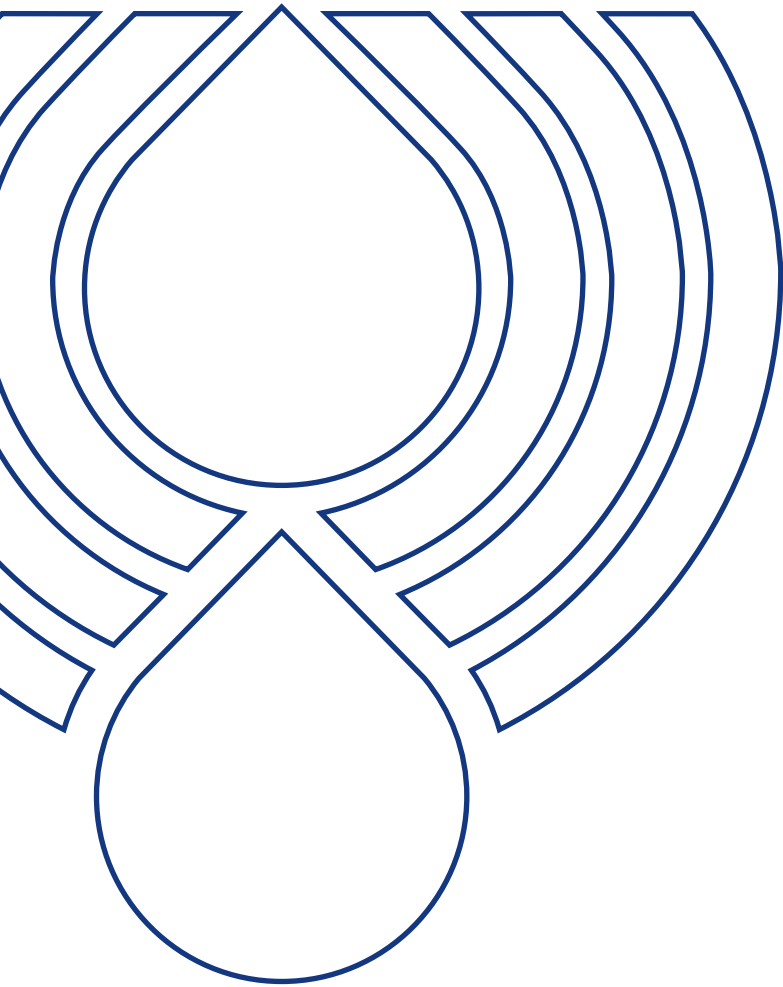


TANK ACCESSORIES



PASSION TO PERFORM





A WORLDWIDE LEADER IN THE FIELD OF HYDRAULIC FILTRATION EQUIPMENT.

Our company started life in 1964, when Bruno Pasotto decided to attempt to cater for the requests of a market still to be fully explored, with the study, design, development, production and marketing of a vast range of filters for hydraulic equipment, capable of satisfying the needs of manufacturers in all sectors. The quality of our products, our extreme competitiveness compared with major international producers and our constant activities of research, design and development has made us a worldwide leader in the field of hydraulic circuit filtering. Present for over 50 years in the market, we have played a truly decisive role in defining our sector, and by now we are a group capable of controlling our entire chain of production, monitoring all manufacturing processes to guarantee superior quality standards and to provide concrete solutions for the rapidly evolving needs of customers and the market.

MARKET LEADER



Our work is based on a skillful interaction between advanced technology and fine workmanship, **customizing products according to specific market requests**, focusing strongly on innovation and quality, and following every step in the manufacturing of both standard and special products, fully respecting customer expectations.



Our customer-oriented philosophy, which enables us to satisfy all customer requests **rapidly and with personalized products**, makes us a **dynamic and flexible enterprise**. The possibility of constantly controlling and monitoring the entire production process is essential to allow us to guarantee the quality of our products.

WORLDWIDE PRESENCE

Our foreign Branches enable us to offer a diversified range of products that allow us to successfully face the aggressive challenge of international competition, and also to maintain a stable presence at a local level.

The Group boasts **8** business branches



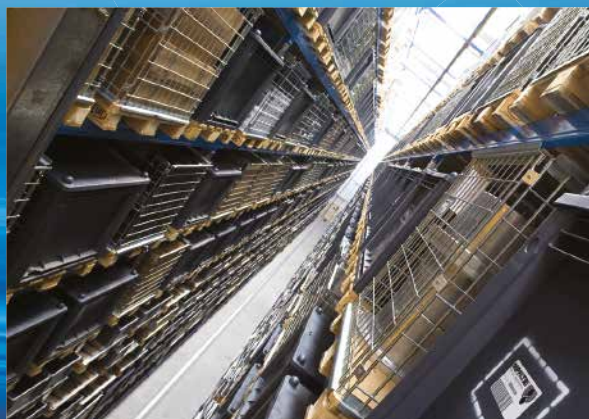
TECHNOLOGY

Our constant **quest for excellence in quality and technological innovation** allows us to offer only the best solutions and services for applications in many fields, including general industry, test rigs, lubrication, heavy engineering, renewable energies, naval engineering, offshore engineering, aviation systems, emerging technologies and mobile plant (i.e. tractors, excavators, concrete pumps, platforms).



AND PRODUCTION

Our high level of technological expertise means **we can rely entirely on our own resources, without resorting to external providers.** This in turn enables us to satisfy a growing number of customer requests, also exploiting our constantly updated range of machines and equipment, featuring **fully-automated workstations** capable of **24-hour production.**





SUCTION FILTERS

Flow rates
up to 875 l/min

- Mounting:
- Tank immersed
 - In-Line
 - In tank with shut off valve
 - In tank with flooded suction

RETURN FILTERS

Flow rates
up to 3000 l/min

- Pressure
up to 20 bar
- Mounting:
- In-Line
 - Tank top
 - In single and duplex designs

RETURN / SUCTION FILTERS

Flow rates
up to 300 l/min

- Pressure
up to 80 bar
- Mounting:
- In-Line
 - Tank top

SPIN-ON FILTERS

Flow rates
up to 365 l/min

- Pressure
up to 35 bar
- Mounting:
- In-Line
 - Tank top

LOW & MEDIUM PRESSURE FILTERS

Flow rates
up to 3000 l/min

- Pressure
up to 80 bar
- Mounting:
- In-Line
 - Parallel manifold version
 - In single and duplex designs

HIGH PRESSURE FILTERS

Flow rates
up to 750 l/min

- Pressure from 110 bar
up to 560 bar
- Mounting:
- In-Line
 - Manifold
 - In single and duplex designs

PRODUCT RANGE

MP Filtri can offer a vast and articulated range of products for the global market, suitable for all industrial sectors using hydraulic equipment.

This includes filters (suction, return, return/suction, spin-on, pressure, stainless steel pressure) and structural components (motor/pump bell-housings, transmission couplings, damping rings, foot brackets, aluminium tanks, cleaning covers).

We can provide all the skills and solutions required by the modern hydraulics industry to monitor contamination levels and other fluid conditions.

Mobile filtration units and a full range of accessories allow us to supply everything necessary for a complete service in the hydraulic circuits.



STAINLESS STEEL HIGH PRESSURE FILTERS

Flow rates up to 125 l/min
Pressure from 320 bar up to 1000 bar

- Mounting:
- In-Line
 - Manifold
 - In single and duplex designs

CONTAMINATION MONITORING PRODUCTS

- Online, in-line particle counters
- Off-line bottle sampling products
- Fully calibrated using relevant ISO standards
- A wide range of variants to support fluid types and communication protocols

MOBILE FILTRATION UNITS

Flow rates from 15 l/min up to 200 l/min

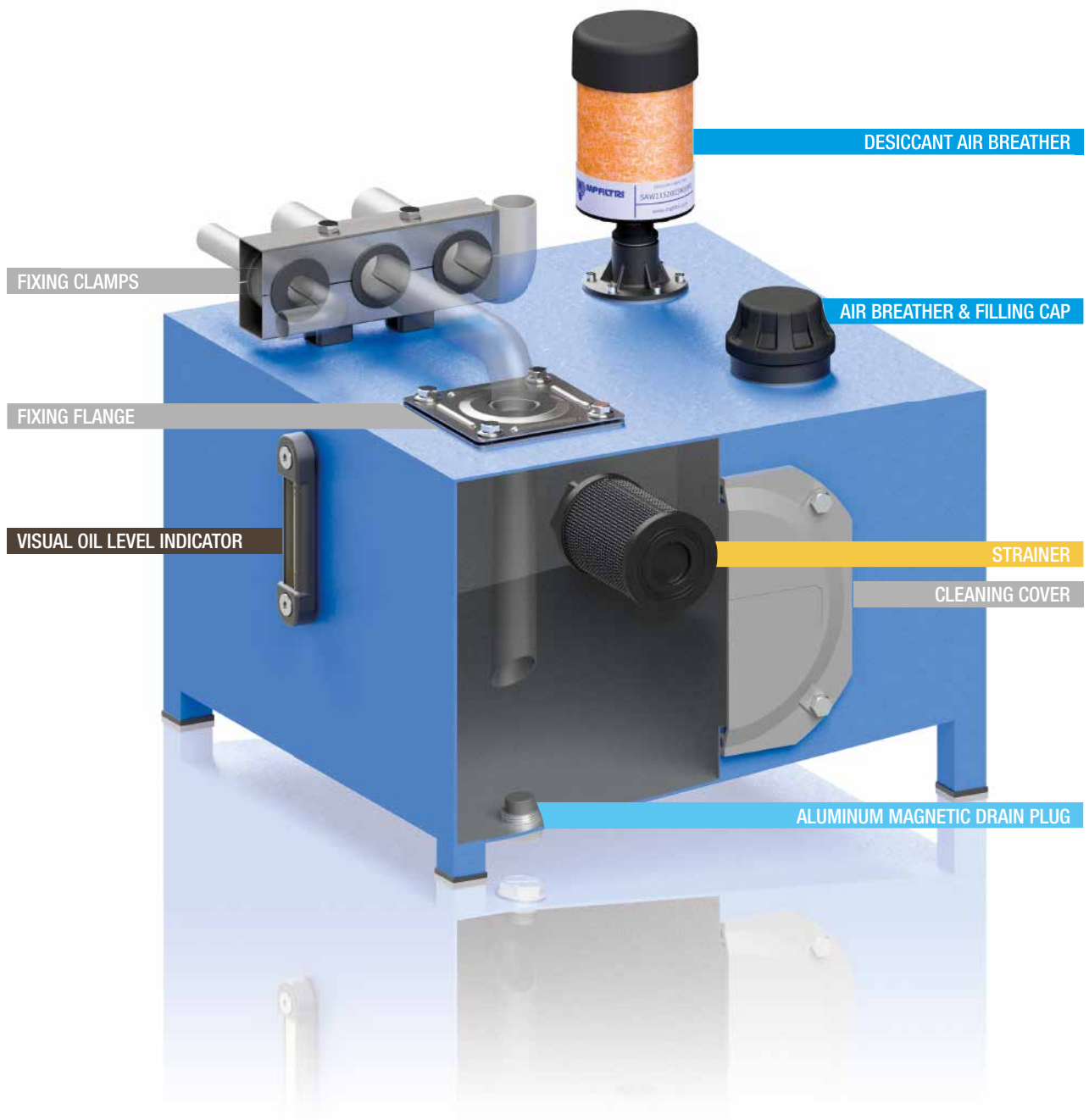
POWER TRANSMISSION PRODUCTS

- Aluminium bell-housings for motors from 0.12 kW to 400 kW
- Couplings in Aluminium Cast Iron - Steel
- Damping rings
- Foot bracket
- Aluminium tanks
- Cleaning covers

TANK ACCESSORIES

- Oil filler and air breather plugs
- Optical and electrical level gauges
- Pressure gauge valve selectors
- Pipe fixing brackets
- Pressure gauges

TANK ACCESSORIES



1 page INTRODUCTION

1	COMPANY
6	PRODUCT RANGE

10 page STRAINERS

13	STR & MPA - MPM	Submerged suction filter, with bypass or magnetic column
----	-----------------	--

20 page AIR BREATHERS AND FILLER PLUGS

23	SAP 054-075 - SA	Air breathers
29	SAW 115	Desiccant air breathers
33	SCS	Metal air breathers with interchangeable filter element
39	SME 1 - SMF 1 - SML 1	Risers for breathers and filler caps installation
45	TA 46 - TAP 50 - SAP 50	Filling cap, air breather & filling cap
53	TA 80	Filling cap
57	TAP 90	Air breather & filling cap
63	TAP 114	Air breather & filling cap
67	TAP 115 & SAP 115	Filling cap, air breather & filling cap

72 page FILLER AND DRAIN PLUGS

75	TC 50	Nylon filler plug
79	TKT - TSD	Nylon filler plugs
79	TKM	Aluminium magnetic drain plug

86 page VISUAL OIL LEVEL INDICATORS

89	LCP - LCC	Spy eyes
95	LVA - LVU	Visual oil level indicator

100 page ELECTRICAL OIL LEVEL INDICATORS

103	LEN - LEG - LET - LEM - LEU	Electrical oil level indicator
115	LVK	Electrical and visual oil level indicator

120 page ACCESSORIES

123	EM1	Gauge isolator valves
129	SVM	Gauge isolator valves
133	FTA - FTR	Oil tank fixing flange
137	SFT	Fixing clamps
143	OB	Cleaning covers
149	SE10LT	Aluminium tanks

Strainers are used as safety filters to protect pumps from gross contamination which can cause them to grip.



STR & MPA - MPM series

Flow rate up to 875 l/min



STR & MPA-MPM GENERAL INFORMATION

Description

Technical data

Strainers

Flow rate up to 875 l/min

STR

STR is a range of suction strainers for protection of the downstream pump against the coarse contamination.

They are placed below the oil level directly connected to the suction line of the pump.

Available features:

- Female threaded connections up to 3", for a maximum flow rate of 875 l/min
- Bypass valve, to relieve excessive pressure drop across the filter media

Common application:

- Mobile machines (Construction and Agriculture machines)
- Industrial equipment

MPA - MPM

MPA and MPM are ranges of suction strainers for protection of the downstream pump against the coarse contamination.

They are placed below the minimum oil level, directly connected to the suction line of the pump.

The robust design allows the use of these filters in any heavy duty application.

Available features:

- Female threaded connections up to 3", for a maximum flow rate of 875 l/min
- Magnetic column (MPM), to hold the ferrous particles

Common application:

Industrial equipment

STR materials

- 1 - Connection: Polyamide, GF reinforced
- 2 - Core tube: Tinned steel
- 3 - Wire mesh
- 4 - End cap: Polyamide, GF reinforced
- 5 - Bypass valve: Polyamide, GF reinforced - Steel

MPA - MPM materials

- 1 - Connection: Aluminium
- 2 - Magnetic column
- 3 - Tie rod: Galvanized steel
- 4 - End cap: Galvanized steel
- 5 - Core tube: Galvanized steel
- 6 - Filter media: Wire mesh
- 7 - Bottom: Galvanized steel
- 8 - Washer: Galvanized steel
- 9 - Self-locking nut: Galvanized steel - Nylon

Bypass valve

Opening pressure 30 kPa (0.3 bar)

Elements

Fluid flow through the filter element from OUT to IN.

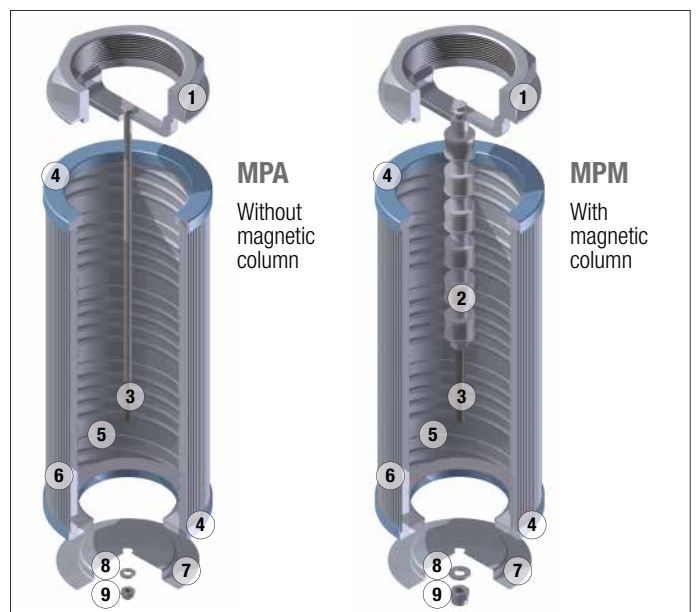
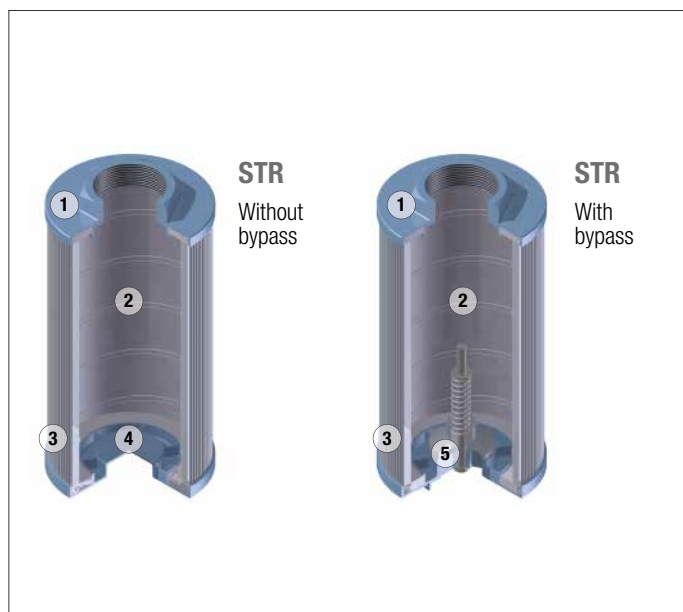


Temperature

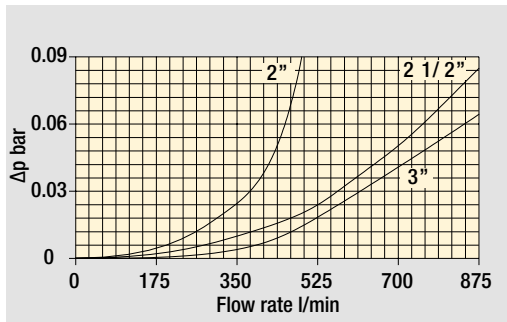
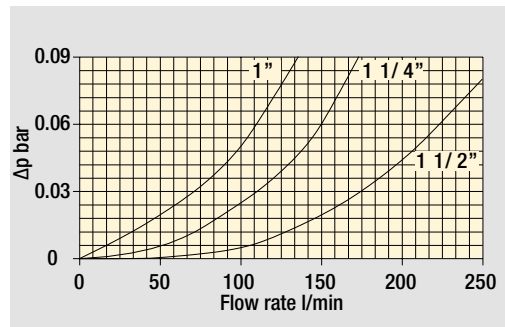
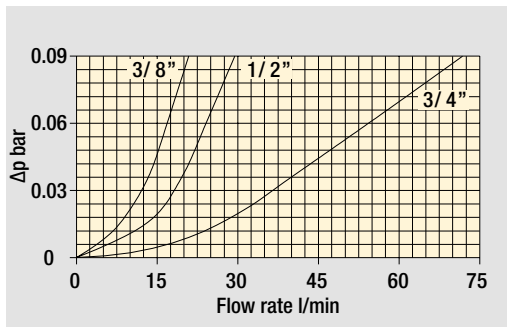
From -25 °C to +110 °C

Weights [kg]

Filter series	
STR	see page 17
MPA - MPM	see page 19



Filters pressure drop Δp
in function of connection type



The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968.
 Δp varies proportionally with density.

Flow rates [l/min]

Filter series	Thread	l/min
STR & MPA - MPM	3/8"	19
	1/2"	28
	3/4"	67
	1"	126
	1 1/4"	167
	1 1/2"	258
	2"	480
	2 1/2"	854
	3"	995

Hydraulic symbols

Filter series	Style S	Style B
STR	•	•
MPA - MPM	•	

Maximum flow rate for a complete suction filter with a pressure drop $\Delta p = 0.08 \text{ bar}$.

The reference fluid has a kinematic viscosity of $30 \text{ mm}^2/\text{s}$ (cSt)
and a density of 0.86 kg/dm^3 .

For different pressure drop or fluid viscosity we recommend to use
our selection software available on www.mpfiltri.com.

Please, contact our Sales Department for further additional information.

COMPLETE FILTER

Element series and size

STR045
STR050
STR065
STR070
STR086
STR100
STR140
STR150

Configuration example 1: STR045 1 B G1 M60 P01

Configuration example 2: STR100 4 S G2 M250 P01

Connection type

	STR045	STR050	STR065	STR070	STR086	STR100	STR140	STR150
1	3/8"	3/8"	1/2"	1/2"	1 1/2"	1 1/4"	1 1/2"	2"
2	1/2"	1/2"	3/4"	3/4"	2"	1 1/4"	2"	2 1/2"
3	-	-	3/4"	3/4"	1 1/2"	1 1/2"	2"	3"
4	-	-	1"	1"	2"	2"	2 1/2"	-
5	-	-	-	-	1 1/2"	1 1/2"	3"	-
6	-	-	-	1/2"	2"	-	3"	-

Valves

S	Without bypass
B	With bypass 0.3 bar

Thread type

G1	Thread GAS
G2	Thread NPT

Filtration rating (filter media)

M25	Wire mesh	25 µm
M60	Wire mesh	60 µm
M90	Wire mesh	90 µm
M250	Wire mesh	250 µm

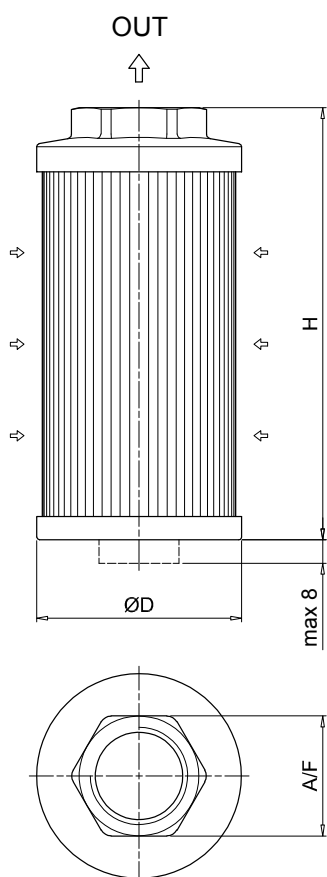
OTHER INFORMATION

Conditions of packaging

Filter size	Pcs. per box
045	12
050	12
065	6
070	6
086	6
100	6
140	1
150	1

Execution

P01	MP Filtri standard
Pxx	Customized



STR						
Filter size	Connection type	Thread	ØD [mm]	H [mm]	A / F [mm]	Weight [kg]
045	1	3/8"	46	105	30	0.15
	2	1/2"	46	105	30	0.19
050	1	3/8"	52	79	30	0.11
	2	1/2"	52	79	30	0.11
065	1	1/2"	65	110	41	0.19
	2	3/4"	65	110	41	0.22
	3	3/4"	65	144	41	0.24
	4	1"	65	144	41	0.22
070	1	1/2"	70	95	41	0.18
	2	3/4"	70	95	41	0.17
	3	3/4"	70	141	41	0.23
	4	1"	70	141	41	0.22
	6	1/2"	70	141	41	0.24
086	1	1 1/2"	86	143	69	0.33
	2	2"	86	143	69	0.30
	3	1 1/2"	86	201	69	0.43
	4	2"	86	201	69	0.40
	5	1 1/2"	86	261	69	0.53
	6	2"	86	261	69	0.50
100	1	1 1/4"	99	137	69	0.47
	2	1 1/4"	99	227	69	0.58
	3	1 1/2"	99	227	69	0.55
	4	2"	99	227	69	0.51
	5	1 1/2"	99	137	69	0.43
140	1	1 1/2"	130	160	69	0.70
	2	2"	130	160	69	0.68
	3	2"	130	262	69	0.94
	4	2 1/2"	130	272	101	1.10
	5	3"	130	272	101	1.00
	6	3"	130	330	101	1.17
150	1	2"	150	150	70	0.34
	2	2 1/2"	150	212	90	0.37
	3	3"	150	272	100	0.40

MPA-MPM

Designation & Ordering code

COMPLETE FILTER

Element series

MPA Without magnetic column

MPM With magnetic column

Configuration example 1: **MPA** **030** **G1** **M60** **P01**

Configuration example 2: **MPM** **430** **G2** **M250** **P01**

Connections

012 3/8"

015 1/2"

025 1/2"

030 3/4"

045 3/4"

050 1"

075 1"

095 1 1/4"

120 1 1/4"

150 1 1/2"

180 1 1/2"

220 2"

280 2"

300 2 1/2"

380 2"

430 3"

Thread type

G1 Thread GAS

G2 Thread NPT

Filtration rating (filter media)

M25 Wire mesh 25 µm

M60 Wire mesh 60 µm

M90 Wire mesh 90 µm

M250 Wire mesh 250 µm

Execution

P01 MP Filtri standard

Pxx Customized

OTHER INFORMATION

Conditions of packaging

Size Pcs. per box

012 12

015 6

025 6

030 6

045 6

050 6

075 6

095 6

120 6

150 6

180 1

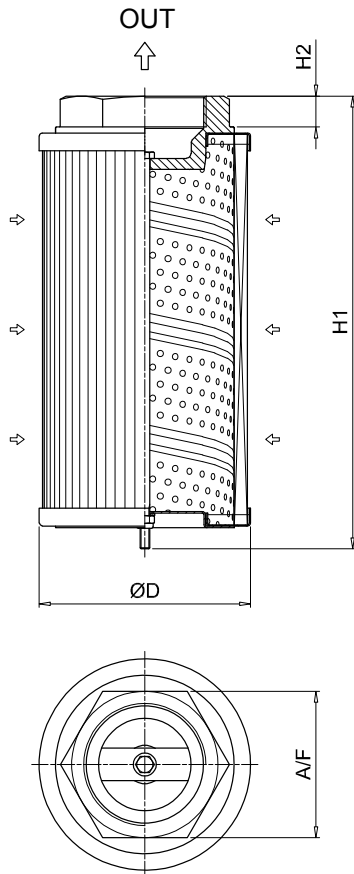
220 1

280 1

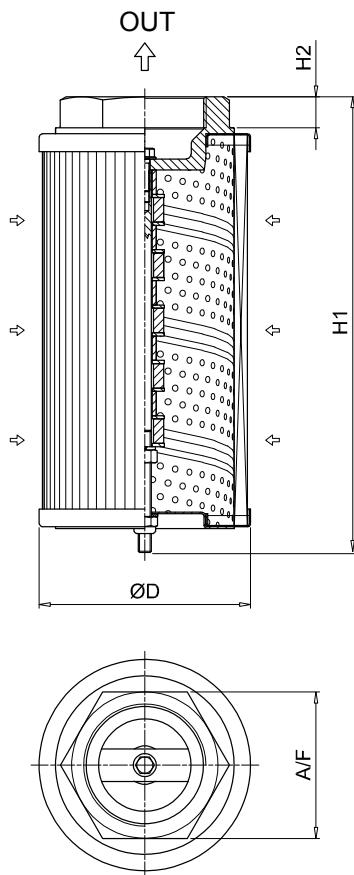
300 1

380 1

430 1



MPA						
Filter size	Thread	ØD [mm]	H1 [mm]	H2 [mm]	A/F [mm]	Weight [kg]
012	3/8"	50	98	16	28	0.17
015	1/2"	50	98	16	28	0.17
025	1/2"	70	113	16	28	0.27
030	3/4"	70	115	18	42	0.36
045	3/4"	70	160	18	42	0.39
050	1"	70	160	18	42	0.35
075	1"	99	145	18	42	0.54
095	1 1/4"	99	148	20	60	0.63
120	1 1/4"	99	239	20	60	0.95
150	1 1/2"	99	239	20	60	0.91
180	1 1/2"	130	174	20	60	0.98
220	2"	130	162	13	80	1.00
280	2"	130	272	13	80	1.60
300	2 1/2"	130	281	20	90	1.67
380	2"	130	322	13	80	1.60
430	3"	130	335	22	106	1.93



