

# SERIE HL

## IT Filtri avvitabili per montaggio in linea su circuiti oleodinamici a bassa pressione (aspirazione, mandata o ritorno)

### CARATTERISTICHE TECNICHE:

- Testata di supporto: fusione di alluminio.
- Valvola by-pass (testa): Apertura in aspirazione 0,25 bar / sul ritorno 1,7 bar.
- Cartuccia avvitabile: struttura in acciaio zincato. Elemento filtrante in microfibra, carta o tela inox.
- Attacchi disponibili standard: 3/4"bspp (mod. 1-2) o 1"1/4 bspp (mod. 3-4). Filettature speciali su richiesta.
- Elementi filtranti disponibili standard: 3-5-10-25 Micron abs. Microfibra / 10-25 Micron nom. Carta / 60-90 Micron nom. Tela metallica / 30 Micron nom. assorbente acqua. Altre filtrazioni su richiesta.
- Guarnizioni: standard Buna-N. Su richiesta Viton.
- Temperatura esercizio: da -30°C a +110°C.
- Pressione di esercizio: 12 bar. Pressione di scoppio: 25 bar. Pressione di collasso cartuccia: 5 bar.
- Test eseguiti secondo normative: ISO 2941 / ISO 3724 / ISO 3968.

## EN Spin-on filters for in-line low pressure hydraulic circuit mounting (suction, delivery or return).

### TECHNICAL FEATURES:

- Supporting head: aluminium die-casting.
- By-pass valve (head): Opening 0,25 bar in suction / 1,7 bar on return.
- Spin-on element: galvanized steel structure. Filter element in microfiber, paper or wire mesh.
- Standard available threads: 3/4" bspp (mod. 1-2) or 1"1/4 bspp (mod. 3-4). Other threads upon request.
- Standard available filter elements: 3-5-10-25 Micron abs. microfiber / 10-25 Micron nom. paper / 60-90 Micron nom. wire mesh / 30 Micron nom. water absorbing. Other filter elements upon request.
- Seals: Buna-N standard. Viton upon request.
- Operating temperature: -30°C +110°C.
- Operating pressure: 12 bar. Burst pressure: 25 bar. Element collapse pressure: 5 bar.
- Tested according standards: ISO 2941 / ISO 3724 / ISO 3968.

## D LeitungsfILTER für Niederdruck Hydraulikschaltung mit Wechselfiltern (Saug, Druck- und Rücklauf).

### TECHNISCHE DATEN:

- Filterkopf: Aluminium-Druckguss.
- By-pass Ventil (kopf): Eröffnung 0,25 bar in Saug- / 1,7 bar auf Rücklauf.
- Spin-on Element: galvanisierte Stahlkonstruktion. Filterelement in Mikrofaser, Papier - oder Drahtgewebe.
- Standard verfügbaren Anschlüssen: 3 / 4 "bspp (Mod. 1-2) oder 1 " 1 / 4 bspp (Mod. 3-4). Weitere Gewinde auf Anfrage erhältlich.
- Standard verfügbaren Filterelemente: 3-5-10-25 Mikron abs. Mikrofaser / 10-25 Mikron nom. Papier / 60-90 Micron nom. Drahtgewebe / 30 Micron nom. Wasserabsorbierendenmedien. Weitere Materialien auf Anfrage erhältlich.
- Dichtungen: Buna-N Standard. Viton auf Wunsch.
- Betriebstemperatur: von -30°C bis +110°C.
- Betriebsdruck: 12 bar. Berstdruck: 25 bar. Patronekollapsdrücke: 5 bar.
- Test nach Normen: ISO 2941 / ISO 3724 / ISO 3968.

