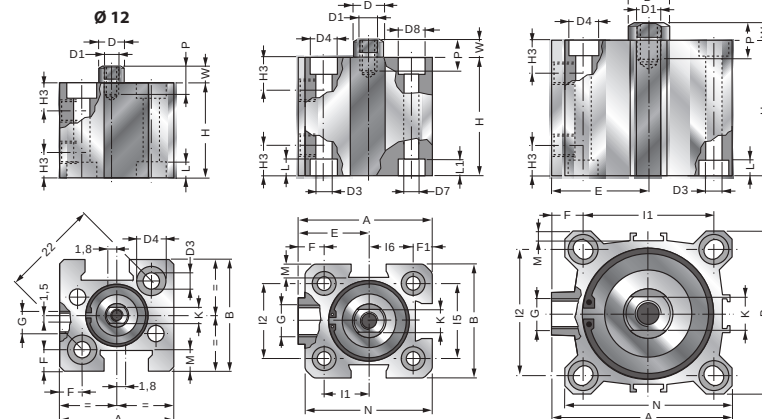
* = Stroke / Corsa

Ø 16; 20; 25

Ø 32; 40; 50; 63; 80; 100.

SHSM .. -...

With magnet / Magnetico
CYLINDER SINGLE ACTING FRONT SPRING
CILINDRO SEMPLICE EFFETTO MOLLA ANTERIORE



Ø	Stroke / Corsa (mm):															
	4	5	10	15	20	25	30	40	50							
12	-	32	37	-	-	-	-	-	-	SHSM 12	-	-	-	-	-	-
16	-	37	42	47	52	63	-	-	-	SHSM 16	-	-	-	-	-	-
20	-	37	42	47	52	63	-	-	-	SHSM 20	-	-	-	-	-	-
25	-	43,5	48,5	53,5	58,5	64,5	-	-	-	SHSM 25	-	-	-	-	-	-
32	-	44,5	49,5	54,5	59,5	64,5	69,5	89,5	99,5	SHSM 32	-	-	-	-	-	-
40	-	44,5	49,5	54,5	59,5	64,5	69,5	89,5	99,5	SHSM 40	-	-	-	-	-	-
50	-	-	49,5	54,5	59,5	64,5	69,5	89,5	99,5	SHSM 50	-	-	-	-	-	-
63	-	-	52	57	62	67	72	82	102	SHSM 63	-	-	-	-	-	-
80	-	-	56	61	66	71	76	86	106	SHSM 80	-	-	-	-	-	-
100	-	-	66	71	76	81	86	96	116	SHSM 100	-	-	-	-	-	-



SHORT STROKE SPECIAL VERSION / CORSA BREVE ESECUZIONI SPECIALI

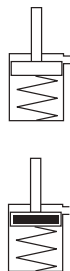
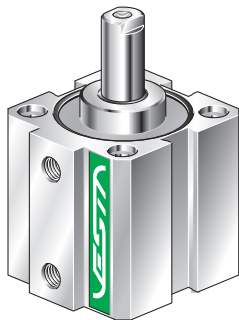
SHS .. -... SEP

Without magnet / Non magnetico

SHSM .. -... SEP

With magnet / Magnetico

SIMPLE ACTING REAR SPRING
SEMPLICE EFFETTO MOLLA POSTERIORE

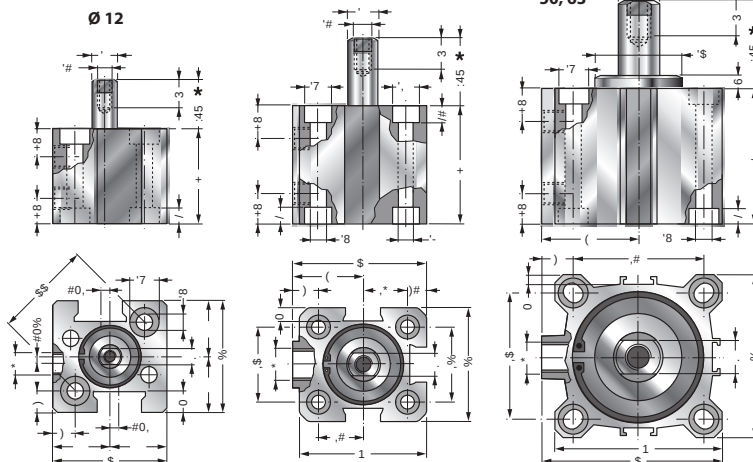


* = Stroke / Corsa

Ø 16; 20; 25

Ø 32; 40;
50; 63

Ø 12



Bore Alesaggio	A	B	ØD	D1	D2	ØD3	ØD4	ØD7	ØD8	E	F	F1	G	H3	I1	I2	I5	I6	K	L	L1	M	N	P	S	W	Code Codice	H Stroke / Corsa (mm):							
																												5	10	15	20	25	30	40	50
12	25	25	6	M3	-	3,7	5,6	-	-	-	4,7	-	M5	5,5	-	-	-	-	5	3,5	-	4,7	-	6	-	3,5	SHS 12 .. SEP	22	27	-	-	-	-	-	-
12	25	25	6	M3	-	3,7	5,6	-	-	-	4,7	-	M5	5,5	-	-	-	-	5	3,5	-	4,7	-	6	-	3,5	SHSM 12 .. SEP	32	37	-	-	-	-	-	-
16	34	30	8	M4	-	4,7	7,5	3,7	5,6	19	7	5	M5	8	12	18	20	10	6	4,6	3,5	4	32	8	-	4,5	SHS(M) 16 .. SEP	37	42	47	-	-	-	-	-
20	40	36	10	M5	-	5,8	9	5,8	9	22	7	5,2	M5	8	15	20	25,5	12,7	8	5,7	5,7	5,7	38,5	10	-	4,5	SHS(M) 20 .. SEP	37	42	47	63	68	-	-	-
25	44,5	40	10	M5	-	5,8	9	5,8	9	24,5	9	6	G1/8	10,5	15,5	26	28	14	8	5,7	5,7	4,5	42	10	-	5,5	SHS(M) 25 .. SEP	43,5	48,5	53,5	64,5	69,5	-	-	-
32	51	46	12	M6	24,5	5,8	9	-	-	27	9	-	G1/8	11,5	36	32	-	-	10	5,7	-	4	48	12	5	11	SHS(M) 32 .. SEP	44,5	49,5	54,5	64,5	69,5	79,5	-	119,5
40	58	55	12	M6	28	5,8	9	-	-	30,5	9,5	-	G1/8	11	42	42	-	-	10	5,7	-	4	55	12	6	12,5	SHS(M) 40 .. SEP	-	49,5	54,5	59,5	64,5	69,5	-	-
50	70	65	16	M8	34	6,8	11	-	-	37,5	12,5	-	G1/8	11,5	50	50	-	-	13	6,8	-	4	65	12	6	13,5	SHS(M) 50 .. SEP	-	49,5	54,5	59,5	64,5	69,5	-	-
63	86	80	16	M8	38,5	9	14	-	-	46	15	-	G1/8	11	62	62	-	-	13	8,8	-	5	80	14	8	15	SHS(M) 63 .. SEP	-	52	57	62	67	72	-	-

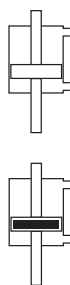
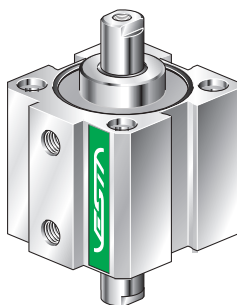
SHD .. -... P

Without magnet / Non magnetico

SHDM .. -... P

With magnet / Magnetico

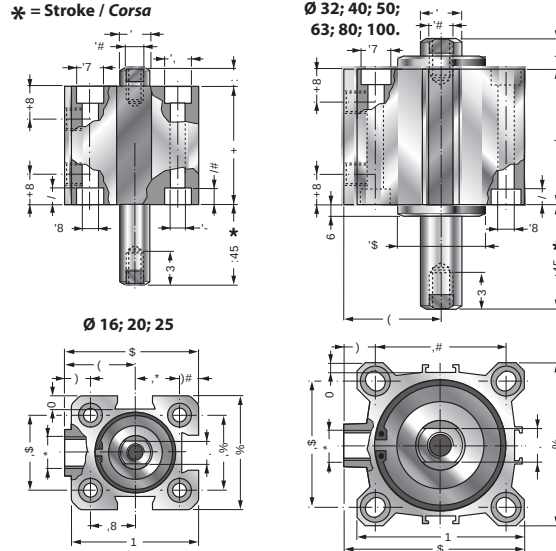
THROUGH ROD CYLINDER
CILINDRO STELO PASSANTE



* = Stroke / Corsa

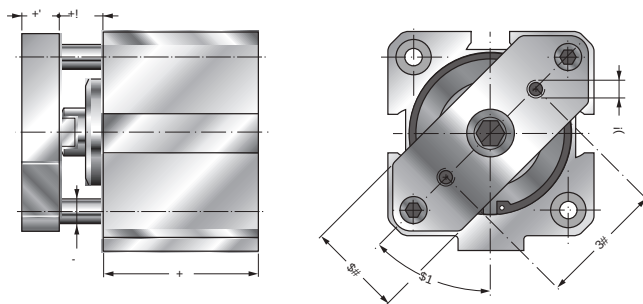
Ø 32; 40; 50;
63; 80; 100.

Ø 16; 20; 25



Bore Alesaggio	Stroke / Corsa (mm):															
	5	10	15	20	25	30	40	50	60	80	100	125	160	200	250	306
16	37	42	47	52	63	68	78	88	98	118	138	-	-	-	-	-
20	37	42	47	52	63	68	78	88	98	118	138	163	-	-	-	-
25	43,5	48,5	53,5	58,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	-	-	-	-
32	44,5	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	199,5	-	-	-
40	44,5	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	199,5	-	-	-
50	-	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	199,5	239,5	-	-
63	-	52	57	62	67	72	82	92	102	122	142	167	202	242	-	-
80	-	56	61	66	71	76	86	96	106	126	146	171	206	246	296	-
100	-	66	71	76	81	86	96	106	116	136	156	181	216	256	306	-

Bore Alesaggio	A	B	ØD	D1	ØD2	ØD3	ØD4	ØD7	ØD8	E	F	F1	G	H3	I1	I2	I3	I5	I6	K	L	L1	M	N	P	S	W	Code / Codice
16	34	30	8	M4	-	4,7	7,5	3,7	5,6	19	7	5	M5	8	-	18	12	20	10	6	4,6	3,5	4	32	8	-	4,5	SHD(M) 16 - ... P
20	40	36	10	M5	-	5,8	9	5,8	9	22	7	5,2	M5	8	-	20	15	25,5	12,7	8	5,7	5,7	5,7	38,5	10	-	4,5	SHD(M) 20 - ... P
25	44,5	40	10	M5	-	5,8	9	5,8	9	24,5	9	6	G1/8	10,5	-	26	15,5	28	14	8	5,7	5,7	4,5	42	10	-	5,5	SHD(M) 25 - ... P
32	51	46	12	M6	24,5	5,8	9	-	-	27	9	-	G1/8	11,5	36	32	-	-	-	10	5,7	-	4	48	12	5	11	SHD(M) 32 - ... P
40	58	55	12	M6	28	5,8	9	-	-	30,5	9,5	-	G1/8	11	42	42	-	-	-	10	5,7	-	4	55	12	6	12,5	SHD(M) 40 - ... P
50	70	65	16	M8	34	6,8	11	-	-	37,5	12,5	-	G1/8	11,5	50	50	-	-	-	13	6,8	-	4	65	12	6	13,5	SHD(M) 50 - ... P
63	86	80	16	M8	38,5	9	14	-	-	46	15	-	G1/8	11	62	62	-	-	-	13	8,8	-	5	80	14	8	15	SHD(M) 63 - ... P
80	105	100	20	M10	44	9	14	-	-	55	14	-	G1/4	14	82	82	-	-	-	17	9	-	6	100	15	10	18	SHD(M) 80 - ... P
100	131	124	25	M12	56	11	17,2	-	-	69	17,5	-	G1/4	16	103	103	-	-	-	22	11	-	7,5	124	20	10,5	20,5	SHD(M) 100 - ... P



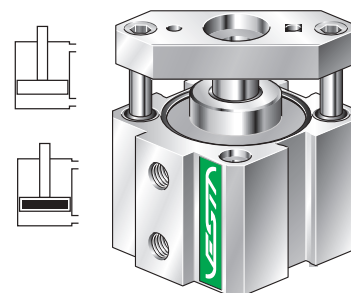
SHD .. -... AR

Without magnet / Non magnetico

SHDM .. -... AR

With magnet / Magnetico

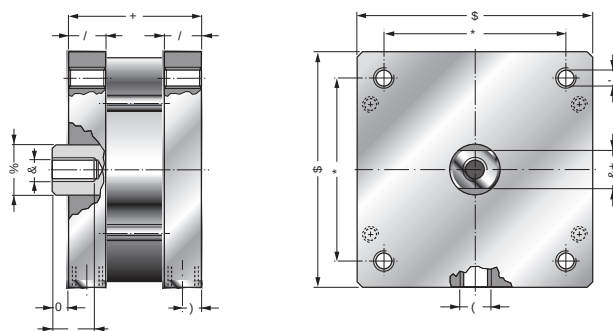
NON ROTATING / CILINDRO ANTIROTAZIONE



Bore <i>Alesaggio</i>	AN	A1	F2	H2	H4	P1	ØD	Code <i>Codice</i>	H Stroke / <i>Corsa</i> (mm):												
									5	10	15	20	25	30	40	50	60	80	100	125	160
20	45°	15	M4	4,5	8	20	5	SHD(M) 20...AR	37	42	47	52	63	68	78	88	98	118	138	-	-
25	45°	15	M4	5,5	8	22	5	SHD(M) 25...AR	43,5	48,5	53,5	58,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	-	-
32	41,5°	20	M5	11	10	28	5	SHD(M) 32...AR	44,5	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	-	-
40	45°	20	M5	12,5	10	33	5	SHD(M) 40...AR	44,5	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	-	-
50	45°	30	M6	13,5	12	42	6	SHD(M) 50...AR	-	49,5	54,5	59,5	64,5	69,5	79,5	89,5	99,5	119,5	139,5	164,5	-
63	45°	30	M6	15	12	50	8	SHD(M) 63...AR	-	52	57	62	67	72	82	92	102	122	142	167	202
80	45°	50	M8	18	14	65	8	SHD(M) 80...AR	-	56	61	66	71	76	86	96	106	126	146	171	206
100	45°	50	M10	20,5	14	80	10	SHD(M) 100...AR	-	66	71	76	81	86	96	106	116	136	156	181	216

Cylinders series **SHD(M)_AR** comes from **SHD(M)_** standard: technical and dimensional features remain exactly the same.

I cilindri antirotazione serie **SHD(M)_AR** sono derivati dalle serie **SHD(M)_** standard e ne conservano quindi caratteristiche tecniche e dimensioni di ingombro.



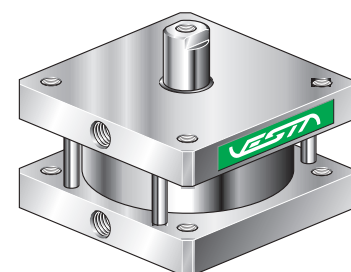
DOUBLE ACTING CYLINDER Ø 125; 160; 200.
CILINDRO DOPPIO EFFETTO Ø 125; 160; 200.

SHD .. -...

Without magnet / Non magnetico

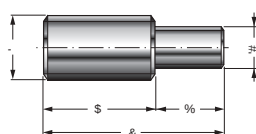
SHDM .. -...

With magnet / Magnetico



Bore Alesaggio	A	ØB	ØC	ØD	E	F	G	CH	I	L	M	Code Codice	H Stroke / Corsa (mm):						
													25	50	75	100	125	160	200
125	140	30	M14	M12	G1/4	10	110	28	25	22	10	SHD(M) 125 ...	103	128	153	178	203	238	278
160	180	40	M20	M16	G3/8	12	140	36	30	26	12	SHD(M) 160 ...	112	137	162	187	212	247	287
200	220	40	M20	M16	G3/8	12	175	36	30	26	12	SHD(M) 200 ...	112	137	162	187	212	247	287

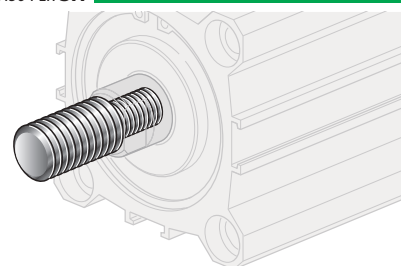
FIXING ACCESSORIES FOR SH CYLINDERS / ACCESSORI DI FISSAGGIO PER CILINDRI SH



COUPLING NIPPLES TO ISO STANDARD FOR SH
NIPPLE CON FILETTO A NORME ISO PER SH

SHNP/..

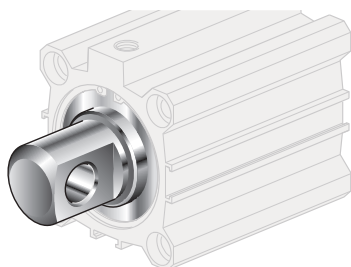
Bore Alesaggio	ØD	ØD1	A	B	C	Code Codice
12	M6x1	M3	16	6,5	22,5	SHNP/12
16	M6x1	M4	15	8	23	SHNP/16
20	M8x1,25	M5	20	10	30	SHNP/20
25	M8x1,25	M5	20	10	30	SHNP/25
32	M10x1,25	M6	22	12	34	SHNP/32
40	M10x1,25	M6	22	12	34	SHNP/40
50	M12x1,25	M8	24	14	38	SHNP/50
63	M12x1,25	M8	24	14	38	SHNP/63
80	M16x1,5	M10	32	15	47	SHNP/80
100	M20x1,5	M12	40	20	60	SHNP/100



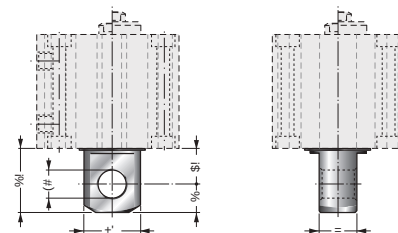


SHCM/..

CLEVIS MOUNTING FOR SH
MONTAGGIO A CERNIERA MASCHIO PER SH



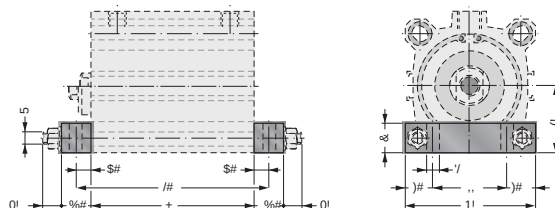
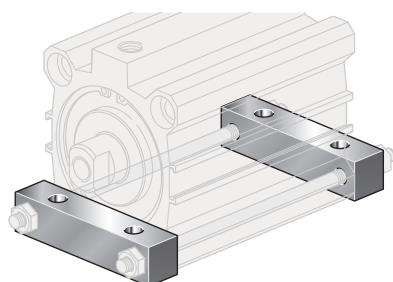
Bore Alesaggio	A1	B	ØE2 ^{H8}	ØH5	Z	B1	Code Codice
16	8	6	6	12	7	14	SHCM/16
20	10	8	8	16	9	18	SHCM/20
25	10	8	8	16	9	18	SHCM/25
32	13	10	10	20	14	23	SHCM/32
40	15	12	12	24	16	27	SHCM/40
50	15	12	12	24	17	27	SHCM/50
63	19	16	16	32	22	35	SHCM/63
80	19	16	16	32	22	35	SHCM/80
100	23	20	20	40	26	43	SHCM/100



H = See previous pages
Vedi pagine precedenti

SHP/..

FOOT MOUNTING FOR SH
MONTAGGIO A PIEDINI PER SH



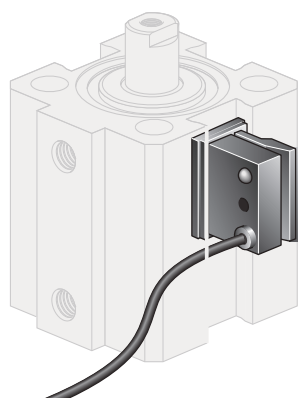
Bore Alesaggio	A2	B2	C	ØD9	E1	F2	I6	L2	M1	N1	ØR	Code Codice
16	5	10	10	3,5	17	5	30	H+10	2,4	40	M3	SHP/16
20	5	10	10	5,5	18	5	40	H+10	4	50	M5	SHP/20
25	6	12	12	5,5	20	7,5	45	H+12	4	60	M5	SHP/25
32	6	12	12	5,5	24	5	50	H+12	4	60	M5	SHP/32
40	6	12	12	5,5	27,5	5	60	H+12	4	70	M5	SHP/40
50	7,5	15	15	6,5	32,5	5	70	H+15	5	80	M6	SHP/50
63	7,5	15	15	8,5	40	7,5	85	H+15	6,5	100	M8	SHP/63
80	10	20	20	8,5	50	20	60	H+20	6,5	100	M8	SHP/80
100	10	20	20	10,5	62	22	80	H+20	8	124	M10	SHP/100

H = See previous pages
Vedi pagine precedenti

REED SWITCHES FOR SH CYLINDERS / FINECORSA PER CILINDRI SH

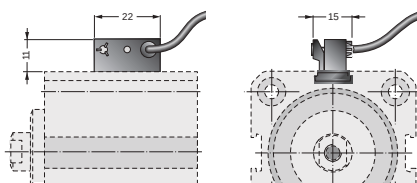
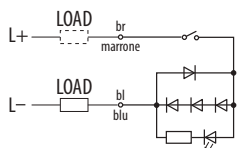
FTV 306 V

REED SWITCHES
FINECORSA MAGNETICO



Cable
Cavo L=3m

FTV 306 V circuit - Circuito FTV 306 V



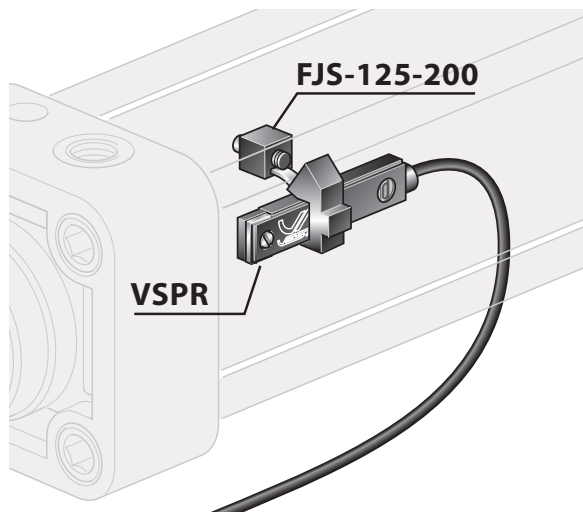
Circuit code Codice Circuito	Voltage range Tensione V	Switching current Corrente mA	Switching capacity Potenza VA/W	Degree of protection Protezione	Working temperature Temperatura °C	Contact function Contatto
FTV 306 V	10-250 AC-DC	300	10/10	IP65	-25 ÷ +75	NO

FJS-125-200

FIXING FOR TIE RODS MOUNTING
SUPPORTO PER MONTAGGIO SU TIRANTI

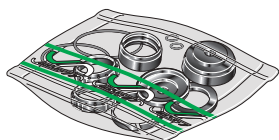
VSPR

REED SWITCHES
FINECORSA MAGNETICO



..... - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO



Seals kit code = **Cylinder code** + **Bore** + **Versions** + **- SG**: (The kit includes all seals).

Codice del kit = **Codice del cilindro** + **Alesaggio** + **Versions** + **- SG**: (Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **SHDM 32 P - SG**

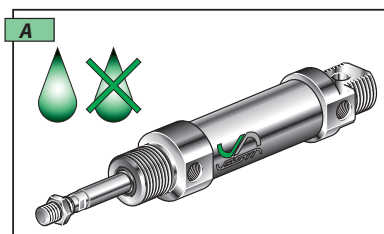
TECHNICAL FEATURES FOR CYLINDERS USED IN HARSH ENVIRONMENTS CARATTERISTICHE TECNICHE CILINDRI ANTICORROSIONE

Anticorrosive Vesta cylinders, **DSM, DSA, XPN, XJS** and **XJSS** are suitable for use in aggressive environment, such as the food or the chemical industries. **DSM** e **XJSS** series are available also with fluoro rubber seals (VITON), for high temperature. All cylinders follows ISO 6432 and ISO VDMA 15552 standards (also for stroke tolerance).

For further information on the resistance of materials to aggressive agents, please contact our technical sales department.

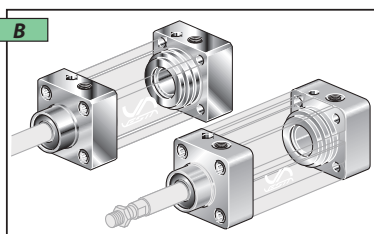
*I cilindri anticorrosione Vesta serie **DSM, DSA, XPN, XJS** e **XJSS** sono progettati per l'impiego in ambienti aggressivi, quali l'industria alimentare o chimica. I modelli **DSM** e **XJSS** (completamente in acciaio inox) sono fornibili con tutte le guarnizioni in VITON. Tutti i cilindri anticorrosione rispettano gli standard ISO 6432 e ISO VDMA 15552 (incluse le tolleranze sulle corse dei cilindri).*

Per informazioni sul grado di resistenza in ambienti specifici contattare il nostro ufficio tecnico-commerciale.



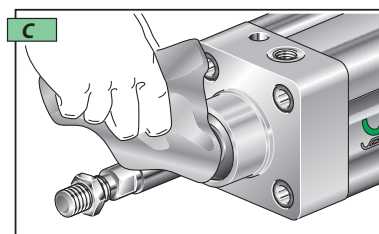
Lubrication not required.

Possibilità di funzionamento continuo privo di lubrificazione.



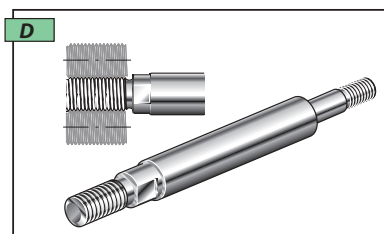
X5 Cr Ni 1810 stainless steel caps for DSM and XJSS, acetalic polymer for XJS and XPN.

Teste inox X5 Cr Ni 1810 per DSM e XJSS, resina acetalica per XJS e XPN.



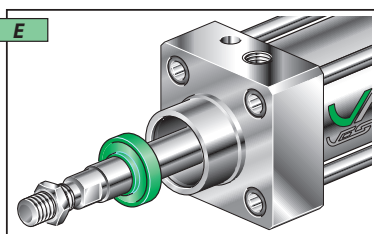
Caps easy to clean, due to their shape.

Le teste sono facilmente pulibili perché non scaricate esternamente.



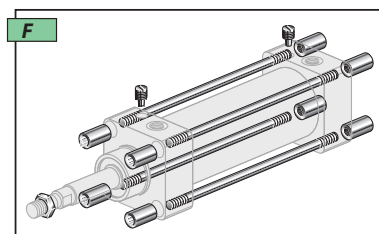
Piston rods in rolled stainless steel X5 Cr Ni 18-10.

Steli in acciaio INOX X5 Cr Ni 18-10 rullato.



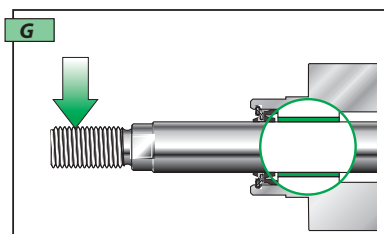
Poliurethane piston rod seal.

Guarnizione dello stelo realizzata in poliuretano.



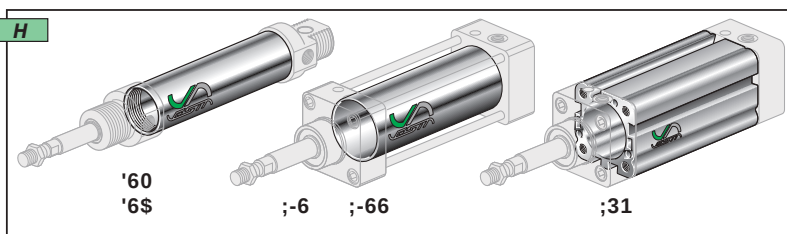
All external parts are in X10 Cr Ni S 18-09.

I particolari a contatto con gli agenti esterni sono in acciaio inox X10 Cr Ni S 18-09.



Self lubricating bearing in a copper-steel alloy, with teflon covering.

Boccole autolubrificanti in acciaio ramato con deposito in Teflon.



X5 Cr Ni 18-10 stainless steel tube for DSM, XJS and XJSS series. For XPN series, anodized aluminium.

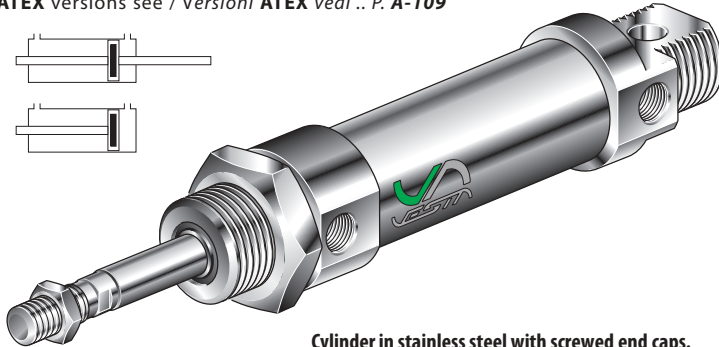
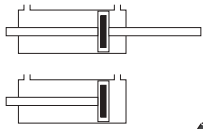
Camicie realizzate in acciaio inox X5 Cr Ni 18-10 per le versioni DSM, XJS e XJSS. La versione XPN è ricavata da profilato di alluminio anodizzato.



SERIE DSM

PNEUMATIC CYLINDERS ISO 6432 FOR HARSH AGGRESSIVE ENVIRONMENT CILINDRI INOX ISO 6432 PER AMBIENTI PARTICOLARMENTE AGGRESSIVI

ATEX versions see / Versioni ATEX vedi .. P. A-109



Cylinder in stainless steel with screwed end caps.
Completamente in acciaio inox con teste avvitare.

With magnetic piston / Con pistone magnetico

DSM -

Bore
Alesaggio
(mm):

Ø12 12
Ø16 16
Ø20 20
Ø25 25

Stroke / Corsa
(mm):

VV Viton all seal
Tutte le guarnizione in Viton

P Through rod cylinder
Cilindro stelo passante

SEA Single acting front spring
Semplice effetto molla anteriore

SEP Single acting rear spring
Semplice effetto molla posteriore

Bore Alesaggio	10	25	50	80	100	125	160	200	250	300	350	400	450	500
12	.	.	.	.	.	.	.	.	.	.	.	.	.	.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Standard stroke / Corse Standard

DSM cylinder fixing see:

Fissaggi per cilindri DSM vedi: **Pag. A-10 ÷ A-11; A-43.**

Features of reed switches see:

Caratteristiche finecorsa magnetici: **Pag. A-19, A-42**

TECHNICAL FEATURES

End caps	Stainless steel X5 Cr Ni 1810.
Piston rod	Stainless steel X5 Cr Ni 1810.
Barrel	Stainless steel X5 Cr Ni 1810 tube.
Seals	Rod seal in VITON, other seals in NBR.
Cushioning	Mechanical in polyurethane.
Nuts	Stainless steel X10 Cr Ni S 18-09.

Environment temperature range	-10 ÷ +70 °C.
Temperature range of medium	0 ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.

CARATTERISTICHE TECNICHE

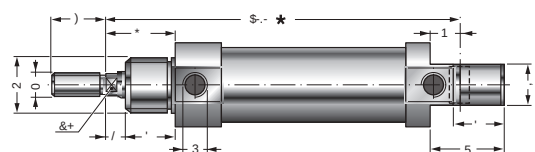
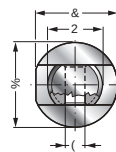
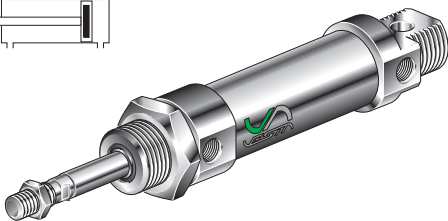
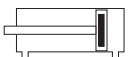
Testate	Acciaio inox X5 Cr Ni 1810.
Stelo	Acciaio inox X5 Cr Ni 1810.
Camicia	Tubo in acciaio inox X5 Cr Ni 1810.
Guarnizioni	Dello stelo in VITON, altre in NBR.
Ammortizzatori	Meccanici in poliuretano.
Bussola e dado	Acciaio inox X10 Cr Ni S 18-09.

Temperatura ambiente	-10 °C ÷ +70 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.

DSM .. /...

SINGLE ROD
CILINDRO BASE STELO SEMPLICE

* = Stroke / Corsa

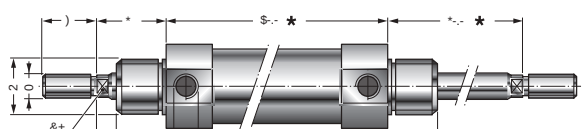
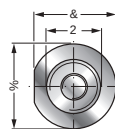
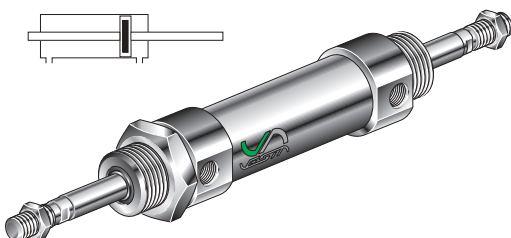


Bore Alesaggio	A	ØB	C	CH	D	ØE ^{H9}	F	G	I	L	ØM	N	ØO	ØP	R	Code Codice
12	75	18	17,2	5	15	6	16	22	12	7	M6x1	9	M16x1,5	M5	22	DSM 12/...
16	82	20	19	5	15	6	16	22	12	7	M6x1	9	M16x1,5	M5	22	DSM 16/...
20	95	25	26,2	7	19	8	20	24	16	5	M8x1,25	12	M22x1,5	G1/8	30	DSM 20/...
25	104	30	28,3	8	20	8	22	28	16	8	M10x1,25	12	M22x1,5	G1/8	30	DSM 25/...

DSM .. /... P

THROUGH ROD
STELO PASSANTE

* = Stroke / Corsa



Bore Alesaggio	A	ØB	C	CH	D	F	G	L	ØM	ØO	ØP	Code Codice
12	49,5	18	17,2	5	15	16	22	7	M6x1	M16x1,5	M5	DSM 12/... P
16	56	20	19	5	15	16	22	7	M6x1	M16x1,5	M5	DSM 16/... P
20	68	28	26,2	7	19	20	24	5	M8x1,25	M22x1,5	G1/8	DSM 20/... P
25	69	30	28,3	8	20	22	28	8	M10x1,25	M22x1,5	G1/8	DSM 25/... P

CYLINDERS ISO 6432 FOR AGGRESSIVE ENVIRONMENTS CILINDRI ISO 6432 PER AMBIENTI AGGRESSIVI

SERIE **DSA**

With magnetic piston / Con pistone magnetico

DSA -

Bore
Alesaggio (mm):

Ø12 **12**
Ø16 **16**
Ø20 **20**
Ø25 **25**

Stroke / Corsa
(mm):

P Through rod cylinder
Cilindro stelo passante

SEA Single acting front spring
Semplice effetto molla anteriore

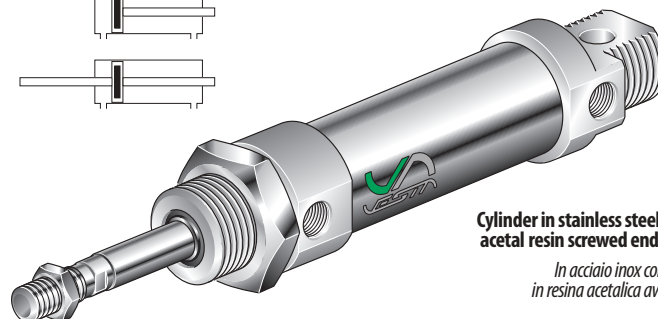
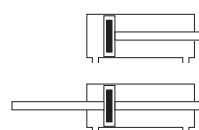
SEP Single acting rear spring
Semplice effetto molla posteriore

DSA cylinder fixing see:

Fissaggi per cilindri DSA vedi: **Pag. A-10 ÷ A-11; A-43.**

Features of reed switches see:

Caratteristiche finecorsa magnetici: **Pag. A-19, A-42**



Cylinder in stainless steel with
acetal resin screwed end caps.

In acciaio inox con teste
in resina acetica avvitata.

Bore Alesaggio	10	25	50	80	100	125	160	200	250
12	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•

Standard stroke / Corse Standard

End caps Acetal resin.
Piston rod Stainless steel X5 Cr Ni 1810.
Barrel Stainless steel X5 Cr Ni 1810 tube.
Seals Rod seal in Polyurethane, other seals in NBR.
Cushioning Mechanical in polyurethane.
Nuts Stainless steel X10 Cr Ni S 18-09.

Environment temperature range $-10 \div +70^{\circ}\text{C}$.
Temperature range of medium $0 \div +40^{\circ}\text{C}$.
Lubrication Not required.
Medium Filtered air.
Max operating pressure 10 bar.

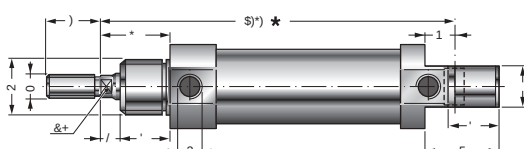
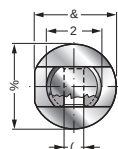
TECHNICAL FEATURES

Testate Resina acetica.
Stelo Acciaio inox X5 Cr Ni 1810.
Camicia Tubo in acciaio inox X5 Cr Ni 1810.
Guarnizioni Dello stelo in Poliuretano, altre in NBR.
Ammortizzatori Meccanici in poliuretano.
Dadi Acciaio inox X10 Cr Ni S 18-09.

Temperatura ambiente $-10^{\circ}\text{C} \div +70^{\circ}\text{C}$.
Temperatura fluido $0^{\circ}\text{C} \div +40^{\circ}\text{C}$.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

CARATTERISTICHE TECNICHE

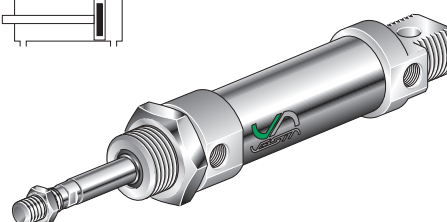
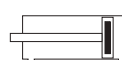
* = Stroke / Corsa



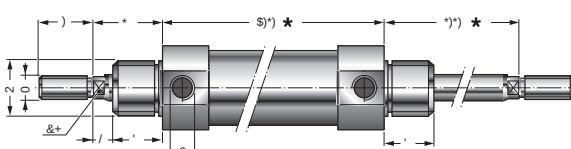
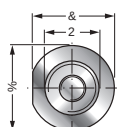
Bore Alesaggio	A	ØB	C	CH	D	ØE ^{H9}	F	G	I	L	ØM	N	ØO	ØP	R	Code Codice
12	75	18	17,2	5	15	6	16	22	12	7	M6x1	9	M16x1,5	M5	22	DSA 12/...
16	82	20	19	5	15	6	16	22	12	7	M6x1	9	M16x1,5	M5	22	DSA 16/...
20	95	25	23,5	7	19	8	20	24	16	5	M8x1,25	12	M22x1,5	G1/8	30	DSA 20/...
25	104	30	28,3	8	20	8	22	28	16	8	M10x1,25	12	M22x1,5	G1/8	30	DSA 25/...

SINGLE ROD
CILINDRO BASE STELO SEMPLICE

DSA .. /...



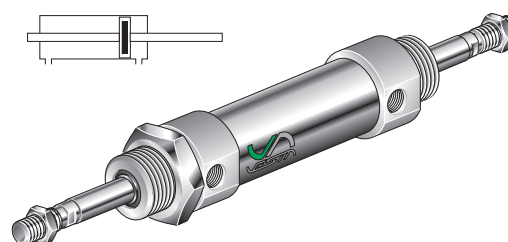
* = Stroke / Corsa



Bore Alesaggio	A	ØB	C	CH	D	F	G	L	ØM	ØO	ØP	Code Codice
12	49,5	18	17,2	5	15	16	22	7	M6x1	M16x1,5	M5	DSA 12/... P
16	56	20	19	5	15	16	22	7	M6x1	M16x1,5	M5	DSA 16/... P
20	68	25	23,5	7	19	20	24	5	M8x1,25	M22x1,5	G1/8	DSA 20/... P
25	69	30	28,3	8	20	22	28	8	M10x1,25	M22x1,5	G1/8	DSA 25/... P

THROUGH ROD
STELO PASSANTE

DSA .. /... P



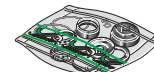
SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

..... - **SG**

Seals kit code = **Cylinder code + Bore + Versions + -SG**: (The kit includes all seals).

Codice del kit = **Codice del cilindro + Alesaggio + Versioni + -SG**: (Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **DSA 16 P - SG**



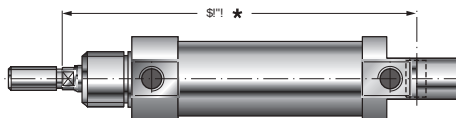
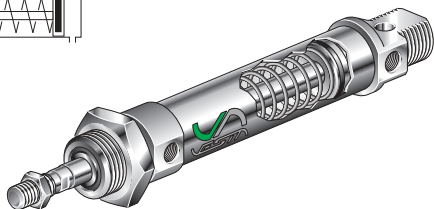
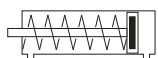


DS ... /... SEA

SIMPLE ACTING FRONT SPRING
SEMPLICE EFFETTO MOLLA ANTERIORE

For overall dimensions see DSM or DSA single rod
Dimensioni di ingombro vedi DSM o DSA base stelo semplice

* = Stroke / Corsa



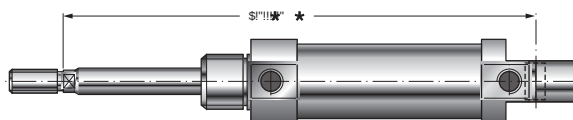
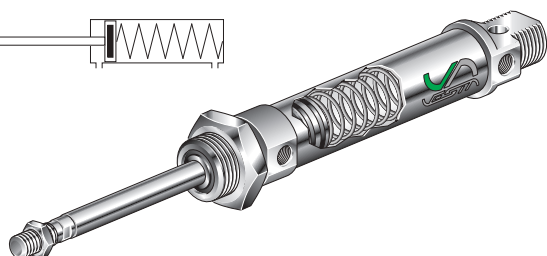
Bore Alesaggio	A	Code Codice	Code Codice
12	75	DSM 12/... SEA	DSA 12/... SEA
16	82	DSM 16/... SEA	DSA 16/... SEA
20	95	DSM 20/... SEA	DSA 20/... SEA
25	104	DSM 25/... SEA	DSA 25/... SEA

DS ... /... SEP

SIMPLE ACTING REAR SPRING
SEMPLICE EFFETTO MOLLA POSTERIORE

For overall dimensions see DSM or DSA single rod
Dimensioni di ingombro vedi DSM o DSA base stelo semplice

* = Stroke / Corsa



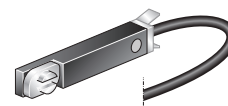
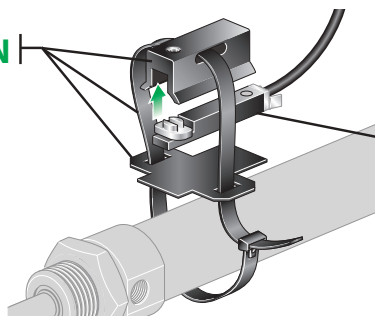
Bore Alesaggio	A	Code Codice	Code Codice
12	75	DSM 12/... SEP	DSA 12/... SEP
16	82	DSM 16/... SEP	DSA 16/... SEP
20	95	DSM 20/... SEP	DSA 20/... SEP
25	104	DSM 25/... SEP	DSA 25/... SEP

Strokes Corse (mm)	Spring force - Forza molla (daN)								..SEA	..SEP
	Ø12 mm		Ø16 mm		Ø20 mm		Ø25 mm			
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
10	2,1	2,4	2,2	2,5	2,3	2,6	2,3	2,6	●	●
25	1,6	2,4	1,6	2,5	1,7	2,6	1,7	2,6	●	●
50	0,35	2,4	0,5	2,5	1	2,6	1	2,6	●	●

MAGNETIC SWITCHES FOR ISO 6432 CYLINDER / FINECORS MAGNETICI PER CILINDRI ISO 6432

FFS 01 VN

Bore
Alesaggio
(mm):
Ø12 ... **12**
Ø16 ... **16**
Ø20 ... **20**
Ø25 ... **25**



For magnetic switches details see:
Caratteristiche finecorsa magnetici vedi:

VNCR2, VNPR2, VNCE3, VNPE3.

Pag. A-19

For further information on the resistance of material to aggressive agents,
please contact our technical sales department.

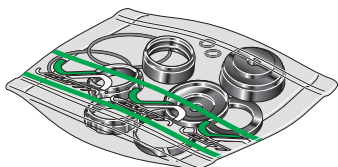
Per informazioni sul grado di resistenza dei finecorsa magnetici
in ambienti specifici contattare il nostro ufficio tecnico-commerciale.

Instruction for mounting see:

Per le istruzioni di montaggio vedi: **Pag. A-11**

..... - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO



Seals kit code = **Cylinder code** + **Bore** + **Versions** + **- SG**:
(The kit includes all seals).

Codice del kit = **Codice del cilindro** + **Alesaggio** + **Versions** + **- SG**:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **DSM 16 - SG**

STAINLESS STEEL FIXING / ACCESSORI DI FISSAGGIO INOX PER CILINDRI ANTICORROSIONE

ISO 6432 FOR / PER **DSM - DSA** Ø12 ÷ Ø25

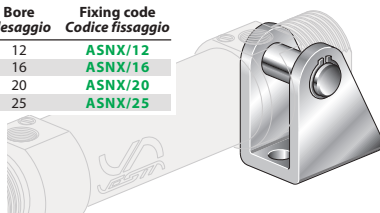
REAR HINGE HORIZONTAL MOUNTING
MONTAGGIO A CONTROCERNIERA

ASN/..

Vesta fixing accessories shown here are manufactured in X5 Cr Ni 18-10 stainless steel.
Dimensions correspond to ISO 6432 standard (see pages A-10 and A-11).

I fissaggi Vesta a fianco illustrati sono realizzati in acciaio inox X5 Cr Ni 18-10 per poter resistere all'ambiente di destinazione del cilindro anticorrosione e comunque mantengono le dimensioni di ingombro dei corrispondenti fissaggi ISO 6432 descritti a pagina A-10 e A-11 del presente catalogo.

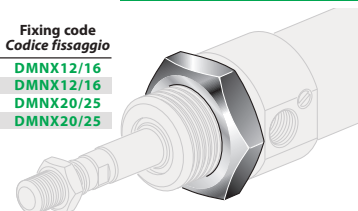
Bore Alesaggio	Fixing code Codice fissaggio
12	ASN/12
16	ASN/16
20	ASN/20
25	ASN/25



END-CAP NUT
DADO TESTATA

DMNX ../..