MPM						
Filter size	Thread	ØD [mm]	H1 [mm]	H2 [mm]	A/F [mm]	Weight [kg]
012	3/8"	50	98	16	28	0.17
015	1/2"	50	98	16	28	0.17
025	1/2"	70	113	16	28	0.27
030	3/4"	70	115	18	42	0.36
045	3/4"	70	160	18	42	0.39
050	1"	70	160	18	42	0.35
075	1"	99	148	18	42	0.54
095	1 1/4"	99	154	20	60	0.63
120	1 1/4"	99	244	20	60	0.95
150	1 1/2"	99	244	20	60	0.91
180	1 1/2"	130	174	20	60	0.98
220	2"	130	163	13	80	1.00
280	2"	130	273	13	80	1.60
300	2 1/2"	130	282	20	90	1.67
380	2"	130	323	13	80	1.60
430	3"	130	336	22	106	1.93



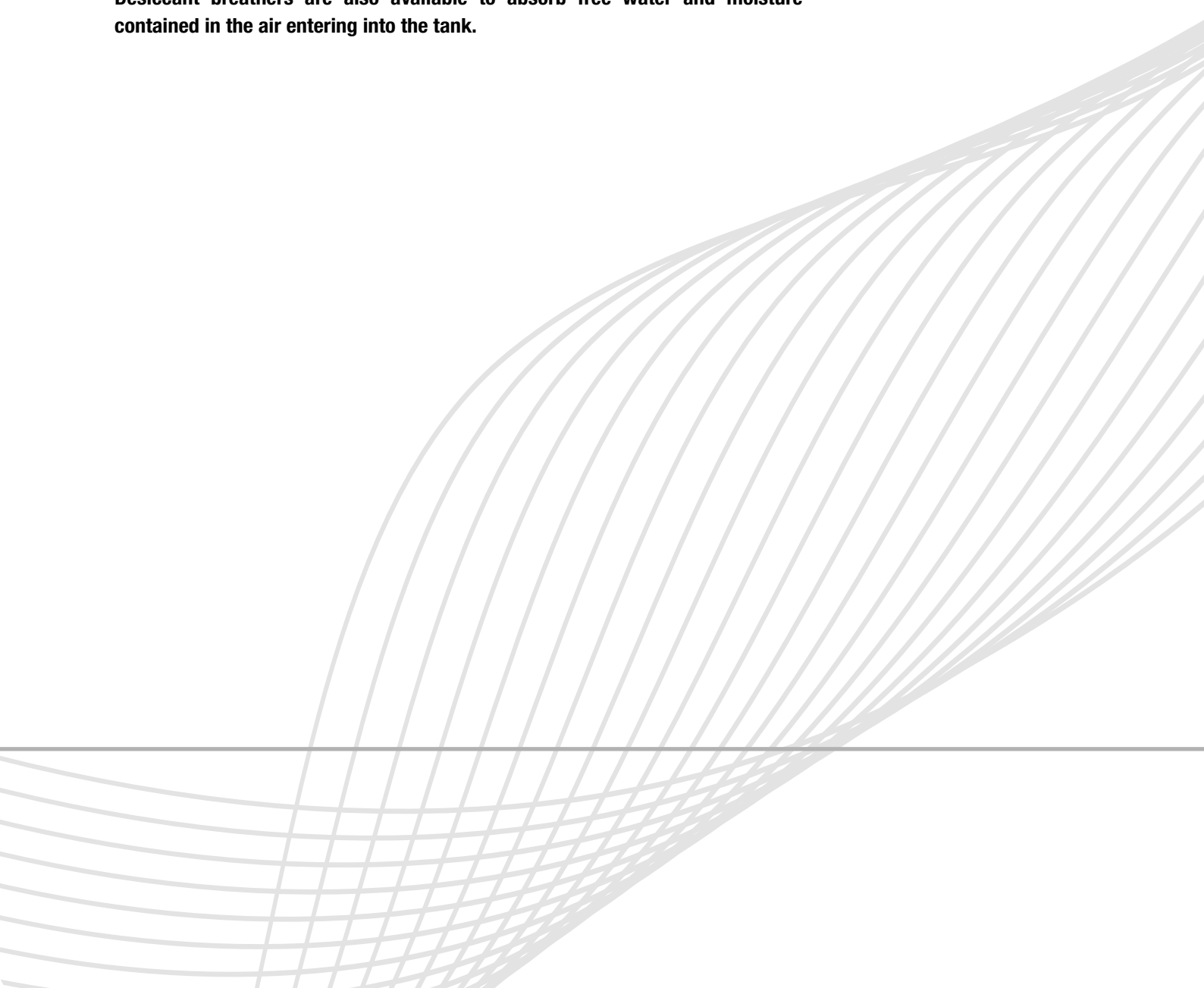
The complete series of air breathers and filler plugs makes it possible to meet all market demands.

Metal and plastic versions suitable for use on mobile equipment are available.

Filler plugs perform a dual function, air filtration at the tank inlet and prefiltration of the fluid by means of the basket, in order to prevent the ingress of foreign material into the tank during filling and top-up operations.

Correct operation of breather filters makes for longer life of the filter cartridges installed in the hydraulic circuit, and in applications where high level of contamination are present.

Desiccant breathers are also available to absorb free water and moisture contained in the air entering into the tank.



Air Breathers & Filler Plugs



SAP 054-075 - SA	page 23
SAW 115	29
SCS	33
SME 1 - SMF 1 - SML 1	39
TA 46 - TAP 50 - SAP 50	45
TA 80	53
TAP 90	57
TAP 114	63
TAP 115 & SAP 115	67

SAP 054-075 series

Nylon air breather filter

SA series

Metal air breather filter



Technical data

Air breathers & Filler plugs

Nylon air breather filter Flow rate up to 400 l/min

SAP is a range of plastic air breathers for protection of the tank against the solid contamination contained into the air. They are usually directly fitted on the tank.

Available features:

- Male threaded connections up to 3/4", for a maximum flow rate of 400 l/min
- Replaceable filter element
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Polyester media is an option for heavy environmental conditions (high humidity, sand ...)

Common applications:

- Mobile machines (construction and agriculture machines)
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	L03
SAP054	200	250
SAP075	350	400

Materials

- Cover: Nylon
- Connection: Nylon
- Filter element: Resin impregnated paper

Temperature

From -25 °C to +100 °C

Weight

SAP 054 - 0.06 kg
SAP 075 - 0.15 kg



Designation & Ordering code

COMPLETE AIR BREATHER

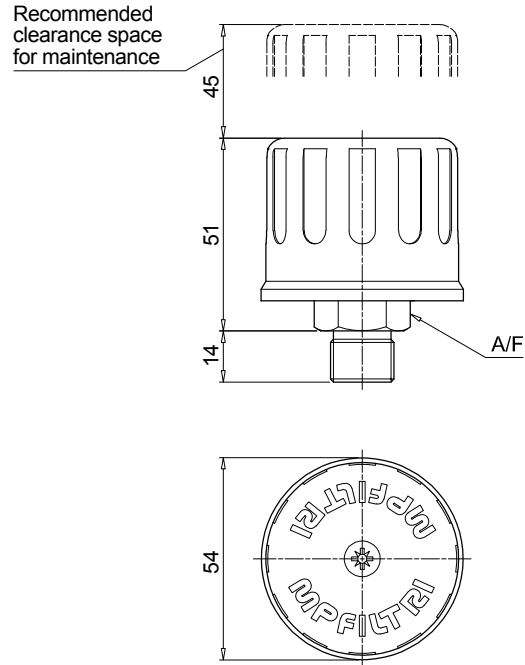
Series and size	Configuration example : SAP054 G2 L10 A P01				
SAP054					
SAP075					
Connections to the tank	SAP054	SAP075			
G1	G 3/8"	G 1/2"			
G2	G 1/2"	G 3/4"			
Filtration rating					
L03	Resin impregnated paper	3 µm			
L10	Resin impregnated paper	10 µm			
Seals					
A	NBR				
			Execution		
			P01	MP Filtri standard	
			Pxx	Customized	

FILTER ELEMENT

Filter element series and size	Configuration example : A4 L10 P01			
A4	SAP054			
A7	SAP075			
Filtration rating				
L03	Resin impregnated paper	3 µm		
L10	Resin impregnated paper	10 µm		
			Execution	
			P01	MP Filtri standard
			Pxx	Customized

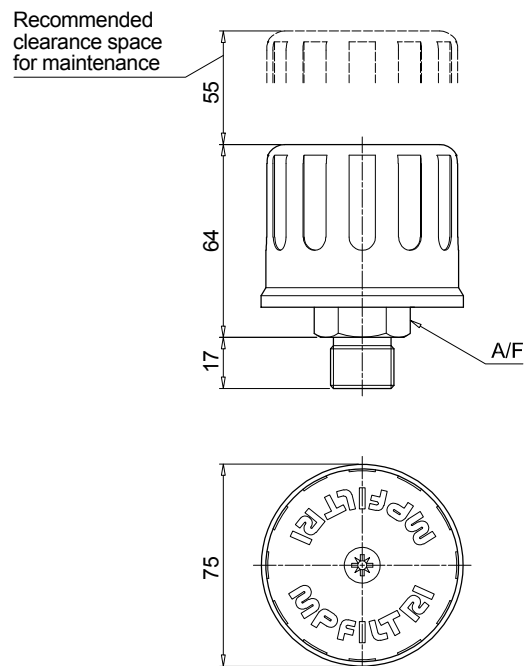
SAP054

Connection	A/F [mm]
G1	22
G2	27



SAP075

Connection	A/F [mm]
G1	27
G2	32



Technical data

Air breathers & Filler plugs

Metal air breather filter Flow rate up to 2500 l/min

SA is a range of metal air breathers for protection of the tank against the solid contamination contained into the air.

They are usually directly fitted on the tank. The robust design allows the use of these filters in any heavy-duty application.

Available features:

- Male threaded connections up to 2 1/2", for a maximum flow rate of 2500 l/min
- Replaceable filter element
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Polyester media is an option for heavy environmental conditions (high humidity, sand ...)

Common applications:

- Mobile machines (construction and agriculture machines)
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	L03
SA036	140	140
SA053	250	250
SA075	350	400
SA115	800	850
SA145	1800	1850
SA185	2300	2500

Materials

- Cover: Steel
- Connection: Anodized steel, Galvanized steel
- Filter element: Resin impregnated paper
- Screws: Galvanized steel
- Washer: Teflon
- Ring: Galvanized steel
- Seals: NBR

Temperature

From -25 °C to +100 °C

Weight

- SA 036 - 0.08 kg
- SA 053 - 0.15 kg
- SA 075 - 0.26 kg
- SA 115 - 0.40 kg
- SA 145 - 0.59 kg
- SA 185 - 1.22 kg



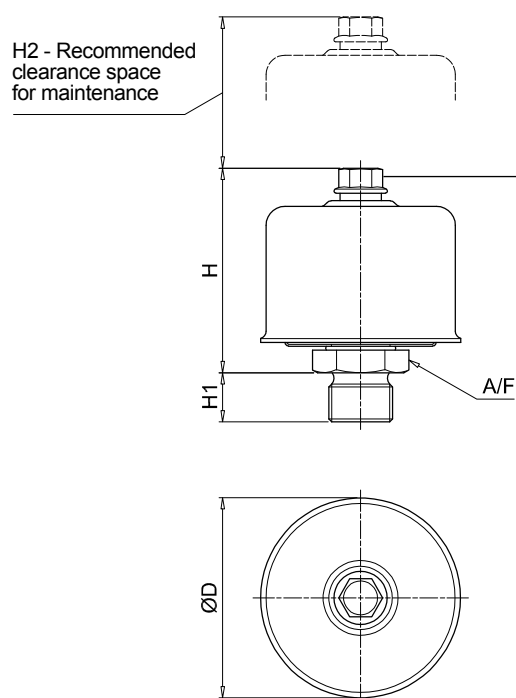
Designation & Ordering code

COMPLETE AIR BREATHER

Series and size						Configuration example : SA115 G1 L10 A P01				
SA036	SA053	SA075	SA115	SA145	SA185					
Connections to the tank										
	SA036	SA053	SA075	SA115	SA145	SA185				
G1	G 1/4"	G 1/4"	G 1/2"	G 1"	G 1 1/2"	G 2 1/2"				
G2	G 3/8"	G 3/8"	G 3/4"	-	-	-				
G3	G 1/2"	-	-	-	-	-				
G4	1/4" NPT	1/4" NPT	1/2" NPT	1" NPT	1 1/2" NPT	2 1/2" NPT				
G5	3/8" NPT	3/8" NPT	3/4" NPT	-	-	-				
G6	1/2" NPT	-	-	-	-	-				
Filtration rating										
L03	Resin impregnated paper		3 µm							
L10	Resin impregnated paper		10 µm							
S	Without filter element									
							Seals		Execution	
							A NBR		P01 MP Filtri standard	
									Pxx Customized	

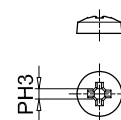
FILTER ELEMENT

Filter element series and size						Configuration example : A8 L10 P01		
A05	A5	A7	A8	A10	A11			
Filtration rating (filter media)								
L03	Resin impregnated paper		3 µm					
L10	Resin impregnated paper		10 µm					
							Execution	
							P01 MP Filtri standard	
							Pxx Customized	

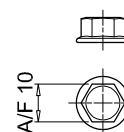


Type of bolt/nut

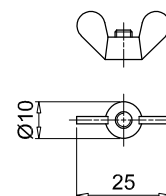
Phillips:
SA036



Hex:
SA053
SA075
SA115
SA145



Wings:
SA185



Type	Connection	ØD [mm]	H [mm]	H1 [mm]	H2 [mm]	A/F [mm]
036	G1 ÷ G6	36	37	13	30	22
053	G1-G2-G4-G5	53	53	13	50	22
075	G1	75	69	13	60	27
	G2			17		32
	G4			15		27
	G5			20		32
115	G1 - G4	115	80	17	70	38
145	G1 - G4	145	115	25	100	55
185	G1 - G4	185	164	25	150	90

SAW 115 series

Moisture control desiccant air breather



SAW 115 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Moisture control desiccant air breather

Max air flow up to 453 l/min

SAW is a range of desiccant breathers; they are products that combine the filtration of the solid contamination and the absorption of the free water contained into the air.

They are usually directly fitted on the tank; the filter layers remove the solid contamination while the desiccant agent holds the moisture contained in the air that enters into the tank as result of the tank breathing.

While in service or during shut-down, the desiccant agent dries the equipment, absorbing moisture from the reservoir.

Available features:

- Male threaded connections up to 1", for a maximum flow rate of 453 l/min
- Fine filtration rating, to get a good cleanliness level into the reservoir

Common applications:

Hydraulic systems, oil storage, tanks, transformers, renewable energy, Gearboxes.

Chemical Compatibility

Recommended:

- All Gear Oil
- Most Hydraulic Fluid
- Mineral and Synthetic Oil

Not Recommended:

- Phosphate Ester
- Hydrogen Sulphide
- Sulphuric Acid
- High Alkaline Cleaner

Flow rate Δp 0.02 bar

	Flow rate [l/min]
Filtration rating	03
SAW115	453

Materials

Connection: Nylon
Internal Support Pipe: Nylon
Screen: Polycarbonate
Cover: Nylon
Dryer Agent: Silica Gel

Filter Efficiency 3 μ m absolute (B₃ \geq 200)

Seals NBR

Temperature From -25 °C to +90 °C

Humidity Level Below Ambient Conditions

SAW115G03A00P01 : protects 30,000+ cycles

Deliquescent: Protects 5,000 cycles
(Testing parameters 23 °C, 30 l/min)

Silica Gel Weight

Lenght 1: 0.32 kg
Lenght 2: 0.56 kg
Lenght 3: 0.84 kg

Total Weight

Lenght 1: 0.60 kg
Lenght 2: 0.90 kg
Lenght 3: 1.20 kg



Designation & Ordering code

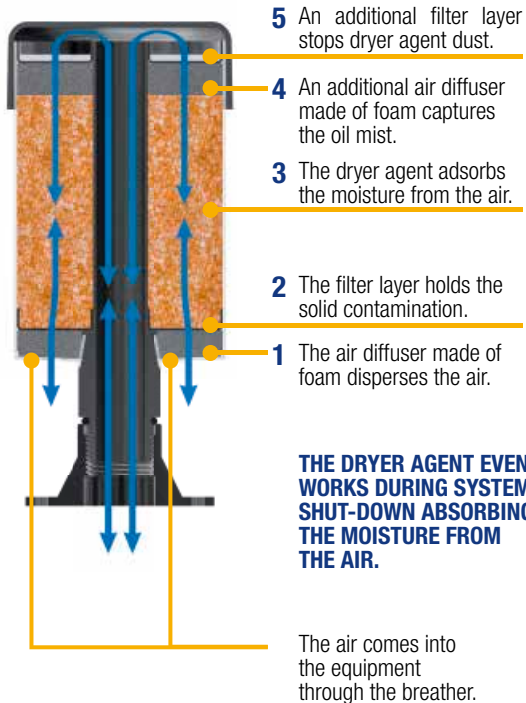
MOISTURE CONTROL DESICCANT BREATHER

Series and size	Configuration example :	SAW115	1	G	03	A	0	0	P01
SAW115									
Length			1 2 3						
Connections to the tank				G Thread 1"					
Filtration rating					03 Orange Silica Gel				
Seals						A NBR			
Valve							0 Without valve		
Option								0 Standard	
Execution									P01 MP Filtri standard Pxx Customized

ACCESSORIES

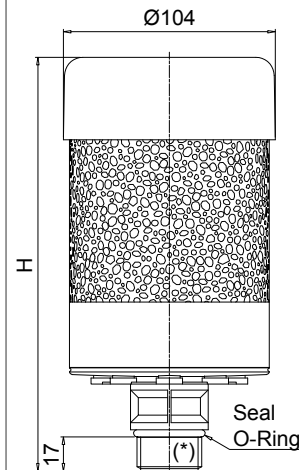
Series and size	Configuration example :	SMG1	S	A	P02
SMG Adapter Flange					
Connections to the tank			S Without screws		
Seals				A NBR	
Execution					P02 MP Filtri standard

How does SAW Series works

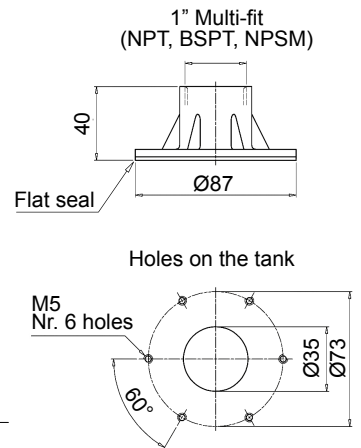


SAW115

Length	H [mm]
1	154
2	205
3	256



Optional 6-hole tank flange SMG1 type



(*) 1" Multi-fit (NPT, BSPT, NPSM)

Silica gel

Active breather



Depleted breather



Silica gel is the most efficient and economic moisture adsorbent for general applications.

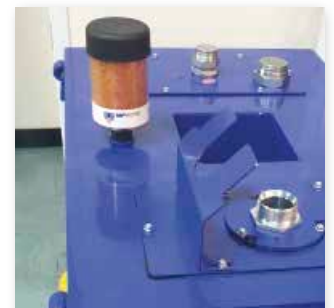
A white breather means the unit has done its job keeping moisture out of your lubricants.

Whenever the colour changes from orange to white it's time to replace the breather with a new one.

All breathers should be changed at least once a year.

IMPORTANT

Dispose of the exhausted silica gel according to the regulations in force in the country of use.



Air vent holes

Max hydraulic flow rate [l/min (cfm)]	Holes to open
up to 110 (4)	2
from 111 to 220 (4-8)	4
from 221 to 330 (8-12)	6
from 331 to 452 (12-16)	8

IMPORTANT INSTALLATION INFORMATION

- The air vent holes are plugged for any new breather
- The plugs protect the dryer agent during storage and shipment
- The plugs must be taken out during the installation, according to the max hydraulic flow rate



SCS series

Metal air breather filter



Technical data

Air breathers & Filler plugs

Metal air breather filter

Flow rate up to 1330 l/min

SCS is a range of air breathers for protection of the tank against the solid contamination contained into the air.

They are composed of a spin-on filter can screwed on a connection tube, directly fitted on the tank. They are usually directly fitted on the tank.

Available features:

- Weld or flanged connection, for a maximum flow rate of 1415 l/min
- Fine cellulose and microfibre filtration, to get a good cleanliness level into the reservoir

Common applications:

- Mobile machines (construction and agriculture machines)
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]		
	Filtration rating	P10	A03
SCS050	550	515	530
SCS070	550	515	530
SCS100	1415	1300	1330
SCS150	1415	1300	1330

Materials

Riser: Galvanized steel

Temperature

From -25 °C to +100 °C

Weight

SCS050...G1: 0,200 kg
 SCS050...G2: 0,265 kg
 SCS100...G1: 0,450 kg
 SCS100...G2: 0,645 kg

CS/CG050: 0,73 kg
 CS/CG070: 0,95 kg
 CS100: 1,3 kg
 CS150: 1,6 kg
 CG100: 1,3 kg
 CG150: 1,6 kg



Designation & Ordering code

METAL AIR BREATHER FILTER

Series and size				Configuration example 1 :					
SCS050	SCS070	SCS100	SCS150	SCS050	C	G2		V	P01
				Configuration example 2 :					
				SCS150	C	G2	A10	V	P01
Connections to the tank									
C	Weld riser								
F	Screwed flange								
Threaded connection		SCS050 - 070		SCS100 - 150					
G1	Connection ISO 228	G 3/4"	G 1 1/4"						
G2	Connection U.S. standard	1" - 12 UNF	1 1/2" - 16 UN						
Filtration rating		Size:	050	070	100	150			
Without filter element			•	•	•	•			
A03	Inorganic microfiber	3 µm	•	•	•	•			
A10	Inorganic microfiber	10 µm	•	•	•	•			
P10	Resin impregnated paper	10 µm	•	•	•	•			
Seals									
A	NBR								
V	FPM								
Execution									
P01	MP Filtri standard								
Pxx	Customized								

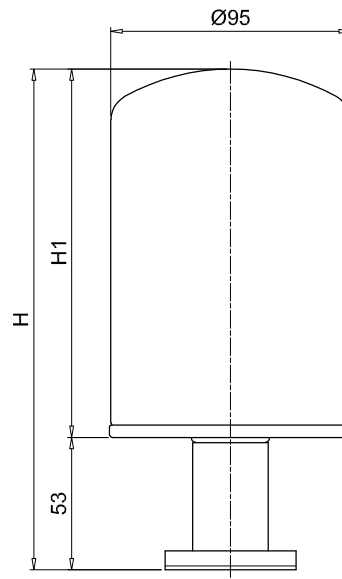
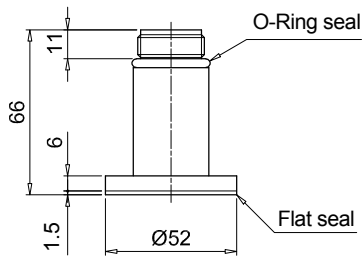
FILTER ELEMENT

Filter element series		Threaded connection:		Configuration example :					
CS	Connection ISO 228	G1	G2	CG	150	A10	V	P01	
CG	Connection U.S. standard								
Filter element size									
050	070	100	150						
Filtration rating									
A03	Inorganic microfiber	3 µm							
A10	Inorganic microfiber	10 µm							
P10	Resin impregnated paper	10 µm							
Seals									
A	NBR								
V	FPM								
Execution									
P01	MP Filtri standard								
Pxx	Customized								

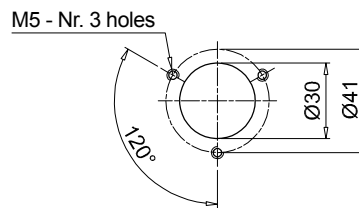
SCS050-070

Screwed flange

Size	H [mm]	H1 [mm]
050	199	146
070	263	210



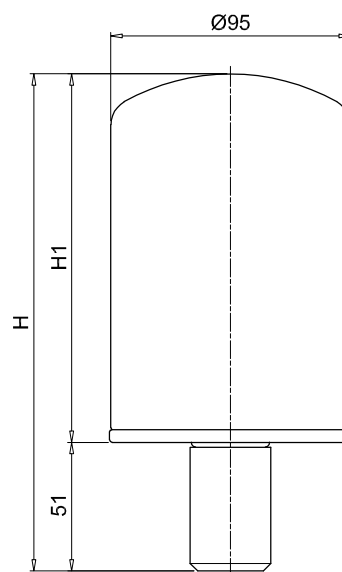
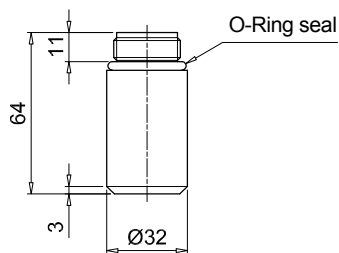
Holes on the tank



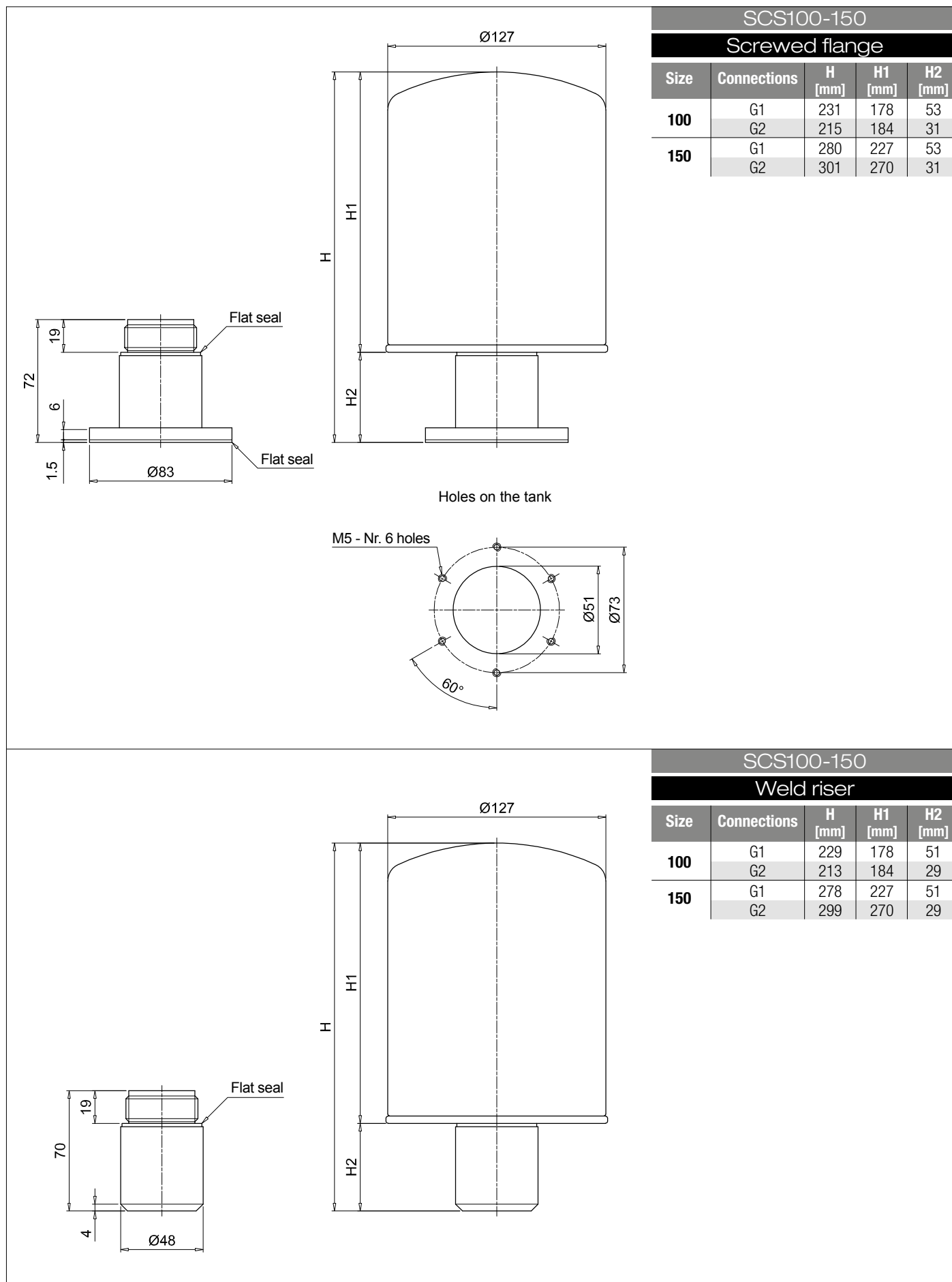
SCS050-070

Weld riser

Size	H [mm]	H1 [mm]
050	197	146
070	261	210



Dimensions



SME 1 - SMF 1 - SML 1 series

Risers for breathers and filler caps installation



Technical data

Air breathers & Filler plugs

Risers for breathers and filler caps installation

SME/SMF/SML are ranges of risers for installation of the breathers and filler caps in any place on the tank. They make the maintenance operation easy and fast.