## FR Filtres à visser (spin-on) pour montage en ligne sur circuits hydrauliques à basse pression (aspiration, refoulement ou retour)

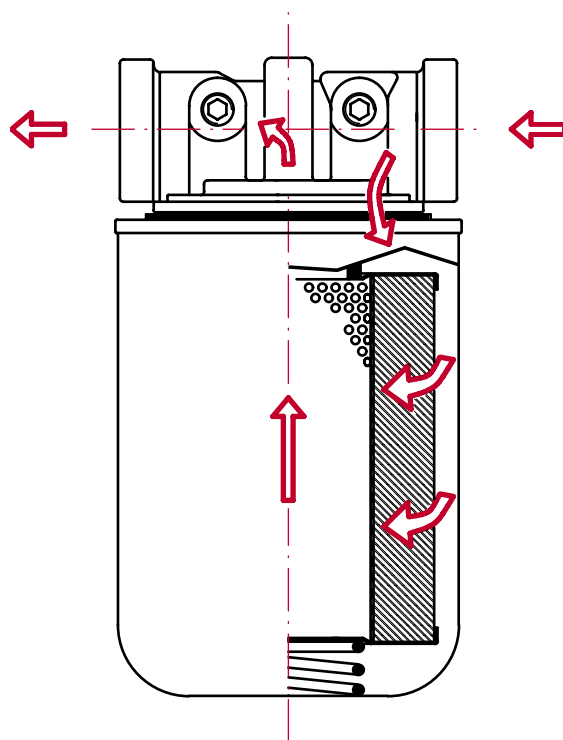
### CARACTERISTIQUES TECHNIQUES:

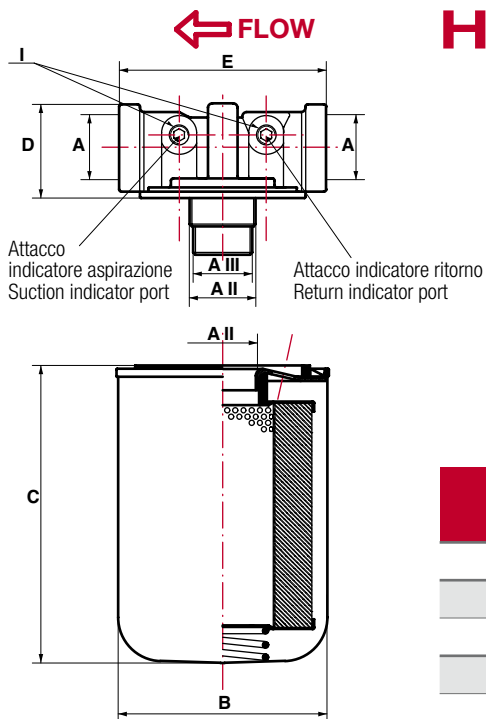
- Tête-support: fusion d'aluminium.
- Clapet by-pass (tête): Ouverture en aspiration 0,25 bar / 1,7 bar sur le retour.
- Cartouche à visser: structure en acier galvanisé. Élément filtrant en microfibres, papier ou en toile métallique.
- Connexions standard disponibles: 3/4 "bspp (modèle 1-2) ou 1"1/4 bspp (modèle 3-4). Filetages spéciaux sur demande.
- Eléments filtrants standard disponibles: 3-5-10-25 Micron abs. en microfibres / 10-25 Micron nom. papier / 60-90 Micron nom. Toile métallique / 30 Micron nom. absorption eau. Autres filtrations sur demande.
- Joints: Buna-N standard. Viton sur demande.
- Temperature de travail: de -30°C à +110°C.
- Pression de service: 12 bar. Pression d'éclatement: 25 bar. Pression d'écrasement élément filtrant: 5 bar.
- Test selon standards: ISO 2941 / ISO 3724 / ISO 3968.

## ES Filtros roscados para montaje en línea en circuitos hidráulicos a baja presión (aspiración, presión ó retorno)

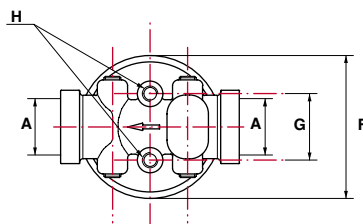
### CARACTERÍSTICAS TÉCNICAS:

- Cabeza de soporte: aluminio fundido.
- Válvula by-pass (cabeza): Apertura en aspiración 0,25 bar / en retorno 1,7 bar.
- Cartucho roscado: cuerpo en acero cincado. Elemento filtrante en microfibra, papel ó tela inox.
- Conexiones disponibles estándar: 3/4"bspp (mod. 1-2) ó 1"1/4bspp (mod. 3-4). Rosca especial bajo pedido.
- Elemento filtrante disponible estándar: 3-5-10-25 micras abs. en Microfibra / 10-25 micras nom. en Papel / 60-90 micras nom. en Tela Metálica / 30 Micron nom. media absorción agua. Otras filtraciones bajo pedido.
- Juntas: estándar Buna-N. Bajo pedido Viton.
- Temperatura de trabajo: de -30°C a +110°C.
- Presión de trabajo: 12bar. Presión de rotura: 25bar. Presión de colapso cartucho: 5 bar
- Test efectuado según normativa: ISO 2941 / ISO 3724 / ISO 3968.