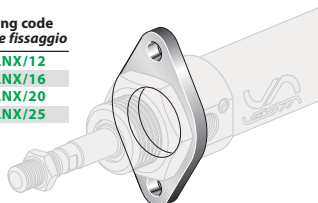
Bore Alesaggio	Fixing code Codice fissaggio
12	DMNX12/16
16	DMNX12/16
20	DMNX20/25
25	DMNX20/25



FLANGE MOUNTING
MONTAGGIO A FLANGIA

FLNX/..

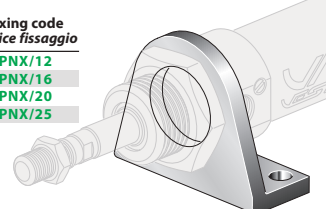
Bore Alesaggio	Fixing code Codice fissaggio
12	FLNX/12
16	FLNX/16
20	FLNX/20
25	FLNX/25



FOOT MOUNTING
MONTAGGIO A PIEDINI

PNX/..

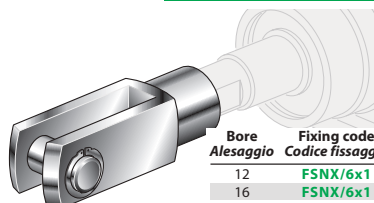
Bore Alesaggio	Fixing code Codice fissaggio
12	PNX/12
16	PNX/16
20	PNX/20
25	PNX/25



ISO 15552 & ISO 6432 FOR / PER **DSM; DSA; XPN; XJS; XJSS** Ø12 ÷ Ø100

CLEVIS (ROD) MOUNTING
FORCELLA STELO

FSNX/..



Bore Alesaggio	Fixing code Codice fissaggio
12	FSNX/6x1
16	FSNX/6x1
20	FSNX/8x1,25
25	FSNX/10x1,25
32	FSNX/10x1,25
40	FSNX/12x1,25
50	FSNX/16x1,5
63	FSNX/16x1,5
80	FSNX/20x1,5
100	FSNX/20x1,5

ROD NUT
DADO STELO

DSNX/..

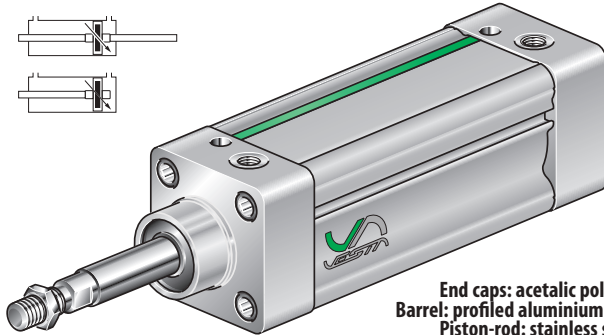


Bore Alesaggio	Fixing code Codice fissaggio
12	DSNX/6x1
16	DSNX/6x1
20	DSNX/8x1,25
25	DSNX/10x1,25
32	DSNX/10x1,25
40	DSNX/12x1,25
50	DSNX/16x1,5
63	DSNX/16x1,5
80	DSNX/20x1,5
100	DSNX/20x1,5



SERIE XPN

FOR AGGRESSIVE ENVIRONMENT CONDITIONS, VDMA - ISO 15552
CILINDRI PER AMBIENTI AGGRESSIVI, VDMA - ISO 15552



End caps: acetalic polymer
Barrel: profiled aluminium tube
Piston-rod: stainless steel.

Testate: resina acetica
Camicia: profilato di alluminio
Stelo: acciaio inox

With magnetic piston / Con pistone magnetico

XPN /

Bore / Alesaggio
(mm):

Ø32 32
Ø40 40
Ø50 50
Ø63 63
Ø80 80
Ø100 100

P Through rod cylinder
Cilindro stelo passante

Stroke / Corsa
(mm):

Bore Alesaggio	25	50	80	100	125	160	200	250	300	350	400	450	500	600	700	800	900	1000
32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Standard stroke / Corse Standard

Effective cushion length
Lunghezza utile ammortizzatore

Bore Alesaggio	Length Lunghezza
32	24
40	27
50	30
63	30
80	36
100	38

XPN cylinder fixing see:
Fissaggi per cilindri XPN vedi:
..... **Pag. A-43; A-47 ÷ A-48.**

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-19.**

TECHNICAL FEATURES

End caps Acetalic polymer (Zellamid 900).
Piston rod Stainless steel X5 Cr Ni 18-10.
Barrel Extruded profiled and anodized aluminium tube.
Seals Rod seal in polyurethane, other seals in NBR.
Cushioning Pneumatic adjusting cushions.

Environment temperature range -10 °C ÷ +70 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium Filtered air.
Max operating pressure range 10 bar.

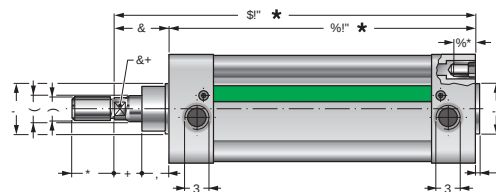
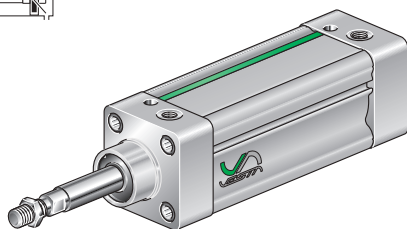
CARATTERISTICHE TECNICHE

Testate Resina acetica (Zellamid 900).
Stelo Acciaio inox X5 Cr Ni 18-10.
Camicia Tubo profilato ed anodizzato d' alluminio.
Guarnizioni Dello stelo in poliuretano, altre in NBR.
Ammortizzatori Di notevole efficacia, con regolazione micrometrica.

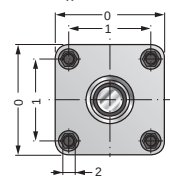
Temperatura ambiente -10 °C ÷ +70 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

XPN .. /...

SINGLE ROD
CILINDRO BASE STELO SEMPLICE



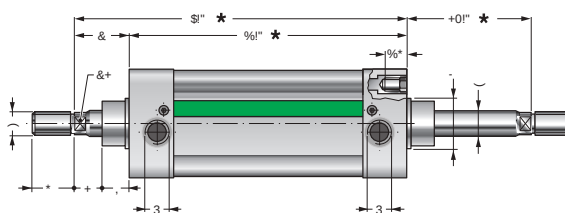
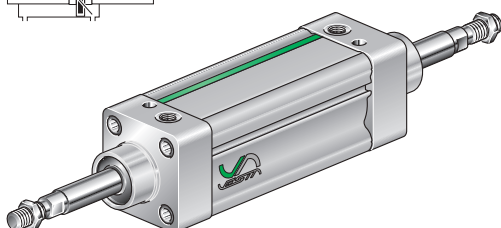
* = Stroke / Corsa



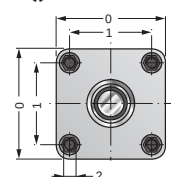
Bore Alesaggio	A	B	C	D	E	F	G	H	I	L	M	N	O	P	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	7	19	4	47	32,5	M6	G1/8	15	10	XPN 32/...
40	135	105	30	35	16	M12x1,25	24	8	22	4	54	38	M6	G1/4	15	13	XPN 40/...
50	143	106	37	40	20	M16x1,5	32	11	26	2	66	46,5	M8	G1/4	15	17	XPN 50/...
63	158	121	37	45	20	M16x1,5	32	13	24	4	78	56,5	M8	G3/8	15	17	XPN 63/...
80	174	128	46	45	25	M20x1,5	40	20	26	2	98	72	M10	G3/8	18	21	XPN 80/...
100	189	138	51	55	25	M20x1,5	40	25	26	2	115	89	M10	G1/2	18	25	XPN 100/...

XPN .. /... P

THROUGH ROD
STELO PASSANTE



* = Stroke / Corsa



Bore Alesaggio	A	B	C	D	E	F	G	H	H1	I	M	N	O	P	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	7	26	19	47	32,5	M6	G1/8	15	10	XPN 32/... P
40	135	105	30	35	16	M12x1,25	24	8	30	22	54	38	M6	G1/4	15	13	XPN 40/... P
50	143	106	37	40	20	M16x1,5	32	11	37	26	66	46,5	M8	G1/4	15	17	XPN 50/... P
63	158	121	37	45	20	M16x1,5	32	13	37	24	78	56,5	M8	G3/8	15	17	XPN 63/... P
80	174	128	46	45	25	M20x1,5	40	20	46	26	98	72	M10	G3/8	18	21	XPN 80/... P
100	189	138	51	55	25	M20x1,5	40	25	51	26	115	89	M10	G1/2	18	25	XPN 100/... P

FOR USE IN DUSTY AND AGRESSIVE ENVIRONMENT, VDMA - ISO 15552
CILINDRI PER AMBIENTI AGGRESSIVI, VDMA - ISO 15552

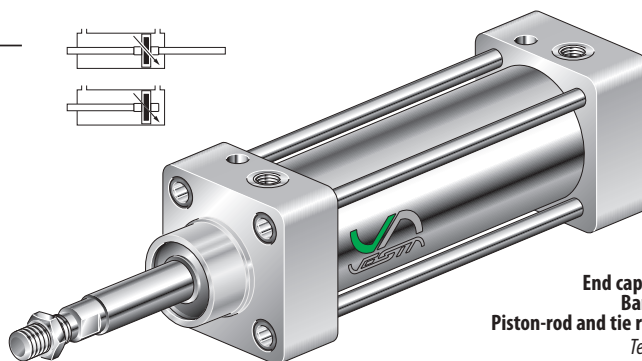
SERIE **XJS**

With magnetic piston / Con pistone magnetico

XJS	☐	☐	/	☐	☐	☐	☐
Bore / Alesaggio (mm):							
Ø32	32						
Ø40	40						
Ø50	50						
Ø63	63						
Ø80	80						
Ø100	100						

P
Through rod cylinder
Cilindro stelo passante

Stroke / Corsa (mm):



End caps: acetalic polymer
Barrel: stainless steel
Piston-rod and tie rods: stainless steel
Testate: resina acetica
Camicia: acciaio inox
Stelo e tiranti: acciaio inox

XJS cylinder fixing see:
Fissaggi per cilindri XJS vedi:
..... **Pag. A-43; A-47 ÷ A-48.**

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-19; A-48.**

Effective cushion length Lunghezza utile ammortizzatori	
Bore Alesaggio	Length Lunghezza
32	24
40	27
50	30
63	30
80	36
100	38

Standard stroke / Corse Standard	
Bore Alesaggio	25 50 80 100 125 160 200 250 300 350 400 450 500 600
32	• • • • • • • • • • • • • • •
40	• • • • • • • • • • • • • • •
50	• • • • • • • • • • • • • • •
63	• • • • • • • • • • • • • • •
80	• • • • • • • • • • • • • • •
100	• • • • • • • • • • • • • • •

TECHNICAL FEATURES

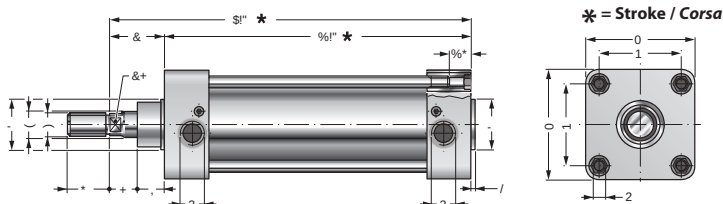
End caps Acetalic polymer (Zellamid 900).
Piston rod Stainless steel X5 Cr Ni 18-10.
Tie rods Stainless steel X10 Cr Ni S 18-09.
Barrel Stainless steel X5 Cr Ni 18-10 tube.
Seals Rod seal in polyurethane, other seals in NBR.
Cushioning Pneumatic adjusting cushioning with screw in X10 Cr Ni S 18-09.

Environment temperature range -10 °C ÷ +70 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium Filtered air.
Max operating pressure 10 bar.
Nuts Stainless steel X10 Cr Ni S 18-09.

CARATTERISTICHE TECNICHE

Testate Resina acetica (Zellamid 900).
Stelo Acciaio inox X5 Cr Ni 18-10
Tiranti Acciaio inox X10 Cr Ni S 18-09.
Camicia Tubo in acciaio inox X5 Cr Ni 18-10.
Guarnizioni Dello stelo in poliuretano, altre in NBR.
Ammortizzatori Regolazione pneumatica con viti regolabile in X10 Cr Ni S 18-09.

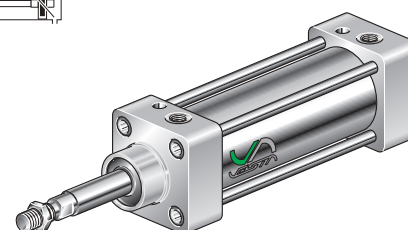
Temperatura ambiente -10 °C ÷ +70 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.
Bussola e dado Acciaio inox X10 Cr Ni S 18-09.



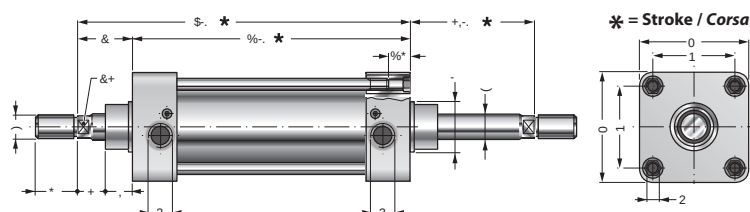
* = Stroke / Corsa

SINGLE ROD
CILINDRO BASE STELO SEMPLICE

XJS .. /...



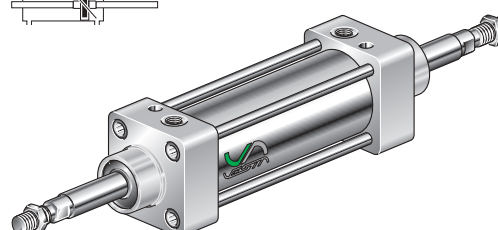
Bore Alesaggio	A	B	C	D	E	F	G	H	I	L	M	N	O	P	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	7	19	4	47	32,5	M6	G1/8	15	10	XJS 32/...
40	135	105	30	35	16	M12x1,25	24	8	22	4	54	38	M6	G1/4	15	13	XJS 40/...
50	143	106	37	40	20	M16x1,5	32	11	26	2	66	46,5	M8	G1/4	15	17	XJS 50/...
63	158	121	37	45	20	M16x1,5	32	13	24	4	78	56,5	M8	G3/8	15	17	XJS 63/...
80	174	128	46	45	25	M20x1,5	40	20	26	2	98	72	M10	G3/8	18	21	XJS 80/...
100	189	138	51	55	25	M20x1,5	40	25	26	2	110	89	M10	G1/2	18	25	XJS 100/...



* = Stroke / Corsa

THROUGH ROD
STELO PASSANTE

XJS .. /... P



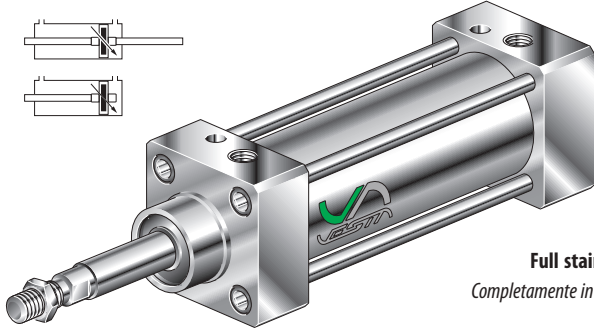
Bore Alesaggio	A	B	C	D	E	F	G	H	H1	I	M	N	O	P	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	7	26	19	47	32,5	M6	G1/8	15	10	XJS 32/... P
40	135	105	30	35	16	M12x1,25	24	8	30	22	54	38	M6	G1/4	15	13	XJS 40/... P
50	143	106	37	40	20	M16x1,5	32	11	37	26	66	46,5	M8	G1/4	15	17	XJS 50/... P
63	158	121	37	45	20	M16x1,5	32	13	37	24	78	56,5	M8	G3/8	15	17	XJS 63/... P
80	174	128	46	45	25	M20x1,5	40	20	46	26	98	72	M10	G3/8	18	21	XJS 80/... P
100	189	138	51	55	25	M20x1,5	40	25	51	26	110	89	M10	G1/2	18	25	XJS 100/... P



SERIE XJSS

FOR HARSH ENVIRONMENT CONDITIONS, VDMA - ISO 15552
PER AMBIENTI PARTICOLARMENTE AGGRESSIVI, VDMA - ISO 15552

ATEX versions see / Versioni ATEX vedi .. P. A-109



Full stainless steel,
Completamente in acciaio inox,

Standard stroke / Corse Standard														
Bore Alesaggio		25	50	80	100	125	160	200	250	300	350	400	450	600
32		•	•	•	•	•	•	•	•	•	•	•	•	•
40		•	•	•	•	•	•	•	•	•	•	•	•	•
50		•	•	•	•	•	•	•	•	•	•	•	•	•
63		•	•	•	•	•	•	•	•	•	•	•	•	•
80		•	•	•	•	•	•	•	•	•	•	•	•	•
100		•	•	•	•	•	•	•	•	•	•	•	•	•

With magnetic piston / Con pistone magnetico

XJSS □□ / □□□□ □□

Bore / Alesaggio (mm):

Ø32 32

Ø40 40

Ø50 50

Ø63 63

Ø80 80

Ø100 100

VV Viton all seals
Tutte le guarnizioni in Viton

P Through rod cylinder
Cilindro stelo passante

Stroke / Corsa (mm):

Effective cushion length
Lunghezza utile ammortizzatore

Bore Alesaggio	Length Lunghezza
32	24
40	27
50	30
63	30
80	36
100	38

XJSS cylinder fixing see:
Fissaggi per cilindri XJSS vedi:
..... Pag. A-43; A-47 ÷ A-48.

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... Pag. A-19; A-48.

TECHNICAL FEATURES

End caps	Stainless steel X5 Cr Ni 18-10.
Piston rod	Stainless steel X5 Cr Ni 18-10.
Tie rods	Stainless steel X10 Cr Ni S 18-09.
Barrel	Stainless steel X5 Cr Ni 18-10 tube.
Seals	Rod seal in VITON, other seals in Polyurethane.
Cushioning	Pneumatic adjusting with screws in X10 Cr Ni S 18-09.

Environment temperature range	-10 ÷ +70 °C.
Temperature range of medium	0 ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.
Nuts	Stainless steel X10 Cr Ni S 18-09.

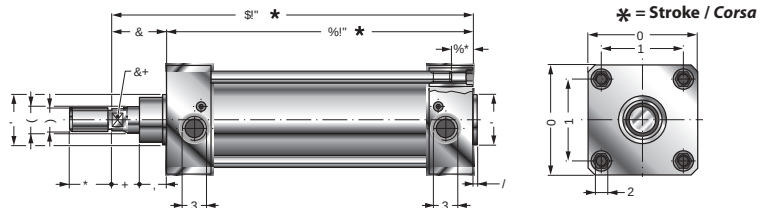
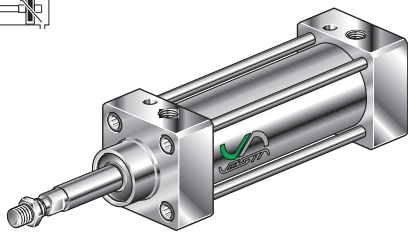
CARATTERISTICHE TECNICHE

Testate	Acciaio inox X5 Cr Ni 18-10.
Stelo	Acciaio inox X5 Cr Ni 18-10.
Tiranti	Acciaio inox X10 Cr Ni S 18-09.
Camicia	Tubo in acciaio inox X5 Cr Ni 18-10.
Guarnizioni	Dello stelo in VITON, altre in Poliuretano.
Ammortizzatori	Pneumatici regolabili con viti in X10 Cr Ni S 18-09.

Temperatura ambiente	-10 °C ÷ +70 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.
Bussola e dado	Acciaio inox X10 Cr Ni S 18-09.

XJSS .. /...

SINGLE ROD
CILINDRO BASE STELO SEMPLICE

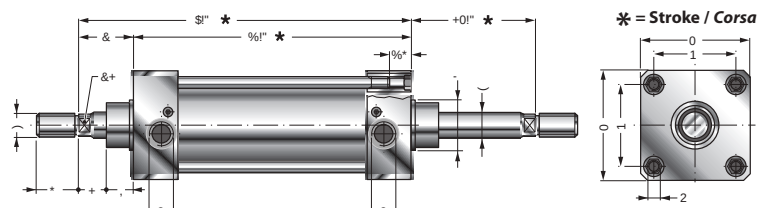
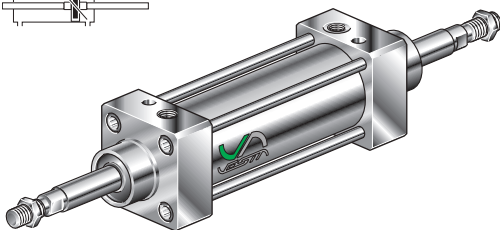


Bore Alesaggio	A	B	C	D	E	F	G	H	I	L	M	N	O	P	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	7	19	4	47	32,5	M6	G1/8	15	10	XJSS 32/...
40	135	105	30	35	16	M12x1,25	24	8	22	4	54	38	M6	G1/4	15	13	XJSS 40/...
50	143	106	37	40	20	M16x1,5	32	11	26	2	66	46,5	M8	G1/4	15	17	XJSS 50/...
63	158	121	37	45	20	M16x1,5	32	13	24	4	78	56,5	M8	G3/8	15	17	XJSS 63/...
80	174	128	46	45	25	M20x1,5	40	20	26	2	100	72	M10	G3/8	18	21	XJSS 80/...
100	189	138	51	55	25	M20x1,5	40	25	26	2	110	89	M10	G1/2	18	25	XJSS 100/...

ATEX versions see / Versioni ATEX vedi .. P. A-109

XJSS .. /... P

THROUGH ROD
STELO PASSANTE



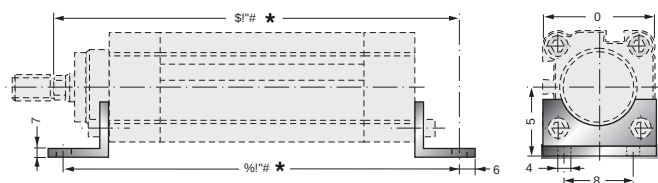
Bore Alesaggio	A	B	C	D	E	F	G	H	H1	I	M	N	O	P	BG	CH	Code Codice
32	120	94	26	30	12	M10x1,25	20	7	26	19	47	32,5	M6	G1/8	15	10	XJSS 32/... P
40	135	105	30	35	16	M12x1,25	24	8	30	22	54	38	M6	G1/4	15	13	XJSS 40/... P
50	143	106	37	40	20	M16x1,5	32	11	37	26	66	46,5	M8	G1/4	15	17	XJSS 50/... P
63	158	121	37	45	20	M16x1,5	32	13	37	24	78	56,5	M8	G3/8	15	17	XJSS 63/... P
80	174	128	46	45	25	M20x1,5	40	20	46	26	100	72	M10	G3/8	18	21	XJSS 80/... P
100	189	138	51	55	25	M20x1,5	40	25	51	26	110	89	M10	G1/2	18	25	XJSS 100/... P

ATEX versions see / Versioni ATEX vedi .. P. A-109

STAINLESS STEEL FIXING / ACCESSORI DI FISSAGGIO INOX PER CILINDRI ANTICORROSIONE

Note: the fixing screws are not included in the supply of the fitting / le viti di fissaggio non sono comprese nella fornitura dell'accessorio.

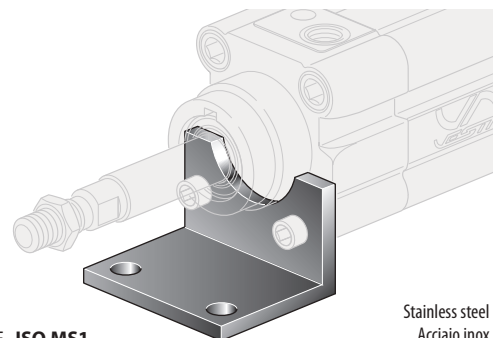
* = Stroke / Corsa



Bore Alesaggio	A1	B1	M	ØQ	R	S	T	U	Code Codice
32	144	142	47	7	32	11	4	32	XPNX/32
40	163	161	54	9	36	15	4	36	XPNX/40
50	175	170	66	9	45	15	5	45	XPNX/50
63	190	185	78	9	50	15	5	50	XPNX/63
80	215	210	98	12	63	20	6	63	XPNX/80
100	230	220	115	14	71	25	6	75	XPNX/100

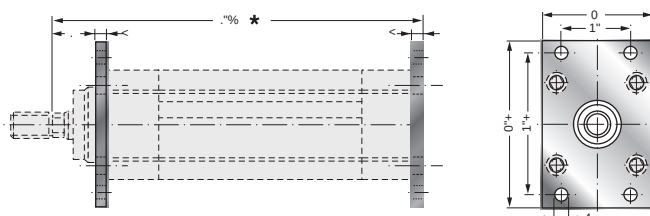
FOOT MOUNTING
MONTAGGIO A PIEDINI

XPNX/..



Stainless steel
Acciaio inox

REF. ISO MS1

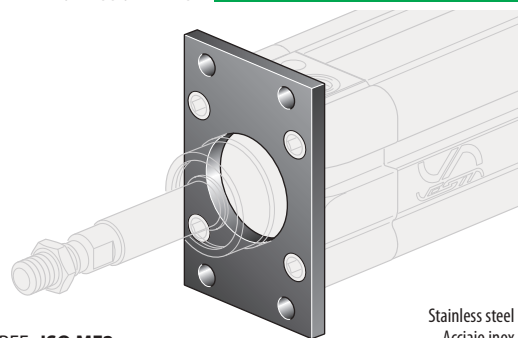


* = Stroke / Corsa

Bore Alesaggio	K	K1	M	M2	N1	N2	ØQ	Y	Code Codice
32	16	130	45	80	32	64	7	10	XFLNX/32
40	20	145	52	90	36	72	9	10	XFLNX/40
50	25	155	65	110	45	90	9	12	XFLNX/50
63	25	170	75	120	50	100	9	12	XFLNX/63
80	30	190	95	150	63	126	12	16	XFLNX/80
100	35	205	115	170	75	150	14	16	XFLNX/100

FLANGE MOUNTING
MONTAGGIO A FLANGIA

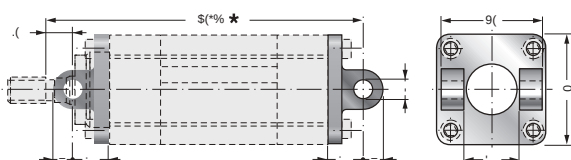
XFLNX/..



Stainless steel
Acciaio inox

REF. ISO MF2

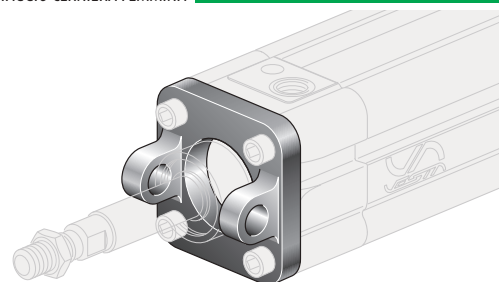
* = Stroke / Corsa



Bore Alesaggio	A2	ØJ ^{H9}	K2	M	V1	V2	W	Z	Code front Cod. ant.	Code rear Cod. post.
32	142	10	4	47	26	45	22	11	XCFANX/32	XCFNX/32
40	160	12	5	54	28	52	25	13	XCFANX/40	XCFNX/40
50	170	12	10	66	32	60	27	13	XCFANX/50	XCFNX/50
63	190	16	5	78	40	70	32	17	XCFANX/63	XCFNX/63
80	210	16	10	98	50	90	36	17	XCFANX/80	XCFNX/80
100	230	20	10	115	60	110	41	21	XCFANX/100	XCFNX/100

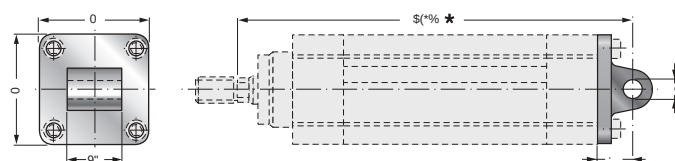
CLEVIS (FEMALE) MOUNTING
MONTAGGIO CERNIERA FEMMINA

XCFNX/..



Stainless steel
Acciaio inox

REF. ISO MP2

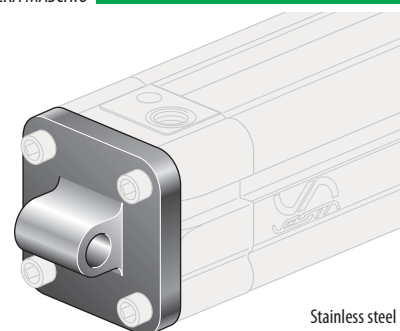


* = Stroke / Corsa

Bore Alesaggio	A2	ØJ ^{H7}	M	V1	W	Code Codice
32	142	10	45	26	22	XCMNX/32
40	160	12	55	28	25	XCMNX/40
50	170	12	65	32	27	XCMNX/50
63	190	16	75	40	32	XCMNX/63
80	210	16	95	50	36	XCMNX/80
100	230	20	115	60	41	XCMNX/100

CLEVIS (MALE) MOUNTING
MONTAGGIO A CONTROCERNIERA MASCHIO

XCMNX/..

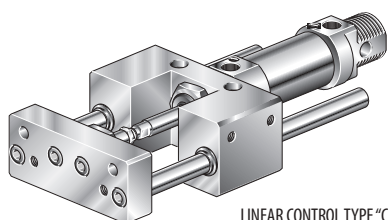


Stainless steel
Acciaio inox

REF. ISO MP4

INDEX / INDICE

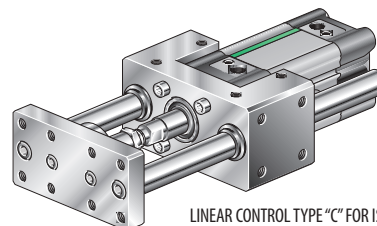
LINEAR CONTROL UNITS AND FIXING MOUNTINGS GLC - GLH SERIES Ø 20 ÷ 100 mm UNITA' DI GUIDA E FISSAGGI SERIE GLC - GLH - ALESAGGI Ø 20 ÷ 100 mm



pag. A-52

GLC

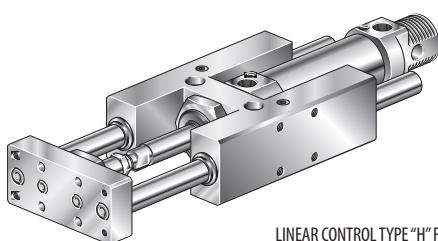
LINEAR CONTROL TYPE "C" FOR ISO 6432 CYLINDER
GUIDA ESECUZIONE "C" PER CILINDRI ISO 6432



pag. A-53

GLC

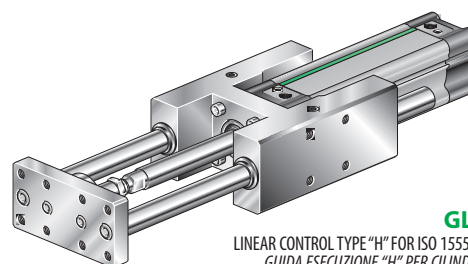
LINEAR CONTROL TYPE "C" FOR ISO 15552 CYLINDERS
GUIDA ESECUZIONE "C" PER CILINDRI ISO 15552



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GLH

LINEAR CONTROL TYPE "H" FOR ISO 6432 CYLINDER
GUIDA ESECUZIONE "H" PER CILINDRI ISO 6432



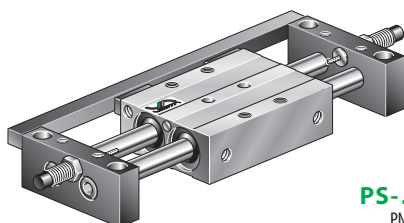
pag. A-55

GLH

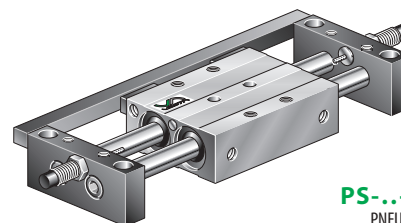
LINEAR CONTROL TYPE "H" FOR ISO 15552 CYLINDERS
GUIDA ESECUZIONE "H" PER CILINDRI ISO 15552

FIXING / ACCESSORI DI FISSAGGIO pag. A-52 ÷ A-56

PNEUMATIC SLIDES PS SERIE - BORE Ø 16 AND 25 mm SLITTE PNEUMATICHE SERIE PS - ALESAGGI Ø 16 E 25 mm



PS-...-16-....
PNEUMATIC SLIDE Ø16
SLITTA PNEUMATICA Ø16

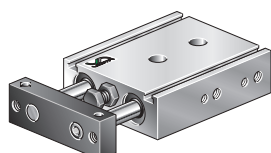


PS-...-25-....
PNEUMATIC SLIDE Ø25
SLITTA PNEUMATICA Ø25

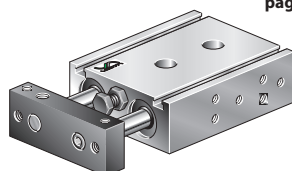
pag. A-60

MAGNETIC SWITCHES AND ACCESSORIES FOR PNEUMATIC SLIDES / FINECOSA MAGNETICI ED ACCESSORI PER SLITTE PNEUMATICHE pag. A-62

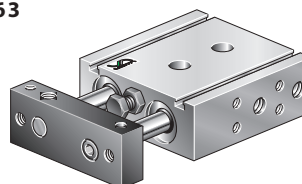
DUAL ROD CYLINDERS HPSK SERIE - BORE Ø 16 ÷ 32 mm SEMISLITTE PNEUMATICHE SERIE HPSK - ALESAGGI Ø 16 ÷ 32 mm



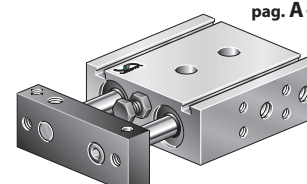
HPSK-...-16-....
DUAL ROD CYLINDER Ø16
SEMISLITTA PNEUMATICA Ø16



HPSK-...-20-....
DUAL ROD CYLINDER Ø20
SEMISLITTA PNEUMATICA Ø20



HPSK-...-25-....
DUAL ROD CYLINDER Ø25
SEMISLITTA PNEUMATICA Ø25



HPSK-...-32-....
DUAL ROD CYLINDER Ø32
SEMISLITTA PNEUMATICA Ø32

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pag. A-65

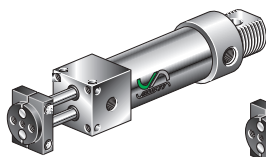
MAGNETIC SWITCHES AND ACCESSORIES FOR DUAL ROD CYLINDERS / FINECOSA MAGNETICI ED ACCESSORI PER SEMISLITTE PNEUMATICHE pag. A-66; A-19.



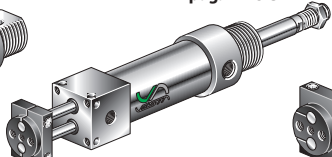
INDEX / INDICE

ANTIROTATION CYLINDERS AW SERIES / CILINDRI ANTIROTAZIONE SERIE AW

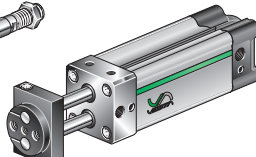
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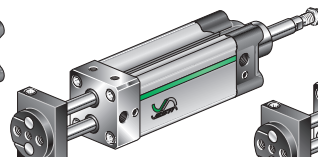
AR2-25-...
TWIN PISTON RODS
BASIC CYLINDER Ø25
CILINDRO BASE STELLI
GEMELLATI Ø25



AR3-25-...
TWIN PISTON RODS CYLINDER +
THROUGH PISTON ROD Ø25
CILINDRO STELLI GEMELLATI +
STELO PASSANTE OPPOSTO Ø25

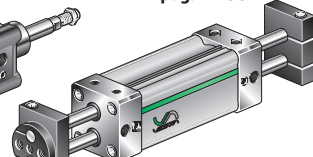


AW2-...-...
TWIN PISTON RODS
BASIC CYLINDER Ø32÷100
CILINDRO BASE STELLI
GEMELLATI Ø32÷100



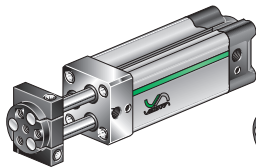
AW3-...-...
TWIN PISTON RODS CYLINDER +
THROUGH PISTON ROD Ø32÷100
CILINDRO STELLI GEMELLATI +
STELO PASSANTE OPPOSTO Ø32÷100

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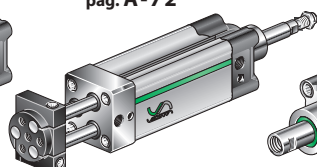


AW4-...-...
Ø32÷100 CYLINDER THROUGH
TWIN PISTON RODS
CILINDRO Ø32÷100 CON
STELLI GEMELLATI PASSANTI

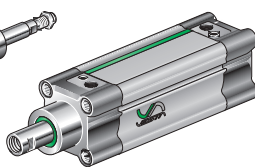
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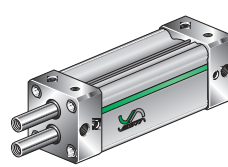
AW6-...-...
TRIPLE PISTON RODS
BASIC CYLINDER Ø32÷63
CILINDRO BASE CON
3 STELLI Ø32÷63



AW8-...-...
TRIPLE PISTON RODS +
THROUGH PISTON ROD Ø32÷63
CILINDRO CON 3 STELLI +
STELO PASSANTE OPPOSTO Ø32÷63

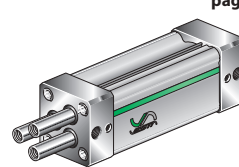


AW1-...-...
SINGLE HOLED TELESCOPIC PISTON
ROD CYLINDER Ø32, 40 AND 50.
CILINDRO STELO CAVO
ALESAGGI Ø32, 40 E 50.



AW5-...-...
TWIN HOLED TELESCOPIC PISTON
ROD CYLINDER Ø40, 50 AND 63.
CILINDRO CON 2 STELLI GEMELLATI
CAVI, ALESAGGI Ø40, 50 E 63.

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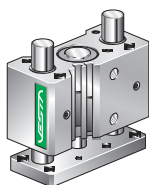


AW7-...-...
TRIPLE HOLED PISTON RODS
CYLINDER Ø40, 50 AND 63.
CILINDRO CON 3 STELLI GEMELLATI
CAVI, ALESAGGI Ø40, 50 E 63.

pag. A-76



HCG-...-...
COMPACT GUIDE
PNEUMATIC CYLINDER Ø16÷25
CILINDRI PNEUMATICI COMPATTI
GUIDATI Ø16÷25



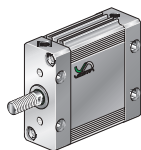
HCG-...-...
COMPACT GUIDE
PNEUMATIC CYLINDER Ø32÷100
CILINDRI PNEUMATICI COMPATTI
GUIDATI Ø32÷100



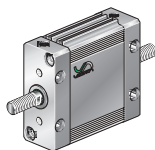
HNG-...-...
PROFILE COMPACT GUIDE
PNEUMATIC CYLINDER Ø16÷63
CILINDRI PNEUMATICI COMPATTI
GUIDATI A PROFILO Ø16÷63

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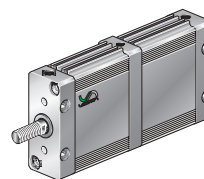
pag. A-80



NCV-...-...
FLAT CYLINDERS Ø63
CILINDRI PIATTI Ø63



NCV-...-... P
THROUGH ROD FLAT CYLINDERS Ø63
CILINDRI PIATTI STELO PASSANTE Ø63



NCV-...-... TN2
MULTI THRUST TANDEM FLAT CYLINDERS Ø63
CILINDRI PIATTI TANDEM MULTISPINTA Ø63

pag. A-68 ÷ A-77

MAGNETIC SWITCHES AND ACCESSORIES FOR ANTIROTATION CYLINDER / FINECORS MAGNETICI ED ACCESSORI PER CILINDRI ANTIROTAZIONE

LINEAR CONTROL UNITS UNITA' DI GUIDA

SERIE **GLC** - **GLH**

TECHNICAL FEATURES / CARATTERISTICHE COSTRUTTIVE

The linear control units **GLC** and **GLH** series can be assembled to cylinders in compliance with ISO 6432 and ISO 15552 standards. Anti-rotation is guaranteed by two steel guide stems, whose movement is supported by four brass bushes in **GLC ...** and **GLH ... BS** series, and by four ball bushings in the **GLH ... BB** series. The piston rod is connected to the front flange by a floating joint. The use of high quality materials and precision manufacturing techniques gives the units excellent performance with high resistance to side loads. Versatility of mounting is assured by either mounting directly to the unit, or by the use of standard accessories (mountings). All the linear control units GLH-BS and BB series are supplied with scraper seals and grease box. The unit is supplied already lubricated.

*Le unità di guida serie **GLC** e **GLH** sono assemblabili a cilindri rispondenti alla norma ISO 6432-15552.*

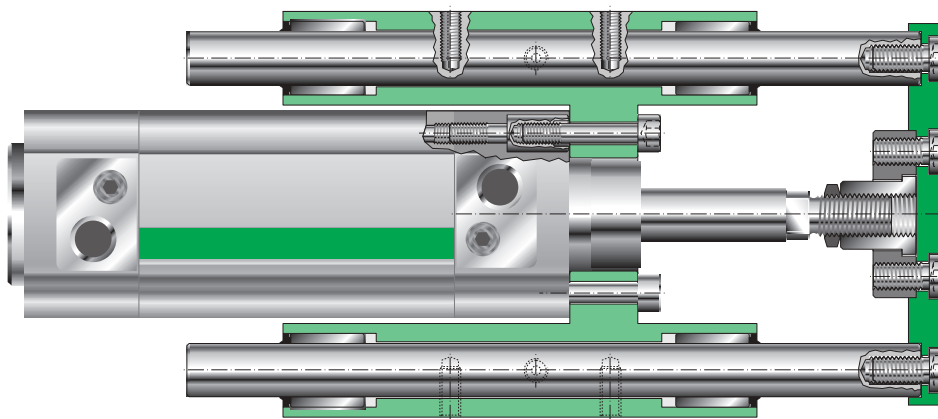
*L'antirotazione è garantita da due steli guida in acciaio il cui movimento è supportato da quattro bronzine a strisciamento nella serie **GLC ...** e **GLH ... BS**, oppure da quattro cuscinetti con ricircolo di sfere nella serie **GLH ... BB**.*

Lo stelo del cilindro è collegato alla flangia frontale con un giunto di compensazione assiale e radiale.

L'impiego di materiali di alta qualità e la precisione delle lavorazioni consentono all'unità di guida una ottima resistenza ai carichi laterali con elevate prestazioni.

La versatilità d'impiego è stata realizzata mediante tre possibili superfici di fissaggio e di piastre per il fissaggio orizzontale o verticale.

Tutte le unità di guida, oltre ad essere fornite già prelubrificate, sono corredate di rischiapolvere ed ingrassatori.



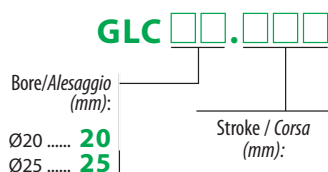
PRECAUTIONS BEFORE USE / RACCOMANDAZIONI PER L'INSTALLAZIONE

- Avoid impacts and abrasion of slide rods.
- Avoid impacts and scratching of the slide body and plate surfaces in order not to effect the flatness of the slide.
- Ensure that the surface upon which the slide is mounted is perfectly flat or else the correct functioning of the slide can be endangered by uneven wear of the bearings or seals.
- To lubricate use greasers located on the top of the unit.
- Evitare urti ed abrasioni degli steli.
- Evitare urti e graffiature alle superfici del corpo e della piastra per non compromettere la planarità della guida.
- Verificare che la superficie alla quale viene fissata la guida sia perfettamente piana; in caso contrario si comprometterebbe il buon funzionamento della stessa con anomale usure dei cuscinetti e delle guarnizioni.
- Usare gli appositi ingrassatori per la lubrificazione.



SERIE GLC

LINEAR CONTROL UNITS FOR ISO CYLINDER Ø20 ÷ 100 AND FIXING UNITA' DI GUIDA PER CILINDRI ISO Ø20 ÷ 100 E FISSAGGI



Bore Alesaggio	Standard stroke / Corse Standard							
	25	50	80	100	125	160	200	250
20	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•

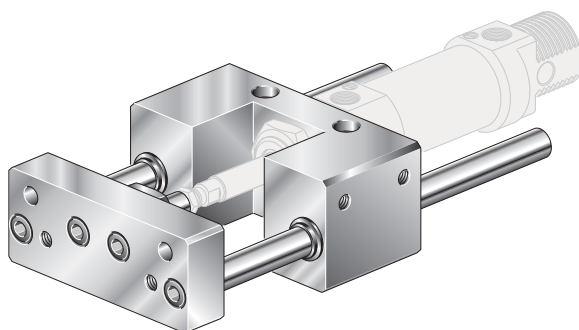
Weight (Kg) of guide units
Peso (Kg) delle unità di guida

Stroke Corsa	Ø 20	Ø 25
25	0,700	0,690
50	0,740	0,730
80	0,760	0,750
100	0,780	0,770
160	0,850	0,840
200	0,900	0,890
250	0,970	0,960

GLC

LINEAR CONTROL UNITS TYPE "C"
UNITA' DI GUIDA ESECUZIONE "C"

* = Stroke / Corsa



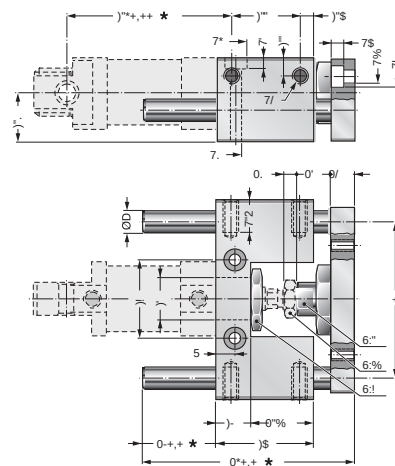
Standard coupling for ISO 6432 cylinder (Ø20 ÷ Ø25)
Accoppiamento standard per cilindri ISO 6432 (Ø20 ÷ Ø25)

Bore Alesaggio	ØD	F1	F2	F3	F4	ØF7	F9	F11	F14	F15	F16	F17	H	M1	M2	M3	M4	M5	M6
20	10	100	40	46,5	48	22	17	32	8	71	24	10	74	90	38	70	30	77	4
25	10	100	40	46,5	48	22	17	32	8	76	24	10	74	90	38	70	30	77	6

Bore Alesaggio	M7	M8	M9	M11	M12	M13	R	ØT1	ØT2	ØT3	T4	ØT5	T6	T7	ØT8	T10	SW1	SW2	SW3
20	22	12	12	55	31	14	8,5	M6	6,5	10,5	7	14	9	9	M8	16	13	13	17
25	22	12	6	55	31	14	8,5	M6	6,5	10,5	7	14	9	9	M8	16	13	17	17

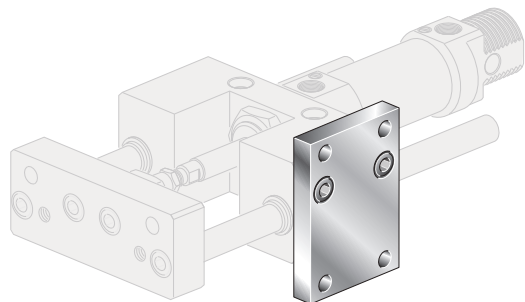
- Ø20 e Ø25 mm standard coupling; Ø12 e 16 see page A-56
- All the linear control units are supplied with scraper seals
- All the guide stems are in rectified stainless steel
- For maximum allowable load see page A-57.