Available features:

- SME: vertical riser made of polyamide for nylon tanks, mainly used in the mobile machines
- SMF: sloping riser made of polyamide for nylon tanks, mainly used in the mobile machines
- SML: sloping riser made of aluminium for metal tanks, mainly used in the industrial equipment and heavy-duty applications

Materials SME

- Body: Nylon
- Seals: NBR
Cork gasket
- Screws: Phosphatized steel
Galvanized steel

Materials SMF

- Body: Nylon
- Seals: NBR
Cork gasket
- Screws: Phosphatized steel
Galvanized steel

Materials SML

- Body: Aluminium
- Seals: NBR
Cork gasket
- Screws: Phosphatized steel

Temperature

From -25 °C to +100 °C

Weight

- SME - 0.250 kg
- SMF - 0.325 kg
- SML - 0.380 kg

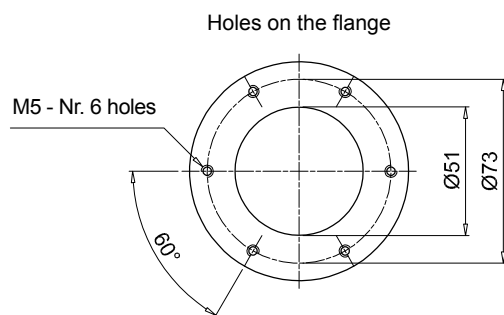
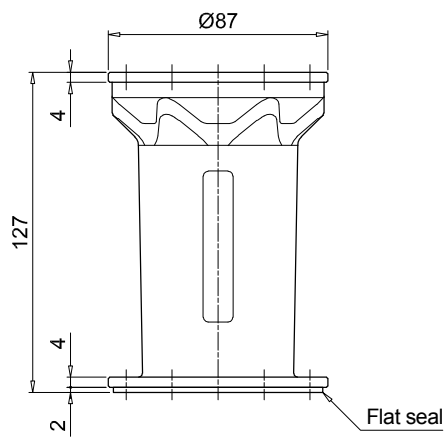
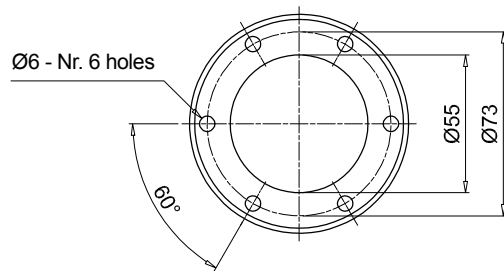


Designation & Ordering code

SME / SMF / SML

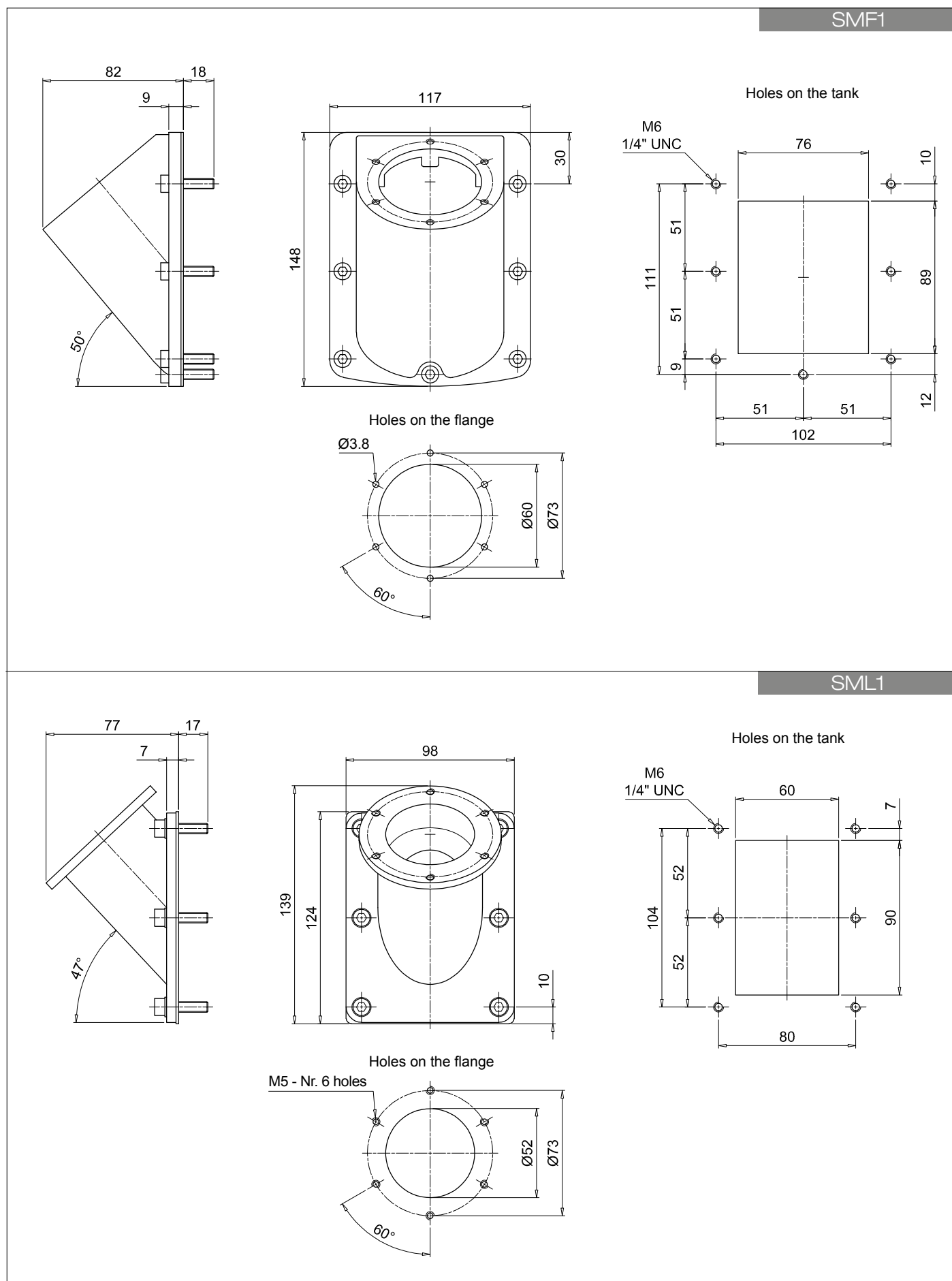
Series and size		Configuration example: SMF1 M A P01			
SME1	Polyamide vertical riser				
SMF1	Polyamide sloping riser				
SML1	Aluminium sloping riser				
Connections to the tank					
M	Metric screws				
U	UNC screws				
Seals					
A	NBR				
Execution		Series			
		SME1	SMF1	SML1	
P01	MP Filtri standard		•	•	
P02	Standard without logo	•			
Pxx	Customized	•	•	•	

SME1



SME 1-SMF 1-SML 1

Dimensions



TA 46

TAP 50

SAP 50 series

**Metal oil filler
and air breather filler cap**

**Nylon oil filler
and breather plug**

**Nylon air
breather filter**



Technical data

Air breathers & Filler plugs

Metal oil filler and air breather filler cap Flow rate up to 200 l/min

TA46 is a range of compact metal air breathers and filler caps for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures. They are usually directly fitted on the tank. The robust design allows the use of these filters in any heavy-duty application.

Available features:

- Male threaded connections up to 1/4" and flanged connection with bayonet, for a maximum flow rate of 200 l/min
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank

Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

TA46	Flow rate [l/min]	
	Filtration rating 03	10
	150	200

Materials (version G/N)

- Cover: Chrome plated steel
- Filter element: Resin impregnated paper, Polyurethane
- Flange: Galvanized steel
- Connection: Phosphatized steel

Materials (version B)

- Cover: Chrome plated steel
- Filter element: Resin impregnated paper, Polyurethane
- Flange: Galvanized steel
- Connection: Phosphatized steel
- Seals: NBR
- Chain, ring: Cork gasket
- Screws: Galvanized steel
- Basket: Brass

Temperature

From -25 °C to +100 °C

Weight

TA 46 B 0.10 kg
TA 46 G/N 0.11 kg



Designation & Ordering code

COMPLETE AIR BREATHER - TA46

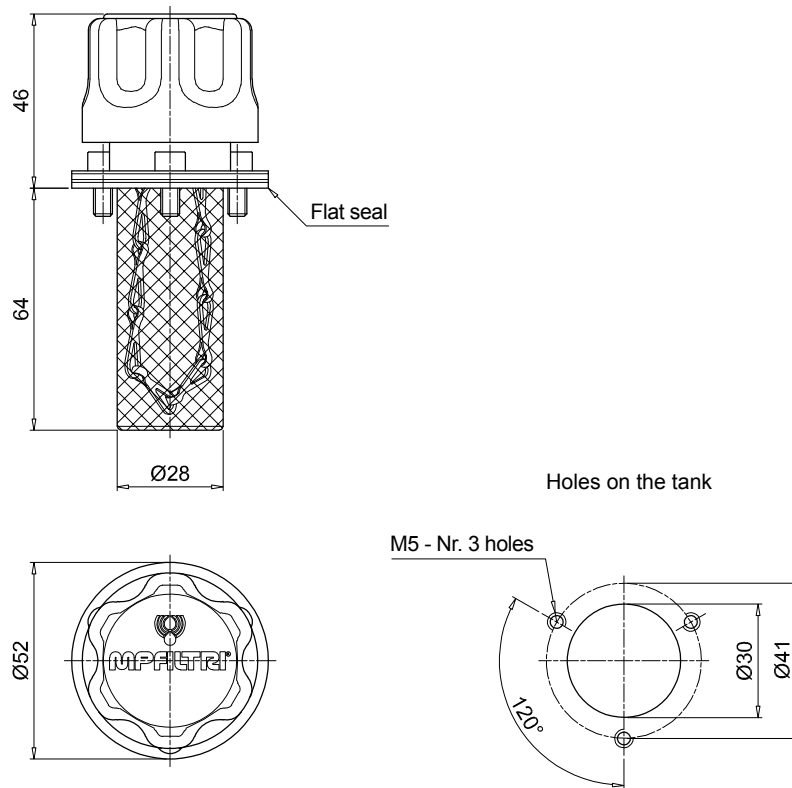
Series and size TA46	Configuration example 1:	TA46	B	03	A	0	0	1	P01
	Configuration example 2:	TA46	G	10					P01
Connections to the tank									
B	Screwed flange with bayonet mount								
G	Thread G 1/4"								
N	Thread 1/4" NPT								
Filtration rating									
03	Resin impregnated paper 3 µm								
10	Polyurethane 10 µm								
Seals	Connection:	B	G	N					
A	NBR	•							
Valve	Connection:	B	G	N					
0	Without valve	•							
Version	Connection:	B	G	N					
0	Standard	•							
Basket	Connection:	B	G	N					
1	With basket	•							

Execution

P01 MP Filtri standard
Pxx Customized

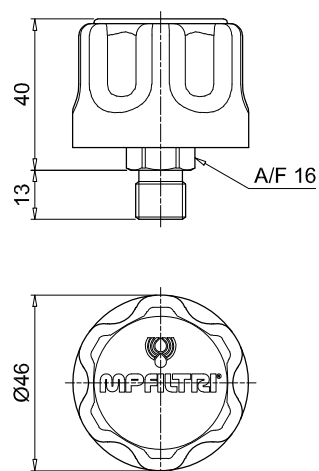
TA46

Screwed flange



TA46

Threaded connection



TAP 50 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and breather plug

Flow rate up to 200 l/min

TAP50 is a range of compact plastic air breathers and filler caps for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

Available features:

- Flanged connection with bayonet, for a maximum flow rate of 200 l/min
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank

Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	03
TAP50	180	202

Materials

- Cover/ringnut: Nylon
- Filter element: Resin impregnated paper, Polyurethane
- Pressurization valve: Nylon, Galvanized steel, NBR
- Seals: NBR
- Flange: Nylon
- Screws: Galvanized steel
- Basket: Nylon

Temperature

From -25 °C to +100 °C

Weight

0.60 kg

Quantity

10 pcs/pack



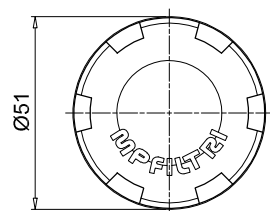
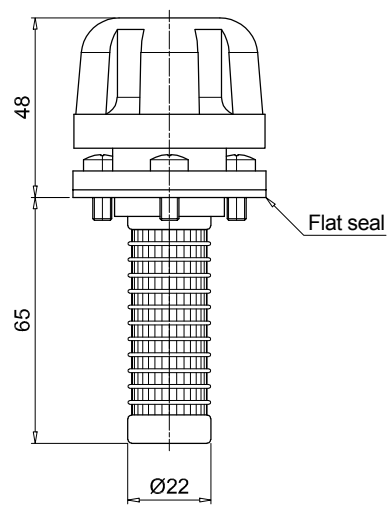
Designation & Ordering code

COMPLETE OIL FILLER PLUG - TAP50

Series and size	Configuration example :							
TAP50 Nylon oil filler and breather plug	TAP50	C	03	A	1	1	P01	
Connections to the tank								
C Screwed flange with G 3/4" mount								
Filtration rating								
03 Resin impregnated paper 3 µm								
10 Polyurethane 10 µm								
Seals								
A NBR								
Valve								
0 Without valve								
1 0.5 bar pressurization valve								
Basket								
1 With basket								
								Execution
								P01 MP Filtri standard
								Pxx Customized

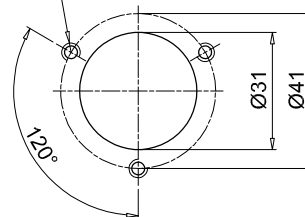
TAP50

Screwed flange



Holes on the tank

M5 - Nr. 3 holes



SAP 50 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon air breather filter

Flow rate up to 200 l/min

SAP50 is a range of compact plastic air breathers for protection of the tank against the solid contamination contained into the air.

The integrated air breather protects the tank against the solid contamination contained into the air. They are usually directly fitted on the tank.

Available features:

- Male threaded connections up to 3/4", for a maximum flow rate of 200 l/min.
- Fine cellulose filtration, to get a good cleanliness level into the reservoir.

Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	03
SAP50	180	204

Materials

- Cover/Connection: Nylon
- Filter element: Resin impregnated paper, Polyurethane
- Pressurization valve: Nylon, Galvanized steel, NBR
- Seals: NBR

Temperature

From -25 °C to +100 °C

Weight

0.40 kg

Quantity

10 pcs/pack



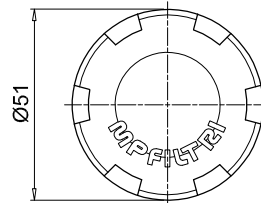
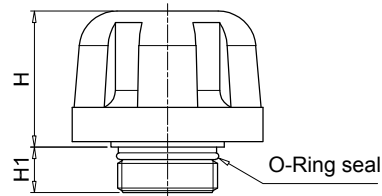
Designation & Ordering code

COMPLETE AIR BREATHER - SAP50

Series and size	Configuration example :						
SAP50 Nylon air filter	SAP50	G3	L03	A	1	0	P01
Connections to the tank							
G1	G 1/4"						
G2	G 3/8"						
G3	G 1/2"						
G4	G 3/4"						
G9	SAE 6 - 9/16" - 18 UNF						
G10	SAE 12 - 1 1/16" - 12 UN						
Filtration rating							
L03	Resin impregnated paper	3 μ m					
L10	Polyurethane	10 μ m					
Seals							
A	NBR						
Valve	Connection						
	G1	G2	G3	G4	G9	G10	
0	Without valve	•	•	•	•	•	
1	0.5 bar pressurization valve		•	•	•	•	
Basket							
0	Without basket						
Execution							
P01	MP Filtri standard						
Pxx	Customized						

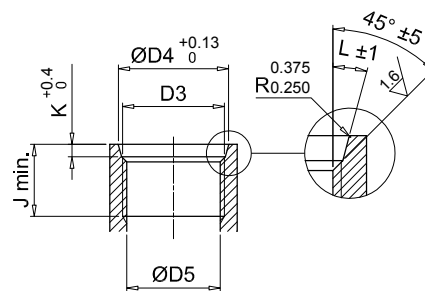
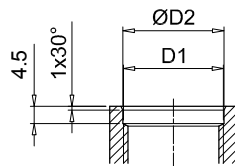
SAP50

Threaded connection



Housing on the tank for connections GAS

Housing on the tank for connections SAE



Connections	H [mm]	H1 [mm]	D1 [mm]	$\text{ØD}2$ [mm]	D3 [mm]	$\text{ØD}4$ [mm]	$\text{ØD}5$ [mm]	J min. [mm]	K [mm]	L
G1	36	12	G 1/4"	13.5	-	-	-	-	-	-
G2	36	12	G 3/8"	17	-	-	-	-	-	-
G3	36	12	G 1/2"	21.5	-	-	-	-	-	-
G4	36	12	G 3/4"	26.7	-	-	-	-	-	-
G9	36	12	-	-	SAE 6 - 9/16" - 18 UNF	15.6	13.081 12.751	12.7	2.5	12°
G10	35	14.5	-	-	SAE 12 - 1 1/16" - 12 UN	29.2	24.978 24.696	19	3.3	15°

TA 80 series

Metal oil filler and air breather filler cap



TA 80 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Metal oil filler and air breather filler cap Flow rate up to 550 l/min

TA80 is a range of metal air breathers and filler caps for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

They are usually directly fitted on the tank. The robust design allows the use of these filters in any heavy-duty application.

Available features:

- Male threaded connections up to 3/4" and flanged connection with bayonet, for a maximum flow rate of 550 l/min
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Pressurization valve with different setting, to guarantee a positive pressure into the tank in any application with metal or plastic tanks
- Padlock tab, to secure the air breather to the tank
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

TA80	Flow rate [l/min]	
	Filtration rating 03	10
	450	550

Materials

- Cover: Chrome Plated steel
- Filter element: Resin impregnated paper, Polyurethane
- Pressurization valve: Nylon (bodies), Galvanized steel (end cap - disk), Steel (spring), NBR (seals)
- Flange and anti-splash feature: Galvanized steel
- Seals: NBR
- Screws, Flange: Galvanized steel
- Chain, Ring: Brass
- Basket (only TA80B): Galvanized steel

Temperature

From -25 °C to +100 °C

Weight

L 80 mm 0.33 kg
L 100 mm 0.35 kg

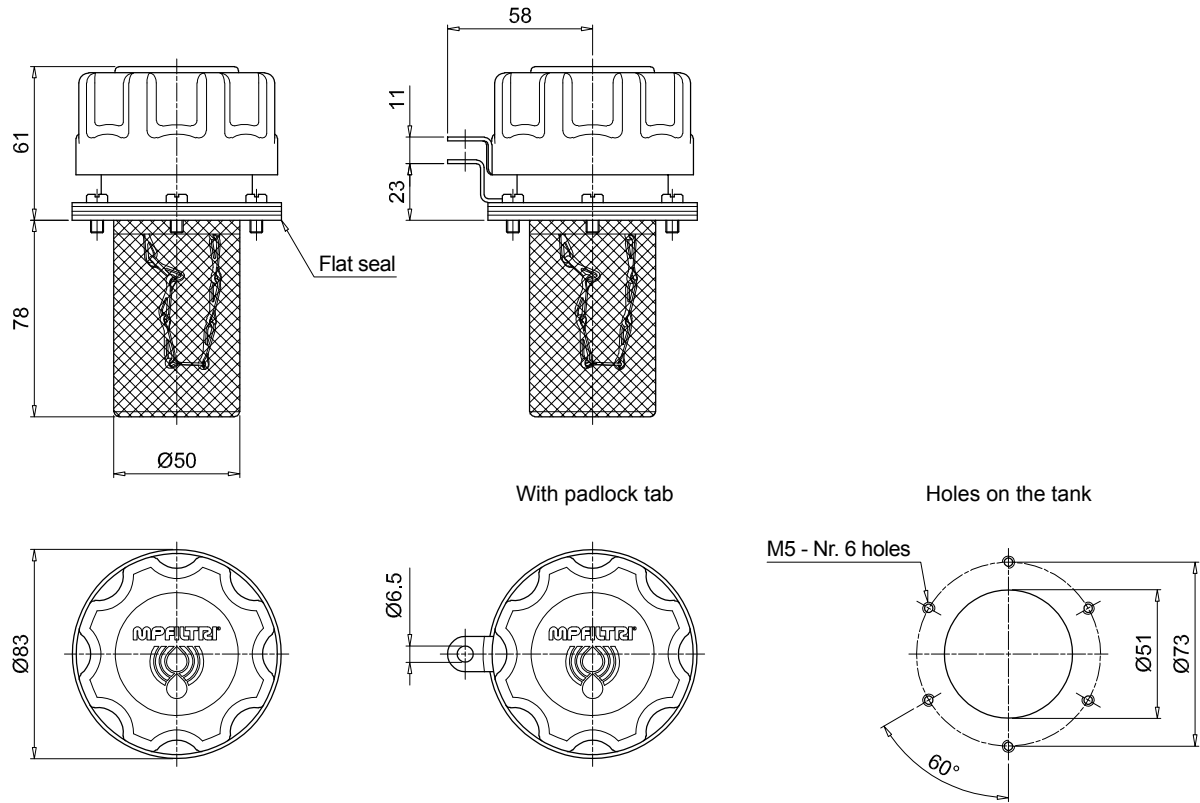


Designation & Ordering code

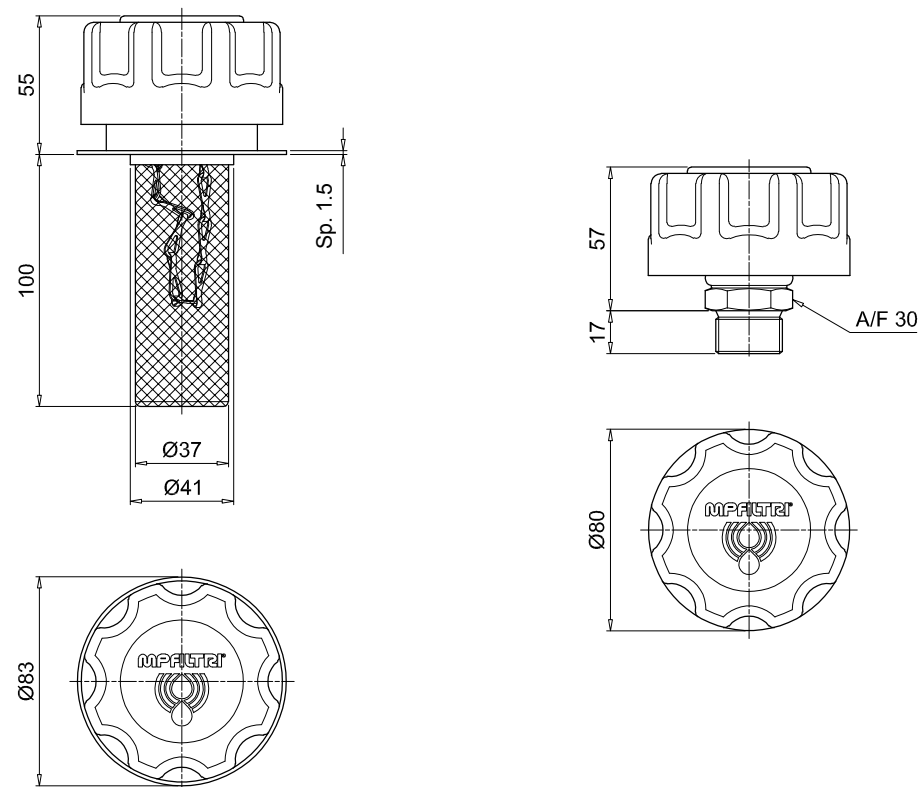
COMPLETE BREATHER PLUG - TA80

Series and size	Configuration example 1 :										
TA80	TA80	B	03	A	0	L	1	P01			
	Configuration example 2 :										
	TA80	G	10	A	2				P01		
Connections to the tank											
B	Screwed flange with bayonet mount			G	Thread G 3/4"						
D	Weld flange with bayonet mount			N	Thread 3/4" NPT						
Filtration rating	Connection:	B	D	G	N						
00	Without filter (blind filler plug)	•	•								
03	Resin impregnated paper 3 µm	•	•	•	•						
10	Polyurethane 10 µm	•	•	•	•						
Seals											
A	NBR										
Valve	Filtration rating:	00	03	10							
0	Without valve	•	•	•							
1	0.3 bar pressurization valve		•	•							
2	0.7 bar pressurization valve		•	•							
9	With anti-splash feature		•	•							
Version	Connection:	B	D	G	N						
0	Standard	•	•								
L	With padlock tab	•									
Basket	Connection:	B	D	G	N						
0	Without basket	•	•								
1	L = 80 mm	•									
3	L = 100 mm		•								
Execution											
										P01	MP Filtri standard
										Pxx	Customized

TA80
Screwed flange



TA80
Weld flange
Threaded connection



TAP 90 series

Nylon oil filler and air breather filler cap



TAP 90 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap

Flow rate up to 550 l/min

TAP90 is a range of plastic air breathers and filler caps for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

They are usually directly fitted on the tank.

