

**FINE REGULATION
& AIR TREATMENT UNITS**
REGOLAZIONE DI PRECISIONE
& GRUPPI TRATTAMENTO ARIA

NEW AIR TREATMENT UNITS

TU/HPR/DPV Series



**Close loop proportional valves with
flow from 200 to 4000 NL/min**
*Valvola proporzionale a loop chiuso
con portata da 200 a 4000 NL/min*



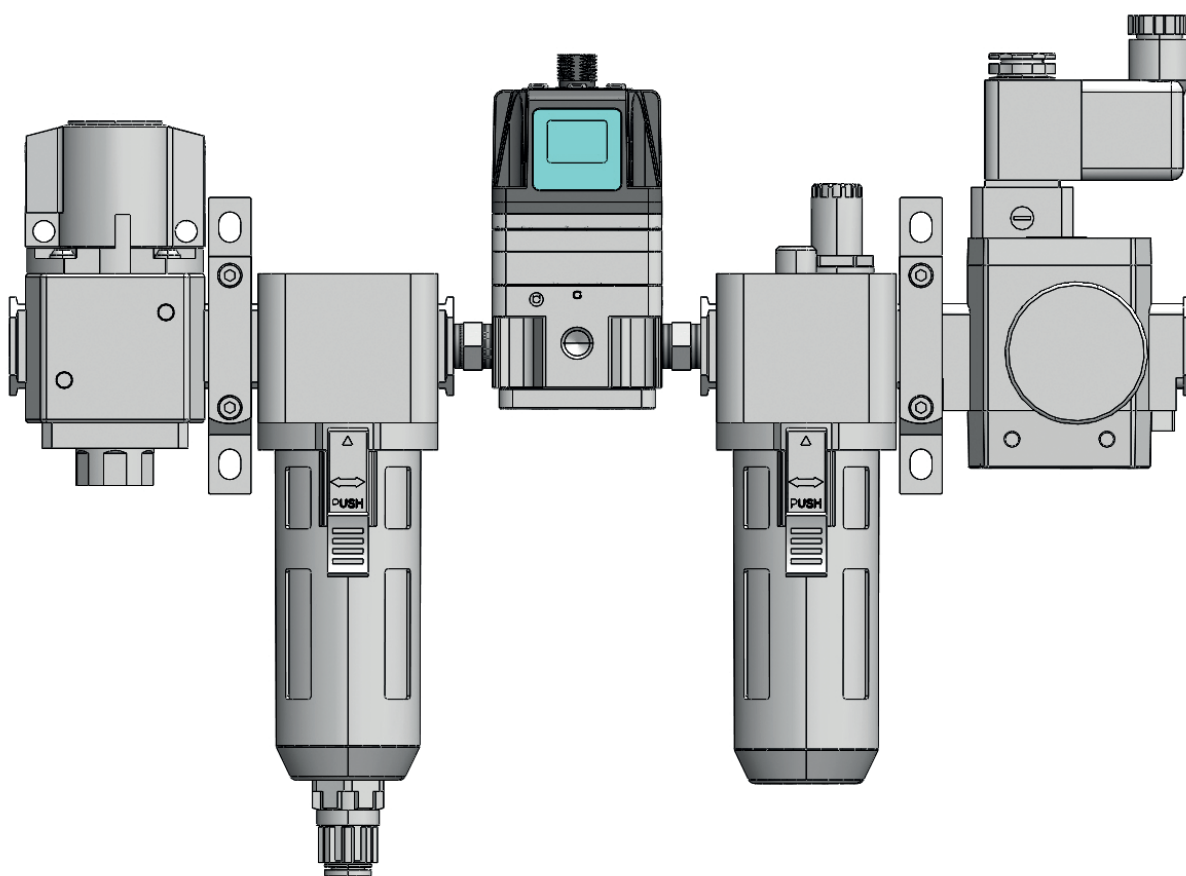
**Die-cast aluminum body,
size from 1/8" to 2"**
*Corpo in alluminio pressofuso,
dimensioni da 1/8" a 2"*

**Precision pressure regulators
with high relief flow**
*Regolatori di precisione con
alta portata di relieving*



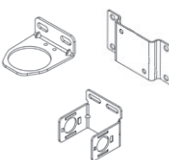
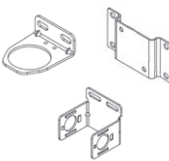
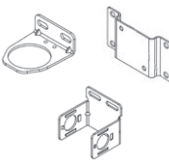
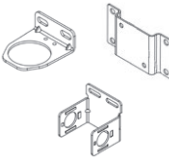
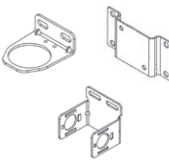
**FINE REGULATION &
AIR TREATMENT UNITS /**
*REGOLAZIONE DI PRECISIONE &
GRUPPI TRATTAMENTO ARIA*

TU / HPR / DPV



September / Settembre
2021

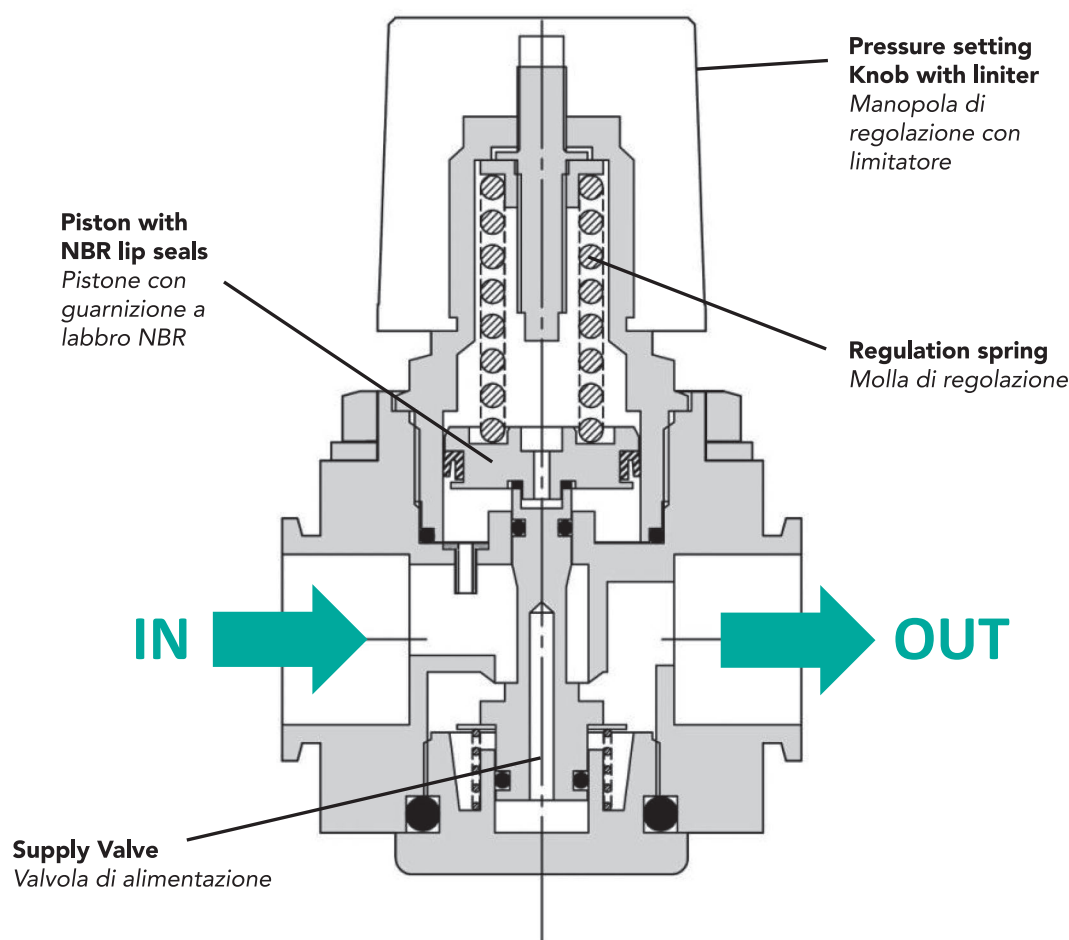
PRESSURE REGULATOR / REGOLATORE DI PRESSIONE		FILTER & PRESSURE REGULATOR / FILTRO & REGOLATORE		FRL UNIT / UNITÀ FRL		AIR FILTER / FILTRO D'ARIA		MICRO MIST FILTER / FILTRO DISOLEATORE	
									
Pag. 8		Pag. 10		Pag. 12		Pag. 14			
SIZE 2 / TAGLIA 2 (G 1/4", 1/8")									
TU-R2-14/18...		TU-FR2-14...		TU-FRL2-14...		TU-F2-14...			
Pag. 22		Pag. 24		Pag. 26		Pag. 28		Pag. 30	
SIZE 3 / TAGLIA 3 (G 1/4", 3/8", 1/2")									
TU-R3 14/38/12...		TU-FR3 14/38/12...		TU-FRL3 14/38/12...		TU-F3 14/38/12...		TU-MMF3 14/38/12...	
Pag. 40		Pag. 42		Pag. 44		Pag. 46		Pag. 48	
SIZE 4 / TAGLIA 4 (G 1/2")									
TU-R4-12...		TU-FR4-12...		TU-FRL4-12...		TU-F4-12...		TU-MMF4-12...	
Pag. 56		Pag. 58		Pag. 60					
SIZE 4H (HIGH PRESSURE) / TAGLIA 4H (ALTA PRESSIONE) (G 1/2")									
TU-R4H-12...		TU-FR4H-12...		TU-FRL4H-12...					
Pag. 64		Pag. 66		Pag. 68		Pag. 70			
SIZE 5 / TAGLIA 5 (G 3/4", 1")									
TU-R5- 34/10...		TU-FR5-34/10...		TU-FRL5-34/10...		TU-F5-34/10...			
Pag. 76						Pag. 78			
SIZE 6 / TAGLIA 6 (G 1 1/2")									
TU-R6-15...						TU-F6-15...			
Pag. 82						Pag. 84			
SIZE 7 / TAGLIA 7 (G 2")									
TU-R7-20...						TU-F7-20...			

LUBRICATOR / LUBRIFICATORE	SLOW START VALVE / VALVOLA DI AVVIAMENTO PROGRESSIVO	ON-OFF VALVE / VALVOLA ON-OFF	BRACKETS / STAFFE	ACCESSORIES / ACCESSORI
				
Pag. 16	Pag. 18	Pag. 20	Pag. 90	Pag. 88
			PRESSURE SWITCH FOR TU SERIES / PRESSOSTATO PER SERIE TU	STANDARD PRESSURE SWITCH / PRESSOSTATO STANDARD
TU-L2-14...	TU-VS2...			
EP43			EP41	
Pag. 32	Pag. 36	Pag. 34	Pag. 38	Pag. 86
				GAUGE ADAPTER SET / ADATTATORE MANOMETRO
TU-L3 14/38/12...	TU-VS3...	TU-VM3...		GAUGE / MANOMETRO (G 1/8")
				
TU-AS				K MM...
Pag. 50	Pag. 54	Pag. 52	Pag. 62	Pag. 86
				FINE PRESSION REGULATION / REGOLAZIONE DI PRECISIONE
TU-L4-12...	TU-VS4...	TU-VM4...		
Pag. 62	Pag. 62	Pag. 62	Pag. 62	Pag. 94
				HIGH PRESSURE REGULATOR / REGOLATORE DI PRESSIONE DI PRECISIONE
				
				
				HPR 18.. HPR 14.. HPR 12..
Pag. 72	Pag. 74	Pag. 74	Pag. 74	Pag. 102
				DIGITAL PROPORTIONAL VALVE / VALVOLA PROPORZIONALE A COMANDO ELETTRICO
TU-L5-34/10...	TU-L5-34/10...	TU-L5-34/10...		
				
				DPV 18.. DPV 14.. DPV 12..

CONSTRUCTION TECHNOLOGY / TECNOLOGIA DI COSTRUZIONE

Vesta TU series are conceived for durability and long use. The bodies for the whole series are in die-cast aluminium while bowls and setting knobs are made in special polymer for high resistance. For more durability, metal bowl versions with prismatic indicator are available for the TU-3, TU-4, TU-4H and TU-5 series. Finally in order to add more strenght and better output control, pressure regulators are operated by an acetal polymer piston with NBR lip seals.

Le serie TU Vesta sono state progettate per durare a lungo. I corpi vengono realizzati in lega di alluminio, le tazze sono tutte in tecnopolimero ad alta resistenza e relativa protezione. Sono a disposizione anche le versioni con tazze metalliche provviste di indicatore di livello prismatico. Particolare accuratezza della regolazione viene ottenuta con sistemi a pistone con guarnizione a labbro che aumentano la precisione e la durata.



PRESSURE GAUGE / MANOMETRO

Regulators for TU-3, TU-4 and TU-5 series are assembled with gauge in the standard version. They can be ordered with pressure switch, or with a 1/8" port size adapter set to mount any kind of standard gauge or pressure switch.

I regolatori e i filtri regolatori della serie TU-3, TU-4, TU-5 vengono realizzati con manometri o pressostati digitali integrati. Possono essere sostituiti da un blocchetto filettato da 1/8".

Standard gauge for TU series
Manometro standard per serie TU



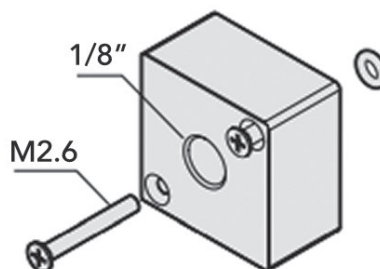
TU - G

TU compatible pressure switch
Pressostato digitale per serie TU



EP41 / EP43

1/8" adapter set to mount any standard gauge or pressure switch.
Adattatore 1/8" per assemblaggio di ogni manometro o pressostato digitale standard.

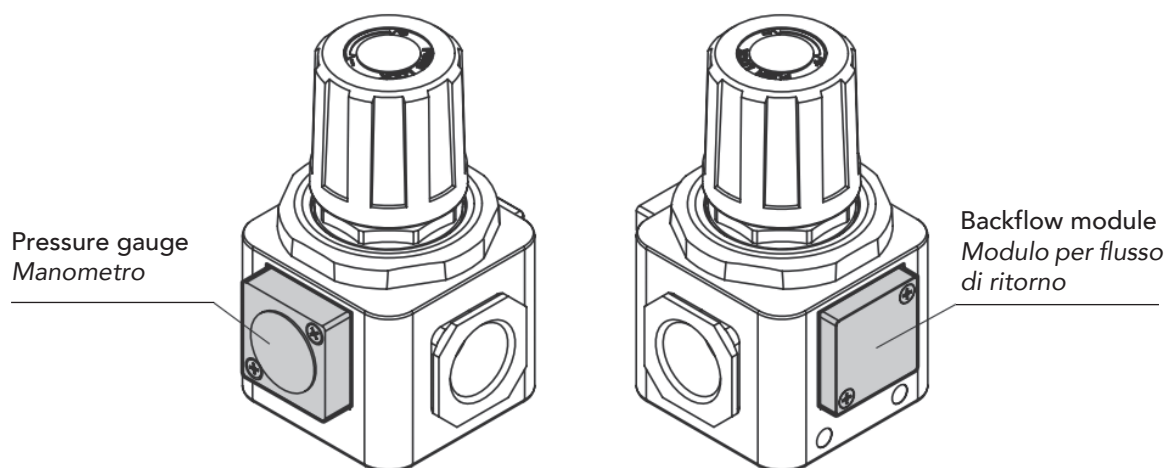


TU - AS

BACKFLOW FUNCTION / FLUSSO DI RITORNO

Regulators for TU series can be ordered with backflow function: in this assembly the regulator is equipped with a special valve that opens when air supply is cut off, exhausting the back pressure from the IN port, allowing a full reverse flow.

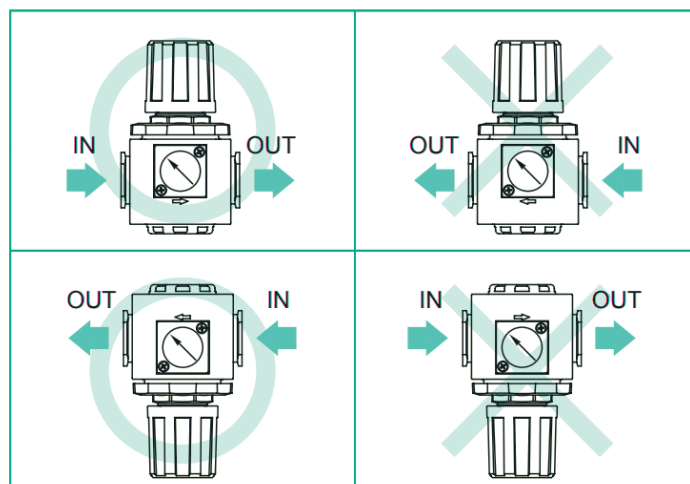
Questi regolatori possono essere inseriti tra valvola e cilindro. L'aria in scarico non passa attraverso il regolatore, permettendo una portata elevata.



INSTALLATION / INSTALLAZIONE

When choosing the flow direction, the backflow module can not be exchanged with the gauge.

Quando si decide la direzione del flusso, il modulo di backflow non può essere invertito con il manometro.



METAL BOWL / TAZZA DI METALLO

Filtering elements and lubricators of the TU-3, TU-4 and TU-5 series can be ordered with metal bowls, to provide better resistance and strength, and resist to higher pressures (see TU-4H series with 0-20 Bar regulation). Metal bowls are equipped with prismatic visual indicators. Sizes and dimensions of the metal bowl cases are the same of those standard.

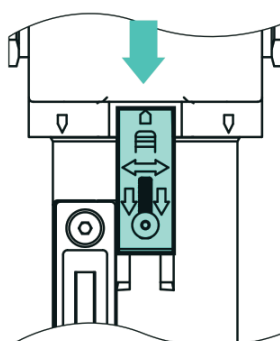
I componenti della serie TU-3, TU-4 e TU-5 possono essere ordinati con tazze in metallo, per avere maggiore resistenza agli urti, mentre la serie TU-4H permette una regolazione di pressione da 0 a 20 Bar.



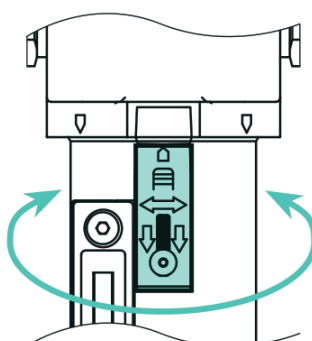
INSTALLATION / INSTALLAZIONE

Before assembling or disassembling the bowl, push the lock plate down to the end, and confirm that it is detached from the body then rotate the bowl, otherwise the lock plate will be deformed or the body will be scratched

Prima di assemblare o togliere la tazza, spingere verso il basso la chiusura di plastica per essere sicuri che sia staccata dal corpo, e solo in seguito ruotare, per evitare danni al corpo.

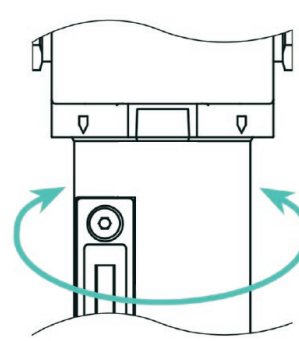


Locked bowl
Tazza bloccata



Unlocked bowl (rotate)
Tazza sbloccata (ruotare)

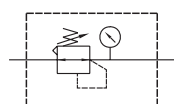
TU - 3



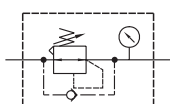
Push the bowl up to rotate
Spingere verso l'alto la tazza
per poterla ruotare

TU - 4

TU - R2

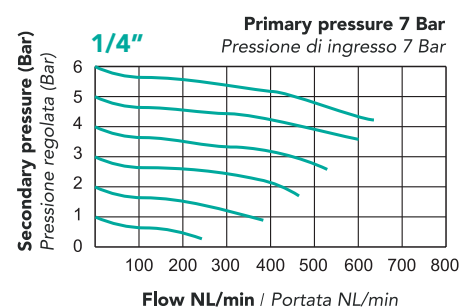
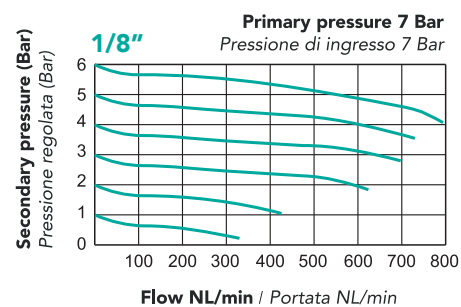
PRESSURE REGULATOR
REGOLATORE DI PRESSIONE

Standard / standard

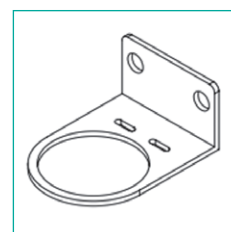


Backflow / flusso di ritorno

FLOW / PORTATA



Attachment / Accessori

L-type bracket (TU-BL2)
Staffa a L (TU-BL2)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

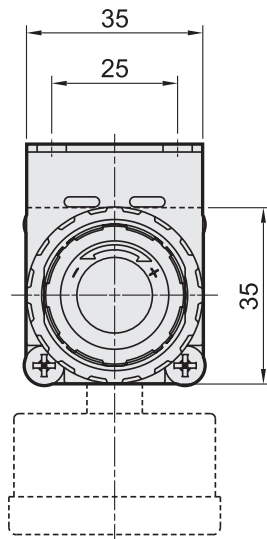
Port size / Connessione	G 1/4" G1/8"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	10 Bar
Proof pressure Pressione di scoppio	15 Bar
Regulated pressure range Range di regolazione di pressione	Version - Versione A: 0,5 ~ 2 Bar Version - Versione B: 0,5 ~ 4 Bar Version - Versione C: 0,5 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Attachment / Accessori	Pressure gauge, L-type bracket (TU-BL2) Manometro, staffa tipo L (TU-BL2)
Weight / Peso	190 g

ENCODING / CODIFICA

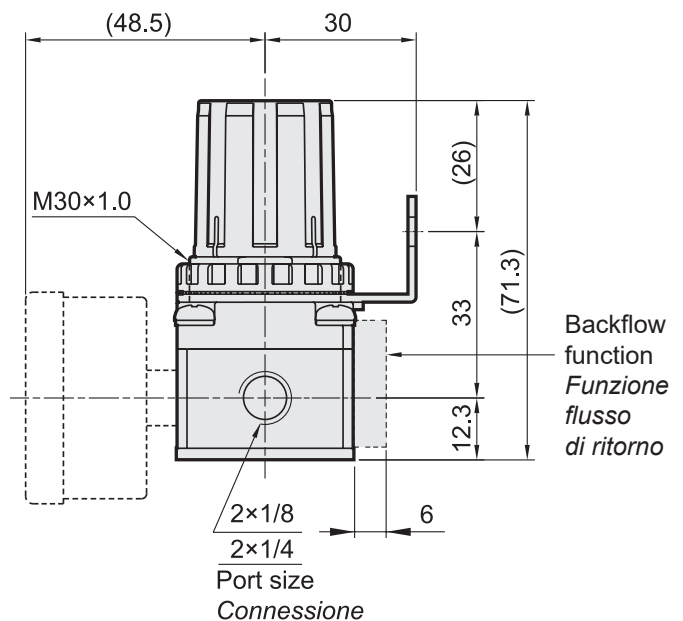
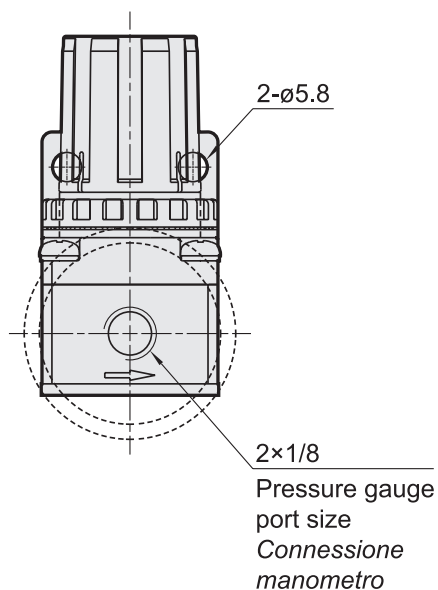
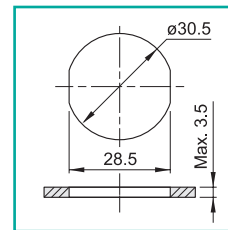
TU - R2 - -

Model <i>Modello</i>	Port size: <i>Connessione</i> 14 1/4" 18 1/8"	Backflow function: S Standard B Backflow function <i>Funzione flusso di ritorno</i>	Pressure range: <i>Range di pressione:</i> A (0,5÷2 Bar) B (0,5÷4 Bar) C (0,5÷8,5 Bar)	Exhaust mechanism: <i>Meccanismo di scarico:</i> R Relieving type con relieving N Non relieving type senza relieving
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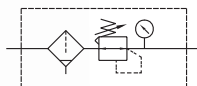
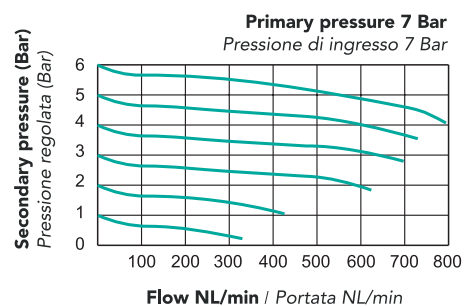
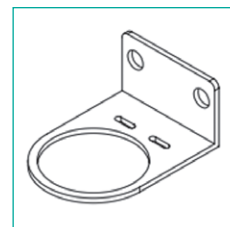
DIMENSIONS / DIMENSIONI



Panel mounting hole
Foro per montaggio a pannello



TU - FR2

FILTER AND PRESSURE REGULATOR
FILTRO E REGOLATORE DI PRESSIONE

FLOW / PORTATA

Attachment / Accessori

L-type bracket (TU-BL2)
 Staffa a L (TU-BL2)

***Pressure gauge to be ordered separately**
 *Il manometro è da ordinare a parte

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

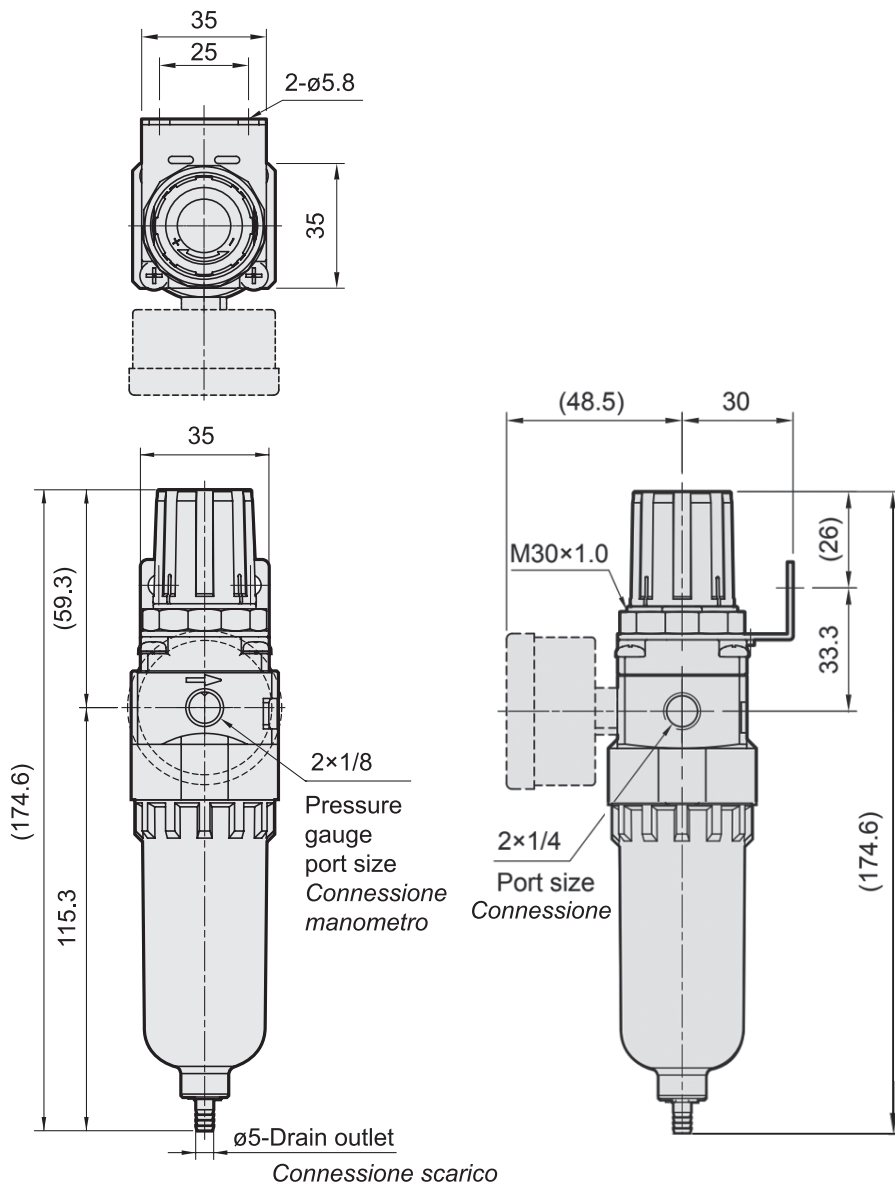
Port size / Connessione	G 1/4"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Regulated pressure range Range di regolazione di pressione	Version - Versione A: 0,5 ~ 2 Bar Version - Versione B: 0,5 ~ 4 Bar Version - Versione C: 0,5 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Drain capacity / Capacità tazza	9,5 cm ³ (P), 25 cm ³ (L)
Attachment / Accessori	Pressure gauge, L-type bracket (TU-BL2) Manometro, staffa tipo L (TU-BL2)
Weight / Peso	257 g (P), 226 g (L)

ENCODING / CODIFICA

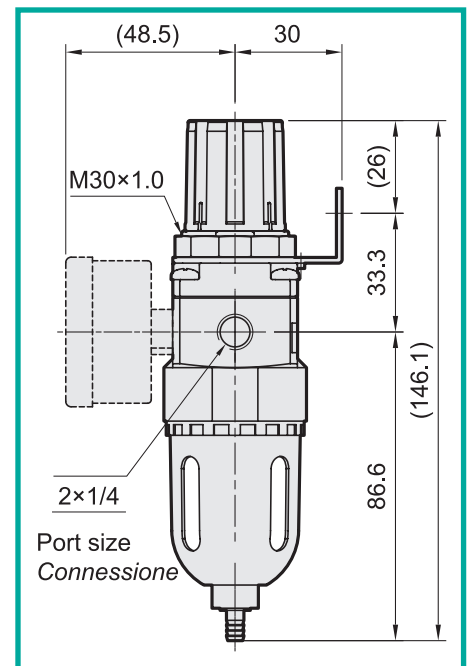
TU - FR2 - 14 -

Model Modello	Port size: Connessione: 14 1/4"	Adjustable press. range: Range di pressione regolabile: A (0,5÷2 Bar) B (0,5÷4 Bar) C (0,5÷8,5 Bar)	Bowl /Tazza: L Longer Case Tazza lunga P Protection case Tazza protetta	Filter element: Elemento filtrante: 4 40 µm 5 5 µm
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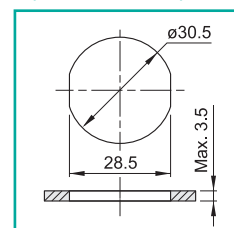
DIMENSIONS / DIMENSIONI



Protection case
Tazza protetta



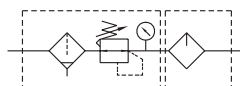
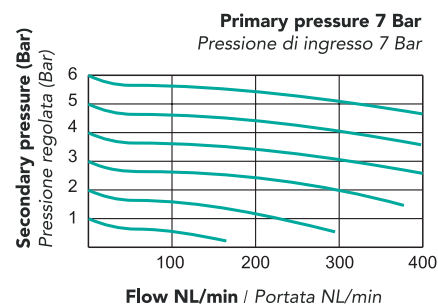
Panel mounting hole
Foro per montaggio a pannello



TU - FRL2

F.R.L. UNIT
UNITÀ F.R.L.

FLOW / PORTATA



*Pressure gauge to be ordered separately
*Il manometro è da ordinare a parte

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

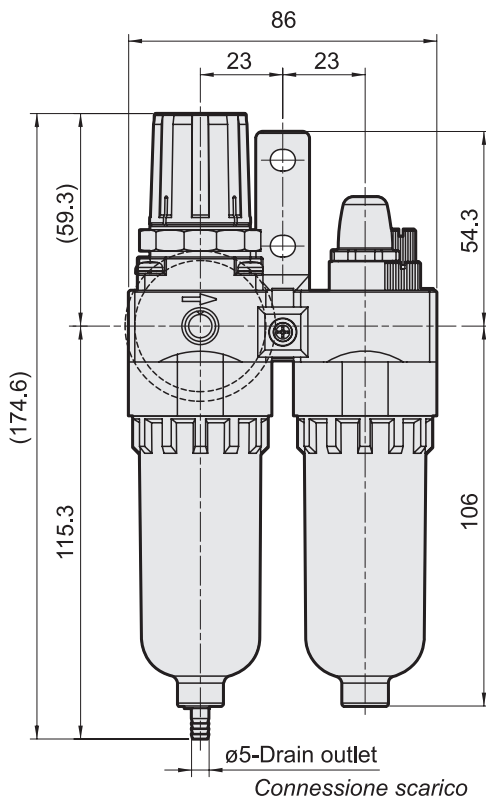
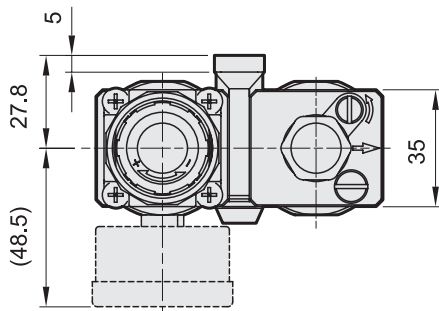
Port size / Connessione	G 1/4"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Regulated pressure range Range di regolazione di pressione	0,5 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Lubricating oil capacity / Capacità tazza olio	20 c.c. (P) , 35 c.c. (L)
Min. flow for oil drip Flusso minimo gocciolamento olio	50L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Attachment / Accessori	Pressure gauge Manometro

ENCODING / CODIFICA

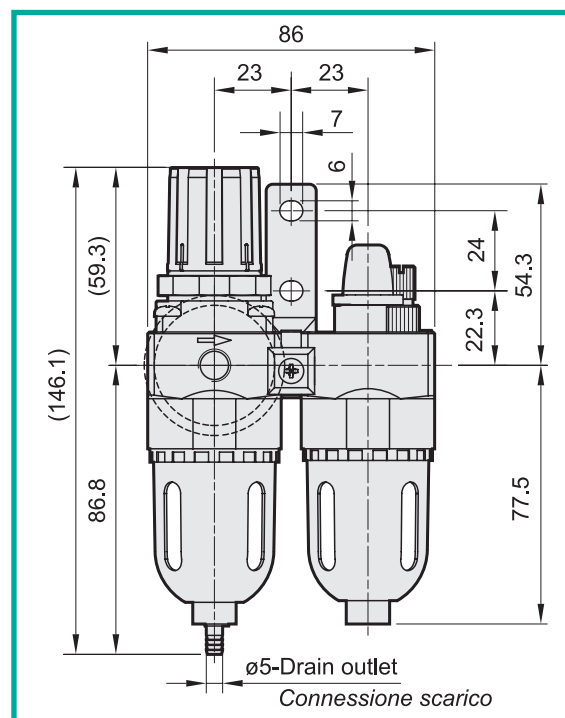
TU - FRL2 - 14 -

Model <i>Modello</i>	Port size: <i>Connessione:</i> 14 1/4"	Bowl /Tazza: L Longer Case Tazza lunga P Protection case Tazza protetta	Filter element: <i>Elemento filtrante:</i> 4 40 µm 5 5 µm
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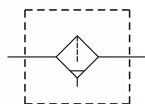
DIMENSIONS / DIMENSIONI



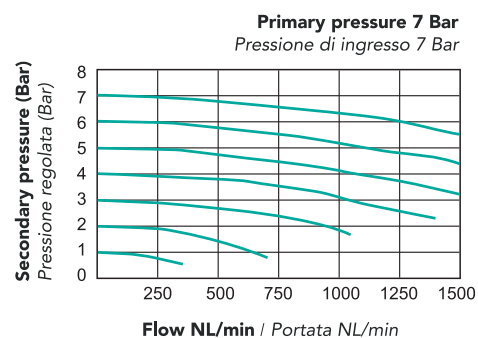
Protection case
Tazza protetta



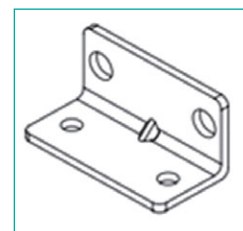
TU - F2

FILTER
FILTRO

FLOW / PORTATA



Attachment / Accessori



L-type bracket (TU-BC2F)
Staffa a L (TU-BC2F)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

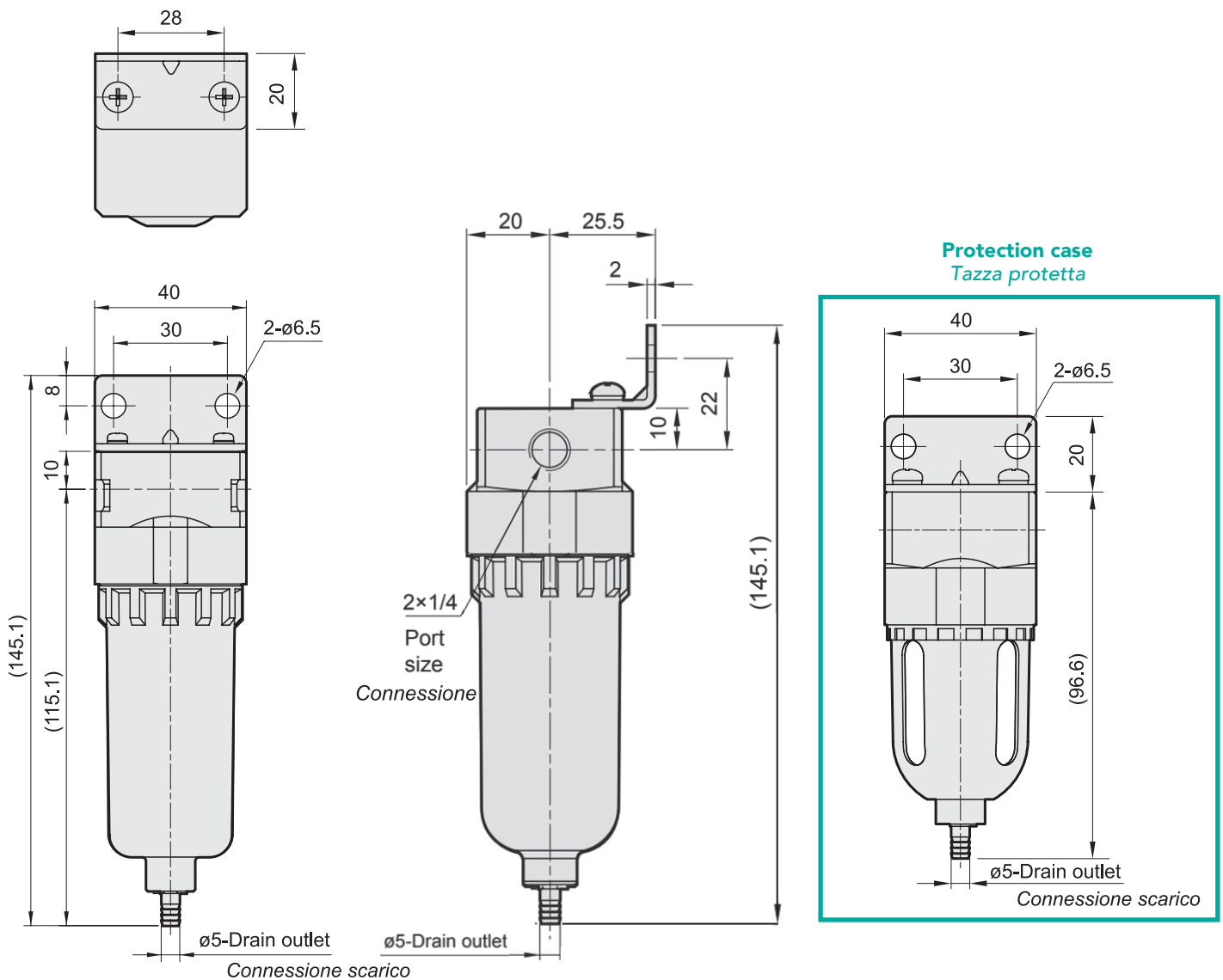
Port size / Connessione	G 1/4"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Drain capacity / Capacità di scarico	9,5 cm ³ (P), 25 cm ³ (L)
Weight / Peso	187 g (P), 155 g (L)
Attachment / Accessori	bracket (TU-BC2F) staffa (TU-BC2F)