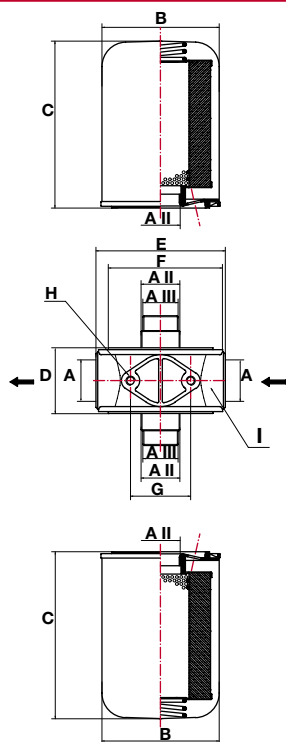


# HL10-20



## CARTUCCIA SINGOLA SINGLE CARTRIDGE

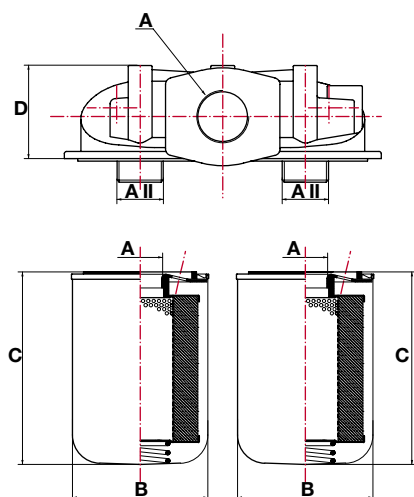
Mod.	A	A II	A III	B	C	D	E	F	G	H	I
<b>HL101</b>	3/4" bspp	3/4" bspp	-	95	147	43	95	75,5	38	M8	1/8" bspp
<b>HL102</b>	3/4" bspp	3/4" bspp	-	95	192	43	95	75,5	38	M8	1/8" bspp
<b>HL203</b>	1"1/4 bspp	1"1/4 bspp	1"1/2-16 UNF	128	182	65	133	134	55	M8	1/8" bspp
<b>HL204</b>	1"1/4 bspp	1"1/4 bspp	1"1/2-16 UNF	128	228	65	133	134	55	M8	1/8" bspp



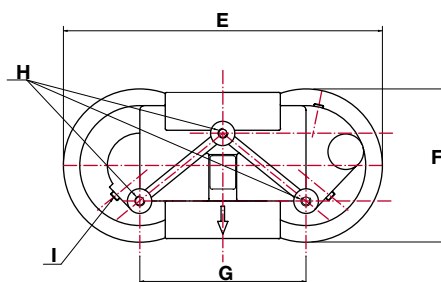
# HL30

## CARTUCCIA DOPPIA CONTRAPPOSTA OPPOSED DOUBLE CARTRIDGE

Mod.	A	A II	A III	B	C	D	E	F	G	H	I
<b>HL303</b>	1"1/2 bspp	1"1/4 bspp	1"1/2-16 UNF	128	182	71	140	113	65	M10	1/8" bspp
<b>HL304</b>	1"1/2 bspp	1"1/4 bspp	1"1/2-16 UNF	128	228	71	140	113	65	M10	1/8" bspp