Available features:

- Male threaded connections up to 1 1/2" and flanged connection with bayonet, for a maximum flow rate of 550 l/min
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Pressurization valve with different setting, to guarantee a positive pressure into the tank in any application with metal or plastic tanks
- Padlock tab, to secure the air breather to the tank
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank
- Dipstick, to monitor the fluid level into the tank even in complicated positions

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	03
TAP90	450	550

Materials

- Cover/Ringnut: Nylon
- Filter element: Resin impregnated paper, Polyurethane
- Pressurization valve: Nylon (bodies), Galvanized steel (end cap - disk), NBR (seals)
- Flange B: Nylon
- Seals: NBR
- Screws: Galvanized steel
- Padlock tab: Galvanized steel
- Chain, Ring: Brass
- Dipstick: Phosphatized steel
- Basket: Galvanized steel, Nylon

Temperature

From -25 °C to +100 °C

Weight

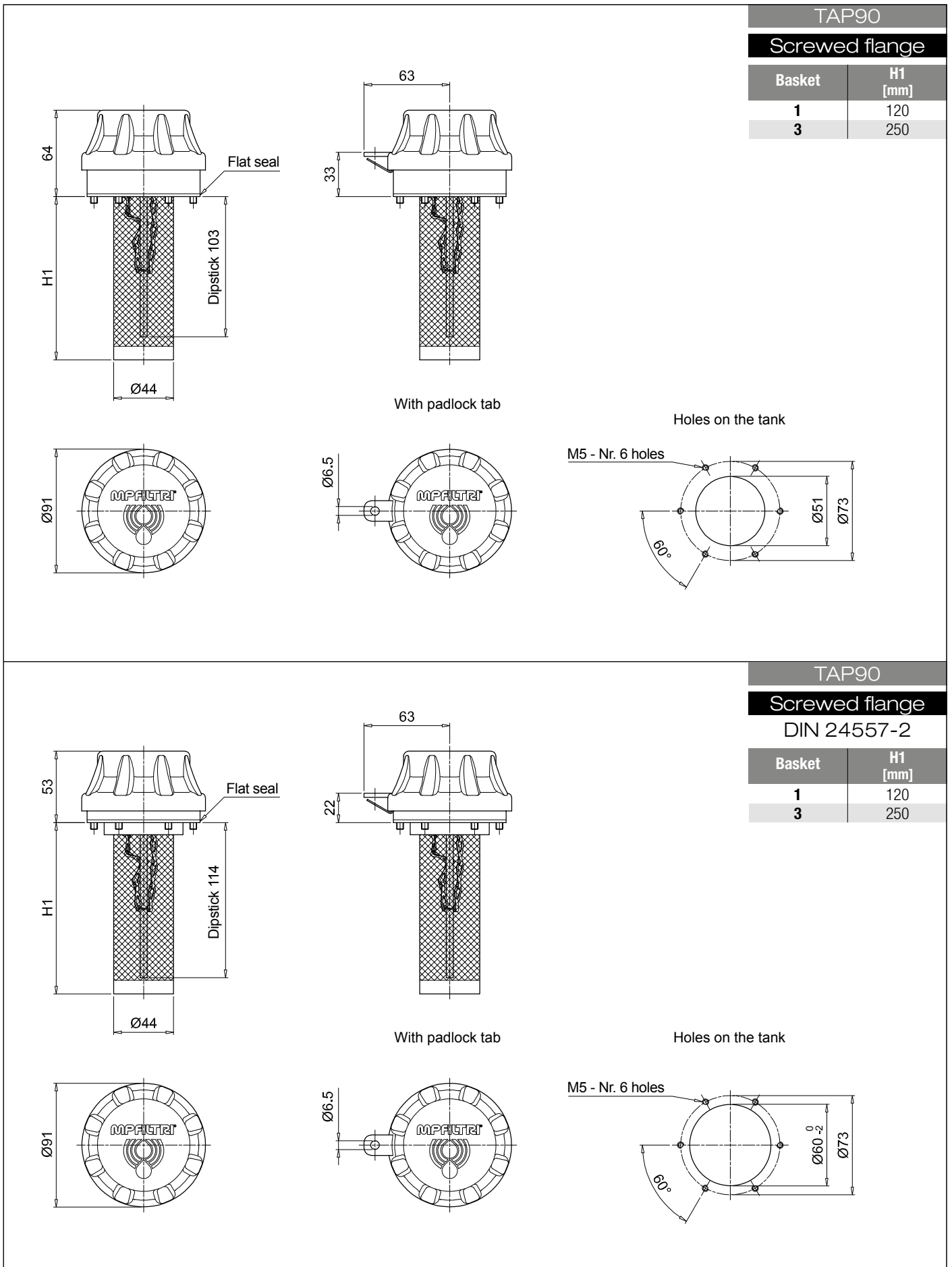
L 120 mm 0.25 kg
L 250 mm 0.31 kg



Designation & Ordering code

COMPLETE BREATHER PLUG - TAP90

Series and size	Configuration example 1 :										
TAP90	TAP90	R	03	A	1	A	1	P01			
	Configuration example 2 :										
	TAP90	G	10	A	2	L				P01	
Connections to the tank											
R Screwed flange with M52x2 mount	H Thread G 1 1/2"										
F Screwed flange DIN 24557-2	M Thread 3/4" NPT										
C Weld riser	G Thread M52x2										
Q Thread G 3/4"											
		Connection									
Filtration rating	R	F	C	Q	H	M	G				
00 Without filter (blind filler plug)	•	•	•								
03 Resin impregnated paper 3 µm	•	•	•	•	•	•	•				
10 Polyurethane 10 µm	•	•	•	•	•	•	•				
		Valve		Filtration rating:							
0 Without valve			•	•	•						
1 0.3 bar pressurization valve				•	•						
2 0.7 bar pressurization valve				•	•						
Version											
0 Standard	A With dipstick										
L With padlock tab	F With padlock tab and dipstick										
		Connection									
Basket	R	F	C	Q	H	M	G				
0 Without basket	•	•	•								
1 With basket 120 mm	•	•	•								
3 With basket 250 mm	•	•	•								
		Seals									
A NBR											
		Execution									
P01 MP Filtri standard											
Pxx Customized											

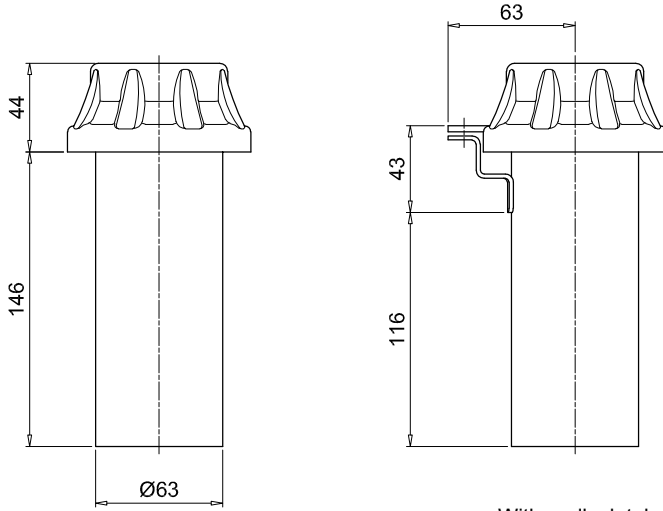


TAP 90

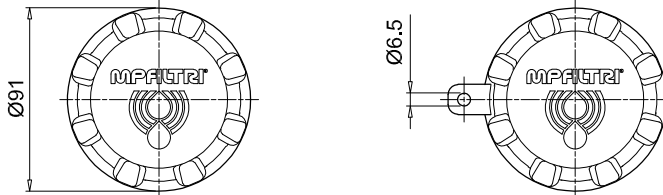
Dimensions

TAP90

Weld riser

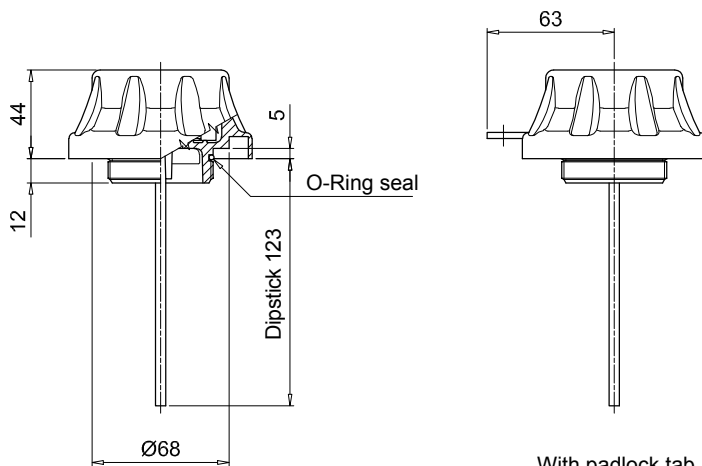


With padlock tab

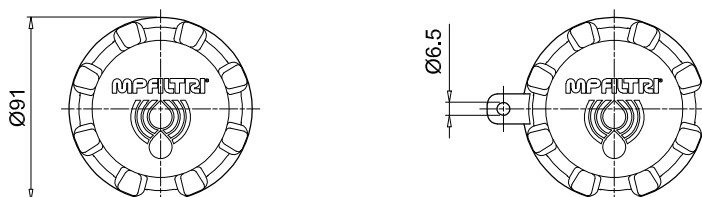


TAP90

Threaded connection

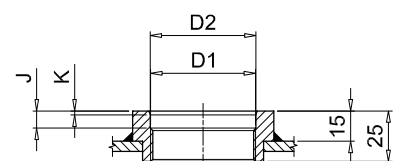


With padlock tab



Connection	D1 [mm]	D2 [mm]	J [mm]	K [mm]
Q	G 3/4"	-	-	-
H	G 1 1/2"	48.5	8.5	2x15°
M	3/4" NPT	-	-	-
G	M 52x2	52.5	8.5	2x15°

Housing on the tank for connections GH-MT





TAP 114 series

Nylon oil filler and air breather filler cap



TAP 114 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap

Flow rate up to 1600 l/min

TAP114 is a range of plastic large air breathers and filler caps for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

They are usually directly fitted on the tank.

Available features:

- Flanged connection, for a maximum flow rate of 1600 l/min
- Replaceable filter element
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Polyester media is an option for heavy environmental conditions (high humidity, sand ...)
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank
- Dipstick, to monitor the fluid level into the tank even in complicated positions

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]
	Filtration rating L10
TAP114 length 1	1450
TAP114 length 3	1600

Materials

- Cover: Nylon
- Filter element: Resin impregnated paper
- Flange: Nylon
- Seals: NBR
- Screws: Galvanized steel
- Basket: Nylon

Temperature

From -25 °C to +100 °C

Weight

Length 1 - 0.185 kg

Length 2 - 0.200 kg



Designation & Ordering code

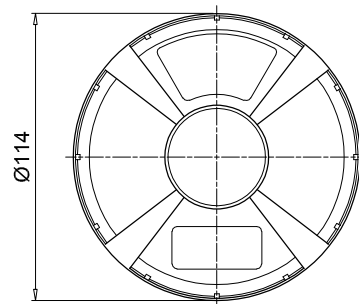
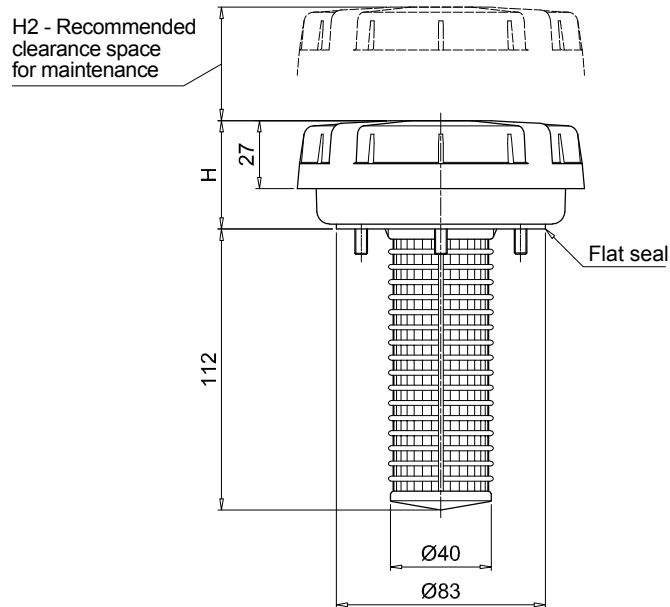
COMPLETE BREATHER PLUG - TAP114

Series and size	Configuration example : TAP114 1 L10 A 1 P01					
TAP114						
Length	1 3					
Filtration rating	L10 Resin impregnated paper 10 µm					
Seals	A NBR					
Version	1 With basket					
						Execution
						P01 MP Filtri standard
						Pxx Customized

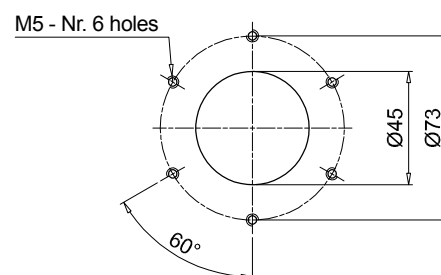
FILTER ELEMENT

Filter element series and size	Configuration example : A114 1 L10 P01			
A114				
Length	1 3			
Filtration rating	L10 Resin impregnated paper 10 µm			
				Execution
				P01 MP Filtri standard
				Pxx Customized

TAP114		
Length	H [mm]	H2 [mm]
1	43	30
3	70	60



Holes on the tank



TAP 115 & SAP 115

Nylon oil filler and air breather filler cap



TAP 115 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap Flow rate up to 2150 l/min

TAP115 is a range of plastic large air breathers and filler caps for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

They are usually directly fitted on the tank.

Available features:

- Flanged connection, for a maximum flow rate of 2150 l/min
- Replaceable filter element.
- Fine cellulose and microfibre filtration, to get a good cleanliness level into the reservoir. Polyester media is an option for heavy environmental conditions (High humidity, sand)
- Visual clogging indicator
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	A03
TAP115 length 1	1600	2000
TAP115 length 2	2150	2150

Materials

- Cover/flange: Nylon
- Filter element: Microfibre, Resin impregnated paper
- Seals: NBR, FPM
- Basket/screws: Galvanized steel

Clogging indicators

- Manual reset
- Set pressure 0.062 bar +/- 10%

Temperature

From -25 °C to +100 °C

Weight	Length 1	Length 2
TAP 115	0.46 kg	0.585 kg



Designation & Ordering code

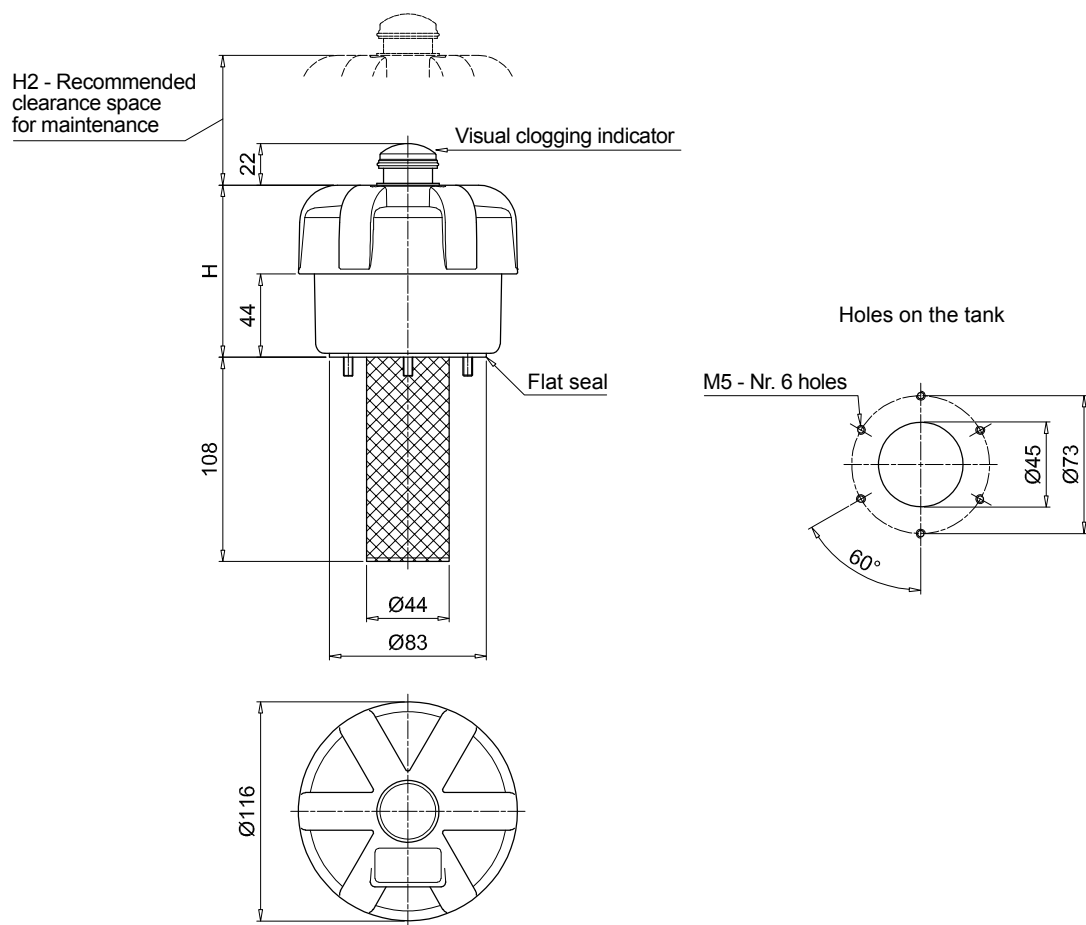
COMPLETE BREATHER PLUG - TAP115

Series and size	Configuration example:	TAP115	2	F	A03	A	1	A	P01
TAP115 Screwed flange connection									
Length									
1 2									
Connection to the tank									
F Flange									
Filtration rating									
A03 Inorganic microfiber 3 µm									
L10 Resin impregnated paper 10 µm									
Seals									
A NBR V FPM									
Version									
1 With basket									
Clogging indicator									
A Without indicator									
B With visual clogging indicator									
Execution									
P01 MP Filtri standard									
Pxx Customized									

FILTER ELEMENT

Filter element series and size	Configuration example:	A115	2	A03	P01
A115					
Length					
1 2					
Filtration rating					
A03 Inorganic microfiber 3 µm					
L10 Resin impregnated paper 10 µm					
Execution					
P01 MP Filtri standard					
Pxx Customized					

TAP115		
Length	H [mm]	H2 [mm]
1	91	55
2	155	80



Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap Flow rate up to 3000 l/min

SAP115 is a range of plastic large air breathers for protection of the tank against the solid contamination contained into the air. They are usually directly fitted on the tank.

Available features:

- Male threaded connections up to 1 1/2", for a maximum flow rate of 3000 l/min.
- Replaceable filter element.
- Fine cellulose and microfibre filtration, to get a good cleanliness level into the reservoir. Polyester media is an option for heavy environmental conditions (High humidity, sand ...)
- Visual clogging indicator
- Antisplash, to avoid fluid coming out through the air breather due to sloshing
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	A03
SAP115 length 1 - G1"	1830	2170
SAP115 length 2 - G1"	2800	2800
SAP115 length 1 - G1 1/2"	1995	2330
SAP115 length 2 - G1 1/2"	3000	3000

Materials

- Cover/flange: Nylon
- Filter element: Microfibre, Resin impregnated paper
- Connection: Nylon
- Seals: NBR, FPM

Clogging indicators

- Manual reset
- Set pressure 0.062 bar +/- 10%

Temperature

From -25 °C to +100 °C

Weight	Length 1	Length 2
SAP 115	0.41 kg	0.525 kg



Designation & Ordering code

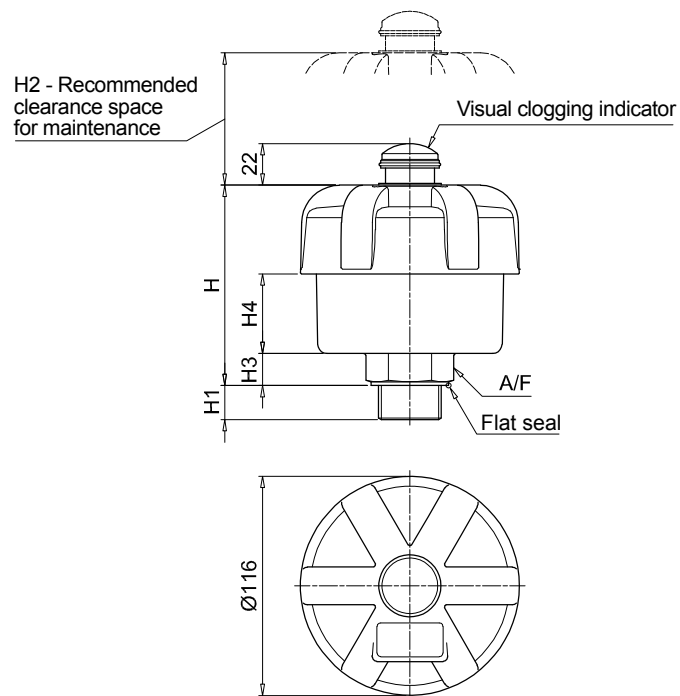
COMPLETE BREATHER PLUG - SAP115


Series and size	Configuration example:	SAP115	2	A	A03	A	1	A	P01
SAP115 Threaded connection									
Length									
1 2									
Connection to the tank									
A Thread G 1"									
C Thread G 1 1/2"									
Filtration rating									
A03 Inorganic microfiber 3 µm									
L10 Resin impregnated paper 10 µm									
Seals									
A NBR									
Version									
0 Standard									
1 With anti-splash feature									
Clogging indicator									
A Without indicator									
B With visual clogging indicator									
Execution									
P01 MP Filtri standard									
Pxx Customized									

FILTER ELEMENT

Filter element series and size	Configuration example:	A115	2	A03	P01
A115					
Length					
1 2					
Filtration rating					
A03 Inorganic microfiber 3 µm					
L10 Resin impregnated paper 10 µm					
Execution					
P01 MP Filtri standard					
Pxx Customized					

SAP115							
Length	Connection	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	A/F [mm]
1	A	106	18	55	17	42	41
	C	111	23	55	22	42	55
2	A	170	18	80	17	106	41
	C	175	23	80	22	106	55





The filler plugs series is composed by different versions: with breather filter, with dipstick for measuring the reservoir fluid level or with anti-splash fins to prevent spillage of oil from the reservoir to be specifically used on mobile equipments.

Filler and Drain Plugs



TC 50 page 75
TKT - TSD - TKM 79

TC 50 series

Nylon filler cap



TC 50 GENERAL INFORMATION

Technical data

Filler plugs

Nylon filler plug

TC50 is a range of plastic compact air breathers and filler plugs for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

They are usually directly fitted on the tank.

Available features:

- G 1" male threaded connection, with or without nut
- Metal filtration, to hold the coarse contamination contained into the air
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank
- Caps with different graphics and colours, for the use in several applications

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Materials

- Cover: Nylon
- Filter element: Galvanized steel
- Filler cap: Nylon
- Strainer: Galvanized steel / Nylon
AISI 304 / Nylon
- Collar: Nylon
- Seals: Inorganic fibre
- Ringnut: Phosphatized steel

Temperature

From -25 °C to +100 °C

Weight

TC 50 G1" conn. 0.70 kg

TC 50 with ringnut 0.10 kg

Quantity

25 pcs/pack



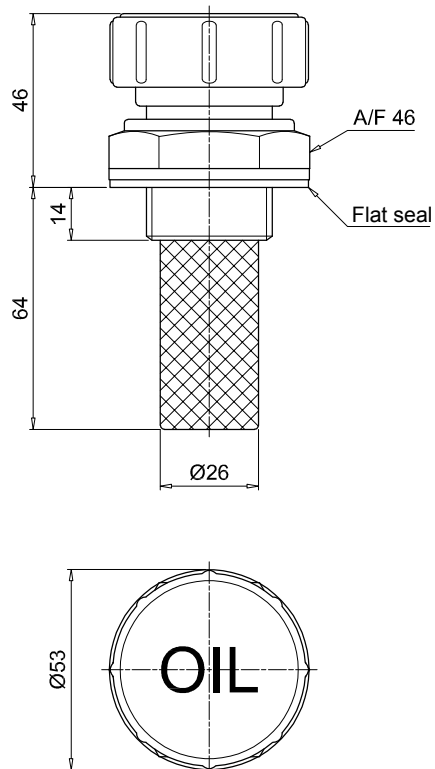
Designation & Ordering code

FILLER PLUG - TC50

Series and size	Configuration example :	TC50	G1	L90	P	R	O	C70	P01
TC50									
Connections to the tank									
G1 G 1"									
GA With ringnut									
Filtration rating									
L90 Galvanized steel									
Seals									
P Inorganic fiber									
Cover colour									
R Red									
Y Yellow									
Cover wording									
O Oil									
N Neutral									
Basket									
S Without basket									
C70 L = 70 mm - galvanized steel									
I70 L = 70 mm - AISI 304									
Execution									
P01 MP Filtri standard									
Pxx Customized									

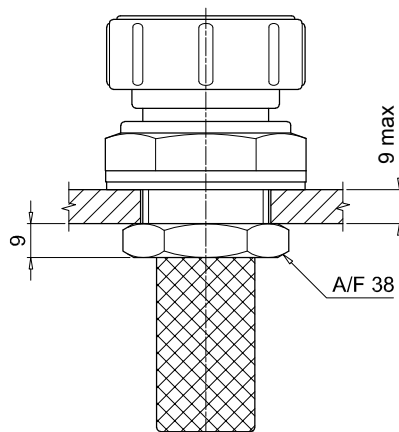
TC50

Threaded connection

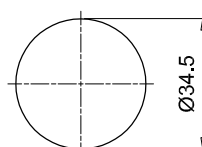


TC50

With ringnut



Through hole on the tank



TKT - TSD - TKM series

Nylon and aluminium filler and drain plugs



Technical data

Filler plugs

Nylon filler plug

TKT is a range of nylon compact filler plugs for filling of the fluid into the systems during the commissioning and maintenance procedures. They are usually directly fitted on the tank.