ENCODING / CODIFICA

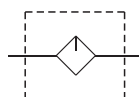
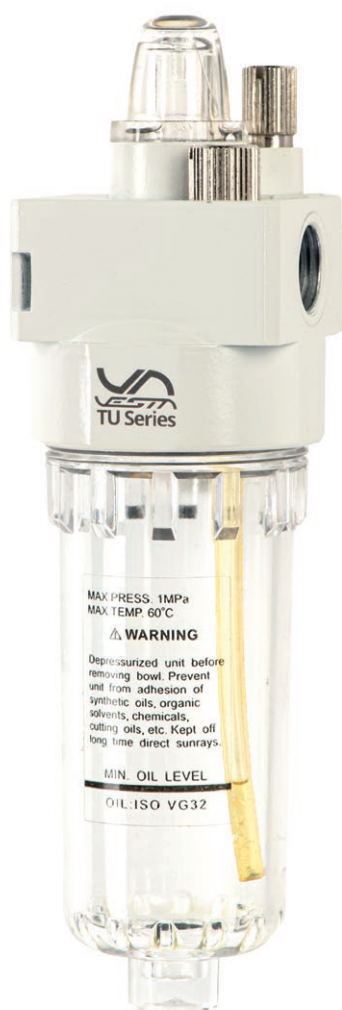
TU - F2 - 14 -

Model <i>Modello</i>	Port size: <i>Connessione:</i> 14 1/4"	Bowl /Tazza: L Longer Case Tazza lunga P Protection case Tazza protetta	Filter element: <i>Elemento filtrante:</i> 4 40 µm 5 5 µm
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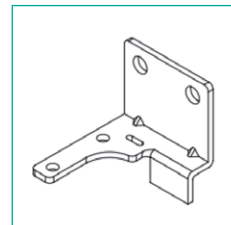
DIMENSIONS / DIMENSIONI



TU - L2

LUBRICATOR
LUBRIFICATORE

Attachment / Accessori

L-type bracket (TU-BC2L)
Staffa a L (TU-BC2L)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

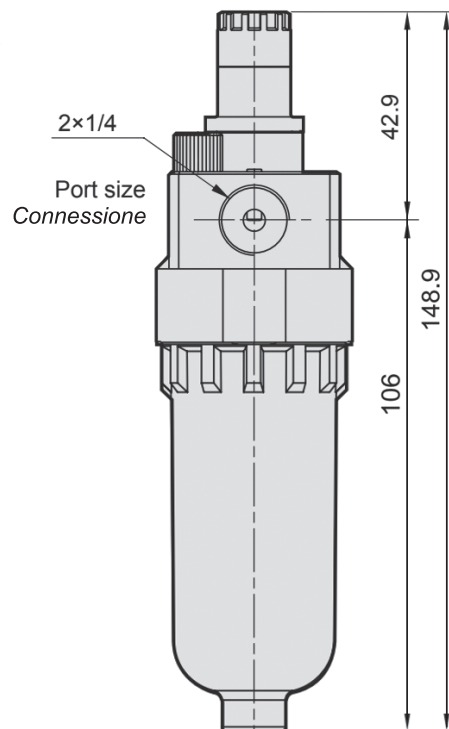
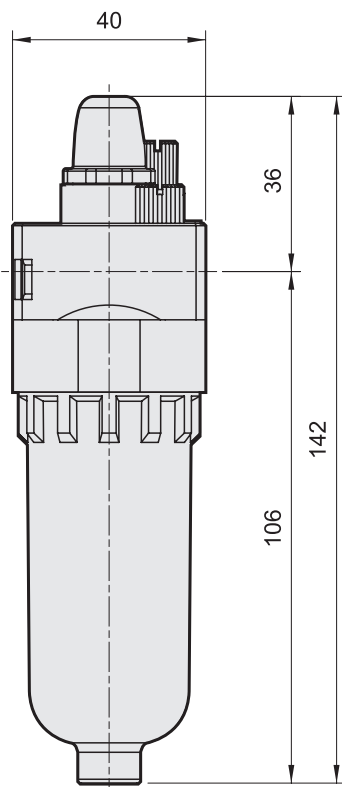
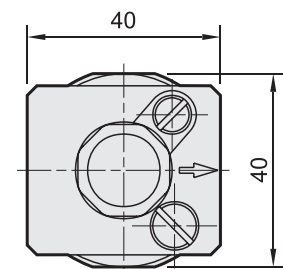
Port size / Taglia	G 1/4"
Fluid / Fluido	Air / Air
Max. operating pressure Range massimo di pressione	10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Lubricating oil capacity Capacità tazza olio	20 cc (P), 35 cc (L)
Min. flow for oil drip Flusso minimo gocciolamento olio	50 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Weight / Peso	150 g, 130 g (L)
Attachment / Accessori	L-type bracket (TU-BC2L) staffa a L (TU-BC2L)

ENCODING / CODIFICA

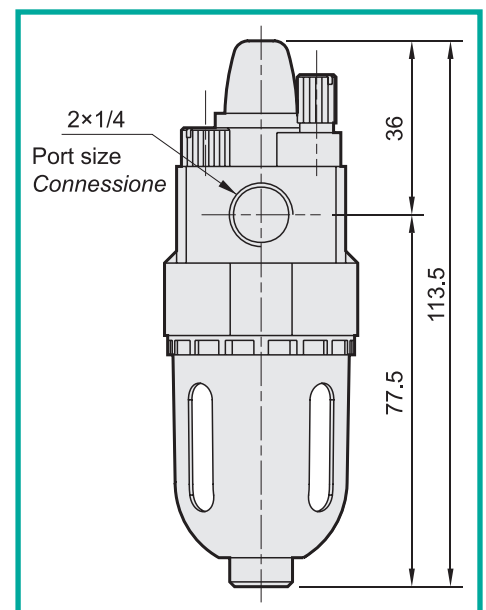
TU - L2 - 14 - 

Model <i>Modello</i>	Port size: <i>Connessione:</i> 14 1/4"	Bowl /Tazza: L Longer Case Tazza lunga P Protection case Tazza protetta
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DIMENSIONS / DIMENSIONI



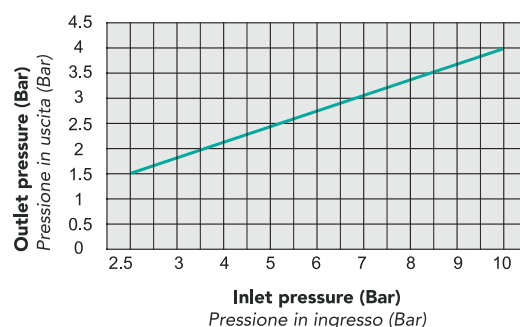
Protection case
Tazza protetta



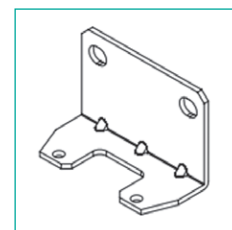
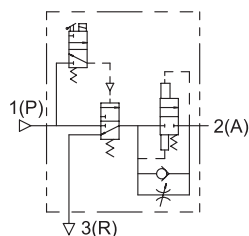
TU - VS2

SLOW START / SHUT-OFF VALVE
VALVOLA DI AVVIAMENTO PROGRESSIVO

FLOW / PORTATA

Piston B switching pressure (Close - Open)
Pressione di scambio (Chiuso - Aperto)

Attachment / Accessori

L-type bracket (TU-BVS2)
Staffa a L (TU-BVS2)

*Pressure gauge to be ordered separately
*Il manometro è da ordinare a parte

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 1/4"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	2,5 ~ 10 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Option / Opzioni	Pressure gauge, L-type bracket (TU-BVS2) Manometro, staffa tipo L (TU-BVS2)
Weight / Peso	450 g

ENCODING / CODIFICA

TU - VS2 - -

Model
Modello

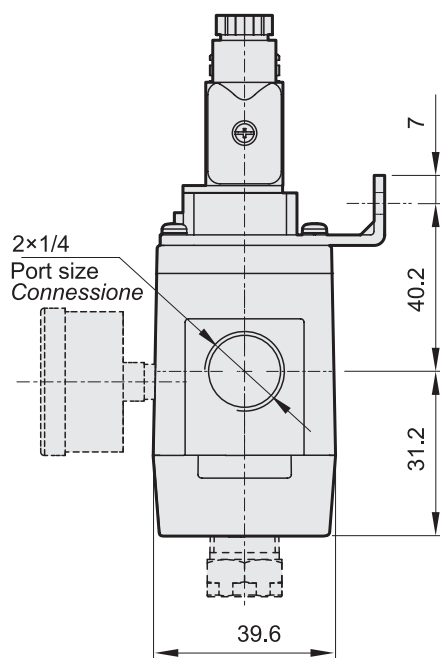
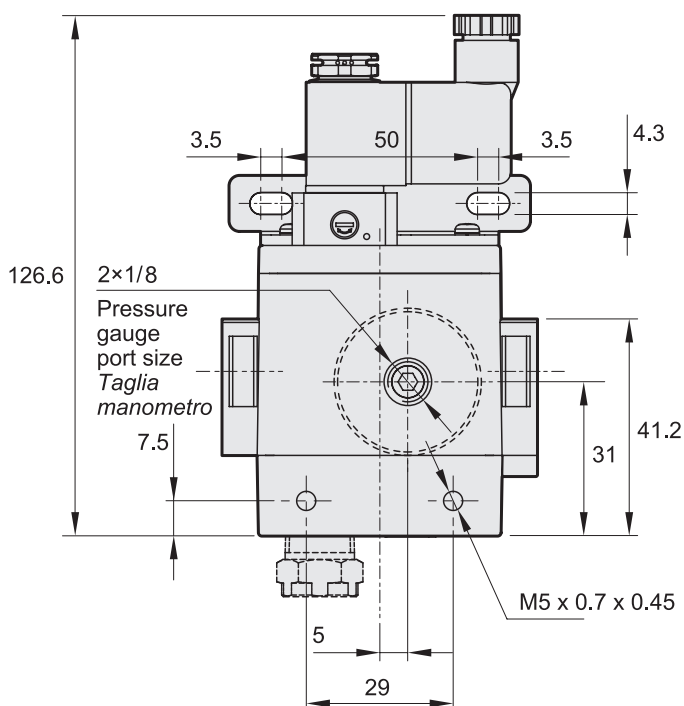
Port size:
Connessione:
14 1/4"

Coil
Bobina:
1 01200
2 02400
3 02450
4 11550
5 23050

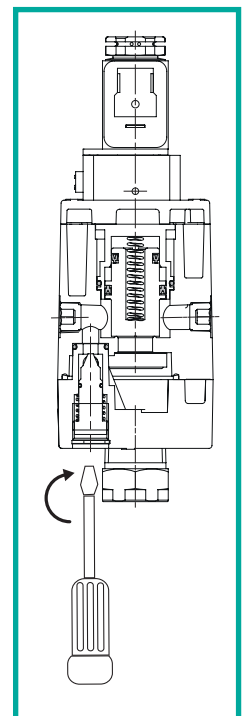
COIL / BOBINA

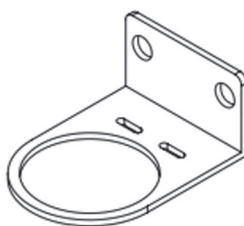
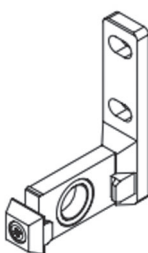
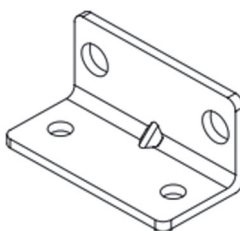
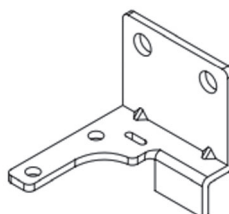
Code / Codice	Voltage / Tensione
MS01200	12 V DC
MS02400	24 V DC
MS02450	24 V 50/60Hz AC
MS11550	115 V 50/60Hz AC
MS23050	230 V 50/60Hz AC

DIMENSIONS / DIMENSIONI



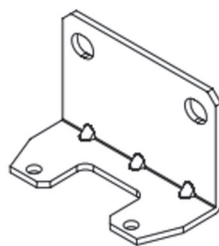
Slow-start regulation
Regolazione avviamento
progressivo



TU - BL2**L Bracket**
Staffa a L**TU - BT2****T Bracket**
Staffa a T**TU - BC2F****Bracket for F unit**
Staffa per unità F**TU - BC2L****Bracket for L unit**
Staffa per unità L

TU - BVS2

Bracket for TU-VS2
Staffa per TU-VS2



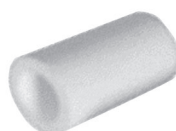
TU - FE2

40 micron filter
Filtro 40 micron

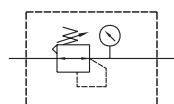


TU - FX2

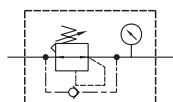
5 micron filter
Filtro 5 micron



TU - R3

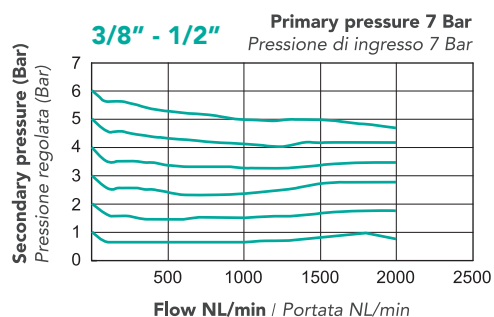
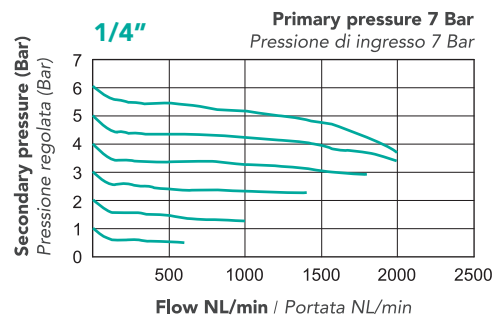
PRESSURE REGULATOR
REGOLATORE DI PRESSIONE

Standard / standard

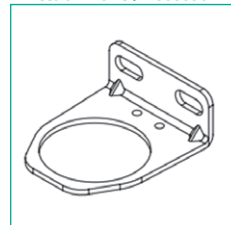


Backflow / flusso di ritorno

FLOW / PORTATA



Attachment / Accessori

L-type bracket (TU-BL3)
Staffa a L (TU-BL3)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

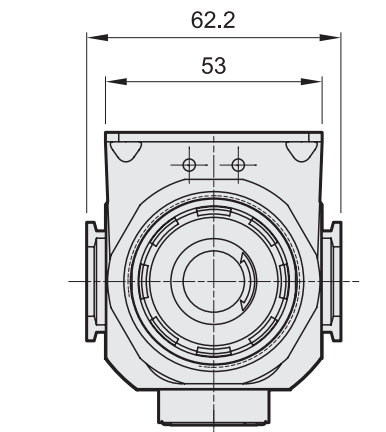
Port size / Connessione	G 1/4" G 3/8" G 1/2"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	10 Bar
Proof pressure Pressione di scoppio	15 Bar
Regulated pressure range Range di regolazione di pressione	0,5 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Attachment / Accessori	Pressure gauge, pressure switch, L-type bracket (TU-BL3) Manometro, pressostato digitale, staffa a L (TU-BL3)
Weight / Peso	270 g

ENCODING / CODIFICA

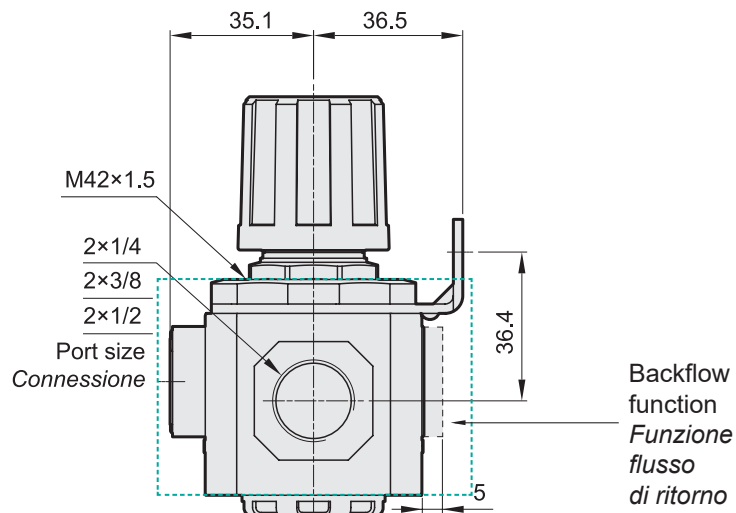
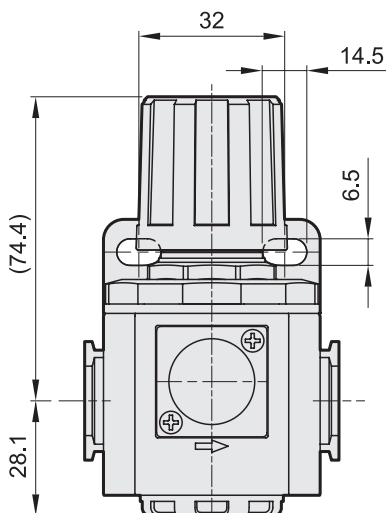
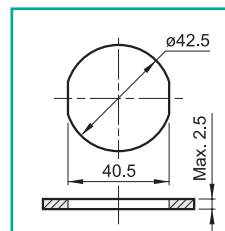
TU - R3 - -

Model Modello	Port size: Connessione: 14 1/4" 38 1/8" 12 1/2"	Backflow function: S Standard B Backflow function Funzione flusso di ritorno	Exhaust mechanism: Meccanismo di scarico: R Relieving type con relieving N Non relieving type senza relieving	Pressure Gauge: / Manometro: G Integrated pressure gauge Manometro integrato A Gauge adapter set (TU-AS) Adattatore per manometro (TU-AS) E Pressure switch (EP41) Pressostato digitale (EP41)
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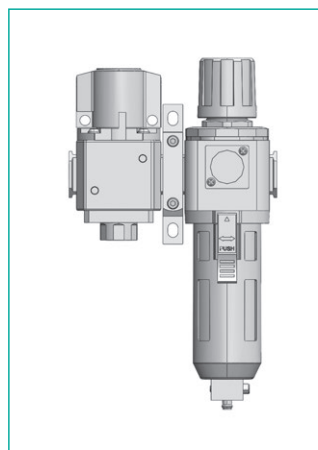
DIMENSIONS / DIMENSIONI



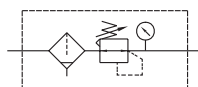
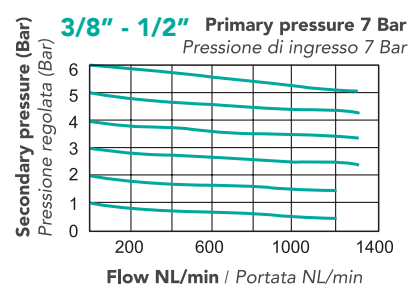
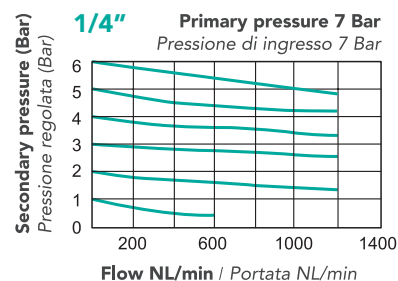
Panel mounting hole
Foro per montaggio a pannello



TU - FR3

FILTER AND PRESSURE REGULATOR
FILTRO E REGOLATORE DI PRESSIONE


Integrated ON OFF version
Versione con valvola ON OFF integrata

**FLOW / PORTATA****Attachment / Accessori**

L-type bracket (TU-BL3)
Staffa a L (TU-BL3)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1/4" G 3/8" G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range <i>Range di pressione operativa</i>	0,5 ~ 10 Bar
Proof pressure <i>Pressione di scoppio</i>	15 Bar
Regulated pressure range <i>Range di regolazione di pressione</i>	0,5 ~ 8,5 Bar
Ambient temperature <i>Temperatura ambiente</i>	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Drain capacity / Capacità tazza	35 cm ³
Attachment / Accessori	Pressure gauge, pressure switch, L-type bracket (TU-BL3) <i>Manometro, pressostato digitale, staffa a L (TU-BL3)</i>
Weight / Peso	490 g

ENCODING / CODIFICA

TU - FR3 - -

Model
Modello

Port size:
Connessione:
14 1/4"
38 3/8"
12 1/2"

Accessories / Accessori

ON OFF Valve / Valvola ON OFF
Blank No integrated valve
Senza valvola integrata
VM Integrated ON OFF valve
Valvola ON OFF integrata

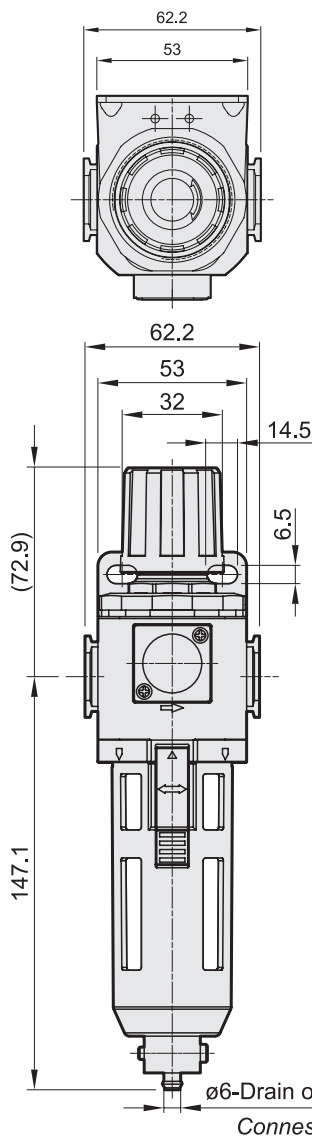
Filter element:
Elemento filtrante:
4 40 µm
5 5 µm

Bowl / Tazza:
P Protection case
Tazza protetta
M Metal bowl
Tazza di metallo

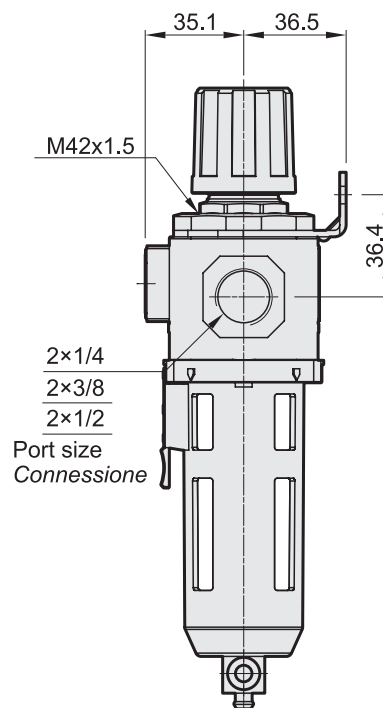
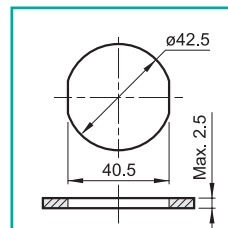
Pressure Gauge: / Manometro:
G Integrated pressure gauge
Manometro integrato
A Gauge adapter set (TU-AS)
Adattatore per manometro (TU-AS)
E Pressure switch (EP41)
Pressostato digitale (EP41)

Drain valve / Valvola di scarico
S Semi-auto drain
Scarico semiautomatico
D Auto drain
Scarico automatico

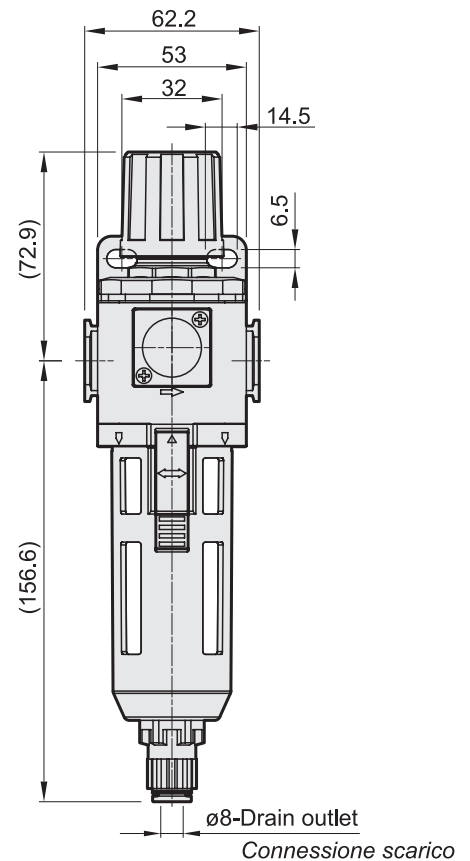
DIMENSIONS / DIMENSIONI



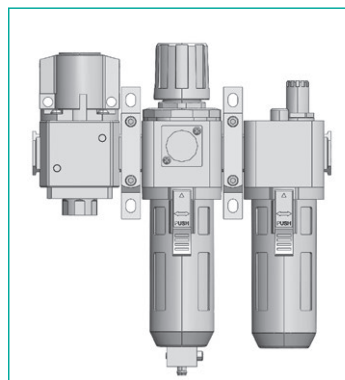
Panel mounting hole
Foro per montaggio a pannello



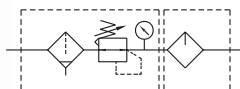
Auto drain
Scarico automatico



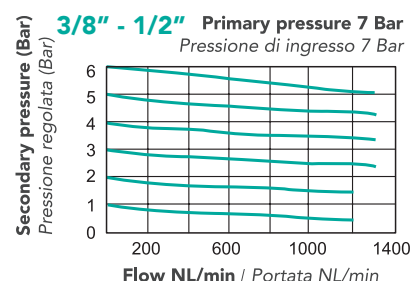
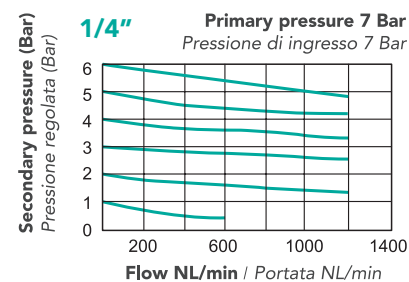
TU - FRL3

F.R.L UNIT
UNITÀ F.R.L.

Integrated ON OFF version
Versione con valvola ON OFF integrata



FLOW / PORTATA



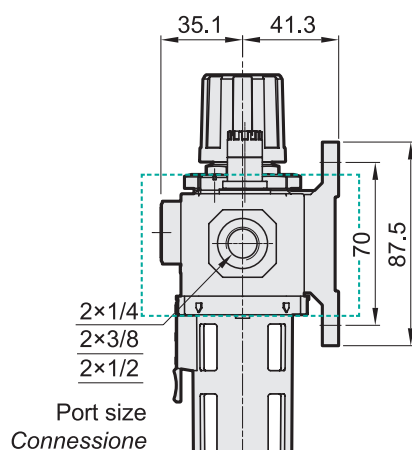
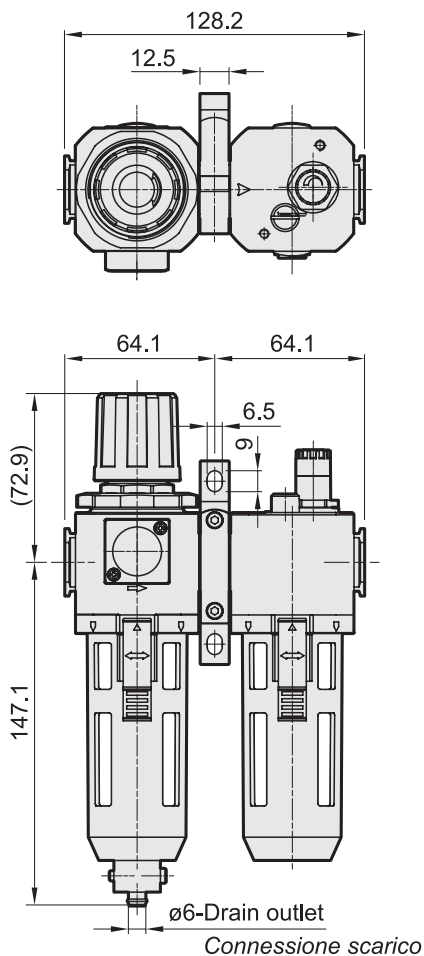
TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1/4" G 3/8" G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Regulated pressure range Range di regolazione di pressione	0,5 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Lubricating oil capacity / Capacità tazza olio	65 c.c.
Min. flow for oil drip Flusso minimo gocciolamento olio	50 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Attachment / Accessori	Pressure gauge, pressure switch Manometro, pressostato digitale
Weight / Peso	845 g

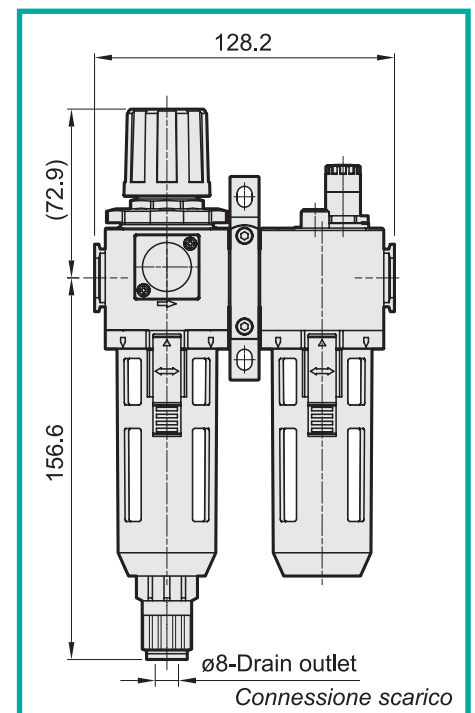
ENCODING / CODIFICA

Model Modello	Port size: Connessione: 14 1/4" 38 3/8" 12 1/2"	TU - FRL3 -		ON OFF Valve / Valvola ON OFF Blank No integrated valve Senza valvola integrata VM Integrated ON OFF valve Valvola ON OFF integrata	Filter element: Elemento filtrante: 4 40 µm 5 5 µm
				Accessories / Accessori	
Bowl / Tazza: P Protection case Tazza protetta M Metal bowl Tazza di metallo	Pressure Gauge: / Manometro: G Integrated pressure gauge Manometro integrato A Gauge adapter set (TU-AS) Adattatore per manometro (TU-AS) E Pressure switch (EP41) Pressostato digitale (EP41)	Drain valve / Valvola di scarico S Semi-auto drain Scarico semiautomatico D Auto drain Scarico automatico			

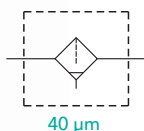
DIMENSIONS / DIMENSIONI



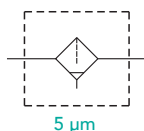
Auto drain valve
Scarico automatico



TU - F3

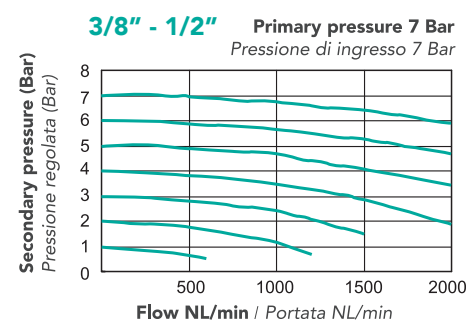
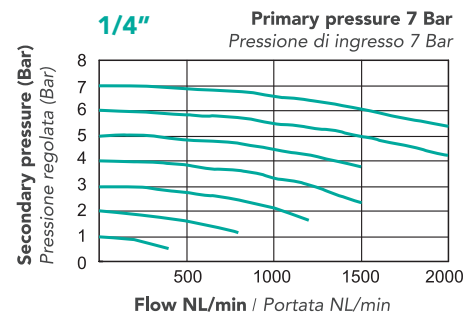
FILTER
FILTRO

40 µm

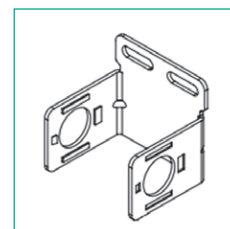


5 µm

FLOW / PORTATA



Attachment / Accessori

C-type bracket (TU-BC3)
Staffa a C (TU-BC3)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

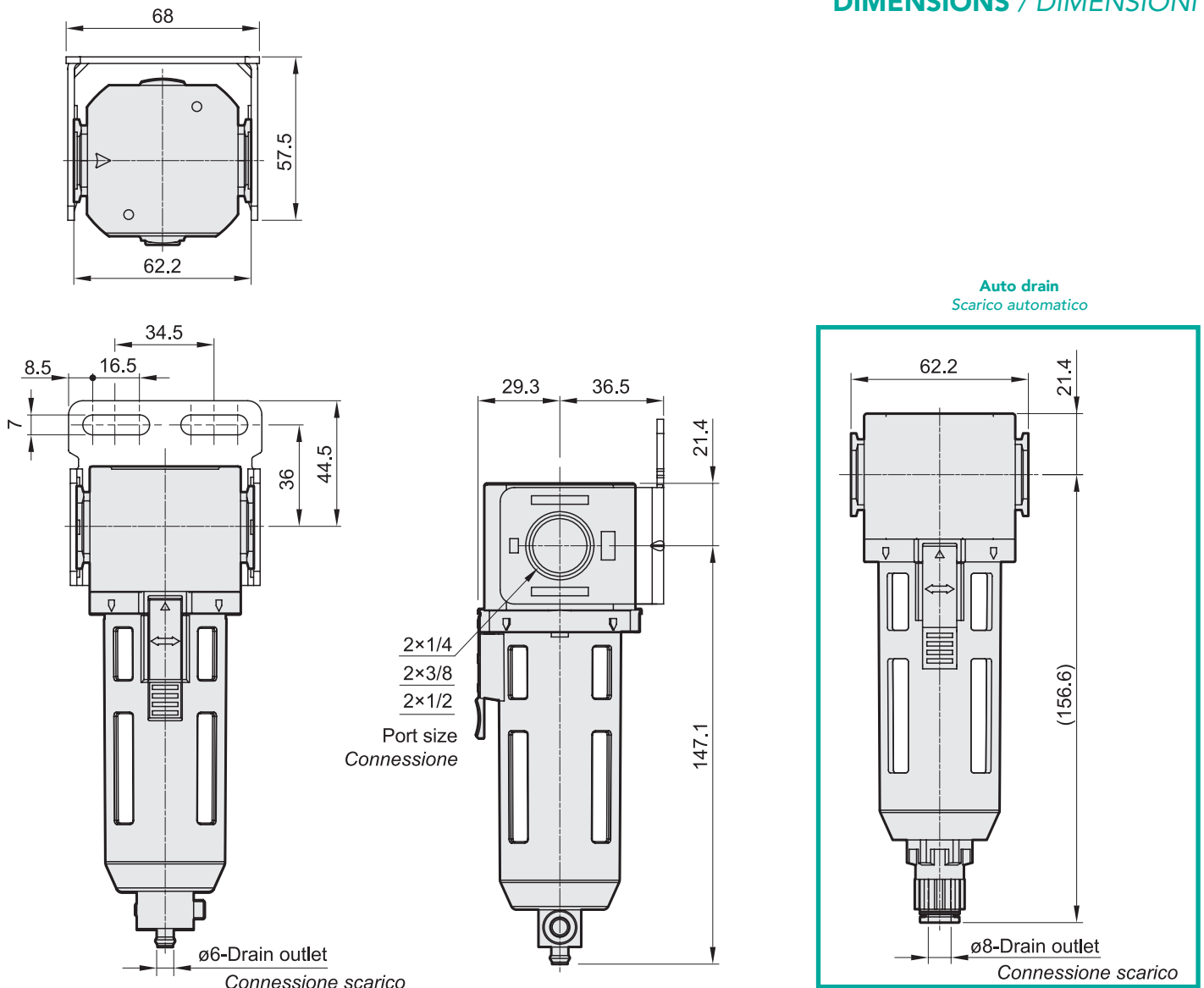
Port size / Connessione	G 1/4" G 3/8" G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Drain capacity / Capacità tazza	35 cm ³
Weight / Peso	365 g

ENCODING / CODIFICA

TU - F3 - -

Model <i>Modello</i>	Port size: <i>Connessione:</i> 14 1/4" 38 3/8" 12 1/2"	Bowl /Tazza: P Protection case Tazza protetta M Metal bowl Tazza di metallo	Drain valve / Valvola di scarico S Semi-auto drain Scarico semiautomatico D Auto drain Scarico automatico	Filter element: <i>Elemento filtrante:</i> 4 40 µm 5 5 µm
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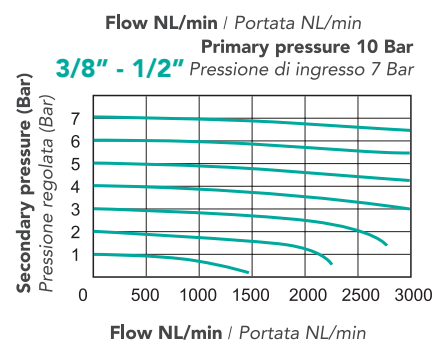
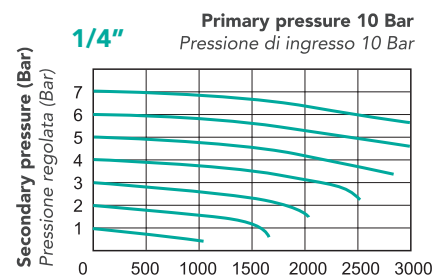
DIMENSIONS / DIMENSIONI



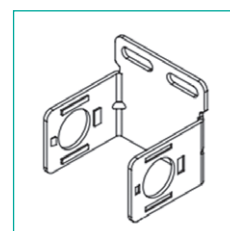
TU - MMF3

MICRO-MIST FILTER
FILTRO DISOLEATORE

FLOW / PORTATA



Attachment / Accessori

C-type bracket (TU-BC3)
Staffa a C (TU-BC3)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