# HL40

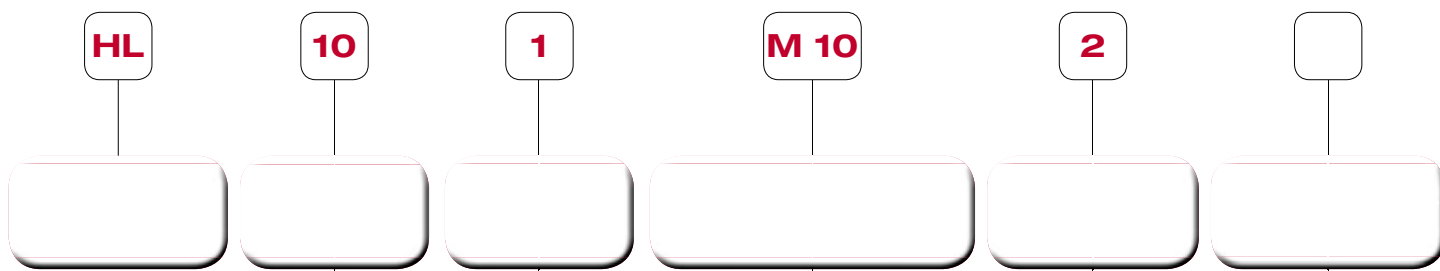


## CARTUCCIA DOPPIA PARALLELA PARALLEL DOUBLE CARTRIDGE

Mod.	A	A II	B	C	D	E	F	G	H	I
<b>HL403</b>	1"1/2 bspp	1"1/4 bspp	128	182	82	287	138	150	M10	1/8" bspp
<b>HL404</b>	1"1/2 bspp	1"1/4 bspp	128	228	82	287	138	150	M10	1/8" bspp

# COME ORDINARE UN FILTRO COMPLETO:

HOW TO ORDER A COMPLETE FILTER:

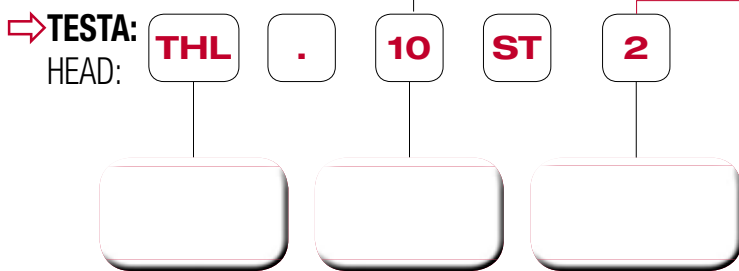


<b>10</b>	3/4" bspp singola - single	<b>1</b>	3/4" Ø95 H.147 (10)	<b>A03</b>	MICROFIBRA 3µm abs 3µm MICROFIBERGLASS abs	<b>1</b>	aspirazione ap. 0,25 bar suction op. 0,25 bar		senza-solo predisposizione without-just predisposition
<b>20</b>	1"1/4 bspp singola - single	<b>2</b>	3/4" Ø95 H.192 (10)	<b>A05</b>	MICROFIBRA 5µm abs 5µm MICROFIBERGLASS abs	<b>2</b>	ritorno ap. 1,7 bar return op. 1,7 bar	<b>M</b>	manometro per ritorno manometer for return line
<b>30</b>	1"1/2 bspp doppia contr. double opposed	<b>3</b>	1"1/4 Ø128 H.182 (20-30-40)	<b>A10</b>	MICROFIBRA 10µm abs 10µm MICROFIBERGLASS abs	<b>3</b>	senza / without	<b>V</b>	vuotometro per aspirazione vacuometer for suction line
<b>40</b>	1"1/2 bspp doppia parallela double parallel	<b>4</b>	1"1/4 Ø128 H.228 (20-30-40)	<b>A25</b>	MICROFIBRA 25µm abs 25µm MICROFIBERGLASS abs			<b>I</b>	pressostato visivo per ritorno visual pressure ind. for return line
				<b>M10</b>	CARTA 10µm nom. 10µm PAPER nom.			<b>L</b>	vuotostato visivo per aspirazione visual vacuum indicator for suction line
				<b>M25</b>	CARTA 25µm nom. 25µm PAPER nom.			<b>P</b>	pressostato n.a. per ritorno pressure switch n.o. for return line
				<b>M60</b>	TELA METALLICA 60µm nom. 60µm METAL MESH nom.			<b>R</b>	vuotostato n.a. per aspirazione vacuum switch n.a. for suction line
				<b>MCV</b>	TELA METALLICA 125µm nom. 125µm METAL MESH nom.			<b>Q</b>	pressostato n.c. per ritorno pressure switch n.c. for return line
				<b>WABS *</b>	30 MICRON ASSORBENTE ACQUA 30 MICRON WATER ABSORBING			<b>S</b>	vuotostato n.c. per aspirazione vacuum switch n.c. for suction line