- Accoppiamento standard per cilindri Ø20 e Ø25 mm; Ø12 e 16 vedi pag. A-56
- Le unità di guida sono corredate di raschiapolvere
- Gli steli guida sono in acciaio inox rettificato
- Dati sul massimo carico utile ammesso vedi pagina A-57.



GLC 2025P

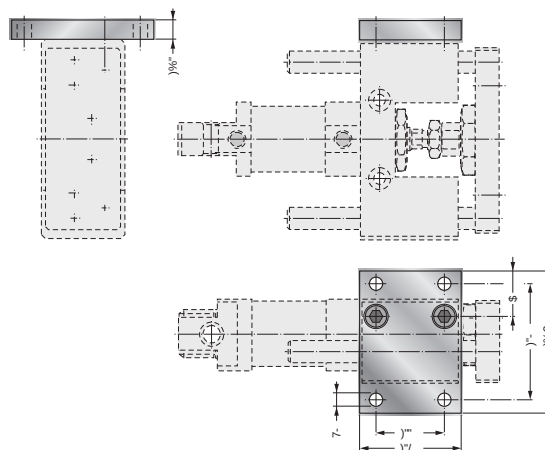
FIXING PLATE
PIASTRA DI FISSAGGIO



Bore Alesaggio	A	F11	F18	F19	F20	F21	ØT9	Code Codice	Kg
20/25	25	32	50	56	70	10	7	GLC 2025P	0,260

- Building material: galvanized steel
- 2 fixing screws are included with supply

- Materiale: acciaio zincato
- La fornitura comprende le 2 viti di fissaggio



GLC

Bore / Alesaggio (mm):

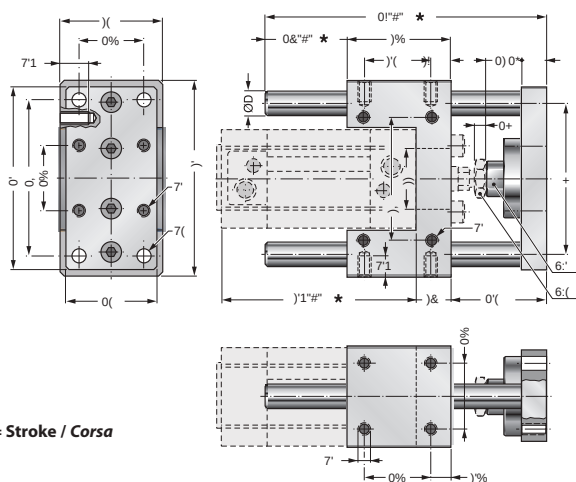
Ø32 32
Ø40 40
Ø50 50
Ø63 63
Ø80 80
Ø100 ... 100

Stroke / Corsa (mm):

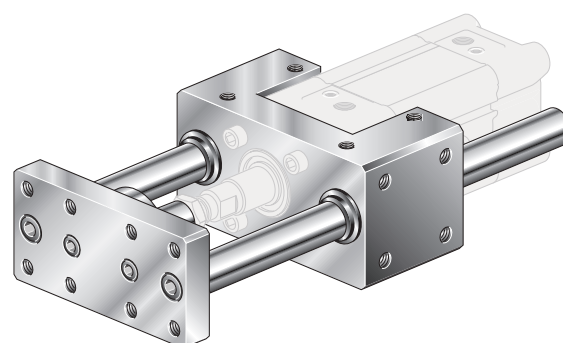
Bore Alesaggio	Standard stroke / Corse Standard											Weight (Kg) for "0" stroke unit	Extra weight (Kg) for each 100 mm stroke
	25	50	80	100	125	160	200	250	300	400	500	Peso (Kg) per unità di guida corsa "0" mm	Supplemento di peso (Kg) per ogni 100 mm di corsa
32	•	•	•	•	•	•	•	•	•	•	•	0,660	0,122
40	•	•	•	•	•	•	•	•	•	•	•	0,960	0,176
50	•	•	•	•	•	•	•	•	•	•	•	1,400	0,176
63	•	•	•	•	•	•	•	•	•	•	•	1,700	0,176
80	•	•	•	•	•	•	•	•	•	•	•	3,500	0,312
100	•	•	•	•	•	•	•	•	•	•	•	4,700	0,312

LINEAR CONTROL UNITS TYPE "C"
UNITÀ DI GUIDA ESECUZIONE "C"

GLC



* = Stroke / Corsa



Standard coupling for ISO 15552 cylinder (Ø32 ÷ Ø100)
Accoppiamento standard per cilindri ISO 15552 (Ø32 ÷ Ø100)

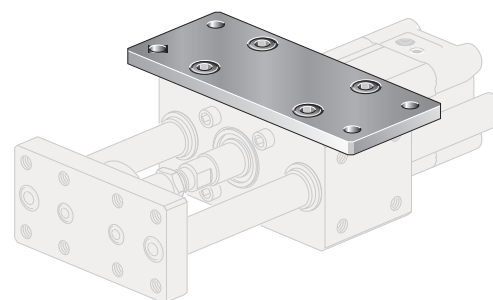
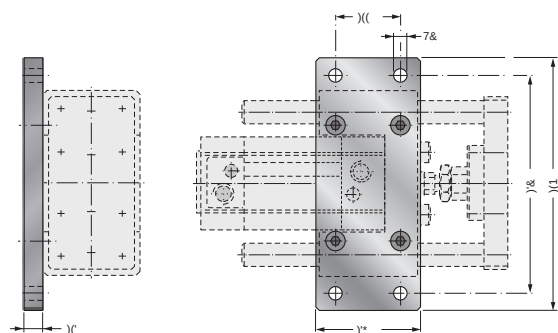
Bore Alesaggio	ØD	F1	F2	F3	F4	ØF7	F9	F10	F12	F5	F14	H	M1	M2	M3	M4	M5	M6	M7	M8	M9	M12	ØT1	ØT2	T10	SW1	SW2
32	10	100	48	58	48	30	17	94	32,5	7,8	7,8	74	90	45	78	32,5	106	6	17	12	13	45	M6	6,5	12	15	17
40	12	106	56	64	58	35	21	105	38	10	10	80	100	50	84	38	117	7	22	12	6	53	M6	6,5	12	15	19
50	12	125	66	80	59	40	25	106	46,5	6,3	6,3	96	120	60	100	46,5	129	8	26	15	6	64	M8	8,5	16	22	24
63	12	132	76	95	76	45	25	121	56,5	9,8	9,8	104	125	70	105	56,5	146	8	26	15	6	64	M8	8,5	16	22	24
80	16	165	98	130	90	45	34	128	50	20	9	130	155	90	130	72	170	9	33	16	8	72	M10	11	18	27	30
100	16	185	118	150	110	55	39	138	70	20	10,5	150	175	110	150	89	190	9	33	16	8	72	M10	11	18	27	30

- Ø32; 40; 50; 63; 80 and Ø100 mm; Ø20 e 25 see page A-56.
- All the linear control units are supplied with scraper seals.
- All the guide stems are in rectified steel
- For maximum allowable load see page A-57.

- Diametro cilindri Ø32; 40; 50; 63; 80 e Ø100 mm; Ø20 e 25 vedi pag. A-56.
- Le unità di guida sono corredate di raschiapolvere.
- Gli steli guida sono in acciaio inox rettificato
- Dati sul massimo carico utile ammesso vedi pagina A-57.

FIXING PLATE
PIASTRA DI FISSAGGIO

GLC ... P



- Building material: galvanized steel
- 4 fixing screws are included with supply

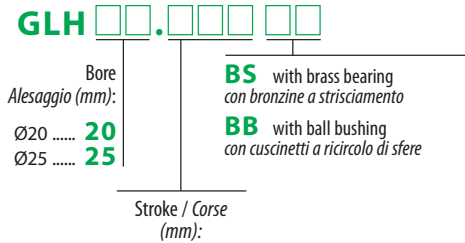
- Materiale: acciaio zincato
- La forniture comprende le 4 viti di fissaggio

Bore Alesaggio	F18	F19	F20	F21	F22	ØT9	Code Codice	Kg
32	50	116	130	10	32,5	6,5	GLC32P	0,500
40	55	126	142	10	38	8,5	GLC40P	0,600
50	70	150	170	12	46,5	8,5	GLC50P	1,100
63	80	156	176	12	56,5	8,5	GLC63P	1,300
80	100	195	220	15	80	12	GLC80P	2,550
100	120	217	245	15	95	14	GLC100P	3,390



SERIE GLH

LINEAR CONTROL UNITS FOR ISO CYLINDER Ø20 ÷ 100 AND FIXING UNITA' DI GUIDA PER CILINDRI ISO Ø20 ÷ 100 E FISSAGGI



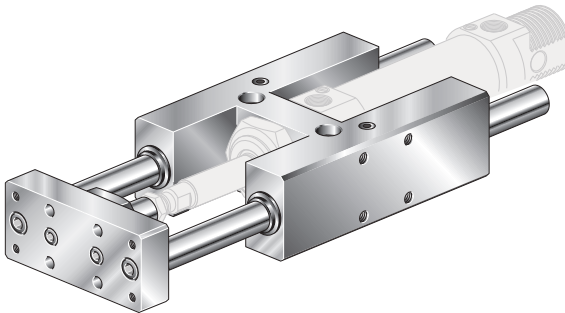
Bore Alesaggio	25	50	80	100	125	160	200	250
20	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•

Weight (Kg) of guide units Ø20 and Ø25
Peso (Kg) delle unità di guida Ø20 e Ø25

Stroke Corsa	Weight (Kg) "BS" serie	Weight (Kg) "BB" serie
25	0,815	0,800
50	0,846	0,830
80	0,882	0,870
100	0,907	0,890
160	0,980	0,965
200	1,030	1,015
250	1,090	1,075

GLH

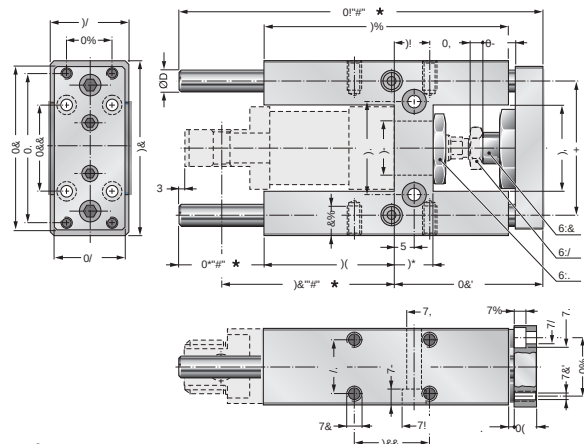
LINEAR CONTROL UNITS TYPE "H"
UNITA' DI GUIDA ESECUZIONE "H"



SERIES /SERIE "BS-BB"

Standard coupling for ISO 6432 cylinder (Ø20 ÷ Ø25)
Accoppiamento standard per cilindri ISO 6432 (Ø20 ÷ Ø25)

* = Stroke / Corsa



Bore Alesaggio	ØD	H	R	P	F1	F2	F3	F4	F5	F6	ØF7	F8	F9	F10	F11	M1	M2	M3	M4
20	10	58	8,5	6	79	34	38	108	15	37	22	58	17	71	32,5	76	32	68	20
25	10	58	8,5	1	79	34	38	108	15	37	22	58	17	76	32,5	76	32	68	20

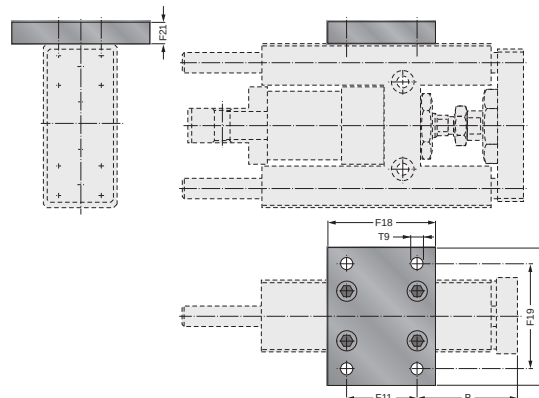
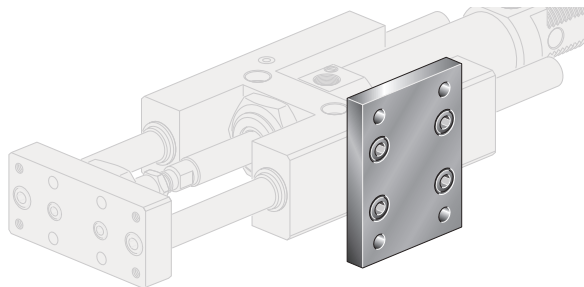
Bore Alesaggio	M5	M6	M7	M8	M9	M10	M11	ØT1	ØT2	ØT3	T4	ØT5	ØT6	T7	ØT10	SW1	SW2	SW3
20	160	5	22	12	37	65	40	M6	5,5	9	5,5	10,5	6,5	7	M5	13	13	27
25	160	6	17	12	37	65	40	M6	5,5	9	5,5	10,5	6,5	7	M5	13	17	27

- Ø20 e Ø25 mm standard coupling; Ø12 e 16 see page A-56.
- All the linear control units are supplied with scraper seals.
- The **BS** series mounting brass bearing, and guide stems are in chromium-plated and rectified steel; **BB** series mounting ball bushing and guide stems are in hardened chromium-plated and rectified steel.
- For maximum allowable load see pages A-57 ÷ A-58.

- Accoppiamento standard per cilindri Ø20 e Ø25 mm; Ø12 e 16 vedi pag. A-56.
- Le unità di guida sono corredate di raschiapolvere.
- La serie **BS** monta bronzine a strisciamento con gli steli guida in acciaio cromato e rettificato; mentre la serie **BB** monta cuscinetti a ricircolo di sfere con steli guida in acciaio temprato cromato e rettificato.
- Dati sul carico max. ammesso vedi pagine A-57 ÷ A-58.

GLH 2025P

FIXING PLATE
PIASTRA DI FISSAGGIO



Bore Alesaggio	B	F11	F18	F19	F20	F21	ØT9	Code Codice	Kg
20/25	50	32,5	50	50	64	10	6,5	GLH 2025P	0,270

- Building material: galvanized steel
- 4 fixing screws are included with supply

- Materiale: acciaio zincato
- La fornitura comprende le 4 viti di fissaggio

Bore Alesaggio	Standard stroke / Corse Standard											Weight (Kg) for "0" stroke unit	Supplementar weight (Kg) each 100 mm stroke
	25	50	80	100	125	160	200	250	300	400	500	Peso (Kg) per unità di guida corsa "0" mm	Supplemento di peso (Kg) per ogni 100 mm di corsa
32	•	•	•	•	•	•	•	•	•	•	•	1,300	0,176
40	•	•	•	•	•	•	•	•	•	•	•	2,300	0,312
50	•	•	•	•	•	•	•	•	•	•	•	3,600	0,490
63	•	•	•	•	•	•	•	•	•	•	•	4,500	0,490
80	•	•	•	•	•	•	•	•	•	•	•	8,700	0,765
100	•	•	•	•	•	•	•	•	•	•	•	11,000	0,765

GLH

Bore
Alesaggio (mm):

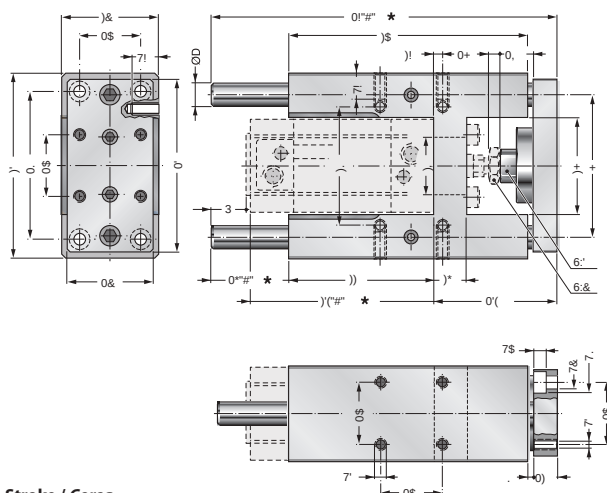
Ø32 **32**
Ø40 **40**
Ø50 **50**
Ø63 **63**
Ø80 **80**
Ø100 **100**

BS with brass bearing
con bronzine a strisciamento
BB with ball bushing
con cuscinetti a ricircolo di sfere

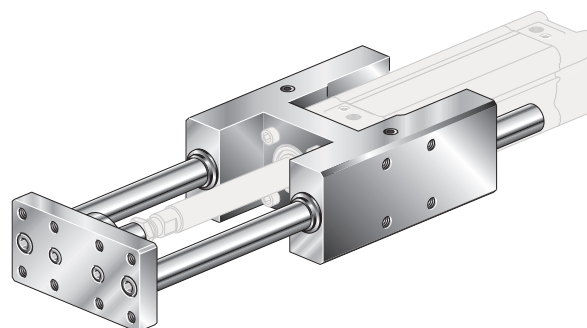
Stroke / Corse
(mm):

LINEAR CONTROL UNITS TYPE "H"
UNITA' DI GUIDA ESECUZIONE "H"

GLH



* = Stroke / Corsa



SERIES /SERIE "BS-BB"

Standard coupling for ISO 15552 cylinder (Ø32 ÷ Ø100)
Accoppiamento standard per cilindri ISO 15552 (Ø32 ÷ Ø100)

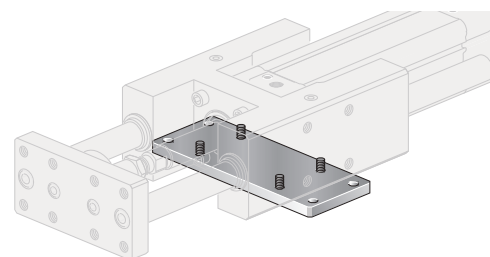
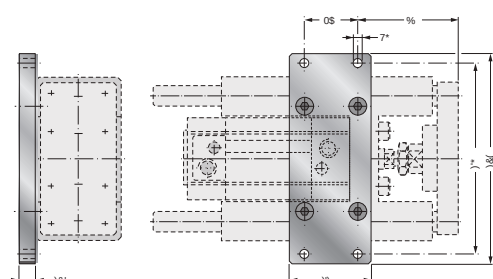
Bore Alesaggio	D	F1	F2	F3	F4	F5	F6	ØF7	F8	F9	F10	H	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	P	ØT1	ØT2	ØT3	T4	T5	SW1	SW2
32	12	97	50	61	125	4,3	50,2	30	76	17	94	74	90	45	78	32,5	177	6	17	12	37	64	15	M6	6,5	10,5	6,5	14	13	17
40	16	115	58	69	140	11	58,2	35	81	21	105	87	110	54	84	38	192	7	22	12	37	74	9	M6	6,5	10,5	6,5	14	15	19
50	20	137	70	85	150	18,8	70,2	40	79	26	106	104	130	63	100	46,5	205	8	26	15	37	89	8	M8	8,5	13,5	9	16	22	24
63	20	152	85	100	182	15,3	85,2	45	111	26	121	119	145	80	105	56,5	237	8	26	15	37	88	23	M8	8,5	13,5	9	16	22	24
80	25	189	105	130	215	21	105,4	45	128	34	128	148	180	100	130	72	280	9	32	20	42	110	40	M10	11	18	11	20	27	30
100	25	213	130	150	220	24,5	130,4	55	128	39	138	173	200	120	150	89	280	9	32	20	37	115	25	M10	11	18	11	20	27	30

- Ø32; 40; 50; 63; 80 and Ø100 mm; Ø20 e 25 see page A-56.
- All the linear control units are supplied with scraper seals.
- The **BS** series mounting brass bearing, and guide stems are in chromium-plated and rectified steel; **BB** series mounting ball bushing and guide stems are in hardened chromium-plated and rectified steel.
- For maximum allowable load see pages A-57 ÷ A-58.

- Diametro cilindri Ø32; 40; 50; 63; 80 e Ø100 mm; Ø20 e 25 vedi pag. A-56.
- Le unità di guida sono corredate di raschiapolvere.
- La serie **BS** monta bronzine a strisciamento con gli steli guida in acciaio cromato e rettificato; mentre la serie **BB** monta cuscinetti a ricircolo di sfere con steli guida in acciaio temprato cromato e rettificato.
- Dati sul carico max. ammesso vedi pagine A-57 ÷ A-58.

FIXING PLATE
PIASTRA DI FISSAGGIO

GLH ... P



Bore Alesaggio	B	M4	F18	F19	F20	F21	ØT9	Code Codice	Kg
32	59,7	32,5	50	116	130	10	6,5	GLH32P	0,500
40	63	38	55	140	160	10	9	GLH40P	0,700
50	70,2	46,5	70	160	180	12	9	GLH50P	1,200
63	73,7	56,5	80	175	195	12	9	GLH63P	1,480
80	89	72	100	218	242	15	12	GLH80P	2,850
100	90,5	89	120	245	272	15	14	GLH100P	3,900

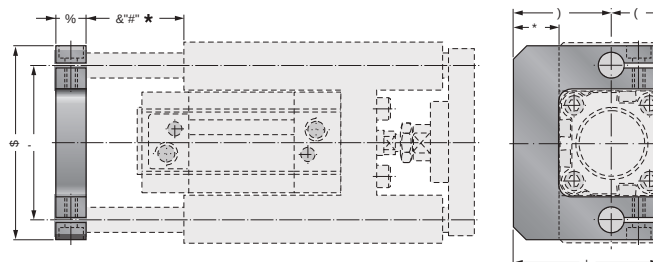
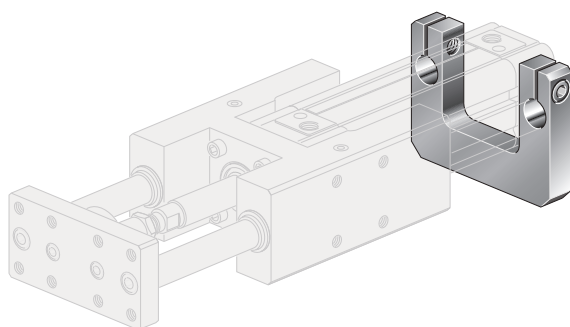
- Building material: galvanized steel
- 4 fixing screws are included with supply

- Materiale: acciaio zincato
- La forniture comprende le 4 viti di fissaggio



RFGLH ..

REAR FLANGE COUPLING GUIDE STEMS
FLANGIA POSTERIORE DI COLLEGAMENTO STELI GUIDA

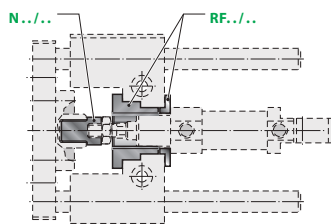


* = Stroke / Corsa

- Building material: aluminium alloy
- 2 clamps screws are included in the supply
- Materiale: lega di alluminio
- La fornitura comprende le 2 viti di bloccaggio

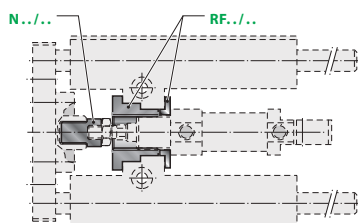
Bore Alesaggio	A	B	C	D	E	F	G	H	Code Codice	Kg
20 / 25	78	12	22	58	16,5	37,5	13,5	54	RFGLH20/25	0,110
32	95	15	22	74	25	47	22	70	RFGLH32	0,170
40	113	20	17	87	29	54	25	80	RFGLH40	0,310
50	134	20	17	104	35	67,5	32,5	100	RFGLH50	0,460
63	149	20	17	119	42,5	80,5	38	120	RFGLH63	0,600
80	185	25	12	148	52,5	101,5	49	150	RFGLH80	1,150
100	209	25	12	173	65	116	51	165	RFGLH100	1,350

COMBINATION OF ASSEMBLING / COMBINAZIONI DI ASSEMBLAGGIO



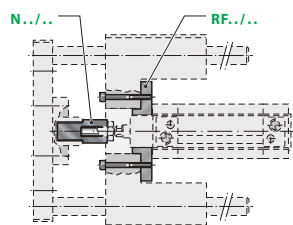
Adaption set to assemble **ISO 6432** cylinders
(with threaded flange mounting) on **GLC** and **GLH** linear control units series.

Adattatori per l'assemblaggio dei cilindri **ISO 6432**
(con fissaggio a flangia filettata) su guide **GLC** e **GLH**



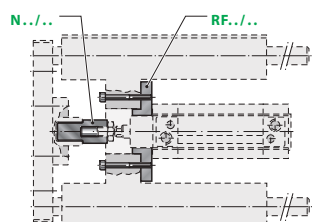
Linear control units - size Guide laterali taglia	Adaption set Set di adattamento			
	Ø12	Ø16	Ø20	Ø25
GLH20/25	RF25/12 N12/25	RF25/16 N16/25	○	○
GLH32			RF32/20 N20/32	RF32/25 N25/32
GLC20/25	RF25/12 NC12/25	RF25/16 NC16/25	○	○
GLC32			RF32/20 NC20/32	RF32/25 NC25/32

○ Standard coupling / Accoppiamento standard



Adaption set to assemble **ISO 15552** and **ISO 6432** cylinders
(with 4 screw fixing) on **GLC** and **GLH** linear control units series.

Adattatori per l'assemblaggio dei cilindri **ISO 15552** e **ISO 6432**.
(con fissaggio a 4 viti filettate) su guide **GLC** e **GLH**



Linear control units - size Guide laterali taglia	Adaption set Set di adattamento							
	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
GLH32	RF32/20 N20/32	RF32/25 N25/32	○					
GLC-GLH40	RF40/20 N20/40	RF40/25 N25/40	●	○				
GLC-GLH50			RF50/32 N32/50	●	○			
GLC-GLH63			RF63/32 N32/63	RF63/40 N40/63	●	○		
GLC-GLH80				RF80/40 N40/80	RF80/50 N50/80	●	○	
GLC-GLH100					RF100/50 N50/100	RF100/63 N63/100	●	○

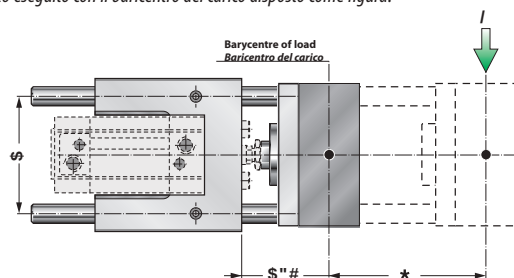
● Available on demand (with modification linear control units) / Fornibile a richiesta (con modifica su guida laterale)
○ Standard coupling / Accoppiamento standard

INFLECTION GRAPHICS AND MAXIMUM ALLOWABLE LOAD DIAGRAMMI DI INFLESSIONE E MASSIMO CARICO UTILE

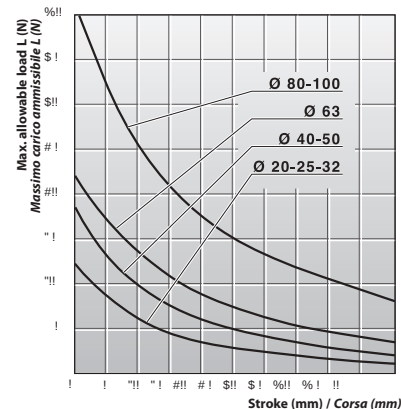
Ø20÷100 GLC

Maximum allowable load (N), with the longitudinal axes of the unit horizontal placed. The graphic on the right has been executed with the load placed as figure.

Massimo carico utile (N) con asse longitudinale dell'unità di guida disposto orizzontalmente. Il grafico a destra è stato eseguito con il baricentro del carico disposto come figura.



* = Stroke / Corsa

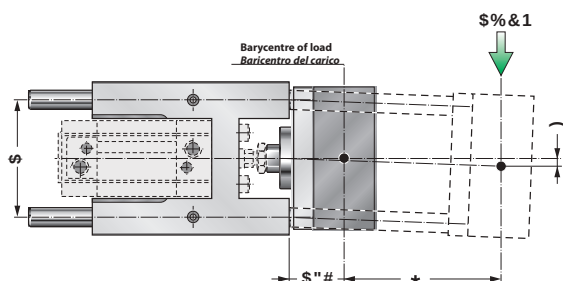


MAX. ALLOWABLE LOAD "N" (Ø20÷100 GLC)
MASSIMO CARICO UTILE "N" (Ø20÷100 GLC)

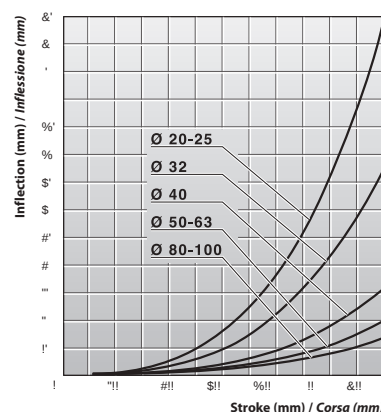
Ø20÷100 GLH BB-BS

Inflection of guide stems is due to their weight summed to the load of 10 N related to the stroke. The **BS** series mounting brass bearing, and guide stems are in chromium-plated and rectified steel; **BB** series mounting ball bushing and guide stems are in hardened chromium-plated and rectified steel. The graphic on the right has been executed with the load placed as figure.

Inflessione degli steli dovuta al peso proprio sommato ad un carico di 10 N in relazione alla corsa. La serie **BS** monta bronzine a strisciamento con gli steli guida in acciaio cromato e rettificato; mentre la serie **BB** monta cuscinetti a ricircolo di sfere con steli guida in acciaio temprato cromato e rettificato. Il grafico a destra è stato eseguito con il baricentro del carico disposto come figura.



* = Stroke / Corsa

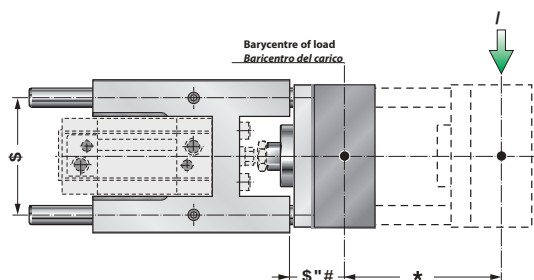


INFLECTION OF GUIDE STEMS (Ø20÷100 GLH BS E BB)
INFLESSIONE DEGLI STELI (Ø20÷100 GLH BS E BB)

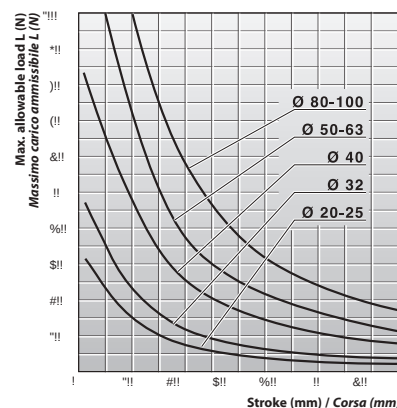
Ø20÷100 GLH BS

Maximum allowable load (N), with the longitudinal axes of the unit horizontal placed. **BS** series mounting brass bearing and guide stems in chromium-plated and rectified steel. The graphic on the right has been executed with the load placed as figure.

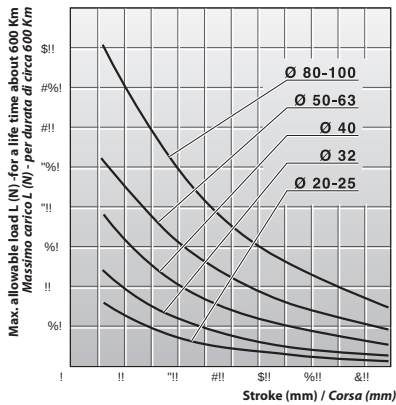
Massimo carico utile (N) con asse longitudinale dell'unità di guida disposto orizzontalmente. La serie **BS** monta bronzine a strisciamento e steli guida in acciaio cromato rettificato. Il grafico a destra è stato eseguito con il baricentro del carico disposto come figura.



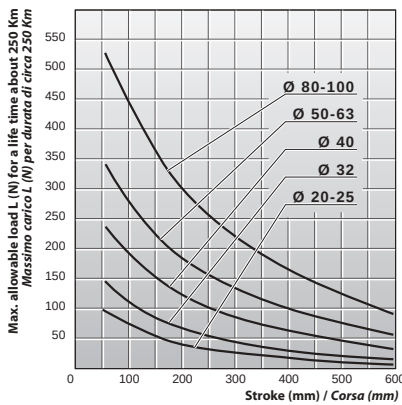
* = Stroke / Corsa



MAX. ALLOWABLE LOAD (Ø20÷100 GLH BS)
MASSIMO CARICO UTILE (Ø20÷100 GLH BS)



MAX. ALLOWABLE LOAD FOR A LIFE-TIME OF 600 Km
CARICO MASSIMO PER DURATA DI CIRCA 600 Km

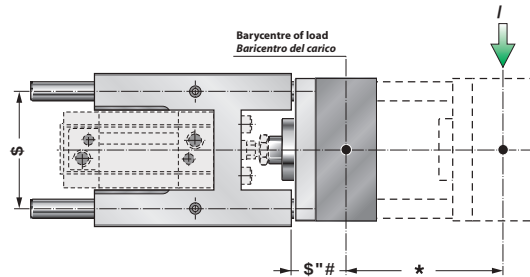


MAX. ALLOWABLE LOAD FOR A LIFE-TIME OF 250 Km
CARICO MASSIMO PER DURATA DI CIRCA 250 Km

20÷100 GLH BB

Maximum allowable load (N), with the longitudinal axes of the unit horizontal placed. **BB series** mounting brass bearing and guide stems in hardened chromium-plated and rectified steel. The graphic on the right has been executed with the load placed as figure.

Massimo carico utile (N) con asse longitudinale dell'unità di guida disposto orizzontalmente. La **serie BB** monta bronzine a strisciamento e steli guida in acciaio temprato cromato e rettificato. Il grafico a destra è stato eseguito con il baricentro del carico disposto come figura.



$$* = \text{Stroke} / \text{Corsa}$$

Reduction of allowable load with short stroke.
For stroke <60 mm multiply the allowable load per "K".

Riduzione del carico utile con corsa breve.
Per corse <60 mm moltiplicare il carico ammesso per "K".

Stroke Corsa	K
50	0,9
40	0,8
30	0,7
20	0,6

PNEUMATIC SLIDES AND TWIN ROD CYLINDERS SLITTE PNEUMATICHE E SEMISLITTE

SERIE PS - HPSK

TECHNICAL FEATURES / CARATTERISTICHE COSTRUTTIVE

VESTA manufactures a complete range of slides and twin rod pneumatic cylinders.

With the series **PS** and **HPSK**, VESTA offers many varieties of mounting options in order to provide maximum flexibility of application. Excellent performance and high reliability are made possible by the use of first class materials, careful product development and precise production control. All units are suitable for magnetic switching use.

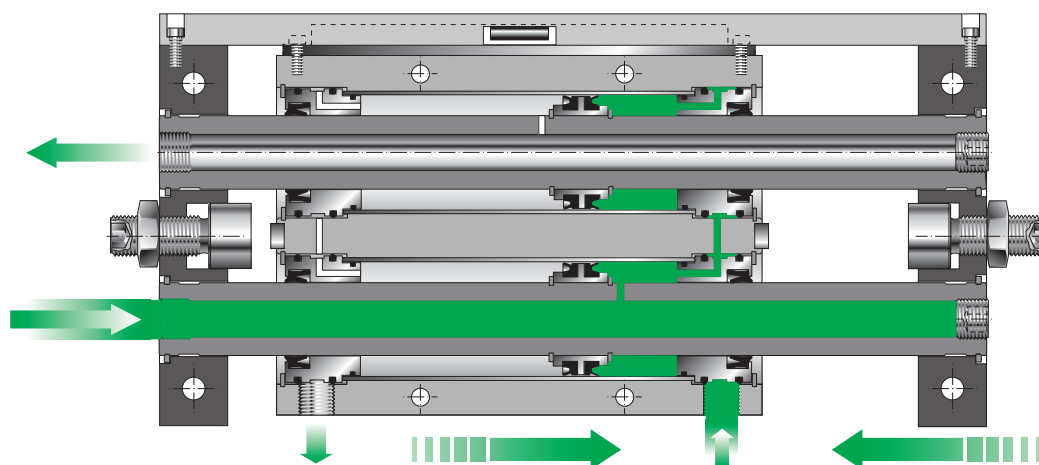
Very low friction is achieved by incorporating self-lubricating bearings between each linear moving element.

*Le slitte e semislitte VESTA serie **PS** e **HPSK** vengono concepite per soddisfare le esigenze di automazione legate in termini di precisione, robustezza, flessibilità a spostamenti di corsa limitata. Diverse le possibilità di fissaggio a seconda della serie e del modello, diverso l'equipaggiamento a seconda dell'impiego richiesto. Una progettazione particolarmente attenta alle esigenze dell'utilizzatore finale e la scelta di materiali di ottima qualità rappresentano, secondo la filosofia costruttiva VESTA, il punto di partenza per la realizzazione di ciascun prodotto.*

L'accurata lavorazione dei particolari e lo stretto controllo garantiscono per ogni prodotto prestazioni di assoluto rilievo in termini di affidabilità e durata.

Il perfetto scorrimento delle parti mobili è consentito nel tempo dall'uso di bronzine a basso attrito e con alta precisione.

Tutti i modelli sono predisposti per l'utilizzo di sensori magnetici per il rilevamento della posizione.



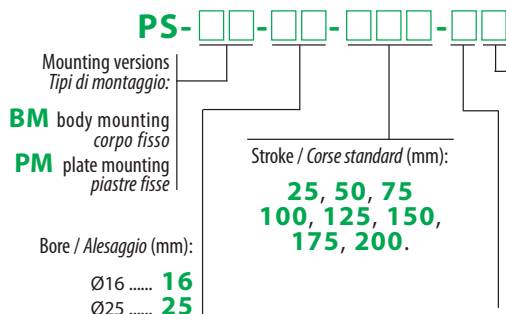
PRECAUTIONS BEFORE USE / RACCOMANDAZIONI PER L'INSTALLAZIONE

- Avoid impacts and abrasion of piston rods.
- Avoid impacts and scratching of the slide body and plate surfaces in order not to effect the flatness of the slide.
- Ensure that the surface upon which the pneumatic slide or twin rod cylinder and is mounted is perfectly flat or else the correct functioning of the unit can be endangered by uneven wear of the bearings or seals.
- Lubrication is not necessary; but if it provided, use only ISO VG 32 oil. Do not use engine oil or spindle oil.
- Before each pneumatic connection, clean tubes and fittings carefully.
- Evitare urti ed abrasioni degli steli.
- Evitare urti e graffiature alle superfici del corpo e della piastra per non compromettere la planarità della slitta o semislitta pneumatica.
- Verificare che la superficie alla quale viene fissata la semislitta sia perfettamente piana; in caso contrario si compromettebbe il buon funzionamento della stessa con anomale usure dei cuscinetti e delle guarnizioni.
- La lubrificazione non è necessaria, ma se prevista usare olio ISO VG 32. Non usare olio per motori o per mandrini.
- Prima di ogni collegamento pneumatico pulire accuratamente tubi e raccordi.



SERIE PS

PNEUMATIC SLIDES Ø16 AND Ø25 SLITTE PNEUMATICHE Ø16 E Ø25



Stroke / Corse standard (mm):

25, 50, 75
100, 125, 150,
175, 200.

Magnetic switches / Finecorsa magnetici:

D basic type: none magnetic switches / tipo base: senza finecorsa magnetici

Stopper type / Arresti di fine corsa:

A basic type: N° 2 stopper bolt / tipo base: con N° 2 arresti meccanici

B with N° 1 shock absorber and N° 1 stopper bolt
con N° 1 deceleratore e N° 1 arresto meccanico

C with N° 2 shock absorbers / con N° 2 deceleratori

TECHNICAL FEATURES

Environment temperature	0 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Bearings	High precision bearings.
Shock absorber.....	Auto compensating.
Port size	Ø16 ÷ 20; M5 x 0,8; Ø25 ÷ 32; G1/8.

Stroke adjustment with stopper bolt	+0,9 ÷ -4 mm (one side).
Stroke adjustment with shock absorber	+0,6 ÷ -10 mm (one side).
Total over stroke	+1,2 mm.
Speed range with stopper bolt	30 ÷ 100 mm/s.
Speed range with shock absorber	30 ÷ 300 mm/s.
Max. load	3 Kg.
Non-rotation accuracy at stroke 0 mm	± 0,02°.
Operating pressure range	2 ÷ 9 bar.

CARATTERISTICHE TECNICHE

Temperatura ambiente	0 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Cuscinetti	Bronzine ad alta precisione.
Deceleratori	Autocompensanti.
Attacchi per l'alimentazione	Ø16 ÷ 20; M5 x 0,8; Ø25 ÷ 32; G1/8.

Regolazione corsa con fermi meccanici	+0,9 ÷ -4 mm (per lato).
Regolazione corsa con deceleratori	+0,6 ÷ -10 mm (per lato).
Oltrecorsa totale	+1,2 mm.
Velocità con fermi meccanici	30 ÷ 100 mm/s.
Velocità con deceleratori	30 ÷ 300 mm/s.
Carico massimo	3 Kg.
Precisione antirotazione ad inizio corsa	± 0,02°.
Pressione d'esercizio	2 ÷ 9 bar.

THEORETICAL THRUSTS FORZE TEORICHE SVILUPPATE

Bore Alesaggio	Theoretical output force (Kg) Forze (Kg) teoriche di spinta							
	Operating pressure (bar) Pressione d'esercizio (bar)							
	2	3	4	5	6	7	8	9
16	4,9	7,35	9,8	12,2	14,7	17,1	19,6	22
25	11,6	17,4	23,2	29	34,8	40,6	46,4	52,2

SHOCK ABSORBER DECELERATORI

Shock absorber code Codice deceleratori	DEC 16	DEC 25
Bore slide Alesaggio slitta	16 mm	25 mm
Max. energy absorbed Max. energia assorbita	0,1 Kgm	0,4 Kgm
Max. frequency Max. frequenza	1 Hz	1,2 Hz

WEIGHT WITH STOPPER BOLT PESO CON FERMI MECCANICI

Bore Alesaggio	Weight (Kg) with stopper bolt without switch Peso (Kg) con fermi meccanici senza finecorsa							
	stroke / corsa							
	25	50	75	100	125	150	175	200
16	0,440	0,540	0,640	0,740	0,840	0,940	1,040	1,140
25	1,210	1,440	1,670	1,900	2,130	2,360	2,590	2,820

PISTON RODS DEFLECTION PS SERIES / FLESSIONE DEGLI STELI SERIE PS

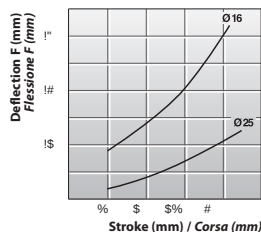
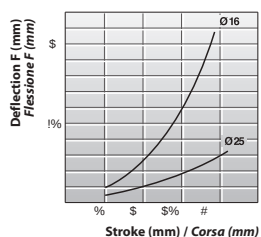
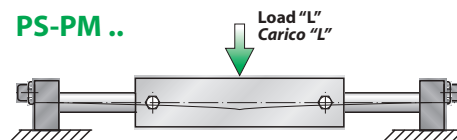


Plate mounting
Deflection (mm) of piston rods.
Test data with concentrated
load as figure.

A piastre fisse
Flessione (mm) degli steli.
Dati ricavati con il carico
posizionato come in figura.

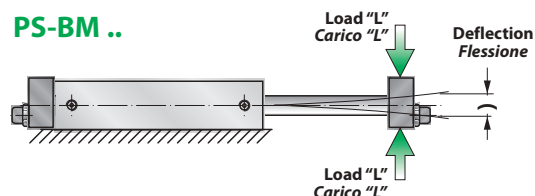
Bore Alesaggio	Load (Kg) Carico (Kg)
16	2
25	5



Body mounting
Deflection (mm) of piston rods.
Test data with concentrated
load as figure.

A corpo fisso
Flessione (mm) degli steli.
Dati ricavati con il carico
posizionato come in figura.

Bore Alesaggio	Load (Kg) Carico (Kg)
16	0,5
25	1,2

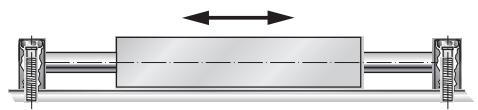




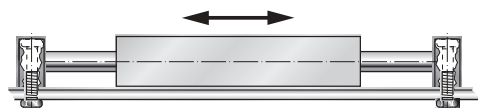
MOUNTING TYPE AND FIXING POSSIBILITY / TIPI DI MONTAGGI E POSSIBILITA' DI FISSAGGIO

PS-PM ..

PNEUMATIC SLIDE AT PLATE MOUNTING
SLITTA PNEUMATICA A PIASTRE Fisse



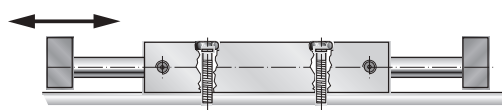
Mounting from upper face
Fissaggio con viti dall'alto



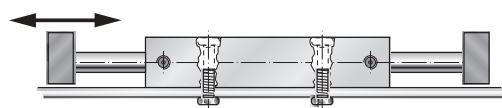
Mounting from lower face
Fissaggio con viti da sotto

PS-BM ..