Available features:

- Male threaded connections up to G 2"
- Breathing hole, to reduce the pressure inside the filter during the maintenance operations
- Caps with different graphics and colours, for the use in several applications
- Dipstick, to monitor the fluid level into the tank even in complicated positions
- Antisplash, to avoid fluid coming out through the air breather due to sloshing
- Labyrinth filter, to avoid fluid coming out through the air breather due to sloshing

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Materials

- Body: Nylon
- Seals: NBR, Inorganic fibre
- Labyrinth: Nylon
- Anti-splash feature: Resin impregnated paper
- Dipstick: Phosphatized steel

Temperature

From -25 °C to +100 °C

Weight

TKTG 13	5 g
TKTG 16	8 g
TKTG 20	10 g
TKTG 26	15 g
TKTG 33	30 g
TKTG 42	32 g
TKTG 60	35 g

Quantity

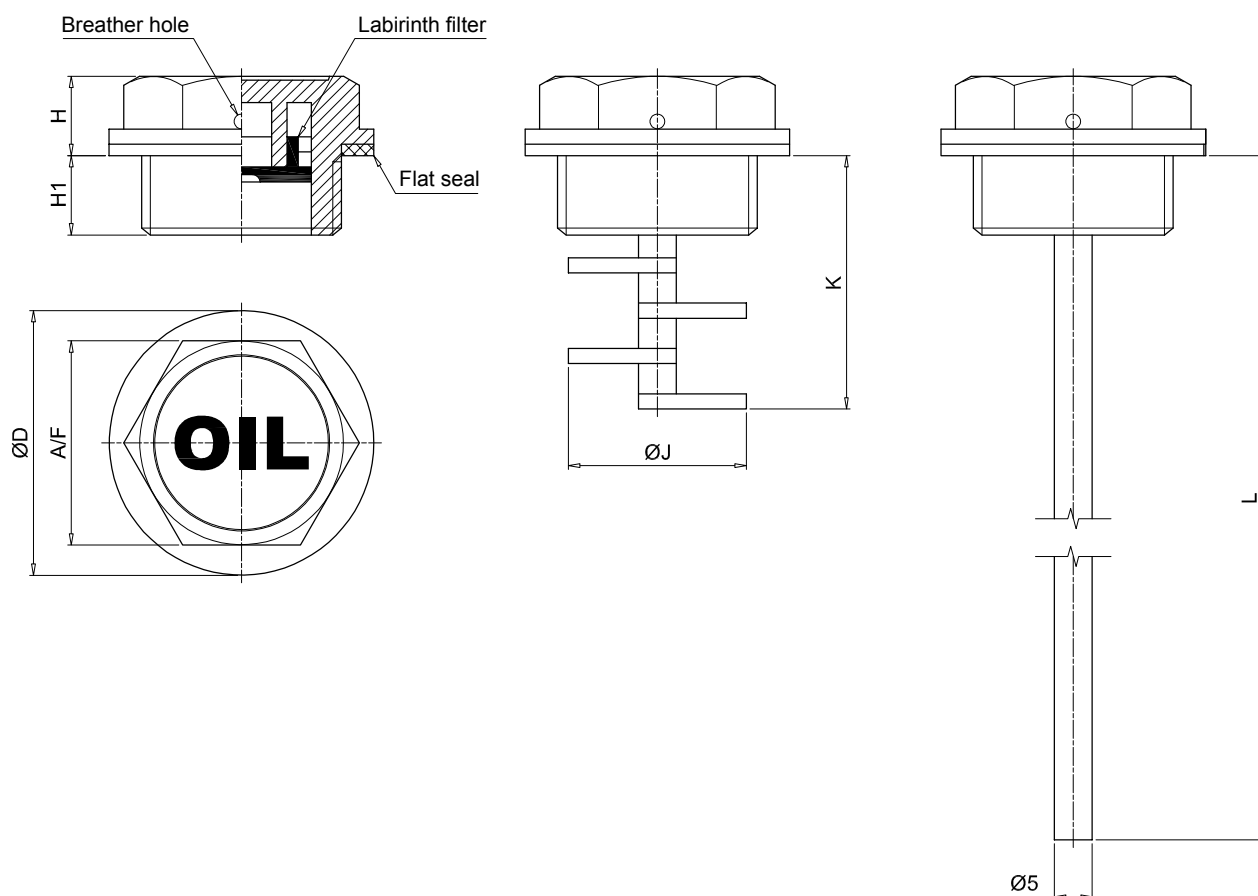
25 pcs/pack



Designation & Ordering code

FILLER PLUG - TKT

Series and size		Configuration example :									
TKT		TKT	G26	N	N	A	F	S	P01		
Connections to the tank		Version									
		S	A	F	L						
G13	Thread G 1/4"	•	•		•						
G16	Thread G 3/8"	•	•	•	•						
G20	Thread G 1/2"	•	•	•	•						
G26	Thread G 3/4"	•	•	•	•						
G33	Thread G 1"	•	•	•							
G42	Thread G 1 1/4"	•	•	•							
G48	Thread G 1 1/2"	•	•	•							
G60	Thread G 2"	•	•								
Colour											
N	Black nylon										
Cover wording											
O	Oil		N	Neutral							
Seals		Version									
		S	A	F	L						
A	NBR		•	•							
B	Inorganic fiber	•			•						
Breather hole											
S	Without breather hole		F	With breather hole							
Version											
S	Standard		F	With anti-splash feature							
A	With dipstick		L	With labyrinth filter							
Execution											
P01	MP Filtri standard										
Pxx	Customized										



Connections	$\varnothing D$ [mm]	A/F [mm]	H [mm]	H1 [mm]	$\varnothing J$ [mm]	K [mm]	L [mm]
G13	20	17	8.5	7.5	-	-	205
G16	22	18	9.5	8.5	13.5	32	206
G20	28	22	9.5	9.5	17.5	33	207
G26	35	27	10.5	10.5	23.5	34	208
G33	42	34	10.5	10.5	29.5	36	201
G42	52	42	11	11	38	38	201
G48	58	47	11	11	38	36	201
G60	74	64	18	18	-	-	198

TSD GENERAL INFORMATION

Technical data

Filler plugs

Nylon filler plug

TSD is a range of nylon compact air breathers and filler plugs for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

They are usually directly fitted on the tank.

Available features:

- Male threaded connections up to G 1 1/2"
- Metal filtration, to hold the coarse contamination contained into the air
- Caps with different graphics and colours, for the use in several applications
- Dipstick, to monitor the fluid level into the tank even in complicated positions
- Antisplash, to avoid fluid coming out through the air breather due to sloshing

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Materials

- Body: Nylon
- Cover: Nylon
- Seal: NBR
- Filter: Galvanized steel
- Anti-splash feature: Nylon
- Dipstick: Phosphatized steel

Temperature

From -25 °C to +100 °C

Weight

TSDG16	15 g
TSDG20	25 g
TSDG26	28 g
TSDG33	60 g
TSDG42	69 g
TSDG48	74 g

Quantity

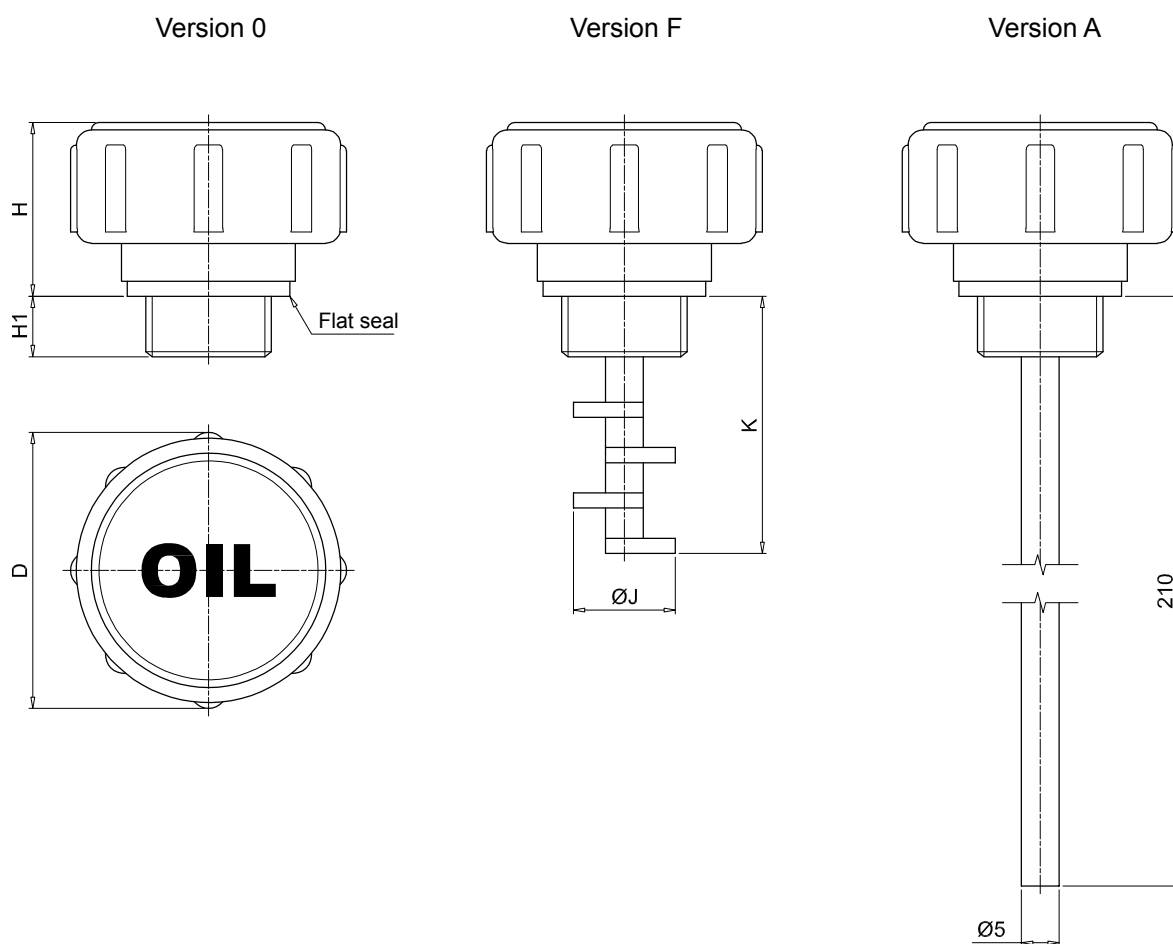
25 pcs/pack



Designation & Ordering code

FILLER PLUG - TSD

Series and size	Configuration example :								
TSD	TSD	G26	R	G	A	F	S	P01	
Connections to the tank									
G16 Thread G 3/8"	G33 Thread G 1"								
G20 Thread G 1/2"	G42 Thread G 1 1/4"								
G26 Thread G 3/4"	G48 Thread G 1 1/2"								
Cover colour									
R Red	Y Yellow								
Cover wording									
O Oil									
N Neutral									
G Gasoil									
Seals									
A NBR									
Filter element			Cover wording						
O Without filter element	•	•	•						
A Steel filter element	•	•							
Version									
S Standard									
A With dipstick									
F With anti-splash feature									
								Execution	
								P01 MP Filtri standard	
								Pxx Customized	



Connections	ØD [mm]	H [mm]	H1 [mm]	ØJ [mm]	K [mm]
G16	36.5	23	8	13.5	34
G20	40.5	23	9	17.5	34
G26	46.5	23	10	23.5	35
G33	52.5	24	11	29.5	42
G42	67.5	31.5	12	38	45
G48	67.5	31.5	11	38	45

Technical data

Drain plugs

Aluminium magnetic drain plug

TKM is a range of aluminium compact plugs for draining of the fluid from the systems during the commissioning and maintenance procedures. They are usually directly fitted on the bottom of the tank. The integrated magnet holds the ferrous contamination.

Available features:

- Male threaded connections up to G 1"

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Materials

- Body: Aluminium
- Seal: Inorganic fibre

Temperature

From -25 °C to +100 °C

Weight

TKMG13 14 g
TKMG16 23 g
TKMG20 42 g
TKMG26 95 g
TKMG33 98 g

Quantity

1 pc/pack



Designation & Ordering code

DRAIN PLUG - TKM

Series and size

TKM

Configuration example : TKM G20 B P01

Connections to the tank

G13 Thread G 1/4"

G16 Thread G 3/8"

G20 Thread G 1/2"

G26 Thread G 3/4"

G33 Thread G 1"

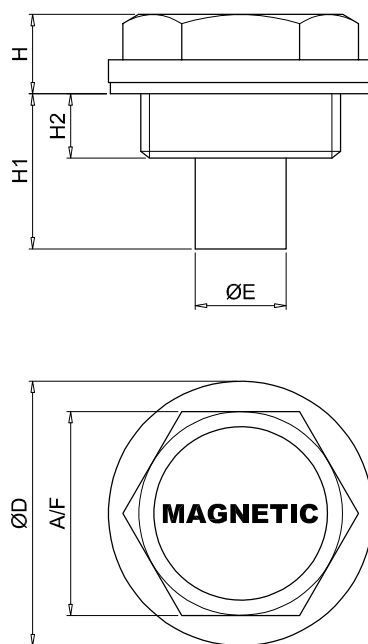
Seals

B Inorganic fiber

Execution

P01 MP Filtri standard

Pxx Customized



Connection	ØD [mm]	A/F [mm]	ØE [mm]	H [mm]	H1 [mm]	H2 [mm]
G13	19	15	9.5	6	11.5	5.5
G16	22	18	8	9.5	13.5	7.5
G20	28	22	10	9.5	15.5	7.5
G26	35	27	12	10.5	20.5	8.5
G33	42	34	25	13	30.5	10.5

LC

The sight plugs series allow visibility of the fluid contained in the reservoirs, showing the level and also any changes in transparency and emulsion.

LV

The oil level indicators series is available for both static and mobile applications; the construction materials used make it possible to guarantee service with wide temperature variations and compatibility with all hydraulic fluids.

LVA / LVU level indicators are available with fixing centre distance from 76 to 1000 mm.

These indicators are available in three configurations, with transparent plastic body, with black plastic body and with aluminium body.

Fixing to reservoirs with unthreaded holes or with reduced thickness can be achieved using series LCC equipped with expansion kit.

Visual Oil Level Indicators



LCP - LCC	page 89
LVA - LVU	95

LCP - LCC series

Visual oil level indicators



LCP GENERAL INFORMATION

Technical data

Visual oil level indicators

LCP is a range of plastic compact fluid level indicators, usually called spy eyes, for monitoring of the fluid level into the tank. They are directly fitted on the tank side.

Housings made of polyamide or steel can be selected, to meet every condition.

Available features:

- Male threaded connections up to G 2"
- Baffle, to allow an easy monitoring of the level
- Expansion kit, for reliable sealing even in tanks with thin walls

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

T Series

Weight

LCPG13	1 g
LCPG16	2 g
LCPG20	4 g
LCPG26	8 g
LCPG33	10 g
LCPG42	12 g

Materials

- Body: Polyamide
- Contrast screen: Nylon
- Seals: NBR

M Series

Weight

LCPG20	6 g
LCPG26	9 g
LCPG33	13 g

Materials

- Body: Aluminium
- Lens: Thermoplastic
- Contrast screen: Nylon
- Seals: Inorganic fibre

N Series

Weight

LCPG13	2 g
LCPG16	4 g
LCPG20	7 g
LCPG26	9 g
LCPG30	12 g
LCPG33	18 g
LCPG42	25 g
LCPG48	48 g
LCPG60	59 g

Materials

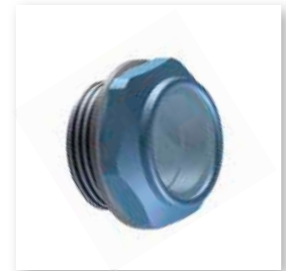
- Body: Nylon
- Lens: Thermoplastic
- Contrast screen: Nylon
- Seals: Inorganic fibre, NBR
- Expansion kit: Brass, NBR

Temperature

From -20 °C to + 80 °C

Quantity

25 pcs/pack



Designation & Ordering code

LCP

Series and size

LCP

Configuration example 1 : LCP G26 N S B S P01

Configuration example 2 : LCP G42 T S A P01

Configuration example 3 : LCP G20 M C A P01

Connections to the tank

Material:	N	T	M
G13 Thread G 1/4"	•	•	
G16 Thread G 3/8"	•	•	
G20 Thread G 1/2"	•	•	•
G26 Thread G 3/4"	•	•	•
G33 Thread G 1"	•	•	•
G42 Thread G 1 1/4"	•	•	
G48 Thread G 1 1/2"	•		
G60 Thread G 2"	•		

Material

N Black nylon **T** Transparent polyamide **M** Metal (aluminium)

Baffle

Material:	N								T								M
Connection:	G13	G16	G20	G26	G33	G42	G48	G60	G13	G16	G20	G26	G33	G42			
S Without	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
C With baffle		•	•	•	•	•	•	•			•	•	•	•	•		

Seals

Material:	N				T				M	
Expansion kit:		S	K							
A NBR			•						•	•
B Inorganic fiber			•							

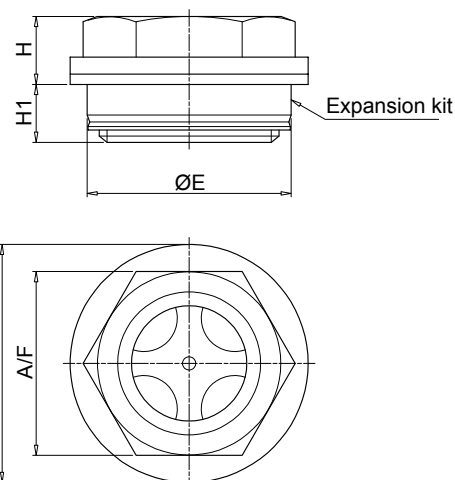
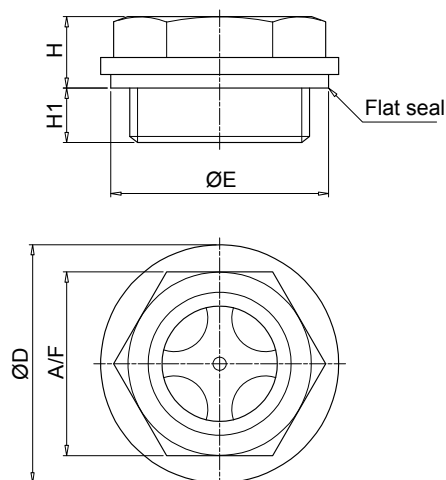
Expansion kit

Material:	N								T								M
Connection:	G13	G16	G20	G26	G33	G42	G48	G60									
S Without	•	•	•	•	•	•	•	•									
K With expansion kit			•	•	•	•	•	•									

Execution

P01 MP Filtri standard
Pxx Customized

LCP - N



without expansion kit

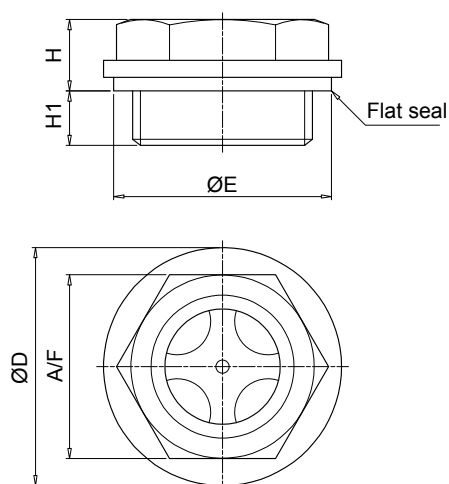
Connection	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G13	20	18.5	17	9	7
G16	22	21.5	18	10	7
G20	28	26	22	10	7
G26	35	32	27	10.5	8
G33	42	41	34	13.5	10.5
G42	52	51	42	14	11
G48	58	53.5	47	16	11
G60	74	72	64	16	18

with expansion kit

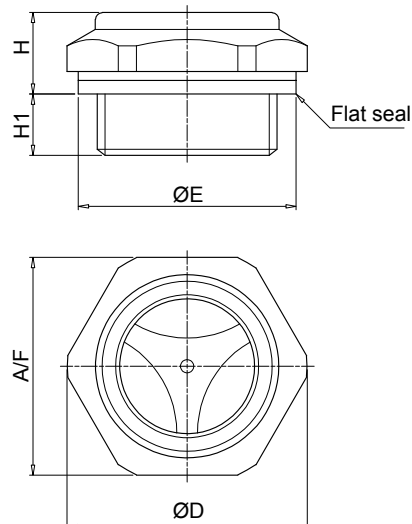
Connection	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G20	28	26	22	9	8
G26	35	30	27	10	8.5
G33	42	40	34	13	11
G42	52	50	42	13.5	11.5
G48	58	55	47	15.5	11.5

Note: for installation onto OB Cleaning covers see page 147

LCP - T



LCP - M



Connection	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G13	20	18.5	15	6.5	5
G16	22	21.5	17	7	5.5
G20	28	26	21	8	6
G26	33	32	26	8.5	7
G33	41	41	32	9	8
G42	52	51	42	14	11

Connection	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G20	29.5	26	27	11	7
G26	35.5	32	32	12	9
G33	44.5	41	40	13	8

Note: for installation onto OB Cleaning covers see page 147

Technical data

Visual oil level indicators

LCC is a range of plastic compact fluid level indicators, usually called spy eyes, for monitoring of the fluid level into the tank. They are directly fitted on the tank side.

The special shape of the screen allows the monitoring of the fluid level from every position.

Available features:

- Male threaded connections up to G 2"
- Expansion kit, for reliable sealing even in tanks with thin walls

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

N Series

Weight

LCCG26	7 g
LCCG42	20 g
LCCG60	40 g

Materials

- Body: Nylon
- Lens: Polyamide
- Contrast screen: Nylon
- Seals: Inorganic fibre, NBR
- Expansion kit: Brass / NBR

T Series

Weight

LCCG16	2 g
LCCG20	4 g
LCCG33	9 g

Materials

- Body: Polyamide
- Seals: NBR

Temperature

From -20 °C to + 80 °C

Quantity

25 pcs/pack



Designation & Ordering code

LCC

Series and size

LCC

Configuration example 1: LCC G20 N A K P01

Configuration example 2: LCC G33 T A P01

Connections to the tank

Material: N T

Material:	N	T
G13 Thread G 1/4"		
G16 Thread G 3/8"		•
G20 Thread G 1/2"	•	•
G26 Thread G 3/4"	•	•
G33 Thread G 1"	•	•
G42 Thread G 1 1/4"	•	
G48 Thread G 1 1/2"	•	
G60 Thread G 2"	•	

Material

N Black nylon **T** Transparent polyamide

Material: N T

Expansion kit: S K

Material:	N	T
A NBR	•	•
B Inorganic fiber	•	

Material: N T

Expansion kit: G20 G26 G33 G42 G48 G60

Material:	N	T
S Without	•	•
K With expansion kit	•	•

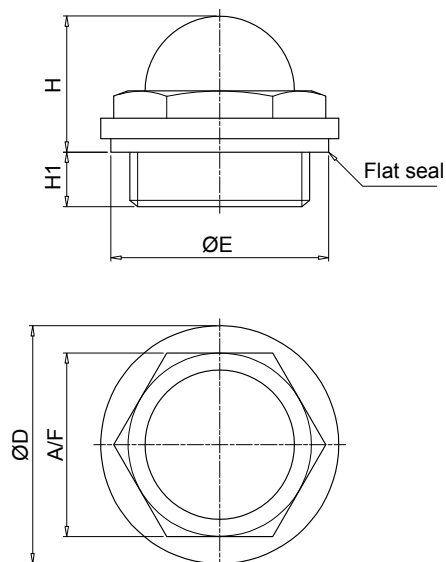
Execution

P01 MP Filtri standard

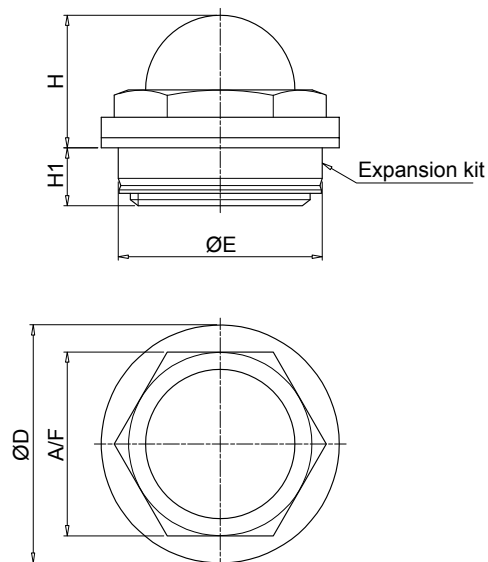
Pxx Customized

LCC - N

without expansion kit



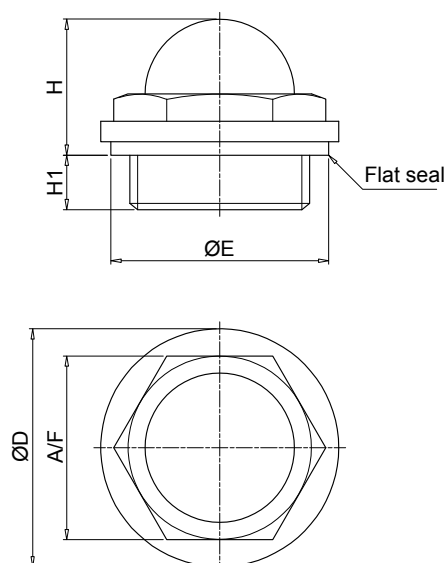
with expansion kit



Connection	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G20	28	26	22	17.5	17.5
G26	35	32	27	20	8
G33	42	41	34	24	10
G42	52	51	44	30	11
G48	58	53.5	50	33	11.5
G60	74	72	64	39	18

Connection	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G20	28	26	22	16.5	8.5
G26	35	30	27	19.5	8.5
G33	42	40	34	23.5	10.5
G42	52	50	44	29.5	11.5
G48	58	55	50	32.5	12

LCC - T



Connection	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G13	19	18.5	15	12.5	5
G16	21.5	21.5	17	14	5.5
G20	27	26	21	16.5	6
G26	33	32	26	19	7
G33	40	41	32	22.5	8

LVA - LVU series

Visual oil level indicators



LVA GENERAL INFORMATION

Technical data

Visual oil level indicators

LVA is a range of plastic compact fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank side. The fluid comes in through the lower connection screw and it is easily visible through the screen.

A white background plate, an orange line for the minimum level and a blue line for the maximum level allow an easy monitoring of the level.

Available features:

- Several male threaded connections, with or without nuts
- Three different sizes, to meet every size of tank
- Thermometer, to check the temperature of the fluid

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Materials

- Body: Transparent amorphous polyamide lens
- Nylon guard
- Seal: A -NBR / V - FPM

Operating pressure

Max 1 bar at +80°C

Operating temperature

From -25 °C to +80 °C

Weight

LVA 10 0.13 kg
LVA 20 0.18 kg
LVA 30 0.23 kg

Quantity

10 pcs/pack

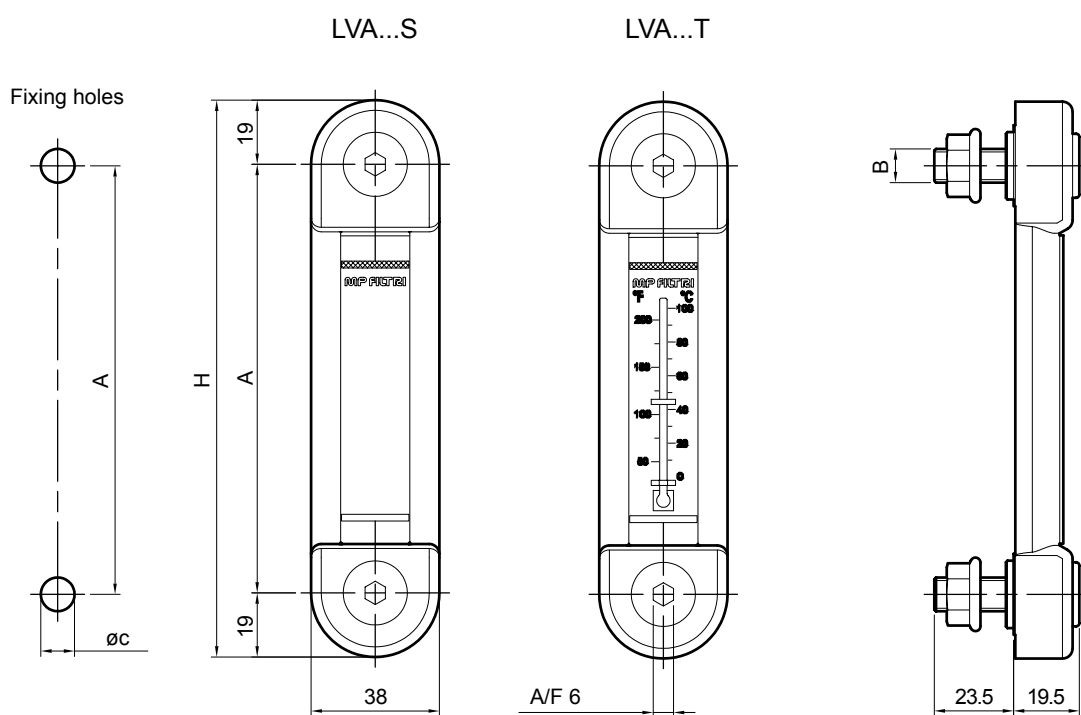


Designation & Ordering code

LVA	
Series LVA	Configuration example : LVA 20 T A P M10 S01
Size 10 20 30	
Thermometer S Without thermometer T With thermometer	
Seals A NBR V FPM	
Cover material P Polyamide	
Connections M10 Screws M10 M12 Screws M12 U38 Screws 3/8" UNC U12 Screws G 1/2" UNC	
	Execution S01 Tag MP Filtri, with nuts S02 Tag MP Filtri, without nuts

LVA		
Size	A [mm]	H [mm]
LVA10	76	114
LVA20	127	165
LVA30	254	292

Type	B [mm]	C [mm]
LVA...M10	M10	10.5
LVA...M12	M12	12.5
LVA...U38	3/8" UNC	10.0
LVA...U12	1/2" UNC	13.5



Note: for installation onto OB Cleaning covers see page 147

Technical data

Visual oil level indicators

LVU is a range of plastic fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank side.