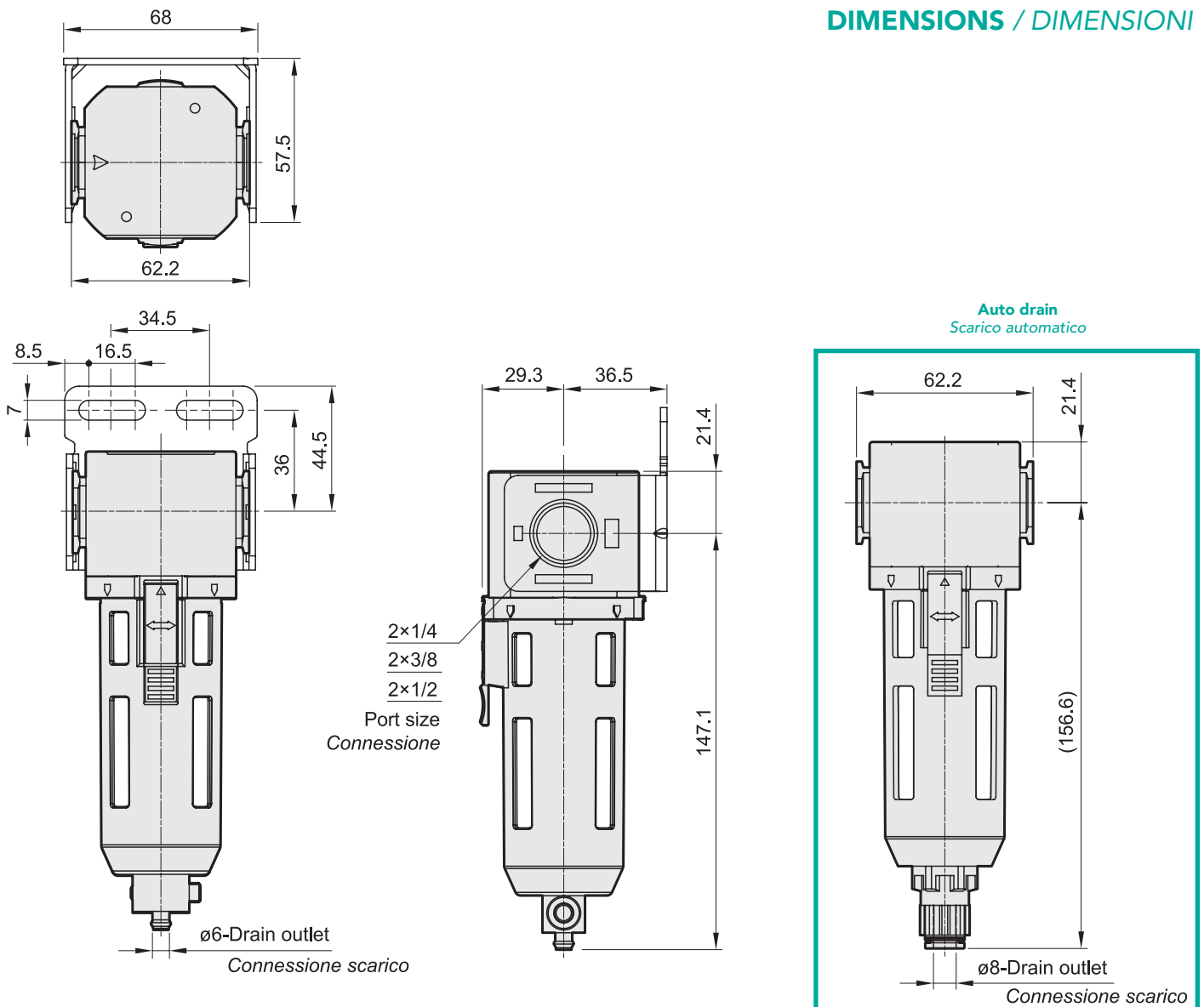
Port size / Connessione	G 1/4" G 3/8" G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Version - Versione: 0,3 µm Version - Versione: 0,01 µm
Drain capacity / Capacità tazza	35 cm ³
Weight / Peso	365 g

ENCODING / CODIFICA

TU - MMF3 - -

Model Modello	Port size: Connessione: 14 1/4" 38 3/8" 12 1/2"	Bowl /Tazza: P Protection case Tazza di protezione M Metal bowl Tazza di metallo	Drain valve / Valvola di scarico S Semi-auto drain Scarico semiautomatico D Auto drain Scarico automatico	Filter element: Elemento filtrante: 3 0.3 µm 1 0.01 µm
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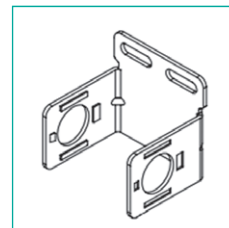
DIMENSIONS / DIMENSIONI



TU - L3

LUBRICATOR
LUBRIFICATORE

Attachment / Accessori

C-type bracket (TU-BC3)
Staffa a C (TU-BC3)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 1/4" G 3/8" G 1/2"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Lubricating oil capacity Capacità tazza olio	65 cc (L)
Min. flow for oil drip Flusso minimo gocciolamento olio	50 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Weight / Peso	345 g

Attachment / Accessori

C-type bracket (TU-BC3)
staffa a C (TU-BC3)

ENCODING / CODIFICA

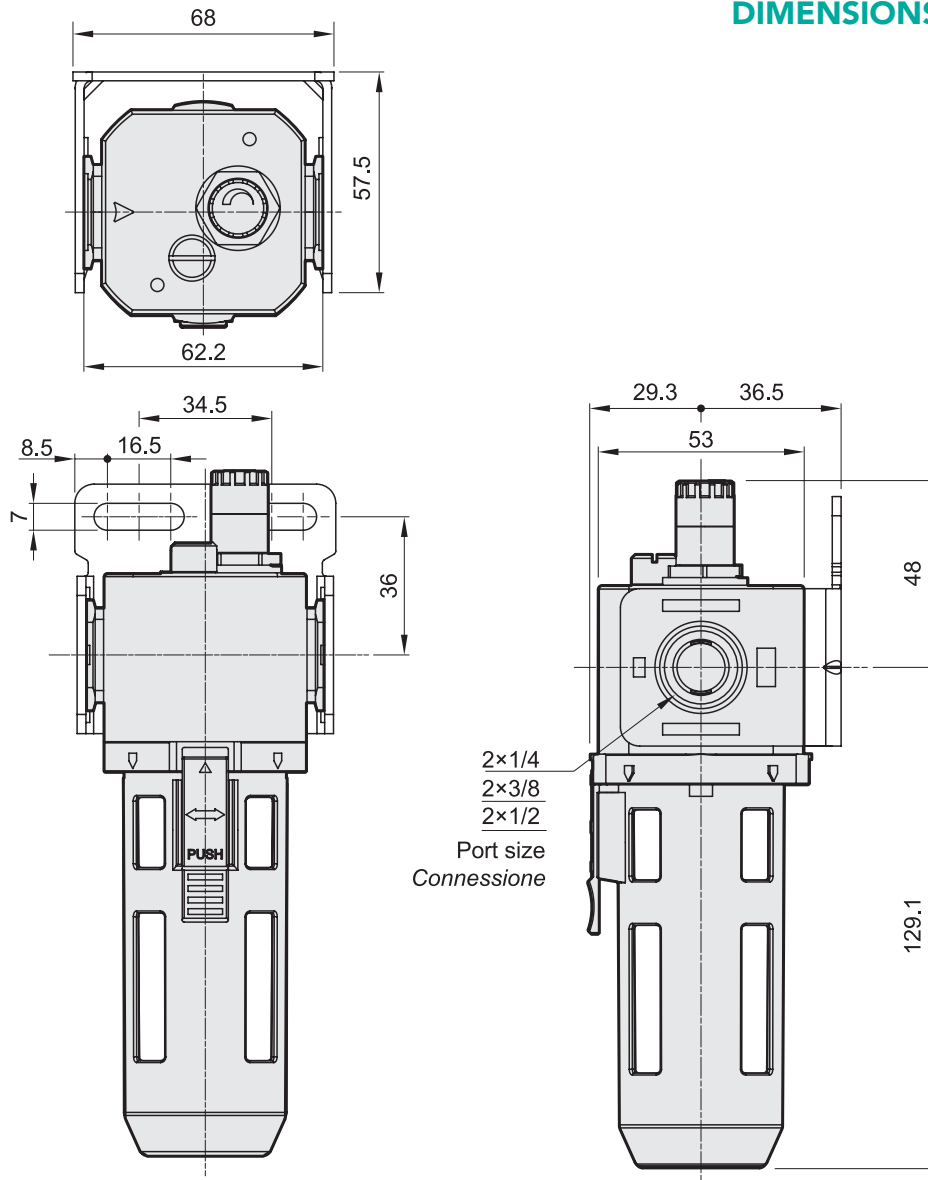
TU - L3 - -

Model
Modello

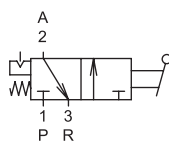
Port size:
Connessione:
14 1/4"
38 3/8"
12 1/2"

Bowl /Tazza:
P Protection case
Tazza protetta
M Metal bowl
Tazza di metallo

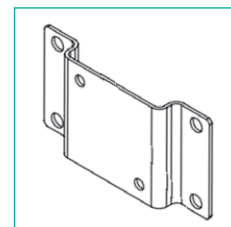
DIMENSIONS / DIMENSIONI



TU - VM3

ON OFF VALVE
VALVOLA ON OFF

Attachment / Accessori

Bracket (TU-BVM)
Staffa (TU-BVM)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 1/4" G 3/8" G 1/2"
N° of port / N° di porti	3
N° of position / N° di posizione	2
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	1 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Option / Opzioni	Bracket (TU-BVM) Staffa (TU-BVM)
Weight / Peso	323 g

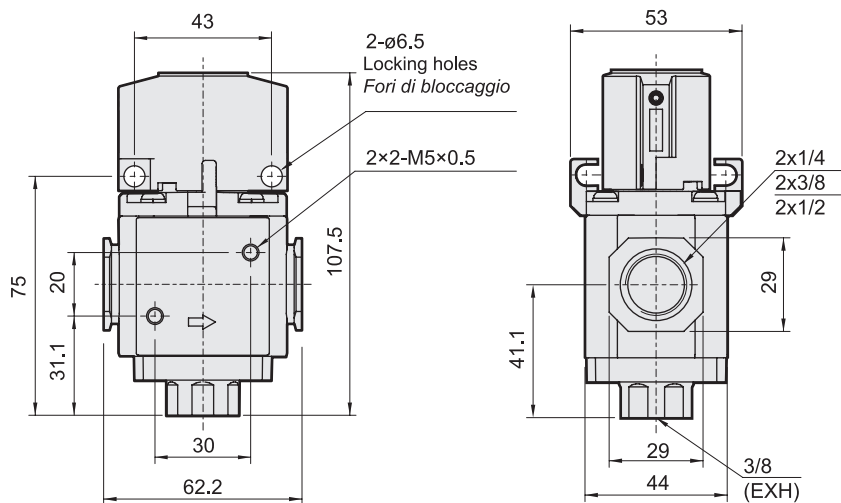
ENCODING / CODIFICA

TU - VM3 - 

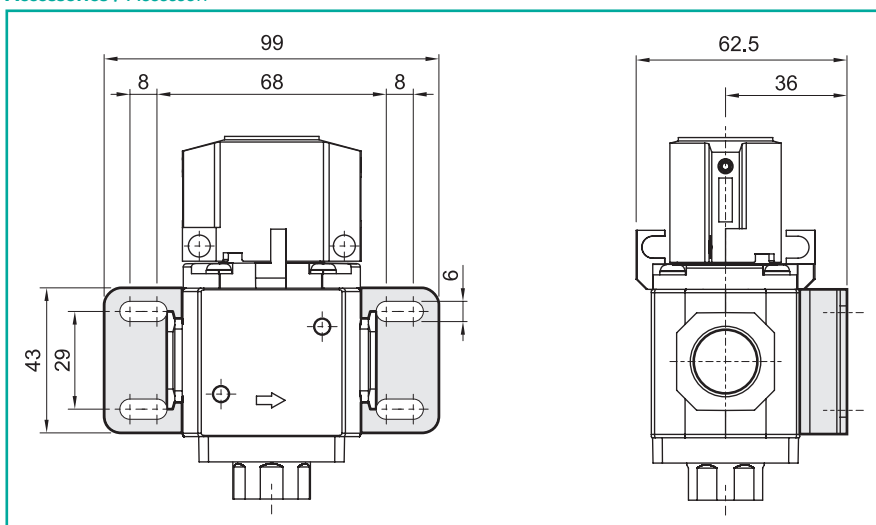
Model
Modello

Port size:
Connessione:
14 1/4"
38 3/8"
12 1/2"

DIMENSIONS / DIMENSIONI



Accessories / Accessori

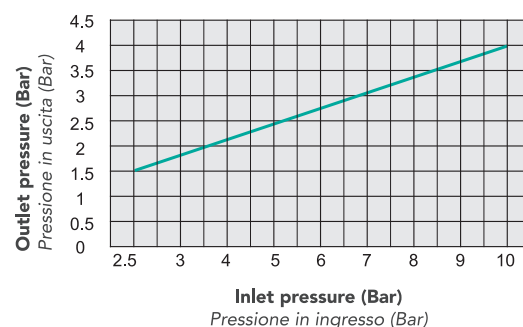


TU - VS3

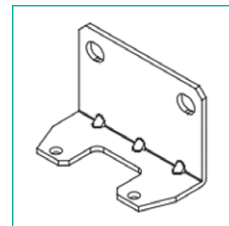
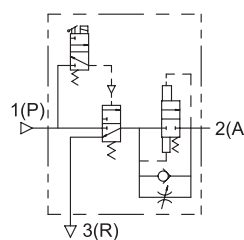
SLOW START / SHUT-OFF VALVE
VALVOLA DI AVVIAMENTO PROGRESSIVO

FLOW / PORTATA

Piston B switching pressure (Close - Open)
Pressione di scambio (Chiuso - Aperto)



Attachment / Accessori



L-type bracket (TU-BVS3)
Staffa a L (TU-BVS3)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 3/8"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	2,5 ~ 10 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Option / Opzioni	Pressure gauge, L-type bracket (TU-BVS3) Manometro, staffa tipo L (TU-BVS3)
Weight / Peso	520 g

ENCODING / CODIFICA

TU - VS3 - □ - □

Model
Modello

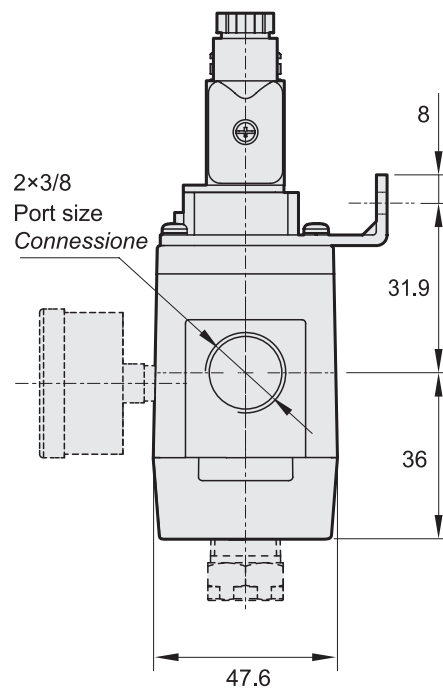
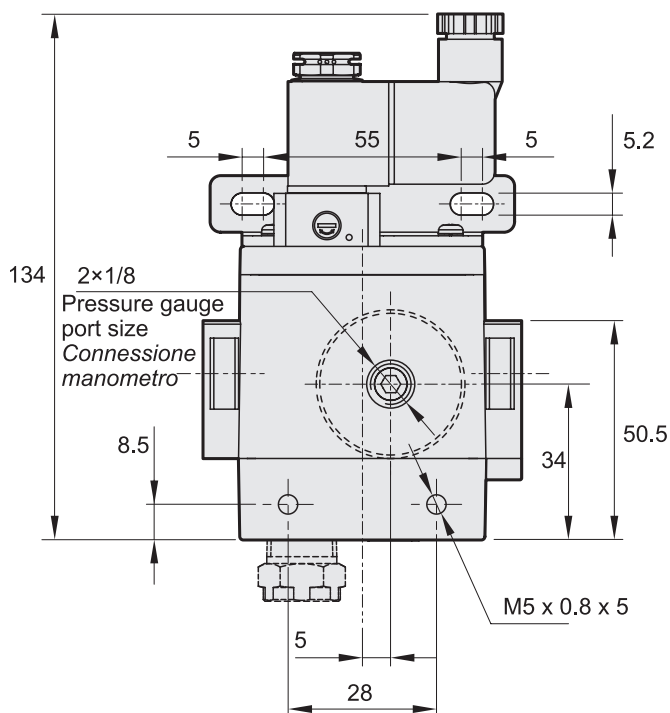
Port size:
Connezione:
38 3/8"

Coil
Bobina:
1 01200
2 02400
3 02450
4 11550
5 23050

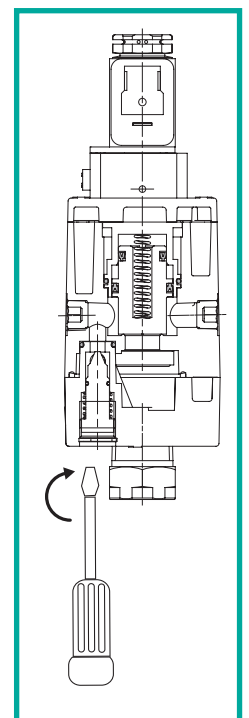
COIL / BOBINA

Code / Codice	Voltage / Tensione
MS01200	12 V DC
MS02400	24 V DC
MS02450	24 V 50/60Hz AC
MS11550	115 V 50/60Hz AC
MS23050	230 V 50/60Hz AC

DIMENSIONS / DIMENSIONI

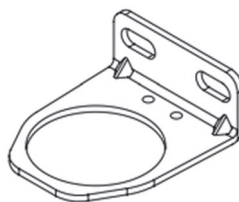


Slow-start regulation
Regolazione avviamento
progressivo

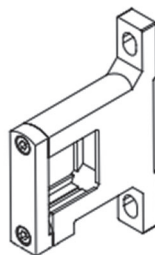


TU - BL3

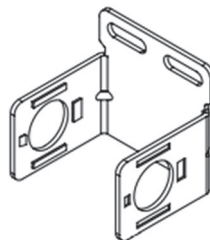
L Bracket
 Staffa a L


TU - BT3

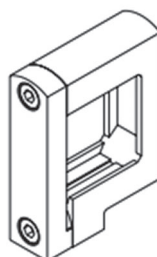
T Bracket and joiner
 Staffa a T a giunzione


TU - BC3

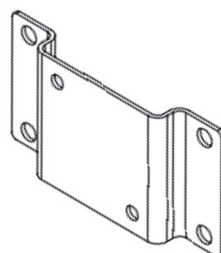
C Bracket for F, MMF
 Staffa a C per unità F, MMF e L


TU - BS3

Joiner unit
 Giunzione

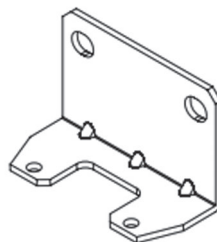

TU - BVM

Bracket for TU - VM3
 Staffa per TU - VM3



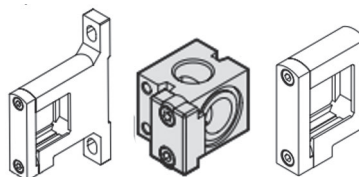
TU - BVS3

Bracket for TU - VS3
Staffa per TU - VS3



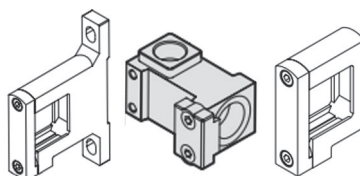
TU - T3 - 14, 38, 12

Module mounting bracket
Blocchetto di derivazione



TU - K3 - 14, 38

Module bracket with check valve
*Blocchetto di derivazione
con valvola di non ritorno*



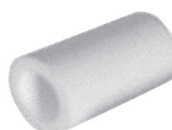
TU - FE3

40 micron filter
Filtro 40 micron



TU - FX3

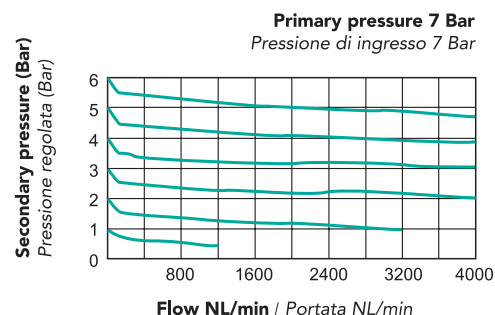
5 micron filter
Filtro 5 micron



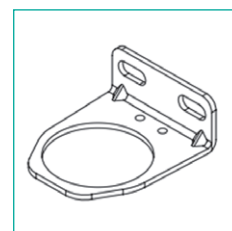
TU - R4

PRESSURE REGULATOR
REGOLATORE DI PRESSIONE

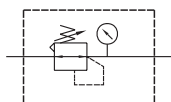
FLOW / PORTATA



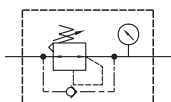
Attachment / Accessori



L-type bracket (TU-BL4)
Staffa a L (TU-BL4)



Standard / standard



Backflow / flusso di ritorno

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

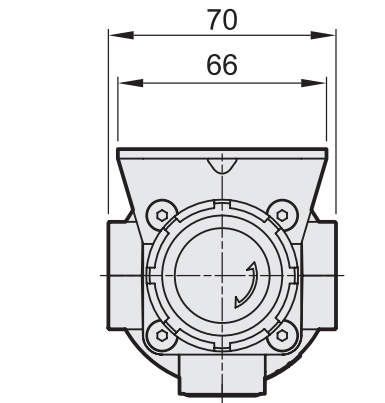
Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	10 Bar
Proof pressure Pressione di scoppio	15 Bar
Regulated pressure range Range di regolazione di pressione	1 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Attachment / Accessori	Pressure gauge, gauge adapter set, L-type bracket (TU-BL4) Manometro, adattatore per manometro, staffa a L (TU-BL4)
Weight / Peso	450 g

ENCODING / CODIFICA

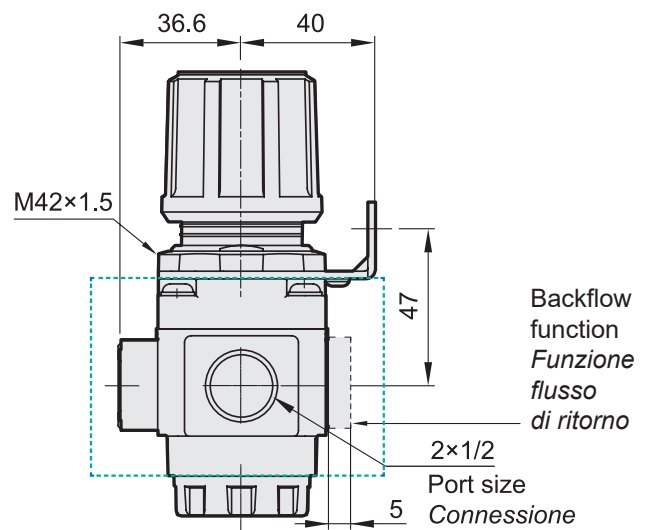
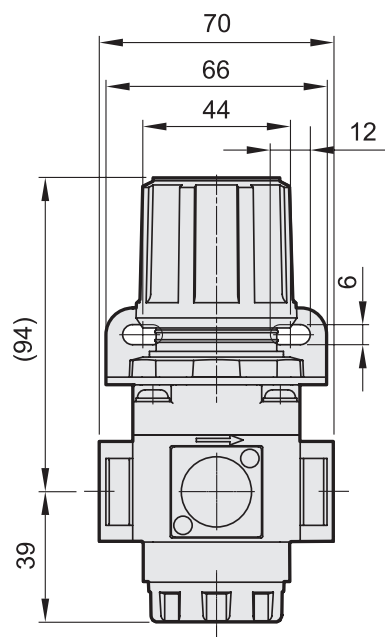
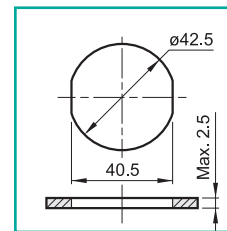
TU - R4 - -

Model <i>Modello</i>	Port size: <i>Connessione:</i> 12 1/2"	Backflow function: S Standard B Backflow function <i>Funzione flusso di ritorno</i>	Exhaust mechanism: <i>Meccanismo di scarico:</i> R relieving type con relieving N Non relieving type senza relieving	Pressure Gauge: / Manometro: G Integrated pressure gauge Manometro integrato A Gauge adapter set (TU-AS) Adattatore per manometro (TU-AS) E Pressure switch (EP41) Pressostato digitale (EP41)
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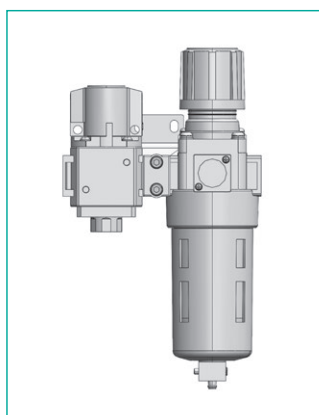
DIMENSIONS / DIMENSIONI



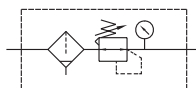
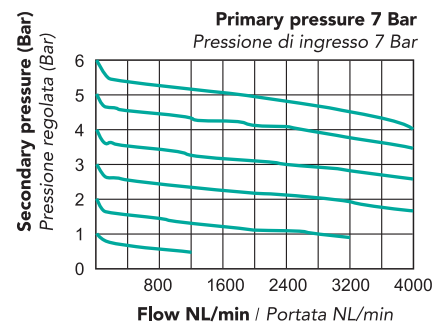
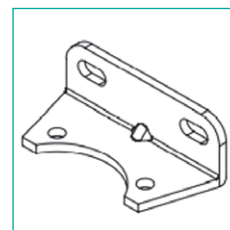
Panel mounting hole
Foro per montaggio a pannello



TU - FR4

FILTER AND PRESSURE REGULATOR
FILTRO E REGOLATORE DI PRESSIONE


Integrated ON OFF version
Versione con valvola ON OFF integrata

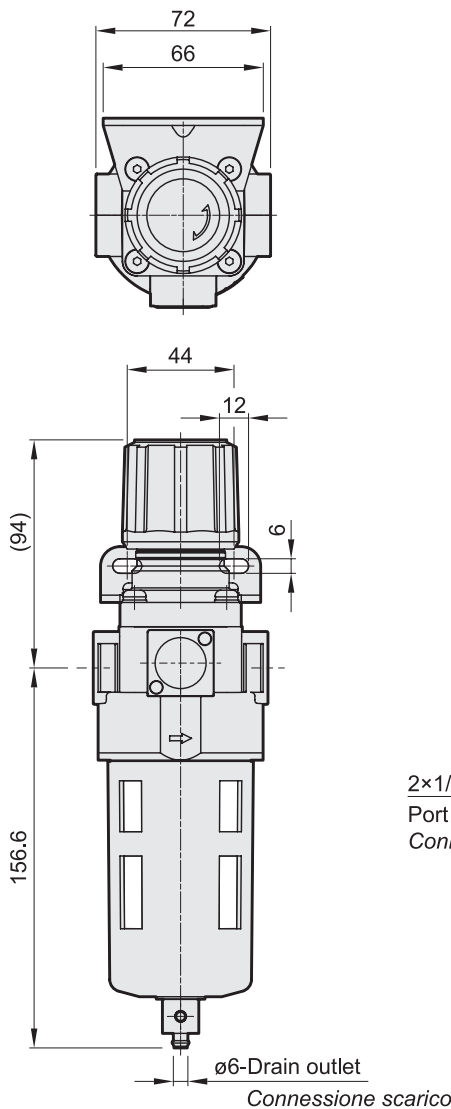
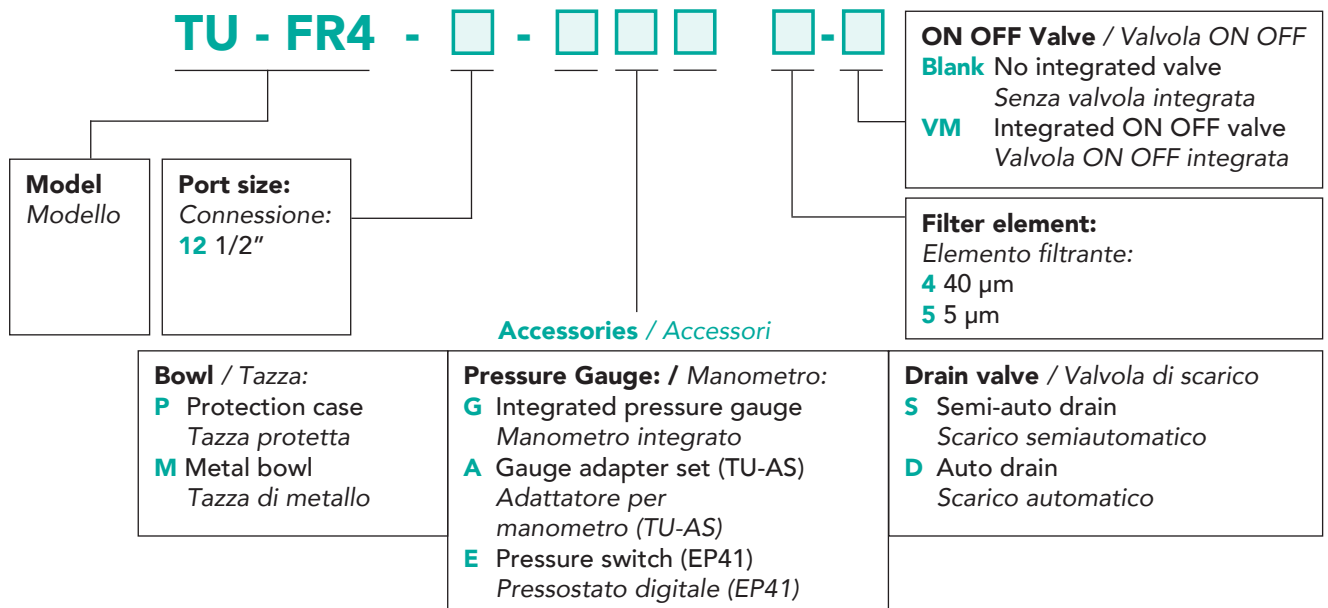
**FLOW / PORTATA****Attachment / Accessori**

L-type bracket (TU-BFR4)
Staffa a L (TU-BFR4)

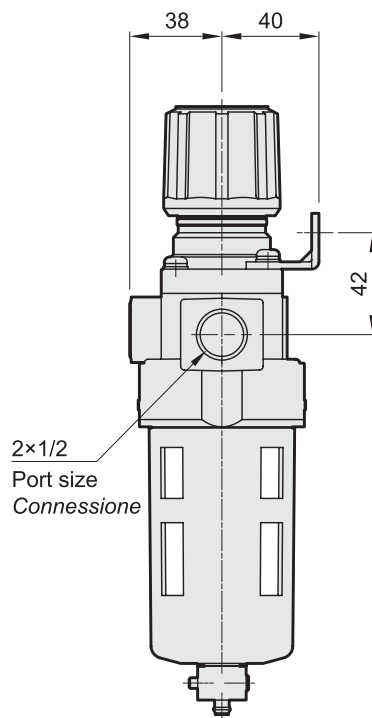
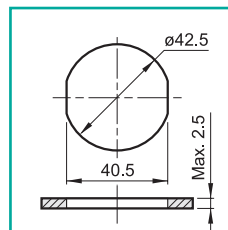
TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range <i>Range di pressione operativa</i>	0,5 ~ 10 Bar
Proof pressure <i>Pressione di scoppio</i>	15 Bar
Regulated pressure range <i>Range di regolazione di pressione</i>	1 ~ 8,5 Bar
Ambient temperature <i>Temperatura ambiente</i>	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Drain capacity / Capacità tazza	75 cm ³
Attachment / Accessori	Pressure gauge, pressure switch, bracket (TU-BFR4) Manometro, pressostato digitale, staffa (TU-BFR4)
Weight / Peso	620 g

ENCODING / CODIFICA

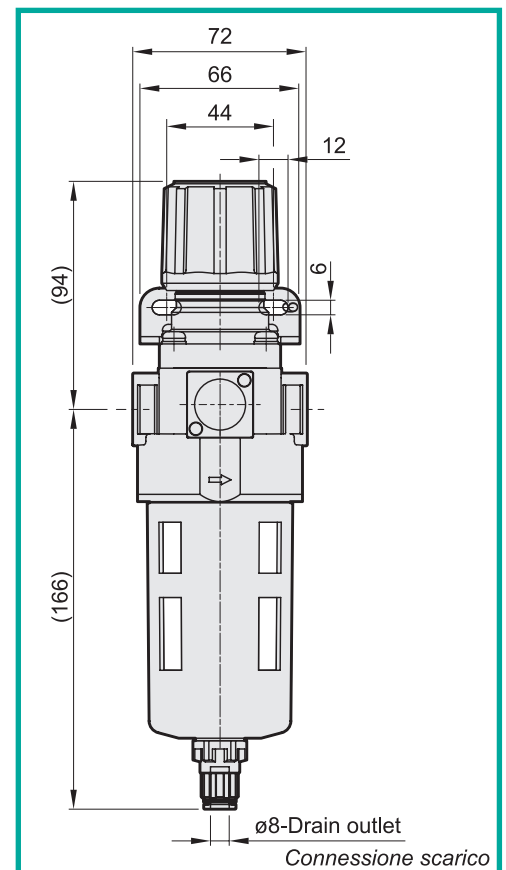


Panel mounting hole
Foro per montaggio a pannello



DIMENSIONS / DIMENSIONI

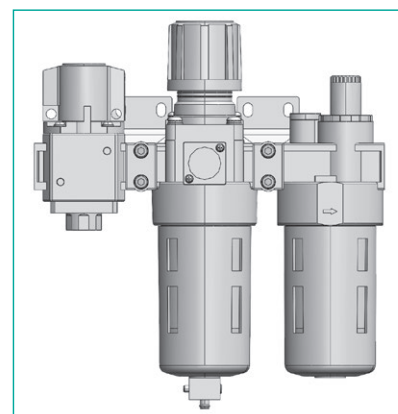
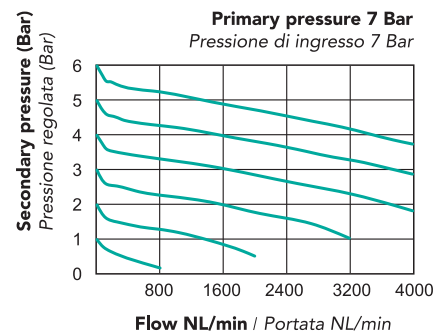
Auto drain
Scarico automatico



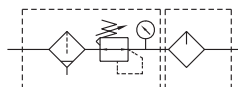
TU - FRL4

F.R.L. UNIT
UNITÀ F.R.L.