PNEUMATIC SLIDE AT BODY MOUNTING
SLITTA PNEUMATICA A CORPO Fisso

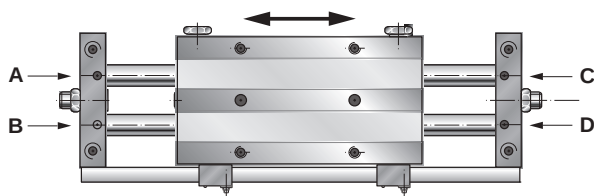


Mounting from upper face
Fissaggio con viti dall'alto

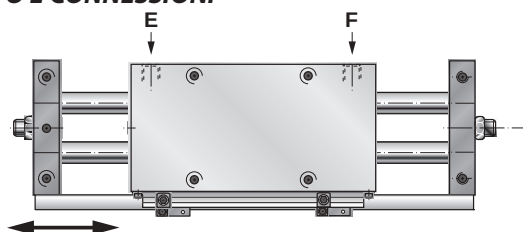


Mounting from lower face
Fissaggio con viti da sotto

WORKING DIRECTION AND PORTS / DIREZIONE DI MOVIMENTO E CONNESSIONI



Port	A	B	C	D
Ingresso				
Plate working direction	Right	Left	Right	Left
Direzione di lavoro delle piastre	destra	sinistra	destra	sinistra

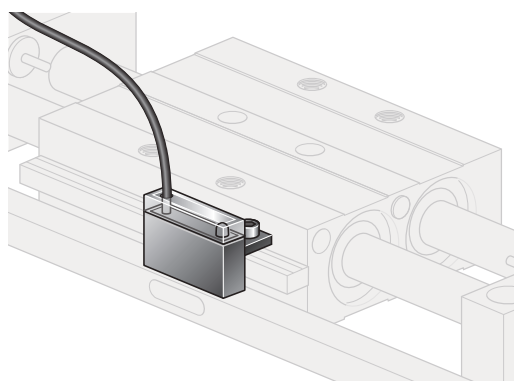


Port	E	F
Ingresso		
Plate working direction	Right	Left
Direzione di lavoro delle piastre	destra	sinistra

MAGNETIC SWITCHES POSITIONING / POSIZIONAMENTO DEI FINECORSI

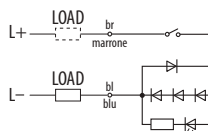
FIV 306 V

MAGNETIC SWITCH
FINECORSO MAGNETICO



Bore	R	R1	R2	R3	R4	R5	R6	R7	R8
Alesaggio									
16	22	8	39	21	1	5	40	8	1,5
25	22	8	53	33	11	5	54	10	2,5

FIV circuit
Circuito FIV



Body mounting:
Corpo fisso:

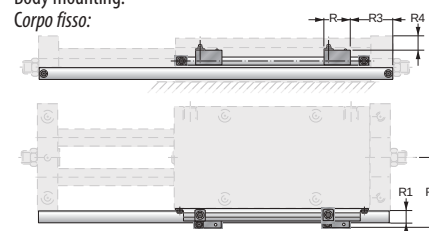
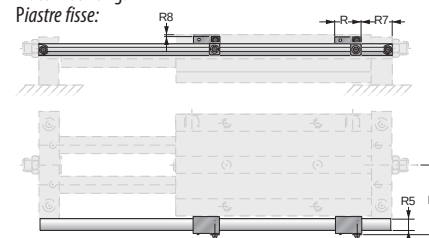


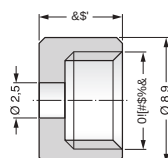
Plate mounting:
Piastra fissa:



Code	Voltage range	Switching current	Switching capacity	Degree of protection	Working temperature	Contact function
Codice	Tensione Corrente V	Potenza mA	VA/W	Temperatura Protezione	°C	Contatto
FIV 306 V	10-220 (AC-DC)	200	15/10	IP67	-25 ÷ +75°C	Contatto

GH-DEC 16

PROTECTION FOR PNEUMATIC SLIDE Ø 16
GHIERA DI PROTEZIONE PER ALESAGGIO Ø 16



DUAL ROD CYLINDERS Ø16 ÷ Ø32 SEMISLITTE PNEUMATICHE Ø16 ÷ Ø32

SERIE **HPSK**

HPSK-

Series / Serie:

bore / Alesaggio (mm):

Ø16 **16**
Ø20 **20**
Ø25 **25**
Ø32 **32**

Stroke / Corsa
(mm):

**10, 20,
30, 40,
50, 75,
100.**

BS Brass bearing and guide stems in chromium-plated steel
Bronzine a strisciamento e steli guida in acciaio cromato

BB Ball bushing and guide stems in hardened chromium-plated and rectified steel.

Cuscinetti a ricircolo di sfere e steli guida in acciaio temprato cromato e rettificato.

TECHNICAL FEATURES

Environment temperature range 0 °C ÷ +80 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium Filtered air.
Operating pressure range 2 ÷ 8 bar.
Magnetic switches Reed type.

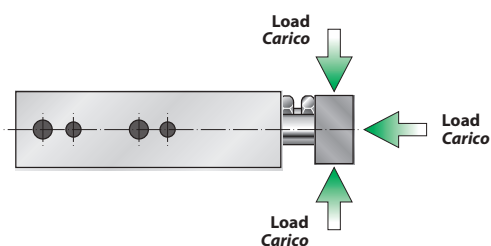
Bearings Slide bearing or ball bushing.
Piston speed 30 ÷ 300 mm/s.
Port size Ø16 ÷ 20 M5 x 0,8.
Ø25 ÷ 32 G1/8.
Stroke adjustment 0 ÷ -5 mm.
Cushion Mechanical buffer.

CARATTERISTICHE TECNICHE

Temperatura ambiente 0 °C ÷ +80 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione d'esercizio 2 ÷ 8 bar.
Finecorsa Magnetici Tipo reed.

Cuscinetti A strisciamento o a ricircolo di sfere.
Velocità di attuazione 30 ÷ 300 mm/s.
Attacchi per l'alimentazione Ø16 ÷ 20 M5 x 0,8.
Ø25 ÷ 32 G1/8.
Regolazione della corsa 0 ÷ -5 mm.
Ammortizzatore Smorzatore d'urto meccanico.

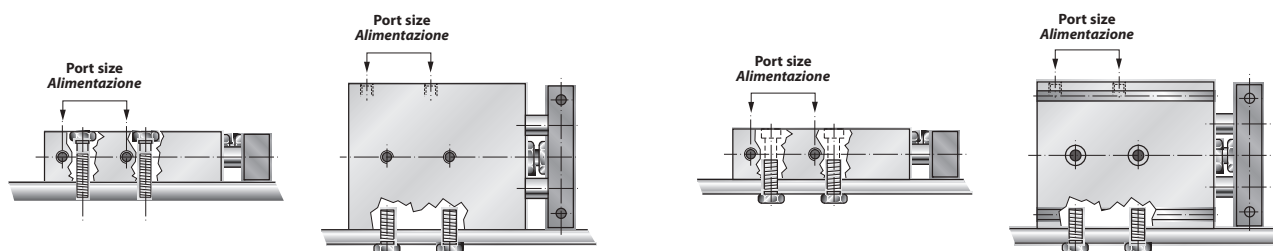
WORKING LOAD / APPLICAZIONI DEL CARICO



THEORETICAL THRUSTS / FORZE TEORICHE SVILUPPATE

Bore Alesaggio (Ø mm)		Theoretical output force (kgf) at pression (Bar) Forze teoriche di spinta alla pressione (Bar)						
		2	3	4	5	6	7	8
16	in	6	9	12	15	18	21	24
	out	8	12	16	20	24	28	32
20	in	9,4	14	19	23,6	28	33	37,7
	out	12,6	19	25	31,4	37,7	44	50
25	in	15	22,7	30	38	45,5	53	60,5
	out	19,6	29,5	39	49	59	68,7	78,6
32	in	24	36	48	60	72	84,4	96,5
	out	32	48	64	80,4	96,5	113	129

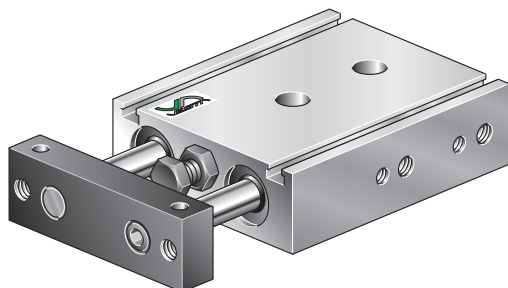
MOUNTING EXAMPLES HPSK SERIE / ESEMPI DI MONTAGGIO SERIE HPSK



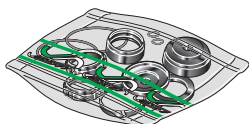


HPSK-.-16-.-...

DUAL ROD CYLINDER Ø16
SEMISLITTA PNEUMATICA Ø16



Stroke Corsa (mm)	A	B	C	D
10	89	70	25	15
20	99	80	25	25
30	109	90	35	25
40	119	100	35	35
50	129	110	35	45
75	154	135	35	70



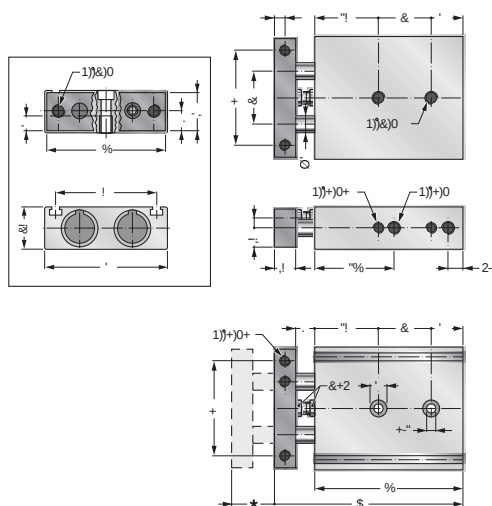
Seals kit for dual rod cylinder HPSK Ø16 serie
Kit guarnizioni semislitte pneumatiche serie HPS K Ø16

Bore
Alesaggio

16

Seals kit code
Codice guarnizioni

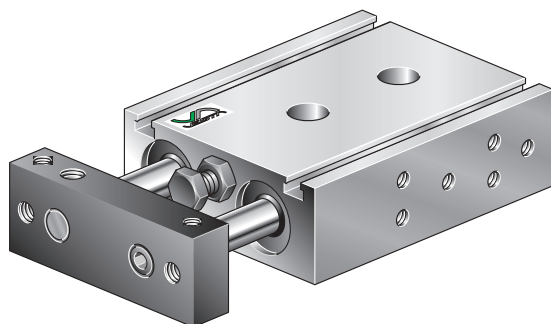
HPSK16SG



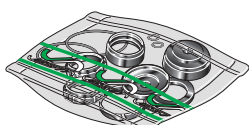
* = Stroke / Corsa

HPSK-.-20-.-...

DUAL ROD CYLINDER Ø20
SEMISLITTA PNEUMATICA Ø20



Stroke Corsa (mm)	A	B	C	D
10	104	80	30	20
20	114	90	30	30
30	124	100	40	30
40	134	110	40	40
50	144	120	40	50
75	169	145	60	55
100	194	170	60	80



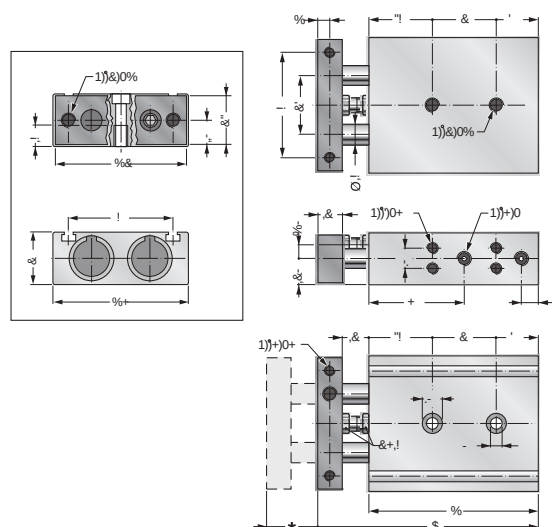
Seals kit for dual rod cylinder HPSK Ø20 serie
Kit guarnizioni semislitte pneumatiche serie HPS K Ø20

Bore
Alesaggio

20

Seals kit code
Codice guarnizioni

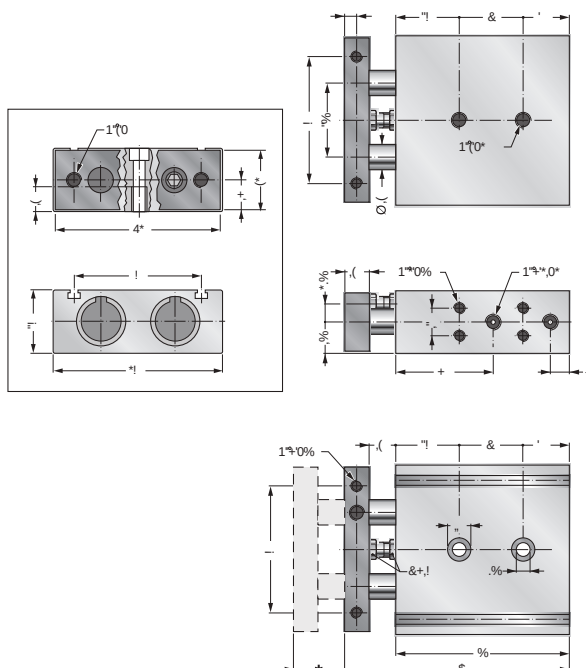
HPSK20SG



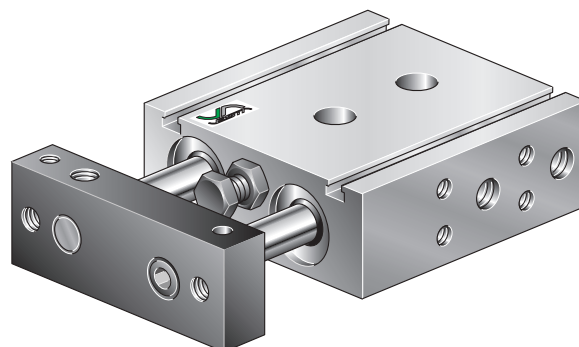
* = Stroke / Corsa

DUAL ROD CYLINDER Ø25
SEMISLITTA PNEUMATICA Ø25

HPSK-..-25-..-..



* = Stroke / Corsa



Stroke Corsa (mm)	A	B	C	D
10	106	82	30	22
20	116	92	30	32
30	126	102	40	32
40	136	112	40	42
50	146	122	40	52
75	171	147	60	57
100	196	172	60	82

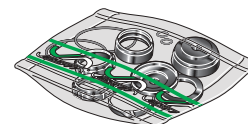
Seals kit for dual rod cylinder HPSK Ø25 serie
Kit guarnizioni semislitte pneumatiche serie HPSK Ø25

Bore
Alesaggio

25

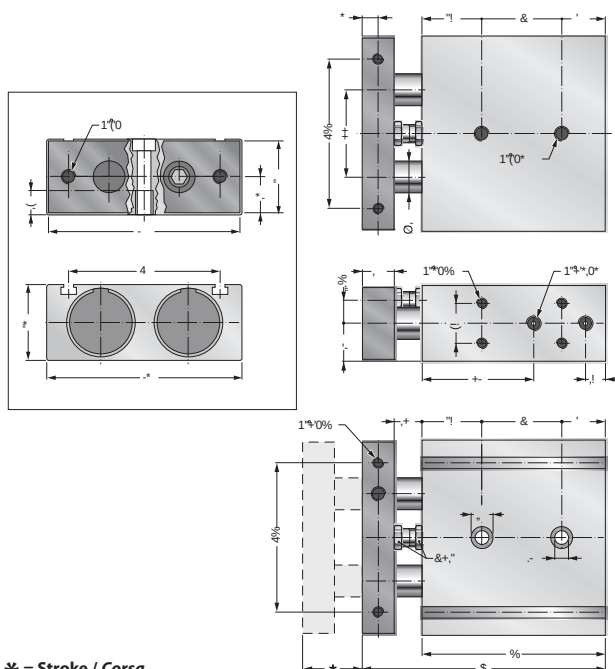
Seals kit code
Codice guarnizioni

HPSK25SG

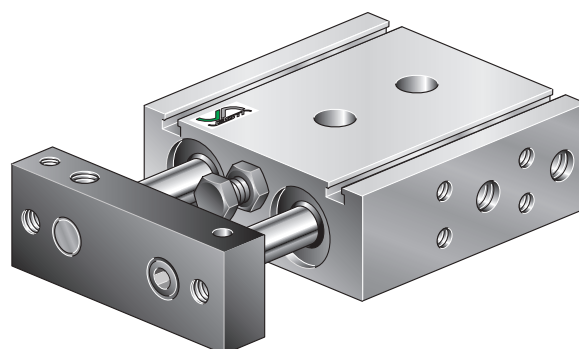


DUAL ROD CYLINDER Ø32
SEMISLITTA PNEUMATICA Ø32

HPSK-..-32-..-..



* = Stroke / Corsa



Stroke Corsa (mm)	A	B	C	D
10	122	92	40	22
20	132	102	40	32
30	142	112	50	32
40	152	122	50	42
50	162	132	50	52
75	187	157	70	57
100	212	182	70	82

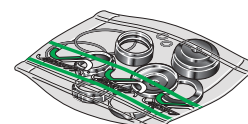
Seals kit for dual rod cylinder HPSK Ø32 serie
Kit guarnizioni semislitte pneumatiche serie HPS K Ø32

Bore
Alesaggio

32

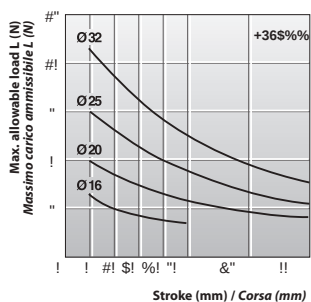
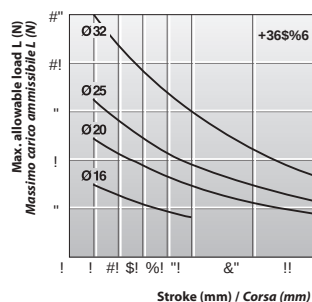
Seals kit code
Codice guarnizioni

HPSK32SG





MAXIMUM ALLOWABLE LOAD **HPSK** SERIES / CARICO MASSIMO AMMISSIBILE SERIE **HPSK**

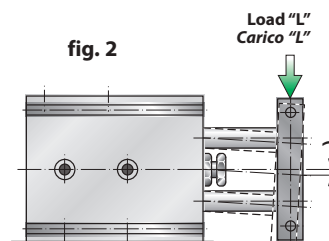
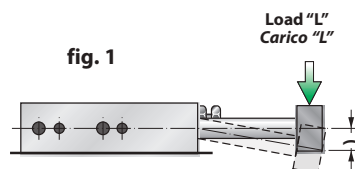
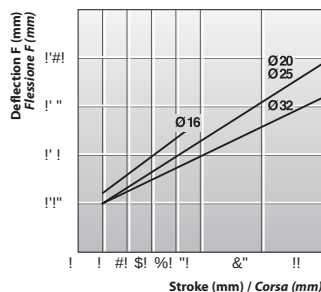


Graphics of maximum allowable load for dual rod cylinder "**BS**" series (with rod bearing brass) and **BB** series (with ball bushing)

Diagrammi del carico massimo ammissibile per semislitte pneumatiche della **serie BS** (con bronzine a strisciamento) e della **serie BB** (con cuscinetti a ricircolo di sfere)



PISTON RODS DEFLECTION / FLESSIONE DEGLI STELI



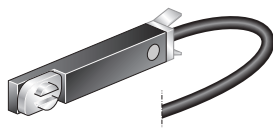
The graph shows the standard value of piston rod deflection (F) with a load of 10 N.

The piston rods deflection value in the case shown in fig. 2 is 30% less than value shown in the graph referred to fig. 1

Il grafico riporta i valori standard della flessione (F) degli steli nella condizione di carico per $L=10$ N.

I valori della flessione degli steli nella condizione di carico della fig. 2 sono inferiori del 30% rispetto ai valori di carico della fig. 1 da cui è ricavato il grafico.

MAGNETIC SWITCHES FOR **HPSK** CYLINDERS / FINECORS MAGNETICI PER CILINDRI **HPSK**

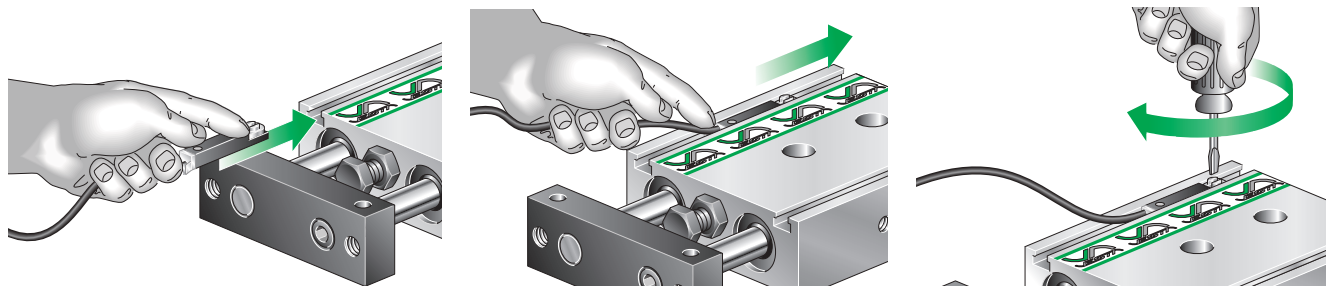


For magnetic switches features see:
Caratteristiche finecorsa magnetici vedi:

**VNCR2, VNPR2,
VNCE3, VNPE3.**

Pag. A-19

MAGNETIC SWITCH POSITIONING / POSIZIONAMENTO DEI FINECORS MAGNETICI



ANTI-ROTATION CYLINDERS CILINDRI ANTIROTAZIONE

SERIE **AW** ..

TECHNICAL FEATURES / CARATTERISTICHE COSTRUTTIVE

VESTA pneumatic cylinders series **AW** are available with twin or triple piston rods. They feature reliability, high resistance to side movement and are manufactured to meet the needs of modern flexible automation.

The materials of construction have been carefully selected to ensure high performance.

All piston rods are guided on self-lubricated bearings, giving low friction and a high load capacity.

Magnetic pistons allow the use of magnetic switches on all models.

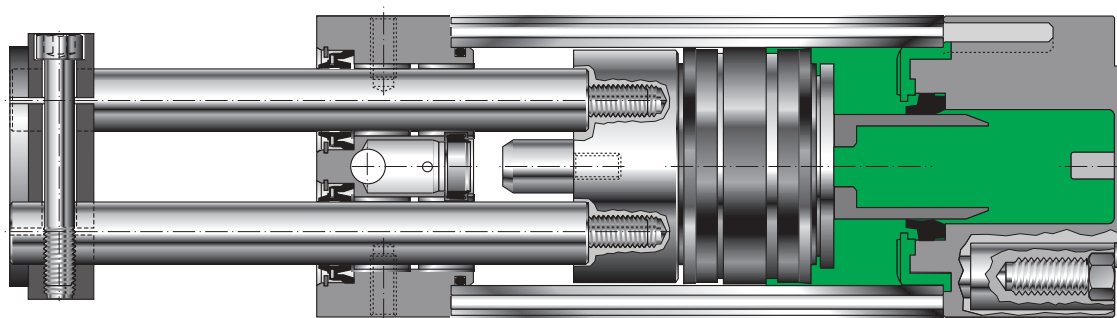
Fully adjustable cushioning is featured on each cylinder with micrometric control. Lubrication is not required.

Telescopic piston rods with hollow bores enable the user to transport air or vacuum signals through the length of the piston rod.

*Gli attuatori pneumatici appartenenti alla serie **AW** a due e tre steli, nascono per garantire prestazioni e durata notevoli del cilindro anche in presenza di carichi sullo stelo che ne determinano un momento torcente o flettente, incrementando in maniera considerevole la resistenza a tali sollecitazioni. La scelta di materiali di prima qualità, l'accuratezza nelle lavorazioni e il controllo del prodotto finito garantiscono una perfetta funzionalità dello stesso.*

Gli steli sono guidati su boccole autolubrificanti a lunga durata, basso coefficiente d' attrito ed elevata capacità di carico; il pistone è guidato e magnetico di serie, onde consentire su tutti i modelli l'uso di finecorsa.

*Ogni cilindro può essere utilizzato anche con aria non lubrificata ed è dotato di ammortizzatori pneumatici con regolazione micrometrica. All'interno della serie **AW** spiccano particolarmente i cilindri a steli cavi che, oltre a garantire la non rotazione dello stelo, consentono l'utilizzo di aria o vuoto attraverso gli steli stessi (vedi gli esempi di pagina A-75).*



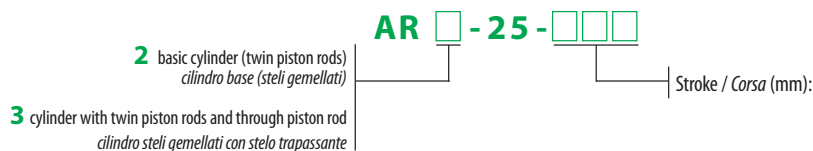
PRECAUTIONS BEFORE USE / RACCOMANDAZIONI PER L'INSTALLAZIONE

- Avoid impacts and abrasion of piston rods, or else the correct functioning of the anti-rotation cylinder can be endangered by uneven wear of the bearings or seals.
- Lubrication is not necessary, but if it is provided, use only ISO VG 32 oil. Do not use engine oil or spindle oil.
- Before each pneumatic connection, clean tubes and fittings carefully.
- Evitare urti ed abrasioni degli steli, in caso contrario si comprometterebbe il buon funzionamento della stessa con anomale usure dei cuscinetti e delle guarnizioni.
- La lubrificazione non è necessaria, ma se prevista usare olio ISO VG 32. Non usare olio per motori o per mandrini.
- Prima di ogni collegamento pneumatico pulire accuratamente tubi e raccordi.



SERIE **AR2 - AR3**

TWIN PISTON RODS PNEUMATIC CYLINDERS Ø25 CILINDRI ANTIROTAZIONE A STELI GEMELLATI Ø25



Bore Alésaggio	Standard stroke / Corse Standard						
25	25	50	80	100	125	160	200 250
	•	•	•	•	•	•	•

TECHNICAL FEATURES

Heads	Aluminium alloy.
Piston rods	Stainless steel X5CrNi 1810.
Barrel	Anodized aluminium.
Seals	NBR rubber.
Cushioning	Mechanical.

Environment temperature range	-10 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	filtered air.
Max operating pressure	10 bar.

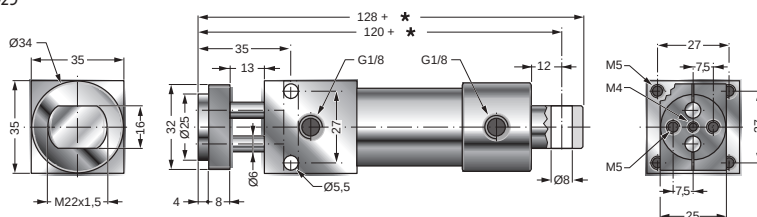
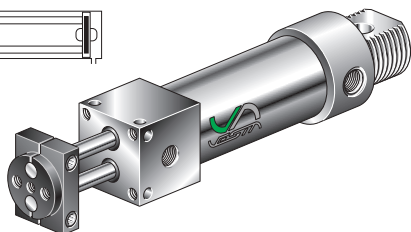
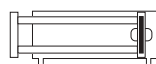
CARATTERISTICHE TECNICHE

Testate	Lega di alluminio.
Steli	Acciaio inox X5CrNi 1810.
Camicia	Alluminio anodizzato.
Guarnizioni	Tutte in NBR con profili antiusura e prelubrificate.
Ammortizzatori	Meccanici.

Temperatura ambiente	-10 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.

AR2-25-...

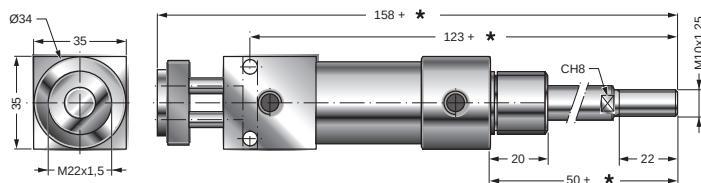
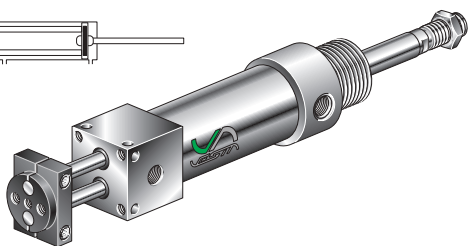
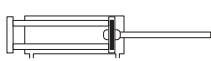
TWIN PISTON RODS BASIC CYLINDER; Ø25
CILINDRO BASE STELI GEMELLATI; Ø25



* = Stroke / Corsa

AR3-25-...

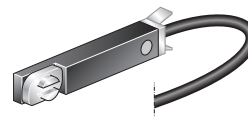
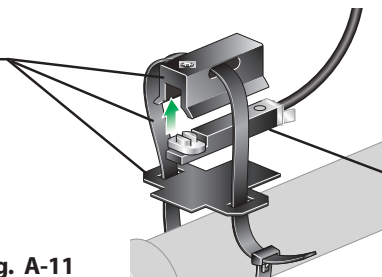
TWIN PISTON RODS+THROUGH PISTON ROD; Ø25
CILINDRO STELI GEMELLATI E PASSANTE; Ø25



* = Stroke / Corsa

MAGNETIC SWITCHES FOR Ø 25 mm CYLINDER / FINECORSA MAGNETICI PER CILINDRI Ø 25 mm

FFS 01 VN



For magnetic switches features see:
Caratteristiche finecorsa magnetici vedi:

VNCR2, VNPR2, VNCE3, VNPE3. Pag. A-19

Instruction for mounting see:
Per le istruzioni di montaggio vedi: **Pag. A-11**

TWIN PISTON RODS PNEUMATIC CYLINDERS CILINDRI ANTIROTAZIONE A STELI GEMELLATI

SERIE **AW2** - **AW3** - **AW4**

2 basic cylinder (twin piston rods)
cilindro base steli gemellati

3 cylinder with twin piston rods and through piston rod
cilindro steli gemellati con stelo trapassante

4 cylinder with twin piston rods and two through piston rods
cilindro steli gemellati con due steli trapassanti

AW - - - -

Bore / Alesaggio (mm):

Ø32 **32**;
Ø40 **40**;
Ø50 **50**;
Ø63 **63**;
Ø80 **80**;
Ø100 **100**.

Stroke
Corsa
(mm):

Bore Alesaggio	25	50	80	100	125	160	200	250	300	350	400	450	500
32	•	•	•	•	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•	•	•	•	•

Standard stroke / Corse Standard

Features of reed switches see:
Caratteristiche finecorsa magnetici: **Pag. A-19.**

TECHNICAL FEATURES

Heads Aluminium alloy.
Piston rods Stainless steel X20 Cr 13.
Barrel Extruded profiled aluminium tube.
Seals NBR rubber and polyurethane.
Cushioning Pneumatic adjusting cushions.

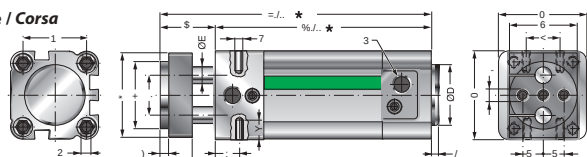
Environment temperature range -10 °C ÷ +80 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium filtered air.
Max operating pressure 10 bar.

CARATTERISTICHE TECNICHE

Testate Lega di alluminio.
Steli Acciaio inox X20 Cr 13.
Camicia Tubo profilato ed anodizzato d' alluminio.
Guarnizioni In NBR e poliuretano.
Ammortizzatori Pneumatici regolabili progressivi.

Temperatura ambiente -10 °C ÷ +80 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

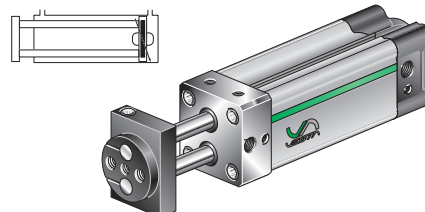
* = Stroke / Corsa



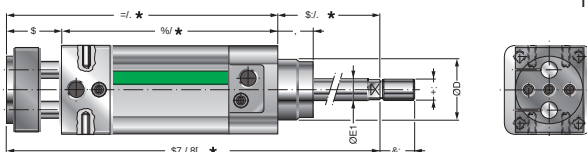
TWIN PISTON RODS BASIC CYLINDER
CILINDRO BASE STELI GEMELLATI

AW2 - ... - ...

Bore Alesaggio	A	B	C	ØD	ØE	F	G	ØH	ØI	L	M	N	ØO	ØP	R	S	ØT	V	W	X	Y	Z	K
32	26	102	15	30	8	4	40	32	M6	4	45	32,5	M6	G1/8	9,5	32	M5	10	11	15	16	128	18
40	30	112	15	35	10	4	45	40	M8	4	55	38	M6	G1/4	11,5	40	M6	10	15	17,5	21	142	21
50	34	117	18	40	12	5	55	50	M8	4	65	46,5	M8	G1/4	15	50	M8	12	16	16	24	151	26
63	36	124	22	45	16	5	70	63	M10	4	80	56,5	M8	G3/8	19	63	M8	12	14	18	33	160	35
80	38	136	22	45	20	5	95	80	M12	4	100	72	M10	G3/8	25	80	M10	18	16	19	40	174	46
100	38	143	22	55	20	5	115	100	M12	4	115	89	M10	G1/2	35	100	M10	18	16	19	58	181	70



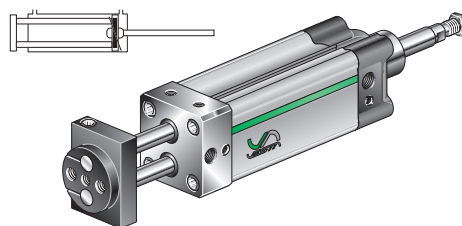
* = Stroke / Corsa



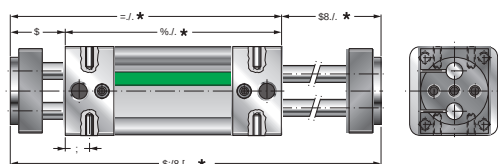
TWIN PISTON RODS CYLINDER+THROUGH PISTON ROD
CILINDRO STELI GEMELLATI+STELO TRAPASSANTE

AW3 - ... - ...

Bore Alesaggio	A	A1	A3	B	C1	CH	ØD	ØE1	I	ØH1
32	26	26	154	102	20	10	30	12	18	M10x1,25
40	30	30	172	112	24	13	35	16	21,5	M12x1,25
50	34	37	188	117	32	17	40	20	28	M16x1,5
63	36	37	197	124	32	17	45	20	28,5	M16x1,5
80	38	46	220	136	40	21	45	25	34,5	M20x1,5
100	38	51	232	143	40	25	55	30	38	M20x1,5



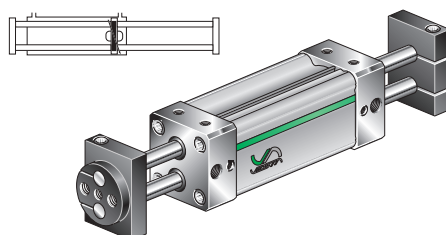
* = Stroke / Corsa



CYLINDER THROUGH TWIN PISTON RODS
CILINDRO STELI GEMELLATI PASSANTI

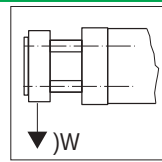
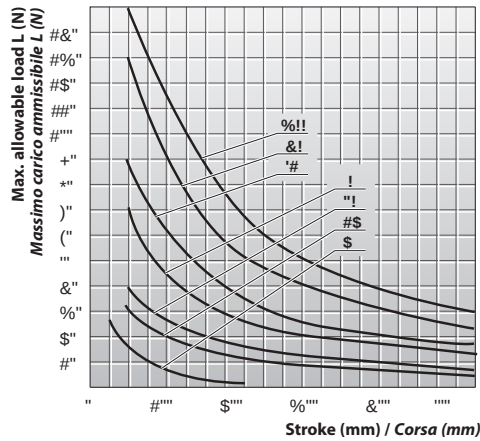
AW4 - ... - ...

Bore Alesaggio	A	A2	A4	B	X	Z
32	26	26	154	102	15	128
40	30	30	172	112	17,5	142
50	34	34	185	117	16	151
63	36	36	196	125	18	160
80	38	38	212	136	19	174
100	38	38	219	143	19	181

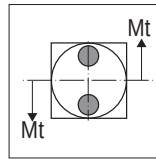




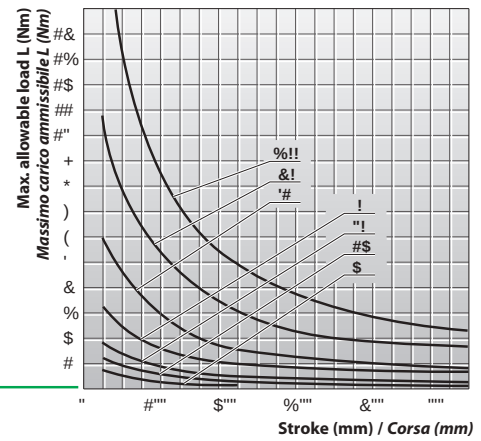
TRANSVERSE FORCE GRAPH AND TORQUE GRAPH AW2 SERIES DIAGRAMMI DI FLESSIONE E MOMENTO TORCENTE SERIE AW2



Transverse force
Flessione

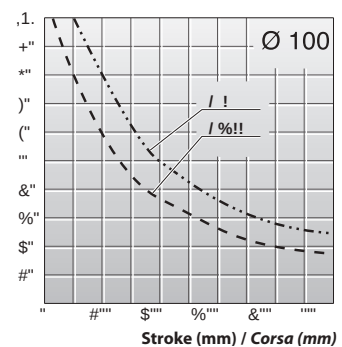
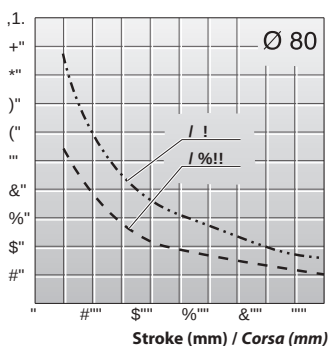
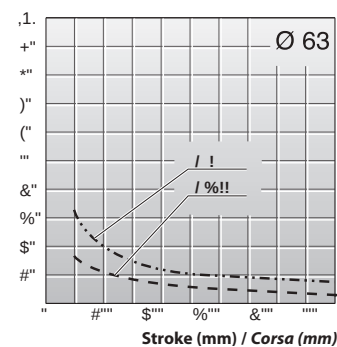
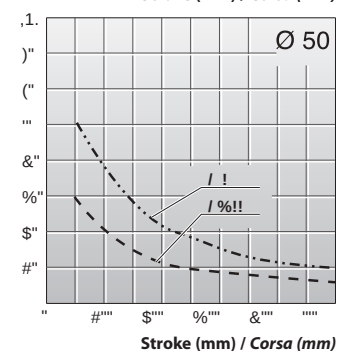
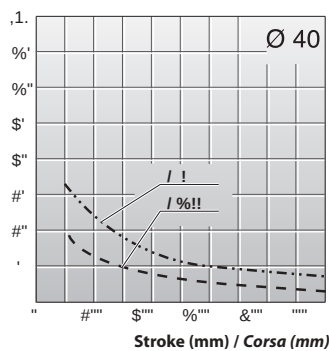
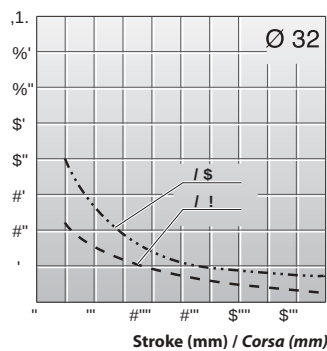
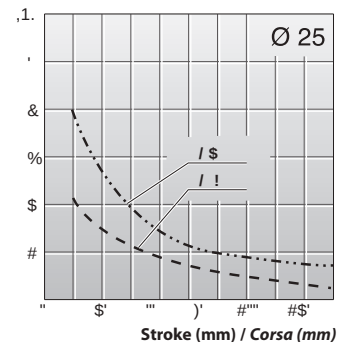
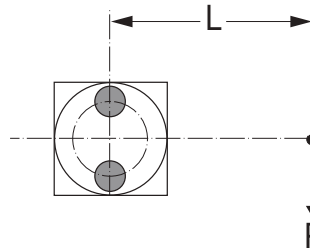


Torque moment
Momento torcente



BENDINGS MOMENTS GRAPH AW2 SERIES DIAGRAMMI DI FLESSOTORSIONE SERIE AW2

Maximum allowable load F (N)
Massimo carico F (N)



FIXING ACCESSORIES FOR AW2, AW3 AND AW4 CYLINDER / ACCESSORI DI FISSAGGIO PER CILINDRI AW2, AW3 E AW4

For fixing accessories on double piston roded units, please contact our technical sales department.
The accessories can be mounted on the profiled tube or on the end-caps using standard fixings, see pp. **A-22 ÷ A-26**.

*Per i fissaggi da applicare alla testata a doppio stelo si prega di consultare il nostro ufficio tecnico-commerciale.
I fissaggi che possono essere montati sulla camicia o sulla testata posteriore sono fissaggi standard specificati a pp. **A-22 ÷ A-26**.*

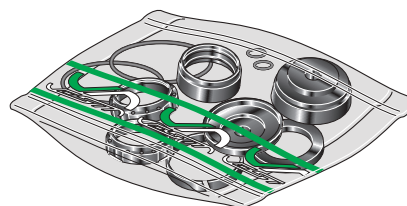
SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

..... - SG

Seals kit code = **Antirotation cylinder code + Bore + - SG:**
(The kit includes all seals).

Codice del kit = **Codice del cilindro antirotazione + Alesaggio + - SG:**
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **AW3 50 - SG**





SERIE **AW6 - AW8**

TRIPLE PISTON RODS PNEUMATIC ANTIROTATION CYLINDERS CILINDRI ANTIROTAZIONE PNEUMATICI A TRIPLO STELO

AW - -

6 triple piston rods antirotation cylinder
cilindro base antirotazione a 3 steli

8 triple piston rods cylinder
with through piston rod
cilindro antirotazione a 3 steli
con stelo trapassante

Bore / Alesaggio
(mm):

Ø32 **32**;
Ø40 **40**;
Ø50 **50**;
Ø63 **63**.

Stroke / Corsa (mm):

Features of reed switches see:
Caratteristiche finecorsa magnetici: **Pag. A-19.**

Standard stroke / Corse Standard		25	50	100	160	200	250	300	350	400	450	500
Bore Alesaggio		32	•	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•	•	•	•	•

TECHNICAL FEATURES

End caps Aluminium alloy.
Piston rods Stainless steel X20 Cr 13.
Barrel Extruded profiled aluminium tube.
Seals NBR rubber and polyurethane.

Cushioning Micrometric control.
Environment temperature range -10 °C ÷ +80 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium filtered air.
Max operating pressure 10 bar.

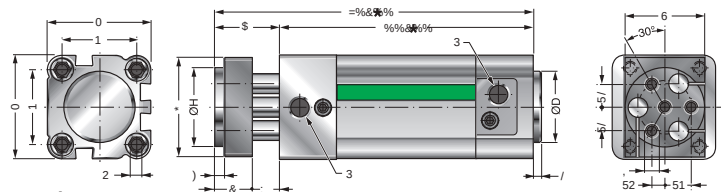
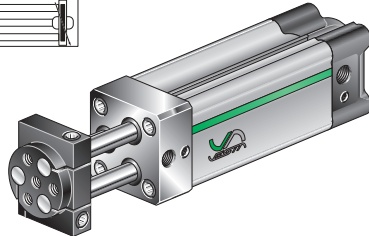
CARATTERISTICHE TECNICHE

Testate Lega di alluminio.
Steli Acciaio inox X20 Cr 13.
Camicia Tubo profilato ed anodizzato d' alluminio.
Guarnizioni In NBR e poliuretano.

Ammortizzatori Con regolazione micrometrica.
Temperatura ambiente -10 °C ÷ +80 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

AW6-...-...

TRIPLE PISTON RODS BASIC CYLINDER
CILINDRO BASE CON 3 STELI

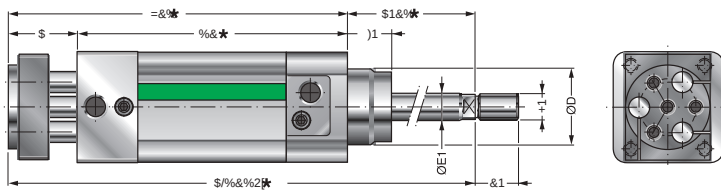
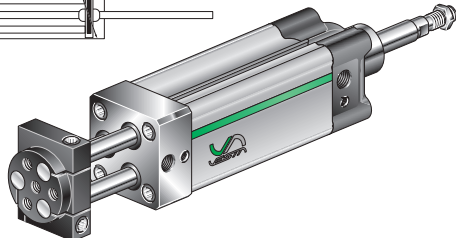
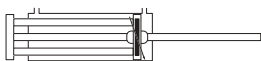


* = Stroke / Corsa

Bore Alesaggio	A	B	C	ØD	F	G	ØH	ØI	L	M	N	ØO	ØP	R1	R2	R3	S	W	Z	Stems diameter Diametro steli
32	26	102	15	30	4	40	32	M6	4	45	32,5	M6	G1/8	10	5	8,7	40	11	128	8
40	30	112	15	35	4	45	40	M8	4	55	38	M6	G1/4	12,5	6,3	9,3	40	15	142	12
50	34	117	18	40	5	55	50	M8	4	65	46,5	M8	G1/4	15,5	7,8	13,4	50	16	151	12
63	36	124	22	45	5	70	63	M10	4	80	56,5	M8	G3/8	19	9,5	15,2	63	14	160	16

AW8-...-...

TRIPLE PISTON RODS + THROUGH PISTON ROD
CILINDRO CON 3 STELI E STELO TRAPASSANTE



* = Stroke / Corsa

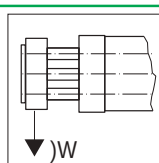
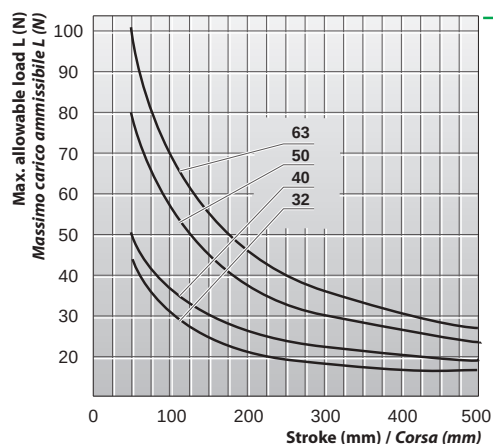
Bore Alesaggio	A	A1	A3	B	C1	CH	ØD	ØE1	F1	H1	Z
32	26	26	154	102	20	10	30	12	18	M10x1,25	128
40	30	30	172	112	24	13	35	16	21,5	M12x1,25	142
50	34	37	194	117	32	17	40	20	28	M16x1,5	151
63	36	37	197	124	32	17	45	20	28,5	M16x1,5	160

FIXING ACCESSORIES FOR AW6 AND AW8 CYLINDER / ACCESSORI DI FISSAGGIO PER CILINDRI AW6 E AW8

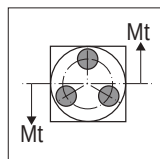
For fixing accessories mounting on triple piston rods end-cap, please contact our technical sales department.
The accessories can be mounting on profiled tube or rear end-cap used standard fixing, see pp. **A-22 ÷ A-26.**

Per i fissaggi da applicare alla testata a triplo stelo si prega di consultare il nostro ufficio tecnico-commerciale.
I fissaggi che possono essere montati sulla camicia o sulla testata posteriore sono fissaggi standard specificati a pp. **A-22 ÷ A-26.**

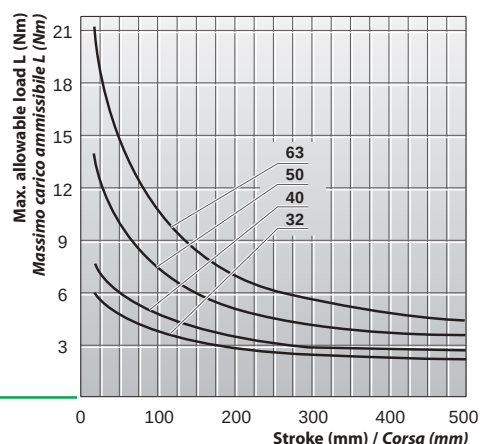
TRANSVERSE FORCE AND TORQUE GRAPHS AW6 AND AW8 SERIES CYLINDERS DIAGRAMMI FLESSIONE E MOMENTO TORCENTE CILINDRI SERIE AW6 E AW8



Transverse force
Flessione



Torque moment
Momento torcente



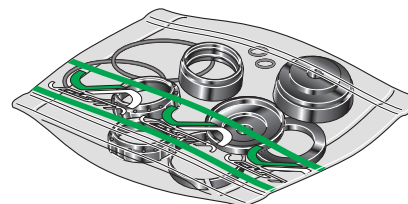
SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

..... - SG

Seals kit code = **Antirotation cylinder code + Bore + - SG:**
(The kit includes all seals).