The fluid comes in through the lower connection screw and it is easily visible through the screen.

A background plate, a red float and the adjustable minimum level and maximum level indicators allow an easy check of the level.

Available features:

- G 3/8" male threaded connections
- Adjustable size on request, to meet every size of tank
- Drain valve, to drop the oil for the maintenance procedures
- Glass screen and "U" protection, to meet heavy duty applications

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Materials

- Head: Nylon
- Connection G 3/8": Nickel plated brass
- G 3/8" valve: Steel
- Seal: NBR
- Pipe seal: NBR, Acrylic
- Pipe: Pyrex
- Float: Nylon
- Protection: Aluminium
- Clamps min-max: Nylon

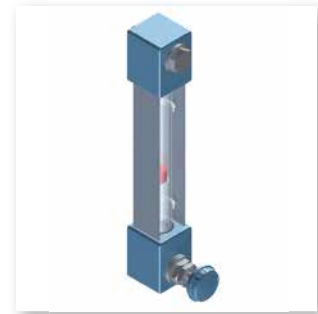
Operating temperature

From -25 °C to +70 °C

Weight	version U	version S
LVU 0500	0.780 kg	0.580 kg
LVU 1000	1.150 kg	0.790 kg
LVU 1500	1.550 kg	1.100 kg
LVU 2000	1.950 kg	1.400 kg

Quantity

10 pcs/pack



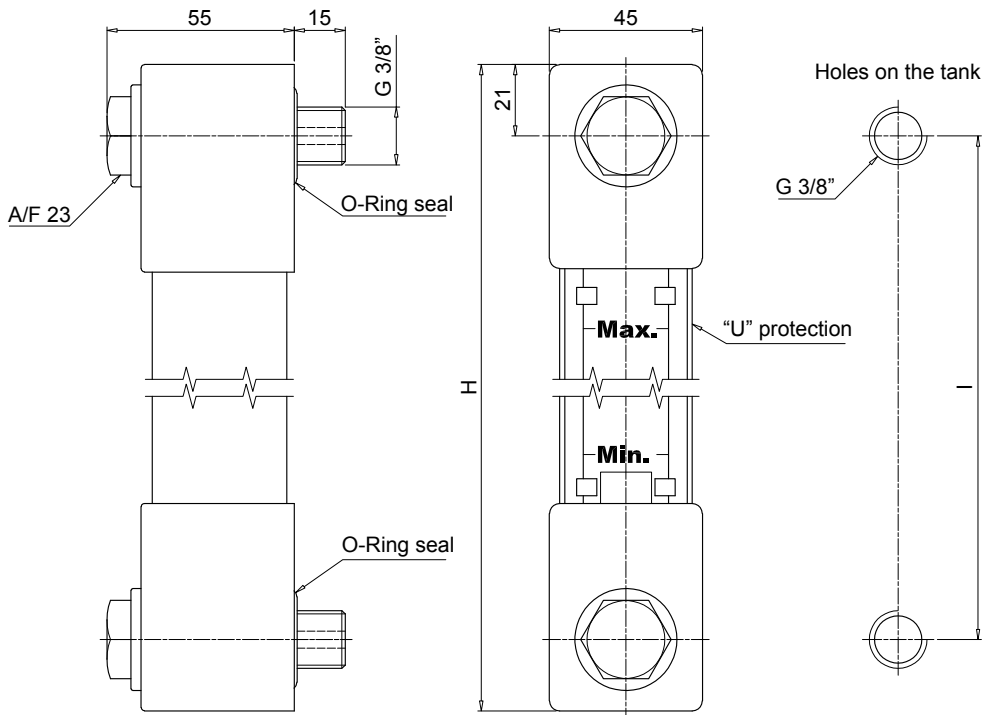
Designation & Ordering code

LVU

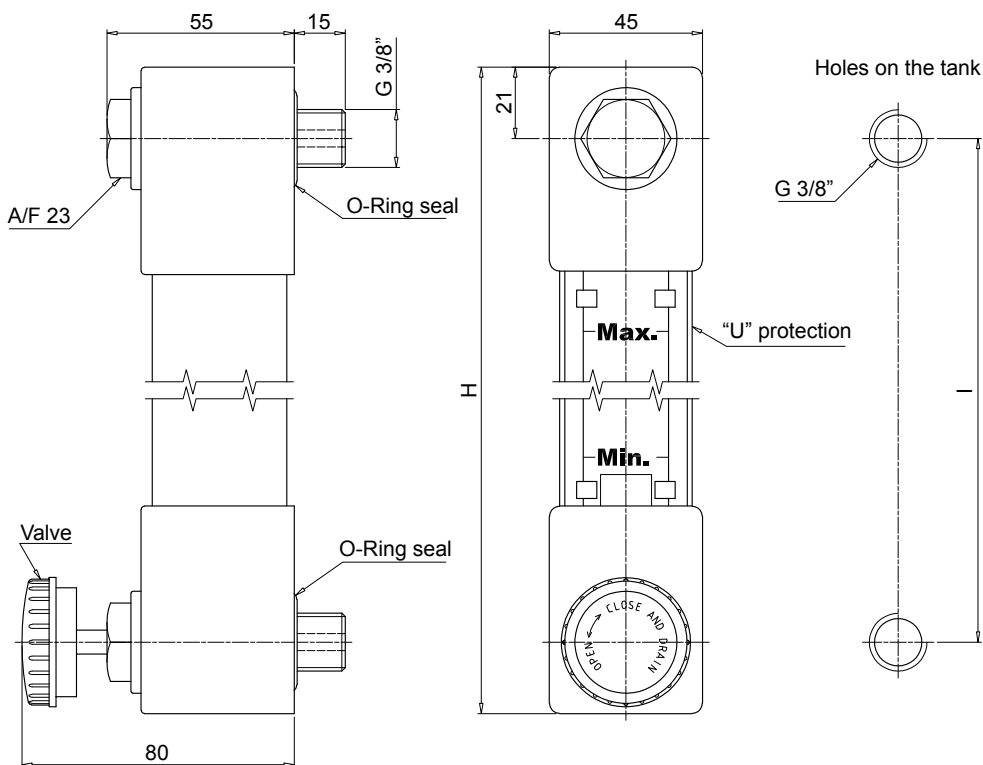
Series	Configuration example :					
LVU	LVU	0500	U	A	10	P01
Size						
0500	Distance between center = 500 mm					
1000	Distance between center = 1000 mm					
1500	Distance between center = 1500 mm					
2000	Distance between center = 2000 mm					
Different sizes on request						
Body	Size					
	500	1000	1500	2000		
S	Standard plexiglass body					
U	Plexiglass body, with "U" protection					
P	Pyrex body, with "U" protection					
Seals						
A	NBR					
V	FPM					
Connections						
10	Connection G 3/8"					
20	Connection G 3/8", with drain valve					
Execution						
P01	MP Filtri standard					
Pxx	Customized					

LVU		
Size	H [mm]	I [mm]
0500	542	500
1000	1042	1000
1500	1542	1500
2000	2042	2000

Connection 10



Connection 20



Electromagnetic float level indicators use the action of a magnet fixed to the float to change the electrical status of a reed switch mounted inside the tube.

As the fluid level in the tank changes, the float moves together with the magnet that, connected with the reed switch, move the contacts thereby tripping an alarm signal.

The movement of the float is normally limited by mechanical stops because once the magnet exceeds the point at which it activates the reed switch, the switch reverts to its original status.

To invert the contact status from N.O. to N.C. and vice versa, it is normally sufficient to invert the float.

Electrical Oil Level Indicators



LEN - LEG - LET - LEM - LEU page 103
LVK 115

LEN - LEG - LET - LEM - LEU series

Electrical oil level indicators



Technical data

Electrical oil level indicators

LEN is a range of electrical fluid level indicators for monitoring of the fluid level into the tank.

They are directly fitted on the tank.

The float moves through the rod while the fluid level changes.

A magnet, fitted into the float, turns a reed sensor fixed into the rod.

Available features:

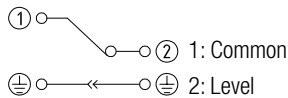
- G 1" male threaded or flanged connections
- Adjustable size on request, to meet every size of tank
- 1 or 2 floats, to monitor the minimum level, the maximum level or both of them.

Common applications:

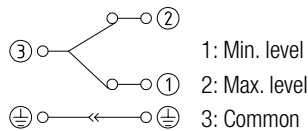
- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LEN 1 Float



LEN 2 Floats



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass, AISI 304 (on request)
- Float: Nylon foam, AISI 316 (on request)
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. reed, N.O. (on request)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

LEN 1 float 0.185 kg
LEN 2 floats 0.230 kg

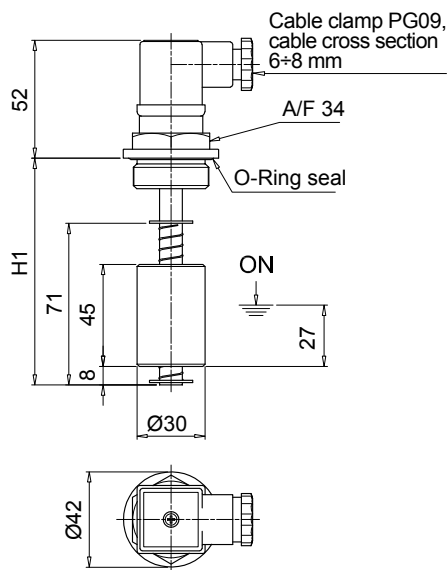


Designation & Ordering code

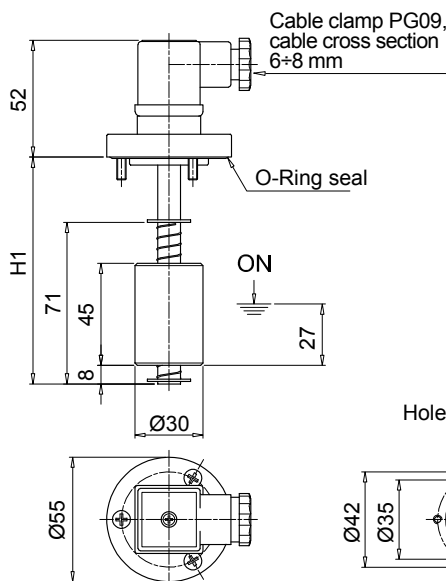
LEN

Series	Configuration example :									
LEN	LEN	A	350	2	A	1	A	G	S	P01
Tube material										
A Brass										
Length										
150 200 250 350 400 500										
Number of floats										
	150	200	250	350	400	500				
1 Nr. 1 float	•	•	•	•	•	•				
2 Nr. 2 floats		•	•	•	•	•				
Float material										
A Nylon foam										
Electrical switch										
1 N.C. (Normally Closed)										
Seals										
A NBR										
Connections to the tank										
G Thread G 1"										
F Nr. 3 holes flange										
Electrical connection										
S DIN 43650 connector										
Execution										
P01 MP Filtri standard										
Pxx Customized										

Connection "G"



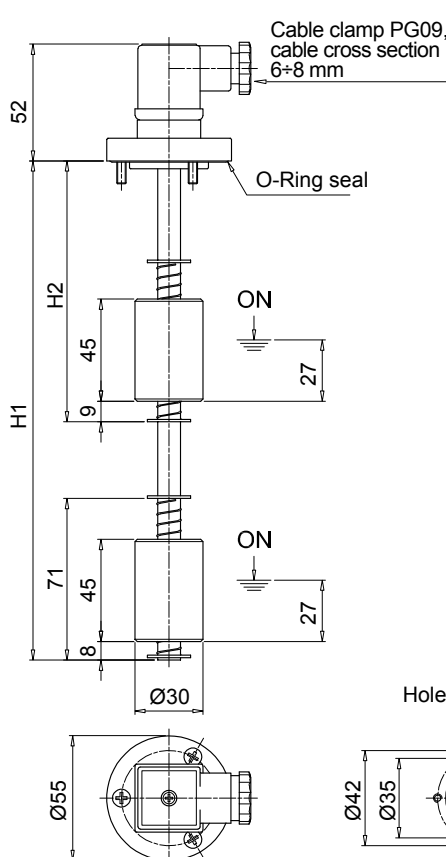
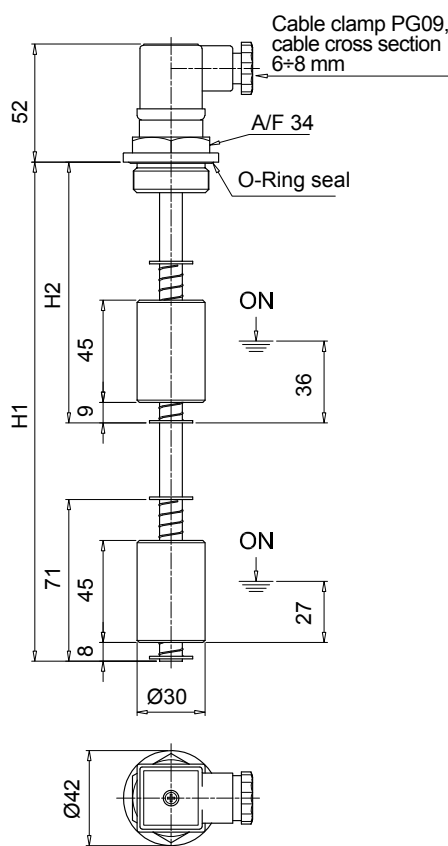
Connection "F"



LEN

Nr. 1 float

Length	H1 [mm]
150	150
200	200
250	250
350	350
400	400
500	500



LEN

Nr. 2 floats

Length	H1 [mm]	H2 [mm]
200	200	95
250	250	105
350	350	115
400	400	115
500	500	125

Optional

DIN 43650 CONNECTOR

Materials

- Flange: aluminum
- Rod: brass
- Float: nylon foam
- Seals: A= NBR - V= FPM

Temperature

From -15 °C to +80 °C

For temperatures outside this range, contact MP Filtri Technical and Sales Department

Technical data

Electrical oil level indicators

LEG is a range of electrical fluid level indicators for monitoring of the fluid level into the tank.

They are directly fitted on the tank side.

The float moves through the rod while the fluid level changes.

A magnet, fitted into the float, turns a reed sensor fixed into the rod.

Available features:

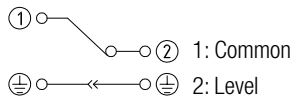
- Flanged connections
- Adjustable size on request, to meet every size of tank
- 1 float, to monitor the minimum level or the maximum level.

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LEG 1 Float



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange: Aluminium
- Tube: Brass
- Float: Nylon foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. reed, N.O. (on request)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

The electrical properties indicated are referred to resistive loads; for capacitive and inductive loads and incandescent lamps, use protection circuits.

Temperature

From -15 °C to + 80 °C

Weight

LEG A 102 0.19 kg
LEG A 200 0.22 kg

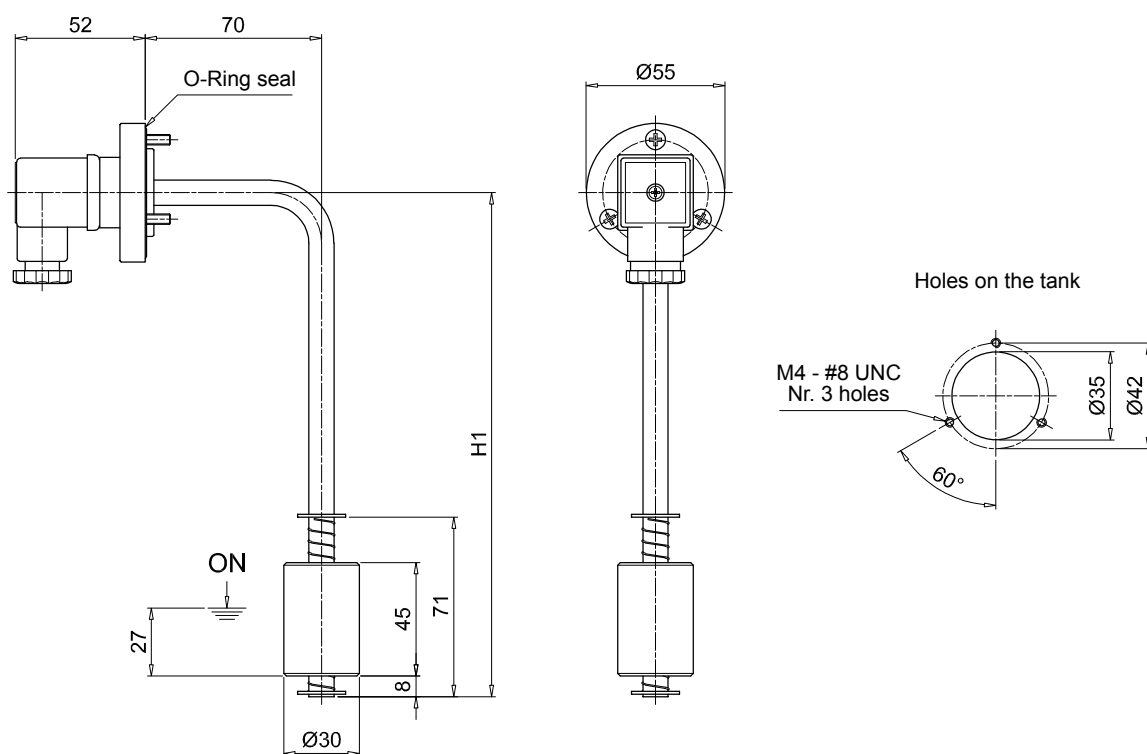


Designation & Ordering code

LEG

Series	Configuration example :	LEG	A	200	1	A	1	A	F	S	P01
LEG											
Tube material			A								
A Brass											
Length				200							
102 200 											
Number of floats					1						
1 Nr. 1 float											
Float material						A					
A Nylon foam											
Electrical switch							1				
1 N.C. (Normally Closed)											
Seals								A			
A NBR											
Connection to the tank									F		
F Nr. 3 holes flange											
Electrical connection										S	
S DIN 43650 connector											
											Execution
											P01 MP Filtri standard
											Pxx Customized

LEG	
Size	H1 [mm]
LEG 102	103
LEG 200	200



Optional

DIN 43650 CONNECTOR

Materials

- Flange: aluminum
- Rod: brass
- Float: nylon foam
- Seals: A= NBR - V= FPM

Temperature

From -15 °C to +80 °C

For temperatures outside this range, contact
MP Filtri Technical and Sales Department

Note: for installation onto OB Cleaning covers see page 147

Technical data

Electrical oil level indicators

LET is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank.

The float moves through the rod while the fluid level changes.

A magnet, fitted into the float, turns a reed sensor fixed into the rod.

The integrated thermostat allows to get a remote monitoring of the temperature.

Available features:

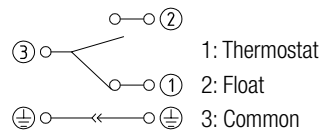
- G 1" male threaded or flanged connections
- Adjustable size on request, to meet every size of tank
- 1 float, to monitor the minimum level or the maximum level.

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LET 2 Floats with thermostat



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass, AISI 304 (on request)
- Float: Nylon foam, AISI 316 (on request)
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. reed, N.O. (on request)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

LET A 200	0.20 kg
LET A 300	0.23 kg
LET A 400	0.28 kg



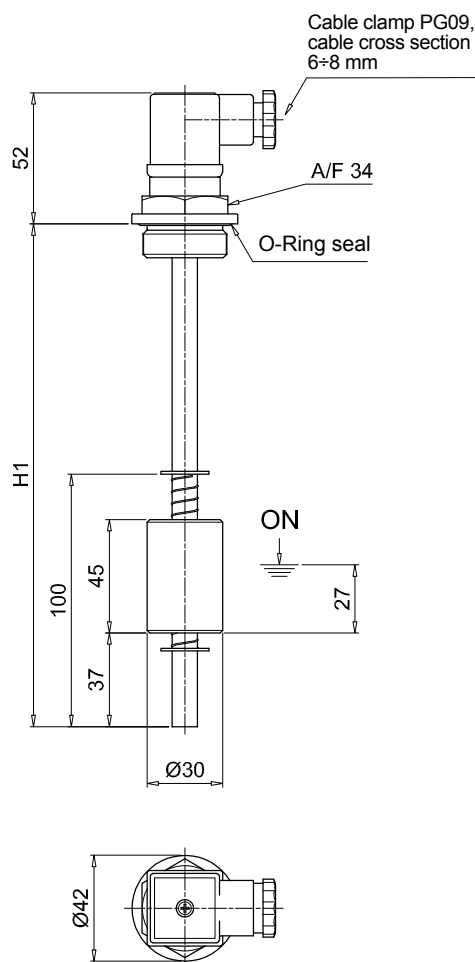
Designation & Ordering code

LET

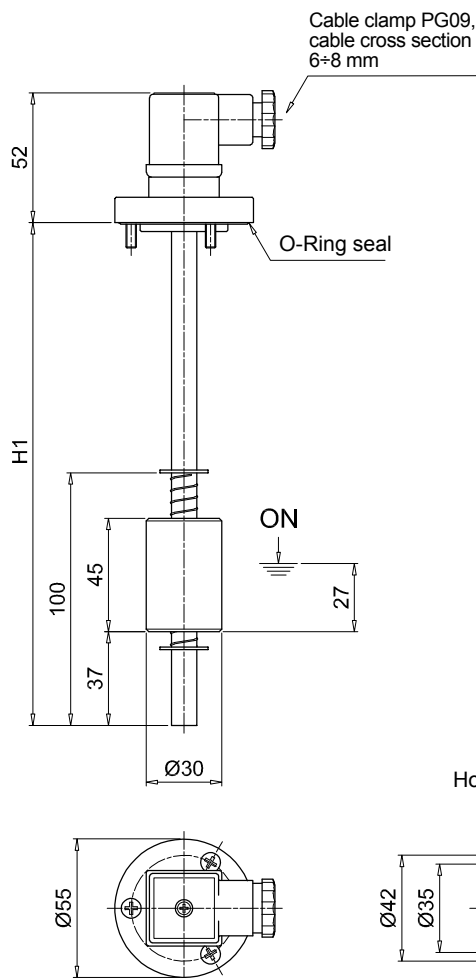
Series	Configuration example :	LET	A	300	1	A	1	A	F	S	50	P01
LET												
Tube material			A									
A Brass												
Length				300								
200 300 400												
Number of floats					1							
1 Nr. 1 float												
Float material						A						
A Nylon foam												
Electrical switch							1					
1 N.C. (Normally Closed)												
Seals								A				
A NBR												
Connections to the tank									F			
G Thread G 1"												
F Nr. 3 holes flange												
Electrical connection										S		
S DIN 43650 connector												
											Thermostat setting	
											50 50°C N.O. (Normally Open)	
												Execution
												P01 MP Filtri standard
												Pxx Customized

LET	
Length	H1 [mm]
200	200
300	300
400	400

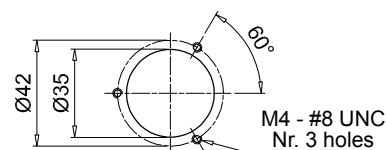
Connection "G"



Connection "F"



Holes on the tank



Optional

DIN 43650 CONNECTOR

Materials

- Flange: aluminum
- Rod: brass
- Float: nylon foam
- Seals: A= NBR - V= FPM

Temperature

From -15 °C to +80 °C

For temperatures outside this range, contact
MP Filtri Technical and Sales Department

Technical data

Electrical oil level indicators

LEM is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod. The setting point is adjustable on site, with few easy actions.

Available features:

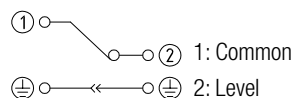
- Flanged connections
- Adjustable size on request, to meet every size of tank
- 1 float, to monitor the minimum level or the maximum level
- Integrated thermostat, to get a remote monitoring of the temperature.

Common applications:

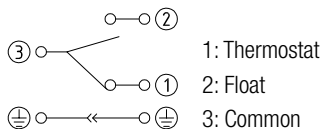
- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LEM 1 Float



LEM 2 Floats with thermostat



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Nylon foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Float contact: N.C. reed, N.O. (on request)
- Thermostat contact: N.O., N.C. (on request)

Electrical data

- Protection rating: IP65
- Max switching capacity: 80 W
- Max switching current: 1 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

LEM 0.406 kg

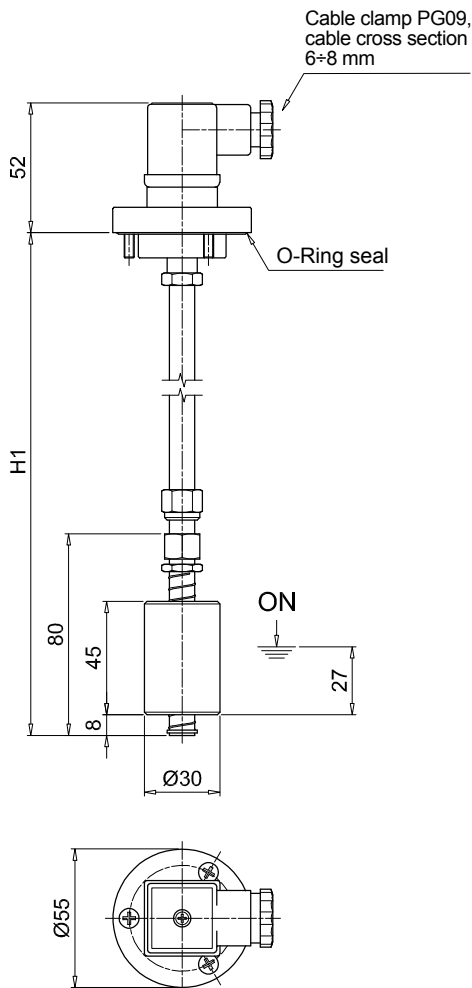


Designation & Ordering code

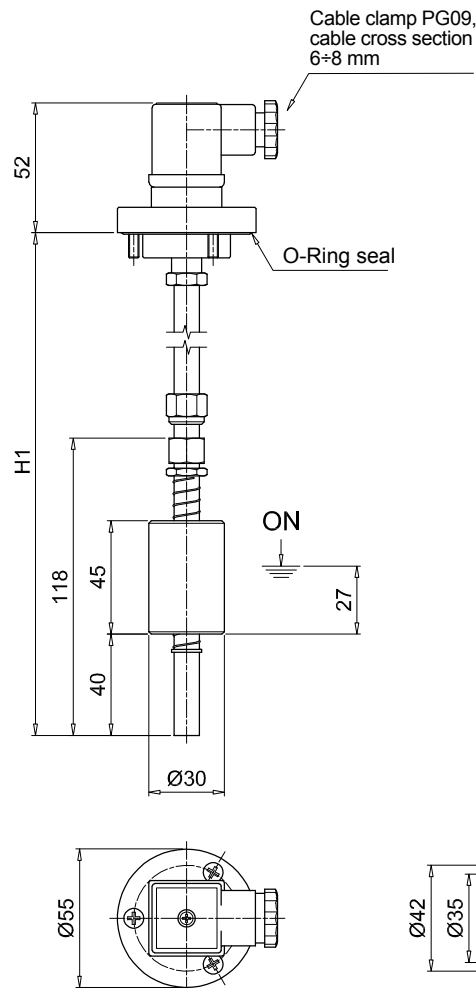
LEM											
Series	Configuration example : LEM A 1000 1 A 1 A F S 60 P01										
LEM											
Tube material	A Brass										
Length	500 1000										
Number of floats	1 Nr. 1 float										
Float material	A Nylon foam										
Electrical switch	1 N.C. (Normally Closed)										
Seals	A NBR										
Connections to the tank	F Nr. 3 holes flange										
Electrical connection	S DIN 43650 connector										
Thermostat setting	00 Without thermostat 60 60°C N.O. (Normally Open)										
Execution	P01 MP Filtri standard Pxx Customized										

LEM	
Length	H1 [mm]
500	500
1000	1000

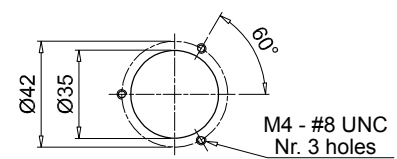
Without thermostat



With thermostat



Holes on the tank



Optional

DIN 43650 CONNECTOR

Materials

- Flange: aluminum
- Rod: brass
- Float: nylon foam
- Seals: A= NBR - V= FPM

Temperature

From -15 °C to +80 °C

For temperatures outside this range, contact
MP Filtri Technical and Sales Department

Technical data

Electrical oil level indicators

LEU is a range of electrical fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank. The float moves through the rod while the fluid level changes. A magnet, fitted into the float, turns a reed sensor fixed into the rod. The setting point is adjustable on site, with few easy actions. They are made of stainless steel, to meet every heavy duty application.