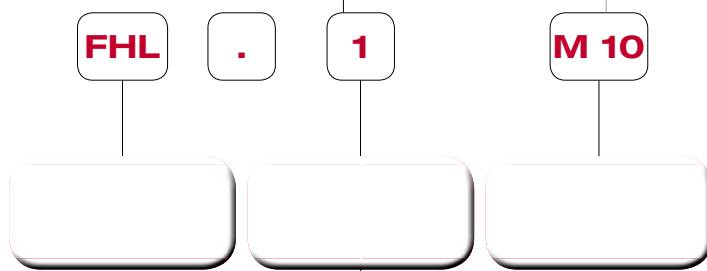
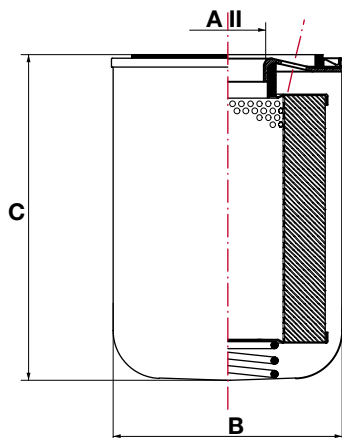
\* Versione su richiesta  
\* Version upon request

# COME ORDINARE UN COMPONENTE:

HOW TO ORDER A COMPONENT:



⇒ **CARTUCCIA:**  
CARTRIDGE:



Dimensioni mm - Dimensions mm			
Mod.	A II	B	C
<b>FHL.1</b>	3/4" bspp	95	147
<b>FHL.2</b>	3/4" bspp	95	192
<b>FHL.3</b>	1"1/4 bspp	128	182
<b>FHL.4</b>	1"1/4 bspp	128	228

### Portate HL in aspirazione\*\*

Portate in l/min. rilevate con  
Dp=0.05 - 0.10 bar

### HL suction flow rates\*\*

Flow rate in l/min. measured with  
Dp=0.05 - 0.10 bar

### Filtedurchfluß (-saug) HL\*\*

Filterdurchfluß in l/min. gemessen  
bei Dp=0.05 - 0.10 bar

### Débits HL à l'aspiration\*\*

Débits en l/min. mesurés avec  
Dp=0.05 - 0.10 bar

### Caudales HP aspiración\*\*

Débits en l/min. mesurés avec  
Dp=0.05 - 0.10 bar

ELEMENTO FILTRANTE FILTERING ELEMENTS	MICROFIBRA / FIBERGLASS				CARTA / PAPER		TELA METALLICA WIRE MESH	
	Mod.	A03 3 MICRON ABS	A05 5 MICRON ABS	A10 10 MICRON ABS	A25 25 MICRON ABS	M10 10 MICRON NOM	M25 25 MICRON NOM	M60 60 MICRON NOM
HL101	7	9	13	15	16	20	30	30
HL102	8	11	15	20	22	30	35	35
HL203	18	32	40	50	53	60	95	95
HL204	27	40	54	65	70	78	100	100
HL303	48	70	95	110	115	130	150	150
HL304	55	79	102	128	130	145	150	150
HL403	48	70	95	110	115	130	150	150
HL404	55	79	102	128	130	145	150	150

\*\* Portate rilevate con olio avente viscosità cinematica di 30 cSt e densità 0.86 kg/dm<sup>3</sup>

\*\* Flow rates measured with oil of 30 cSt kinematic viscosity and 0.86 kg/dm<sup>3</sup>