Codice del kit = **Codice del cilindro antirotazione + Alesaggio + - SG:**
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **AW8 50 - SG**





SERIE **AW1 - AW5 - AW7**

HOLED TELESCOPIC PISTON RODS CYLINDERS CILINDRI A STELI CAVI

- AW** - -
- 1 cylinder with holed telescopic piston rod
cilindro con stelo cavo passante interno
- 5 twin holed telescopic piston rods cylinder
cilindro antirotazione con 2 steli gemellati cavi
- 7 triple holed telescopic piston rods cylinder
cilindro antirotazione con 3 steli cavi
- Bore / Alesaggio (mm):
Ø32 **32**;
Ø40 **40**;
Ø50 **50**;
Ø63 **63**.
- Stroke / Corsa (mm):

Features of reed switches see:
Caratteristiche finecorsa magnetici: **Pag. A-19.**

TECHNICAL FEATURES

End caps Aluminium alloy.
Piston rod Chromium-plated and rectified steel.
Barrel Extruded profiled aluminium tube.
Seals NBR rubber and polyurethane.

Cushioning Micrometric control.
Environment temperature range -10 °C ÷ +80 °C.
Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium filtered air.
Max operating pressure 10 bar.

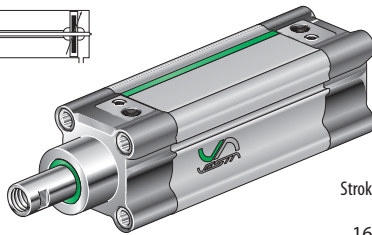
CARATTERISTICHE TECNICHE

Testate Lega di alluminio.
Stelo Acciaio cromato rettificato.
Camicia Tubo profilato ed anodizzato d' alluminio.
Guarnizioni In NBR e poliuretano.

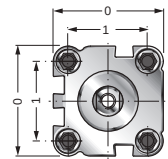
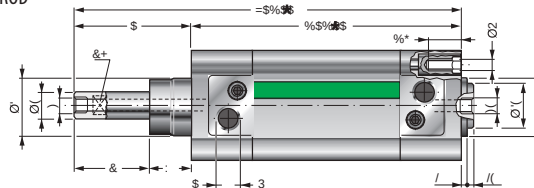
Ammortizzatori Con regolazione micrometrica.
Temperatura ambiente -10 °C ÷ +80 °C.
Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione max d'esercizio 10 bar.

AW1-...-...

SINGLE HOLED TELESCOPIC PISTON ROD CILINDRO STELO CAVO TELESCOPICO



Stroke / Corsa (mm):
25, 50, 100,
160, 200, 300.

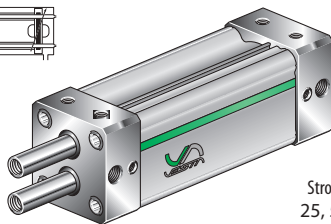
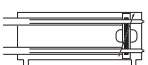


* = Stroke / Corsa

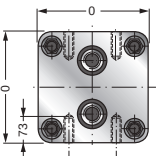
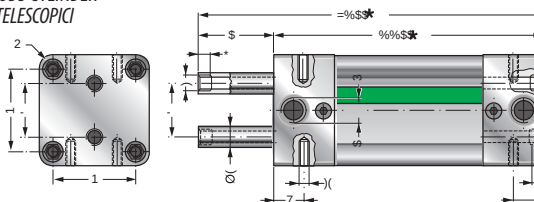
Bore Alesaggio	A	B	BG	C	CH	ØD	ØD1	ØE	F	F1	L	L1	M	N	ØO	ØP	W	Z
32	37	94	15	19	11	30	24	27	12	G1/8	G1/8	4	45	32,5	M6	G1/8	18	131
40	40	105	15	18,5	14	35	35	16	G1/4	G1/8	4	5	54	38	M6	G1/4	21,5	145
50	41	106	15	13	18	40	40	20	G3/8	G1/8	4	5	64	46,5	M8	G1/4	28	147

AW5-...-...

TWIN HOLED TELESCOPIC PISTON RODS CYLINDER CILINDRO A 2 STELI GEMELLATI CAVI TELESCOPICI



Stroke / Corsa (mm):
25, 50, 100, 160,
200, 250, 300.

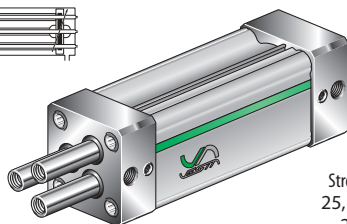


* = Stroke / Corsa

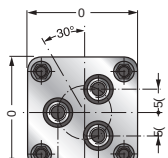
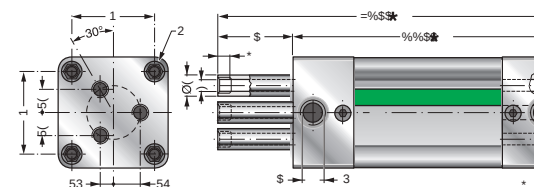
Bore Alesaggio	A	B	D	ØE	ØF1	ØF	G	M	N	ØO	ØP	T	T1	T2	Z
40	40	125	21	12	G1/8	G1/8	8	55	38	M6	G1/4	17	21	10	165
50	40	136	28	16	G1/4	G1/4	11	65	46,5	M8	G1/4	18	24	12	176
63	40	133	35	16	G1/4	G1/4	11	80	56,5	M8	G3/8	18	33	14	173

AW7-...-...

TRIPLE HOLED TELESCOPIC PISTON RODS CYLINDER CILINDRO A 3 STELI GEMELLATI CAVI TELESCOPICI



Stroke / Corsa (mm):
25, 50, 100, 160,
200, 250, 300.



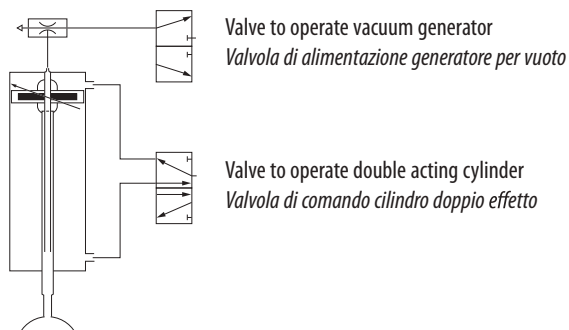
* = Stroke / Corsa

Bore Alesaggio	A	B	ØE	F	G	M	N	O	P	R1	R2	R3	Z
40	40	125	12	G1/8	8	55	38	M6	G1/4	9,3	5,4	10,8	165
50	40	135	12	G1/8	8	65	46,5	M8	G1/4	13,4	7,75	15,5	175
63	40	133	16	G1/4	11	80	56,5	M8	G3/8	15,2	8,75	17,5	173

EXAMPLE OF APPLICATION HOLED CYLINDERS **AW1, **AW5**, **AW7** AND GRIPPERS SERIES **MH****
ESEMPIO DI IMPIEGO DEI CILINDRI CAVI SERIE **AW1, **AW5**, **AW7** E MANI DI PRESA SERIE **MH****

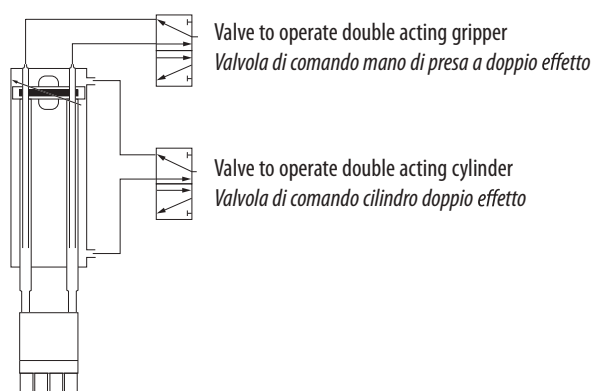
EXAMPLE OF APPLICATION
ESEMPIO DI IMPIEGO

AW1... +



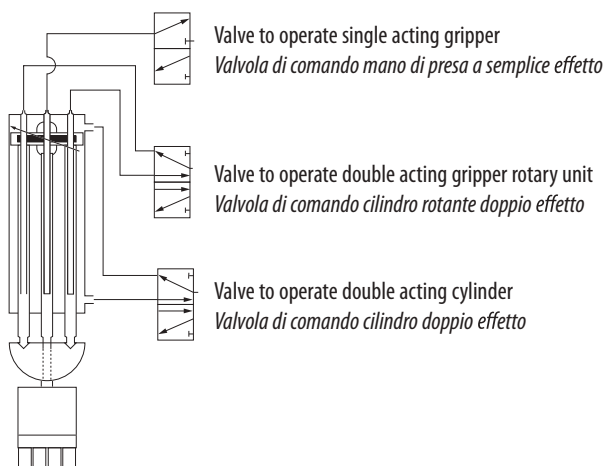
EXAMPLE OF APPLICATION
ESEMPIO DI IMPIEGO

AW5... + MH...



EXAMPLE OF APPLICATION
ESEMPIO DI IMPIEGO

AW7... + MH...



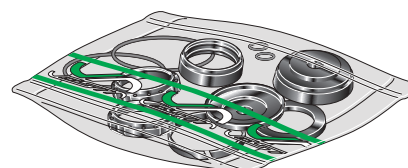
For further information about special application, please contact our technical sales office
Per altre applicazioni delle mani di presa o assemblaggi di componenti speciali contattare il nostro ufficio tecnico commerciale

SEALS KIT
 KIT GUARNIZIONI DI RICAMBIO **..... - SG**

Seals kit code = **Holed piston rods cylinder code + Bore + - SG:**
 (The kit includes all seals).

Codice del kit = **Codice del cilindro steli cavi + Alesaggio + - SG:**
 (Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **AW7 50 - SG**





SERIE HNG

PROFILE COMPACT GUIDE PNEUMATIC CYLINDERS CILINDRI PNEUMATICI COMPATTI GUIDATI A PROFILO

HNG

Bore / Alesaggio
(mm):

Ø16 16
Ø20 20
Ø25 25
Ø32 32
Ø40 40
Ø50 50
Ø63 63

Stroke / Corsa
(mm):

Bore Alesaggio	10	20	25	30	40	50	75	100	125	150	175	200
16												
20												
25												
32												
40												
50												
63												

BS with brass bearing
con bronzine a strisciamento

BB with ball bushing
con cuscinetti a ricircolo di sfere

- The new compact magnetic cylinder **HNG** series is made for demanding applications with guiding system in chromium plate steel on brass bushes bearing or hardened steel with ball bushing bearing. They offer a high resistance event if non axial loads are applied while a good sliding is assured (see tables feature). **HNG** series is very versatile in fixing system, as it is made to offer many ways to fit directly to the machine.

- La nuova serie **HNG** di cilindri magnetici compatti guidati è concepita per impieghi gravosi, con aste di guida in acciaio cromato guidate su bronzine autolubrificanti o con aste di guida in acciaio temprato guidate su bocche a ricircolazione di sfere. Offrono grande resistenza anche a sforzi non assiali, mantenendo adeguata scorrevolezza. Offrono inoltre grande versatilità di fissaggio per accoppiamento diretto su macchina in quanto provvisti di forature di fissaggio su vari lati.

TECHNICAL FEATURES

Cylinder body	Anodized aluminium.
Seals	Poliurethan
Piston rod	C40 chromium plated
Guiding stems	C45 chromium plated steel for BS series C45 chromium plated hardened steel for BB series

Environment temperature range	-20 ÷ +80 °C
Temperature range of medium	0 ÷ +40 °C
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	10 bar.

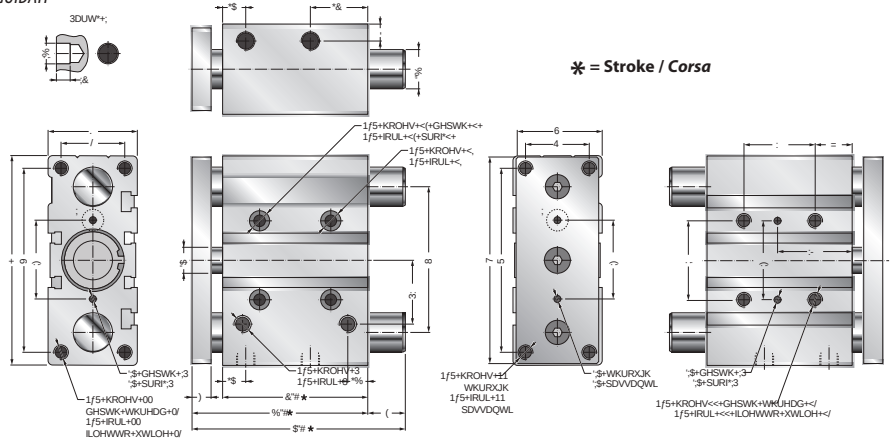
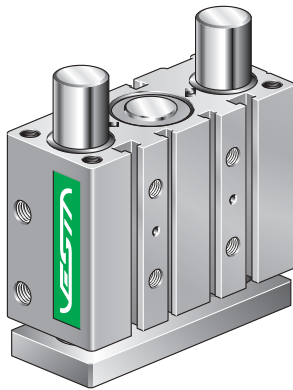
CARATTERISTICHE TECNICHE

Corpo cilindro	Alluminio anodizzato.
Guarnizioni	Tutte in poliuretano
Stelo	Acciaio C40 cromato
Aste di guida	Acciaio C45 cromato per serie BS Acciaio C45 cromato e temprato per serie BB

Temperatura ambiente	-20 °C ÷ +80 °C
Temperatura fluido	0 °C ÷ +40 °C
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	10 bar.

HNG

COMPACT GUIDE PNEUMATIC CYLINDERS
CILINDRI PNEUMATICI COMPATTI GUIDATI



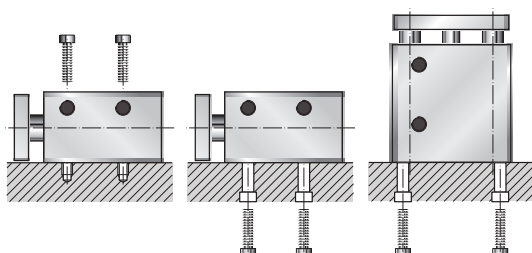
* = Stroke / Corsa

Ø	B	C	DA	F	GA	GB	GC	H	J	K	L	MM	ML	NN	P	PW	Q	R	S	T	U	V	X	YY	YL	YE	YH	YI	Z	XF	XA	XP	XB	XC
16	46	33	8	8	11	8	18	64	5	30	22	M5	12	M5	M5	19	16	54	25	62	46	56	24	M5	10	8	4,5	4,3	5	24	3	6	3,5	3
20	53	37	10	10	10,5	8,5	24,5	83	6,5	36	24	M5	13	M5	G1/8	25	18	70	30	81	54	72	28	M6	12	9,5	5,5	5,6	17	28	3	6	3,5	3
25	53,5	37,5	10	10	11,5	9	25	93	7,5	42	30	M6	15	M6	G1/8	28,5	26	78	38	91	64	82	34	M6	12	9,5	5,5	5,6	17	34	4	6	4,5	3
32	59,5	37,5	12	12	12,5	9	30,5	112	9	48	34	M8	20	M8	G1/8	34	30	96	44	110	78	98	42	M8	16	11	7,5	6,6	21	42	4	6	4,5	3
40	66	44	12	12	14	10	31	120	9	54	40	M8	20	M8	G1/8	38	30	104	44	118	86	106	50	M8	16	11	7,5	6,6	22	50	4	6	4,5	3
50	72	44	16	16	14	11	35	148	9,5	64	46	M10	22	M10	G1/4	47	40	130	60	146	110	130	66	M10	20	14	9	8,6	24	66	5	8	6	4
63	77	49	16	16	16,5	13,5	35	162	11	78	58	M10	22	M10	G1/4	55	50	130	70	158	124	142	80	M10	20	14	9	8,6	24	80	5	8	6	4

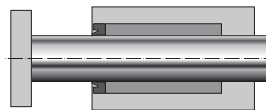
		Sintered bronze Bussole sinterizzate					Ball bushing Manicotti a ricircolo di sfere					Dimensions W - W1 Dimensioni W - W1								
Ø	DB	A Stroke/Corsa		E Stroke/Corsa		DB	A Stroke/Corsa		E Stroke/Corsa		W Stroke/Corsa				W1 Stroke/Corsa					
16	10	46	64,5	0	18,5	8	46	66	0	20	24	44			17	27				
20	12	10÷50	75÷100	10÷50	75÷100	12	10÷30	40÷100	10÷30	40÷100	10÷30	40÷100			10÷30	40÷100				
		53	84,5	0	31,5		53	85,5	0	32,5	24	44	120	29	39	77				
25	16	20÷50	75÷200	20÷50	75÷200	12	20÷30	40÷200	20÷30	40÷200	20÷30	40÷100	125÷200		20÷30	40÷100	125÷200			
		53,5	85	0	31,5		53,5	86	0	32,5	24	44	120	29	39	77				
32	20	20÷50	75÷200	20÷50	75÷200	20	20÷30	40÷200	20÷30	40÷200	20÷30	40÷100	125÷200		20÷30	40÷100	125÷200			
		97	107	37,5	47,5		97	107	37,5	47,5	24	48	124	33	45	83				
40	20	25÷50	75÷200	25÷50	75÷200	20	25÷50	75÷200	25÷50	75÷200	25	50÷100	125÷200		25	50÷100	125÷200			
		97	107	31	41		97	107	31	41	24	48	124	34	46	84				
50	25	25÷50	75÷200	25÷50	75÷200	25	25÷50	75÷200	25÷50	75÷200	25	50÷100	125÷200		25	50÷100	125÷200			
		106,5	118	34,5	46		106,5	114	118	34,5	42	46	24	48	124	36	48	86		
63	25	25÷50	75÷200	25÷50	75÷200	25	25	50	75÷200	25	50	75÷200	25	50÷100	125÷200		25	50÷100	125÷200	
		106,5	118	29,5	41		106,5	114	118	29,5	37	41	28	52	128	38	50	88		
		25÷50	75÷200	25÷50	75÷200		25	50	75÷200	25	50	75÷200	25	50÷100	125÷200		25	50÷100	125÷200	

WORKING PRINCIPLE FOR HNG / PRINCIPIO DI FUNZIONAMENTO PER HNG

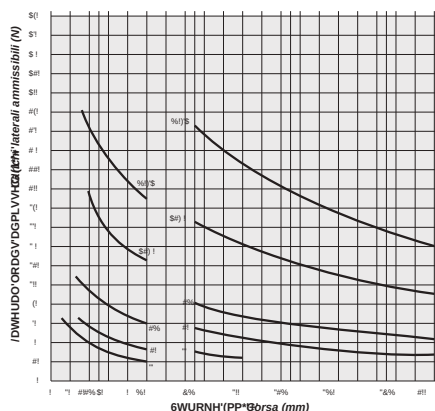
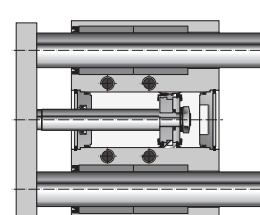
System of assembly / Sistema di montaggio



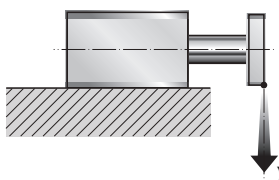
Strokes ≤ 50mm / Corsa ≤ 50mm



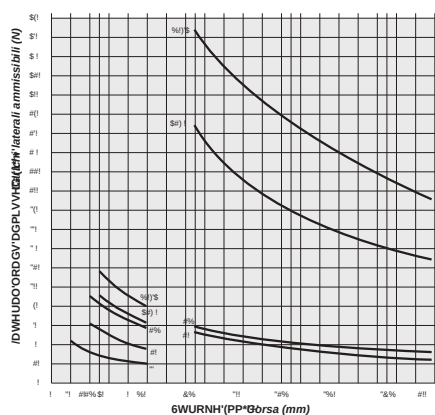
Strokes > 50mm / Corsa > 50mm



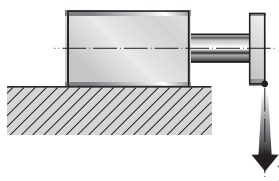
LATERAL LOADS ALLOWED WITH SELF-LUBRICATING SINTERED BRONZE CARICHI LATERALI AMMISSIBILI CON BUSSOLE AUTOLUBRIFICANTI



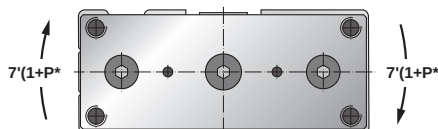
Load / Carico (N)	Strokes / Corsa															
	10	20	25	30	40	50	75	100	125	150	175	200				
16	56	40		30	25	21	30	24								
20		57		46	38	33	55	45	38	33,5	30	27				
25			93	78	68	60	81	67	60	54	48	43				
32				170		125	166	142	124	110	99	90				
40					170		125	166	142	124	110	99	90			
50						250	190	265	227	197	177	156	141			
63							250	190	265	227	197	177	156	141		



LATERAL LOADS ALLOWED WITH RECIRCULATING BALL BUSHING CARICHI LATERALI AMMISSIBILI CON MANICOTTI A RICIRCOLO DI SFERE



Load / Carico (N)	Strokes / Corsa															
	10	20	25	30	40	50	75	100	125	150	175	200				
16	44	34		27	23	21										
20		62		50	42	36	53	42	36	31	27	25				
25			94	79	68	60	59	50	43	39	35	33				
32				84		58	270	213	180	159	142	130				
40					92		64	270	213	180	159	142	130			
50						117	81	370	312	275	243	216	193			
63							117	81	370	312	275	243	216	193		



Torque / Momento (Nm)

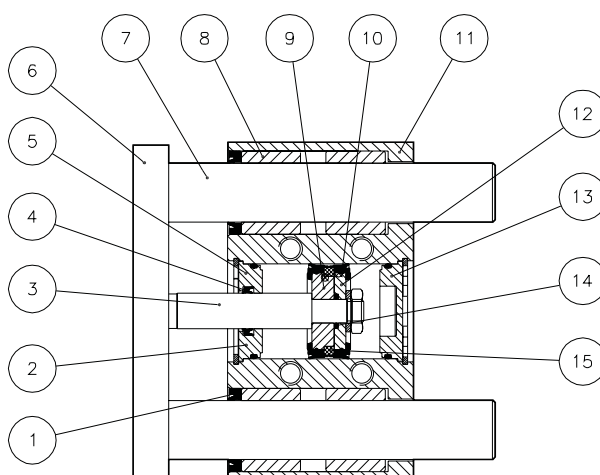
Ø	With self-lubricating sintered bronze Con bussole autolubrificanti															
	Strokes / Corsa															
	10	20	25	30	40	50	75	100	125	150	175	200				
16	0,65	0,51		0,42	0,36	0,32										
20		0,99		0,84	0,71	0,64	0,97	0,78	0,63	0,54	0,48	0,43				
25			1,98	1,67	1,45	1,28	1,73	1,43	1,31	1,18	1,05	0,94				
32				4,10		3,19	3,97	3,36	2,46	2,20	2,00	1,84				
40					4,51	3,51	4,38	3,70	2,46	2,20	2,00	1,84				
50						6,60	5,19	6,68	5,72	4,68	4,25	3,88	3,50			
63							6,60	5,19	6,68	5,72	4,68	4,25	3,88	3,50		

TORQUE - MOMENTO TORCENTE

Ø	With recirculating ball bushing Con manicotti a ricircolo di sfere															
	Strokes / Corsa															
	10	20	25	30	40	50	75	100	125	150	175	200				
16	0,83	0,65		0,52	0,44	0,40										
20		1,20		0,96	0,81	0,69	1,02	0,93	0,82	0,71	0,64	0,58				
25			2,00	1,69	1,45	1,28	1,26	1,09	0,98	0,87	0,79	0,70				
32				2,04		1,41	6,58	5,19	4,49	3,87	3,58	3,17				
40					2,47	1,72	7,25	5,72	4,49	3,87	3,58	3,17				
50						3,22	2,22	10,17	8,58	7,75	6,86	5,99	5,30			
63							3,22	2,22	10,17	8,58	7,75	6,86	5,99	5,30		



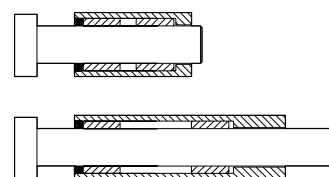
COMPONENTS/COMPONENTI



N°	Description/descrizione	Material/materiale
1	Wiperod seal/guarnizione asta	NBR
2	O-ring/	NBR
3	Rod/stelo	Steel C40 chromed/acciaio C40 cromato
4	Rod seal/guarnizione stelo	Polyurethane/poliuretano
5	Front cap/testata anteriore	Alluminium/alluminio
6	Plate/piastra	Nickel steel/acciaio nichelato
7	Guide rod/asta guida	Steel C40 chromed/acciaio C40 cromato Steel C40 tempered/acciaio C40 temprato
8	Slide bearing/bronzine	Bronze/bronzo Steel/acciaio
9	Semipiston/semipistone	Alluminium/alluminio
10	Seal piston/guarnizione pistone	Polyurethane/poliuretano
11	Body cylinder/corpo slitta	Alluminium/alluminio
12	Semipiston/semipistone	Alluminium/alluminio
13	Rear cap/testata posteriore	Alluminium/alluminio



All sizes and all strokes, have n°4 slide bearing
Tutti gli alesaggi e tutte le corse hanno n°4 bussole in bronzo.



SEALS KIT
KIT DI GUARNIZIONI DI RICAMBIO

..... - SG

SEALS KIT FOR SLIDE BEARINGS VERSION BS
KIT DI GUARNIZIONI PER LA VERSIONE CON BRONZINE BS

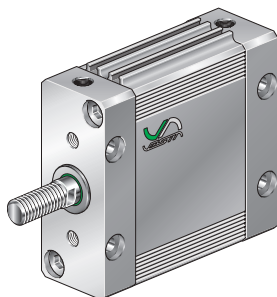
HNG - Ø - BS SG

SEALS KIT FOR BALL BUSHINGS VERSION BB
KIT DI GUARNIZIONI PER LA VERSIONE CON CUSCINETTI A SFERE BB

HNG - Ø - BB SG

SERIE NCV 63

FLAT CYLINDERS CILINDRI PIATTI



NCV 63



Stroke
Corsa
(mm)

**With magnetic piston
Con pistone magnetico**

Features of reed switches see:
Caratteristiche finecorsa magnetici:
Pag. A-19.

VS High temperature (-25°C / + 120 °C)
HT Polyurethane rod seal
Guarnizione dello stelo in Poliuretano per alte temperature (-25 °C / + 120 °C)

P Through rod cylinder
Cilindro stelo passante
TN2 Multi Thrust tandem cylinder
Cilindro Tandem multispinta
AR No rotating cylinder
Cilindro Antirotazione

Vesta introduces new flat NCV-63 series cylinder to meet applications when both thrust and reduced dimensions are needed. High quality components, high precision machining and treatments grant reliability and high performances together with long lasting life of cylinders. Compact and robust, it is most used in welding plants, packaging machines and linear motion applications.

Vesta presenta il nuovo cilindro serie NCV-63 piatto a sezione ovale per soddisfare applicazioni dove la necessità di forza si unisce ad esigenze di ingombri ridotti o di antirotazione. Di costruzione robusta e compatta, garantisce lunga durata e prestazioni elevate, grazie a lavorazioni di precisione ad alta scelta di componenti di grande qualità ed affidabilità. Trova grande impiego nei sistemi ed impianti di saldatura a punti, di movimentazione lineare e in macchine ed attrezzature settore packaging.

TECHNICAL FEATURES

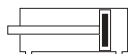
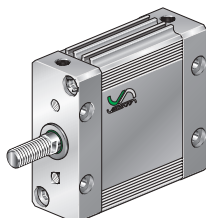
Piston rod	Stainless steel
Seals	Polyurethane piston rod, NBR piston seals
Lubrication	Not required.
Medium	Filtered air.
Cushioning	Mechanical buffers at end of strokes.

CARATTERISTICHE TECNICHE

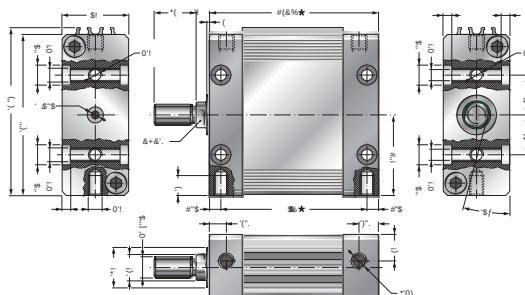
Stelo	Acciaio inox
Guarnizioni	Stelo in Poliuretano, pistone in NBR
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Ammortizzatori	Smorzatori d'urto di fine corsa.

NCV 63

FLAT CYLINDERS CILINDRI PIATTI

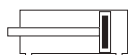
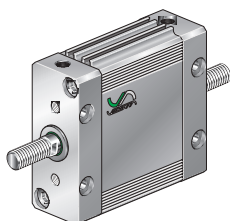


* = Stroke / Corsa

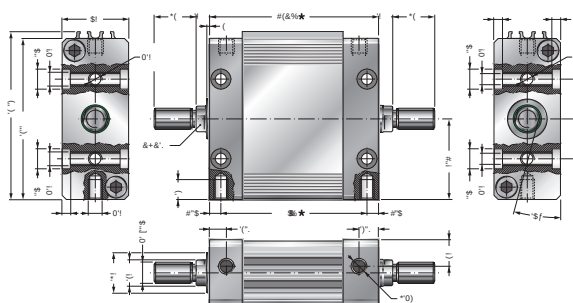


NCV 63 P

THROUGH ROD FLAT CYLINDERS CILINDRI PIATTI STELO PASSANTE

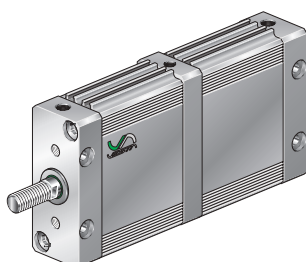


* = Stroke / Corsa

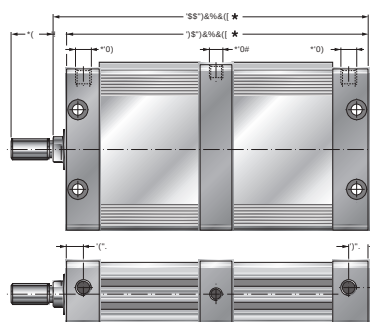


NCV 63 TN2

MULTI THRUST TANDEM FLAT CYLINDERS CILINDRI PIATTI TANDEM MULTISPINTA



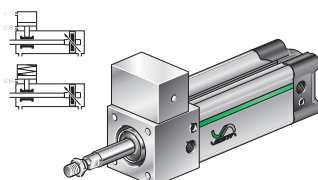
* = Stroke / Corsa





INDEX / INDICE

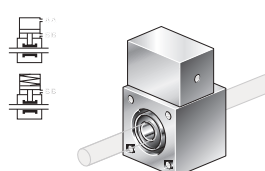
PISTON ROD BRAKING DEVICE / DISPOSITIVO DI BLOCCAGGIO DELLO STELO



RW. ...

PNEUMATIC CYLINDER WITH PISTON-ROD BRAKE DEVICE, SINGLE OR DOUBLE ACTING
CILINDRO PNEUMATICO CON DISPOSITIVO DI BLOCCAGGIO DELLO STELO, A SEMPLICE E DOPPIO EFFETTO

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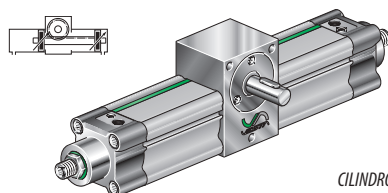


DC. ...

BRAKING DEVICE
SINGLE ACTING OR DOUBLE ACTING
DISPOSITIVO DI BLOCCAGGIO
A SEMPLICE O DOPPIO EFFETTO

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ROTARY CYLINDERS / CILINDRI ROTANTI

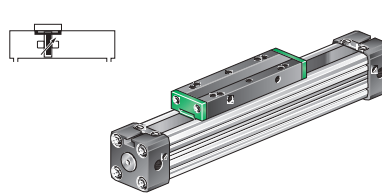


CRW ...

ROTARY CYLINDER **UNI 6604-69**
CILINDRO AD ALBERO ROTANTE **UNI 6604-69**

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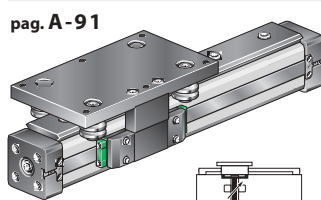
RODLESS CYLINDERS / CILINDRI SENZA STELO



RLF./....

RODLESS PNEUMATIC CYLINDERS
CILINDRI PNEUMATICI SENZA STELO

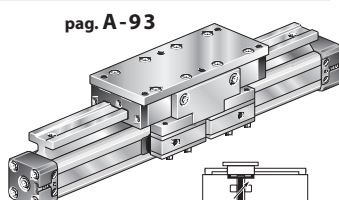
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RLFR./....

RODLESS CYL. WITH DUAL "V" EDGE SLIDE SYSTEM
CILINDRI SENZA STELO CON GUIDA PRISMATICA
E CUSCINETTI A RULLO DOPPIA "V"

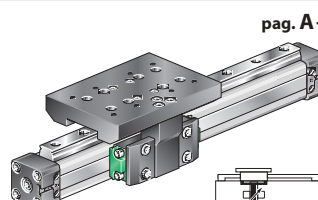
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RLFG./....

RODLESS CYLINDERS WITH GLIDING CARRIAGE
CILINDRI SENZA STELO CON CARRO GUIDATO

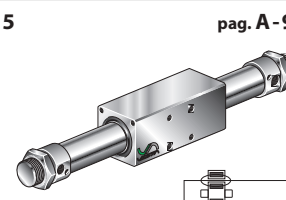
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RLFH./....

RODLESS CYLINDERS WITH BALL BEARING GUIDES
CILINDRI SENZA STELO CON CARRO GUIDATO A
RICIRCOLO DI SFERE

pag. A-95



TM ...

RODLESS CYLINDER
CILINDRO SENZA STELO

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FIXING AND MAGNETIC SWITCHES FOR RODLESS CYLINDERS / ACCESSORI DI FISSAGGIO E FINECORSI MAGNETICI PER CILINDRI SENZA STELO

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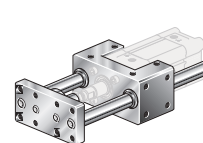
ELECTRICAL ACTUATED CYLINDERS / ATTUATORI ELETTRICI



ESNW./...-...-...-

ELECTRICAL ACTUATED CYLINDERS
ATTUATORI ELETTRICI

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GLE. / ...

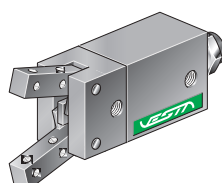
LINEAR CONTROL UNITS FOR ELECTRICAL CYLINDERS
UNITA' DI GUIDA PER ATTUATORI ELETTRICI

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FIXING AND MAGNETIC SWITCHES FOR ELECTRICAL ACTUATED CYLINDERS / ACCESSORI DI FISSAGGIO E FINECORSI MAGNETICI PER ATTUATORI ELETTRICI

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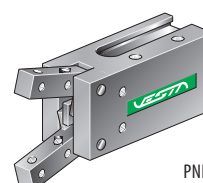
PNEUMATIC GRIPPERS / MANI DI PRESA PNEUMATICHE



MH ...

Ø 16; 20; 32; 50.
PNEUMATIC GRIPPERS
MANI DI PRESA PNEUMATICHE

pag. A-105



MHM ...

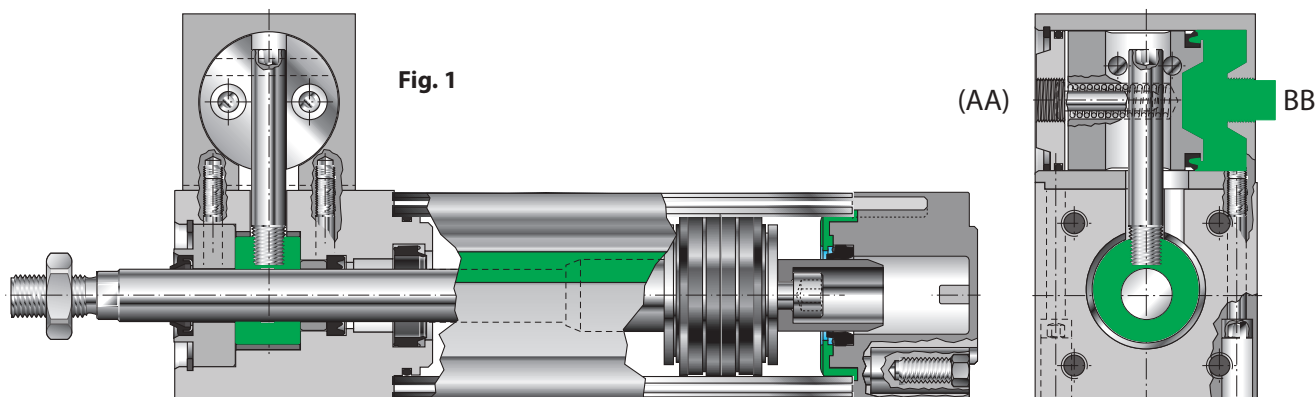
Ø 20; 32; 50.
PNEUMATIC GRIPPERS. MAGNETIC VERSION
MANI DI PRESA PNEUMATICHE, VERSIONI MAGNETICHE

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MAGNETIC SWITCHES FOR **MHM** GRIPPERS / FINECORSI MAGNETICI PER MANI DI PRESA **MHM** pag. A-108



WORKING PRINCIPLE FOR RWD - RWS / PRINCIPIO DI FUNZIONAMENTO PER RWD - RWS



With the Double Acting brake unit, type **RWD**, the brake is applied by supplying air to port **AA**. To release the brake, air must be removed from port **AA** and applied to port **BB**. The clamping force of this unit is directly proportioned to the supply pressure at port **AA**.

With the Single Acting brake unit, type **RWS** (see **fig. 1**), the brake is normally applied to the piston-rod with a clamping force as shown in the table (see page A-82). To release the brake, air is supplied to port **BB**.

In both DA & SA versions the brake may be applied at any point of the cylinder stroke, in every direction of the piston rod.

*Il bloccaggio dello stelo, nel cilindro **RWD** con dispositivo a doppio effetto, avviene inviando aria compressa all'ingresso **AA** in modo continuativo. Lo sbloccaggio si effettua mediante l'invio di un impulso d'aria all'ingresso **BB**. La forza di bloccaggio sarà direttamente proporzionale alla pressione di ingresso in **AA**.*

*Nei cilindri con dispositivo di bloccaggio a semplice effetto **RWS** (vedi **fig. 1**), lo stelo in assenza d'aria è bloccato con una forza costante come indicato nella tabella esplicativa (vedi pagina A-82). Lo sbloccaggio si effettua mediante invio continuativo di aria compressa all'orifizio **BB**.*

Il bloccaggio dello stelo, in tutte le versioni, può avvenire in qualsiasi punto della corsa ed in entrambe le direzioni.

EXAMPLE FOR RWD - RWS CONNECTION / ESEMPIO DI COLLEGAMENTO PER RWD - RWS

This system realizes the best conditions for the exploitation of RWD - RWS cylinders operating features: **speedy stop, stopping accuracy, starts without jerks**. Making use of the two valves 5/2 (**4-5**) besides taking advantages of "closed centres in pressure" system, we have the possibility to allow the inlet pressure of the rear port to be lower, to compensate for the piston-rod.

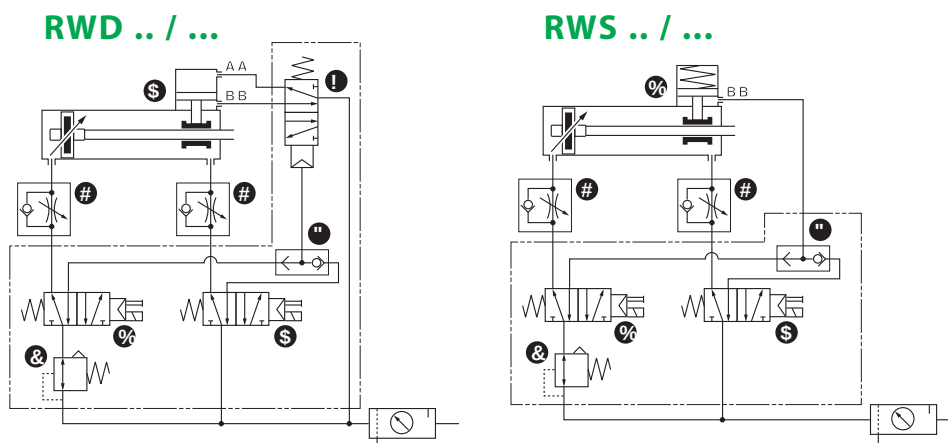
*Con questo sistema si realizzano le migliori condizioni per lo sfruttamento delle caratteristiche dei cilindri RWD - RWS: **velocità di intervento, precisione nell'arresto, partenze senza scatti**. L'impiego di due valvole monostabili (**4 e 5**) oltre ad ottenere i vantaggi del sistema "centri chiusi in pressione", offre la possibilità di alimentare la camera posteriore del cilindro da bloccare ad una pressione inferiore per compensare la differenza di sezione di spinta dovuta allo stelo.*

- A** Double acting braking device
- B** Simple acting braking device
- 2** Flow regulators
- 3** Shuttle valve
- 4** 5/2 solenoid valve
- 5** 5/2 solenoid valve
- 6** Pressure regulator
- 7** 5/2 pneumatic valve

Components can be supplied assembled on base.

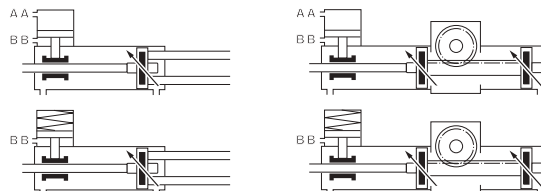
- A** Dispositivo di bloccaggio doppio effetto
- B** Dispositivo di bloccaggio semplice effetto
- 2** Regolatori di flusso
- 3** Valvola selettiva
- 4** Elettrovalvola 5/2
- 5** Elettrovalvola 5/2
- 6** Riduttore di pressione
- 7** Valvola pneumatica monostabile

I componenti possono essere forniti assemblati su base.



For other connections please contact our technical-sales office. / Per altri sistemi di collegamento interpellare il nostro ufficio tecnico.

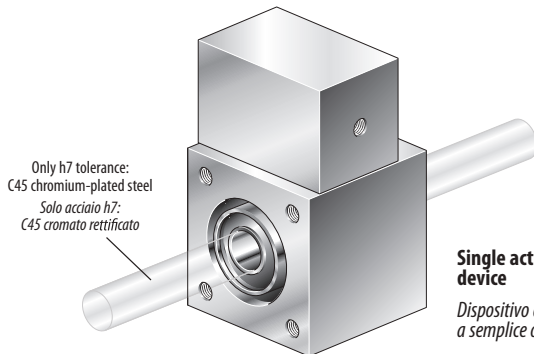
- Special production: on request, the piston-rod brake device, can be jointed to twin rod cylinder with double piston-rod "AW series" and to torque actuator "CRW series".
- Esecuzioni particolari: a richiesta il gruppo dispositivo di bloccaggio può essere applicato, all'origine, ai cilindri antirrotazione a steli gemellati Vesta serie AW passanti ed ai cilindri rotanti Vesta serie CRW.





SERIE DC

BRAKING DEVICE DISPOSITIVO DI BLOCCAGGIO



Single acting or double acting braking device

Dispositivo di bloccaggio a semplice o doppio effetto

DC ☐ ☐ ☐

D Double acting
Doppio effetto

S Single acting
Semplice effetto

Shaft / Albero
(mm):

Ø12 **12**
Ø16 **16**
Ø20 **20**
Ø25 **25**
Ø30 **30**

Note: NOT usable as end-caps for **RW** cylinder
Nota: NON utilizzabile come testata per il cilindro **RW**

TECHNICAL FEATURES

Material Aluminium alloy.
Seals NBR rubber.
Ambient temperature range -10 °C ÷ +80 °C.

Temperature range of medium 0 °C ÷ +40 °C.
Lubrication Not required.
Medium Filtered air.
Operating pressure range 2 ÷ 10 bar.

CARATTERISTICHE TECNICHE

Materiale Lega di alluminio.
Guarnizioni Tutte in NBR con profili antiusura e prelubrificate.
Temperatura ambiente -10 °C ÷ +80 °C.

Temperatura fluido 0 °C ÷ +40 °C.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione d'esercizio 2 ÷ 10 bar.

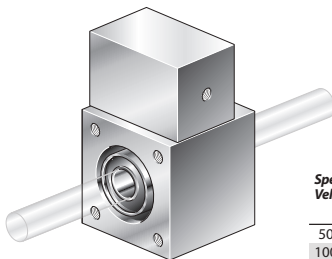
DCD ..

DOUBLE ACTING BRAKE
BLOCCO DOPPIO EFFETTO

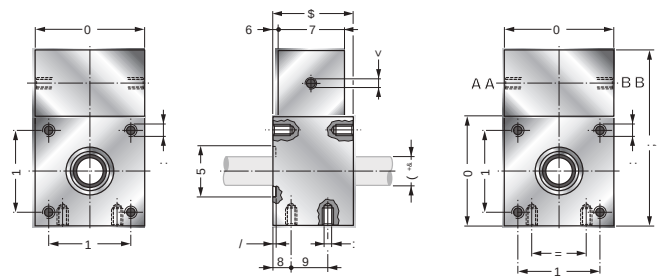


DCS ..