Available features:

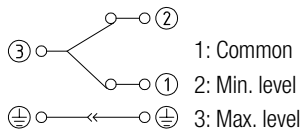
- Flanged connections
- Adjustable size on request, to meet every size of tank
- 2 floats, to monitor both the minimum level and the maximum level.

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LEU 2 Floats



Note: to invert the contact status from NC to NO and vice versa, simply invert the float.

Materials

- Flange: Aluminium
- Tube: AISI 304
- Float: Hard rubber, AISI 316 (on request)
- O-Ring: NBR
- Circlip: AISI 304
- Float contact: N.C. reed, N.O. (on request)

Electrical data

- Protection rating: IP65
- Max switching capacity: 50 W
- Max switching current: 0.5 A
- Max switching voltage: 250 Vac
- Fluid specific gravity: > 0.75

Temperature

From -15 °C to + 80 °C

Weight

LEU 1 float 0.310 kg
LEU 2 floats 0.415 kg

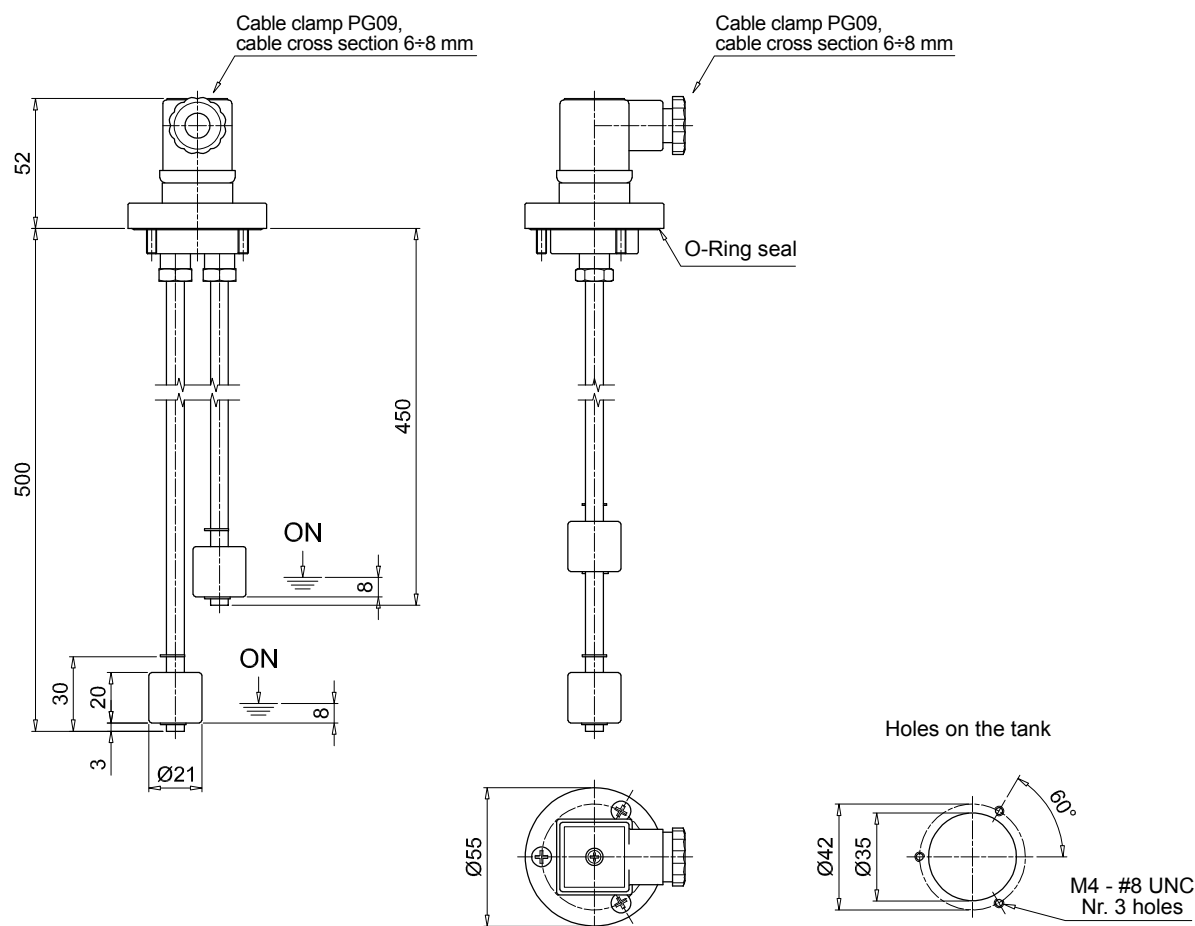


Designation & Ordering code

LEU

Series	Configuration example :	LEU	B	2	B	1	A	F	S	P01
LEU										
Tube material										
B AISI 304										
Number of floats										
2 Nr. 2 floats										
Float material										
B NBR										
Electrical switch										
1 N.C. (Normally Closed)										
Seals										
A NBR										
Connections to the tank										
F Nr. 3 holes flange										
Electrical connection										
S DIN 43650 connector										
Execution										
P01 MP Filtri standard										
Pxx Customized										

LEU



Optional

DIN 43650 CONNECTOR

Materials

- Flange: aluminum
- Rod: brass
- Float: nylon foam
- Seals: A= NBR - V= FPM

Temperature

From -15°C to $+80^\circ\text{C}$

For temperatures outside this range, contact
MP Filtri Technical and Sales Department

LVK series

Electrical and visual oil level indicator



Technical data

Electrical and visual oil level indicators

LVK is a range of electrical and visual fluid level indicators for monitoring of the fluid level into the tank. They are directly fitted on the tank side. The float moves through the indicator housing while the fluid level changes.

A magnet, fitted into the float, turns a reed sensor fixed into the housing.

Available features:

- Several male threaded connections
- Three different sizes, to meet every size of tank
- Thermometer, thermostat or PT100, to check the temperature of the fluid

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

see page. 118

Materials

- Head: Polyamide
- Screws: Nickel plated brass (standard), Aisi 314 (optional)
- Seal: NBR (standard), FPM (optional)
- Float: Polyamide
- Sensor thermometer: Screw + thermometer

Temperature

From -20 °C to + 80 °C

Weight

LVK 10	0.140 kg
LVK 20	0.170 kg
LVK 30	0.250 kg

Quantity

25 pcs/pack



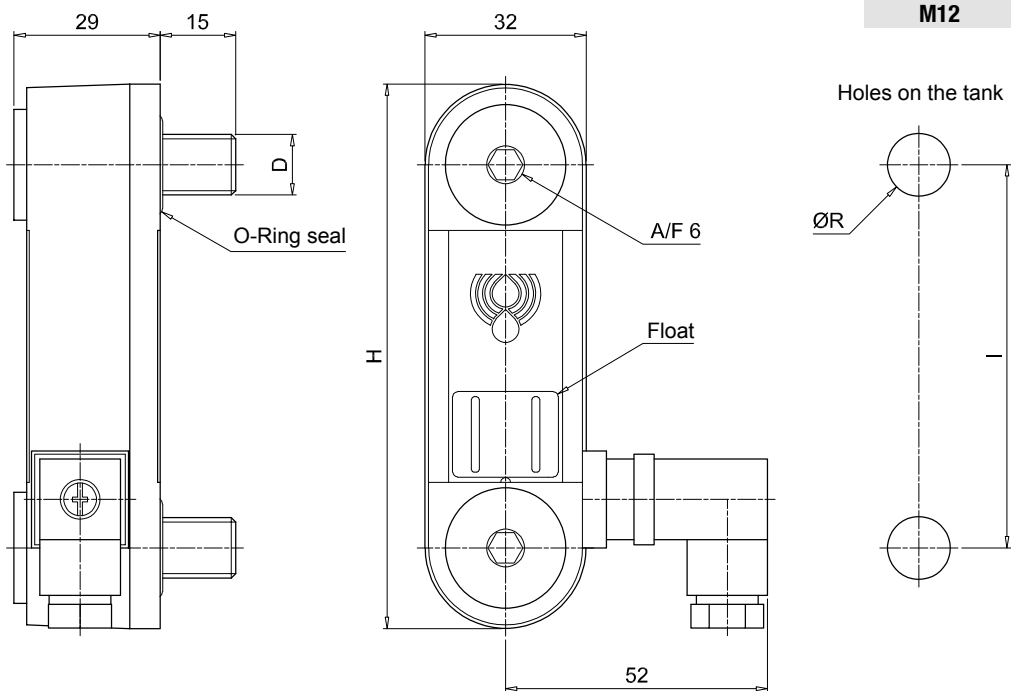
Designation & Ordering code

LVK

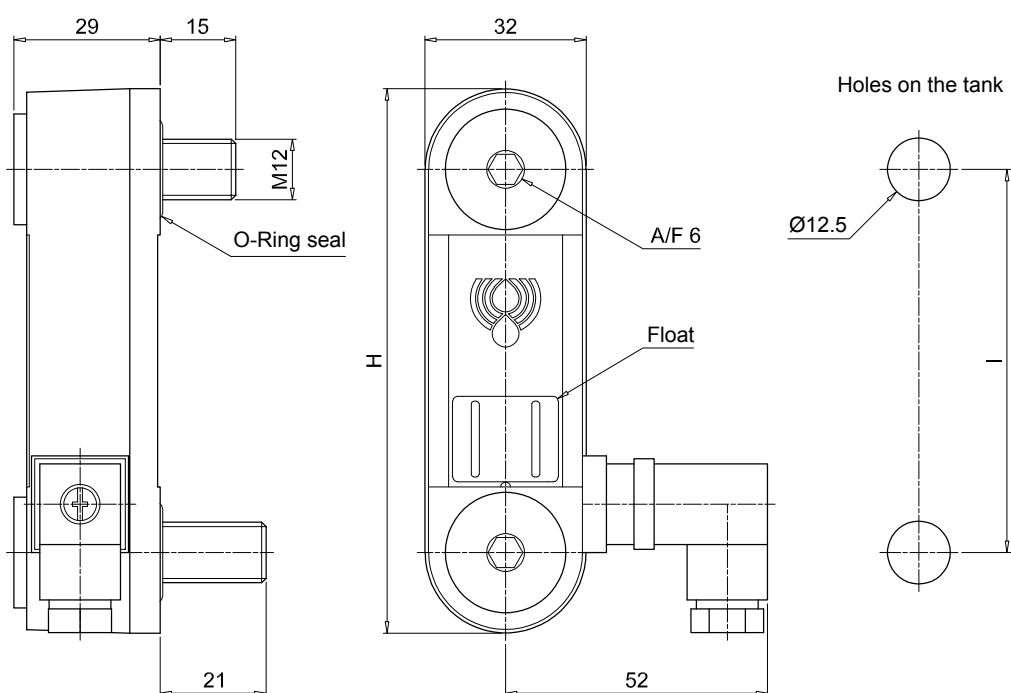
Series	Configuration example : LVK 20 A M12 1 T 5 P01								
LVK									
Length	10 20 30								
Seals	A NBR								
Connections	M10 Screws M10	M12	Screws M12						
Electrical switch in absence of fluid	1 N.O. (Normally Open)								
	2 N.C. (Normally Closed)								
	3 SPDT (single-pole, double throw)								
Version		Connection							
		M10	M12						
S Standard		•	•						
T With thermostat			•						
P With PT100 sensor			•						
Thermostat setting		Version							
		S	T	P					
S Standard (no setting)		•		•					
1 50°C N.O. (Normally Open)			•						
2 60°C N.O. (Normally Open)			•						
3 70°C N.O. (Normally Open)			•						
5 50°C N.C. (Normally Closed)			•						
6 60°C N.C. (Normally Closed)			•						
7 70°C N.C. (Normally Closed)			•						
		Execution							
		P01 MP Filtri standard							
		Pxx Customized							

LVK		
Size	H [mm]	I [mm]
10	108	76
20	159	127
30	286	254
Connection	D [mm]	ØR [mm]
M10	M10	10.5
M12	M12	12.5

Without thermostat

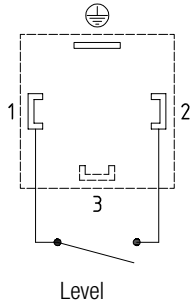


With thermostat

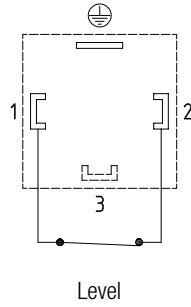


Electrical symbols

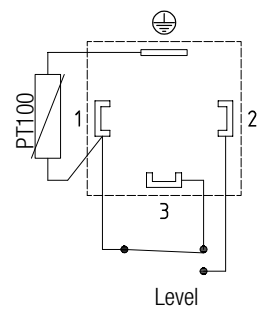
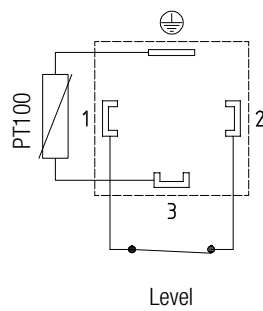
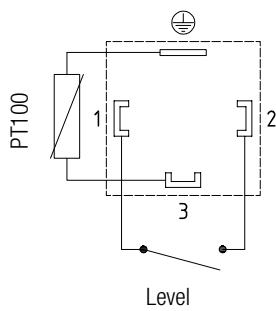
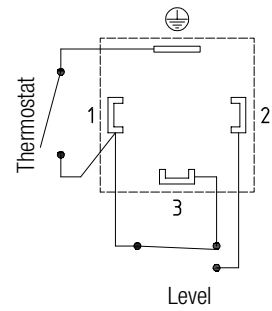
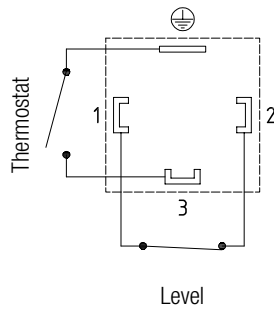
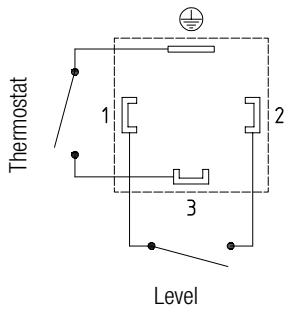
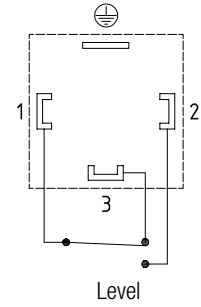
N.O.
(Normally Open)



N.C.
(Normally Closed)



SPDT
(single-pole, double-throw)



EM1 & SVM gauge isolator valves are designed to protect pressure gauges from pressure shocks when the pressure reading is not required.

FTA/FTR flanges make it possible to fix suction and return lines on the reservoir cover.

MULTIFLEX fixing clamps make it possible to install various pipelines of different types and diameters, rapidly, easily, and, more importantly, economically.

CLEANING COVERS, facilitating the maintenance of oil tanks in hydraulic power units, without necessarily having to dismantle the unit.

ALUMINIUM TANKS of 10 litres capacity, allowing the assembly of a compact hydraulic power unit.

Accessories



EM1	page 123
SVM	129
FTA - FTR	133
SFT	137
OB	143
SE10LT	149

EM1 series

Gauge isolator valves



EM1 GENERAL INFORMATION

Technical data

Gauge isolator valves

Gauge isolator valves are designed to protect pressure gauges from pressure shocks when the pressure reading is not required; after each reading setting the selector to the closed position serves to depressurise the pressure gauge by means of the T fitting connected to the reservoir.

3 and 6-way pressure gauge selectors perform the same function as the gauge isolator valves, allowing pressure values from different parts of the system to be read using a single pressure gauge.

Working instructions:

- Button not pressed: pressure gauge isolated
- Button pressed: pressure gauge reading
- Button pressed and turned (either to left or right): button remains in position and pressure gauge measures pressure continuously.
- To isolate the pressure gauge from pressure reading, turn the button until it returns to the not pressed position.

Materials A-B

- Body: Cast iron
- Pin: Steel
- Seals: NBR, FPM
- Knob/cover: Nylon
- Stop ring: Steel
- Spring: Steel
- Nameplate: Aluminium
- Nut-screw: Galvanized steel

Materials C

- Body: Cast iron
- Pin: Steel
- Seals: NBR, FPM
- Knob/cover: Nylon
- Stop ring: Steel
- Spring: Steel
- Nameplate: Aluminium
- Nut-screw: Galvanized steel
- Plug: Anodized steel

Operating pressure

400 bar

Operating temperature

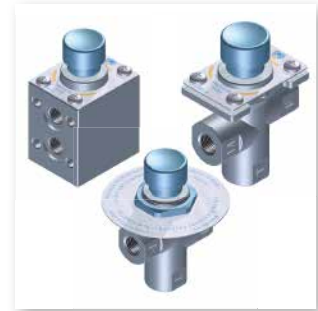
From -25 °C to + 100 °C

Weight

- EM1 version A 0.41 kg
- EM1 version B 0.44 kg
- EM1 version C 1.00 kg

Quantity

25 pcs/pack



Designation & Ordering code

EM1

Series and size

EM1

Configuration example : **EM1** **A** **G2** **A** **P01**

Version

- A** Threaded connections, panel mount with hex nut
- B** Threaded connections, panel mount with screws
- C** Manifold/threaded connections, panel mount with screws

Connection

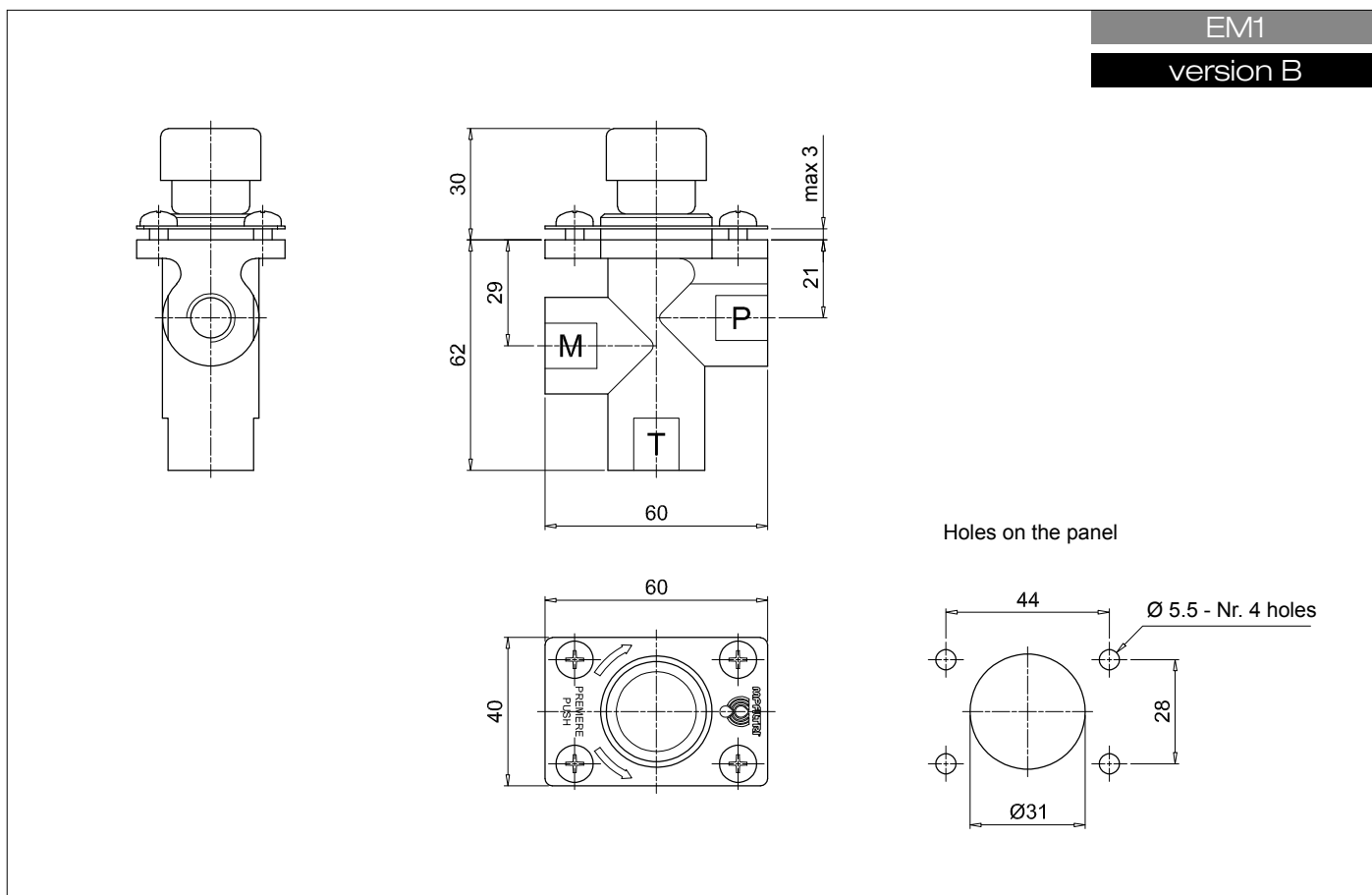
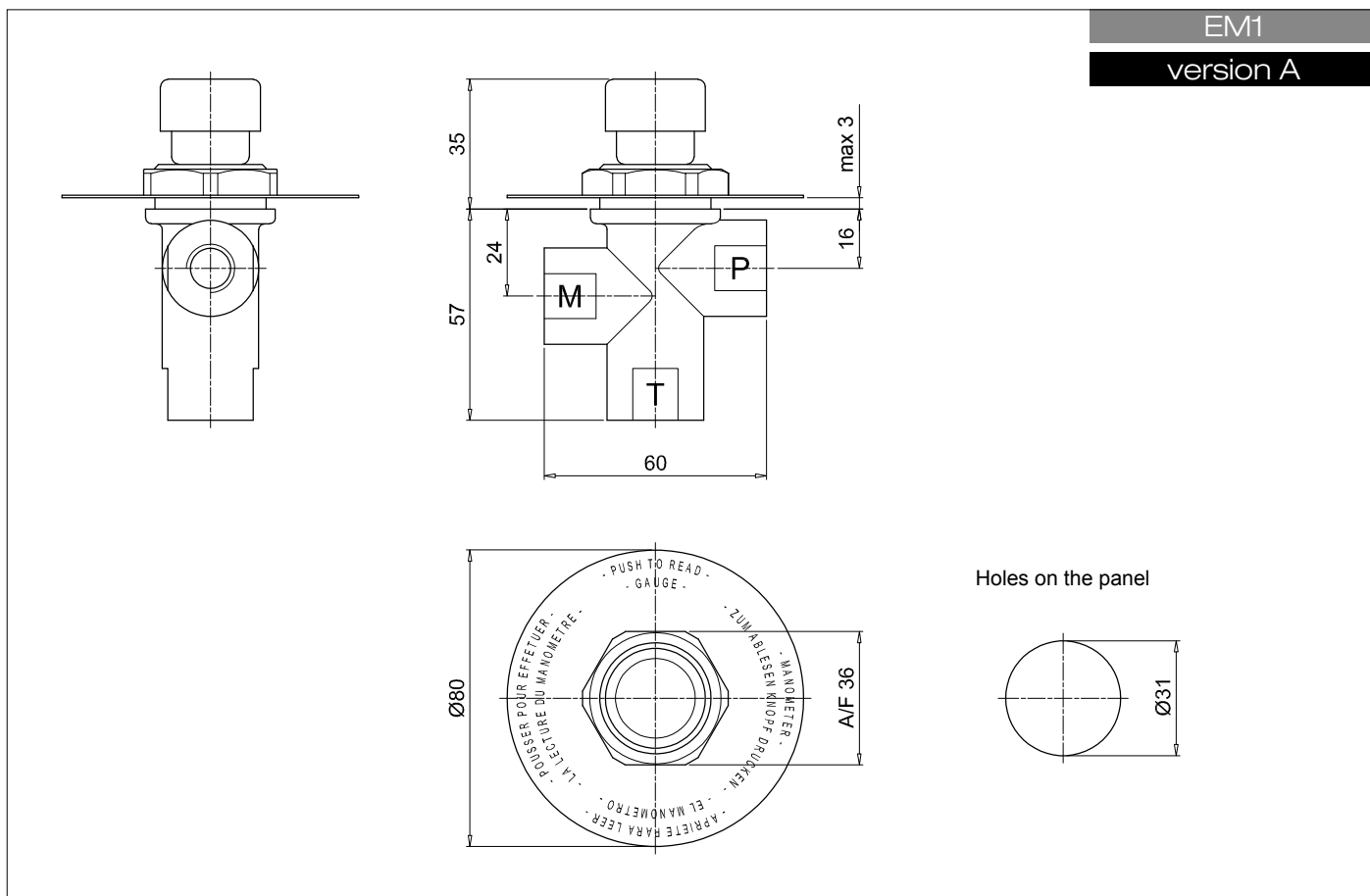
- G1** G 1/4"
- G2** 1/4" NPT
- G3** SAE 5 - 1/2" - 20 UNF

Seals

- A** NBR
- V** FPM

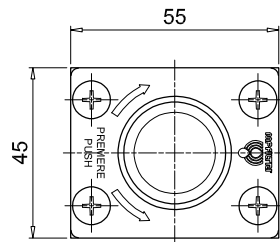
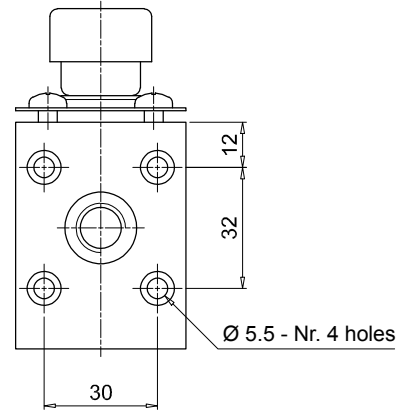
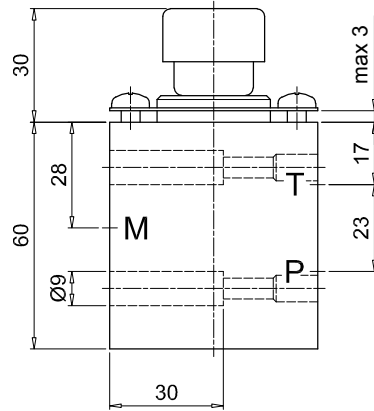
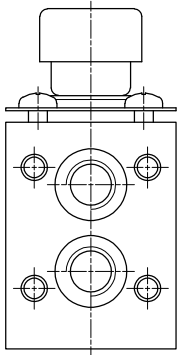
Execution

- P01** MP Filtri standard
- Pxx** Customized

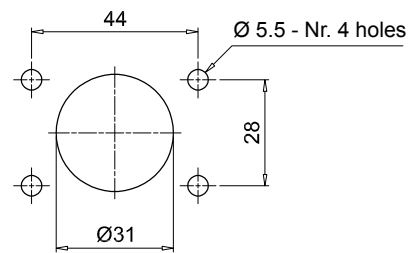


EM1

version C



Holes on the panel



SVM series

Gauge isolator valves



SVM GENERAL INFORMATION

Technical data

Gauge isolator valves

Gauge isolator valves are designed to protect pressure gauges from pressure shocks when the pressure reading is not required; after each reading setting the selector to the closed position serves to depressurise the pressure gauge by means of the T fitting connected to the reservoir.