FLOW / PORTATA



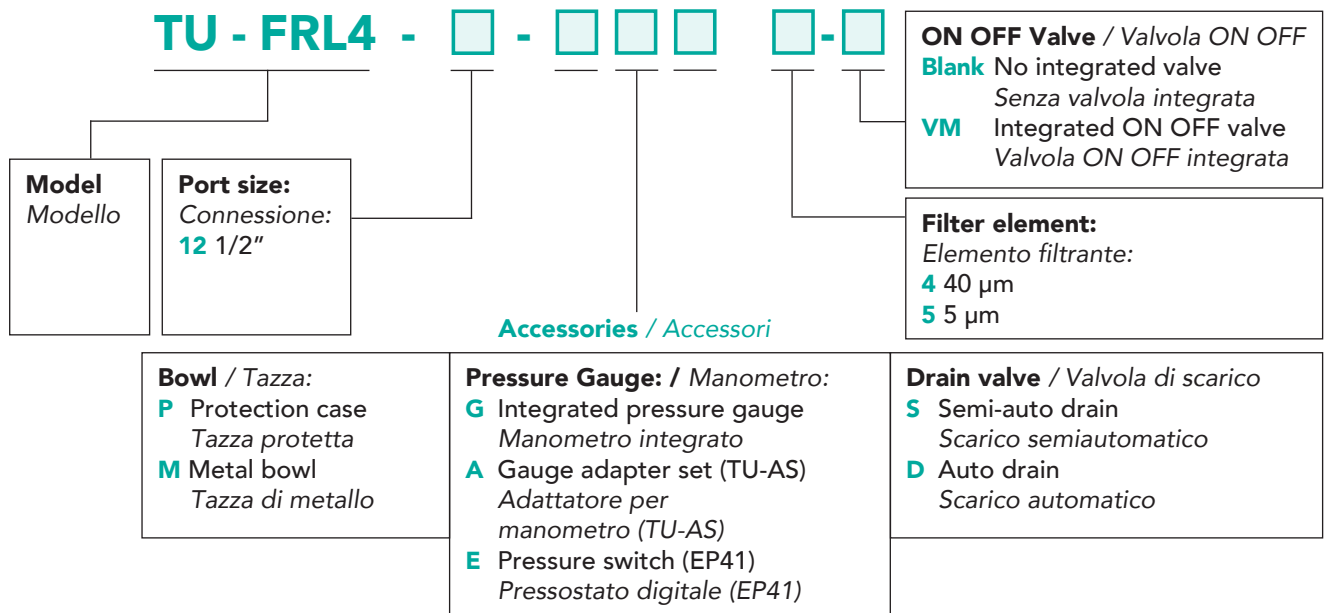
Integrated ON OFF version
Versione con valvola ON OFF integrata



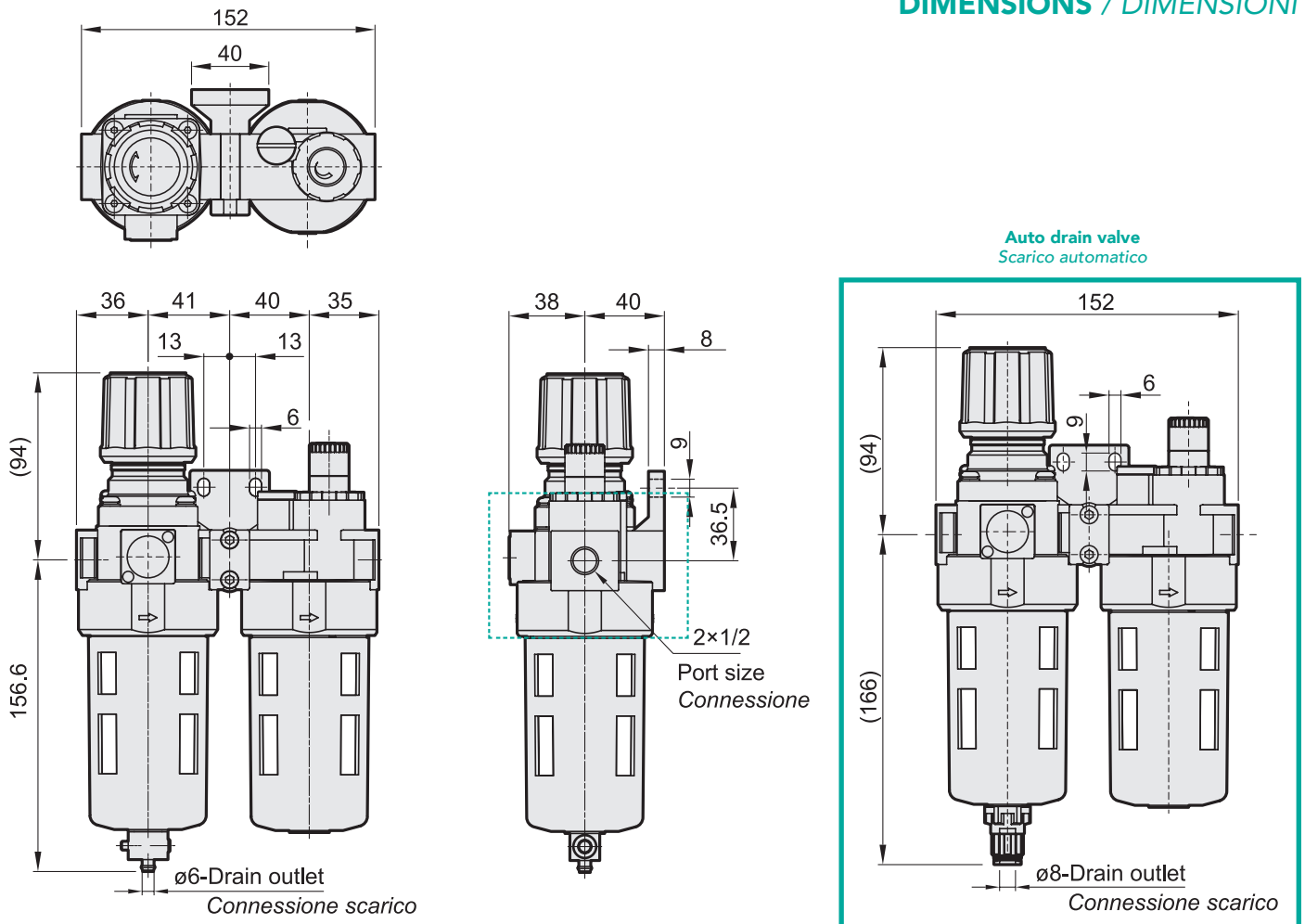
TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Regulated pressure range Range di regolazione di pressione	1 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Lubricating oil capacity / Capacità tazza olio	200 c.c.
Min. flow for oil drip Flusso minimo gocciolamento olio	80 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Attachment / Accessori	Pressure gauge, pressure switch Manometro, pressostato digitale
Weight / Peso	1100 g

ENCODING / CODIFICA



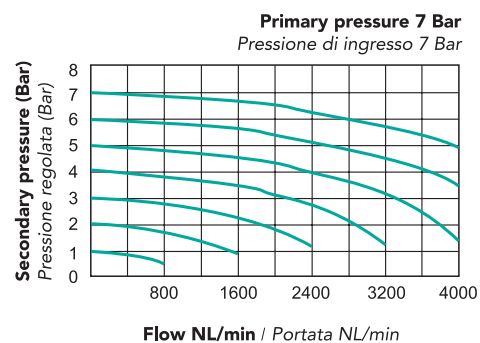
DIMENSIONS / DIMENSIONI



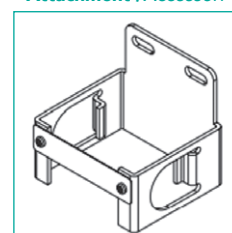
TU - F4

FILTER
FILTRO

FLOW / PORTATA



Attachment / Accessori



C-type bracket (TU-BC4)
Staffa a C (TU-BC4)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

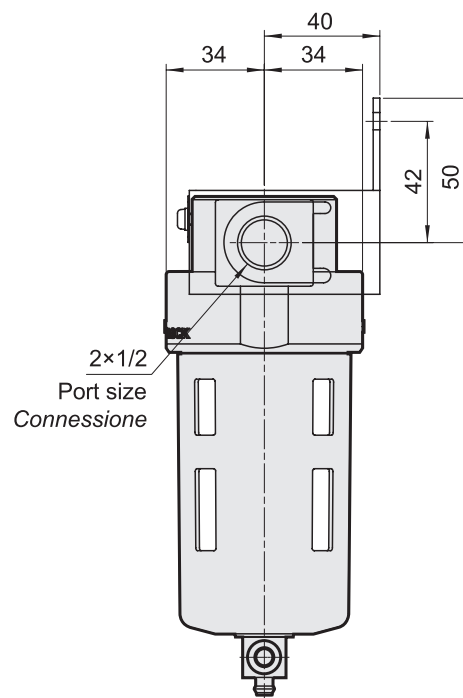
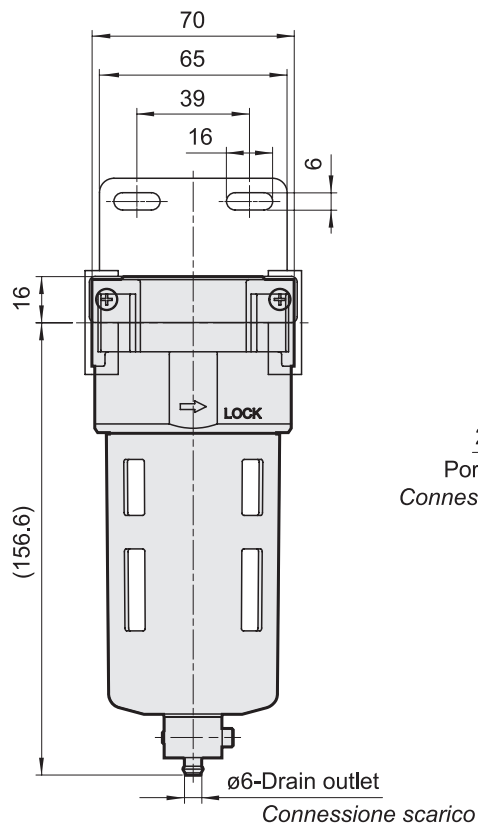
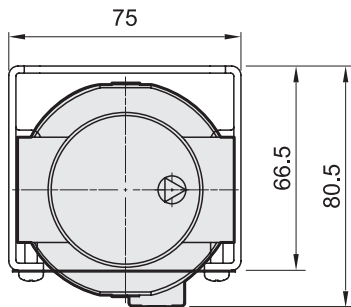
Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Drain capacity / Capacità tazza	75 cm ³
Weight / Peso	345 g
Attachment / Accessori	C-type bracket (TU-BC4) staffa a C (TU-BC4)

ENCODING / CODIFICA

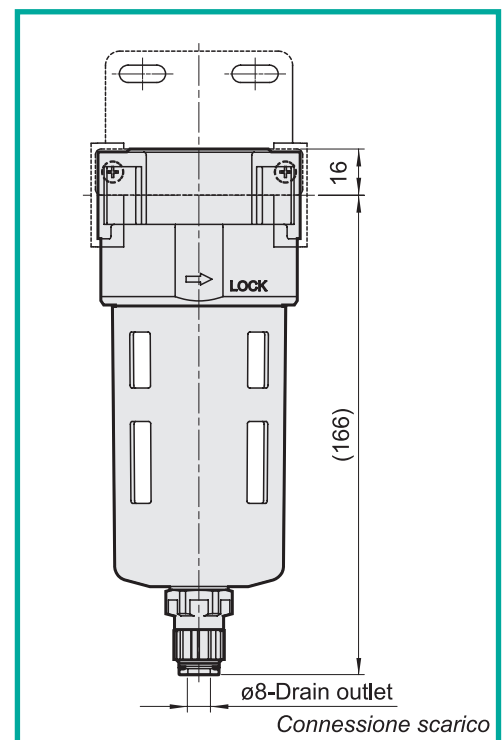
TU - F4 - -

Model Modello	Port size: Connessione: 12 1/2"	Bowl /Tazza: P Protection case Tazza protetta M Metal bowl Tazza di metallo	Drain valve / Valvola di scarico S Semi-auto drain Scarico semiautomatico D Auto drain Scarico automatico	Filter element: Elemento filtrante: 4 40 µm 5 5 µm
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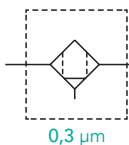
DIMENSIONS / DIMENSIONI



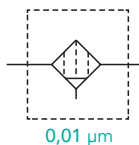
Auto drain valve
Scarico automatico



TU - MMF4

MICRO-MIST FILTER
FILTRO DISOLEATORE

0,3 µm



0,01 µm

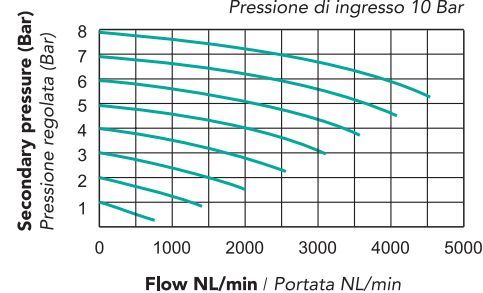
FLOW / PORTATA

0,3 µm

Filter / Filtro

Primary pressure 10 Bar

Pressione di ingresso 10 Bar

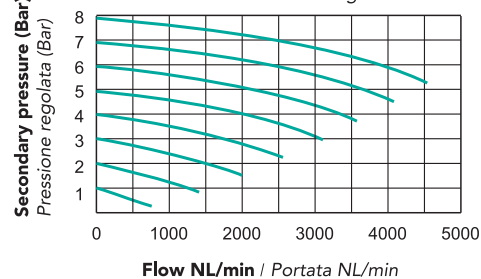


0,01 µm

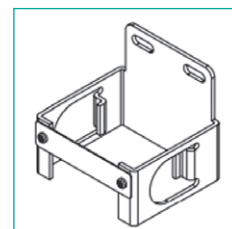
Filter / Filtro

Primary pressure 10 Bar

Pressione di ingresso 10 Bar



Attachment / Accessori

C-type bracket (TU-BC4)
Staffa a C (TU-BC4)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

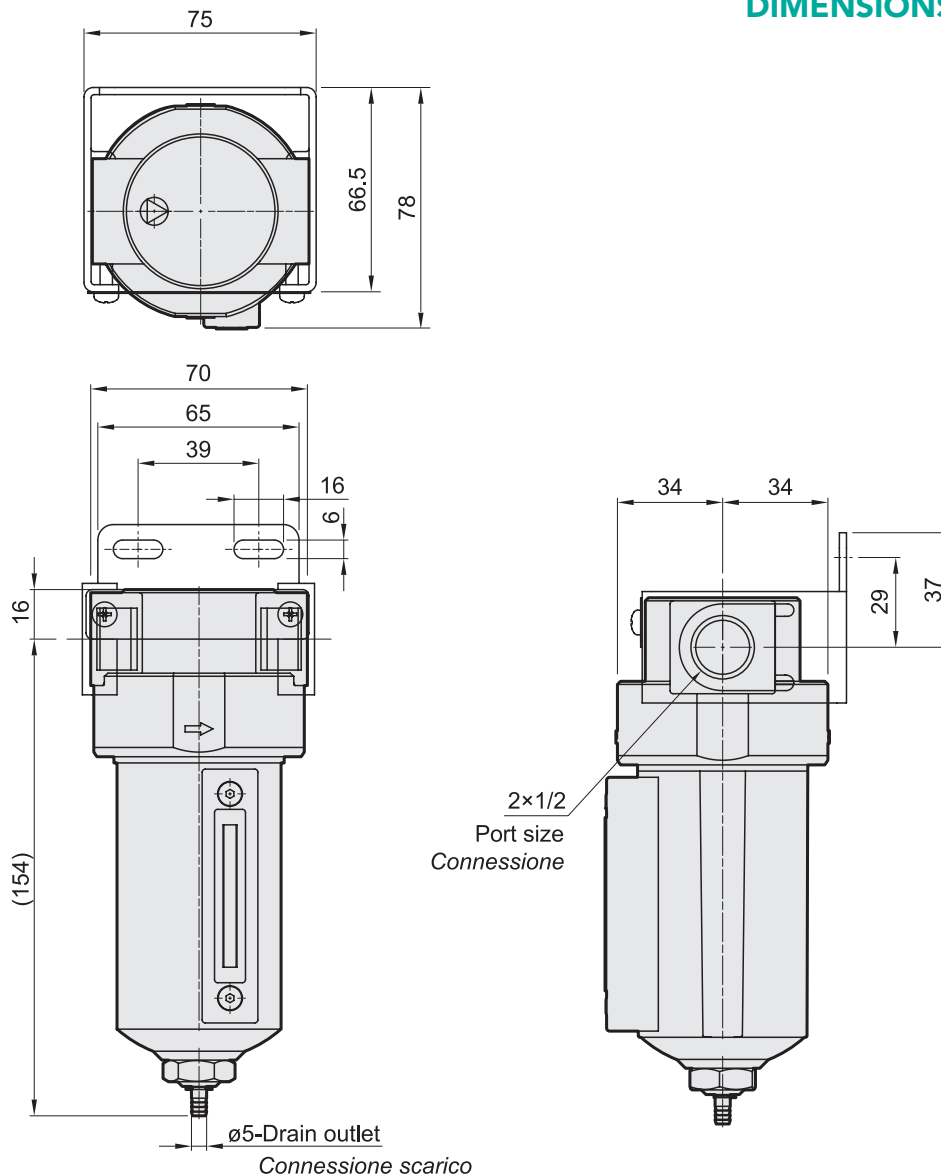
Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	20 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Version - Versione: 0,3 µm Version - Versione: 0,01 µm
Drain capacity / Capacità tazza	70 cm ³
Weight / Peso	480 g
Attachment / Accessori	C-type bracket (TU-BC4) staffa a C (TU-BC4)

ENCODING / CODIFICA

TU - MMF4 - - M

Model Modello	Port size: Connessione: 12 1/2"	Bowl /Tazza: M Metal bowl Tazza di metallo	Drain valve / Valvola di scarico S Semi-auto drain Scarico semiautomatico D Auto drain Scarico automatico	Filter element: Elemento filtrante: 3 0.3 µm 1 0.01 µm
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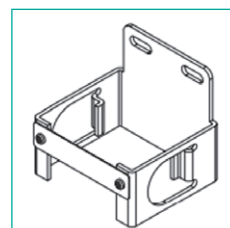
DIMENSIONS / DIMENSIONI



TU - L4

LUBRICATOR
LUBRIFICATORE

Attachment / Accessori

C-type bracket (TU-BC4)
Staffa a C (TU-BC4)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 1/2"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Lubricating oil capacity Capacità tazza olio	200 cc (L)
Min. flow for oil drip Flusso minimo gocciolamento olio	80 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Weight / Peso	410 g
Attachment / Accessori	C-type bracket (TU-BC4) staffa a C (TU-BC4)

ENCODING / CODIFICA

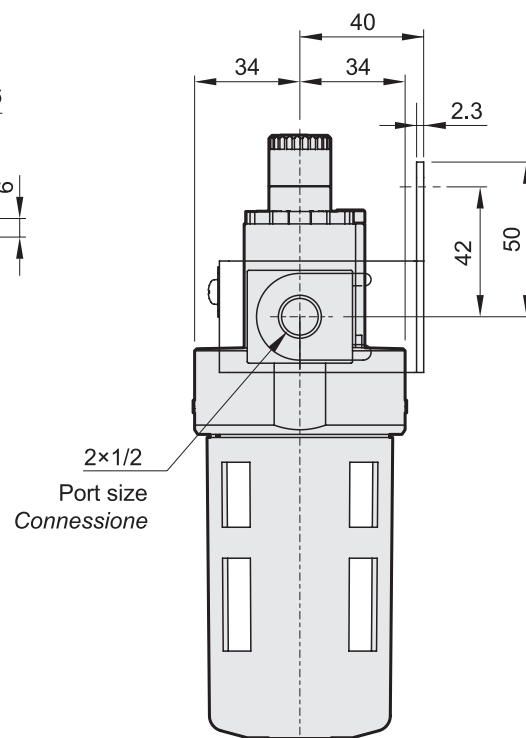
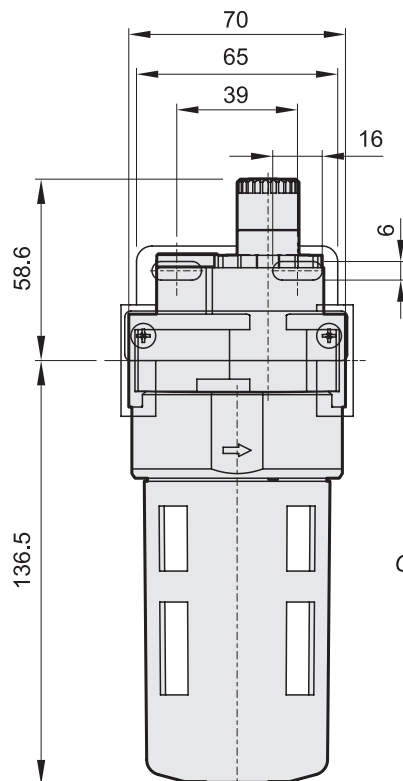
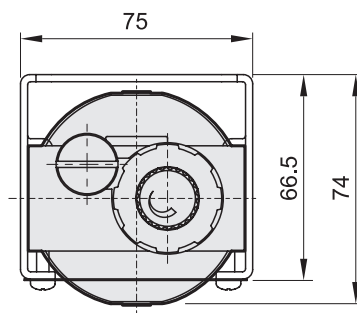
TU - L4 - □ - □

Model
Modello

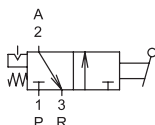
Port size:
Connessione:
12 1/2"

Bowl /Tazza:
P Protection case
Tazza protetta
M Metal bowl
Tazza di metallo

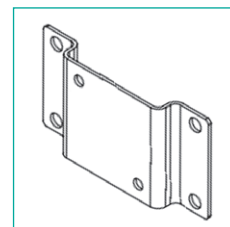
DIMENSIONS / DIMENSIONI



TU - VM4

ON OFF VALVE
VALVOLA ON OFF

Attachment / Accessori

Bracket (TU-BVM)
Staffa (TU-BVM)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 1/2"
N° of port / N° di porti	3
N° of position / N° di posizione	2
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	1 ~ 10 Bar
Proof pressure Pressione di scoppio	15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Attachment / Accessori	Bracket (TU-BVM) Staffa (TU-BVM)
Weight / Peso	311 g

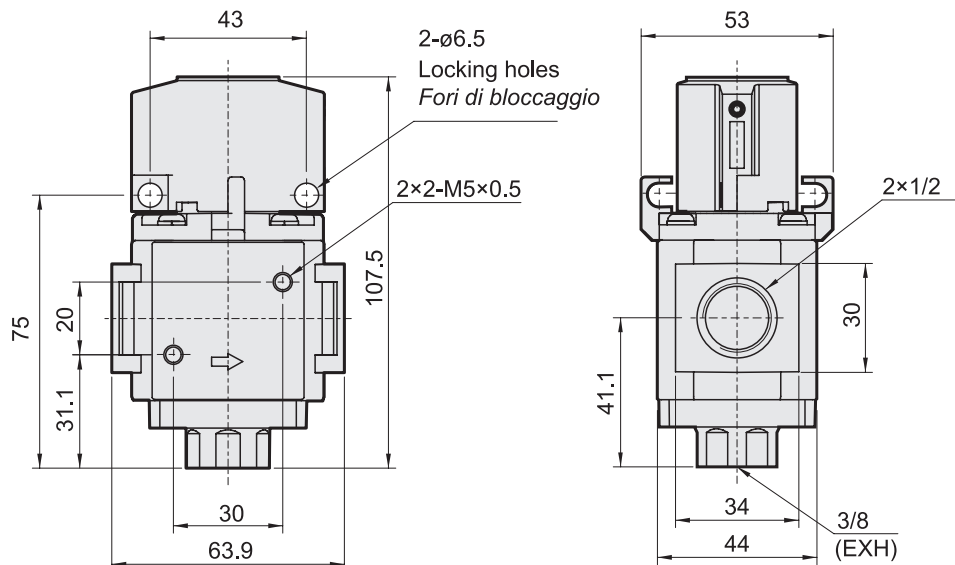
ENCODING / CODIFICA

TU - VM4 - 

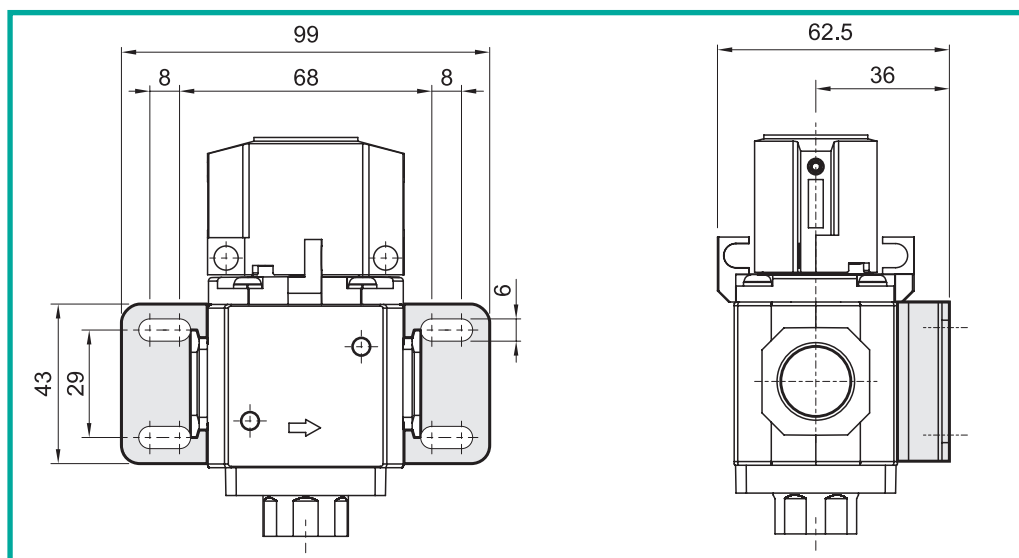
Model
Modello

Port size:
Connessione:
12 1/2"

DIMENSIONS / DIMENSIONI



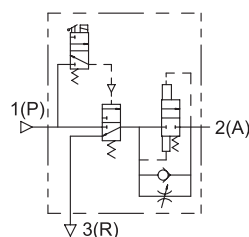
Accessories / Accessori



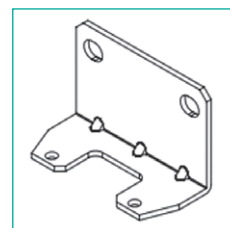
TU - VS4

SLOW START / SHUT-OFF VALVE
VALVOLA DI AVVIAMENTO PROGRESSIVO

FLOW / PORTATA



Attachment / Accessori

L-type bracket (TU-BVS4)
Staffa a L (TU-BVS4)*Pressure gauge to be ordered separately
*Il manometro è da ordinare a parte

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	2,5 ~ 10 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Attachment / Accessori	Pressure gauge, L-type bracket (TU-BVS4) Manometro, staffa tipo L (TU-BVS4)
Weight / Peso	800 g

ENCODING / CODIFICA

TU - VS4 - -

Model
Modello

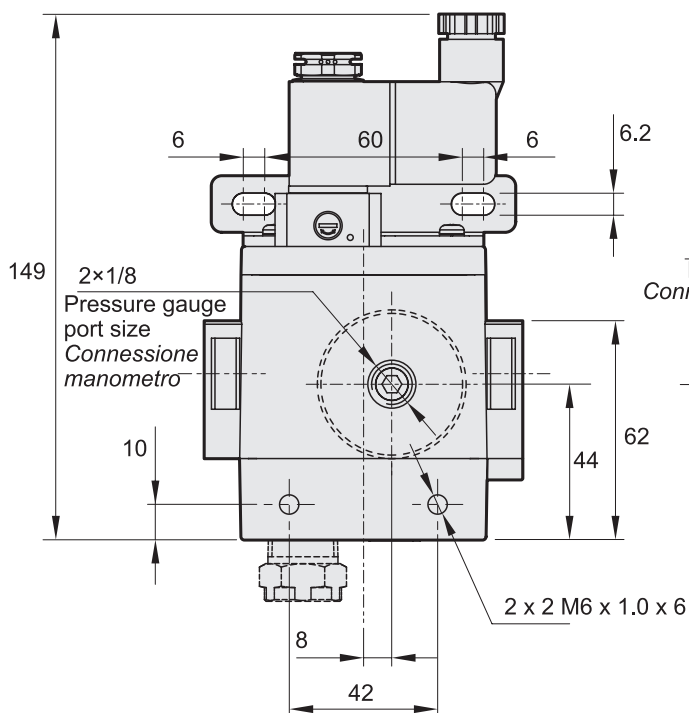
Port size:
Connessione:
12 1/2"

Coil
Bobina:
1 01200
2 02400
3 02450
4 11550
5 23050

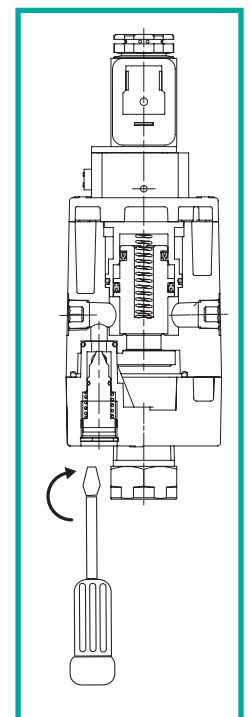
COIL / BOBINA

Code / Codice	Voltage / Tensione
MS01200	12 V DC
MS02400	24 V DC
MS02450	24 V 50/60Hz AC
MS11550	115 V 50/60Hz AC
MS23050	230 V 50/60Hz AC

DIMENSIONS / DIMENSIONI



Slow-start regulation
Regolazione avviamento
progressivo

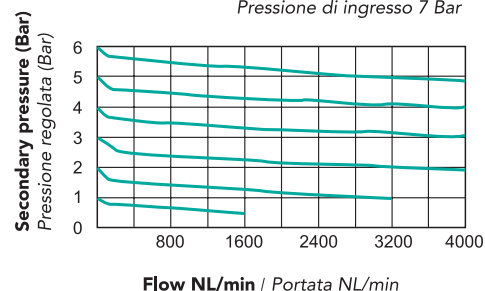


TU - R4H

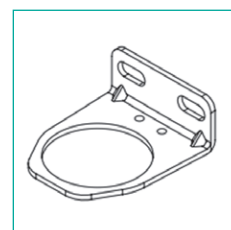
HIGH PRESSURE REGULATOR
REGOLATORE DI ALTA PRESSIONE

FLOW / PORTATA

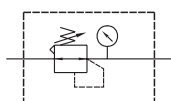
Primary pressure 7 Bar
Pressione di ingresso 7 Bar



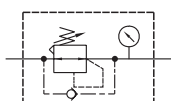
Attachment / Accessori



L-type bracket (TU-BL4)
Staffa a L (TU-BL4)



Standard / standard



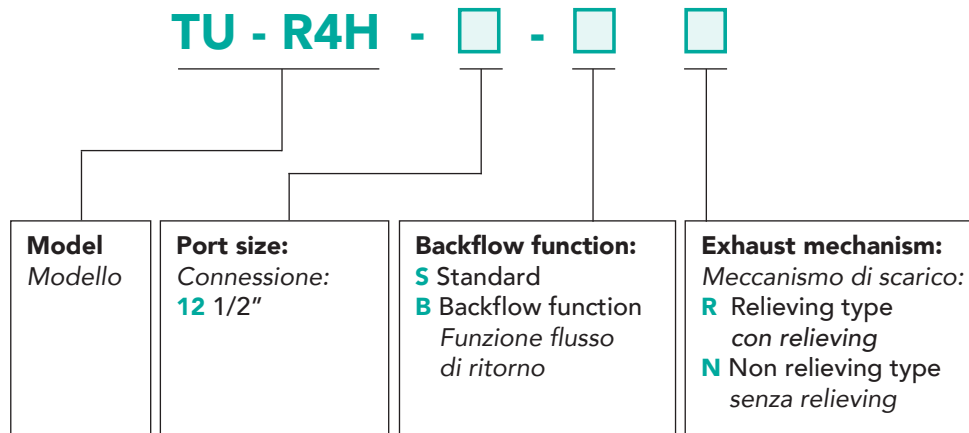
Backflow / flusso di ritorno

*Pressure gauge to be ordered separately
*Il manometro è da ordinare a parte

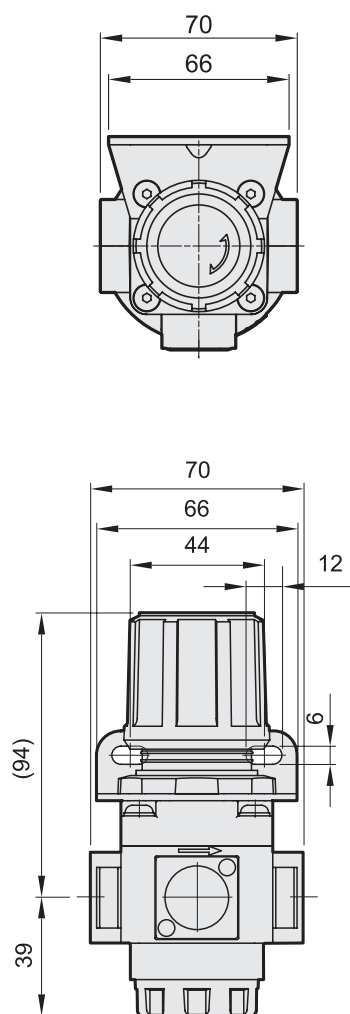
TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	15 Bar
Proof pressure Pressione di scoppio	20 Bar
Regulated pressure range Range di regolazione di pressione	10 ~ 15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Attachment / Accessori	Pressure gauge, bracket (TU-BL4) Manometro, staffa (TU-BL4)
Weight / Peso	450 g

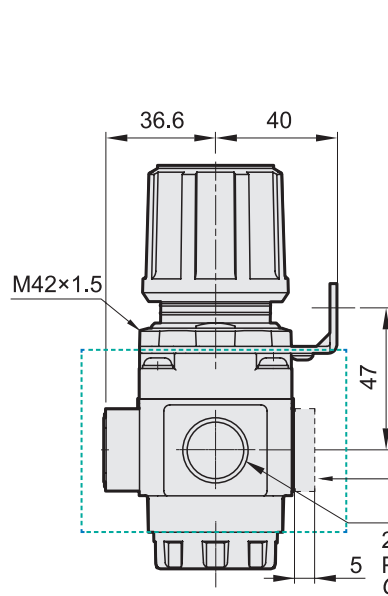
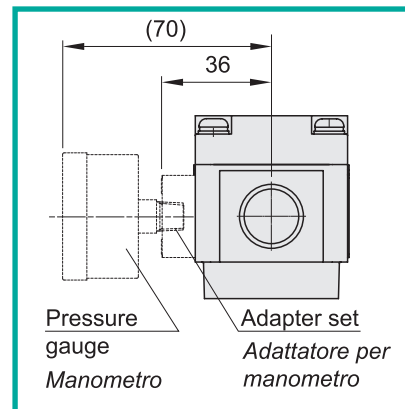
ENCODING / CODIFICA



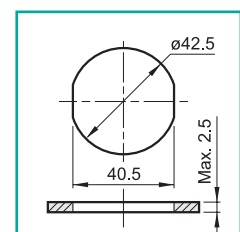
DIMENSIONS / DIMENSIONI



Accessories / Accessori



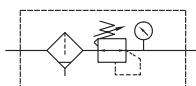
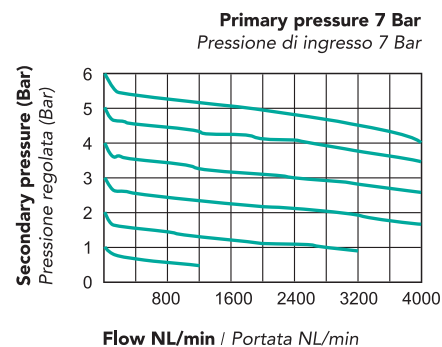
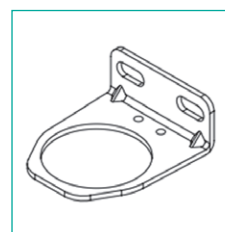
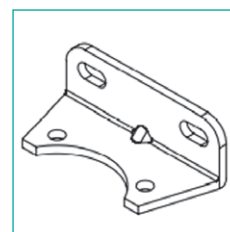
Panel mounting hole
Foro per montaggio a pannello



Backflow function
Funzione flusso di ritorno

2x1/2
Port size
Connessione

TU - FR4H

FILTER AND HIGH-PRESSURE REGULATOR
FILTRO E REGOLATORE DI ALTA PRESSIONE

FLOW / PORTATA

Attachment / Accessori

L-type bracket (TU-BL4)
 Staffa a L (TU-BL4)

L-type bracket (TU-BFR4)
 Staffa a L (TU-BFR4)

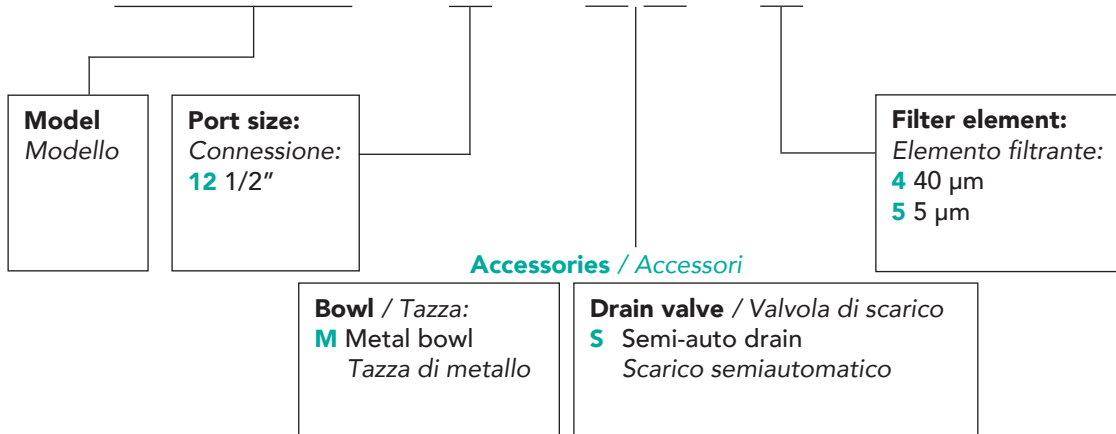
***Pressure gauge to be ordered separately**
 *Il manometro è da ordinare a parte

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 15 Bar
Proof pressure Pressione di scoppio	20 Bar
Regulated pressure range Range di regolazione di pressione	10 ~ 15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Drain capacity / Capacità tazza	70 cm ³
Attachment / Accessori	Pressure gauge, bracket (TU-BFR4) Manometro, staffa (TU-BFR4)
Weight / Peso	800 g

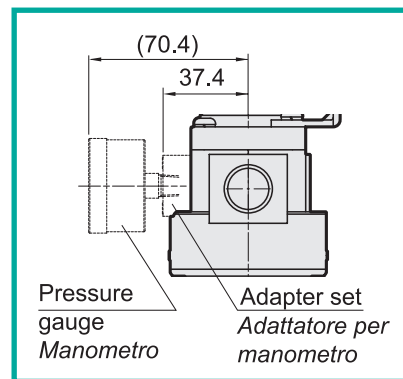
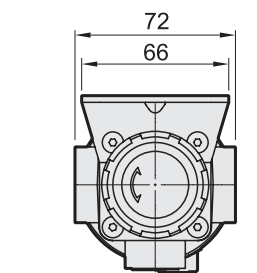
ENCODING / CODIFICA

TU - FR4H - 12 - M

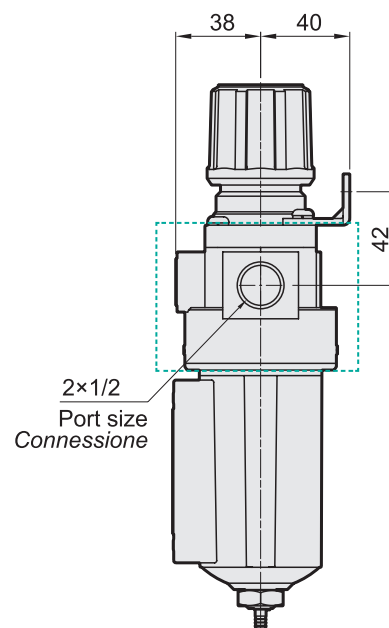
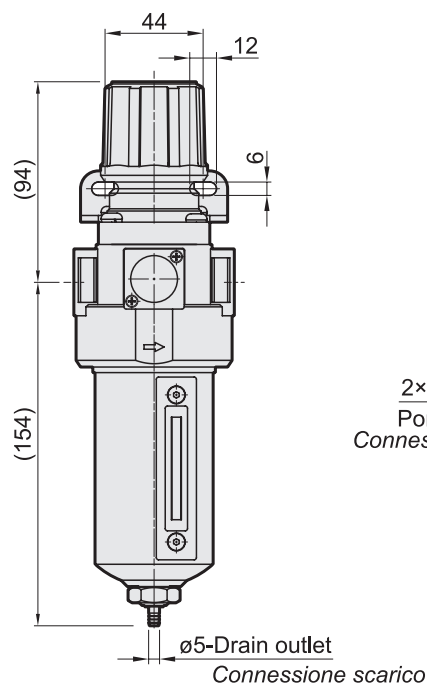
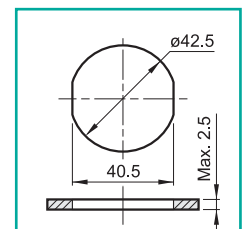


DIMENSIONS / DIMENSIONI

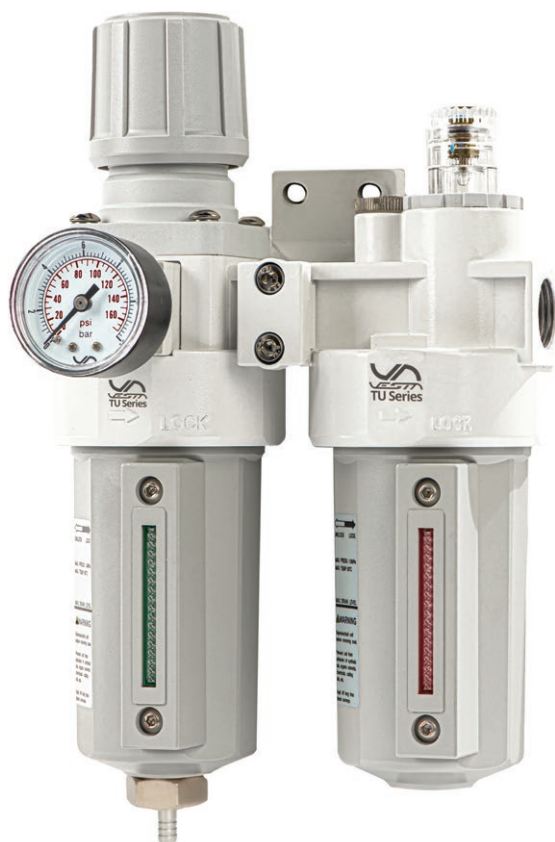
Accessories / Accessori



Panel mounting hole
Foro per montaggio a pannello

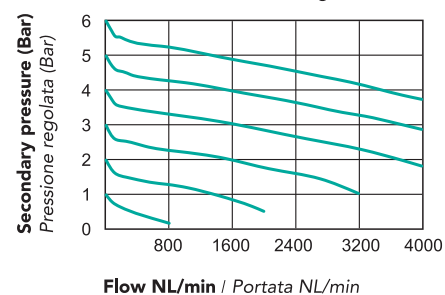


TU - FRL4H

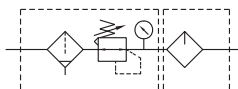
F.R.L UNIT
UNITÀ F.R.L.