SINGLE ACTING BRAKE
BLOCCO SEMPLICE EFFETTO



Speed Velocità	Stopping tolerances Tolleranze di arresto
	DCD DCS
50 mm/s	+/- 0,3 mm +/- 0,8 mm
100 mm/s	+/- 0,5 mm +/- 1,2 mm
150 mm/s	+/- 1,3 mm +/- 2,2 mm



Piston-rod "E" Stelo "E"	A	L	M	N	R	S	T	U	V	W	X	Y	Z	Code Codice
12	50,5	2	50	32,5	32	2	40	19	25	M6	89	G1/8	20	DC. 12
16	57,5	2	55	38	38	2	45	16	35	M6	99	G1/8	26	DC. 16
20	62,5	2	65	46,5	42	4	45	20	35	M8	109	G1/8	30	DC. 20
25	91	2	100	72	58	8	60	28	48	M10	159	G1/8	50	DC. 25
30	99	2	115	89	63	8	65	30	55	M10	179	G1/8	65	DC. 30

Code Codice	Static force applicable on the piston-rod / Forza statica assiale						Bar (AA)
	2	3	4	5	6	7	
DCD 12	60	90	120	150	180	210	daN
DCD 16	80	130	180	230	280	330	daN
DCD 20	90	150	210	270	330	390	daN
DCD 25	220	350	500	650	800	950	daN
DCD 30	350	525	700	880	1050	1230	daN



Code Codice	Static force applicable on the piston-rod Forza statica assiale
DCS 12	90 daN
DCS 16	150 daN
DCS 20	180 daN
DCS 25	380 daN
DCS 30	500 daN



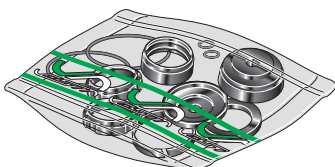
Minimum pressure unclamping:
Pressione minima di sbloccaggio: 2 bar (BB)

Minimum pressure unclamping:
Pressione minima di sbloccaggio: 3,5 bar (BB)

Static force (Kg.) can be applied on the piston rod with high lubrication. In case of lack or insufficient lubrication the values must be increased of 10%.
Forza statica (Kg.) applicabile sullo stelo in condizioni di lubrificazione abbondante. Dati che nel caso di lubrificazione normale o assente aumentano del 10%.

..... - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO



Seals kit code for RW cylinders =
Cylinder code + Bore + - SG:
(The kit includes all seals).

Codice del kit per cilindri RW =
Codice del cilindro + Alesaggio + - SG:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **RWD 50 - SG**

Seals kit code for DC device =
Device code + Shaft bore + - SG:
(The kit includes all seals).

Codice del kit per dispositivi DC =
Codice del dispositivo + Alesaggio albero + - SG:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **DCS 20 - SG**

WORKING PRINCIPLE FOR CRW CYLINDER / PRINCIPIO DI FUNZIONAMENTO DEI CILINDRI CRW

The **CRW** cylinder is a rotary actuator which converts linear piston motion into angular drive using a rack and pinion coupling. The inlet pressure produces the output rotation. Male and female pinions as well as standard rotations (90, 180 and 360 degrees) are available in **CRW** series. Non standard rotations can be manufactured according to customer's requirements.

The working principle of **CRW** cylinder consists of a toothed pinion fitted on to a shaft and supported by ball bearings coupled to a square section rack. Thanks to a guiding plate which supports and guides the rack, it is possible to recover any slack between rack and pinion using a spring adjustment. An articulated coupling fitted to the rack grants a perfect linear movement of the piston. Long life time is granted by piston in aluminium with polyurethane seals and PTFE guiding ring. A tolerance of $\pm 1^\circ$ is acceptable in **CRW** cylinders without final angular adjustment.

*Il cilindro della nuova serie **CRW** è un cilindro ad albero rotante in grado di convertire il moto lineare del pistone in un moto angolare attraverso un accoppiamento cremagliera-pignone sfruttando: la coppia torcente variabile in funzione della pressione di utilizzo, il tipo di accoppiamento albero maschio o femmina, il numero di alesaggi offerti che vanno dal Ø 25 al 100, le rotazioni che, oltre agli standard 90°, 180° e 360°, sono personalizzabili a seconda della richiesta del cliente.*

*Il cuore del cilindro **CRW** è costituito da un pignone dentato montato su di un albero e sostenuto da cuscinetti a sfere, accoppiato ad una cremagliera a sezione quadra a sua volta sostenuta e guidata da un piattino in materiale plastico che tramite un sistema di regolazione a molle consente di recuperare il gioco che si crea tra i denti. La linearità del movimento del pistone nella camicia in tubo profilato di alluminio anodizzato è garantita da un accoppiamento snodato con la cremagliera, il pistone inoltre è in alluminio con guarnizioni di tenuta in poliuretano, fascia di guida in PTFE ed anello magnetico. Per i cilindri senza regolazione di rotazione si deve tenere conto di un'errore pari a $\pm 1^\circ$, mentre grazie al sistema di recupero del gioco questo viene totalmente annullato e quindi si garantisce la ripetibilità della rotazione.*

The **CRW**

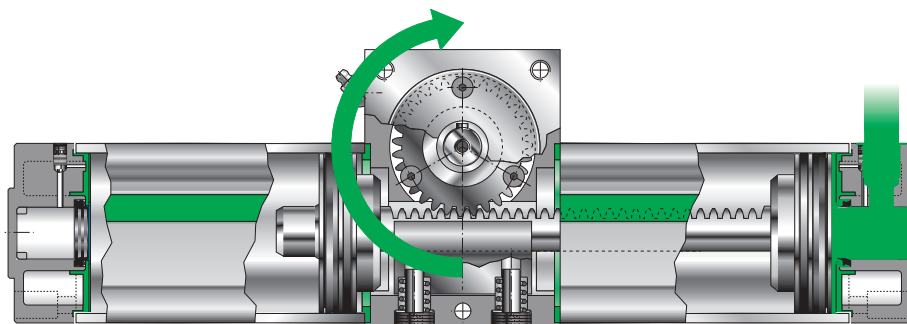
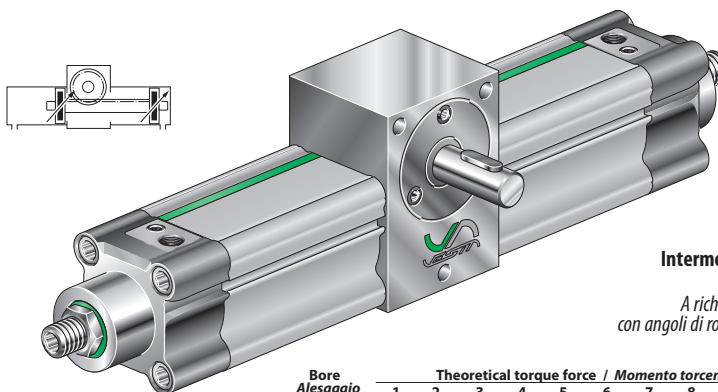


Fig. 2

ROTARY ACTUATORS UNI 6604 - 69 CILINDRI AD ALBERO ROTANTE UNI 6604 - 69

SERIE **CRW**

CRW					
Bore Alesaggio (mm):	Ø25 ...	Ø32 ...	Ø40 ...	Ø50 ...	Ø63 ...
	25	32	40	50	63
	Ø80 ...	Ø100 ...			
	80	100			
Rotation angles Angolo di rotazione	90; 180; 360.				
	0 Male pinion Albero maschio				
	1 Female pinion Albero femmina				
	0 Basic / Base				
	1 With final angular adjustment Regolazione rotazione finale				



**Intermediate rotations
upon request.**
A richiesta sono fornibili
con angoli di rotazione intermedi.

CRW cylinder fixing see / Fissaggi per cilindri CRW vedi: **Pag. A-22 ÷ A-26**

Features of reed switches see / Caratteristiche finecorsa magnetici: **Pag. A-19**

Bore Alesaggio	Theoretical torque force / Momento torcente teorico										Bar
	1	2	3	4	5	6	7	8	9	10	
25	0,07	0,14	0,21	0,28	0,35	0,42	0,49	0,56	0,63	0,70	Kgm
32	0,12	0,24	0,36	0,48	0,60	0,72	0,84	0,96	1,08	1,20	Kgm
40	0,23	0,46	0,69	0,92	1,15	1,38	1,61	1,84	2,07	2,30	Kgm
50	0,44	0,88	1,32	1,76	2,20	2,64	3,08	3,48	3,92	4,36	Kgm
63	0,80	1,60	2,40	3,20	4,00	4,80	5,60	6,40	7,20	8,00	Kgm
80	1,75	3,50	5,25	7,00	8,75	10,5	12,2	14,0	15,7	17,5	Kgm
100	3,23	6,46	9,69	12,9	16,1	19,3	22,6	25,8	29,0	32,3	Kgm

TECHNICAL FEATURES

End caps	Aluminium alloy.
Body	Aluminium alloy.
Shaft	C45 steel.
Shaft guide	Acetalic polymer.
Piston	Aluminium with polyurethane seals, magnet and guide ring.
Barrel	Anodized profiled aluminium tube.
Seals	Polyurethane rubber.

Cushioning	Pneumatic adjusting cushions.
Ambient temperature range	-10 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Max operating pressure	1 ÷ 10 bar.

CARATTERISTICHE TECNICHE

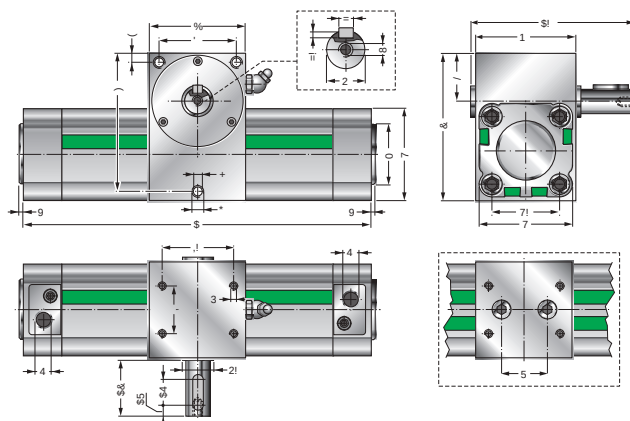
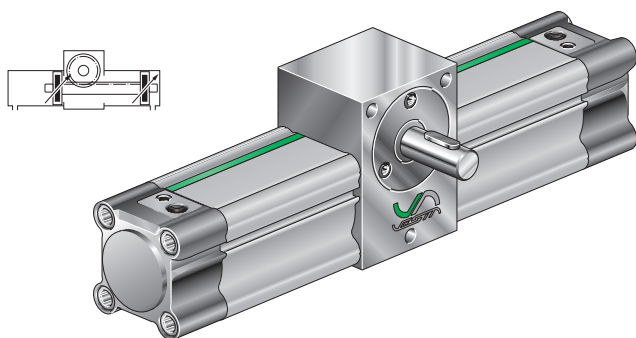
Testate	Lega di alluminio.
Corpo centrale	Lega di alluminio.
Albero	Acciaio C45.
Pattino di guida	Resina acetica.
Pistone	In alluminio con guarnizioni in poliuretano, magnete e fascia di guida.
Camicia	Tubo anodizzato d' alluminio.
Guarnizioni	Tutte in poliuretano.

Ammortizzatori	Pneumatici regolabili progressivi.
Temperatura ambiente	-10 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	1 ÷ 10 bar.



CRW ... 0..

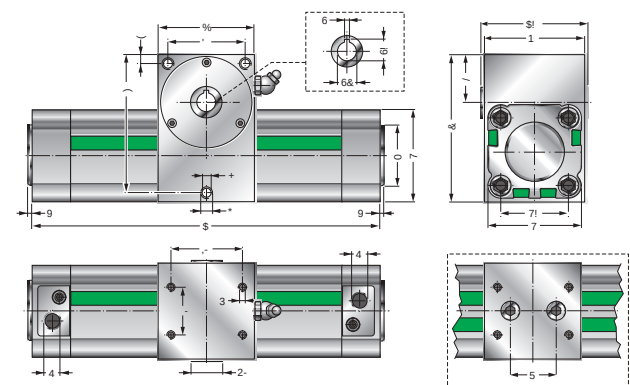
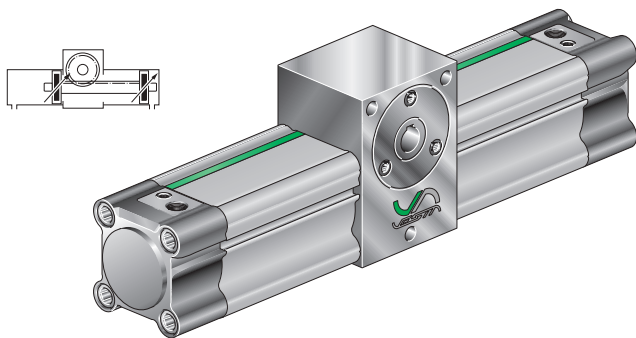
MALE PINION CYLINDER
CILINDRO ROTANTE ALBERO MASCHIO



Bore Alesaggio	A			A1	A2	A3	A4	B	C	D	E	F	G	H	I	I1	L	ØM	N	O	O1	P	Q	R	T	T1	U	V	Z	Z1	Code Codice
	90°	180°	360°																												
25	157	198	280	67	25	15	7	43	62	34	5	54,5	---	M6X8	25	16	22	---	40	Ø10	Ø12	M5X6	G1/8	20	40	26	M4X9	---	3	2	CRW 25 ... 0..
32	208	256	350	82	33	15	8	54	74	44	5	69	Ø5,2	M6X12	18	33	27	30	47	Ø14	Ø17	M6X10	G1/8	25	45	32,5	M5X12	4	5	3	CRW 32 ... 0..
40	237	294	407	91	33	15	8	60	84	46	7	77	Ø6,5	M8X15	22	40	30	35	56	Ø15	Ø17	M6X12	G1/4	25	54	38	M5X15	4	5	3	CRW 40 ... 0..
50	263	329	461	110	40	24	8	75	102	58	9	93	Ø6,5	M8X15	25	50	39	40	68	Ø18	Ø25	M8X12	G1/4	30	64	46,5	M6X15	4	6	3,5	CRW 50 ... 0..
63	307	389	552	124	44	29	8	85	116	69	8	108	Ø8,5	M10X15	35	60	43	45	78	Ø20	Ø30	M8X12	G3/8	40	75	56,5	M6X15	4	6	3,5	CRW 63 ... 0..
80	364	474	694	148	48	32	9	110	149	90	10	140	Ø10,5	M12X20	50	80	54	45	98	Ø25	Ø35	M10X15	G3/8	50	93	72	M8X15	4	8	4	CRW 80 ... 0..
100	403	532	792	177	60	40	10	120	172	96	12	160	Ø10,5	M12X20	60	80	60	55	115	Ø35	Ø50	M10X15	G1/2	60	110	89	M10X15	4	10	5	CRW 100 ... 0..

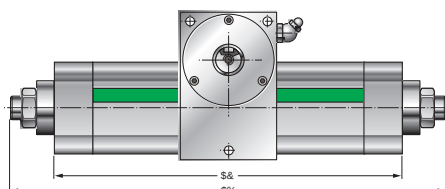
CRW ... 1..

FEMALE PINION CYLINDER
CILINDRO ROTANTE ALBERO FEMMINA



Bore Alesaggio	A			A1	B	C	D	E	F	G	H	I	I1	L	ØM	N	O1	P	Q	R	T	T1	V	S	S1	S2	Code Codice
	90°	180°	360°																								
25	159,2	198	280	42	43	62	34	5	54,5	---	M6X8	25	16	22	---	40	Ø12	M5X6	G1/8	20	40	26	---	3	9,4	8	CRW 25 ... 1..
32	208	256	350	49	54	74	44	5	69	Ø5,2	M6X12	18	33	27	30	47	Ø17	M6X10	G1/8	25	45	32,5	4	3	9,4	8	CRW 32 ... 1..
40	235	291,4	404,4	58	60	84	46	7	77	Ø6,5	M8X15	22	40	30	35	56	Ø17	M6X12	G1/4	25	54	38	4	3	11	10	CRW 40 ... 1..
50	261	328,4	460,4	70	75	102	58	9	93	Ø6,5	M8X15	25	50	39	40	68	Ø18	M8X12	G1/4	30	64	46,5	4	5	16	14	CRW 50 ... 1..
63	306	386	550	80	85	116	69	8	108	Ø8,5	M10X15	35	60	43	45	78	Ø20	M8X12	G3/8	40	75	56,5	4	6	23	20	CRW 63 ... 1..
80	361,2	471,2	691	100	110	149	90	10	140	Ø10,5	M12X20	60	80	54	45	98	Ø35	M10X15	G3/8	50	93	72	4	6	23	20	CRW 80 ... 1..
100	402,4	532	791,2	117	120	172	96	12	160	Ø10,5	M12X20	60	80	60	55	115	Ø50	M10X15	G1/2	60	110	89	4	8	28	25	CRW 100 ... 1..

FINAL ANGULAR ADJUSTMENT ROTATION / REGOLAZIONE ROTAZIONE FINALE



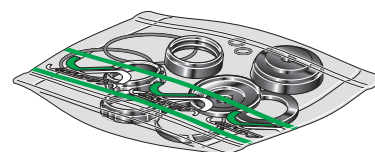
Bore Alesaggio	AC			AB			CH
	90°	180°	360°	90° max.	180° min.	360° max.	
25	166,4	206,4	288,4	203	197	244	4*
32	212	260	354	258	250	306	10
40	243	300	413	293	286	350	10
50	275	340	473	319	310	385	10
63	316	396	560	367	357	443	10
80	373,2	483,2	703	436	423	546	13
100	416,8	546,4	805,6	481	465	610	13

* Inside exagon / Esagono incassato

Final angular adjustment: -8°; +5° /
Regolazione rotazione finale da -8° a +5°

..... - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO



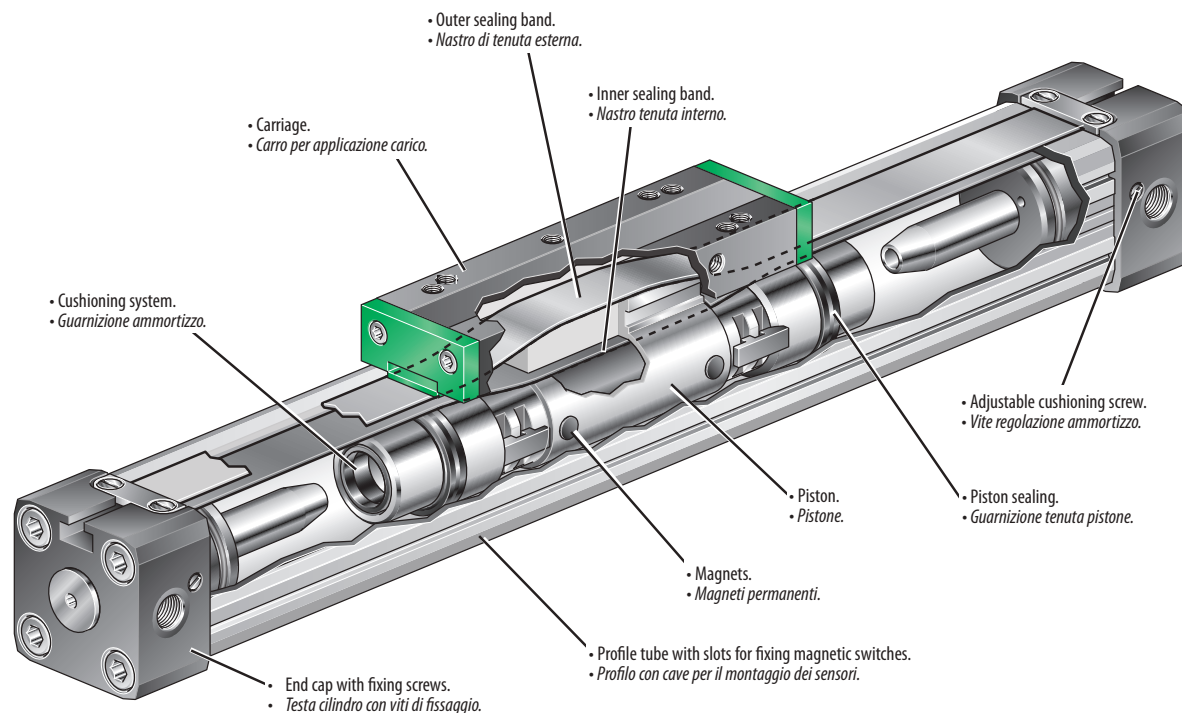
Seals kit code for CRW cylinders =
Rotary cylinder code + Bore + - SG:
(The kit includes all seals).

Codice del kit per cilindri CRW =
Codice cilindro rotante + Alesaggio + - SG:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **CRW 63 - SG**

RODLESS, CUSHIONED, MAGNETIC CYLINDER CILINDRI PNEUMATICI SENZA STELO, AMMORTIZZATI, MAGNETICI

SERIE **RLF**



DESCRIPTION OF FUNCTION AND DESIGN / PRINCIPIO DI FUNZIONAMENTO

Vesta Automation rodless cylinders RLF series are made of a special tube with a slot along the full length. The inside piston assembly is connected directly with the outside carriage through the slot of the tube.

A flexible stainless steel ground inner band runs along the slot passing through the piston assembly, thus enabling the sealing of the tube.

In addition there is an outer stainless steel band passing through the carriage and covering the slot in order to keep out dust and dirt. The two bands keep position by magnetic strips in the tube (pay attention to steel chips: they can be attracted by magnetic strips damaging cylinders).

The mechanically strong connection, the use of low friction materials and the complete range of available guiding systems allow a wide range of loads and moments of inertia to be applied to these cylinders granting fast and competitive solutions to many linear motion applications.

I cilindri senza stelo Vesta Automation serie RLF nascono dall'esigenza di riduzione dell'ingombro assiale di cilindri nel caso di corse particolarmente lunghe. Sono costituiti da un profilo estruso con una cava aperta superiore in tutta la sua lunghezza. Questa apertura consente il collegamento meccanico tra pistone e il carro superiore dove si effettua l'applicazione del carico esterno. Questa cava viene chiusa inferiormente da una sottile lamina di acciaio indurito che passa attraverso il pistone e che garantisce la tenuta metallica dell'aria. Superiormente la feritoia viene chiusa da un'altra lamina dello stesso materiale che impedisce a corpi estranei di penetrare nel cilindro. I due nastri di chiusura aderiscono alla cava superiore del profilo estruso grazie alla presenza di 2 fasce magnetiche annegate nel profilo stesso (nota: prestare attenzione a trucioli o limature ferromagnetiche che possono essere attratte dal campo magnetico). Il passaggio del pistone divarica le due lamine per consentire il passaggio del collegamento meccanico tra carro superiore e pistone stesso, e le richiude a passaggio avvenuto. Le guarnizioni del pistone sono posizionate rispettivamente prima della divaricazione delle lamine e dopo il loro riposizionamento in tenuta, pertanto le due camere d'aria del pistone risultano sempre in tenuta. Il pistone è fornito di magneti permanente per l'utilizzo di sensori magnetici di fine corsa da montarsi sulle apposite cave del profilo. Il cilindro è dotato di ammortizzatori pneumatici regolabili di finecorsa.

ADVANTAGES / VANTAGGI

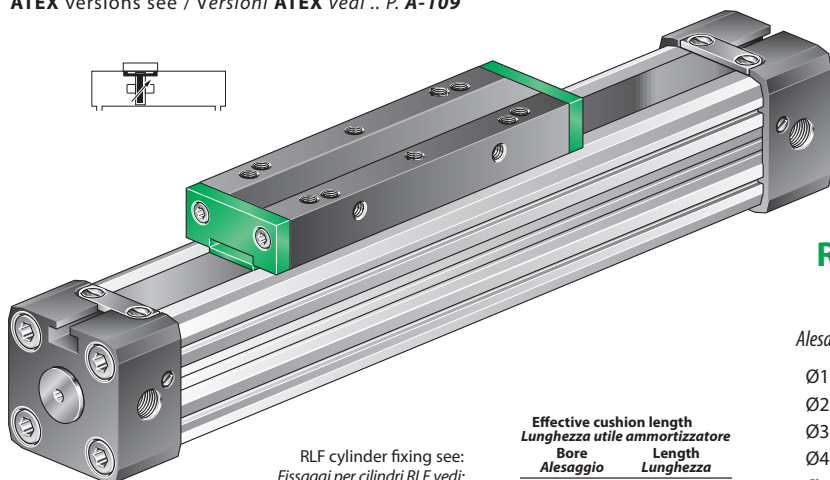
- Equal forces on both ends of the piston.
- Force connection direct, torque safe.
- 50% space saving.
- Long strokes up to 5700mm.
- End caps with 3 air connections and adjustable cushioning.
- Guided versions are available for heavy duty use.
- Cilindro con forze uguali in tiro ed in spinta.
- Connessione meccanica rigida e a basso attrito di scorrimento tra pistone e carro.
- Ingombro assiale molto ridotto, specialmente su corse lunghe.
- Corsa massima di 5700mm.
- Testate con 3 ingressi dell'aria e ammortizzi regolabili.
- Disponibili versioni guidate per applicazioni gravose.



SERIE RLF

RODLESS PNEUMATIC CYLINDERS CILINDRI PNEUMATICI SENZA STELO

ATEX versions see / Versioni ATEX vedi .. P. A-109



RLF cylinder fixing see:
Fissaggi per cilindri RLF vedi:
..... **Pag. A-88 ÷ A-89**

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-97**

Effective cushion length Lunghezza utile ammortizzatore	
Bore Alésaggio	Length Lunghezza
16	15
25	21
32	26
40	32
50	32
63	40

With magnetic piston / Con pistone magnetico

RLF /

Bore Alésaggio (mm):	
Ø16	16
Ø25	25
Ø32	32
Ø40	40
Ø50	50
Ø63	63

Stroke Corsa (mm):	
O	Standard Standard
V	Viton seals ($v \geq 1$ m/s) Guarnizioni in Viton ($v \geq 1$ m/s)
X	Stainless steel screws Viti inox
VX	Viton + Stainless steel screws Viton + viti inox

Stroke { Ø25÷Ø63 = 100÷5700mm
Corsa (mm): Ø16 = 100÷3300mm

TECHNICAL FEATURES

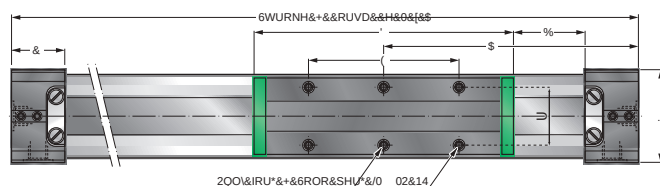
End caps	Anodised aluminium.
Barrel	Anodised aluminium.
Seals	NBR standard (for $v \leq 1$ m/s).
Carriage	Anodised aluminium.
Sealing bands	Stainless steel.

Cushioning	Pneumatic adjusting cushions.
Ambient temperature range	-15 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Pressure range	0,5 ÷ 8 bar.

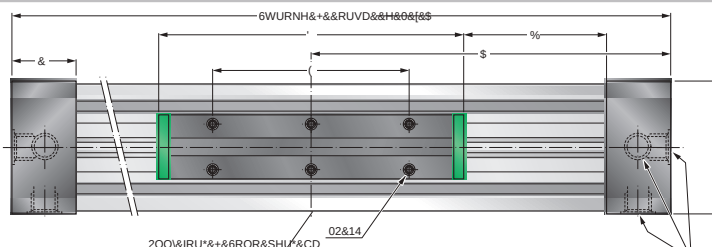
CARATTERISTICHE TECNICHE

Testate	Alluminio anodizzato.
Camicia	Alluminio anodizzato.
Guarnizioni	NBR standard (per $v \leq 1$ m/s).
Carro	Alluminio anodizzato.
Lamine di tenuta	Acciaio inossidabile.

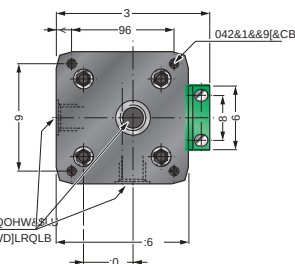
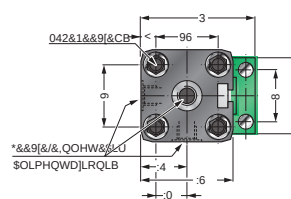
Ammortizzatori	Pneumatici progressivi regolabili.
Temperatura ambiente	-15 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione d'esercizio	0,5 ÷ 8 bar.



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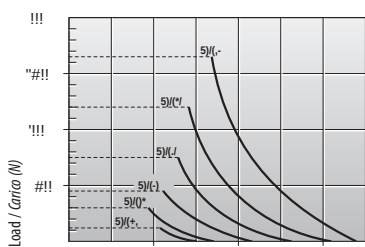


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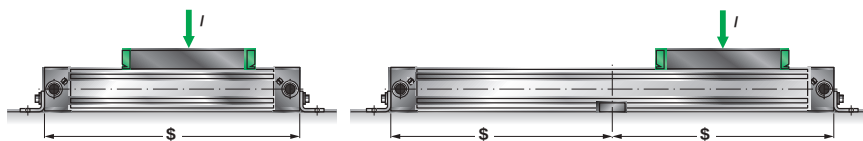


Bore Alésaggio	A	B	C	D	E	G	M	M1	N	N1	P	S	U	V	VS	W	WS	W2	Y	Code Codice
16	65	15,5	15	69	36	M5	M4	M3	7	7	36,5	22	16,5	18	18	27	27	17,1	4,5	RLF 16/..... ..
25	100	21,5	23	111	65	G1/8	M5	M5	12	10	52,5	33	25	27	27	40	40	25,8	6,5	RLF 25/..... ..
32	125	21	27	152	90	G1/4	M6	M6	14	7	66,5	36	27	36	40	52	56	39	8	RLF 32/..... ..
40	150	44	30	152	90	G1/4	M6	M6	17	10	80	36,4	27	54	54	72	69	48,8	9	RLF 40/..... ..
50	175	42	33	200	110	G1/4	M6	M6	18	6	89	56	27	70	70	80	80	44,5	5	RLF 50/..... ..
63	215	48,5	50	233	155	G3/8	M8	M8	18	15	123	50	36	78	78	106	106	48,8	14,5	RLF 63/..... ..

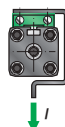
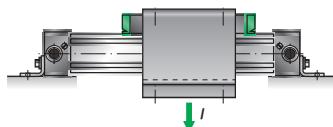
TRANSVERSE FORCE GRAPH RLF SERIES / DIAGRAMMI DI FLESSIONE SERIE RLF



Distances "A" of munting with deflection 1 mm.
Distanza "A" fra i supporti con inflessione 1 mm.



Length should not exceed value "A" / Non superare mai i valori "A"



For load applications under the cylinder please contact our technical department

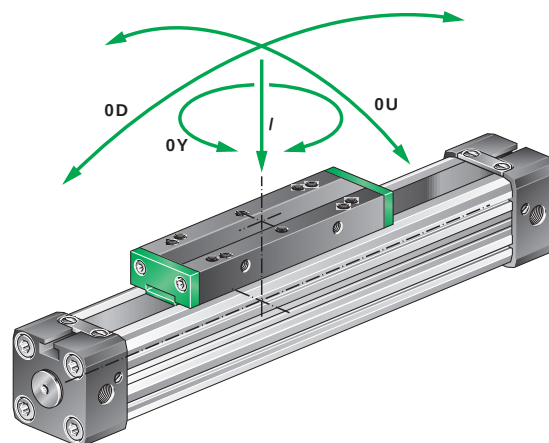
Per l'applicazione del carico sotto il cilindro si prega di contattare il nostro ufficio tecnico

FORCES AND TORQUE / FORZE E MOMENTI TORCENTI

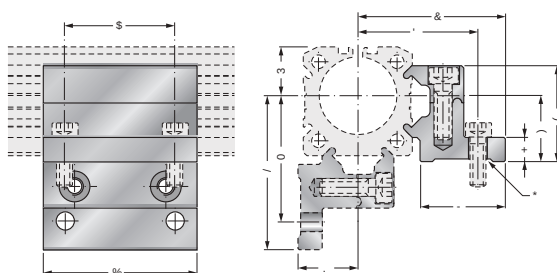
The figures above are max. values based on light shock free duty and speed of 0,45 m/s.
Max. pressure 6 bar. An exceeding of the values in dynamic operations, even for short moments, has to be avoided.
Attention: Resulting forces could lead to extreme exceedings of the values.
In case of undefinable situations the above max. values have to be reduced by 20%.

Valori di carico massimi singolarmente applicati con V 0,45 m/s e pressione max = 6 bar
In condizioni dinamiche, anche per brevi istanti, non superare mai i carichi indicati.
In condizioni di carico non esattamente definite o calcolabili ridurre i valori indicati del 20%.
Inadatto a sopportare combinazioni di più carichi applicati contemporaneamente.

Cylinder Cilindro Ø	Thrust force (N) Forza di spinta (N) (6 bar)	Max allowed load (N) Carico max (N) L	Max allowed bending moments (Nm) Momento flettente max (Nm) M _a axial	Max allowed torque (Nm) Torsione max (Nm) M _r radial	M _v central
16	110	120	4	0,3	0,5
25	250	300	15	1	3
32	420	450	30	2	4,5
40	640	750	60	4	8
50	1000	1200	115	7	15
63	1550	1650	200	8	24



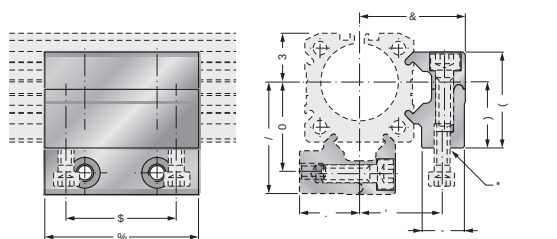
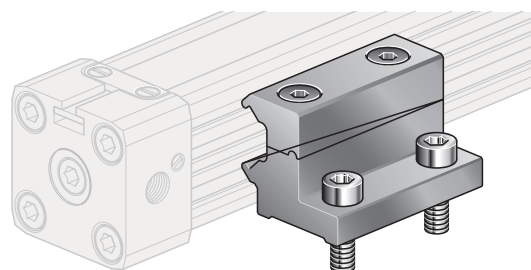
FIXING ACCESSORIES / ACCESSORI DI FISSAGGIO



Bore Alesaggio	A	B	C	D	E	F	G	H	J	K	L	M	P	Code Codice
25	36	50	47,5	40	31,3	22	Ø5,5	10	26	20	49,5	42	16	RLMW- 25
32	36	50	56	47,5	39	30	Ø6,5	10	28,5	27,6	61	52,5	21,5	RLMW- 32

MID SUPPORT
SUPPORTO INTERMEDIO

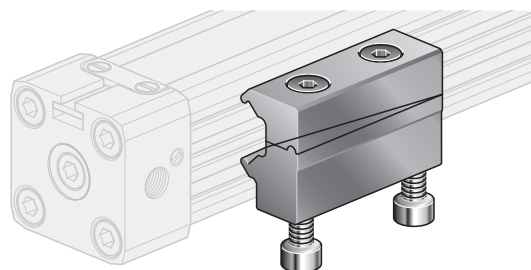
RLMW- ..



Bore Alesaggio	A	B	C	D	E	F	G	J	K	L	M	P	Code Codice
25	36	50	34,5	27	31,3	22	M5	14	20	36,5	29	16	RLMG- 25
32	36	50	41,8	34,2	39	30	M6	14	27,6	47	39,5	21,5	RLMG- 32

MID SUPPORT
SUPPORTO INTERMEDIO

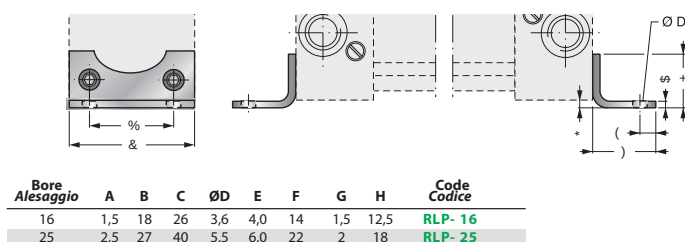
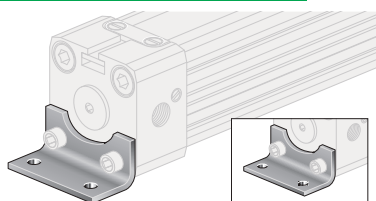
RLMG- ..





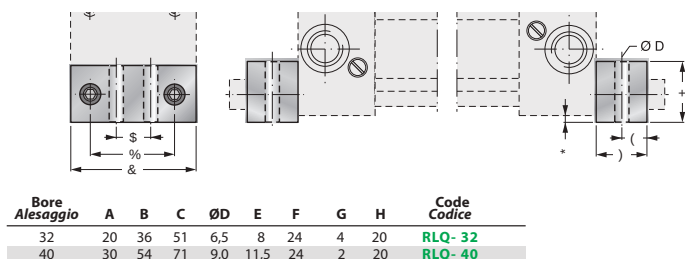
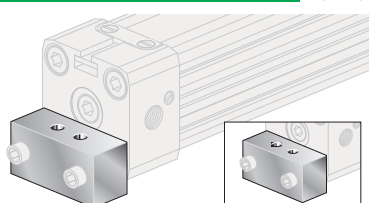
RLP- ..

FOOT MOUNTING
MONTAGGIO A PIEDINI



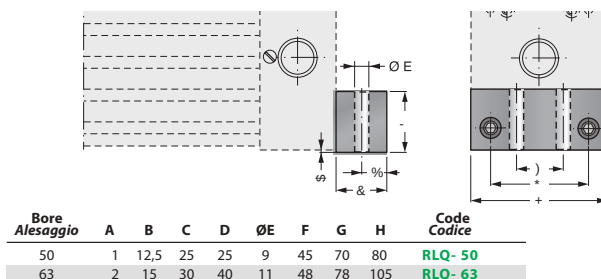
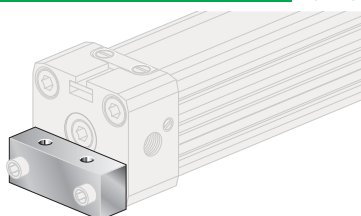
RLQ- ..

SQUARE FOOT MOUNTING
MONTAGGIO A PIEDINI QUADRI



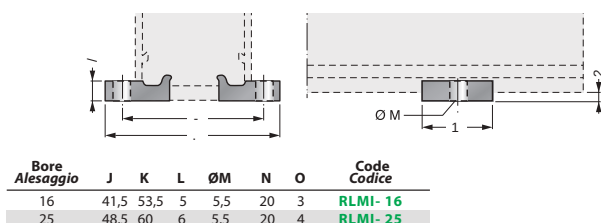
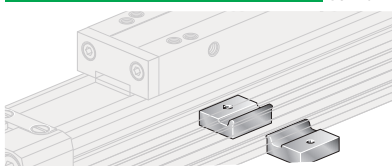
RLQ- ..

SQUARE FOOT MOUNTING
MONTAGGIO A PIEDINI QUADRI



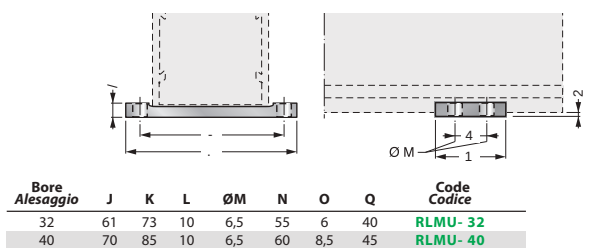
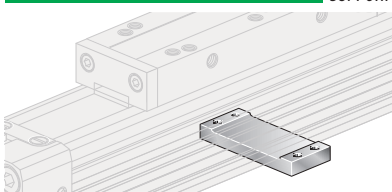
RLMI- ..

MID SUPPORTS
SUPPORTI INTERMEDI



RLMU- ..

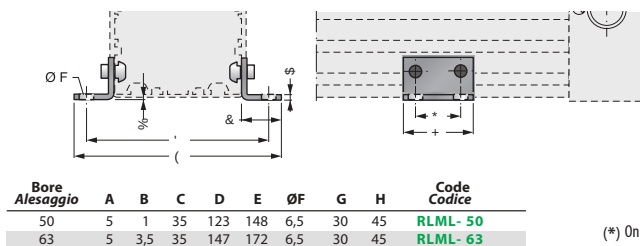
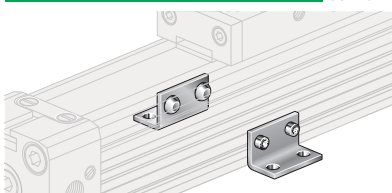
MID SUPPORT
SUPPORTO INTERMEDIO



(*) On request / Su richiesta

RLML- ..

MID SUPPORTS
SUPPORTI INTERMEDI



(*) On request / Su richiesta

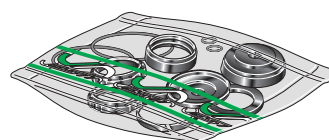
RL.. - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

Seals kit code = **RL** + **Bore** + **- SG**: (The kit includes all seals).

Codice del kit = **RL** + **Alesaggio** + **- SG**: (Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **RL 32 V - SG**



RODLESS CYLINDERS WITH DUAL "V" EDGE SLIDE SYSTEM CILINDRI SENZA STELO CON GUIDA PRISMATICA E CUSCINETTI A RULLO DOPPIA "V"

SERIE **RLFR**

With magnetic piston / Con pistone magnetico

RLFR ☐ / ☐ ☐ ☐ ☐

Bore
Alesaggio (mm):

Ø25 **25**

Ø32 **32**

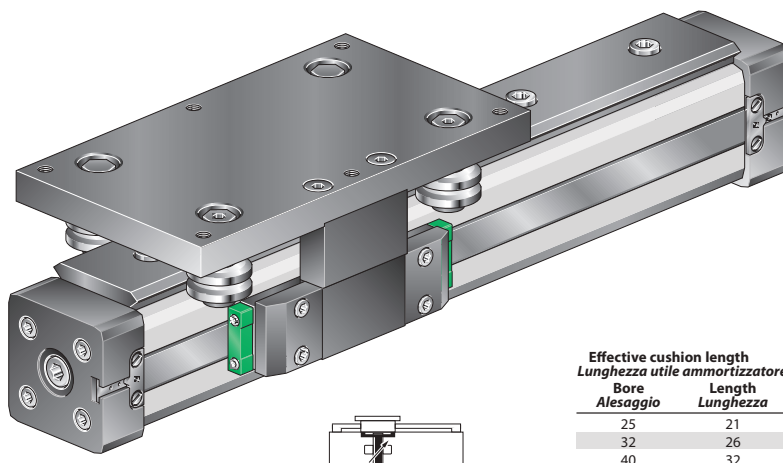
Ø40 **40**

Stroke
Corsa (mm):

O Standard
Standard
V Viton seals ($v \geq 1$ m/s)
Guarnizioni in Viton
($v \geq 1$ m/s)

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-97**

RLFH cylinder fixing see:
Fissaggi per cilindri RLFH vedi:
..... **Pag. A-88 ÷ A-89**



Effective cushion length Lunghezza utile ammortizzatore	
Bore Alesaggio	Length Lunghezza
25	21
32	26
40	32

ADVANTAGES / VANTAGGI

An extremely robust linear system with hard wearing "v" running surfaces. It ensures a high level of guidance over the entire stroke and allows the cylinder to accept high direct bending moments and loads. Especially developed for linear motion in machine tools and robotics, it is sealed to prevent dirt infiltration.

Questa guida lineare estremamente robusta è stata studiata appositamente per il suo utilizzo nelle macchine utensili e nell'industria robotica.

La grande capacità di carico e precisione sono garantite da un sistema di guida costituito da una guida prismatica in acciaio sulla quale scorrono rulli a cuscinetti a "V".

- High loading features
- Quiet and smooth running
- Robust bearing housing
- Hardened and grinded guiderail
- Low friction bearing
- Easy maintenance
- Alte capacità di carico
- Scorrimento regolare e silenzioso
- Robusto alloggiamento di guida
- Rotaia di guida temprata e indurita
- Guida a basso coefficiente d'attrito di scorrimento
- Facile intercambiabilità degli elementi di guida

TECHNICAL FEATURES

End caps Anodised aluminium.
Barrel Anodised aluminium.
Seals NBR standard (for $v \leq 1$ m/s).
Carriage Anodised aluminium.
Sealing bands Stainless steel.
Cushioning Pneumatic adjusting cushions

Ambient temperature range $-15^{\circ}\text{C} \div +80^{\circ}\text{C}$.
Temperature range of medium $0^{\circ}\text{C} \div +40^{\circ}\text{C}$.
Lubrication Not required.
Medium Filtered air.
Pressure range $0,5 \div 8$ bar.

CARATTERISTICHE TECNICHE

Testate Alluminio anodizzato.
Camicia Alluminio anodizzato.
Guarnizioni NBR standard (per $v \leq 1$ m/s).
Carro Alluminio anodizzato.
Lamine di tenuta Acciaio inossidabile.
Ammortizzatori Pneumatici progressivi regolabili.

Temperatura ambiente $-15^{\circ}\text{C} \div +80^{\circ}\text{C}$.
Temperatura fluido $0^{\circ}\text{C} \div +40^{\circ}\text{C}$.
Lubrificazione Non necessaria.
Fluido Aria filtrata.
Pressione d'esercizio $0,5 \div 8$ bar.

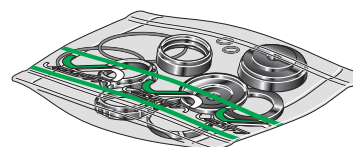
SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

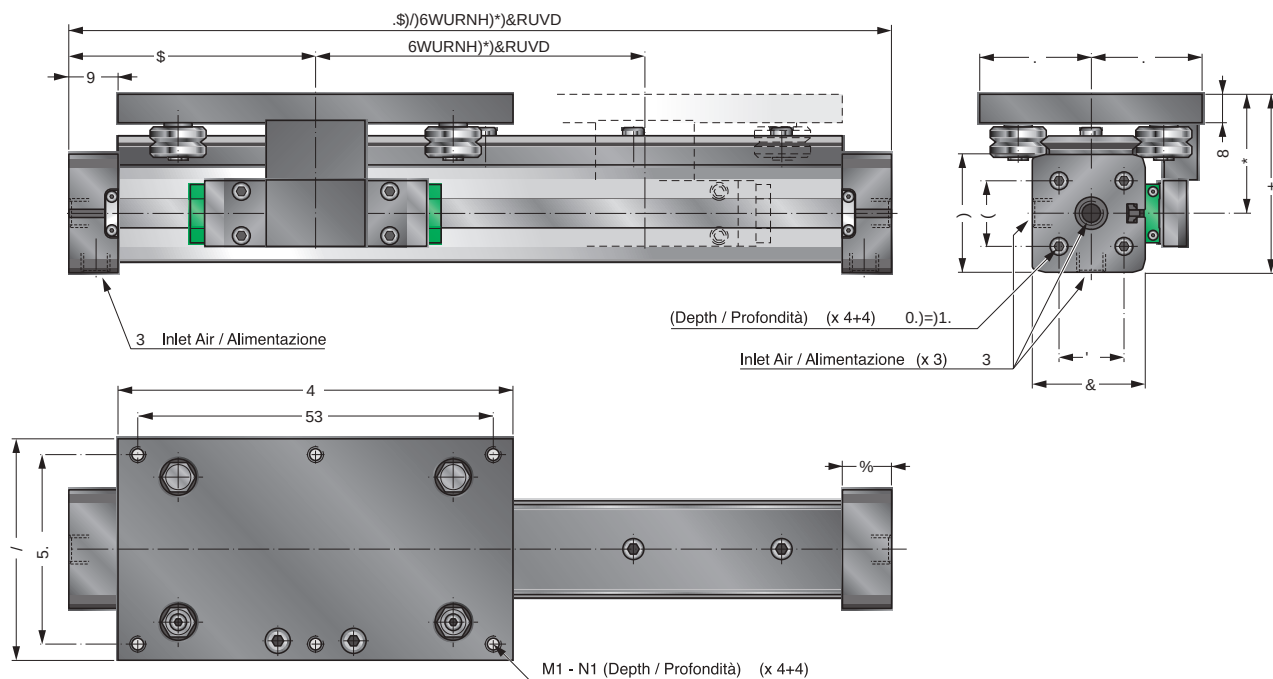
RL.. - SG

Seals kit code = **RL** + **Bore** + **- SG**: (The kit includes all seals).