### Portate HL al ritorno\*\*

Portate in l/min. rilevate con  
Dp=0.4 - 0.5 bar

### HL Flow rates on return line\*\*

Flow rate in l/min. measured with  
Dp=0.4 - 0.5 bar

### Filtedurchfluß HL im Rücklauf\*\*

Filterdurchfluß in l/min. gemessen  
bei Dp=0.4 - 0.5 bar

### Débits HL au retour\*\*

Débits en l/min. mesurés avec  
Dp=0.4 - 0.5 bar

### Caudales HP retorno\*\*

Débits en l/min. mesurés avec  
Dp=0.4 - 0.5 bar

ELEMENTO FILTRANTE FILTERING ELEMENTS	MICROFIBRA / FIBERGLASS				CARTA / PAPER		TELA METALLICA WIRE MESH	
	Mod.	A03 3 MICRON ABS	A05 5 MICRON ABS	A10 10 MICRON ABS	A25 25 MICRON ABS	M10 10 MICRON NOM	M25 25 MICRON NOM	M60 60 MICRON NOM
HL101	30	35	48	65	68	73	80	80
HL102	34	41	55	69	74	80	90	90
HL203	87	102	118	125	130	170	190	190
HL204	92	110	125	135	150	188	205	205
HL303	190	242	270	280	290	325	360	360
HL304	205	255	283	292	305	340	375	375
HL403	190	242	270	280	290	325	360	360
HL404	205	255	283	292	305	340	375	375

\*\* Portate rilevate con olio avente viscosità cinematica di 30 cSt e densità 0.86 kg/dm<sup>3</sup>

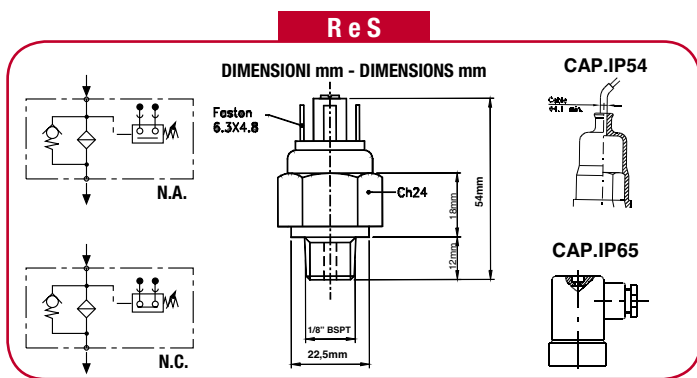
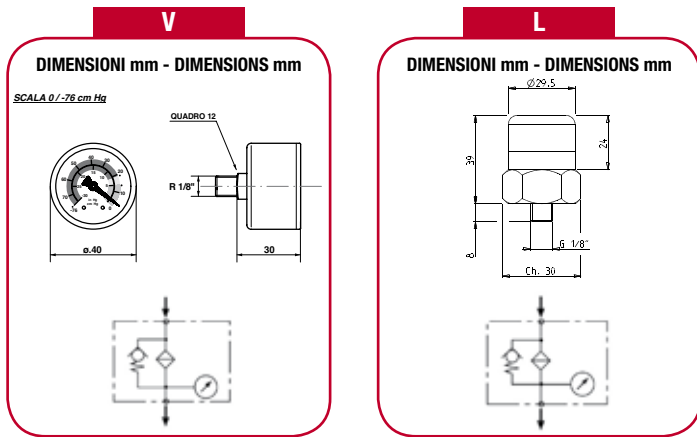
\*\* Flow rates measured with oil of 30 cSt kinematic viscosity and 0.86 kg/dm<sup>3</sup>

- Compatibilità con fluidi: oli minerali (HH-HL-HM-HR-HV-HG) e fluidi sintetici (HS-HFDR-HFDU-HFDS).
- Fluid compatibility: mineral oil (HH-HL-HM-HR-HV-HG) and synthetic fluids (HS-HFDR-HFDU-HFDS).

- Grafici curve  $\Delta p$  VS portata disponibili su richiesta
- Graphic curves  $\Delta p$  VS flow rate available upon request