FLOW / PORTATA

Primary pressure 7 Bar
Pressione di ingresso 7 Bar



*Pressure gauge to be ordered separately
*Il manometro è da ordinare a parte

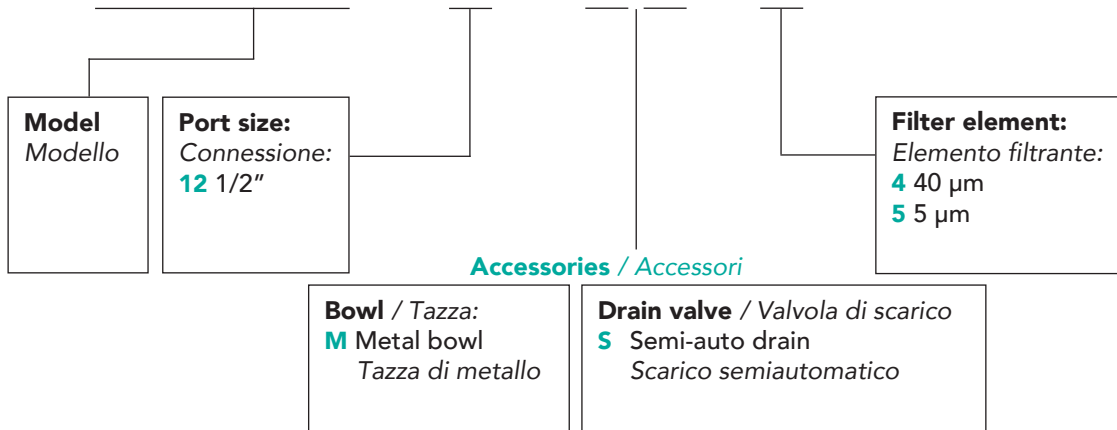


TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

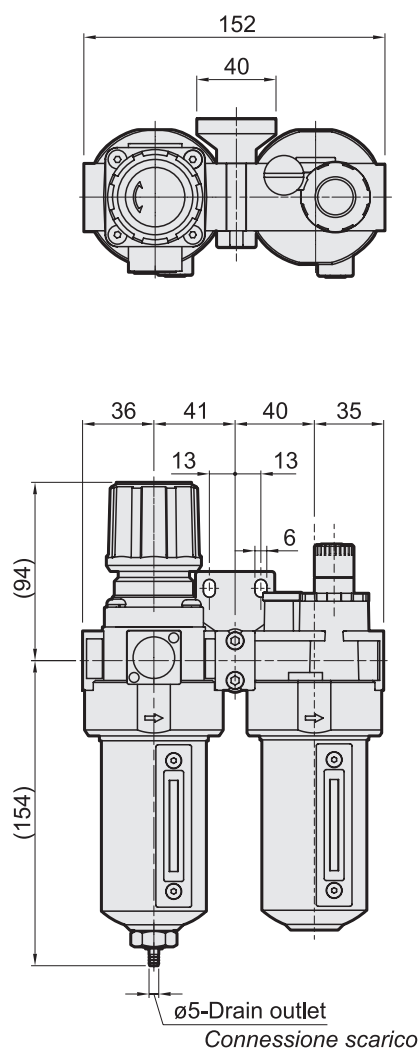
Port size / Connessione	G 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 15 Bar
Proof pressure Pressione di scoppio	20 Bar
Regulated pressure range Range di regolazione di pressione	10 ~ 15 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	Standard - Standard: 40 µm Option - Opzione: 5 µm
Lubricating oil capacity / Capacità tazza olio	200 c.c.
Min. flow for oil drip Flusso minimo gocciolamento olio	80 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Attachment / Accessori	Pressure gauge Manometro
Weight / Peso	1518 g

ENCODING / CODIFICA

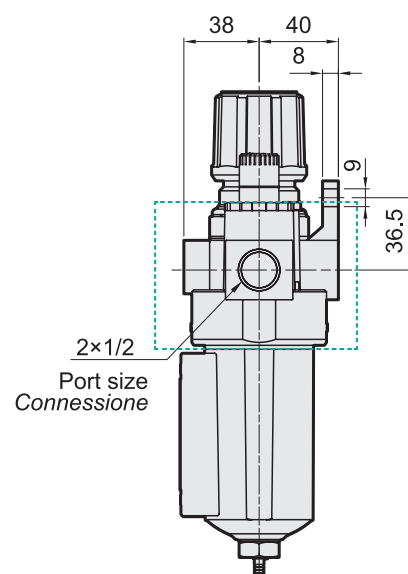
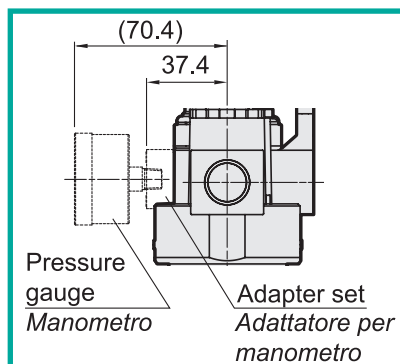
TU - FRL4H - 12 - M



DIMENSIONS / DIMENSIONI



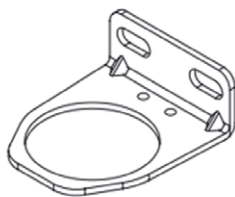
Accessories / Accessori



ACCESSORIES FOR TU - 4 AND TU -4H

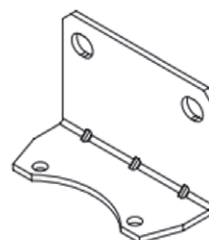
ACCESSORI PER TU - 4 E TU - 4H

TU - BL4



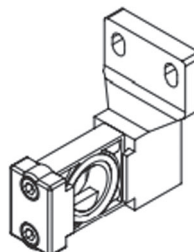
L Bracket for TU - R4 and TU - R4H
Staffa a L per TU - R4 and TU - R4H

TU - BFR4



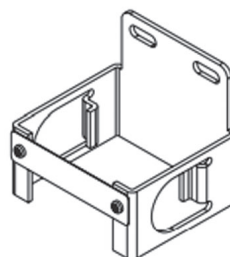
Bracket for TU - FR4 and TU - FR4H
Staffa per TU - FR4 and TU - FR4H

TU - BT4



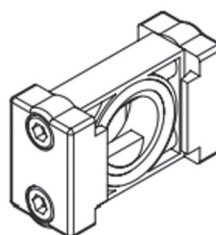
T Bracket and joiner
Staffa a T a giunzione

TU - BC4



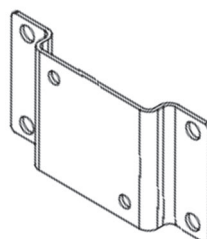
C Bracket for F, MMF and L units
Staffa a C per unità F, MMF e L

TU - BS4



Joiner unit
Giunzione

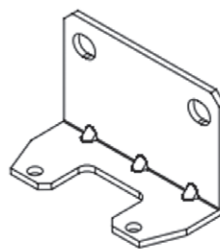
TU - BVM



Bracket for TU VM 4
Staffa per TU VM 4

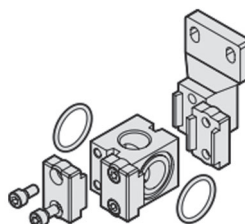
TU - BVS4

Bracket fot TU VS 4
Staffa per TU VS 4



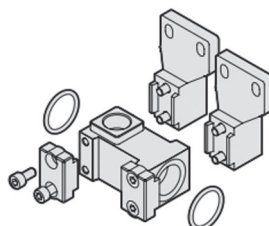
TU - T4 - 12

Module mounting bracket
Blocchetto di derivazione



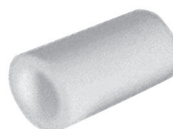
TU - K4 - 38

Module bracket with check valve
*Blocchetto di derivazione
con valvola di non ritorno*



TU - FE4

40 micron filter
Filtro 40 micron

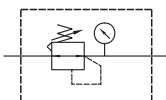


TU - FX4

5 micron filter
Filtro 5 micron



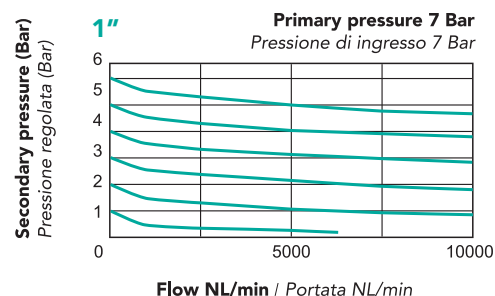
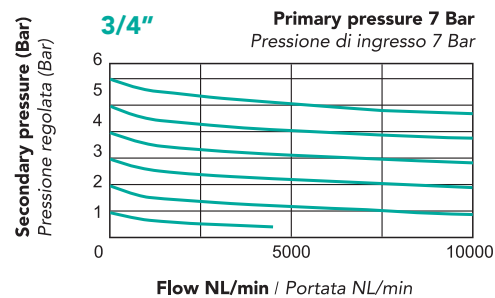
TU - R5

PRESSURE REGULATOR
REGOLATORE DI PRESSIONE

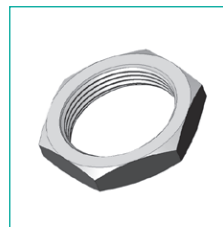
*Panel nut to be ordered separately

*Il dado del pannello è da ordinare a parte

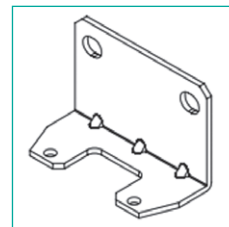
FLOW / PORTATA



Attachment / Accessori



Panel nut (TU-J5)
Dado del pannello (TU-J5)



L-type bracket (TU-BL5)
Staffa a L (TU-BL5)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 3/4" G 1"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	15 Bar
Proof pressure Pressione di scoppio	20 Bar
Regulated pressure range Range di regolazione di pressione	0,5 ~ 8,5 Bar
Repeatability Ripetibilità	± 7% F.S.
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Attachment / Accessori	Pressure gauge, L-type bracket (TU-BL5) Manometro, staffa di tipo L (TU-BL5)
Weight / Peso	1460 g

ENCODING / CODIFICA

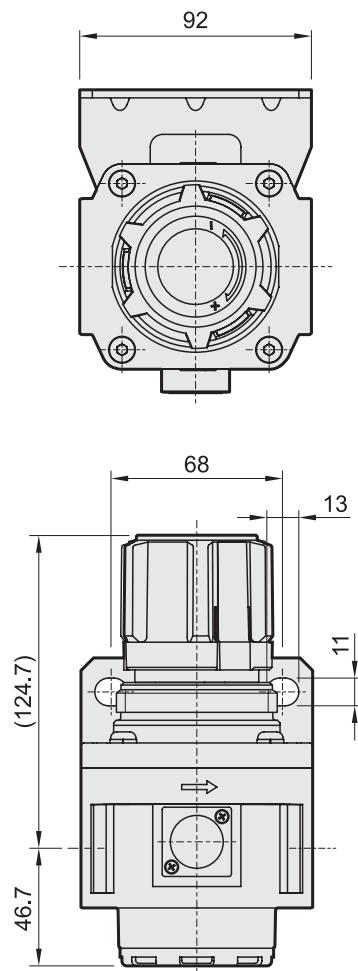
TU - R5 -  - 

Model
Modello

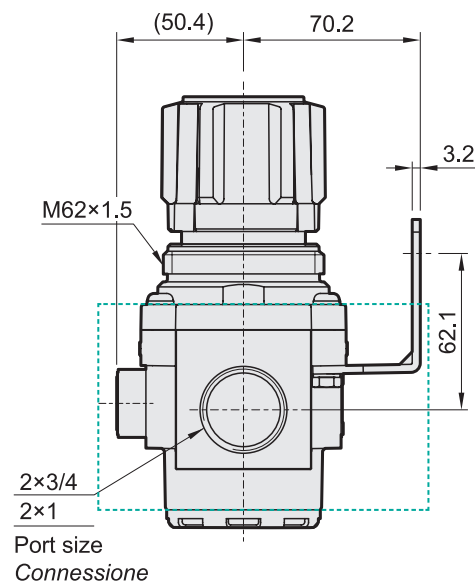
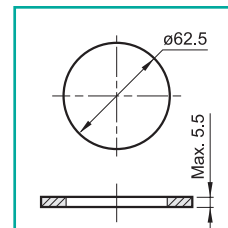
Port size:
Connessione:
34 3/4"
10 1"

Pressure Gauge: / Manometro:
G Integrated pressure gauge
Manometro integrato
A Gauge adapter set (TU-AS)
Adattatore per
manometro (TU-AS)
E Pressure switch (EP41)
Pressostato digitale (EP41)

DIMENSIONS / DIMENSIONI



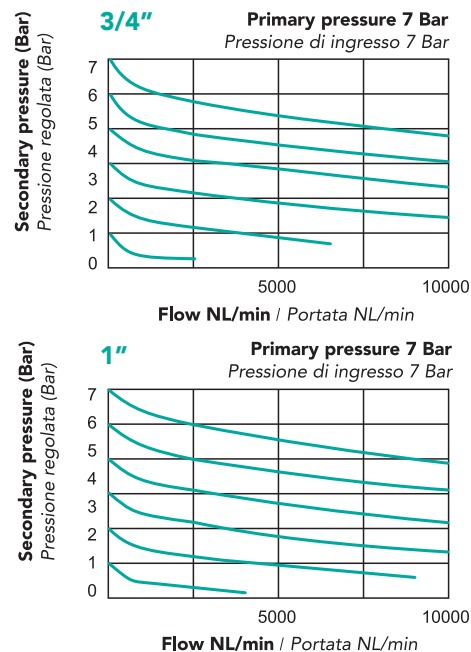
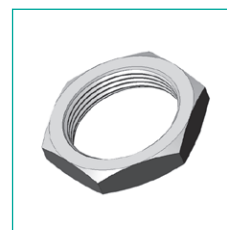
Panel mounting hole
Foro per montaggio a pannello



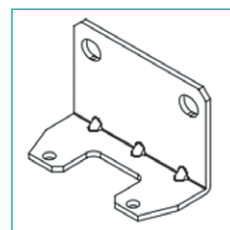
TU - FR5

FILTER AND PRESSURE REGULATOR
FILTRO E REGOLATORE DI PRESSIONE


***Panel nut to be ordered separately**
**Il dado del pannello è da ordinare a parte*

FLOW / PORTATA

Attachment / Accessori


Panel nut (TU-J5)
Dado del pannello (TU-J5)



L-type bracket (TU-BL5)
Staffa a L (TU-BL5)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

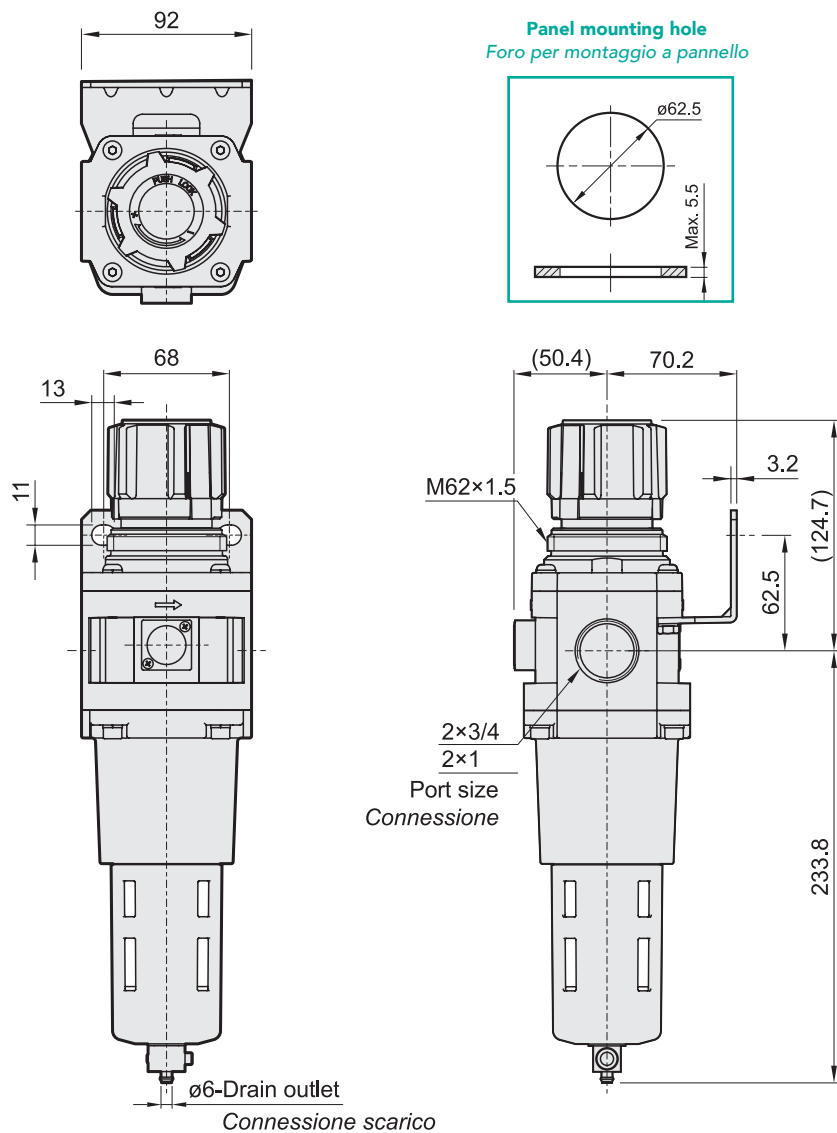
Port size / Connessione	G 3/4" G 1"
Fluid / Fluido	Air / Aria
Operating pressure range <i>Range di pressione operativa</i>	PC bowl / Tazza protetta: 0,5 ~ 10 Bar Metal bowl / Tazza in metallo: 0,5 ~ 20 Bar
Proof pressure <i>Pressione di scoppio</i>	PC bowl / Tazza protetta: 15 Bar Metal bowl / Tazza in metallo: 20 Bar
Regulated pressure range <i>Range di regolazione di pressione</i>	1 ~ 8,5 Bar
Ambient temperature <i>Temperatura ambiente</i>	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	40 µm
Drain capacity / Capacità tazza	PC bowl / Tazza protetta: 75 cm ³ Metal bowl / Tazza in metallo: 70 cm ³
Attachment / Accessori	Pressure gauge, L-type bracket (TU-BL5) Manometro, staffa di tipo L (TU-BL5)
Weight / Peso	PC bowl / Tazza protetta: 1940 g Metal bowl / Tazza in metallo: 2060 g

ENCODING / CODIFICA

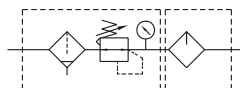
TU - FR5 - -

Model Modello				
Port size: Connessione: 34 3/4" 10 1"		Bowl /Tazza: P Protection case Tazza protetta M Metal bowl Tazza di metallo	Pressure Gauge: / Manometro: G Integrated pressure gauge Manometro integrato A Gauge adapter set (TU-AS) Adattatore per manometro (TU-AS) E Pressure switch (EP41) Pressostato digitale (EP41)	Drain valve / Valvola di scarico S Semi-auto drain Scarico semiautomatico D Auto drain Scarico automatico

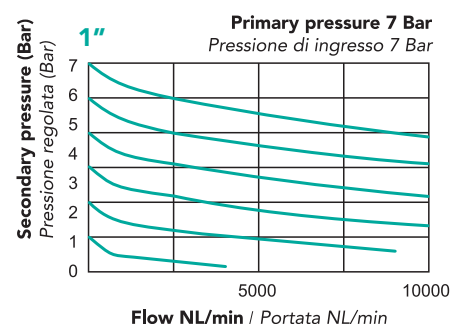
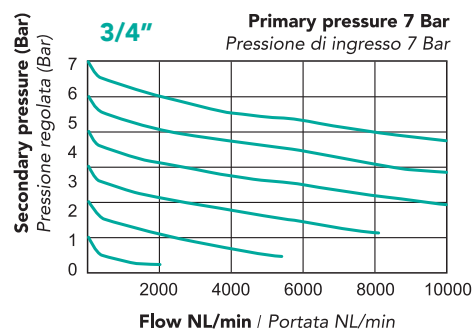
DIMENSIONS / DIMENSIONI



TU - FRL5

F.R.L UNIT
UNITÀ F.R.L.

FLOW / PORTATA



TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

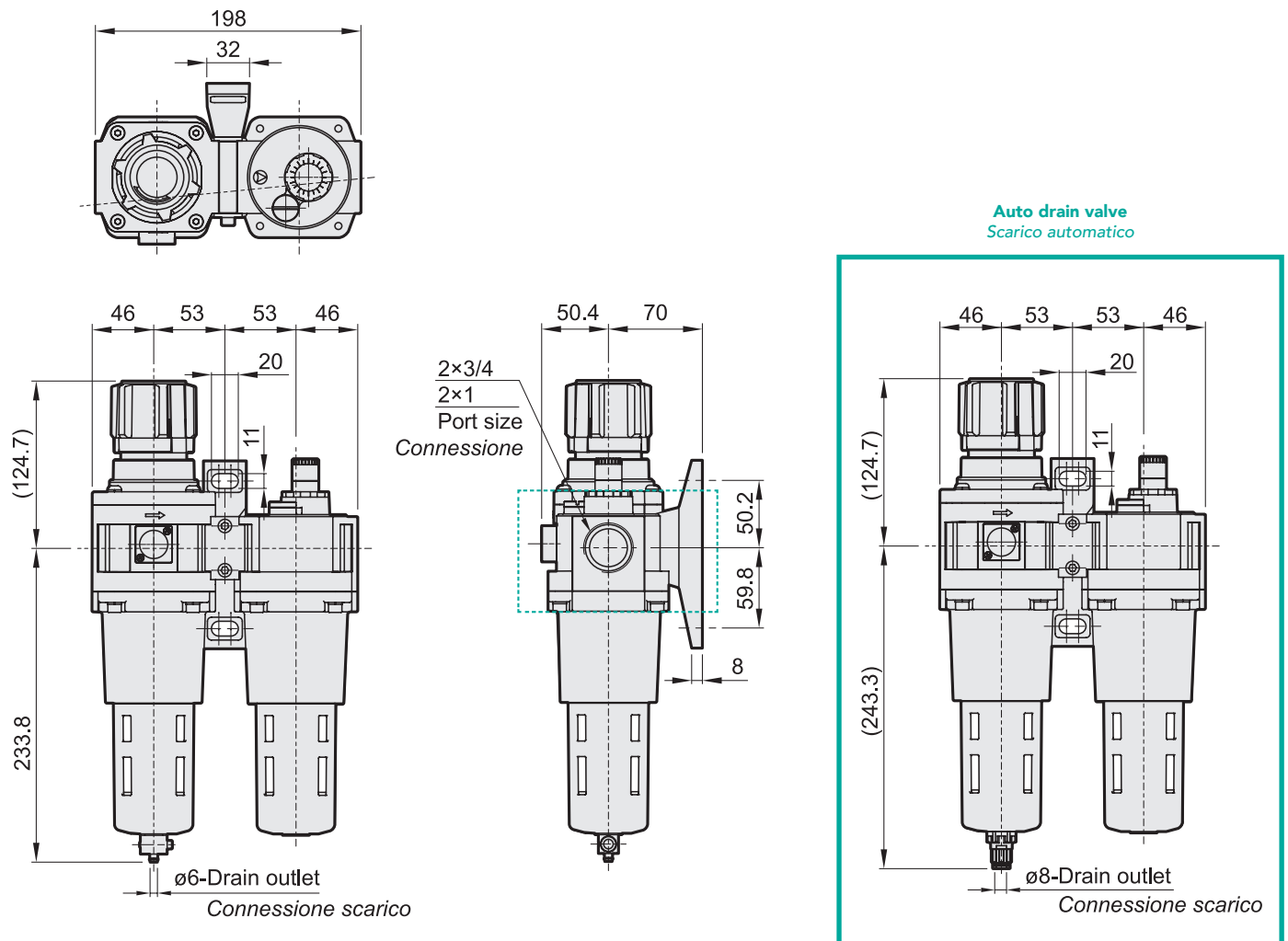
Port size / Connessione	G 3/4" G 1"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	1,5 Bar
Regulated pressure range Range di regolazione di pressione	0,5 ~ 8,5 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element / Elemento filtrante	40 µm
Lubricating oil capacity / Capacità tazza olio	200 c.c.
Min. flow for oil drip Flusso minimo gocciolamento olio	25 L/min 33 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Attachment / Accessori	Pressure gauge Manometro
Weight / Peso	PC bowl / Tazza protetta: 3480 g Metal bowl / Tazza in metallo: 3720 g

ENCODING / CODIFICA

TU - FRL5 - -

Model Modello				
Port size: Connessione: 34 3/4" 10 1"		Bowl /Tazza: P Protection case Tazza protetta M Metal bowl Tazza di metallo	Pressure Gauge: / Manometro: G Integrated pressure gauge Manometro integrato A Gauge adapter set (TU-AS) Adattatore per manometro (TU-AS) E Pressure switch (EP41) Pressostato digitale (EP41)	Drain valve / Valvola di scarico S Semi-auto drain Scarico semiautomatico D Auto drain Scarico automatico

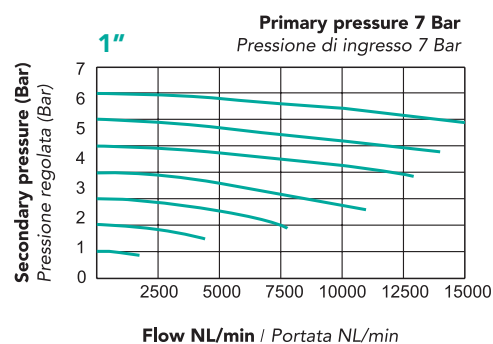
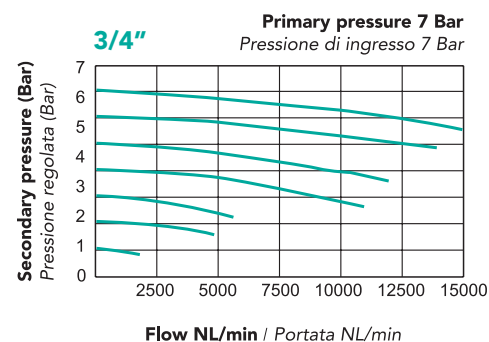
DIMENSIONS / DIMENSIONI



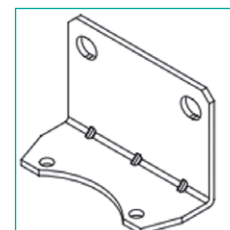
TU - F5

FILTER
FILTRO

FLOW / PORTATA



Attachment / Accessori



L-type bracket (TU-BC5)
Staffa a L (TU-BC5)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

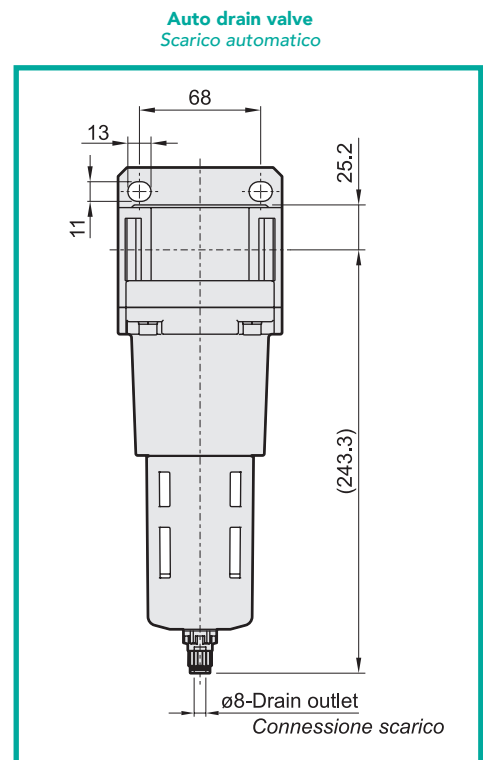
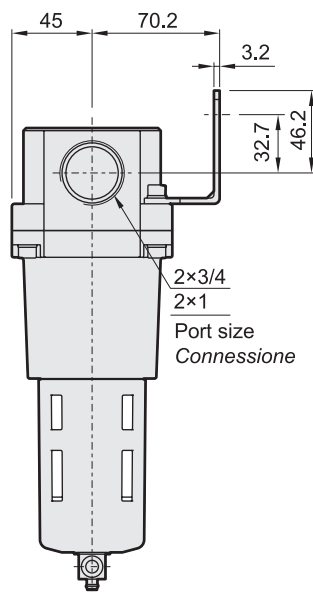
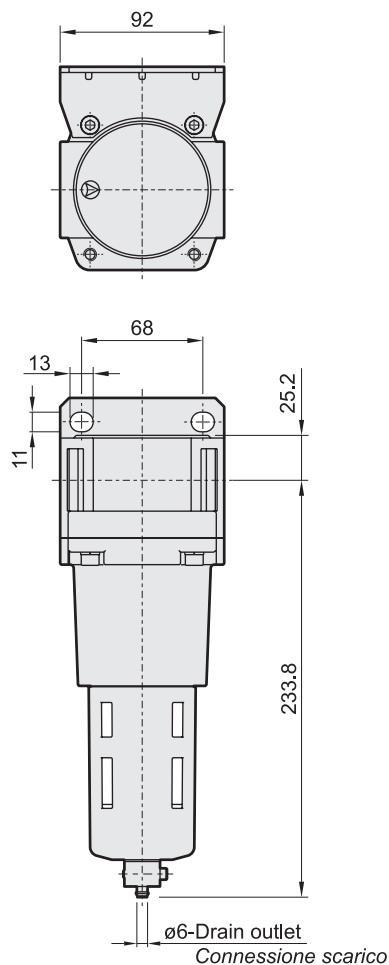
Port size / Connessione	G 3/4" G 1"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	PC bowl / Tazza protetta: 15 Bar Metal bowl / Tazza in metallo: 20 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Filter element Elemento filtrante	40 µm
Drain capacity / Capacità di scarico	PC bowl / Tazza protetta: 75 cm ³ Metal bowl / Tazza in metallo: 70 cm ³
Weight / Peso	PC bowl / Tazza protetta: 1180 g Metal bowl / Tazza in metallo: 1300 g
Attachment / Accessori	C-type bracket (TU-BC5) Staffa a C (TU-BC5)

ENCODING / CODIFICA

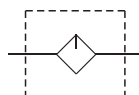
TU - F5 - -

Model <i>Modello</i>	Port size: <i>Connessione:</i> 34 3/4" 10 1"	Bowl /Tazza: P Protection case <i>Tazza protetta</i> M Metal bowl <i>Tazza di metallo</i>	Drain valve / Valvola di scarico S Semi-auto drain <i>Scarico semiautomatico</i> D Auto drain <i>Scarico automatico</i>
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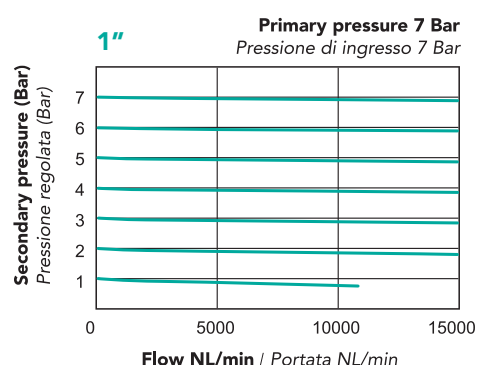
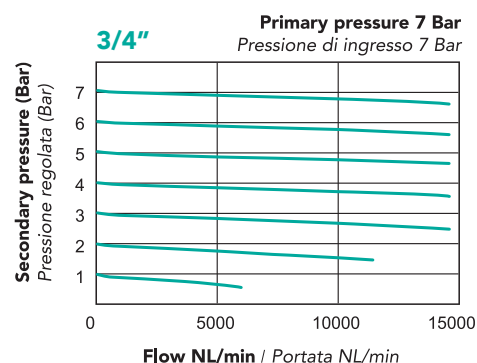
DIMENSIONS / DIMENSIONI



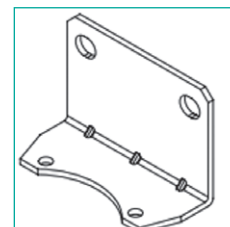
TU - L5

LUBRICATOR
LUBRIFICATORE

FLOW / PORTATA



Attachment / Accessori

L-type bracket (TU-BC5)
Staffa a L (TU-BC5)

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

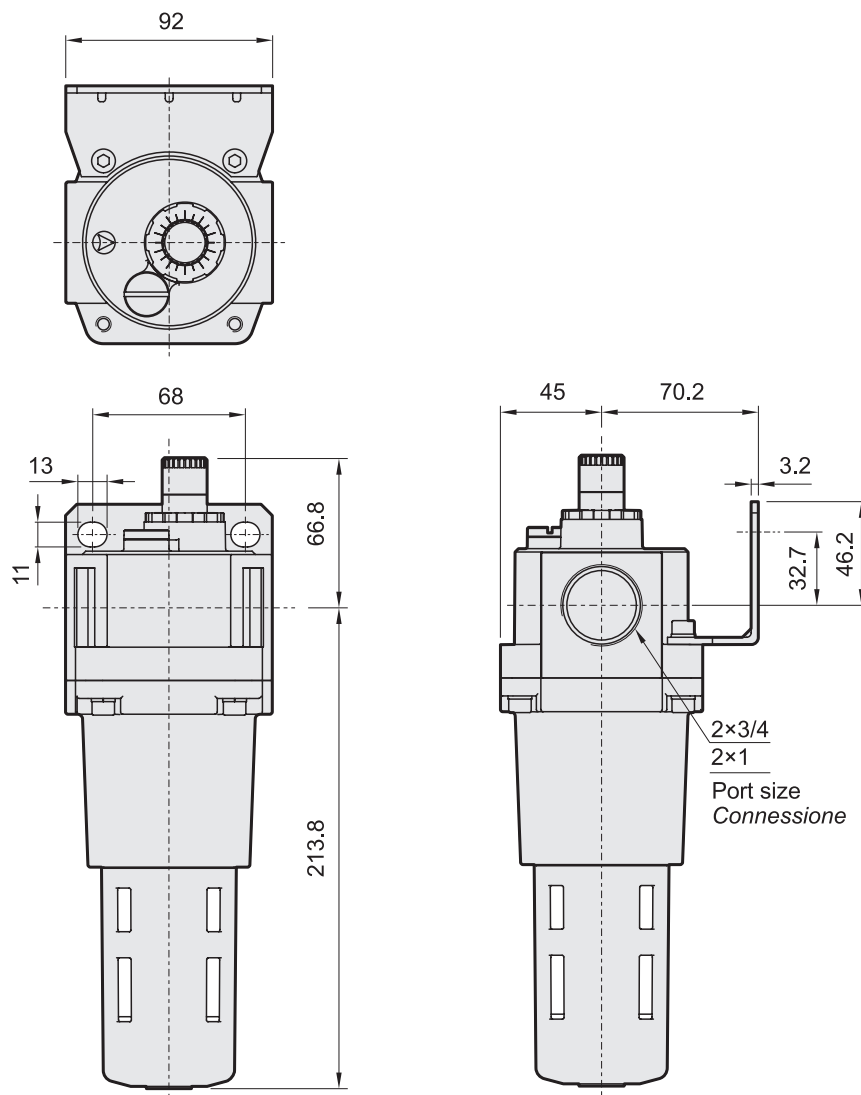
Port size / Taglia	G 3/4" G 1"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 10 Bar
Proof pressure Pressione di scoppio	PC bowl / Tazza protetta: 15 Bar Metal bowl / Tazza in metallo: 20 Bar
Ambient temperature Temperatura ambiente	- 5 ~ +60°C (no freezing - no congelamento)
Lubricating oil capacity Capacità tazza olio	200 cc
Min. flow for oil drip Flusso minimo gocciolamento olio	25 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Weight / Peso	PC bowl / Tazza protetta: 1260 g Metal bowl / Tazza in metallo: 1380 g
Attachment / Accessori	C-type bracket (TU-BC5) Staffa a C (TU-BC5)

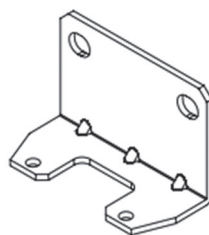
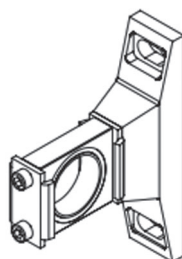
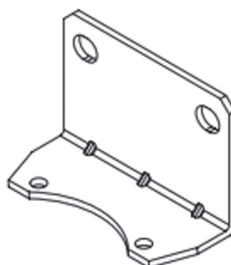
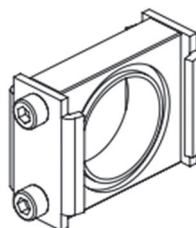
ENCODING / CODIFICA

TU - L5 - □ - □

Model Modello	Port size: Connessione: 34 3/4" 10 1"	Bowl /Tazza: P Protection case Tazza protetta M Metal bowl Tazza di metallo
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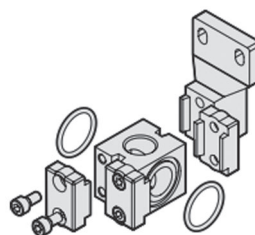
DIMENSIONS / DIMENSIONI



TU - BL5**L Bracket**
Staffa a L**TU - BT5****T Bracket and joiner**
Staffa a T e giunzione**TU - BC5****Bracket for F and L units**
Staffa per unità F e L**TU - BS5****Joiner unit**
Giunzione

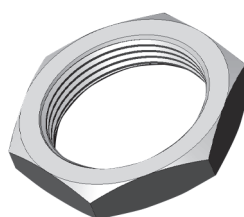
TU - T5 - 12

Module mounting bracket
Blocchetto di derivazione



TU - J5

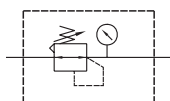
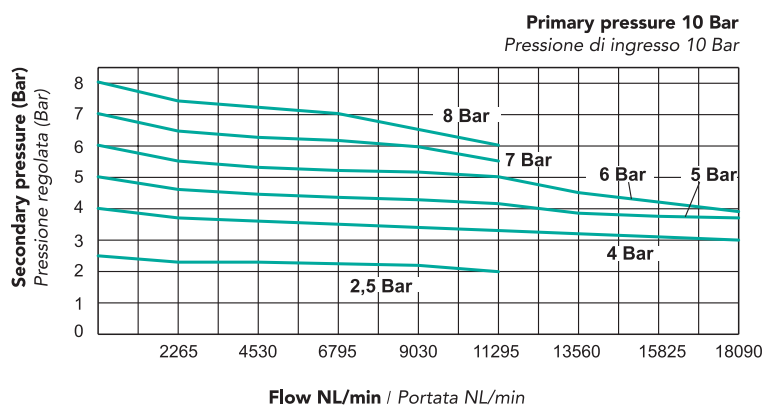
Panel mounting nut
Dado per montaggio a pannello



TU - R6

PRESSURE REGULATOR
REGOLATORE DI PRESSIONE

FLOW / PORTATA



*Pressure gauge to be ordered separately
*Il manometro è da ordinare a parte

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1 1/2"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	21 Bar
Regulated pressure range Range di regolazione di pressione	0,9 ~ 8,6 Bar
Ambient temperature Temperatura ambiente	0 ~ +80°C (no freezing - no congelamento)
Attachment / Accessori	Pressure gauge Manometro
Weight / Peso	1208 g

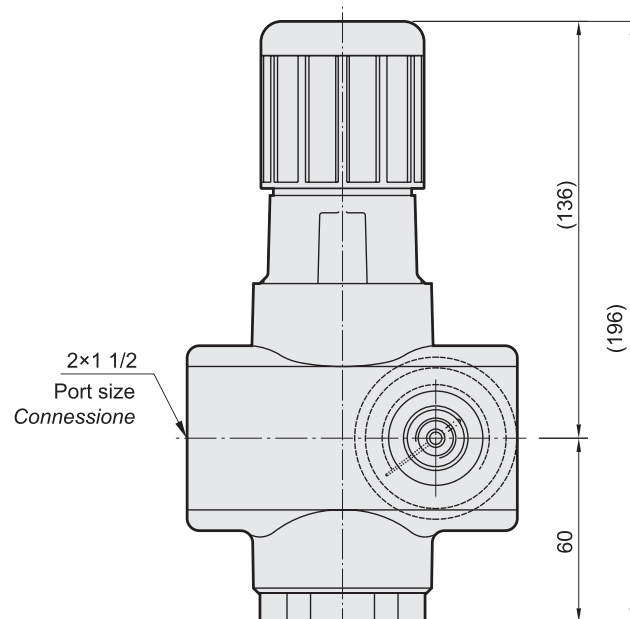
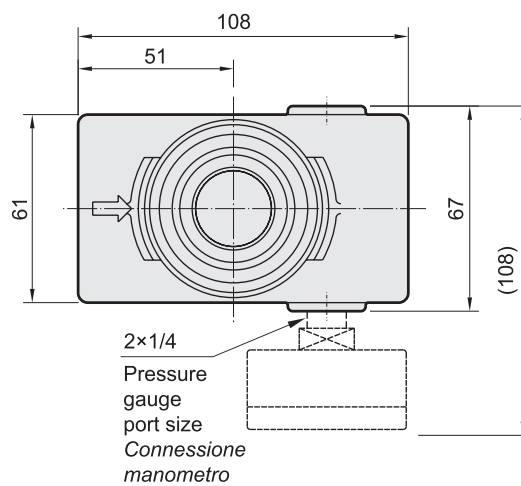
ENCODING / CODIFICA