Codice del kit = **RL** + **Alesaggio** + **- SG**: (Il kit comprende tutte le guarnizioni necessarie).

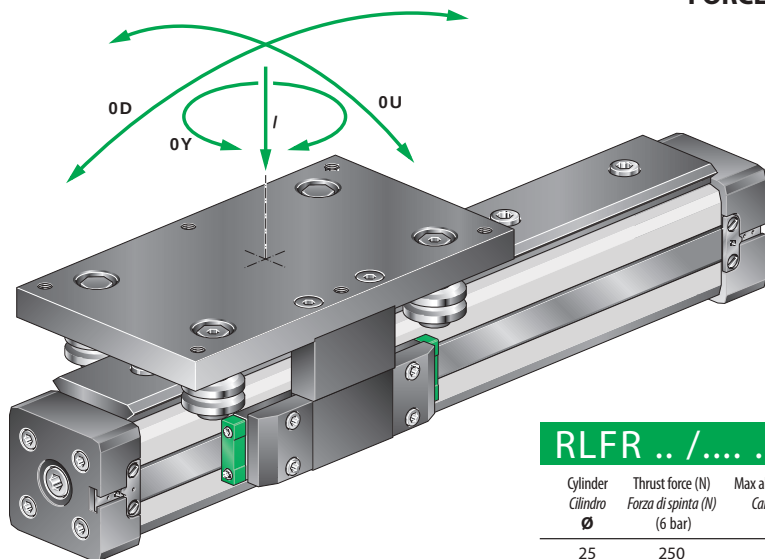
Example / Esempio: **RL 32 V - SG**





Bore Alesaggio	A	B	C	D	E	F	G	H	K	L	M1	M2	N1	N2	P	Q	R1	R2	U	V	Code Codice
25	100	23	40	27	27	40	53,5	73,5	40	80	M6	M5	11	10	G1/8	135	120	65	11	32,5	RLFR 25/...
32	125	27	56	40	36	52	64	90	58	116	M8	M6	14,5	14	G1/4	180	160	96	14,5	35	RLFR 32/...
40	150	30	69	54	54	72	72,5	108,5	67,5	135	M8	M6	16,5	17	G1/4	240	216	115	17,5	30	RLFR 40/...

FORCES AND TORQUE / FORZE E MOMENTI TORCENTI



Combined loads:
The combined forces and torque moments can be calculated using the following formula:

Carichi combinati:
Le sollecitazioni combinate di forze e momenti torcenti sono calcolabili con la seguente formula:

$$\frac{M_a}{M_{a \max}} + \frac{M_r}{M_{r \max}} + \frac{M_v}{M_{v \max}} + \frac{L}{L_{\max}} \leq 1$$

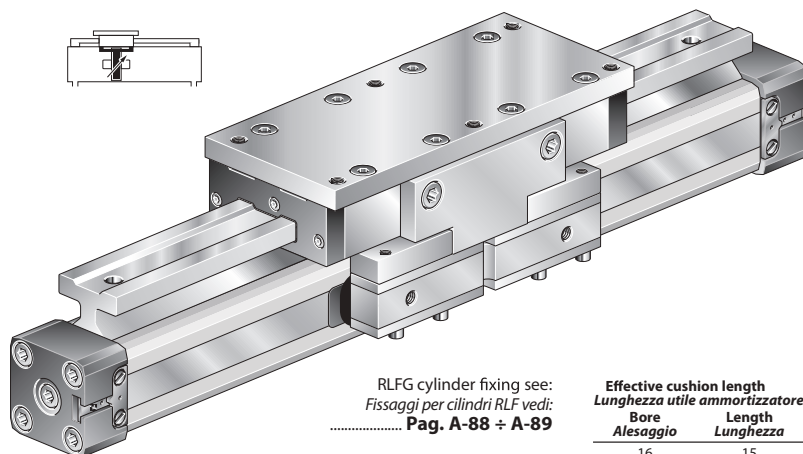
RLFR .. /

RODLESS CYLINDER WITH DUAL "V" EDGE SLIDE SYSTEM
CILINDRO SENZA STELO CON GUIDA PRISMATICA E CUSCINETTI A RULLO DOPPIA "V"

Cylinder Cilindro Ø	Thrust force (N) Forza di spinta (N) (6 bar)	Max allowed load(N) Carico max(N) L	Max allowed bending moments(Nm) Momento flettente max(Nm)	Max allowed torque(Nm) Torsione max(Nm)
			M _a axial	M _r radial
25	250	1400	50	14
32	420	3100	165	65
40	640	3100	250	90

The above mentioned moments (M_a max ...) are related to the guide rail centre. I momenti (M_a max ...) sono calcolati rispetto all'asse della guida.

RODLESS CYLINDERS WITH GLIDING CARRIAGE CILINDRI SENZA STELO CON CARRO GUIDATO

SERIE **RLFG**

RLFG cylinder fixing see:
Fissaggi per cilindri RLF vedi:
..... **Pag. A-88 ÷ A-89**

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-97**

Effective cushion length Lunghezza utile ammortizzatore	
Bore Alesaggio	Length Lunghezza
16	15
25	21
32	26
40	32

With magnetic piston / Con pistone magnetico

RLFG / Bore
Alesaggio (mm):

Ø16 **16**
 Ø25 **25**
 Ø32 **32**
 Ø40 **40**

Stroke
Corsa (mm):

O Standard
 Standard
V Viton seals ($v \geq 1$ m/s)
 Guarnizioni in Viton ($v \geq 1$ m/s)

ADVANTAGES / VANTAGGI

This particular strong linear guiding system was specially developed for medium heavy applications in linear motions.
Questo sistema di scorrimento ottenuto con pattino di guida in tecnopolimero su rotaia in alluminio indurito è realizzato per applicazioni di carichi esterni sul carro cilindro

- High resistance to wear.
- Adjustable tolerance.
- High resistance to corrosion.
- Quiet running.
- Resistance to high loads & moments in all directions.
- Resistance to shock loadings and vibrations against blows and vibrations.
- High resistance to dirt & moisture.
- Low weight
- Easy maintenance of gliding elements.

- Alta resistenza all'usura.
- Tolleranza regolabile.
- Alta resistenza alla corrosione.
- Scorrimento silenzioso e a basso attrito.
- Capacità di sopportare carichi e momenti in tutte le direzioni.
- Capacità di sopportare carichi impulsivi e vibrazioni.
- Alta resistenza in ambienti sporchi e umidi.
- Basso peso.
- Intercambiabilità degli elementi striscianti.

TECHNICAL FEATURES

End caps	Anodised aluminium.
Barrel	Anodised aluminium.
Seals	NBR standard (for $v \leq 1$ m/s).
Carriage	Anodised aluminium.
Sealing bands.....	Stainless steel.
Cushioning	Pneumatic adjusting cushions.

Ambient temperature range	-15 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Pressure range	0,5 ÷ 8 bar.

CARATTERISTICHE TECNICHE

Testate	Alluminio anodizzato.
Camicia	Alluminio anodizzato.
Guarnizioni	NBR standard (per $v \leq 1$ m/s).
Carro	Alluminio anodizzato.
Lamine di tenuta.....	Acciaio inossidabile.
Ammortizzatori	Pneumatici progressivi regolabili.

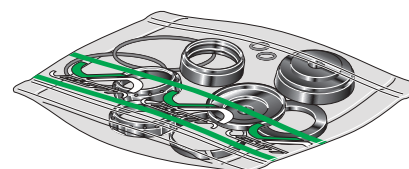
Temperatura ambiente	-15 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione d'esercizio	0,5 ÷ 8 bar.

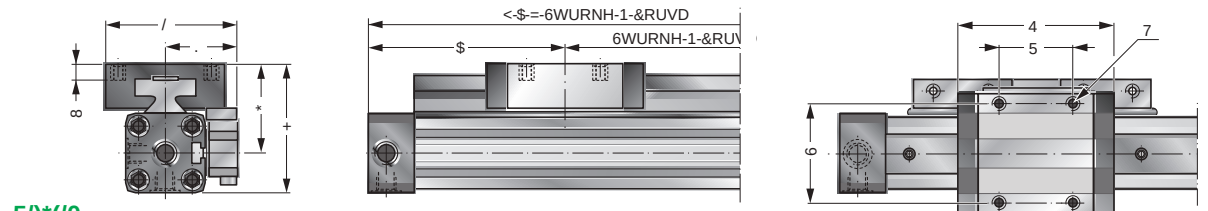
SEALS KIT
KIT GUARNIZIONI DI RICAMBIO**RL.. - SG**

Seals kit code = **RL + Bore + - SG:**
(The kit includes all seals).

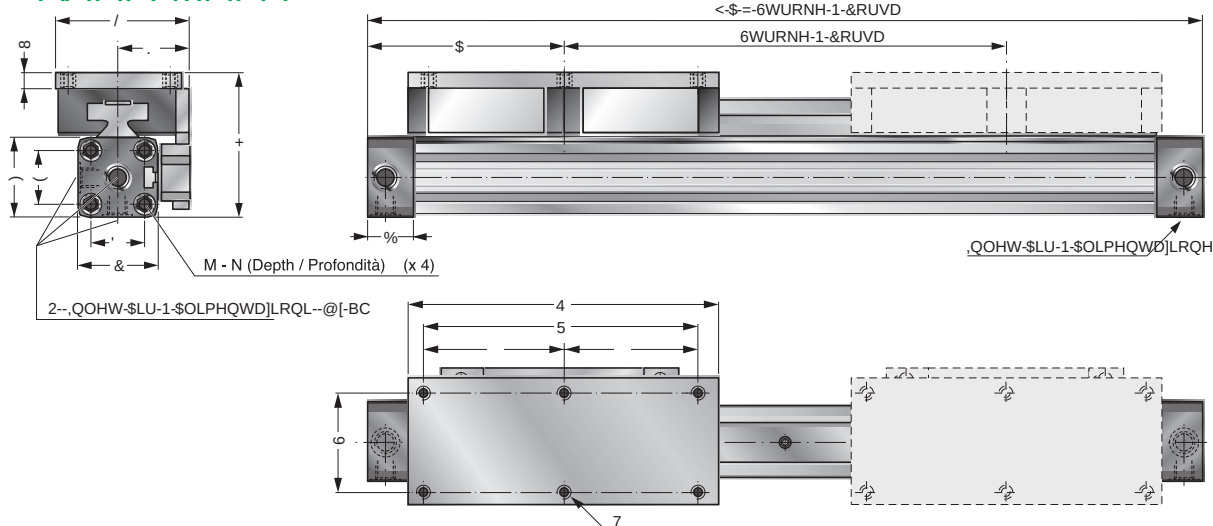
Codice del kit = **RL + Alesaggio + - SG:**
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **RL 32 V - SG**



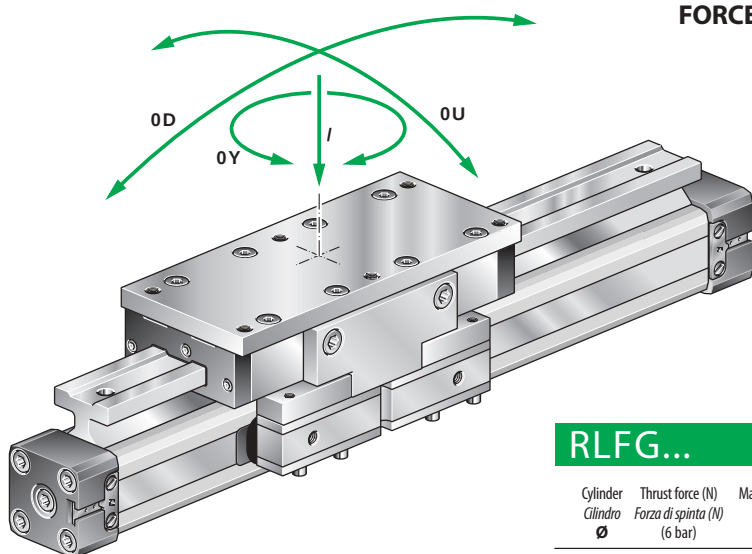


5/)*(10

$$5/)^*(+((5/)^*(,)((+((5/)^*(-.$$


Bore	A	B	C	D	E	F	H	K	L	M	N	O	Q	R	S	T	U	Code
Alesaggio																		DFG
16	65	15	27	18	18	27	48,5	31,5	63	M3	7	M5	90	40	36	M4	8	RLFG.16/...
25	100	23	40	27	27	40	76	32,5	70	M5	10	G1/8	162	148	53	M6	8	RLFG.25/...
32	125	27	52	36	40	52	88,5	32,5	70	M6	14	G1/4	162	148	53	M6	8	RLFG.32/...
40	150	30	60	54	54	72	103	32,5	70	M6	17	G1/4	162	148	53	M6	8	RLFG.40/...

FORCES AND TORQUE / FORZE E MOMENTI TORCENTI



Combined loads:

The combined forces and torque moments can be calculated using the following formula:

Carichi combinati:

Le sollecitazioni combinate di forze e momenti torcenti sono calcolabili con la seguente formula:

$$\frac{M_a}{M_{a \max}} + \frac{M_r}{M_{r \max}} + \frac{M_v}{M_{v \max}} + \frac{L}{L_{\max}} \leq 1$$

RLFG...

SLIDING PARTS WITH WAGON GUIDE
CARRO CON PATTINI GUIDA IN TECNOPOLIMERO

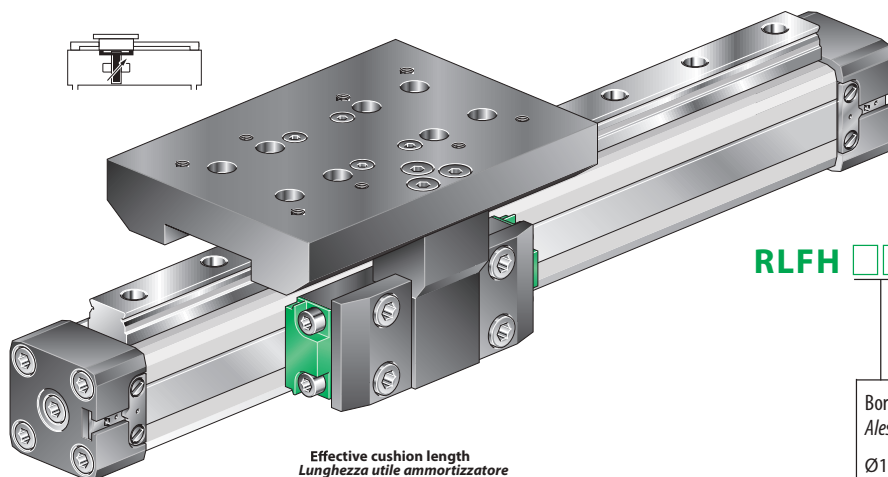
Cylinder <i>Cilindro</i>	Thrust force (N) <i>Forza di spinta (N)</i>	Max allowed load(N) <i>Carico max(N)</i>	Max allowed bending moments(Nm) <i>Momento flettente max(Nm)</i>		Max allowed torque(Nm) <i>Torsione max(Nm)</i>
Ø	(6 bar)	L	M _a axial	M _r radial	M _v central
16	110	350	6	4	6
25	250	1000	40	14	40
32	420	2000	68	24	68
40	640	2800	103	37	103

The above mentioned moments (M_a max ...) are related to the plane surface.

I momenti (M_d max ...) sono calcolati rispetto al piano della flangia.

RODLESS CYLINDERS WITH BALL BEARING GUIDES CILINDRI SENZA STELO CON CARRO GUIDATO A RICIRCOLO DI SFERE

SERIE **RLFH**



With magnetic piston / Con pistone magnetico

RLFH /

Stroke
Corsa (mm):

Bore
Alesaggio (mm):

Ø16	16
Ø25	25
Ø32	32
Ø40	40

- O** Standard
- V** Viton seals ($v \geq 1$ m/s)
Guarnizioni in Viton ($v \geq 1$ m/s)

- 1** Sliding system with one wagon guide
Carro con 1 pattino guida
- 2** Sliding system with two wagons guide
Carro con 2 pattini guida

Effective cushion length Lunghezza utile ammortizzatore	Bore Alesaggio	Length Lunghezza
16	16	15
25	25	21
32	32	26
40	40	32

Characteristic reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-97**

RLFH cylinder fixing see:
Fissaggi per cilindri RLFH vedi:
..... **Pag. A-88 ÷ A-89**

ADVANTAGES / VANTAGGI

A strong ball bearing system ensures a high level of guidance over the entire stroke and allows the cylinder to accept high direct bending moments and loads. Especially developed for linear motion in machine tools and robotics.

Questa guida lineare estremamente robusta è stata studiata appositamente per il suo utilizzo nelle macchine utensili e nell'industria robotica, grazie alla sua grande capacità di carico esterno (forze e movimenti) ed alla grande precisione di guida.

- High loading characteristics
- Quiet and smooth running
- Robust bearing housing
- Easy access to grease nipple
- Hardened and grinded guiderail
- Low friction bearing
- Easy maintenance
- Alte capacità di carico
- Scorrimento regolare e silenzioso
- Robusto alloggiamento di guida
- Facile accesso agli ingrassatori
- Rotaia di guida temprata e indurita
- Guida a basso coefficiente d'attrito di scorrimento
- Facile intercambiabilità degli elementi di guida

TECHNICAL FEATURES

End caps	Anodised aluminium.
Barrel	Anodised aluminium.
Seals	NBR standard (for $v \leq 1$ m/s).
Carriage	Anodised aluminium.
Sealing bands	Stainless steel.
Cushioning	Pneumatic adjusting cushions.

Ambient temperature range	-15 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	Filtered air.
Pressure range	0,5 ÷ 8 bar.

CARATTERISTICHE TECNICHE

Testate	Alluminio anodizzato.
Camicia	Alluminio anodizzato.
Guarnizioni	NBR standard (per $v \leq 1$ m/s).
Carro	Alluminio anodizzato.
Lamine di tenuta	Acciaio inossidabile.
Ammortizzatori	Pneumatici progressivi regolabili.

Temperatura ambiente	-15 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione d'esercizio	0,5 ÷ 8 bar.

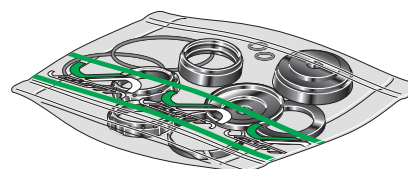
SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

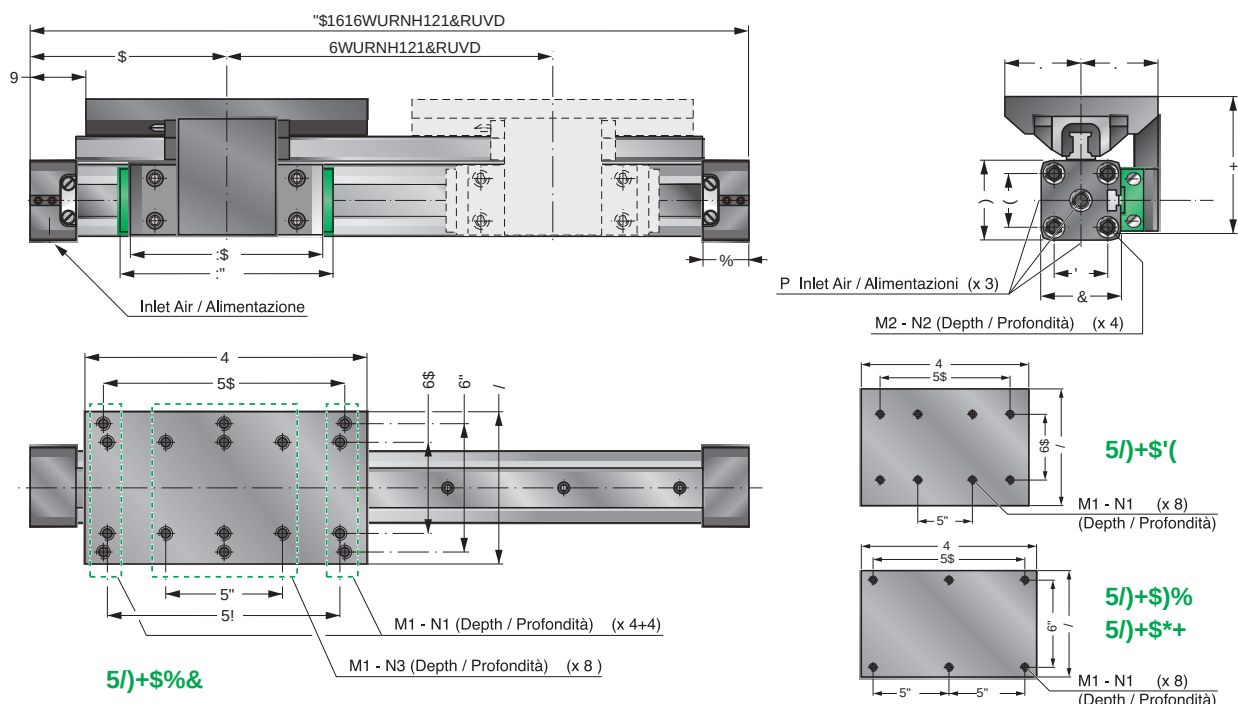
RL.. - SG

Seals kit code = **RL + Bore + -SG**:
(The kit includes all seals).

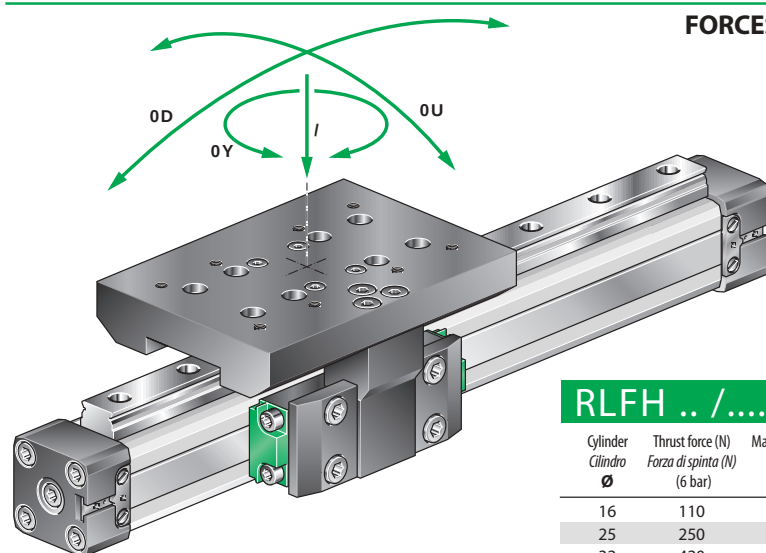
Codice del kit = **RL + Alesaggio + -SG**:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **RL 32 V - SG**





Bore Alesaggio	A	B	C	D	E	F	H	K	L	M1	M2	N1	N2	N3	P	Q	R1	R2	R3	S1	S2	V	W1	W2	Code Codice
16	65	15	27	18	18	27	48,5	31,5	63,0	M4	M3	10	7	-	M5	90	70	30	-	36	-	20	60	69	RLFH 16/...
25	100	23	40	27	27	40	73	40	80	M6	M5	12	11	10	G1/8	145	125	60	120	50	64	27,5	102	112	RLFH 25/...
32	125	27	56	40	36	52	90	57,5	115	M8	M6	13	15	-	G1/4	190	164	82	-	-	96	30	135	152	RLFH 32/...
40	150	30	69	54	54	72	105	57,5	115	M8	M6	18	17	-	G1/4	190	164	82	-	-	96	55	135	152	RLFH 40/...



FORCES AND TORQUE / FORZE E MOMENTI TORCENTI

Combined loads:

The combined forces and torque moments can be calculated using the following formula:

Carichi combinati:

Le sollecitazioni combinate di forze e momenti torcenti sono calcolabili con la seguente formula:

$$\frac{M_a}{M_{a \max}} + \frac{M_r}{M_{r \max}} + \frac{M_v}{M_{v \max}} + \frac{L}{L_{\max}} \leq 1$$

RLFH .. /....1.

SLIDING SYSTEM WITH ONE WAGON GUIDE CARRO CON 1 PATTINO GUIDA

Cylinder Cilindro Ø	Thrust force (N) Forza di spinta (N) (6 bar)	Max allowed load(N) Carico max(N) L	Max allowed bending moments(Nm) Momento flettente max(Nm) M _a axial	M _r radial	Max allowed torque(Nm) Torsione max(Nm) M _v central
16	110	500	4	6	11
25	250	1500	40	14	40
32	420	2950	61	30	62
40	640	3960	115	52	70

RLFH .. /....2.

SLIDING SYSTEM WITH TWO WAGONS GUIDE CARRO CON 2 PATTINI GUIDA

Cylinder Cilindro Ø	Thrust force (N) Forza di spinta (N) (6 bar)	Max allowed load(N) Carico max(N) L	Max allowed bending moments(Nm) Momento flettente max(Nm) M _a axial	M _r radial	Max allowed torque(Nm) Torsione max(Nm) M _v central
16	110	500	8	10	18
25	250	1550	85	20	80
32	420	3020	85	45	90
40	640	4030	130	65	100

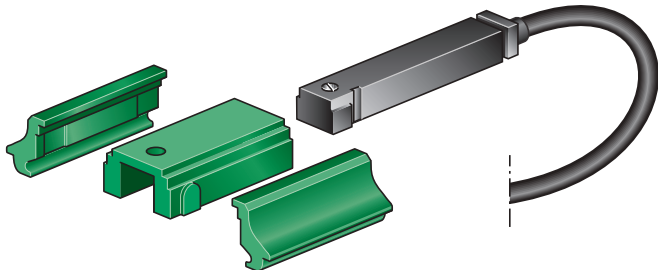
The above mentioned moments (M_a max ...) are related to the guide rail centre.

I momenti (M_a max ...) sono calcolati rispetto all'asse della guida.

MAGNETIC SWITCHES FOR RL.. CYLINDERS / FINECORSA MAGNETICI PER CILINDRI RL..

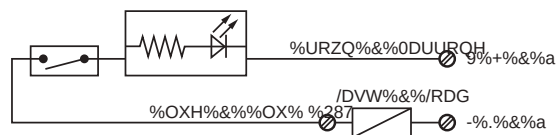
REED SWITCH
SENSORE REED

ZRS 11



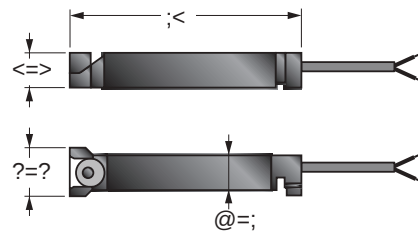
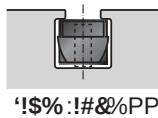
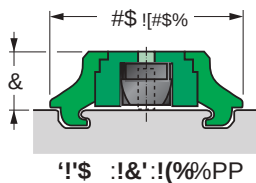
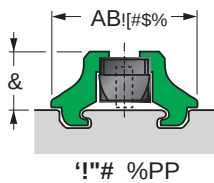
Cable standard lenght / *Lunghezza cavo standard*: 5000 mm

circuit / Circuito

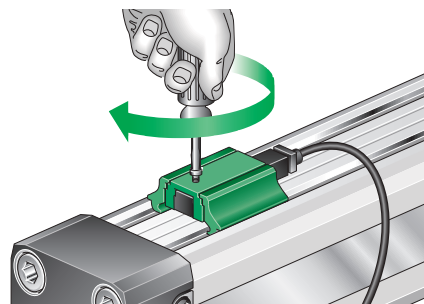
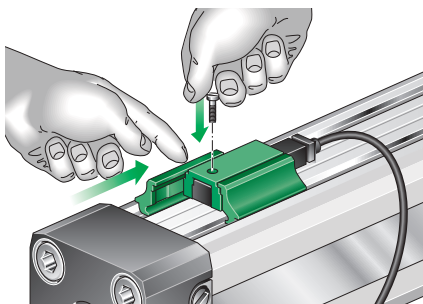
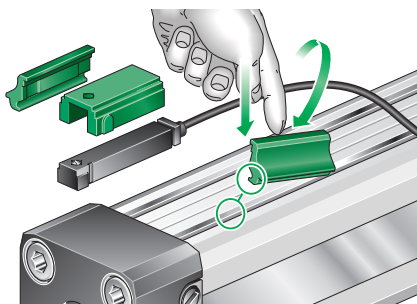


Code Codice	Voltage range <i>Tensione max</i>	Switching current <i>Corrente a 25 °C</i>	Switching power (resistive) <i>Potenza Induttiva</i>	Degree of protection <i>Grado di protezione</i>	Working temperature <i>Temperatura di lavoro</i>	Switch Hysteresis <i>Isteresi di inserzione</i>	ON / OFF time <i>Tempo di inserzione / disin.</i>	Electric life <i>Vita elettrica</i>	Contact function <i>Contatto</i>	
	V	-	-		°C	mm	-	impulse	-	
ZRS 11	5-130 AC-DC	200 mA	6W	IP67	-15 ÷ +60	3 mm	1 - 0,3 msec	1 x 10 ⁷	-	

MAGNETIC SWITCH BRACKET FOR RODLESS CYLINDER / FISSAGGIO PER SENSORE MAGNETICO SU CILINDRI SENZA STELO



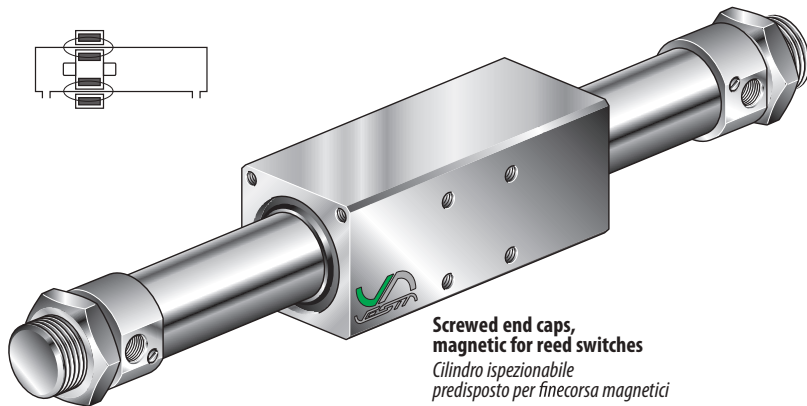
MAGNETIC SWITCH POSITIONING / POSIZIONAMENTO DEI FINECORSI MAGNETICI





SERIE **TM**

RODLESS MAGNETIC COUPLING CYLINDER CILINDRO SENZA STELO A TRASCINAMENTO MAGNETICO



Screwed end caps,
magnetic for reed switches
Cilindro ispezionabile
predisposto per finecorsa magnetici

TM /

Bore / Alesaggio
(mm):

Ø12 **12**

Ø20 **20**

Stroke / Corsa
(mm):

Bore Alesaggio	25	50	80	100	125	160	200	250	300	350	400	450	500
12	.	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.	.

WORKING PRINCIPLE / PRINCIPIO DI FUNZIONAMENTO

Vesta rodless series "TM" cylinder is a pneumatic linear drive unit with magnetic coupling. Its dimensions are smaller than ISO 6432 Standard cylinder. It has pneumatic cushioning for Ø 20, mechanical cushioning for Ø 12. Available upon request fixing accessories and switches.

Il cilindro Vesta serie "TM" è un'unità in cui il collegamento tra pistone e cursore è realizzato per mezzo di un campo magnetico di elevata intensità.

E' privo di stelo e quindi, è di dimensioni molto contenute. E' fornito di serie con ammortizzo pneumatico per il Ø 20 e meccanico per il Ø 12, ed è predisposto per l'uso di sensori magnetici; a richiesta sono fornibili gli accessori e i sensori magnetici per il rilevamento della posizione del cursore.

TECHNICAL FEATURES

Seals	Polyurethane for extended durability.
Cushioning	Pneumatic e mechanical for Ø20, mechanical for Ø12.
Barrel	Stainless steel X5 Cr Ni 18-10.
Stroke	Ø12: < 1000 mm. Ø20: < 2500 mm.
Magnetic force	Ø12: 100 N. Ø20: 270 N.

Ambient temperature	-10 °C ÷ +80 °C.
Temperature range of medium	0 °C ÷ +40 °C.
Lubrication	Not required.
Medium	filtered air.
Max operating pressure	7 bar.

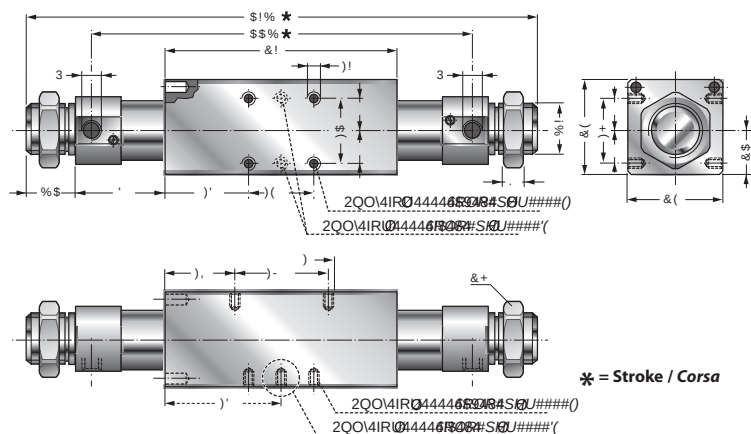
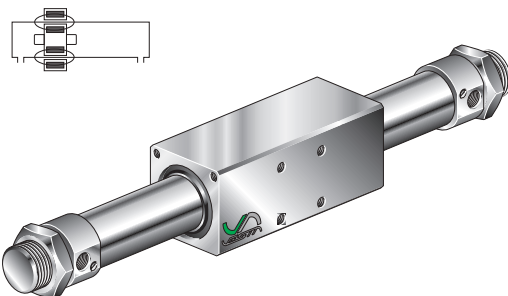
CARATTERISTICHE TECNICHE

Guarnizioni	Poliuretano.
Ammortizzatori	Pneumatico e meccanico per Ø20, meccanico per Ø12.
Camicia	Acciaio inox X5 Cr Ni 18-10.
Corse	Ø12: fino a 1000 mm. Ø20: fino a 2500 mm.
Forza magnetica	Ø12: 100 N. Ø20: 270 N.

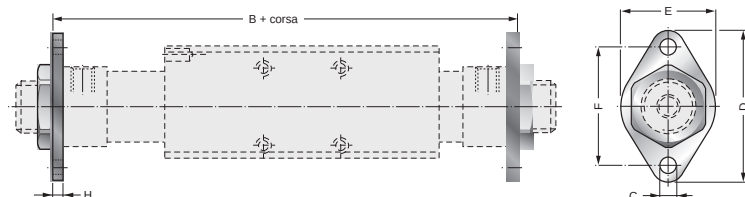
Temperatura ambiente	-10 °C ÷ +80 °C.
Temperatura fluido	0 °C ÷ +40 °C.
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.
Pressione max d'esercizio	7 bar.

TM .. /...

RODLESS CYLINDER
CILINDRO BASE SENZA STELO



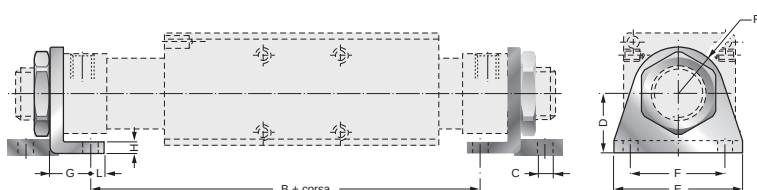
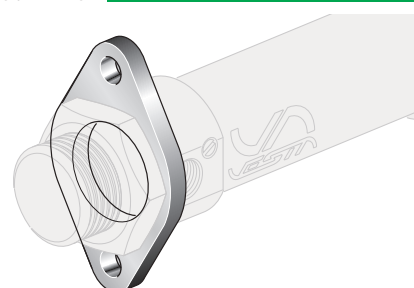
Bore Alesaggio	A1	A2	B1	B2	C1	C2	C3	D	F	F1	F2	F3	F4	F5	F6	F7	K	CH	P	Code Codice
12	156	115	M16x1,5	15	86	15	35	20	M3	M5	22	0	43	16	30	28	8	24	M5	TM 12
20	214	162	M22x1,5	18	110	20	45	34	M5	M5	32	32	39	30	43	33,5	10	30	G1/8	TM 20



Bore Alesaggio	B	ØC	D	E	F	H	Code Codice
12	134	5,5	52	30	40	4	FL/12
20	188	6,6	66	40	50	5	FL/20

FLANGE MOUNTING
MONTAGGIO A FLANGIA

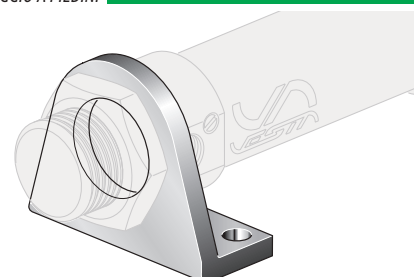
FL/..



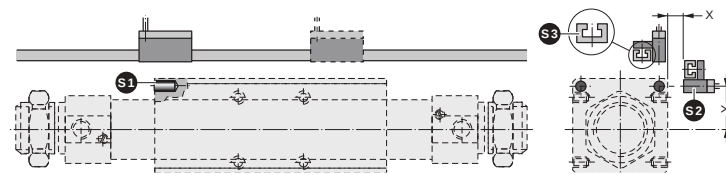
Bore Alesaggio	B	ØC	D	E	F	G	H	L	R	Code Codice
12	106	5,5	20	42	32	14	4	7	13	P/12
20	154	6,6	25	54	40	17	5	7	20	P/20

FOOT MOUNTING
MONTAGGIO A PIEDINI

P/..



MAGNETIC SWITCHES / FINECOSA MAGNETICI PER CILINDRI SERIE TM



- S1 Magnet for reed switch / Magnete per finecosa
S2 Reed switch / Finecosa magnetico
S3 Aluminium rail for reed switch mounting
Profilo di alluminio per montaggio finecosa

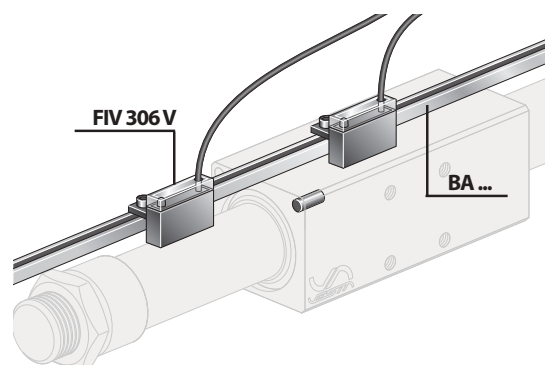
Bore Alesaggio	X	Y
12	7	16,5
20	7	25

REED SWITCH
FINECOSA MAGNETICO

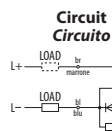
FIV 306 V

FIXING FOR REED SWITCH
SUPPORTO PER FINECOSA MAGNETICI

BA ...



Fixing dimensions BA... = cylinder stroke + A1 (except different customer request)
Dimensioni supporto BA... = corsa cilindro + A1 (salvo diversa specifica del cliente)



Circuit
Circuito

Band code Codice barra	Circuit code Codice circuit	Voltage Tensione V	Switching current Corrente mA	Switching capacity Potenza VA/W	Protection Protezione	Working temperature Temperatura °C	Contact Contatto
BA...	FIV 306V	10-220 AC-DC	200	10/10	IP65	-25 ÷ +75	NO

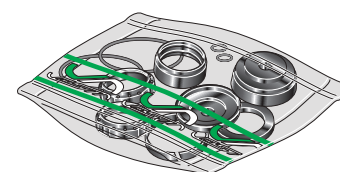
Seals kit code = Rodless cylinder code + Bore + - SG:
(The kit includes all seals).

Codice del kit = Codice del cilindro senza stelo + Alesaggio + - SG:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: TM 20 - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO

..... - SG





TECHNICAL FEATURES ESNW CYLINDERS / CARATTERISTICHE TECNICHE CILINDRI ESNW

In some applications the evolution of automation means very precise and controlled linear motions.

The **ESNW** actuators are developed for applications requiring linear movements and positioning to a high degree of accuracy, repeatability and speed variations in synchronised system. They are made with a ball screw, which is rotated by an electric motor, and a ball nut driving the external piston rod of the ISO 15552 cylinder.

The **ESNW** actuators are available in two versions: the **ESNW - L** with direct co axial transmission and the **ESNW - G** with driving gear transmission.

The available bore sizes for both the L and G versions are 32 and 50 mm in diameter. The pitch on the ball screw can be either 5 or 12,7 mm.

They are made with the body of the ISO 15552 NWT series cylinder, therefore most of the standard ISO fixing accessories can be used.

The 32-diameter version needs to prevent rotation of the piston rod by additional external system like the GLC or GLH, or alternatively a strong locking piston rod to the linear moving part of the machine. The 50-diameter version however has an internal guiding anti-rotational system for the piston rod and should stronger anti-rotational forces be required, the use of GLCE or GLHE guides may be used.

The 32-diameter version is supplied standard, with a flange to suite a size 23 stepping motor and the 50-diameter version is supplied with a flange to suite a size 34 stepping motor. Upon request the ESNW actuators are available with flange to suite other types of electrical motors.

Upon request the ESNW actuators are equipped and supplied with step motors: MP2331300 AP08-1,6 Nm for Ø32, MP3438430 AX08-4,6 Nm or MP3451640 AX08-7,6 Nm for Ø50.

The full range of ESNW cylinders are very suitable for vertical axis, assembling systems, testing systems, palletising and driving systems.

New bores 63 and 80 are now available.

L'evoluzione dei sistemi di automazione richiede spesso movimenti precisi e controllati. Gli attuatori ESNW sono stati studiati con lo scopo di soddisfare l'esigenza di posizionamenti multipli, ripetitivi e di precisione, realizzando sistemi di automazione sincronizzati con possibilità di cambiare i parametri di movimento senza modifiche meccaniche.

La serie di attuatori ESNW impiega viti a ricircolo di sfere che movimentano lo stelo di un cilindro ISO 15552. Il corpo dell'attuatore è infatti costituito da testate e camicia dei cilindri ISO 15552 serie NWT che permettono facile intercambiabilità con i cilindri stessi e l'utilizzo della maggior parte dei sistemi di fissaggio ISO. La serie ESNW è disponibile nelle versioni con diametro Ø32 e Ø50 entrambe con possibilità di montare motori accoppiati in linea nella serie ESNW -L o rinviati in parallelo nella serie ESNW -G. Ogni versione è fornibile con vite a passo 5 mm per impostazioni di rampe di accelerazione brevi con carichi e forze elevati o con vite a passo 12,7 mm per velocità maggiori con ottimi rendimenti dinamici (ideali per movimenti orizzontali veloci).

Il Ø32 necessita di accoppiamento antirotazione ottenibile mediante solido fissaggio dello stelo all'organo in movimento o con il montaggio di sistemi antirotazione tipo GLCE o GLHE, mentre il Ø50 monta un sistema antirotazione interno e non necessita quindi di sistemi di guida antirotazione per lo stelo; tuttavia il loro impiego garantisce ulteriore rigidità all'attuatore. Il Ø32 è fornito nella versione standard con flangia per accoppiamento con motori passo passo taglia 23 mentre il Ø50 viene fornito con flangia per motore passo passo taglia 34. Sono fornibili a richiesta flangiate per motori di tipo diverso. Sempre su richiesta gli attuatori possono essere forniti completi di motore passo passo già montato e testato: per il Ø32: MP2331300 AP08-1,6 Nm, per il Ø50: MP3438430 AX08-4,6 Nm o MP3451640 AX08-7,6 Nm.

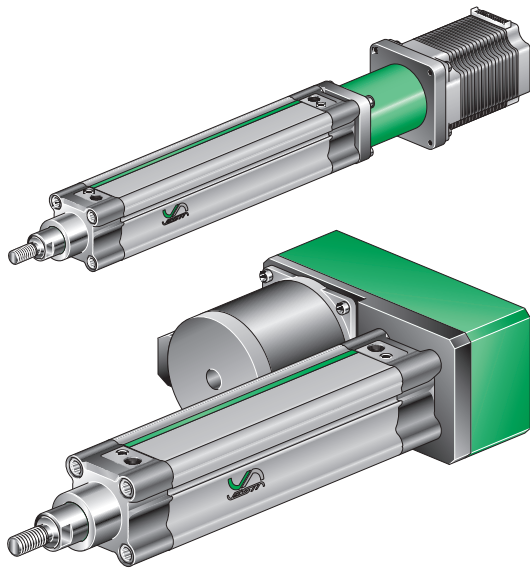
- Ogni modello e versione della serie ESNW è fornibile in una vasta gamma di corse che ne permettono l'impiego in modo versatile ed ideale per asservimenti di impianti automatici, assi verticali ed orizzontali, sistemi di palletizzazione, di montaggio e collaudo.

Ora disponibile anche gli alesaggi 63 e 80.

DYNAMIC FEATURES / CARATTERISTICHE DINAMICHE

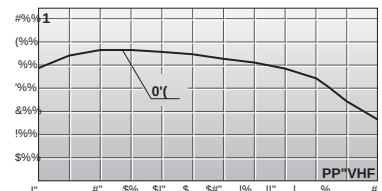
The pitch on the ball screw
can be either 5 or 12,7 mm.

Ogni versione è fornibile con vite
a passo 5 mm o 12,7 mm.