# INDICATORI INTASAMENTO (ASPIRAZIONE)

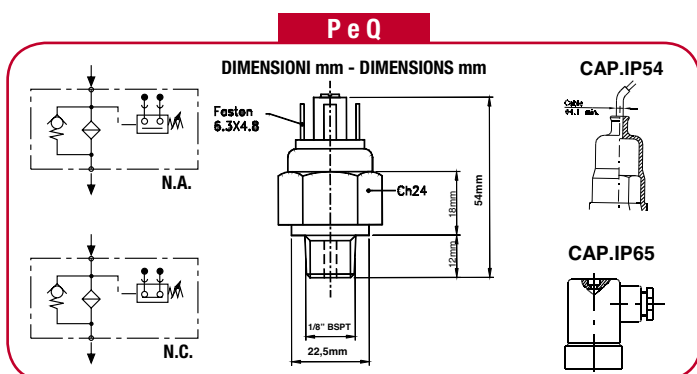
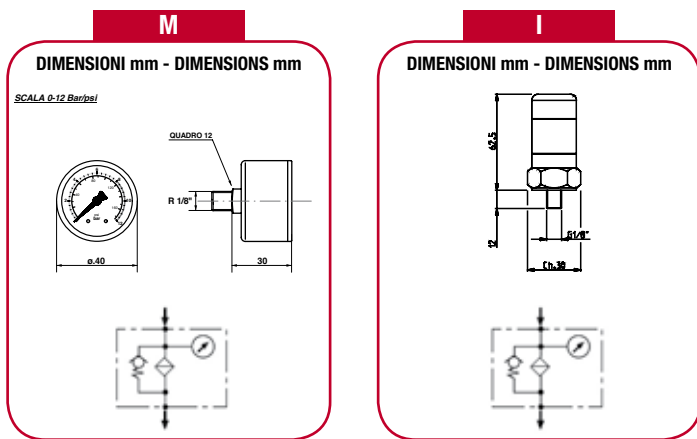
CLOGGING INDICATORS (SUCTION) - VERSCHMUTZUNGSANZEIGEN (SAUG) - INDICATEURS DE COLMAGE (ASPIRATION) - INDICADORES DE SUCIEDAD (ASPIRACION)



SERIE SERIES	TARATURA SETTING	TIPO - TYPE
<b>V</b>	0 ÷ -1 bar	Vuotometro Vacuum gauge Vakuummeter Vacuomètre Vuotometro
<b>L</b>	-0,15 bar	Vacuostato visivo Visual vacuum indicator Visuelle Vakuumschalter Vacuostat visuel Vacuostato visual
<b>R</b>	-0,2 bar	Vuotostato N.A. (Max 240V/0,4A) / (48V/0,5A) Vacuum switch N.O. (Max 240V/0,4A) / (48V/0,5A) Vakuumschalter N.O. (Max 240V/0,4A) / (48V/0,5A) Vacuostat N.O. (Max 240V/0,4A) / (48V/0,5A) Vacuostato N.A. (Max 240V/0,4A) / (48V/0,5A)
<b>S</b>	-0,2 bar	Vuotostato N.C. (Max 240V/0,4A) / (48V/0,5A) Vacuum switch N.C. (Max 240V/0,4A) / (48V/0,5A) Vakuumschalter N.C. (Max 240V/0,4A) / (48V/0,5A) Vacuostat N.F. (Max 240V/0,4A) / (48V/0,5A) Vacuostato N.A. (Max 240V/0,4A) / (48V/0,5A)

# INDICATORI INTASAMENTO (RITORNO)

CLOGGING INDICATORS (RETURN) - VERSCHMUTZUNGSANZEIGEN (RÜCKLAUF) - INDICATEURS DE COLMAGE (RETOUR) - INDICADORES DE SUCIEDAD (RETORNO)



SERIE SERIES	TARATURA SETTING	TIPO - TYPE
<b>M</b>	0 ÷ 12 bar	Manometro Pressure gauge Manometer Manomètre Manometro
<b>I</b>	1,5 bar	Pressostato visivo Visual pressure indicator Optisch Differenzdruckanzeige Pressostat visuel Presostato visual
<b>P</b>	1,5 bar	Pressostato N.A. (Max 240V/0,4A) / (48V/0,5A) Pressure switch N.O. (Max 240V/0,4A) / (48V/0,5A) Druckschalter N.O. (Max 240V/0,4A) / (48V/0,5A) Pressostat N.O. (Max 240V/0,4A) / (48V/0,5A) Presostato N.A. (Max 240V/0,4A) / (48V/0,5A)
<b>Q</b>	1,5 bar	Pressostato N.C. (Max 240V/0,4A) / (48V/0,5A) Pressure switch N.C. (Max 240V/0,4A) / (48V/0,5A) Druckschalter N.C. (Max 240V/0,4A) / (48V/0,5A) Pressostat N.F. (Max 240V/0,4A) / (48V/0,5A) Presostato N.C. (Max 240V/0,4A) / (48V/0,5A)