TU - R6 - 

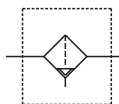
Model
Modello

Port size:
Connessione:
15 1 1/2"

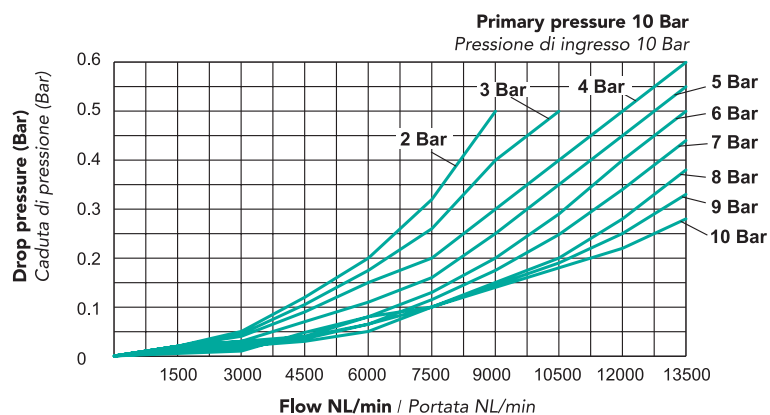
DIMENSIONS / DIMENSIONI



TU - F6

AIR FILTER
FILTRO D'ARIA

FLOW / PORTATA



TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 1 1/2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 17,5 Bar
Ambient temperature Temperatura ambiente	0 ~ +80°C (no freezing - no congelamento)
Filter element Elemento filtrante	Standard 50 µm, sintered bronze / bronzo sinterizzato
Standard nominal flow rate Flusso nominale standard	20000 L/min
Drain-type Tipo di scarico	Auto drain Scarico automatico
Weight / Peso	2035 g

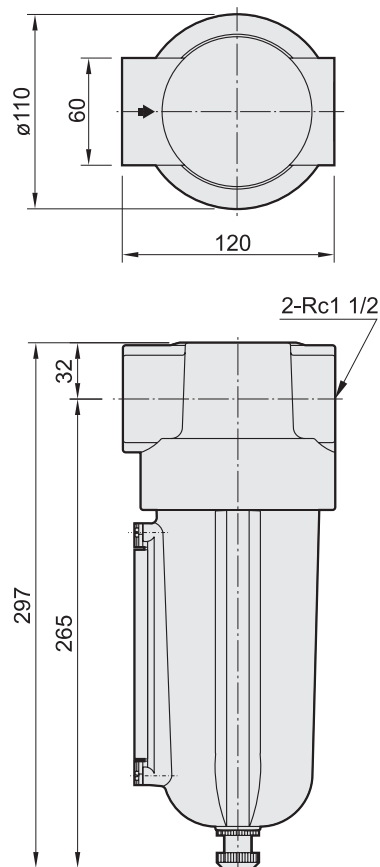
ENCODING / CODIFICA

TU - F6 -

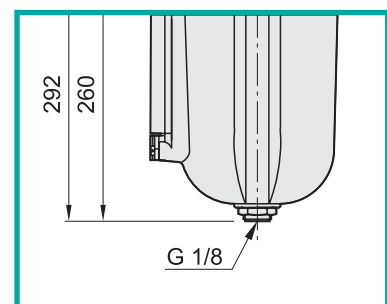
Model
Modello

Port size:
Connessione:
15 1/2"

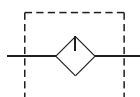
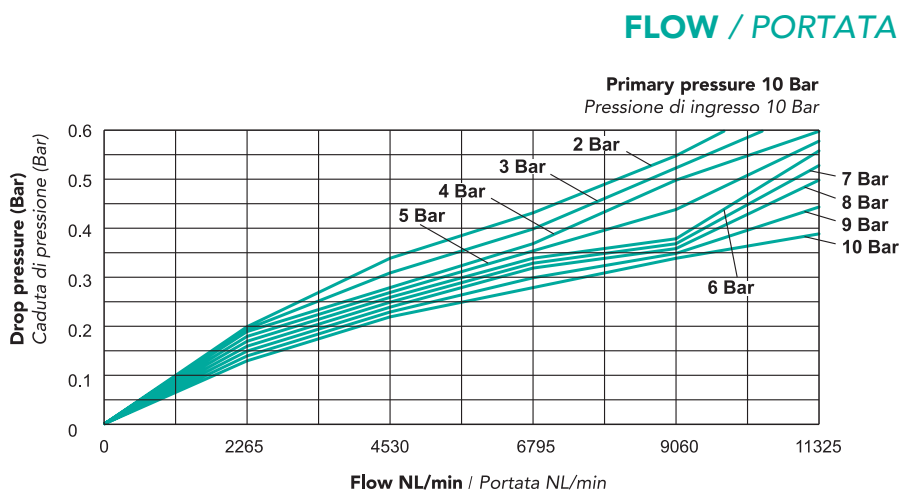
DIMENSIONS / DIMENSIONI



Auto drain valve
Scarico automatico



TU - L6

LUBRICATOR
LUBRIFICATORE

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Taglia	G 1 1/2"
Fluid / Fluido	Air / Aria
Max. Operating pressure range Range massimo di pressione	17,5 Bar
Ambient temperature Temperatura ambiente	0 ~ +80°C (no freezing - no congelamento)
Lubricating oil capacity Capacità tazza olio	1000 cc
Min. flow for oil drip Flusso minimo gocciolamento olio	200 L/min
Standard nominal flow rate Flusso nominale standard	12000 L/min
Recommended lubricating oil Olio di lubrificazione consigliato	ISO-VG32
Weight / Peso	1766 g

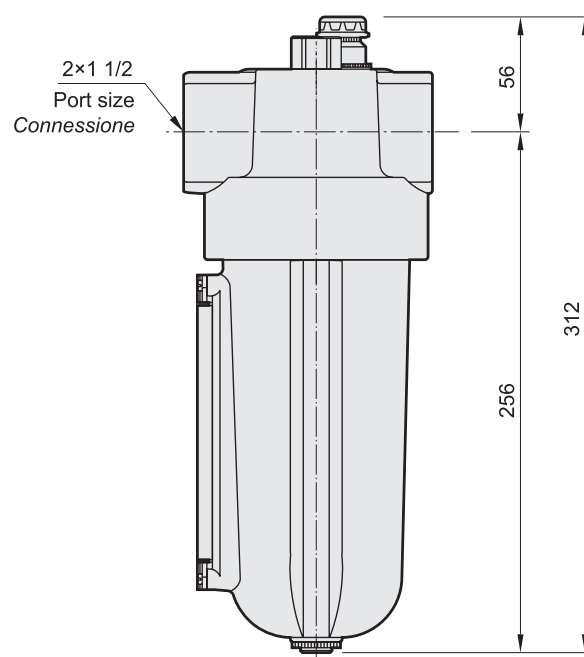
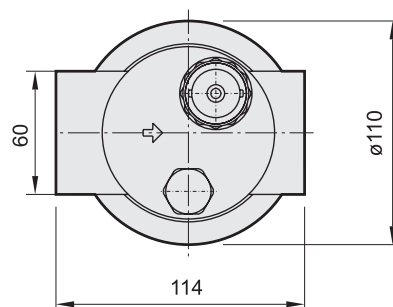
ENCODING / CODIFICA

TU - L6 - 

Model
Modello

Port size:
Connessione:
15 1/2"

DIMENSIONS / DIMENSIONI

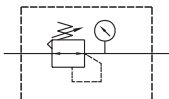
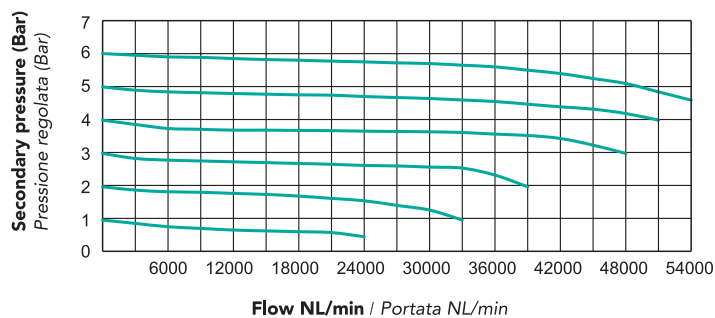


TU - R7

EXTERNAL PILOT PRESSURE REGULATOR
REGOLATORE DI PRESSIONE PILOTATO

FLOW / PORTATA

Primary pressure 10 Bar
Pressione di ingresso 10 Bar



*Pressure gauge to be ordered separately
*Il manometro è da ordinare a parte

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 2"
Fluid / Fluido	Air / Aria
Max. operating pressure Range massimo di pressione	31 Bar
Regulated pressure range Range di regolazione di pressione	Up to / fino a: 17,5 Bar
Ambient temperature Temperatura ambiente	0 ~ +80°C (no freezing - no congelamento)
Standard nominal flow rate Flusso nominale standard	59000 L/min
Attachment / Accessori	Pressure gauge Manometro
Weight / Peso	3055 g

ENCODING / CODIFICA

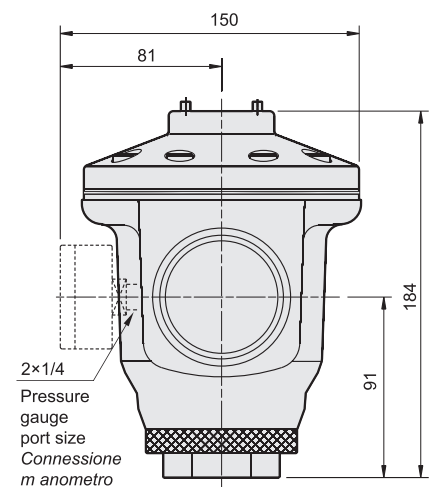
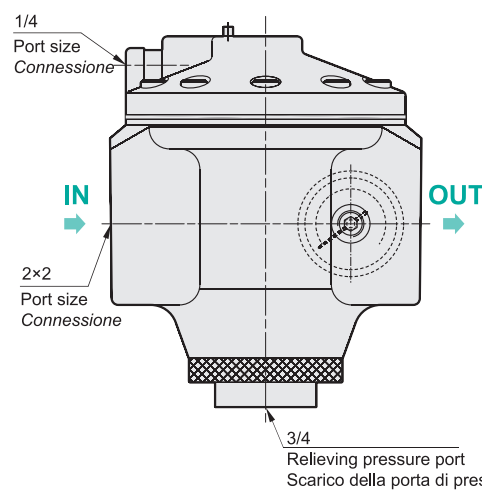
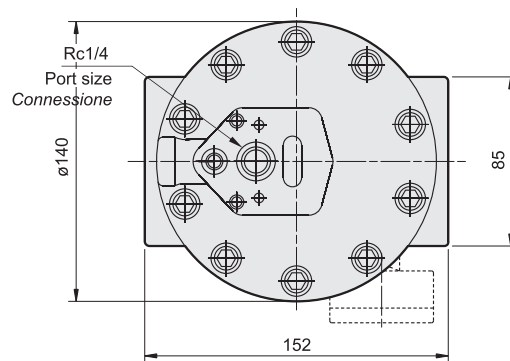
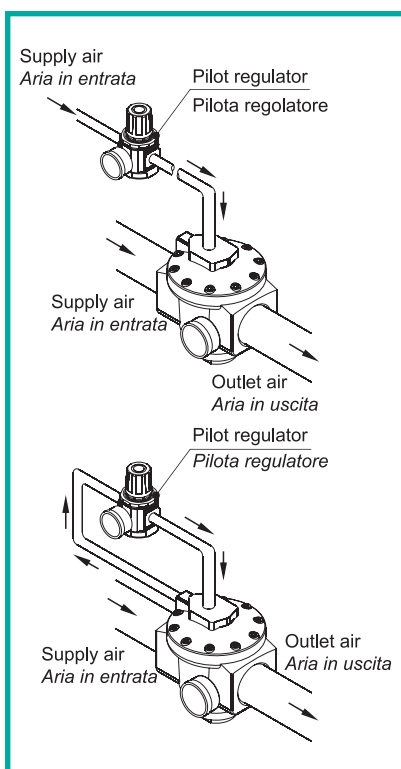
TU - R7 - 

Model
Modello

Port size:
Connessione:
20 2"

DIMENSIONS / DIMENSIONI

Pilot operation
Operazione pilota

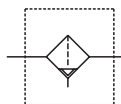
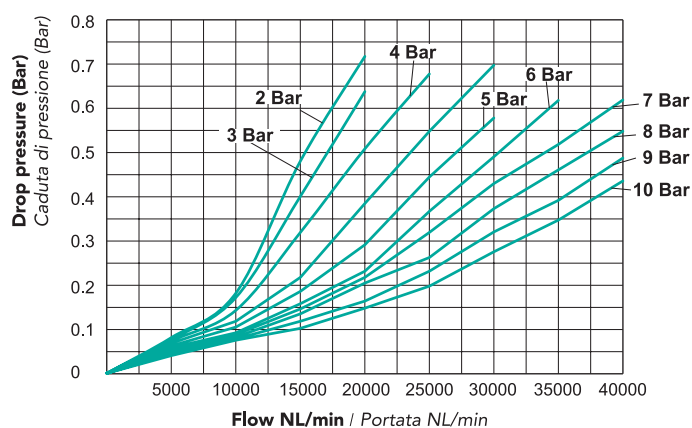


TU - F7

AIR FILTER
FILTRO D'ARIA

FLOW / PORTATA

Primary pressure 10 Bar
Pressione di ingresso 10 Bar



TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Port size / Connessione	G 2"
Fluid / Fluido	Air / Aria
Operating pressure range Range di pressione operativa	0,5 ~ 17,5 Bar
Ambient temperature Temperatura ambiente	0 ~ +80°C (no freezing - no congelamento)
Filter element Elemento filtrante	Standard 50 µm
Standard nominal flow rate Flusso nominale standard	63000 L/min
Drain-type Tipo di scarico	Auto drain Scarico automatico
Weight / Peso	6930 g

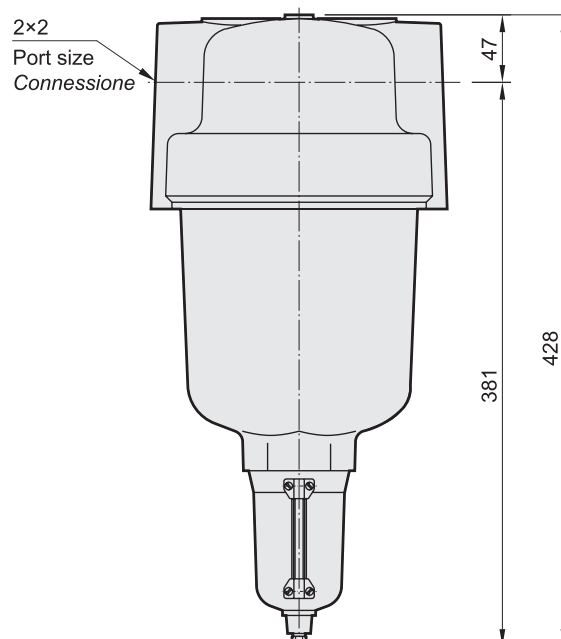
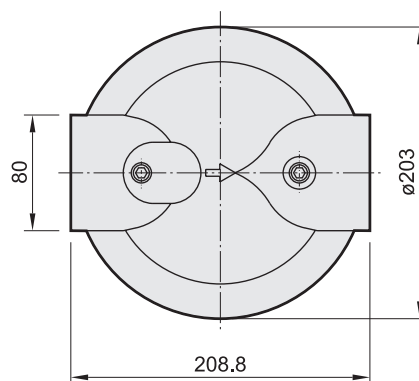
ENCODING / CODIFICA

TU - F7 - 

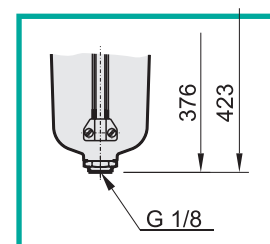
Model
Modello

Port size:
Connessione:
20 2"

DIMENSIONS / DIMENSIONI



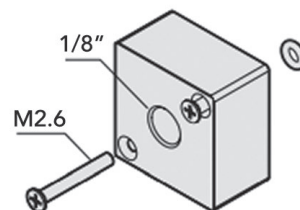
Auto drain valve
Scarico automatico



TU - AS

1/8" gauge adapter set for TU-3, TU-4, TU-5 R and FR units

Adattatore per manometro 1/8" per le unità R e FR TU-3, TU-4, TU-5.



GAUGE / MANOMETRO G1/8

Code / Codice	Connections / Conessioni	Series / Serie
K MM40 06 Ø40 0÷6 Bar	G 1/8"	TU-2, TU-3, TU-4, TU-4H, TU-5
K MM40 12 Ø40 0÷12 Bar	G 1/8"	TU-2, TU-3, TU-4, TU-4H, TU-5
K MM50 06 Ø50 0÷6 Bar	G 1/8"	TU-2, TU-3, TU-4, TU-4H, TU-5
K MM50 12 Ø50 0÷12 Bar	G 1/8"	TU-2, TU-3, TU-4, TU-4H, TU-5
K MM63 12 Ø63 0÷12 Bar	G 1/4"	TU-6, TU-7



PLUG / GRANO

Code / Codice	Connections / Conessioni	Series / Serie
K GC18	G 1/8"	TU-2, TU-3, TU-4, TU-4H, TU-5
K GC14	G 1/4"	TU-6, TU-7



EP41

Pressure switch for TU-3, TU-4, TU-5 R and FR units

Pressostato digitale per le unità R e FR TU-3, TU-4, TU-5



EP43

Pressure switch

Pressostato digitale



VSC - P4 - 020

4 poles cable (2000 mm) for pressure switch extension

Cavo a 4 fili (2000 mm) per prolunga pressostato digitale



EP41

HIGH PRECISION DIGITAL PRESSURE SWITCH

PRESSOSTATO DIGITALE AD ALTA PRECISIONE



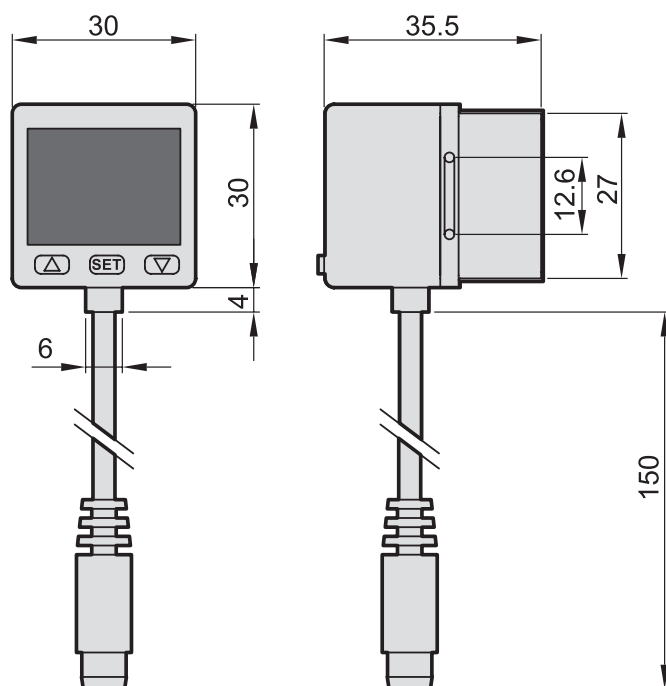
FEATURES / CARATTERISTICHE

- **2 PNP Output**
Uscita 2 PNP
- **-1 ~ 10 Bar range**
Range di pressione -1 ~ 10 Bar
- **Hysteresis adjustable**
Regolazione d'isteresi
- **High accuracy and resolution**
Alta precisione e risoluzione
- **Pressure unit seletcatabre:**
kPa, MPa, kgf/cm², bar, psi, inHg, mmHg
Unità di pressione selezionabili:
kPa, MPa, kgf/cm², bar, psi, inHg, mmHg
- **2 meter cable available (VSC - P4 - 020)**
Cavo di 2 metri disponibile (VSC - P4 - 020)
- **Compatible with TU - 3, TU - 4, TU - 5 series**
Compatibile con le serie TU - 3, TU - 4, TU - 5

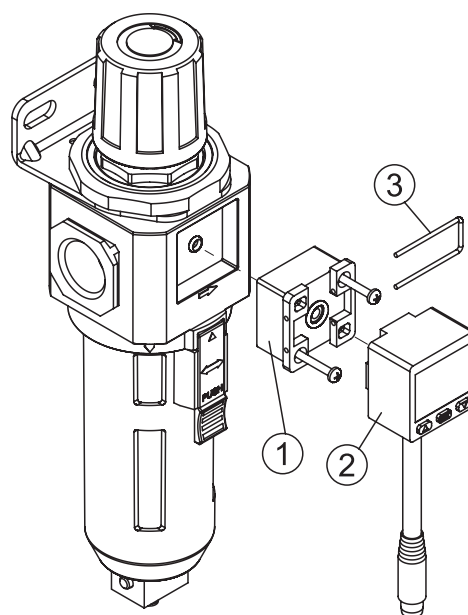
TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Rated pressure range		0.0 ~ 10 Bar
Setting pressure range		-1 ~ 10 Bar
Withstand pressure		15 Bar
Fluid		Air, Non-corrosive gases, incombustible gases
Set pressure resolution	KPa / MPa	- / 0.001
	kgf/cm ² / Bar	0.01
	psi	0.1
	inHg / mmHg	-
Power supply voltage		12 to 24V DC $\pm 10\%$, Ripple (P-P) 10% or less
Current consumption		$\leq 40\text{mA}$ (With no load)
Switch output	Output type	2 PNP open collector
	Max. load current	125mA
	Max. supply voltage	24V DC (at PNP output)
	Residual voltage	$\leq 1.5\text{V}$
Response time		Chattering-proof function: 50ms, 250ms, 500ms, 1000ms, 3000ms selections
Output short circuit protection		Yes
Display	LCD display	Two color (Red/Green) main & unit display, Orange sub-display (Sampling rate: 5 times/1sec.
	Switch On indicator	Orange (1 & 2 indicator) OUT1 OUT2
	Updates time	Adjustable
	Indicator accuracy	$\leq \pm 2\%$ F.S. ± 1 digit (ambient temperature: $25 \pm 3^\circ\text{C}$)
Repeatability (switch output)		$\leq \pm 0.2\%$ F.S. ± 1 digit
Environment	Enclosure	IP40
	Ambient temp. range	Operation: $0 \sim 50^\circ\text{C}$, storage: $-10 \sim 60^\circ\text{C}$ (No condensation or freezing)
	Ambient humidity range	$35 \sim 85\%$ RH (No condensation)
	Withstand voltage	1000V AC in 1-min. (between case and lead wire)
	Insulation resistance	50M Ω min. (at 500V DC, between case and lead wire)
	Vibration	Total amplitude 1.5mm or 10G, 10Hz-150Hz-10Hz scan for 1 minute, wo hours each direction of X, Y and Z
Shock		100m/s ² (10G), 3 times each in direction of X, Y, and Z
Temperature characteristic		$\leq \pm 2\%$ F.S. of detected pressure (25°C) at temp. Range of $0 \sim 50^\circ\text{C}$
Lead wire		Oil resistance cable (0.15mm ²)
Weight		Approx. 65g (with 2 meter lead wire), Approx. 30g (with male connector)

DIMENSIONS / DIMENSIONI

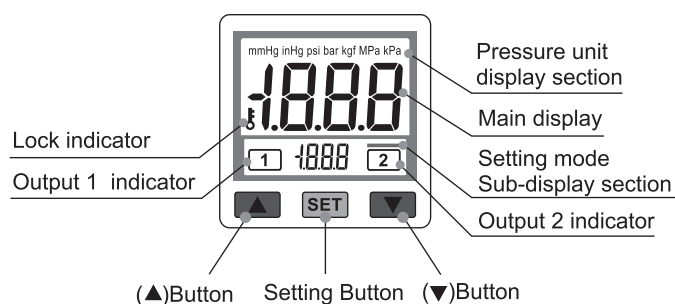


MOUNTING PROCEDURES PROCEDURE DI MONTAGGIO

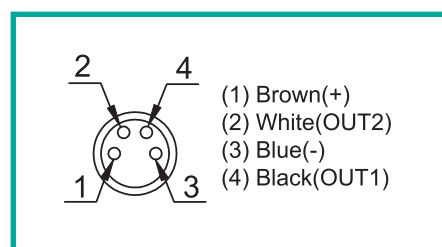


- 1. Fix the holder**
Fissare il supporto
- 2. Assembly the digital pressure switch**
Assemblare il pressostato digitale
- 3. Button the n-ring**
Introdurre la guarnizione a "n"

PANEL INSTRUCTIONS ISTRUZIONI DEL PANNELLO



QD PINOUT SCHEMA



EP43

HIGH PRECISION DIGITAL PRESSURE SWITCH

PRESSOSTATO DIGITALE AD ALTA PRECISIONE

FEATURES / CARATTERISTICHE

- **3 color digital LCD display**
Disply digitale LCD a 3 colori
- **Copy function**
Funzione di copiaggio
- **Programmable pressure unit:**
kPa, MPa, kgf/cm², bar, psi, inHg, mmHg
Unità di pressione programmabile:
kPa, MPa, kgf/cm², bar, psi, inHg, mmHg
- **Dual LCD display allow setting value to be displayed**
Doppio display LCD consente di visualizzare i valori settati
- **Key lock indicator**
Indicatore di blocco / Sblocco
- **Power saving mode**
Modalità risparmio energetico

Quick intallation

Intsallazione veloce

- **Save installation time**
Installazione veloce
- **Easy removal**
Facile rimozione

Copy setting

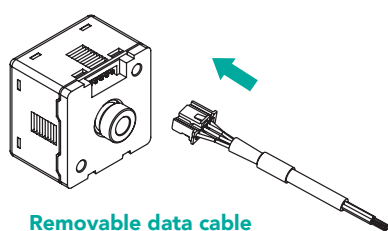
Impostazione di copia

- **Reduce setting time**
Riduce il tempo di settaggio
- **Avoid setting errors**
Evita errori di settaggio

Easy unit identification

Identificazione facile dell'unità

- **Conversion unit is on display and easy to read**
Unità di conversione facile da leggere nel display



Removable data cable
Cavo dati rimovibile

Master (Original parameter)

Master (Parametro originale)



Slave (Copied)

Slave (copiato)



Copy

Can copy the setting value from master to slave sensor
È possibile copiare il valore di settaggio del master al sensore slave

mmHg inHg psi bar kgf/cm² MPa kPa



Setting value easy indication

Indicatore di settaggio facile

- **User can easily observe the setting value from sub-display**
L'utente può facilmente osservare il settaggio dal sotto-display

2-Color main display

Display a 2 colori

- **User programmable color mode, for different setting conditions**
Colore settabile in base alle diverse condizioni di settaggio

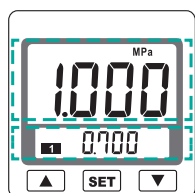
Quick setting

Settaggio veloce

- **Sub-display allows changing the parameter directly, reduce setting step by 3/4**
Il sotto-display consente di cambiare il parametro direttamente riducendo il settaggio sopra/sotto di 3/4

Main / Sub-display

Display principale / sotto-display

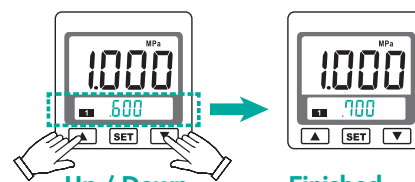


Main display
Display principale

Sub display
Sotto-display



	SoG	SoR	Grn	Red
ON	Green	Red	Green	Red
OFF	Red	Green	Green	Red



Up / Down
quick setting
Sopra / sotto
settaggio
veloce

Finished
setting
Settaggio
finito

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Rated pressure range		-100.0 ~ 100.0 kPa	-100.0 ~ SET27 0.0 kPa	0 ~1.0 MPa
Setting pressure range		-101.0 ~ 101.0 kPa	-101.3 ~ 10.0 kPa	-0.1 ~1.0 MPa
Withstand pressure		300 kPa		300 kPa
Fluid		Filtered Air, Non-corrosive / Non-flammable gas		
Set pressure resolution	KPa / MPa			- / 0.001
	kgf/cm ² / Bar	0.1/-		0.01
	psi	0.001		0.1
	mmHg	0.01		-
	inHg	1		-
Power supply voltage		12 to 24V DC ±10%, Ripple (P-P) 10% or less		
Current consumption		≤ 40mA (With no load)		
Switch output		NPN: open collector 2 outputs	PNP: open collector 2 outputs	
		Max. load current: 125mA	Max. load current: 125mA	
		Max. supply voltage: 30V DC	Max. supply voltage: 24V DC	
		Residual voltage: ≤1.5V	Residual voltage: ≤1.5V	
Repeatability (switch output)		± 0.2% F.S. ±1digit		
Hysteresis	Hysteresis mode/ Window comparator mode	Adjustable (*1)		
Response time		≤2.5ms (chattering-proof function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selectable)		
Output short circuit protection		Yes		
7 segment LCD display		2 color (Red/Green) main & unit display, Orange sub-display (Sampling rate: 5 times/1sec.)		
Indicator accuracy		±2% F.S. ±1 digit (Ambient temperature 25 ±3°C		
Switch ON indicator		Orange (1 & 2 indicator) OUT1 / OUT2		
Analog output (Voltage Output) (*2)		Output Voltage: 1 to 5V ±2.5% F.S. (within rated pressure range); Linearity: ±1% F.S. Output impedance: about 1KΩ		
Analog output (Voltage Output) (*3)		Output Current: 4 to 20mA ±2.5% F.S. (within rated pressure range); Linearity: ±1% F.S. Max. load inpedance: 300Ω at power supply of 12V, 600Ω at power supply of 24V Min. load impedance: 50Ω		
Environment	Enclosure	IP40		
	Ambient temp. range	Operation: 0 ~ 50°C, storage: -10 ~ 60°C (No condensation or freezing)		
	Ambient humidity range	Operation/Storage 35 ~ 85% RH (No condensation)		
	Withstand voltage	1000V AC in 1-min. (between case and lead wire)		
	Insulation resistance	50M Ω min. (at 500V DC, between case and lead wire)		
	Vibration	Total amplitude 1.5mm or 10G, 10Hz-55Hz-10Hz scan for 1 minute, 2 hours each direction of X, Y and Z		
	Shock	100m/s ² (10G), 3 times each in direction of X, Y, and Z		
Temperature characteristic		≤±2.5% F.S. of detected pressure (25°C) at temp. Range of 0 ~ 50°C		
Port size		F1: R1/8, M5x0.8; F2: NPT1/8, #		
Lead wire		Oil resistance cable (0.15mm ²)		
Weight		Approx. 80g (with 2 meter lead wire)		

ORDER EXAMPLE / CODIFICA DI ESEMPIO

EP43 C - 010 - F1

Model
Modello

Pressure port:

Connessioni:

F1 R1/8, M5x0.8

F2 NPT1/8, 10-32UNF

F3 G1/8, M5x0.8

Pressure range:

Range di pressione:

C Compound / Composto
(-101.0 ~ 101.0 kPa)

V Vacuum / Vuoto
(-101.3 ~ 10.0 kPa)

P Positive / Positivo
(-0.1 ~ 1.0 MPa)

Output method:

Range di pressione:

010: 2 NPN output / uscita + 1 Analog output / uscita analogica (1~5V)

011: 2 NPN output / uscita + 1 Analog output / uscita analogica (4~20mA)

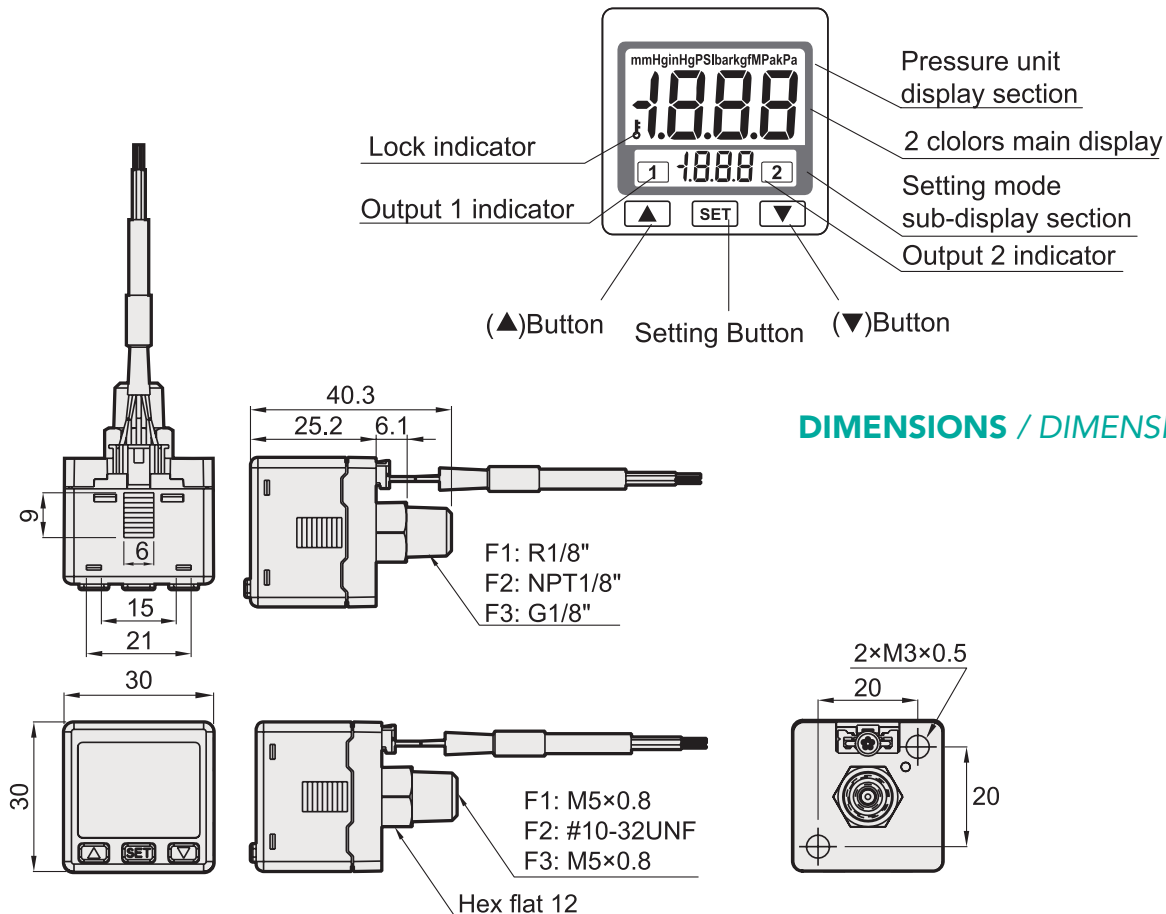
02: 2 NPN output / uscita + 1 Analog output / Copy function / funzione copia

030: 2 PNP output / uscita + 1 Analog output / uscita analogica (1~5V)

031: 2 PNP output / uscita + 1 Analog output / uscita analogica (4~20mA)

04: 2 PNP output / uscita + 1 Analog output / Copy function / funzione copia

PANEL INSTRUCTIONS / ISTRUZIONI DEL PANNELLO



DIMENSIONS / DIMENSIONI



DESCRIPTION / DESCRIZIONE

Light and compact precision pressure regulator with aluminium painted body. Complete with 2-position bracket, gauge on request. The 0,05÷8 Bar regulation range allows great precision, due to the **multi-diaphragm construction concept**, the air escape and the high exhaust capacity for over pressure. These factors guarantee a rapid pressure regulation, while limiting fluctuation. Vesta HPR Series is perfect for **contact pressure control**, for regulating balancing and precise tension, and to control sealing and pressure-loss systems.

The high precision pressure regulators are **available in three sizes**, for different air flows and ports (1/8", 1/4", 1/2").

Regolatori di precisione leggeri e compatti con corpo in alluminio verniciato completi di staffa di fissaggio a due posizioni, e manometro a richiesta. Il range di regolazione 0,05÷8 Bar offre grande precisione, grazie al **concetto costruttivo multi-membrana**, alla fuga d'aria e alla elevata capacità di scarico delle sovrappressioni. Tutto questo rende possibile una rapida regolazione della pressione limitandone la fluttuazione. I regolatori Vesta HPR sono particolarmente idonei per il **controllo della pressione di contatto**, per la regolazione di sistemi di bilanciamento e tensionamento, per controllo di sistemi di tenuta o in perdita. **Disponibile in tre taglie**, a cui corrispondono diverse dimensioni, diverse portate e diverse connessioni (1/8", 1/4", 1/2").

ENCODING / CODIFICA

HPR -

Model:

Modello:

18 G1/8" port

14 G1/4" port

12 G1/2" port

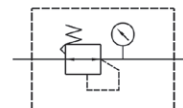
Pressure range:

Range di pressione:

A (0,05÷2 Bar)

B (0,05÷4 Bar)

C (0,05÷8 Bar)



Brackets / Staffe

L bracket for HPR-18

HPR-B18

Staffa a L per HPR-18

L bracket for HPR-14

HPR-B14

Staffa a L per HPR-14

L bracket for HPR-12

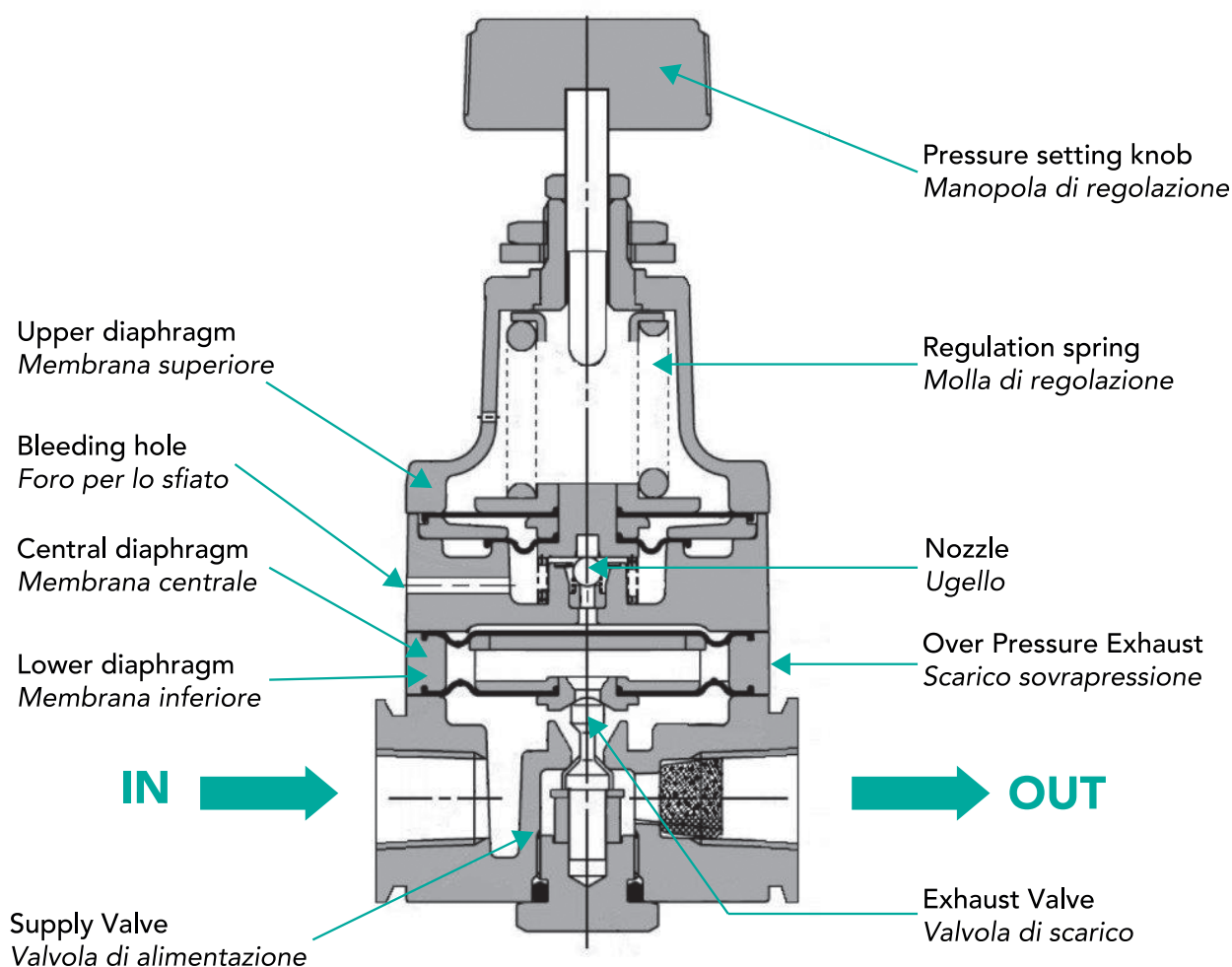
HPR-B12

Staffa a L per HPR-12

FUNCTIONING / FUNZIONAMENTO

By manually turning the pressure setting knob the spring is compressed and acts on the nozzle, and the communication between the central and lower diaphragm open the supply valve allowing flow from IN to OUT (SUP, OUT indicated on the valve body). The output pressure acting on the central and upper diaphragm keeps the precision pressure control, by closing the supply valve. Over pressure (or back pressure) is managed by the diaphragms, with the control function of closing the supply valve and opening the high-flow exhaust valve, guaranteeing a low hysteresis time. The constant bleeding allows high precision control for output pressure.