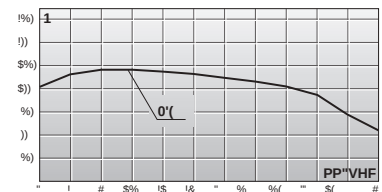
Ø 32 p = 5 mm

Max dynamic load on the screw	3435 N
Max carico dinamico della vite	3435 N
Max static load on the screw	1920 N
Max carico statico della vite	1920 N
Max thrust / Max forza di spinta generata	M16 = 570 N
Max speed	75 mm/sec.
Max velocità di traslazione	75 mm/sec.
Max torque allowed	2 Nm
Coppia max. applicabile	2 Nm



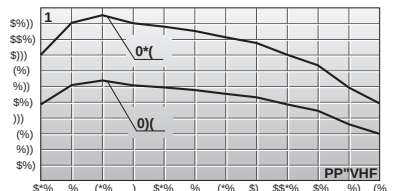
Ø 32 p = 12,7 mm

Max dynamic load on the screw	3435 N
Max carico dinamico della vite	3435 N
Max static load on the screw	1920 N
Max carico statico della vite	1920 N
Max thrust / Max forza di spinta generata	M16 = 220 N
Max speed	190 mm/sec.
Max velocità di traslazione	190 mm/sec.
Max torque allowed	2 Nm
Coppia max. applicabile	2 Nm



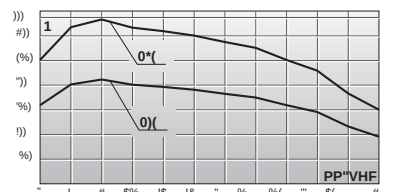
Ø 50 p = 5 mm

Max dynamic load on the screw	4690 N
Max carico dinamico della vite	4690 N
Max static load on the screw	2380 N
Max carico statico della vite	2380 N
Max thrust / Max forza di spinta generata	M46 = 1600 N M76 = 2600 N
Max speed	75 mm/sec.
Max velocità di traslazione	75 mm/sec.
Max torque allowed	7,5 Nm
Coppia max. applicabile	7,5 Nm



Ø 50 p = 12,7 mm

Max dynamic load on the screw	4690 N
Max carico dinamico della vite	4690 N
Max static load on the screw	2380 N
Max carico statico della vite	2380 N
Max thrust / Max forza di spinta generata	M46 = 640 N M76 = 1000 N
Max speed	190 mm/sec.
Max velocità di traslazione	190 mm/sec.
Max torque allowed	7,5 Nm
Coppia max. applicabile	7,5 Nm



ELECTRICAL ACTUATED CYLINDERS ATTUATORI ELETTRICI

SERIE **ESNW**

With magnetic piston / Con pistone magnetico

ESNW / - -

Bore
Alesaggio (mm):

Ø32 **32**
Ø50 **50**
Ø63 **63**
Ø80 **80**

Pitch ball screw
Passo vite:

050 ... 5 mm
100 ... 10 mm(Ø80)
127 ... 12,7 mm(Ø32-50)
200 ... 20 mm(Ø63)

Upon request
A richiesta

M With step motor
Completo di motore

Motor torque / Coppia motore:

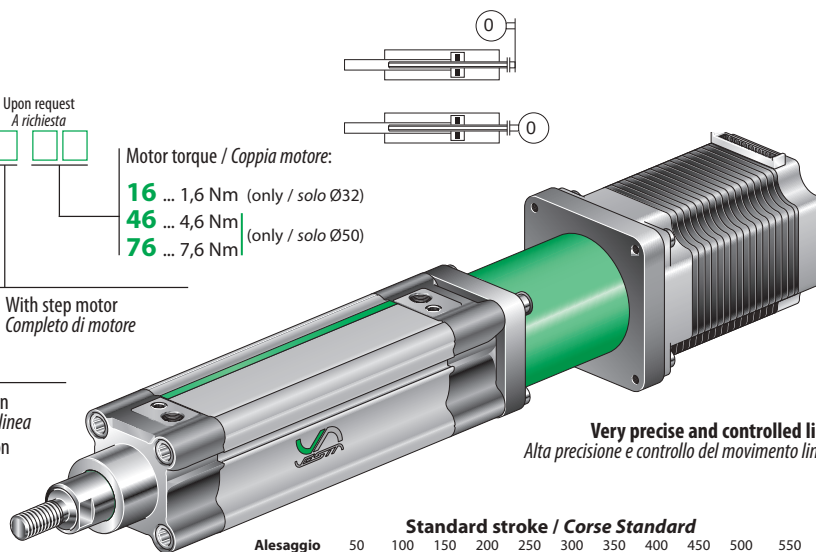
16 ... 1,6 Nm (only / solo Ø32)
46 ... 4,6 Nm (only / solo Ø50)
76 ... 7,6 Nm (only / solo Ø50)

Stroke / Corsa
(mm):

L Linear direct transmission
Trasmissione diretta, in linea
G Gear parallel transmission
Rinvio parallelo

ESNW cylinder fixing see:
Fissaggi per cilindri ESNW vedi:
..... **Pag. A-22 ÷ A-25**

Features of reed switches see:
Caratteristiche finecorsa magnetici:
..... **Pag. A-19**



Very precise and controlled linear
Alta precisione e controllo del movimento lineare.

Alesaggio	50	100	150	200	250	300	350	400	450	500	550	600
32	•	•	•	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•	•	•	•
63	•	•	•	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•	•	•	•

For others strokes please contact our technical sales department
Per corse superiori contattare l'Ufficio Tecnico

Heads Die-cast aluminium alloy, painted.
Piston rod Chromium-plated steel.
Barrel Anodized profiled aluminium tube.

Seals Polyurethane.
Ambient temperature range -10 °C ÷ +80 °C.
Lubrication Not required.

TECHNICAL FEATURES

Testate Pressofuse in lega di alluminio e verniciate.
Stelo Acciaio cromato.
Camicia Tubo profilato ed anodizzato in alluminio.

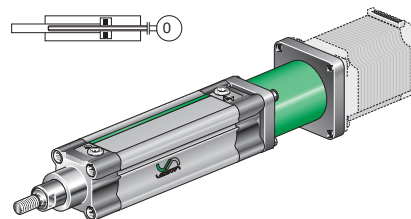
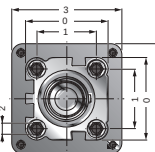
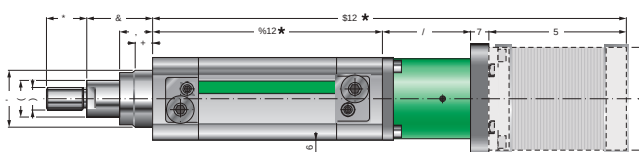
Guarnizioni Tutte in poliuretano.
Temperatura ambiente -10 °C ÷ +80 °C.
Lubrificazione Non necessaria.

CARATTERISTICHE TECNICHE

* = Stroke / Corsa

LINEAR DIRECT TRANSMISSION
TRASMISSIONE DIRETTA, IN LINEA

ESNW ... L

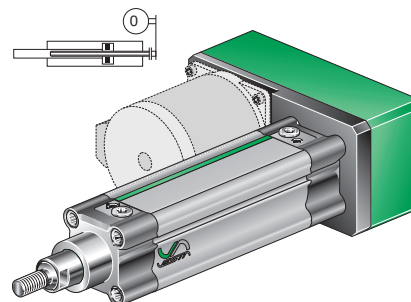
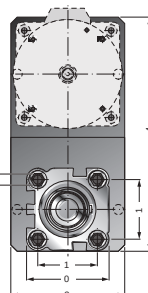
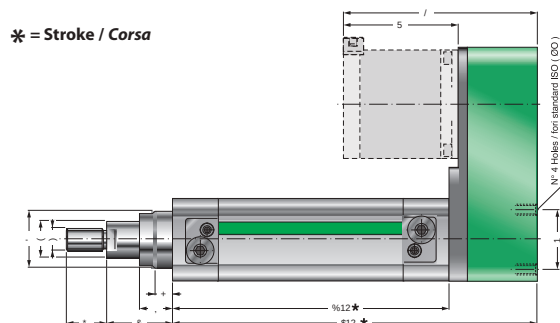


Bore Alesaggio	A	B	C	ØD	ØE	ØF	G	H	I	L	M	N	ØO	P	Q	R	S	T	Code Codice
32 (M16)	279,5	137	28	30	20	M10x1,25	22	10	18	48	45	32,5	M6	60	57,2	78,5	7,5	10	ESNW 32/... L M16
50 (M46)	303	149	38	40	25	M16x1,5	32	12,1	28	48	64	46,5	M8	86	86	94	11	12	ESNW 50/... L M46
50 (M76)	341	149	38	40	25	M16x1,5	32	12,1	28	48	64	46,5	M8	86	86	132	11	12	ESNW 50/... L M76
63	263	176	38	45	30	M16x1,5	32	11,5	28	77	75	56,5	M8	90	-	-	-	-	ESNW 63/... L
80	300	176	31,5	45	35	M20x1,5	40	12	34,5	105	93	72	M10	110	-	-	-	-	ESNW 80/... L

* = Stroke / Corsa

GEAR PARALLEL TRANSMISSION
RINVIATO PARALLELO

ESNW ... G



Bore Alesaggio	A	B	C	ØD	ØE	ØF	G	H	I	L	M	N	ØO	P	Q	R	Code Codice
32 (M16)	185	137	28	30	20	M10x1,25	22	10	18	117	45	32,5	M6	60	110	78,5	ESNW 32/... G M16
50 (M46)	214	149	38	40	25	M16x1,5	32	12,1	28	147	64	46,5	M8	90	170	94	ESNW 50/... G M46
50 (M76)	214	149	38	40	25	M16x1,5	32	12,1	28	185	64	46,5	M8	90	175	132	ESNW 50/... G M76
63	247	176	38	45	30	M16x1,5	32	11,5	28	-	75	56,5	M8	90	200	-	ESNW 63/... G
80	247	176	31,5	45	35	M20x1,5	40	12	34,5	-	93	56,5	M10	110	212	-	ESNW 80/... G



SERIE **GLCE** ; **GLHE**

LINEAR CONTROL UNITS FOR ELECTRICAL CYLINDER UNITA' DI GUIDA PER ATTUATORI ELETTRICI

TECHNICAL FEATURES / CARATTERISTICHE COSTRUTTIVE

The linear control units **GLCE** and **GLHE** series can be assembled to cylinders in compliance with ISO 6432 and ISO 15552 standards. Anti-rotation is guaranteed by two steel guide stems, whose movement is supported by four brass bushes in **GLCE ...** and **GLHE ... BS** series, and by four ball bushings in the **GLHE ... BB** series. The piston rod is connected to the front flange by a rigid joint to prevent its rotations.

Versatility of mounting is assured by either mounting directly to the unit, or by the use of standard accessories (mountings).

All the linear control units GLHE-BS and BB series are supplied with scraper seals and grease box. The unit is supplied already lubricated.

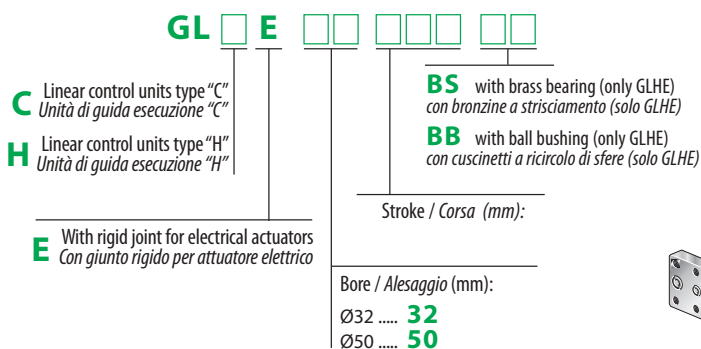
Le unità di guida serie **GLCE** e **GLHE** sono assemblabili a cilindri rispondenti alla norma ISO 6432-15552.

L'antirotazione è garantita da due steli guida in acciaio il cui movimento è supportato da quattro bronzine a strisciamento nella serie **GLCE ...** e **GLHE ... BS**, oppure da quattro cuscinetti con ricircolo di sfere nella serie **GLHE ... BB**.

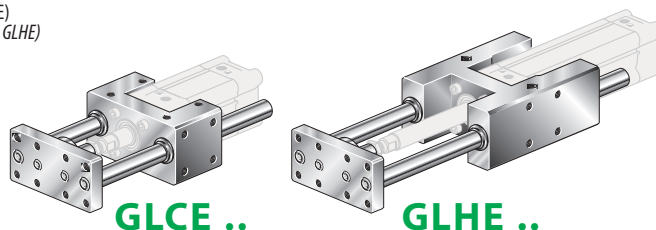
Lo stelo del cilindro è collegato alla flangia frontale con un giunto rigido che ne garantisce l'antirotazione.

La versatilità d'impiego è stata realizzata mediante tre possibili superfici di fissaggio e di piastre per il fissaggio orizzontale o verticale.

Tutte le unità di guida, oltre ad essere fornite già prelubrificate, sono corredate di rischiapolvere ed ingrassatori.

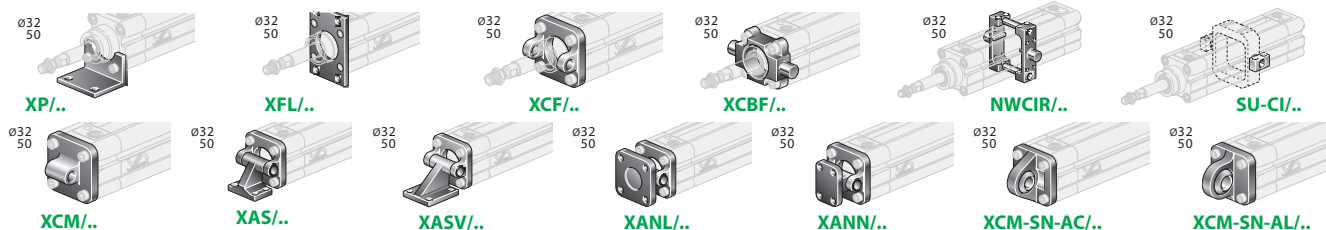


Fixing, materials and dimensions of GLCE and GLHE linear control units see:
Per dimensioni, materiali e fissaggi delle serie GLCE e GLHE vedi:
..... **Pag. A-52 ÷ A-55**



ACCESSORIES / ACCESSORI

Note: the fixing screws are not included with the supply of mountings
le viti di fissaggio non sono comprese nella fornitura dell'accessorio.
For dimensions fixing see: / Per le dimensioni dei fissaggi vedi **A-22 ÷ A-25**.



MAGNETIC SWITCHES FOR **ESN** CYLINDERS / **FINECOSA** MAGNETICI PER CILINDRI **ESN**



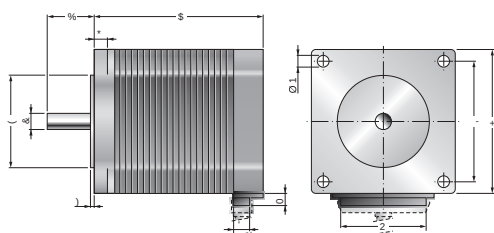
For magnetic switches features see:
Caratteristiche finecorsa magnetici vedi:

**VNCR2, VNPR2,
VNCE3, VNPE3.**

Pag. A-19

For further information on the resistance of materials to aggressive agents, please contact our technical sales department.
Per informazioni sul grado di resistenza dei finecorsa magnetici in ambienti specifici contattare il nostro ufficio tecnico-commerciale.

HYBRID STEPPER MOTORS FOR ESNW CYLINDERS / MOTORI ELETTRICI PER CILINDRI ESNW



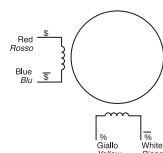
Code Codice	A	B	C	D	E	F	G	H	I	M	ØN	O
MP 2331-M16	78,5	21	6,3	7	38,1	1,6	4,8	56,4	47,1	5,5	5	32,2

STEPPER MOTOR
MOTORE PASSO-PASSO

MP 2331-M16

For size Ø32 / Per taglia Ø32

Circuit / Circuito



Phase/Fase
A1
A2
B1
B2

Bipolar connection / Connessione bipolare:

Red/Rosso
Blue/Blu
Yellow/Giallo
White/Bianco

Step angle	1,8 ± 5%
Number of Phase	2
Insulation resistance	100 MΩ Min (500V DC)
Insulation class	Class B
Holding Torque	16 Kg·cm

Rated Voltage	5,0 V
Rated Current	1,8 A
Resistance per Phase	2,75 Ω
Inductance per Phase	10,8 mH

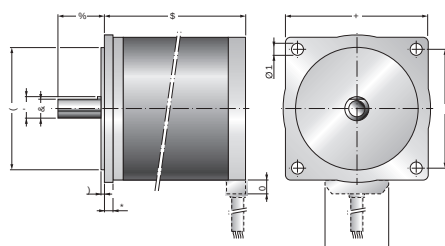
GENERAL AND ELECTRICAL SPECIFICATIONS

Angolo Passo	1,8 ± 5%
Numero di Fasi	2
Isolamento	100 MΩ Min (500V DC)
Classe di isolamento	Class B
Coppia	16 Kg·cm

Voltaggio	5,0 V
Corrente	1,8 A
Resistenza per Fase	2,75 Ω
Induttanza per Fase	10,8 mH

CARATTERISTICHE GENERALI ED ELETTRICHE

Cable standard lenght / Lunghezza cavo standard: 300 mm



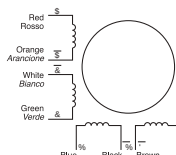
Code Codice	A	B	C	D	E	F	G	H	I	L	M	ØN
MP 3438-M46	94	30,2	8,5	9,5	73	1,6	4,8	82,5	69,6	37	16	5,5

STEPPER MOTOR
MOTORE PASSO-PASSO

MP 3438-M46

For size Ø50 / Per taglia Ø50

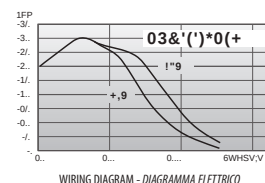
Circuit / Circuito



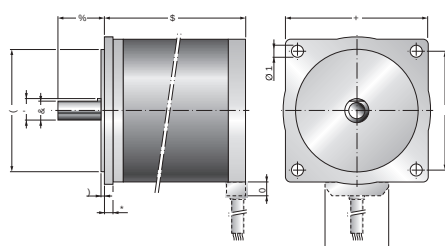
Bipolar parallel connection / Connessione bipolare parallela:

Phase/Fase
A1
A2
B1
B2

Red/Rosso + White/Bianco
Orange/Arancione + Green/Verde
Blue/Blu + Brown/Marrone
Black/Nero + Yellow/Giallo



WIRING DIAGRAM - DIAGRAMMA ELETTRICO



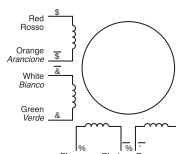
Code Codice	A	B	C	D	E	F	G	H	I	L	M	ØN
MP 3451-M76	132	30,2	8,5	9,5	73	1,6	4,8	82,5	69,6	37	16	5,5

STEPPER MOTOR
MOTORE PASSO-PASSO

MP 3451-M76

For size Ø50 / Per taglia Ø50

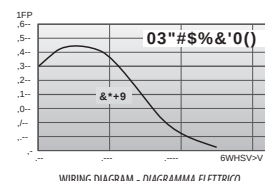
Circuit / Circuito



Bipolar parallel connection / Connessione bipolare parallela:

Phase/Fase
A1
A2
B1
B2

Red/Rosso + White/Bianco
Orange/Arancione + Green/Verde
Blue/Blu + Brown/Marrone
Black/Nero + Yellow/Giallo



WIRING DIAGRAM - DIAGRAMMA ELETTRICO

GENERAL AND ELECTRICAL SPECIFICATIONS

	MP 3438-M46	MP 3451-M76		MP 3438-M46	MP 3451-M76
Step angle	1,8 ± 5%	1,8 ± 5%	Rated Voltage	2,76 V	5,64 V
Number of Phase	4	4	Rated Current	4,6 A	6 A
Insulation resistance	100 MΩ Min (500V DC)	100 MΩ Min (500V DC)	Resistance per Phase	0,6 Ω ± 10%	0,94 Ω ± 10%
Insulation class	Class B	Class B	Inductance per Phase	2,7 mH ± 20%	4,5 mH ± 20%
Weight	2,6 Kg	4,5 Kg	Holding Torque	40 Kg·cm	75 Kg·cm
Rotator inertia	1200 g·cm	-	Detent torque	0,8 Kg·cm	0,8 Kg·cm

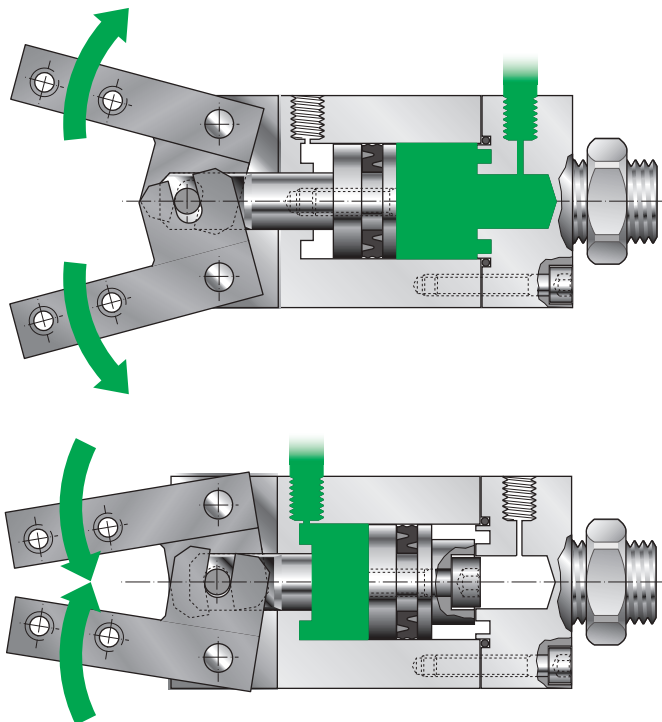
CARATTERISTICHE GENERALI ED ELETTRICHE

	MP 3438-M46	MP 3451-M76		MP 3438-M46	MP 3451-M76
Angolo Passo	1,8 ± 5%	1,8 ± 5%	Voltaggio	2,76 V	5,64 V
Numero di Fasi	4	4	Corrente	4,6 A	6 A
Isolamento	100 MΩ Min (500V DC)	100 MΩ Min (500V DC)	Resistenza per Fase	0,6 Ω ± 10%	0,94 Ω ± 10%
Classe di isolamento	Classe B	Classe B	Induttanza per Fase	2,7 mH ± 20%	4,5 mH ± 20%
Peso	2,6 Kg	4,5 Kg	Coppia	40 Kg·cm	75 Kg·cm
Inerzia Rotore	1200 g·cm	-	Detent torque	0,8 Kg·cm	0,8 Kg·cm



SERIE **MH** - **MHM**

PNEUMATIC GRIPPERS SERIES MANI DI PRESA A COMANDO PNEUMATICO SERIE



MH pneumatic grippers are available in single and double effect versions for bores 16-20-32-50.

The magnetic version (**MHM**) is available starting from bore 20. Gripping force from 4 Kg. to 60 Kg. at 6 bar.

Le unità di presa Vesta serie **MH** a semplice e doppio effetto sono prodotte nei 4 alesaggi 16-20-32-50, magnetiche a partire dal diametro 20 (**MHM**).

La forza di bloccaggio va da 4 a 60 Kg. a 6 bar.

E' disponibile anche una versione a stelo posteriore uscente.

GRIPPERS CODE SERIE **MH** / CODICE DI IDENTIFICAZIONE DELLE MANI DI PRESA SERIE **MH**

Base / Base	MH - -	NA Normally open / Normalmente aperta
M Magnetic Predisposto per interruttori magnetici	Bore Alesaggio (mm): Ø16 16 Ø20 20 Ø32 32 Ø50 50	NC Normally closed / Normalmente chiusa
	SE Simple effect Semplice effetto	
	DE Double effect Doppio effetto	
		0 Base / Base
		1 Back through rod / Stelo posteriore uscente

For Ø16 no version M (Magnetic); for Ø50 no versions SE NA (Simple effect normally open) and SE NC (Double effect normally closed).
Per Ø16 la versione M (Magnetico) non è prevista; per Ø50 le versioni SE NA ed SE NC non sono previste.

TECHNICAL FEATURES

Body	Aluminium alloy.
Seals	Pre-lubricated lip seals.
Lubrication	Not required.
Medium	Filtered air.

Fingers and trunnions	Carbonium steel
Environment temperature range	-20 °C ÷ +80 °C
Bore	Ø16 ÷ Ø50
Max operating pressure	10 bar

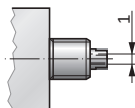
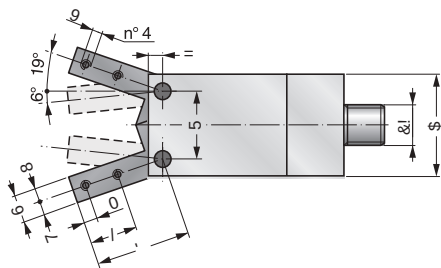
CARATTERISTICHE TECNICHE

Corpo	Lega di alluminio.
Guarnizioni	Con profilo del labbro antiusura prelubrificato con grasso tipo "Long-Time".
Lubrificazione	Non necessaria.
Fluido	Aria filtrata.

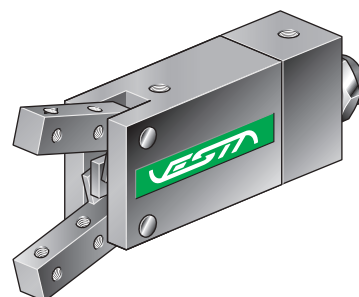
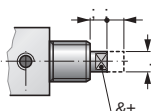
Dita di presa e perni	Acciaio al carbonio
Temperatura ambiente	-20 °C ÷ +80 °C
Alesaggi	Ø16 ÷ Ø50
Pressione max d'esercizio	10 bar

GRIPPER Ø16
UNITA' DI PRESA Ø16

MH 16



Through rod version
Versione stelo passante



A	B	B1	C	ØC1	CH	D	E	F	G	H	ØJ	ØK	L	M	ØN	R	S	T	U	ØV	X	ØY	Z
30	20	3.95	68.7	M12x1.25	5	28	21.2	56.7	7	12	M5x0.8	6	14	4	M3x0.5 (8mm)	20	8	4.5	3.5	M3x0.5	5	M4x0.7	6.2

Weight / Peso : 125 g

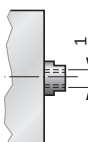
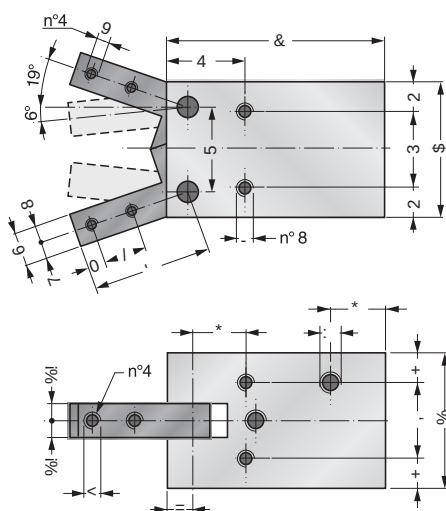
**6 bar gripping
force at 15 mm. from fingers fulcrum:**

**Forze di bloccaggio a 6 bar
a 15 mm di distanza dal fulcro delle dita:**

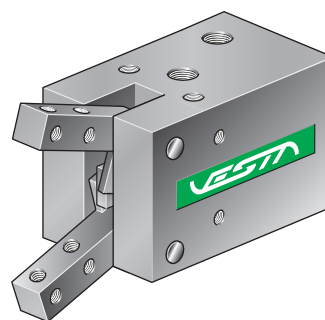
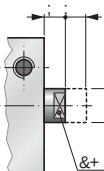
MH 16 DE **6,5 Kg** opening / *in apertura* **5,5 Kg** closing / *in chiusura*

MH 16 SE NC **5,2 Kg** opening / in apertura

MH 16 SE NA 4 Kg closing / *in chiusura*



Through rod version
Versione stelo passante



GRIPPER Ø20
UNITA' DI PRESA Ø20

MH 20

A	B	B1	C	CH	D	G	H	I	ØJ	ØK	L	M	ØN	O	P	Q	R	S	T	U	ØV	X	ØY	Z	W
32	32	3,95	53,5	6	28	13,5	7	18	M4x0,7	8	10	4	M4x0,7 (8mm)	7	18	19,7	20	8	4,5	3,5	M3x0,5	5	M4x0,7	6,2	M5x0,8

Weight / Peso : 175 g

**6 bar gripping
force at 15 mm. from fingers fulcrum:**

**Forze di bloccaggio a 6 bar
a 15 mm di distanza dal fulcro delle dita:**

MH 20 DE **12 Kg** opening / *in apertura* **10 Kg** closing / *in chiusura*

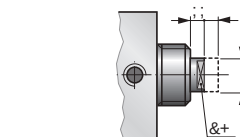
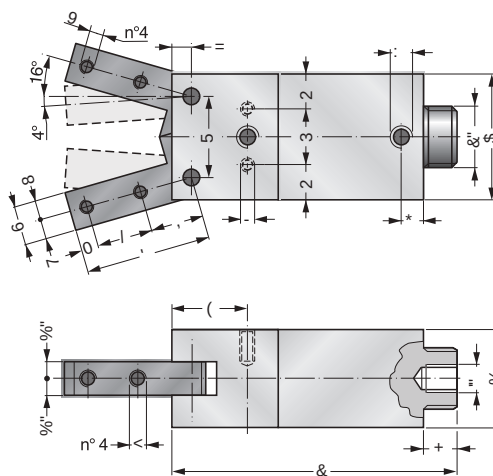
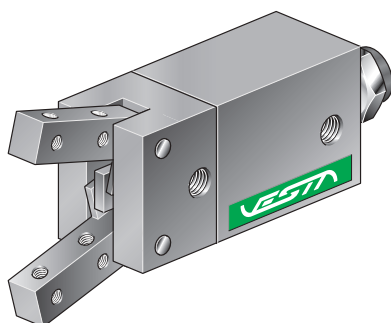
MH 20 SE NC **8,5 Kg** opening / in apertura

MH 20 SE NA 7,5 Kg closing / *in chiusura*

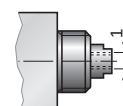


MH 32

GRIPPER Ø32
UNITA' DI PRESA Ø32



Through rod version
Versione stelo passante



A	B	B1	C	ØC1	CH	D	ØD1	E	G	H	ØJ	ØK	I	L	M	ØN	O	P	R	S	T	U	ØV	ØW	X	ØY	Z
45	35	5,95	105,2	M22x1,5	10	45	M10x1,25	30,2	8	12	M5x0,8	12	19	20	6	M5x0,8 (10mm)	12,5	20	28	14	8	6	M5x0,8	G1/8"	5	M6x1	10,2

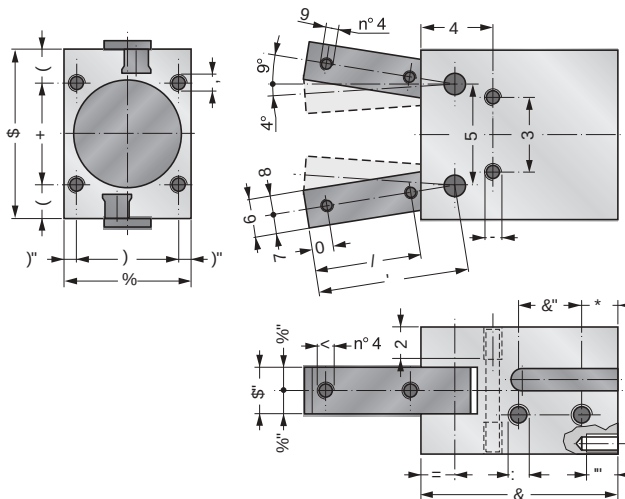
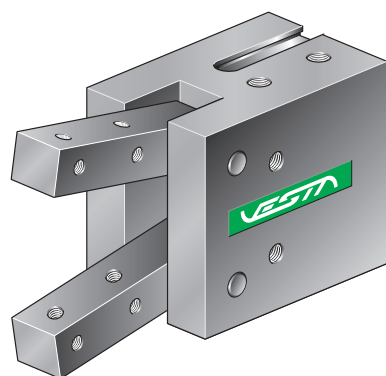
Weigth / Peso : 490 g

6 bar gripping
force at 15 mm. from fingers fulcrum:
Forze di bloccaggio a 6 bar
a 15 mm di distanza dal fulcro delle dita:

MH 32 DE	24 Kg	opening / in apertura	22 Kg	closing / in chiusura
MH 32 SE NC	19,5 Kg	opening / in apertura		
MH 32 SE NA	16,5 Kg	closing / in chiusura		

MHM 16

GRIPPER Ø16
UNITA' DI PRESA Ø16



A	A1	B	B1	C	C1	D	D1	E	F	F1	G	H	ØI	ØJ	L	M	O	P	Q	R	S	T	U	ØV	ØW	ØY	Z
30	7,9	20	4	57	19	28	8	4	12	4	13	22	M4x0,7	M4x0,7	14	4	7	17	18	20	8	4,5	3,5	M3x0,5	M5x0,8	M4x0,7	6,2

Weigth / Peso : 125 g

6 bar gripping
force at 15 mm. from fingers fulcrum:
Forze di bloccaggio a 6 bar
a 15 mm di distanza dal fulcro delle dita:

MHM 16 DE	6,5 Kg	opening / in apertura	5,5 Kg	closing / in chiusura
MHM 16 SE NC	5,2 Kg	opening / in apertura		
MHM 16 SE NA	4 Kg	closing / in chiusura		



Weight / Peso : 175 g

MMH 20 DE	12 Kg opening / <i>in apertura</i>	10 Kg closing / <i>in chiusura</i>
MMH 20 SE NC	8,5 Kg opening / <i>in apertura</i>	
MMH 20 SE NA	7,5 Kg closing / <i>in chiusura</i>	



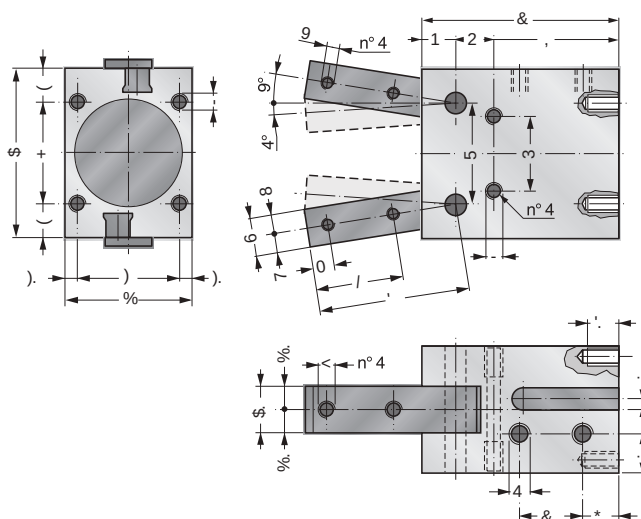
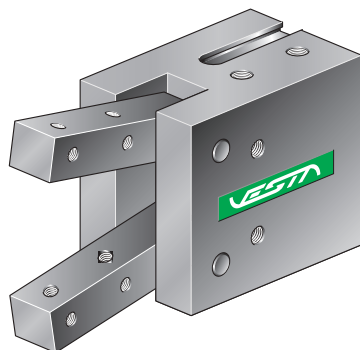
Weight / Peso : 490 g

MMH 32 DE	24 Kg opening / <i>in apertura</i>	22 Kg closing / <i>in chiusura</i>
MMH 32 SE NC	19,5 Kg opening / <i>in apertura</i>	
MMH 32 SE NA	16,5 Kg closing / <i>in chiusura</i>	



MHM 50

MAGNETIC GRIPPER Ø50
UNITÀ MAGNETICA Ø50



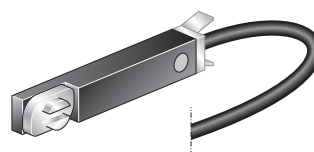
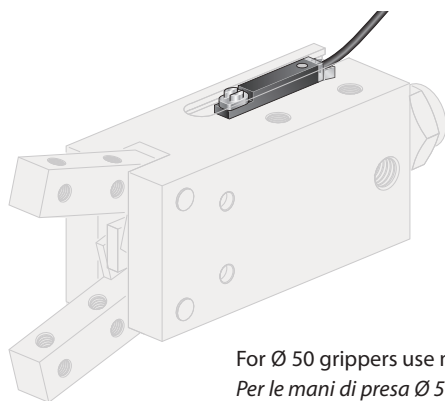
A	A1	B	B1	C	C1	D	D1	E	F	F1	G	H	I	ØJ	L	M	N	O	P	Q	R	S	T	U	ØV	W	X	ØY
80	22	60	11	100	24	71	15	16	48	6	21	48	61	M8x1,25	40	10	18	21	35	G1/8"	48	18	10	8	M6x1	4	17	M8x1,25

Weight / Peso : 1680 g

6 bar gripping
force at 30 mm. from fingers fulcrum:
*Forze di bloccaggio a 6 bar
a 30 mm di distanza dal fulcro delle dita:*

MHM 50 DE	60 Kg	opening / in apertura	52 Kg	closing / in chiusura
MHM 50 SE NC	49 Kg	opening / in apertura		
MHM 50 SE NA	46 Kg	closing / in chiusura		

MAGNETIC SWITCHES FOR MHM .. GRIPPERS / FINECORSA PER MANI DI PRESA SERIE MHM ..



For magnetic switches features see: - Caratteristiche finecorsa magnetici vedi:

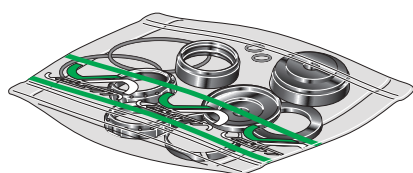
VNCR2, VNPR2, VNCE3, VNPE3.

Pag. A-19

For Ø 50 grippers use magnetic switches **FTV 306 V** (see page A-38).
Per le mani di presa Ø 50 mm usare sensori **FTV 306 V** (vedere pag. A-38).

..... - SG

SEALS KIT
KIT GUARNIZIONI DI RICAMBIO



Seals kit code = **Gripper code** + **Bore** + **- SG**:
(The kit includes all seals).

Codice del kit = **Codice della mano di presa** + **Alesaggio** + **- SG**:
(Il kit comprende tutte le guarnizioni necessarie).

Example / Esempio: **MHM 32 - SG**



ATEX CYLINDERS RANGE GAMMA CILINDRI ATEX

SERIE **ATEX**

TECHNICAL FEATURES / CARATTERISTICHE COSTRUTTIVE

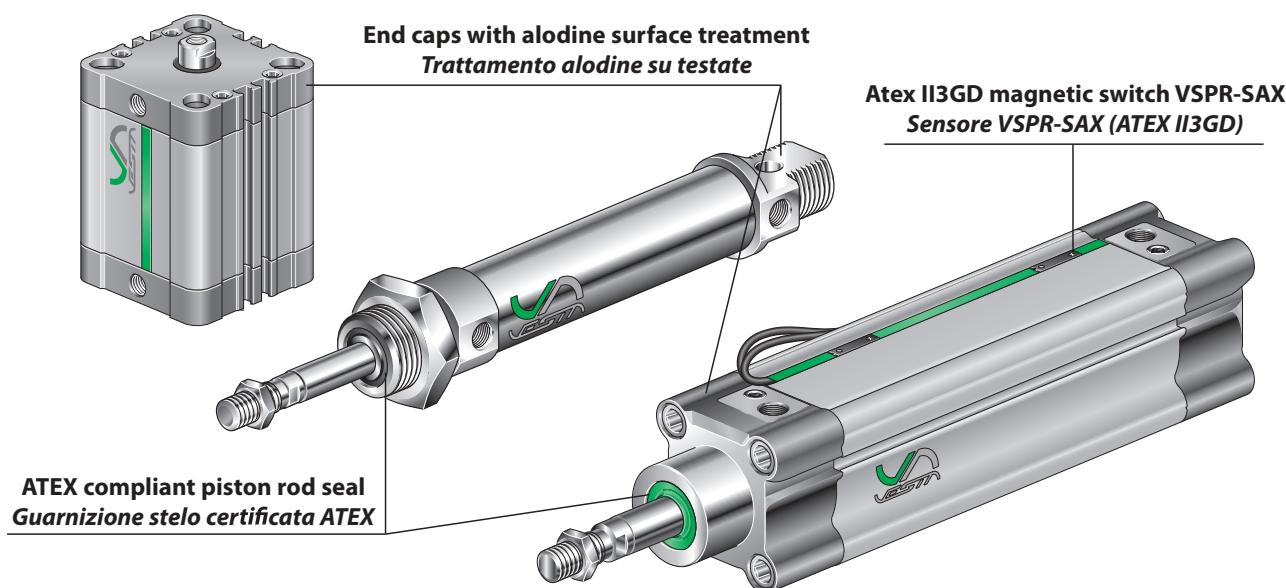
Vesta ATEX cylinders satisfy all directives 94/9/EC to avoid mechanical risks of ignition in explosive atmosphere (category II3GD). Design, materials and technical solutions are made to prevent mechanical sparks, electrostatic charges, heating of surfaces due to friction, etc. "Construction safety" of Vesta ATEX cylinders is granted by all the above mentioned features. They grant the earthing of all their parts. This treatment grants protection to products, while allows electrical conduction. All the parts are ATEX compliant and cylinders have overcome ATEX impact tests and protection degree IP65 tests.

I cilindri ATEX VESTA rispettano tutti i requisiti di sicurezza previsti dalla direttiva 94/9/CE per evitare il rischio meccanico di accensione di atmosfere potenzialmente esplosive di categoria II3GD.

Questo risultato si è ottenuto con la scelta progettuale di materiali e di soluzioni tecniche atti a prevenire scintillii, accumuli di cariche elettrostatiche, surriscaldamenti locali per attrito o sfregamento, ecc; pertanto la protezione viene garantita attraverso la sicurezza costruttiva.

I cilindri ATEX Vesta consentono la messa a terra di tutte le loro parti.

Tutta la componentistica utilizzata soddisfa i requisiti ATEX. I cilindri hanno superato i test d'impatto previsti dalla direttiva, nonché i test del grado di protezione IP 65.



TECHNICAL FEATURES - CARATTERISTICHE TECNICHE

- Atex category II3GD
- IP65 protection degree
- Seals (XNWT, XSK, XXJSS), polyurethane and NBR (XDVM; XACM; XDMS).
- End caps with alodine surface treatment
- Stainless steel piston rod
- Medium T: 0° < Tfluid < 25°C
- Environment T: -5° < Tamb < 50°C
- Medium: filtered air (quality 5 ISO 8573-1)
- Lubrication not required
- For technical features of atex cylinders please see the correspondent non atex cylinder
- For use instructions please see www.vesta.it
- For 94/9/EC atex directive please see pag B-113

- Classificazione atex II3GD
- Protezione IP65
- Guarnizioni poliuretano (XNWT, XNSK, XXJSS), poliuretano e NBR (XDVM; XACM; XDMS)
- Testate con trattamento alodine
- Steli in acciaio inox
- T fluido: 0° < Tfluid < 25°C
- T ambiente: -5° < Tamb < 50°C
- Fluido: aria filtrata (qualità 5 secondo ISO 8573-1)
- Lubrificazione non necessaria
- Per caratteristiche pneumatiche vedere codici corrispondenti senza la "X"
- Per manuale di uso e manutenzione consultare il sito www.vesta.it
- Per informazioni su direttiva 94/9/CE atex vedere pag B-113

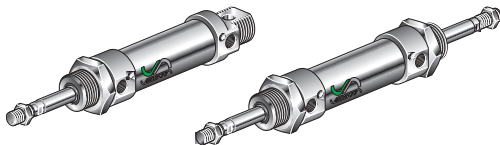


ATEX SERIE

ATEX CYLINDERS RANGE GAMMA CILINDRI ATEX



Pag. A-06 A-07



XACM .. /... SINGLE ROD / CILINDRO BASE STELO SEMPLICE

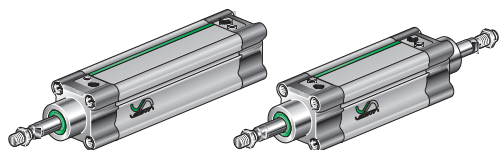
XACM .. /... P THROUGH ROD / STELO PASSANTE

XDVM .. /... SINGLE ROD / CILINDRO BASE STELO SEMPLICE

XDVM .. /... P THROUGH ROD / STELO PASSANTE

ISO 6432 CE Ex II 3GD c T5 T 165 °C -5 < Ta < 50 °C

Pag. A-16

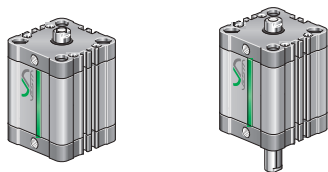


XNWT .. /... SINGLE ROD / CILINDRO BASE STELO SEMPLICE

XNWT .. /... P THROUGH ROD / STELO PASSANTE

ISO 15552 CE Ex II 3GD c T5 T 160 °C -5 < Ta < 50 °C

Pag. A-29

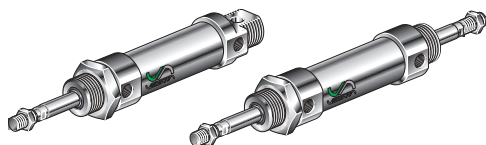


XNSK .. /... SINGLE ROD / CILINDRO BASE STELO SEMPLICE

XNSK .. /... P THROUGH ROD / STELO PASSANTE

UNITOP CE Ex II 3GD c T5 T 165 °C -5 < Ta < 50 °C
ISO 21287

Pag. A-40

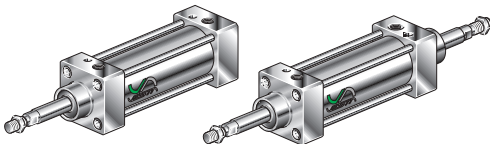


XD SM .. /... SINGLE ROD / CILINDRO BASE STELO SEMPLICE

XD SM .. /... P THROUGH ROD / STELO PASSANTE

ISO 6432 CE Ex II 3GD c T5 T 165 °C -5 < Ta < 50 °C

Pag. A-46

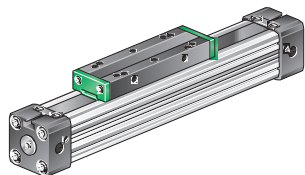


XXJSS .. /... SINGLE ROD / CILINDRO BASE STELO SEMPLICE

XXJSS .. /... P THROUGH ROD / STELO PASSANTE

ISO 15552 CE Ex II 3GD c T4 T 170 °C -5 < Ta < 50 °C

Pag. A-88



XRLF .. /... RODLESS PNEUMATIC CYLINDER / CILINDRI PNEUMATICI SENZA STELO

CE Ex II 2G c T4 T -10 °C < Ta < + 60 °C

MAGNETIC SWITCHES FOR ATEX CYLINDERS / FINECORSA MAGNETICI PER CILINDRI ATEX

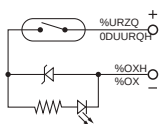
VSPR-SAX

WITH DIRECT CABLE
CON CAVO DIRETTO

CE Ex II 3GD EEx n IIC T6 IP67 T 100 °C -20 < Ta < 70 °C



circuit / Circuito



Max ammitted current
Switching power
Nominal voltage DC/AC
Visual signal Led
Potential drop
Electrical nominal life
Mechanical nominal life
Repeatability const. temp.
Max working temperature
Protection class

Corrente max ammessa
Potenza induttiva
Tensione nominale DC/AC
Led di segnalazione
Caduta di tensione
Vita elettrica nominale
Vita meccanica nominale
Ripetibilità a temp. costante
Temp. max di funzionamento
Grado di protezione

0,1 A
3 W
24 V
Si / Yes
3 V
10 E 6
10 E 9
0,1 mm
70 °C
IP 67

ATEX roud cylinders fixing / Staffa per cilindri tondi ATEX