La regolazione avviene girando la manopola, comprimendo la molla che agisce sull'ugello; la comunicazione tra la membrana centrale e la membrana inferiore permettono l'apertura della valvola di alimentazione, aprendo il flusso in pressione da IN a OUT (indicati con su SUP e OUT nel corpo del regolatore). La pressione in uscita agisce sulle membrane centrale e superiore per il controllo della regolazione, chiudendo la valvola di alimentazione. La sovrappressione (o contropressione) è gestita dal sistema di membrane, chiudendo la valvola di alimentazione ed aprendo la valvola di scarico ad alta portata, garantendo un basso tempo di isteresi. Lo sfiato costante garantisce alta precisione nel controllo della pressione in uscita.



TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Pressure range
Range di pressione

A - 0.05 / 2 Bar

B - 0.05 / 4 Bar

C - 0.05 / 8 Bar

Maximum inlet pressure
Pressione massima di ingresso

10 Bar

Minimum inlet pressure
Pressione minima di ingresso

Set Pressure / Pressione regolata
+1 Bar

Air consumption (NL/min) 10 Bar
Consumo d'aria (NL/min) 10 Bar

HPR18 - Max 3.5

Sensitivity / Sensibilità

0,2% F.S.

Accuracy / Ripetibilità

+/- 0.5% F.S.

Gauge port size
Connessione manometro

G1/8"

Weight / Peso

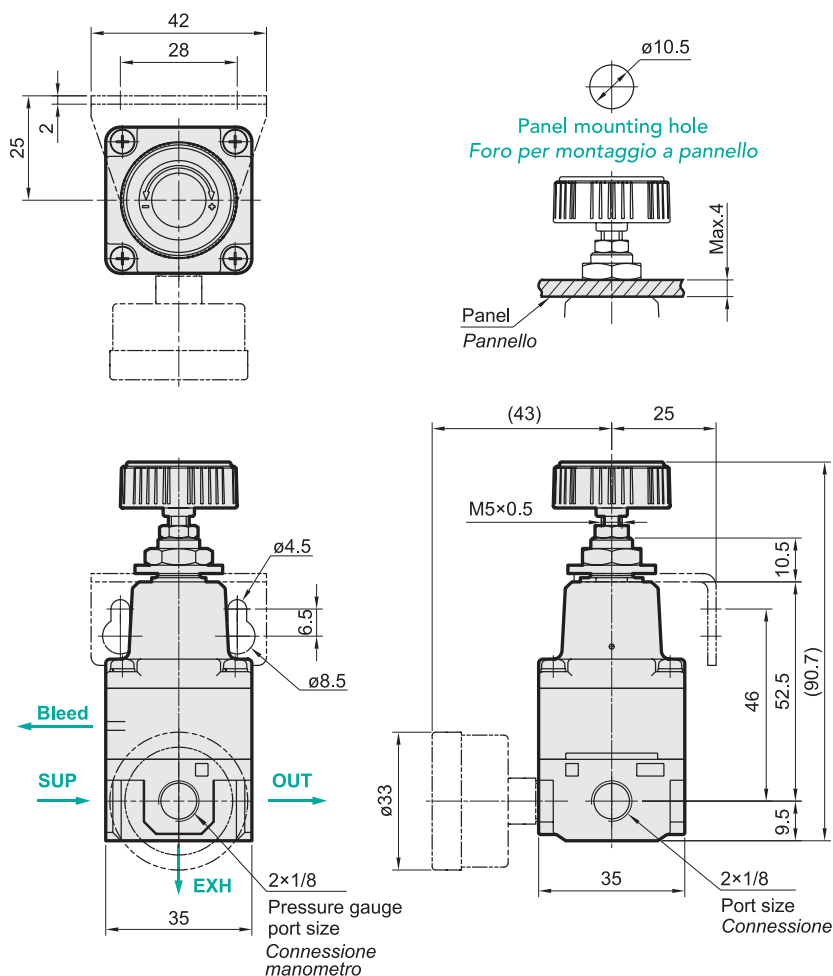
HPR18 - 150gr

Ambient and fluid temperature
Temperatura ambiente e fluido

-5/+60°

Note: for optimal use, filtered air (5μ) not lubricated / Nota: per utilizzo ottimale, aria filtrata (5μ) non lubrificata

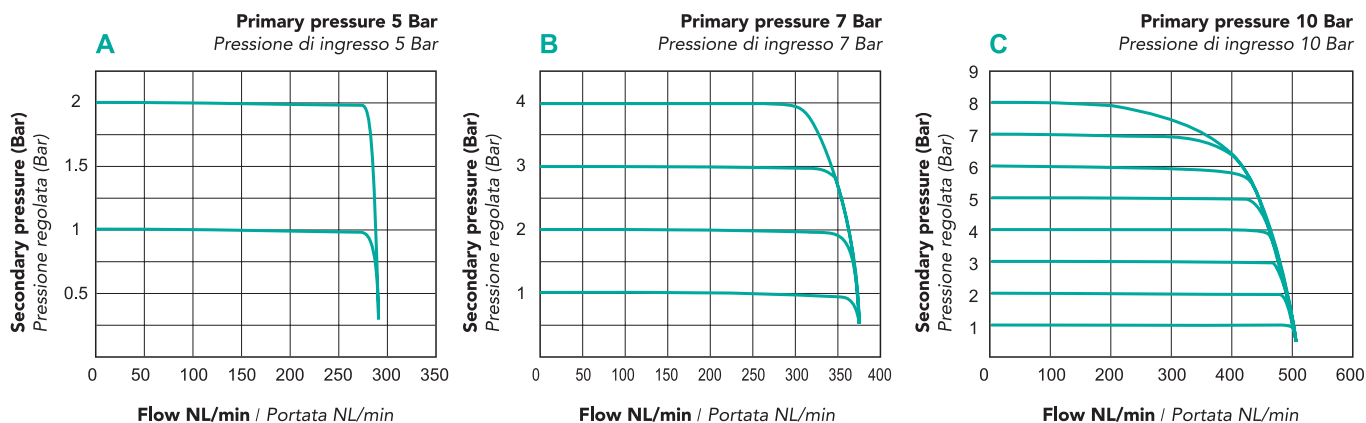
DIMENSIONS HPR18 / DIMENSIONI HPR18



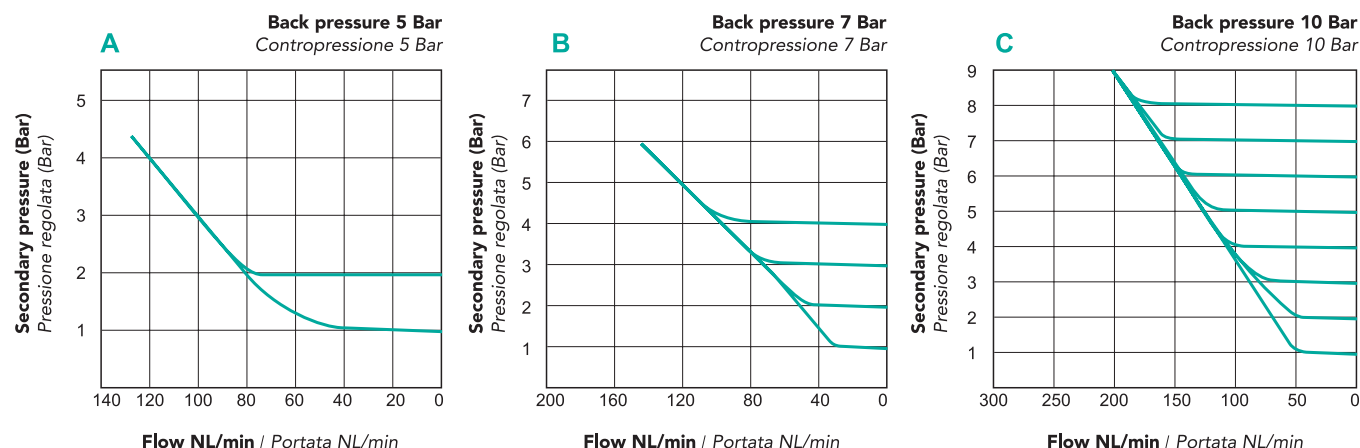
FLOW FEATURE / DIAGRAMMI DI REGOLAZIONE

HPR18

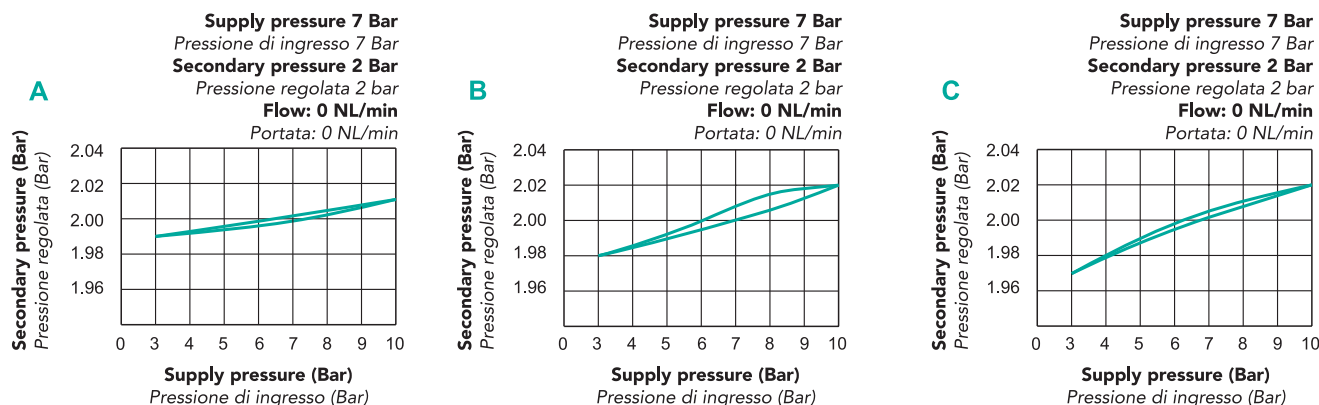
FLOW RATE HPR18 / PORTATA HPR18



RELIEF CHARACTERISTICS HPR18 / SCARICO SOVRAPRESSIONE HPR18



PRESSURE CHARACTERISTICS HPR18 / PRESSIONE HPR18

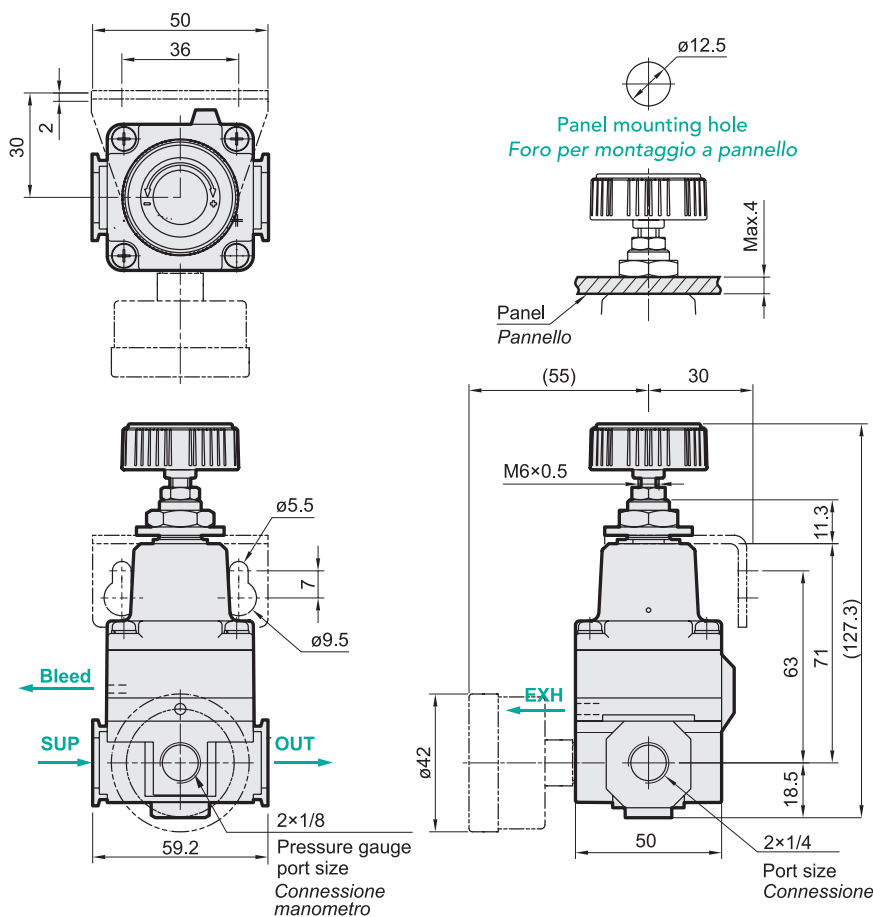


TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Pressure range <i>Range di pressione</i>	A - 0.05 / 2 Bar B - 0.05 / 4 Bar C - 0.05 / 8 Bar
Maximum inlet pressure <i>Pressione massima di ingresso</i>	10 Bar
Minimum inlet pressure <i>Pressione minima di ingresso</i>	Set Pressure / <i>Pressione regolata</i> +1 Bar
Air consumption (NL/min) 10 Bar <i>Consumo d'aria (NL/min) 10 Bar</i>	HPR14 - Max 3.1
Sensitivity / <i>Sensibilità</i>	0,2% F.S.
Accuracy / <i>Ripetibilità</i>	+/- 0.5% F.S.
Gauge port size <i>Connessione manometro</i>	G1/8"
Weight / <i>Peso</i>	HPR14 - 320gr
Ambient and fluid temperature <i>Temperatura ambiente e fluido</i>	-5/+60°

Note: for optimal use, filtered air (5μ) not lubricated / *Nota: per utilizzo ottimale, aria filtrata (5μ) non lubrificata*

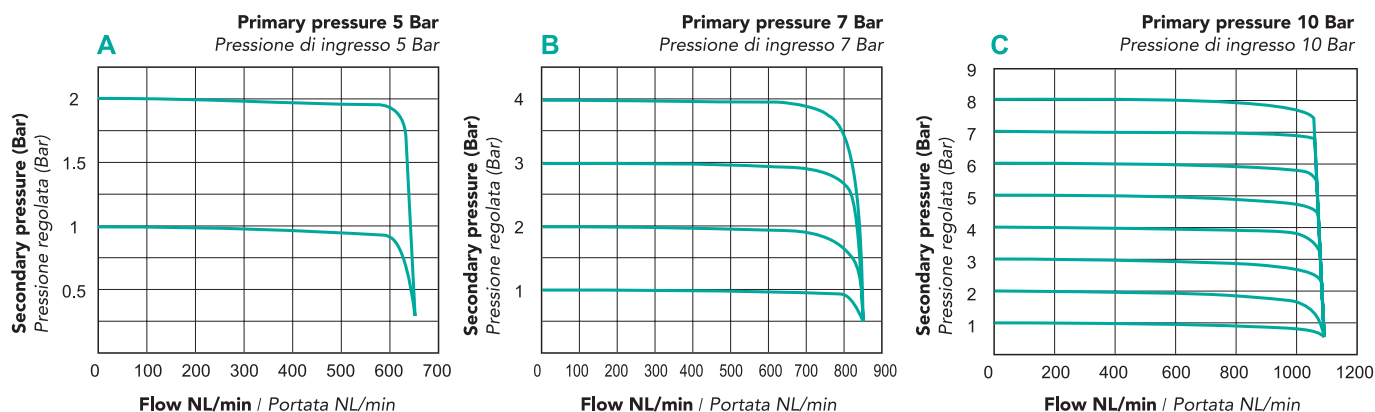
DIMENSIONS HPR14 / DIMENSIONI HPR14



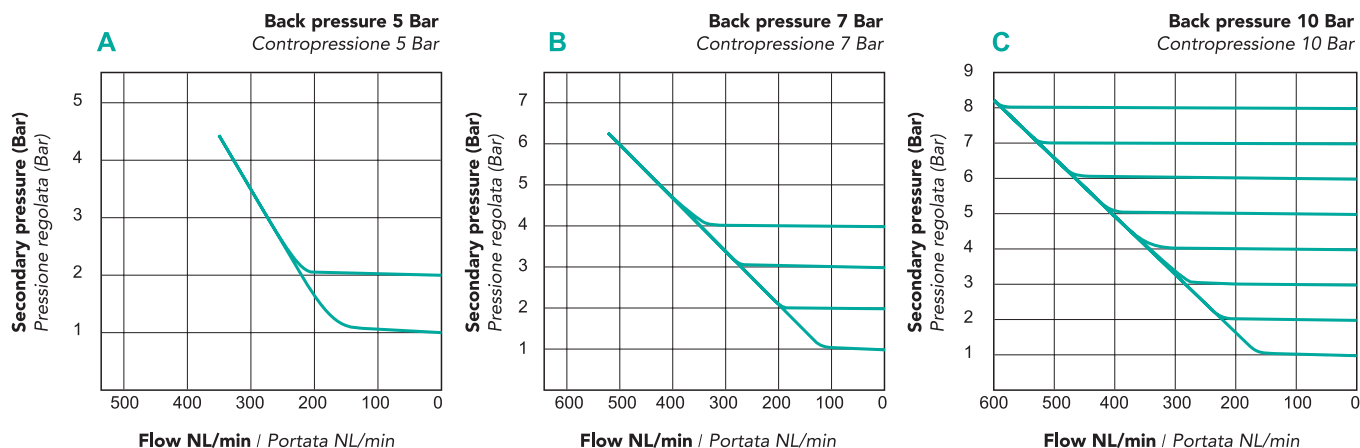
FLOW FEATURE / DIAGRAMMI DI REGOLAZIONE

HPR14

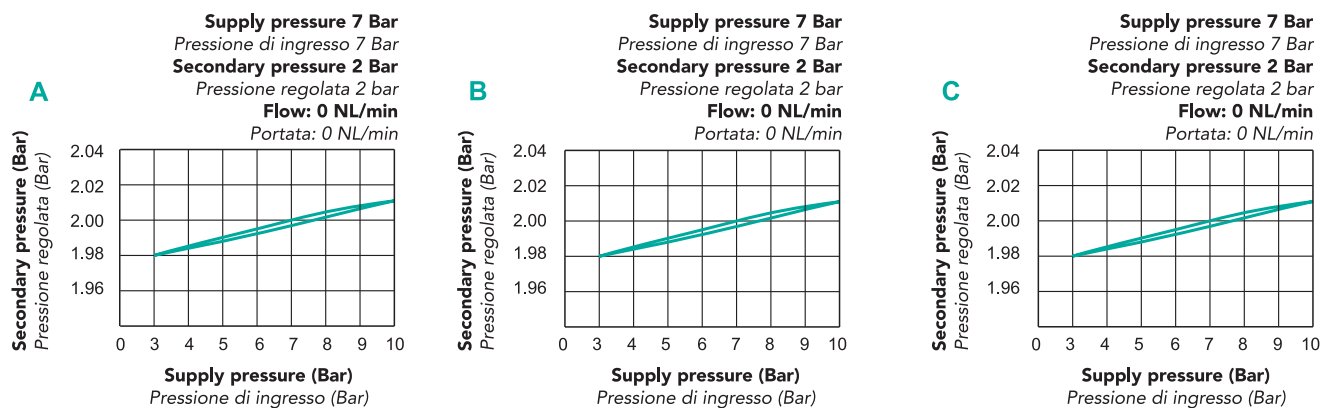
FLOW RATE HPR14 / PORTATA HPR14



RELIEF CHARACTERISTICS HPR14 / SCARICO SOVRAPRESSIONE HPR14



PRESSURE CHARACTERISTICS HPR14 / PRESSIONE HPR14



TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Pressure range
Range di pressione

A - 0.05 / 2 Bar

B - 0.05 / 4 Bar

C - 0.05 / 8 Bar

Maximum inlet pressure
Pressione massima di ingresso

10 Bar

Minimum inlet pressure
Pressione minima di ingresso

 Set Pressure / Pressione regolata
+1 Bar

Air consumption (NL/min) 10 Bar
Consumo d'aria (NL/min) 10 Bar

HPR12 - Max 9.5

Sensitivity / Sensibilità

0,2% F.S.

Accuracy / Ripetibilità

+/- 0.5% F.S.

Gauge port size
Connessione monometro

G1/8"

Weight / Peso

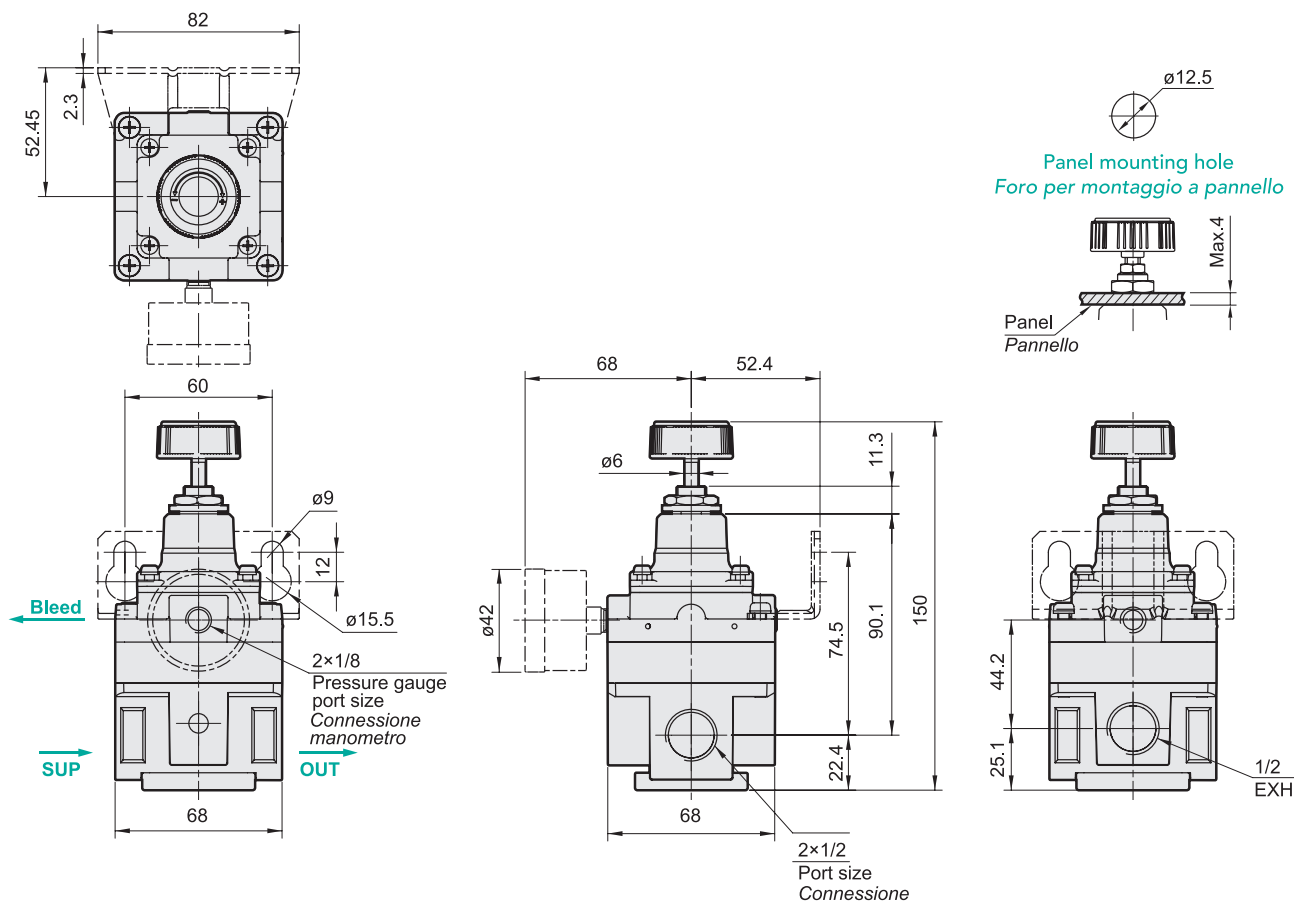
HPR12 - 685gr

Ambient and fluid temperature
Temperatura ambiente e fluido

-5/+60°

Note: for optimal use, filtered air (5μ) not lubricated / Nota: per utilizzo ottimale, aria filtrata (5μ) non lubrificata

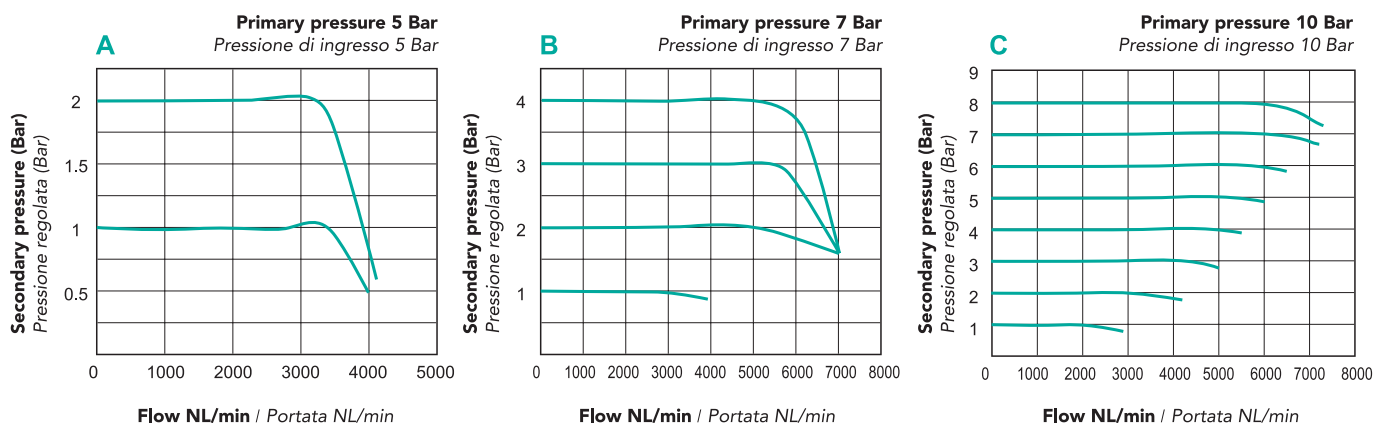
DIMENSIONS HPR12 / DIMENSIONI HPR12



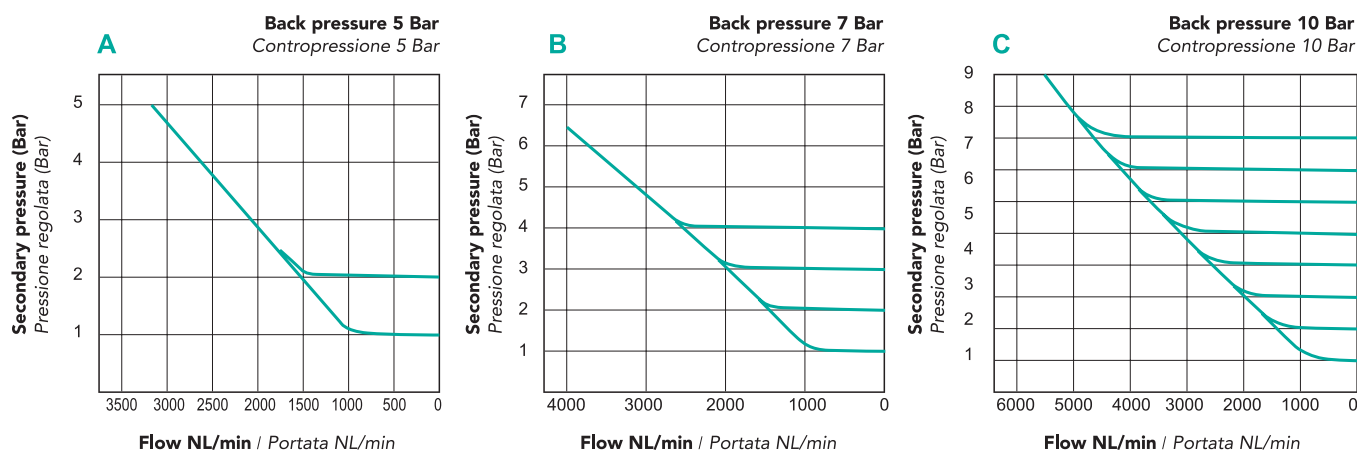
FLOW FEATURE / DIAGRAMMI DI REGOLAZIONE

HPR12

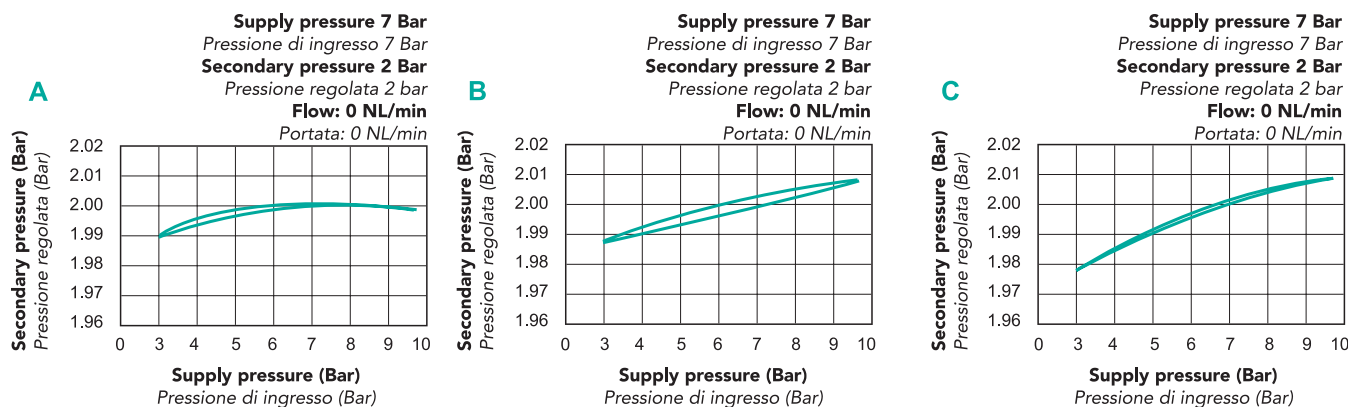
FLOW RATE HPR12 / PORTATA HPR12



RELIEF CHARACTERISTICS HPR12 / SCARICO SOVRAPRESSIONE HPR12



PRESSURE CHARACTERISTICS HPR12 / PRESSIONE HPR12





DESCRIPTION / DESCRIZIONE

Vesta DPV series guarantees a stepless control of pressure by proportional electric signals, along with a construction technology based on a pneumatic-pilot high-sensitivity diaphragm. Easy and quick to program, DPV can be controlled with 4 different input signals (current or voltage) and it provides 4 different output signals (analog or switch). Power supply is DC24V. The display can be set in MPA, BAR, PSI pressure units. The series is available in three sizes: 1/8", 1/4" and 1/2", each of them with 3 different options of pressure ranges, from 0.05 to 9 Bar.

Vesta DPV garantisce un controllo continuo e preciso della pressione tramite segnali elettrici proporzionali, uniti ad una tecnologia costruttiva a membrana con pilotaggio pneumatico ad alta sensibilità. La programmazione è semplice ed immediata; può essere comandata con 4 diversi segnali input (in corrente o tensione) e comunicare con 4 diversi segnali output (analogico o digitale/switch). L'alimentazione è DC24V. Il display può essere letto con diverse unità di misura della pressione (MPa, BAR, e PSI). La serie è disponibile in tre diverse taglie: 1/8", 1/4" e 1/2", ognuna con 3 diverse opzioni di range di pressione regolabile, da 0,05 a 9 Bar.

ENCODING / CODIFICA

DPV -

Model:

Modello:

18 1/8" size, G1/4 port

14 1/4" size, G1/4 port

12 1/2" size, G1/2 port

Pressure range:

Range di pressione:

A (0,05÷1 Bar)

B (0,05÷5 Bar)

C (0,05÷9 Bar)

Input:

Input:

0 Current DC 4-20mA

1 Current DC 0-20mA

2 Voltage DC 0-5 V

3 Voltage DC 0-10 V

Output:

Output:

1 Analog DC 1-5 V

2 Switch NPN Output

3 Switch PNP Output

4 Analog DC 4-20mA

Cables and brackets / Cavi e staffe di fissaggio (DPV18/14/12)

90° 3mt. cable M12x3 / Cavo 90° 3mt. M12x3

Straight 3mt. cable M12x3 / Cavo dritto 3mt. M12x3

Flat Bracket / Staffa piatta

L bracket / Staffa a L

DPV-X

DPV-Y

DPV-F

DPV-L

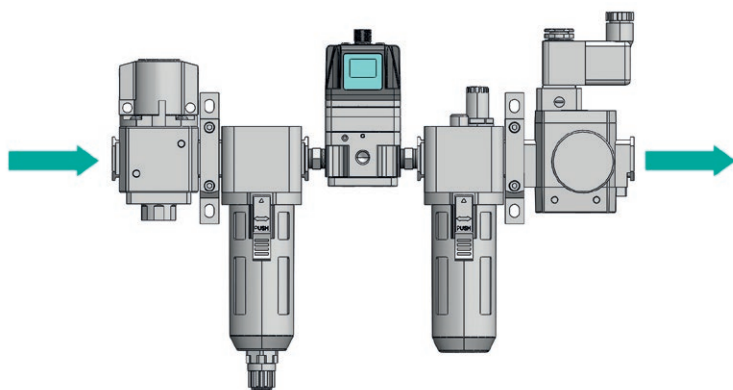
FIELDS OF APPLICATION / SETTORI DI APPLICAZIONE

Vesta DPV proportional valves series can be applied in different industrial fields, for a number of precision control applications. Different sizes offer different flow rates, making DPV suitable for a wide range of automation needs:

La serie di valvole proporzionali Vesta DPV può essere usata in diversi ambiti industriali, per un ampio numero di applicazioni dove è richiesto controllo di precisione. Le diverse taglie offrono diverse portate, rendendo la valvola DPV adatta a rispondere a svariate esigenze di automazione:

- **Plastic moulding , for securing application and control in extrusion**
Stampa plastica, per il controllo preciso e dinamico dell'estrusione
- **Winding and laminating , for friction roller precision deceleration and contact systems**
Avvolgimento e laminazione, sistemi a contatto e decelerazione di precisione
- **Printing and packaging, for controlling contact winding rollers for precise paper tension**
Stampa e packaging, per tensionamento preciso e controllato della carta
- **Lifting and handling , for precise manipulation and gripping, zero gravity load manipulators**
Manipolazione e sollevamenti, per il controllo di azzeratori di gravità
- **Welding, for maximum control in welding guns approaching and precision holding**
Saldatura, per il massimo controllo nel posizionamento delle pistole di saldatura
- **Lapping and polishing , for precision holding in special fields (glass and marble surfaces)**
Smerigliatura e lucidatura, per sistemi di blocco in settori speciali (vetro e marmo)
- **Pneumatic system testing, for checking pressure ramps , leak proof , dynamic response**
Test di sistemi pneumatici, per il controllo di rampe di pressione e perdite
- **Fluid process, for precisely adjusting the pressure output of pumps and blowing applications**
Processo per regolazione precisa dell'output di pompe e sistemi di soffio

FRL GROUP ASSEMBLY / ASSEMBLAGGIO IN GRUPPO FRL



The proportional valve can be mounted within a FRL/air treatment group, after the filtering element (5µ filtering element for optimal use) and before the lubricator.

La valvola proporzionale può essere montata all'interno del gruppo FRL/unità di trattamento dell'aria, collocata a valle del filtro (per un utilizzo ottimale si consiglia un elemento filtrante da 5µ) e prima del lubrificatore.

TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

Pressure range <i>Range disponibili:</i>		A - 0.05 / 1 Bar B - 0.05 / 5 Bar C - 0.05 / 9 Bar
Maximum inlet pressure <i>Pressione massima di ingresso</i>	DPV-A DPV-B/C	2 Bar 10 Bar
Minimum inlet pressure <i>Pressione minima</i>		Set Pressure + 1 Bar
Ambient and fluid temperature <i>Temperatura ambiente e fluido</i>		0-50°C
Protection class <i>Classe di protezione</i>		IP65
Power Supply <i>Alimentazione elettrica</i>		DC 24V±10%
Input Signal <i>Segnale Input</i>	Voltage / Voltaggio Current / Tensione	DC 4~20mA, DC 0~20mA DC 0~5V, DC 0~10V
Input Impedance <i>Impedenza Input</i>	Voltage / Voltaggio Current / Tensione	≤10Ω ~6,5 KΩ
Output Signal <i>Segnale Output</i>	Analog / Analogico Switch / Digitale	DC 1~5V (impedance 1KΩ or more) DC 4~20mA (impedance 250Ω or less) NPN. PNP: 30mA
Linearity <i>Linearità</i>		1% F.S.
Hysteresis <i>Isteresi</i>		0,5% F.S.
Repeatability <i>Ripetibilità</i>		0,5% F.S.
Temperature Drift <i>Variazione di temperatura</i>		2% F.S.
Response time <i>Tempo di risposta</i>	DPV18 DPV14 DPV12	0,2-0,3s 0,2-0,3s 0,3-0,4s
Display <i>Display</i>	Accuracy / Precisione Unit / Unità di misura	2% F.S. M Pa, bar, PSI
Weight <i>Peso</i>	DPV18 DPV14 DPV12	270 gr 385 gr 800 gr

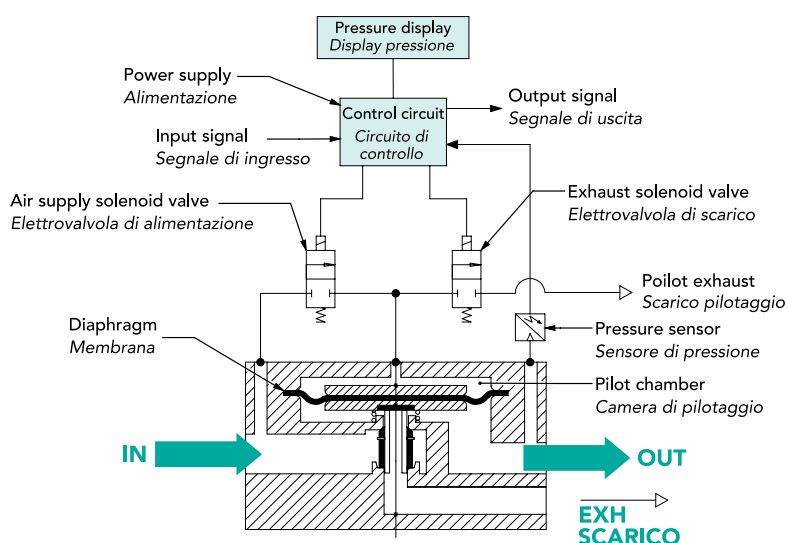
Note: for optimal use, filtered air (5μ) not lubricated / Nota: per utilizzo ottimale, aria filtrata (5μ) non lubrificata

PNEUMATIC FUNCTIONING / FUNZIONAMENTO PNEUMATICO

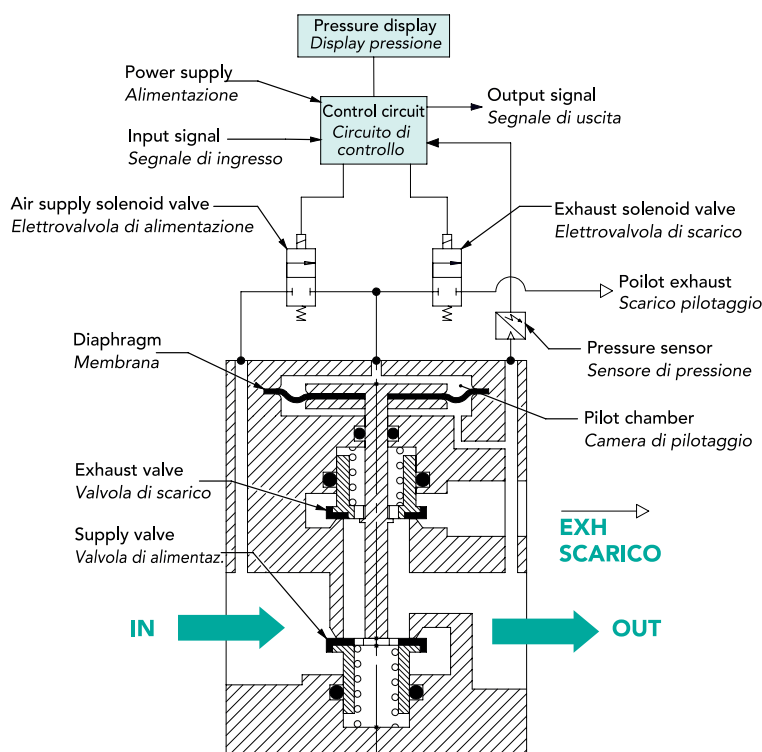
As the electric input signal increases, the supply and exhaust solenoid valves provide pressure control to the diaphragm that opens the supply valve; this guarantees a precise output of pressure that is constantly controlled by an electronic sensor, and kept regulated proportionally to the input signal. Over pressure (or back pressure) is quickly exhausted by a high-flow exhaust valve. The exhaust of the pilot solenoid valves can be conveyed.

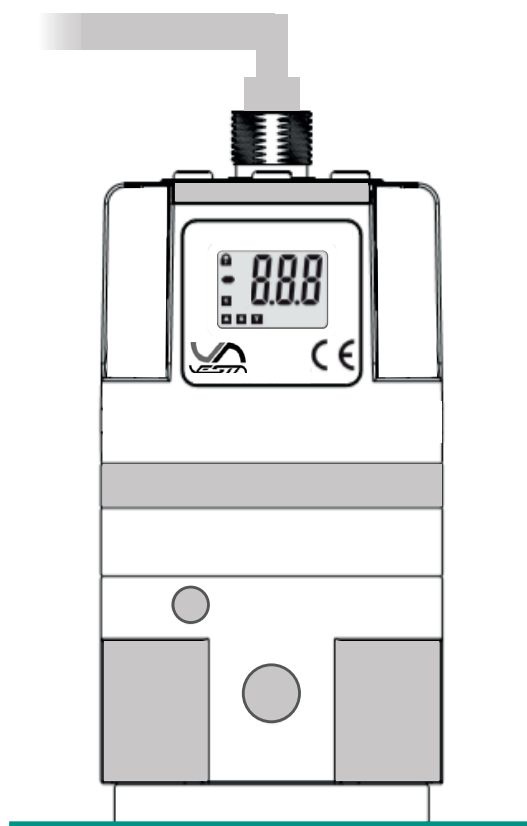
Con l'aumento del segnale elettrico di input, le elettrovalvole di carico e scarico comandano pressione sulla membrana che controlla l'apertura della valvola di alimentazione; questo permette di un preciso output di pressione in uscita, che viene costantemente monitorata da un sensore elettronico, e tenuta regolata proporzionalmente al segnale di input. La sovrappressione (o contropressione) viene velocemente scaricata da una valvola di scarico ad alta portata. Lo scarico delle elettrovalvole di pilotaggio può essere convogliato.

DPV18



DPV14-12





SIGNAL & DISPLAY / SEGNALE E DISPLAY

DPV valve is controlled by a 14 bit internal analog-to-digital converter capable of analyzing high resolution input signals (Current: 4-20mA, 0-20mA or Voltage: 0-5V, 0-10V).

The high-brightness LCD display can be set in different units (BAR, MPA, PSI) and allows different settings, such as the scaling of input signal, manual pressure regulation, programmable pressure ranges and different levels of response/sensitivity.

Safety features include the manumission-protection locking of the keyboard, and the pressure retainment of the last input if power supply is cut off.

More information available in the Operation Manual.

La valvola DPV è controllata da un convertitore analogico-digitale interno a 14 bit, in grado di apprezzare valori di segnale input ad elevata risoluzione, in corrente (4-20mA, 0-20mA) o tensione (0-5V, 0-10V).

Il display ad alta luminosità riproduce diverse unità di misura (BAR, MPA, PSI) e permette di accedere a diversi tipi di setting, come la gestione del segnale di ingresso, la regolazione manuale della pressione, la programmazione di range di pressione e la gestione della risposta/sensibilità della valvola.

Ulteriori caratteristiche sono il bloccaggio antimanomissione della tastiera, e la tenuta della pressione dell'ultimo segnale in caso di perdita di corrente.

Maggiori informazioni sono disponibili nel manuale operativo.

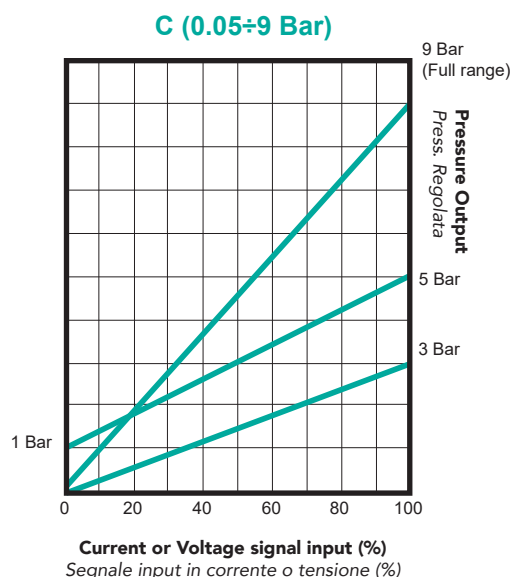
OPERATION MANUAL / MANUALE OPERATIVO

The following instructions are available in the Operation Manual:

Le seguenti istruzioni sono disponibili nel manuale operativo

- **Wiring & Connections**
- *Cablaggio e connessioni elettriche*
- **Setting Method: manual setting of minimum and maximum pressure (P1-P2)**
- *Settaggio manuale della pressione minima e pressione massima (P1-P2)*
- **Switch Output mode (Window Comparator, Hysteresis, Out Of Range)**
- *Modalità di output switch (Window Comparator, Hysteresis, Out Of Range)*
- **Function settings (F01 Unit, F02 Input Adjustment, F03 Gain Level, F04 Zero Clear, F05 Initialize)**
- *Regolazione funzioni (F01 unità di misura, F02 segnale input, F03 sensibilità, F04 Zero Clear, F05 reset)*
- **Preset pressure setting**
- *Preset dei valori di pressione*
- **Error messages & Actions**
- *Messaggi di errore e azioni di ripristino*

INPUT SIGNAL LINEARITY / LINEARITÀ DEL SEGNALE INPUT



DPV allows to set different ranges of pressure, always using 100% of the input signal (Current or Voltage).

This chart shows the linearity of different examples of applications with a regulation range from 0 to 9 Bar.

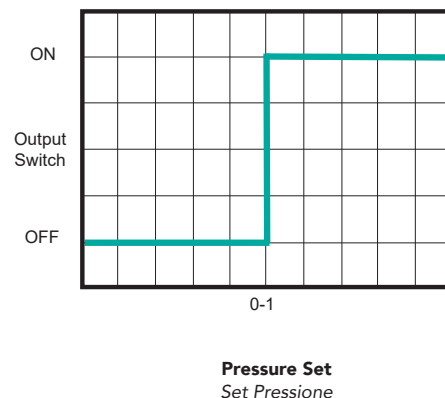
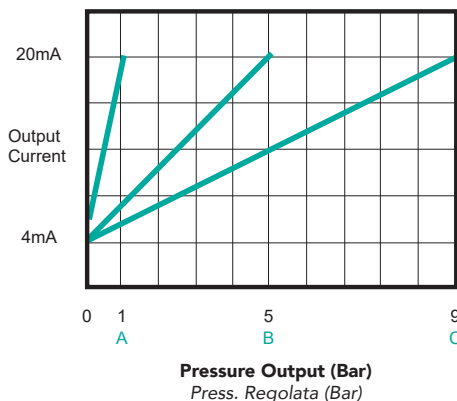
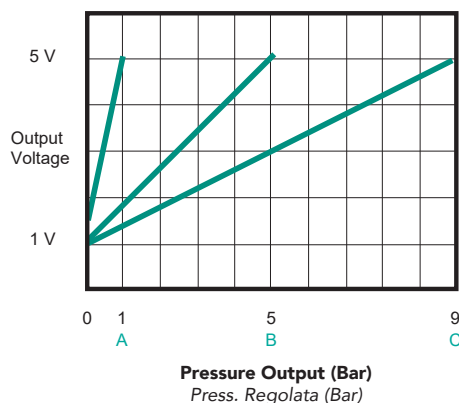
The input signal can control the full pressure range (from 0 to 9 Bar), or different levels of maximum and minimum pressure (P1 and P2), which can be manually reduced from the top and/or the bottom of the available pressure range (shown examples are from 0 to 3 Bar and from 1 to 5 Bar).

La valvola DPV permette di settare diversi range di pressione, utilizzando sempre il 100% del segnale input (in corrente o tensione).

Questo grafico mostra la linearità di diverse applicazioni esemplificative con un range di regolazione da 0 a 9 Bar.

Il segnale input può controllare l'intero range di pressione (da 0 a 9 Bar), o diversi livelli di pressione minima e massima (P1 e P2), che possono essere ridotti manualmente dall'altro e/o dal basso del range di pressione disponibile (gli esempi mostrati sono da 0 a 3 Bar e da 1 a 5 Bar).

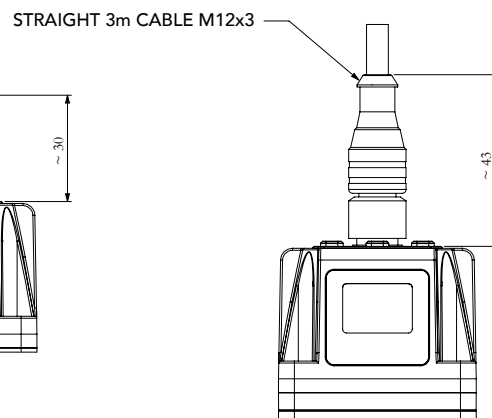
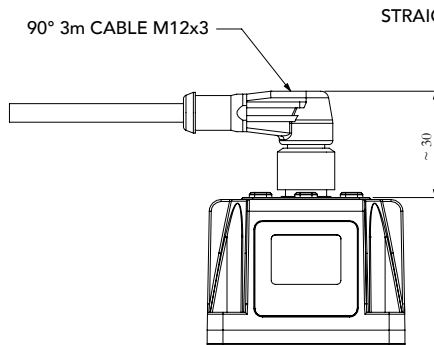
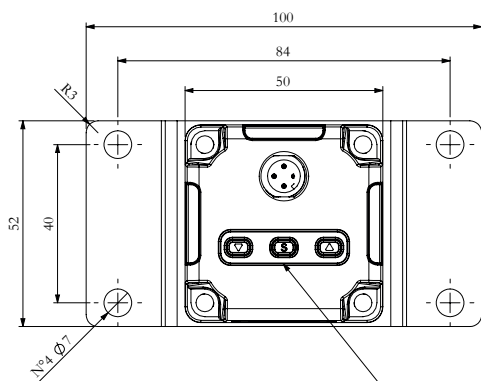
OUTPUT SIGNAL / SEGNALE OUTPUT



Operating pressure value output is available with analog signal (Current 4-20mA or Voltage 1-5V) or with switch ON-OFF signal (PNP, NPN) that can be read in three modes: Window Comparator, Hysteresis, Out of Range. More information available in the Operation Manual.

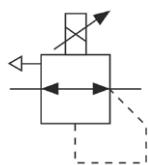
L'output per la rilettura del valore di pressione è disponibile con segnali analogici (in corrente 4-20mA o tensione 1-5V) o con segnale digitale switch ON-OFF (PNP, NPN) che possono essere letti in tre modalità: Window Comparator, Hysteresis, Out of Range. Maggiori informazioni sono disponibili nel manuale operativo.

DIMENSIONS / DIMENSIONI

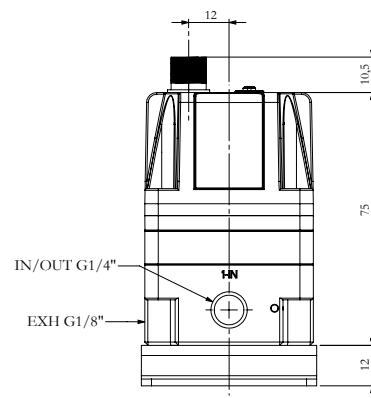
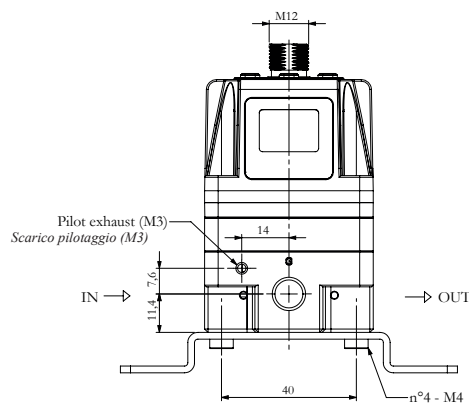


Keys for Unit setting, Display settings, Manual pressure settings, Error settings.
All information about Setting Method is available in the DPV Operation Manual.

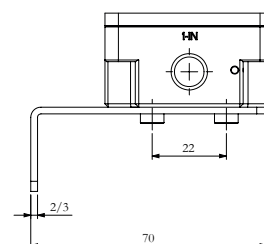
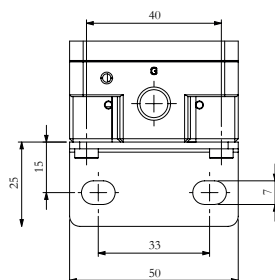
*Pulsanti per Unit setting, Display settings, Manual pressure settings, Error settings.
Tutte le informazioni sono disponibili nel Manuale Operativo.*



FLAT BRACKET ASSEMBLY STAFFA PIATTA

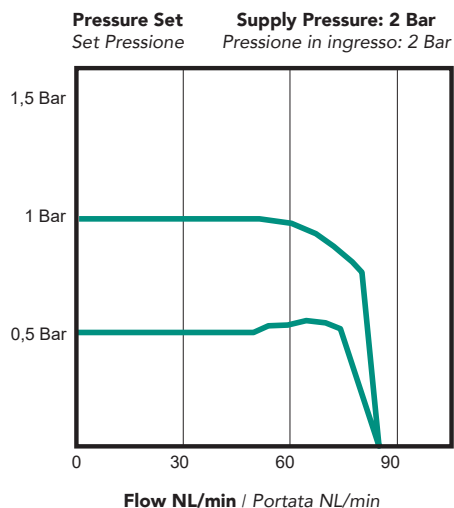


L BRACKET ASSEMBLY STAFFA A L

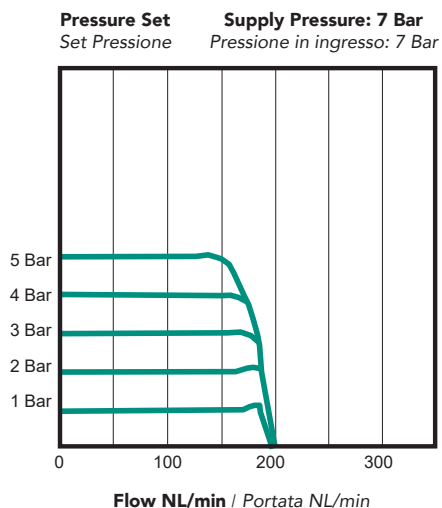


FLOW RATE DPV18 / PORTATA DPV18

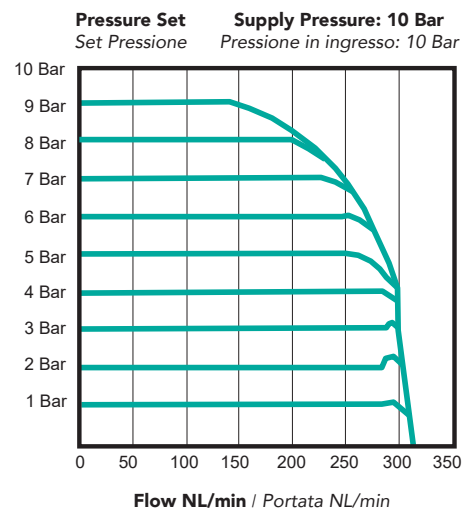
A (0.05÷1 Bar)



B (0.05÷5 Bar)

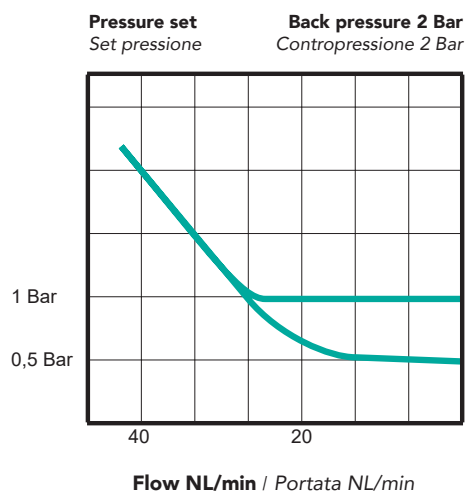


C (0.05÷9 Bar)

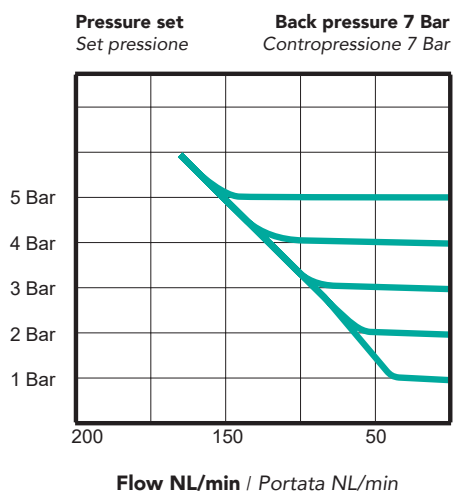


RELIEF CHARACTERISTICS DPV18 / SCARICO PRESSIONE DPV18

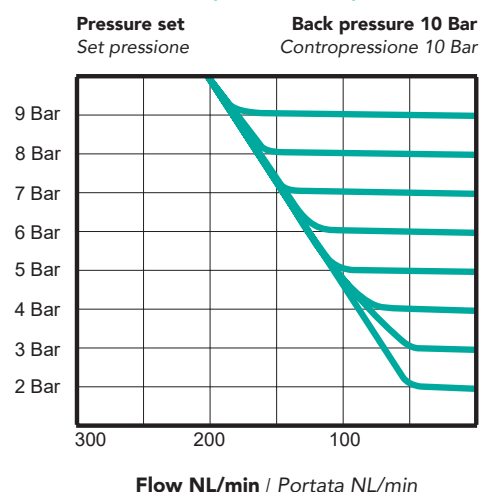
A (0.05÷1 Bar)



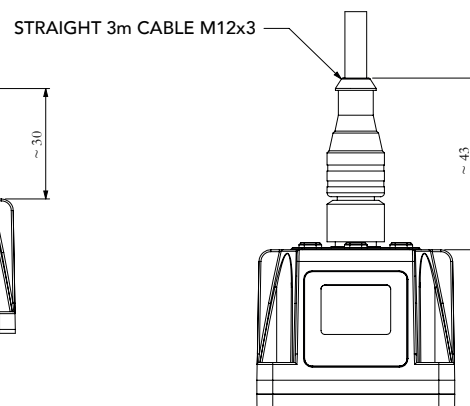
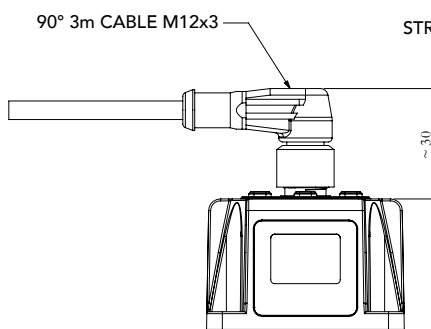
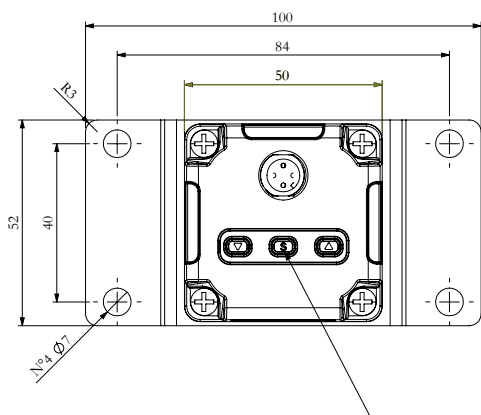
B (0.05÷5 Bar)



C (0.05÷9 Bar)

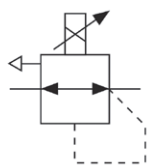
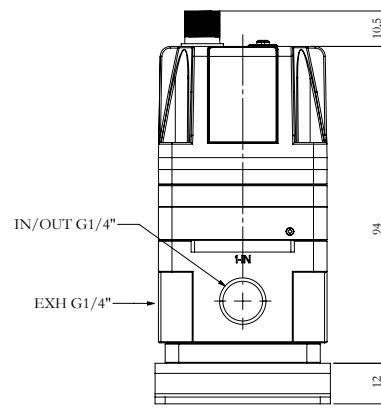
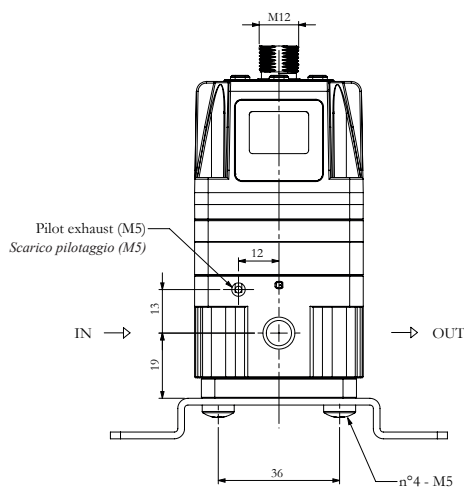
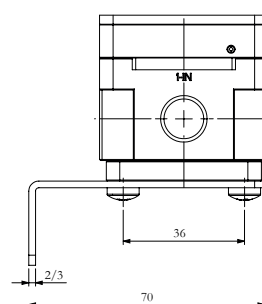
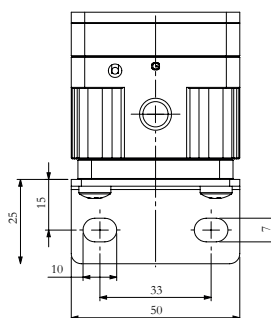


DIMENSIONS / DIMENSIONI



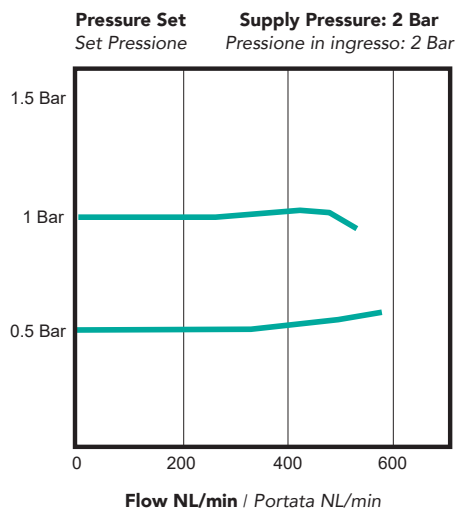
Keys for Unit setting, Display settings, Manual pressure settings, Error settings.
All information about Setting Method is available in the DPV Operation Manual.

*Pulsanti per Unit setting, Display settings, Manual pressure settings, Error settings.
Tutte le informazioni sono disponibili nel Manuale Operativo.*

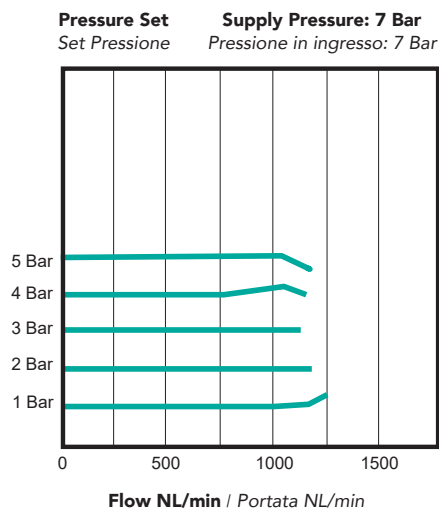
FLAT BRACKET ASSEMBLY
STAFFA PIATTAL BRACKET ASSEMBLY
STAFFA A L

FLOW RATE DPV14 / PORTATA DPV14

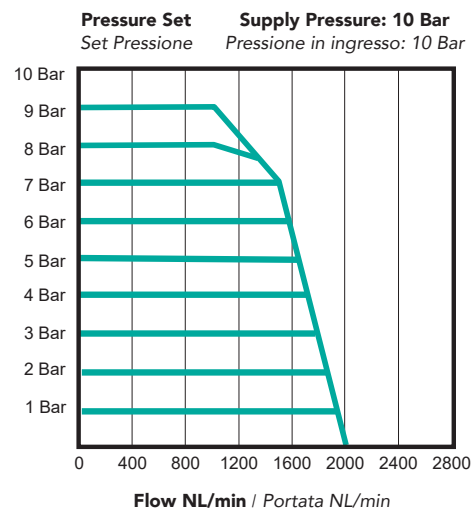
A (0.05÷1 Bar)



B (0.05÷5 Bar)

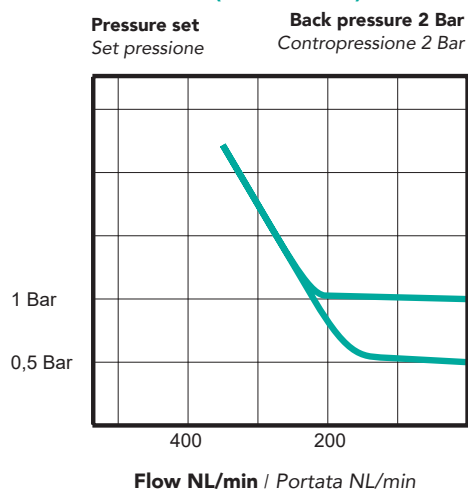


C (0.05÷9 Bar)

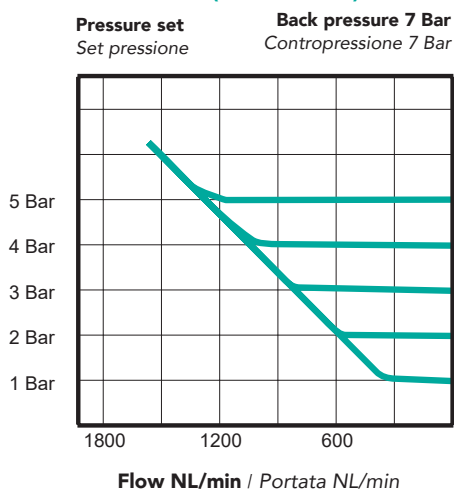


RELIEF CHARACTERISTICS DPV14 / SCARICO PRESSIONE DPV14

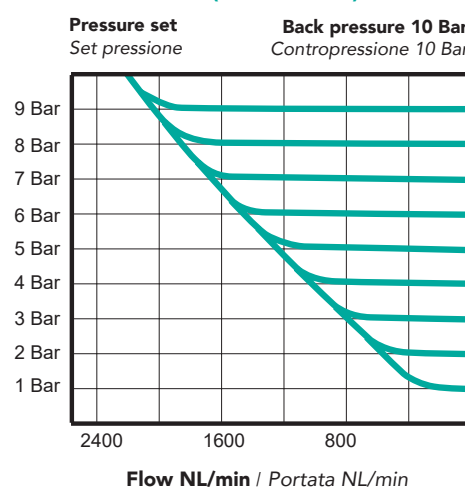
A (0.05÷1 Bar)



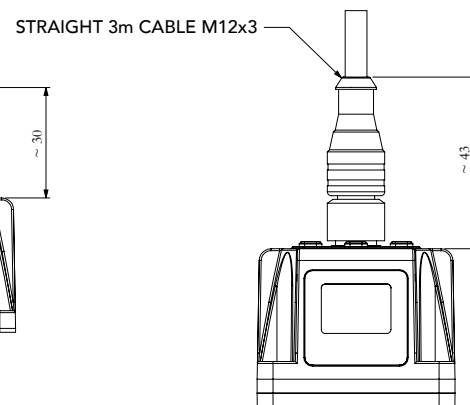
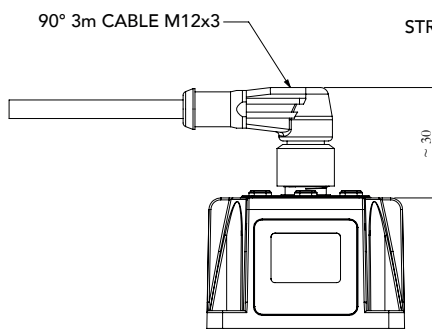
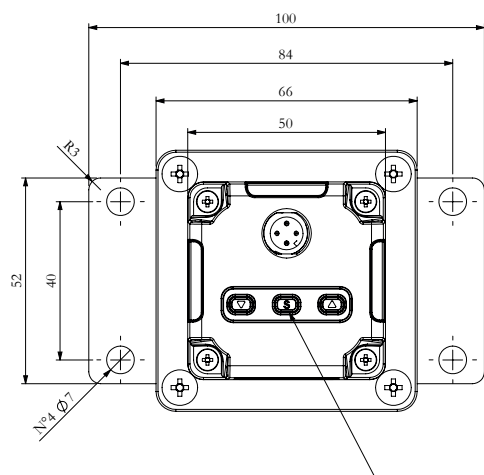
B (0.05÷5 Bar)



C (0.05÷9 Bar)

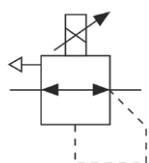
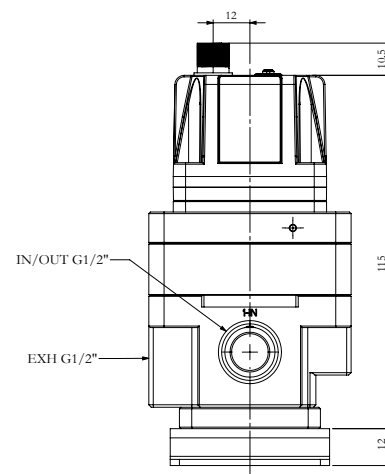
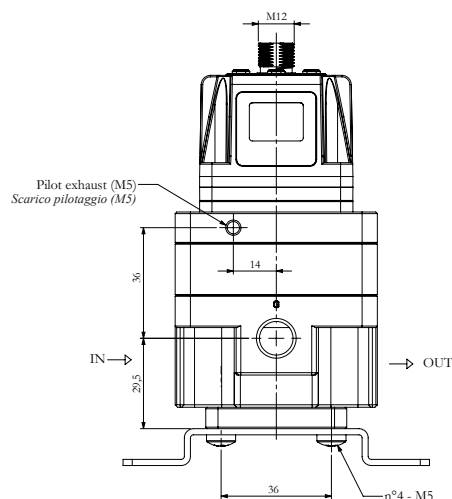
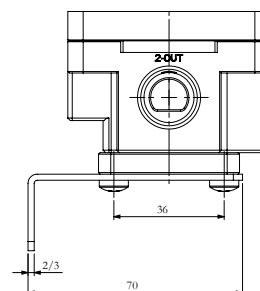
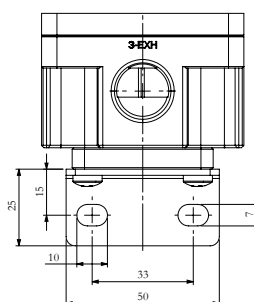


DIMENSIONS / DIMENSIONI



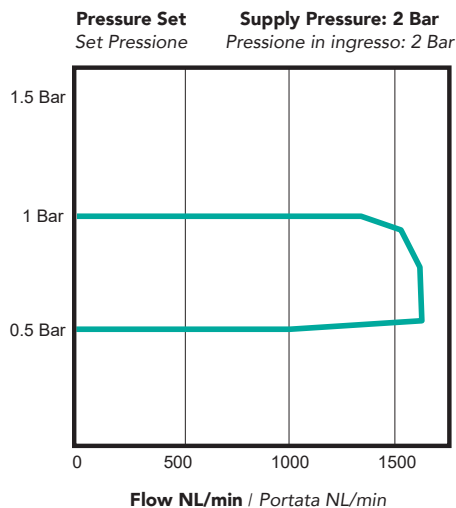
Keys for Unit setting, Display settings, Manual pressure settings, Error settings.
All information about Setting Method is available in the DPV Operation Manual.

Pulsanti per Unit setting, Display settings, Manual pressure settings, Error settings.
Tutte le informazioni sono disponibili nel Manuale Operativo.

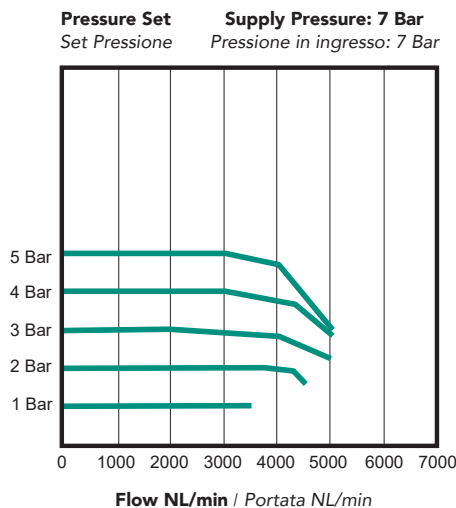
FLAT BRACKET ASSEMBLY
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STAFFA A L

FLOW RATE DPV12 / PORTATA DPV12

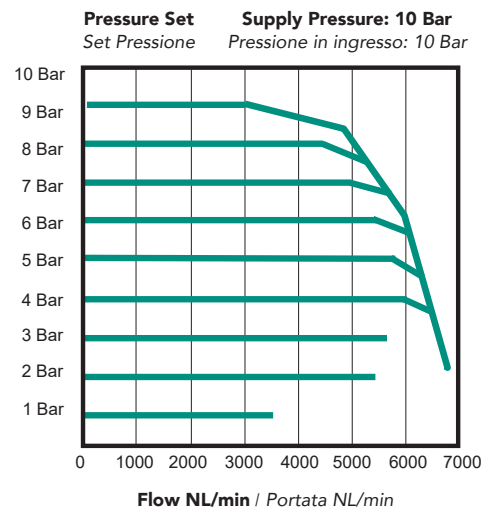
A (0.05÷1 Bar)



B (0.05÷5 Bar)

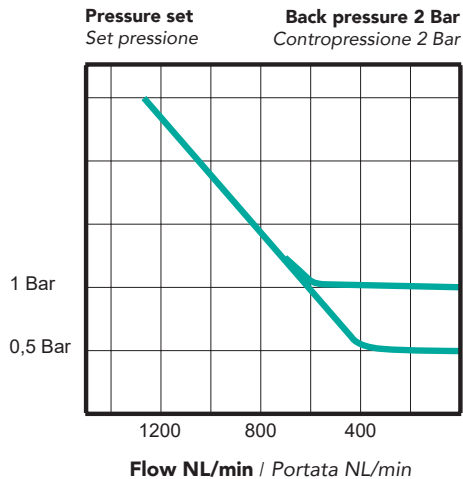


C (0.05÷9 Bar)

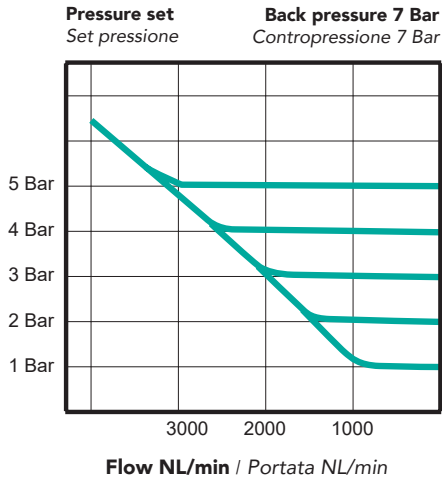


RELIEF CHARACTERISTICS DPV12 / SCARICO PRESSIONE DPV12

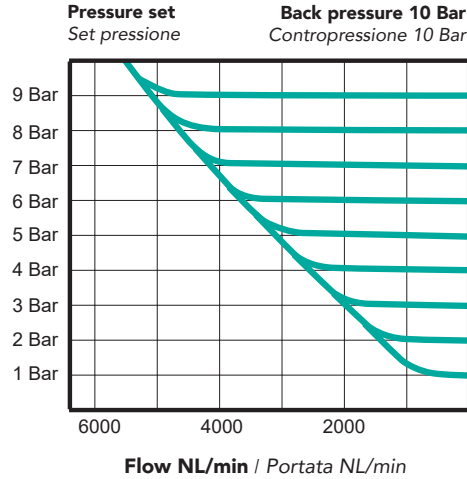
A (0.05÷1 Bar)

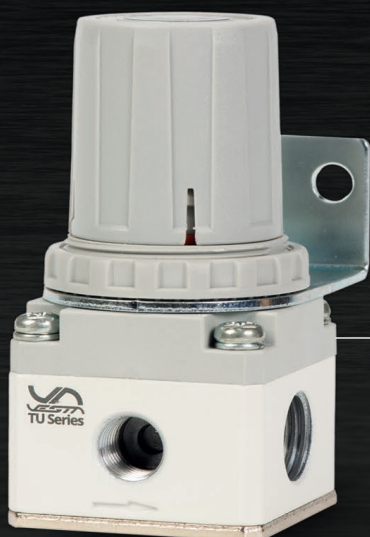


B (0.05÷5 Bar)



C (0.05÷9 Bar)





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