3 and 6-way pressure gauge selectors perform the same function as the gauge isolator valves, allowing pressure values from different parts of the system to be read using a single pressure gauge.

Working instructions:

- Knob not pressed: pressure gauge isolated
- Knob pressed: pressure gauge reading
- Knob pressed and turned: the knob remains in position and pressure gauge measures pressure continuously.
- To isolate the pressure gauge from pressure reading, turn the button until it returns to the not pressed position.

Materials

- Body: Cast iron
- Pin: Steel
- Seals: NBR, FPM
- Cover: Anodized aluminium
- Flange: Anodized aluminium
- Knob: Nylon
- Ringnut: Nylon
- Nut-screw: Galvanized steel, Phosphatized steel
- Pin: Steel

Operating temperature

From -25 °C to + 100 °C

Weight

SVM length 3 1.547 kg
SVM length 6 1.507 kg

Quantity

25 pcs/pack



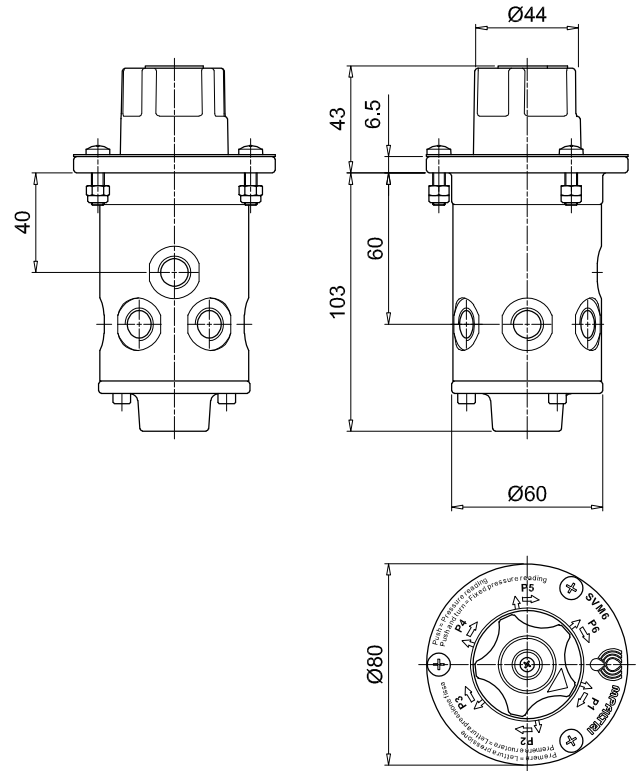
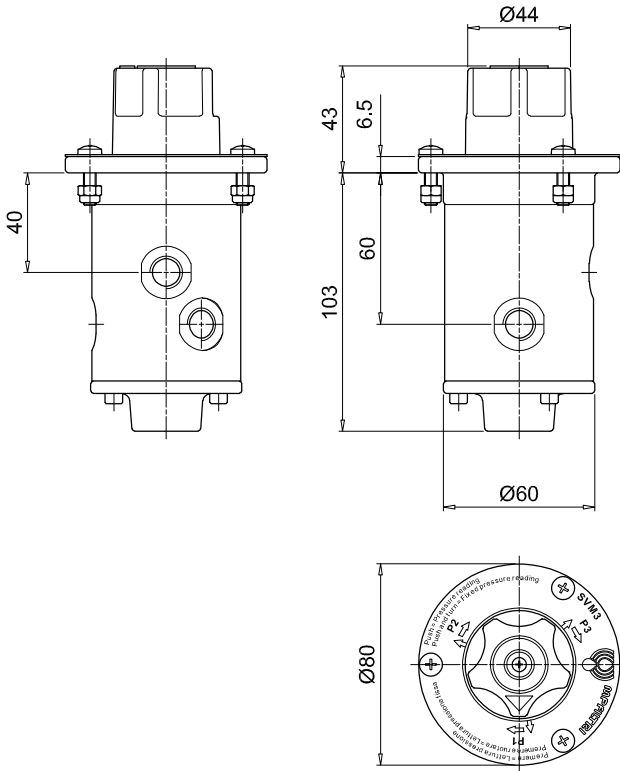
Designation & Ordering code

SVM

Series and size	Configuration example :				
SVM	SVM	3	G1	A	P01
Version					
3 Nr. 3 pressure ports					
6 Nr. 6 pressure ports					
Connection					
G1 G 1/4"					
G2 1/4" NPT					
G3 SAE 5 - 1/2" - 20 UNF					
Seals					
A NBR					
V FPM					
Execution					
P01 MP Filtri standard					
Pxx Customized					

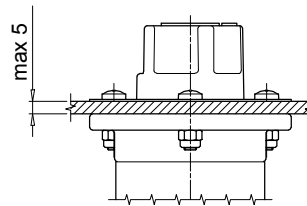
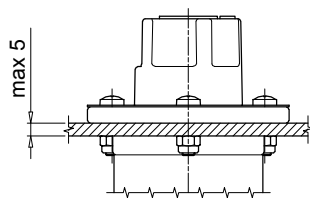
SVM
version 3

SVM
version 6

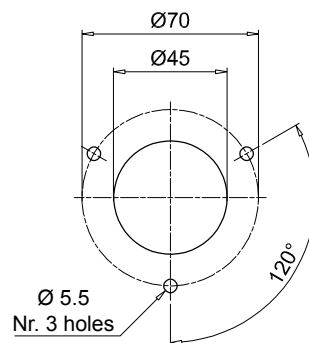
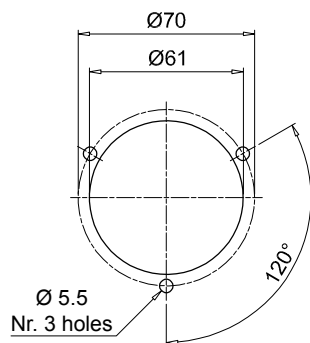


External mount

Internal mount



Holes on the panel



FTA -FTR series

Oil tank fixing flange



FTA - FTR GENERAL INFORMATION

Technical data

Oil tank fixing flange

FT flanges make it possible to fix suction and return lines on the reservoir cover.

Fitting a flexible insert allows separation of pipes.

Both rigid pipes and flexible hoses can be separated from the reservoir walls, absorbing vibration and reducing plant noise emissions.

Operating pressure

400 bar

Operating temperature

From -25 °C to + 100 °C

Materials

- Flange: Galvanized steel
- Flange seal: Inorganic fibre
- Tube seal: NBR
- Screw: Galvanized steel

Weight FTA

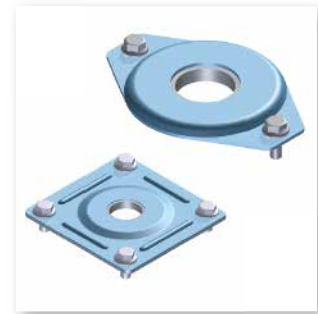
FTA 1215	0.590 kg
FTA 1620	0.570 kg
FTA 2225	0.550 kg
FTA 2630	0.530 kg
FTA 3235	0.500 kg
FTA 3842	0.520 kg
FTA 4850	0.920 kg
FTA 6061	0.900 kg
FTA 7577	0.860 kg
FTA 8789	0.830 kg

Weight FTR

FTR 0610	0.450 kg
FTR 1215	0.430 kg
FTR 1620	0.400 kg
FTR 2225	0.100 kg
FTR 2630	0.103 kg
FTR 3235	0.980 kg
FTR 3842	0.950 kg
FTR 4850	0.900 kg
FTR 6061	0.850 kg

Quantity

25 pcs/pack

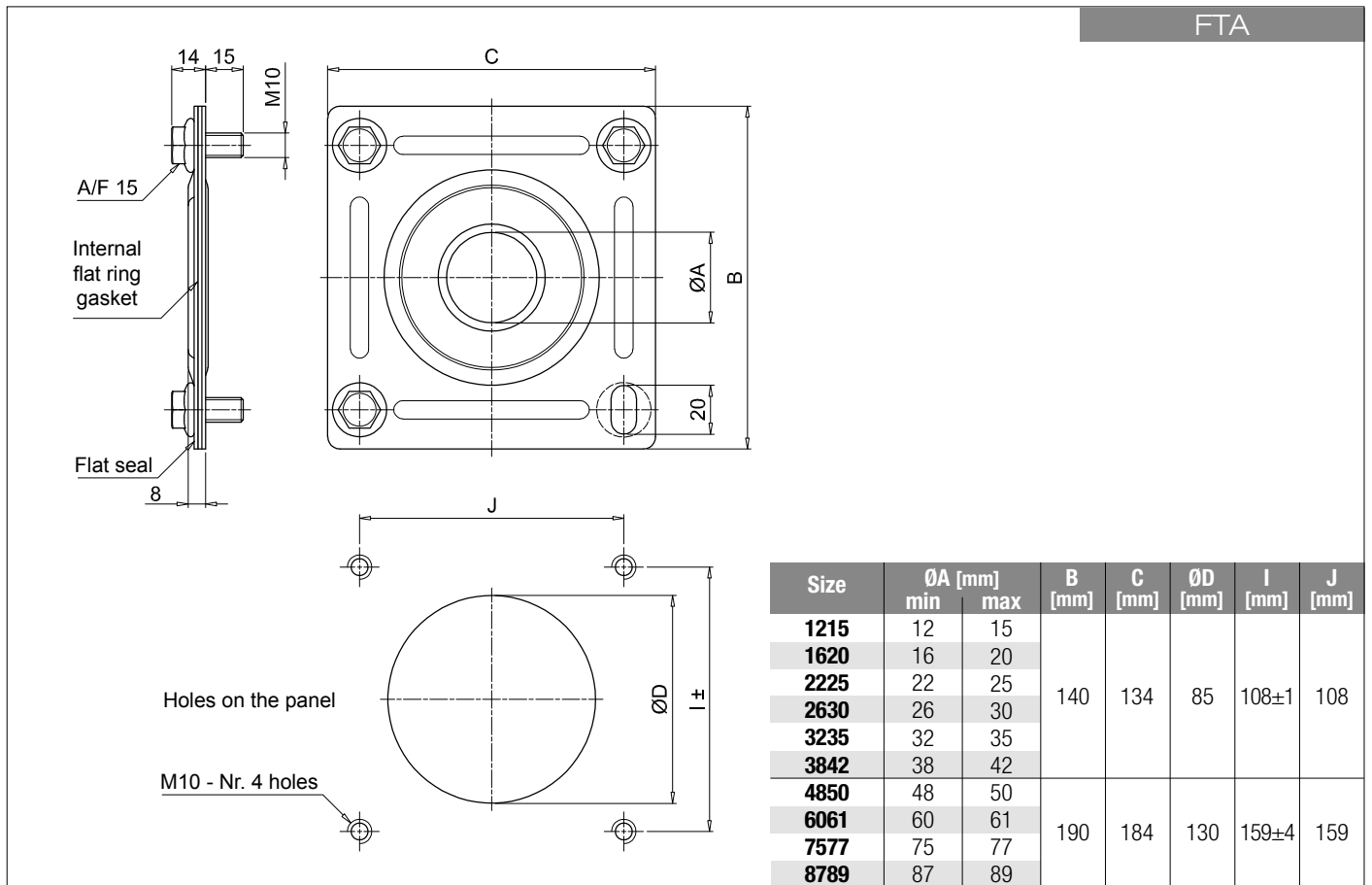


Designation & Ordering code

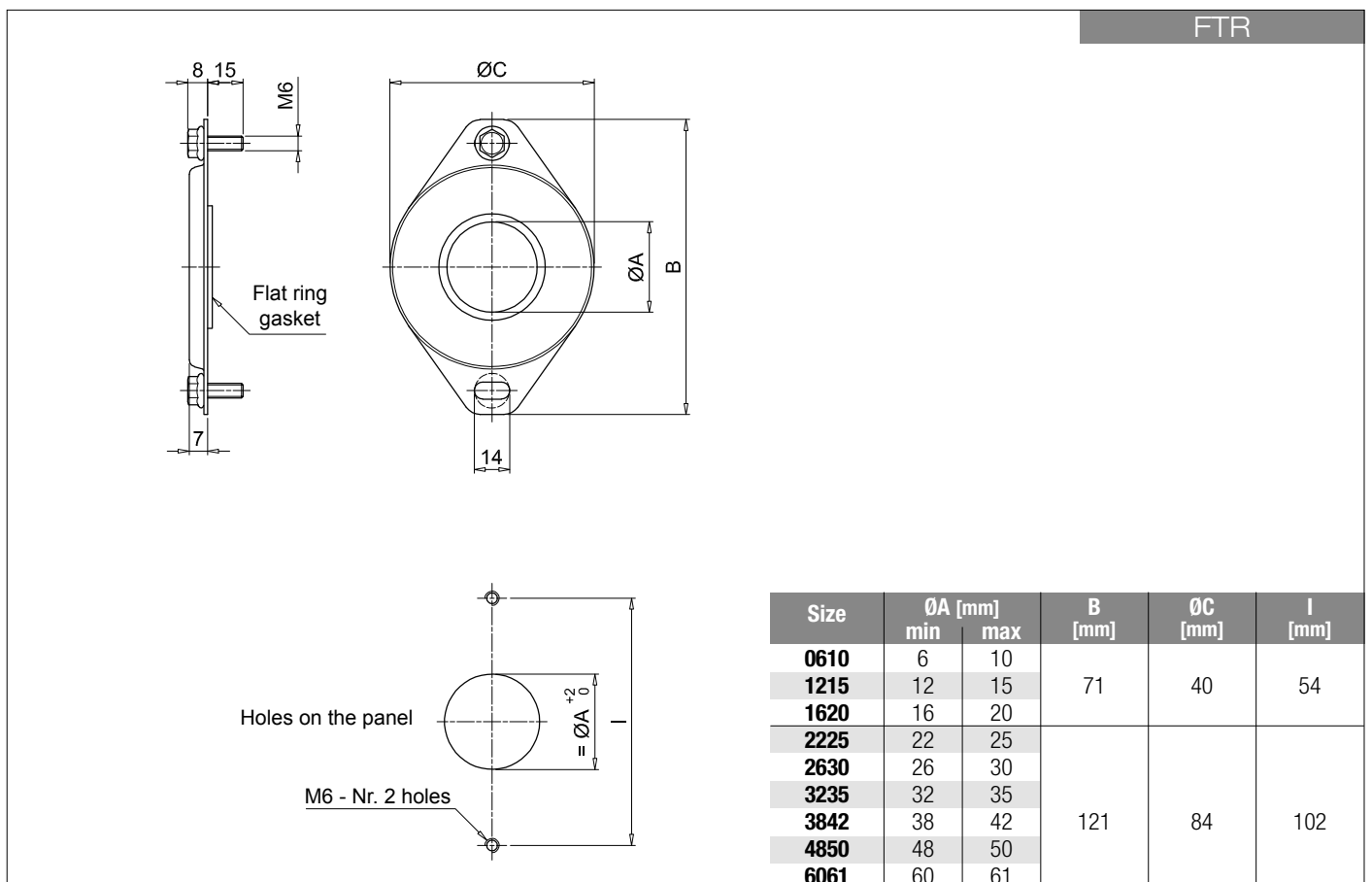
FTA - FTR

Series	Configuration example :					
FTA	FTR	FTA	2630	G	A	P01
Size	FTA	FTR				
0610 Pipe Ø06 ÷ 10 mm		•				
1215 Pipe Ø12 ÷ 15 mm	•	•				
1620 Pipe Ø16 ÷ 20 mm	•	•				
2225 Pipe Ø22 ÷ 25 mm	•	•				
2630 Pipe Ø26 ÷ 30 mm	•	•				
3235 Pipe Ø32 ÷ 35 mm	•	•				
3842 Pipe Ø38 ÷ 42 mm	•	•				
4850 Pipe Ø48 ÷ 50 mm	•	•				
6061 Pipe Ø60 ÷ 61 mm	•	•				
7577 Pipe Ø75 ÷ 77 mm	•					
8789 Pipe Ø87 ÷ 89 mm	•					
Flange seals	FTA	FTR				
G Inorganic fiber	•					
0 Without seal		•				
Pipe seals						
A NBR						
Execution						
P01 MP Filtri standard						
Pxx Customized						

FTA



FTR



SFT series

Fixing clamps



Technical data

Fixing clamps

MULTIFIX fixing clamps are particularly suitable when a series of pipelines must be installed requiring neat and high precision installation. These brackets make it possible to install various pipelines of different types and diameters, rapidly, easily, and, more importantly, economically.

MULTIFIX clamps support, guide, and absorb impact and vibration, protecting the pipes and dispensing with the need for complex and unsightly mounting systems with angle clamps etc.

An orderly layout facilitates maintenance resulting in significant savings in running costs; it also allows intuitive visual design of the plant, which can be assembled easily even without specialised labour.

Materials

- Pair of brackets: Galvanized steel
- Bush: NBR
- Spacer: Steel
- Studs: Steel
- Screws: Steel
- Foot and screw: Steel

Weight

SFT 38 1	0.050 kg
SFT 51 1	0.100 kg
SFT 78 1	0.570 kg

Operating temperature

From -25 °C to + 100 °C

Quantity

25 pcs/pack



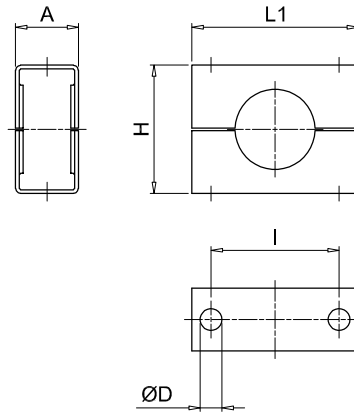
Designation & Ordering code

SFT

Series	Configuration example :			SFT	51	19	P01
SFT Pair of brackets							
Size							
38 Height 38 mm - 1 1/2"							
51 Height 51 mm - 2"							
78 Height 78 mm - 3"							
Number of pipe	38	51	78				
1 Single pipe	•	•	•				
16 Nr. 16 pipes			•				
19 Nr. 19 pipes		•					
26 Nr. 26 pipes	•						
Execution							
P01 MP Filtri standard							
Pxx Customized							

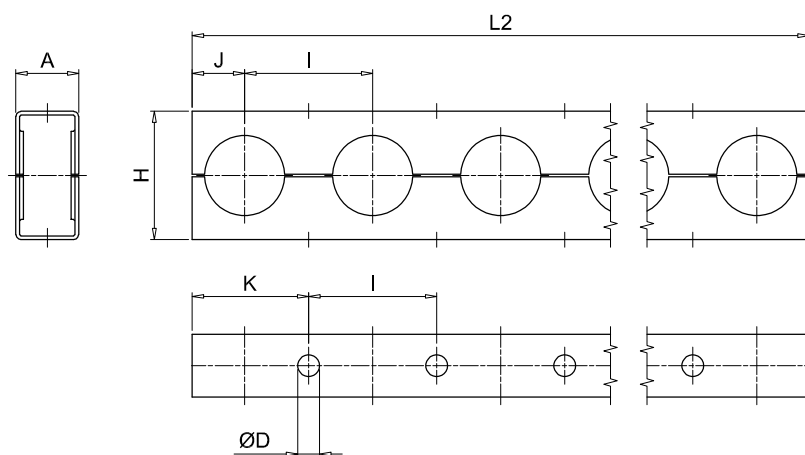
SFT

Single pipe



SFT

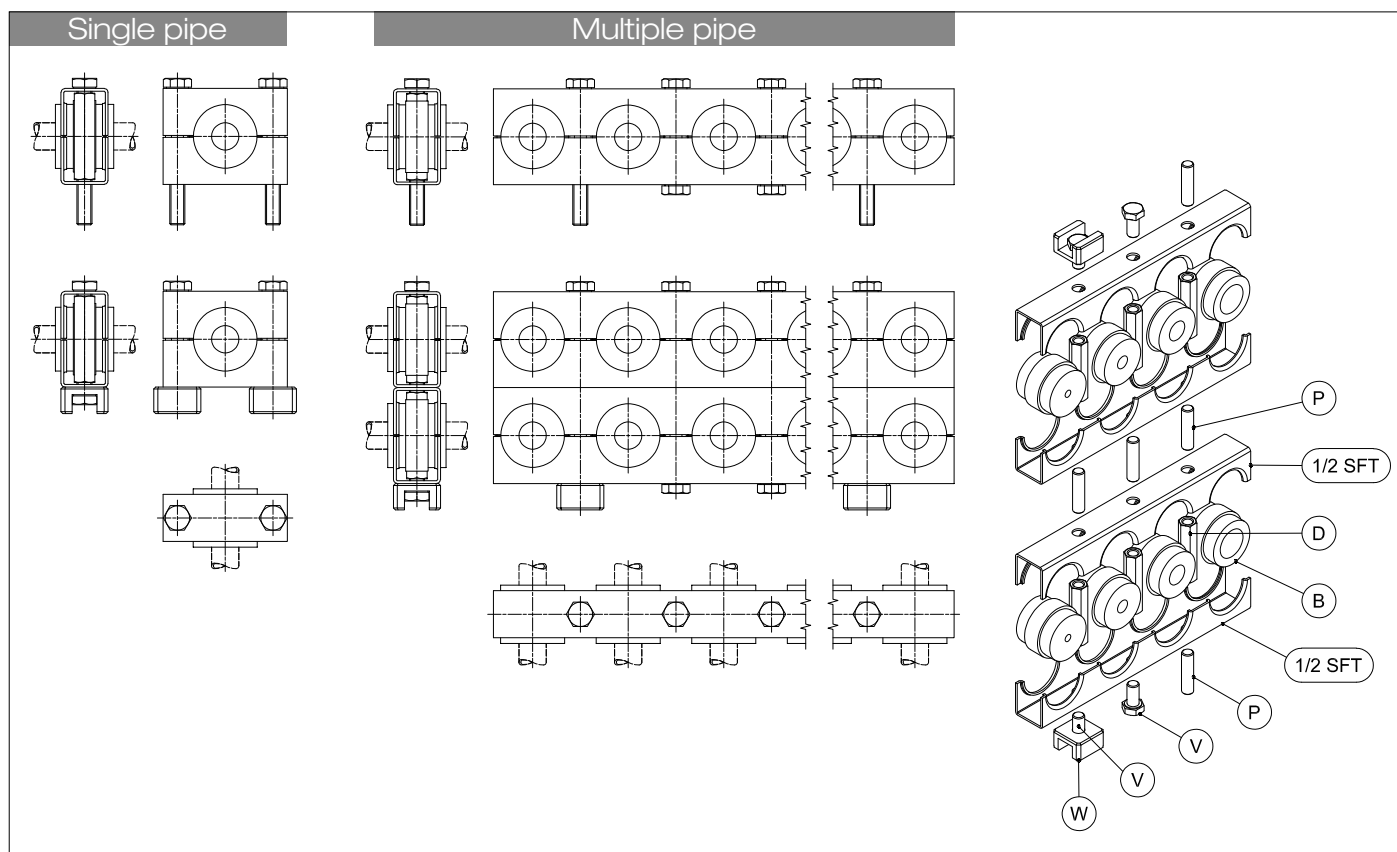
Multiple pipe



Size	A [mm]	ØD [mm]	H [mm]	I [mm]	J [mm]	K [mm]	L1 [mm]	L2 [mm]
38	25	8.7	38	38.1	15	34	56	982
51	25	8.7	51	50.8	21	46	66	956
78	41	11.1	78	76.2	35	73	95	1213

SFT MULTIFIX

Assembly



Designation & Ordering code

Dimensions

RUBBER BUSH

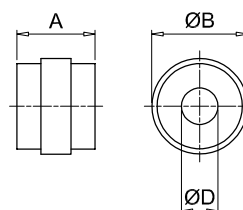
Configuration example: **B** | **51** | **1820**

Series
B Rubber bush

Size
38
51
78

Pipe diameter	38	51	78
6 Pipe Ø6 mm	•	•	
8 Pipe Ø8 mm	•	•	•
10 Pipe Ø10 mm - 1/8"	•	•	•
1214 Pipe Ø12 ÷ 14 mm - 1/4"	•	•	•
1516 Pipe Ø15 ÷ 16 mm - 3/8"	•	•	•
1820 Pipe Ø18 ÷ 20 mm - 1/2"	•	•	•
22 Pipe Ø22 mm - 5/8"		•	•
25 Pipe Ø25 mm - 3/4"		•	•
28 Pipe Ø28 mm		•	
2830 Pipe Ø28 ÷ 30 mm - 7/8"			•
33 Pipe Ø33 mm - 1"			•
3538 Pipe Ø35 ÷ 38 mm - 1 1/8"			•
42 Pipe Ø42 mm - 1 1/4"			•
50 Pipe Ø50 mm			•

B



Size	A [mm]	ØB [mm]
38	31	25
51	31	38
78	45	59

Pipe	ØD [mm]	Ø nom. pipe [inch]
6	6	-
8	8	-
10	10	1/8"
1214	12÷14	1/4"
1516	15÷16	3/8"
1820	18÷20	1/2"
22	22	5/8"
25	25	3/4"
28	28	-
2830	28÷30	7/8"
33	33	1"
3538	35÷38	1 1/8"
42	42	1 1/4"
50	50	-

HEXAGON CONNECTION NUT D

Configuration example: **D** **51** **M**

Series

D Hexagon connection nut

Size

38

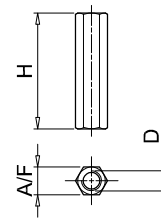
51

78

Screws

M Metric

U UNC



Size	Screws [mm]	D [mm]	H [mm]	A/F [mm]
38	M	M8	33	11
	U	5/16" UNC		
51	M	M8	46	11
	U	5/16" UNC		
78	M	M10	72	13
	U	3/8" UNC		

STUD BOLT P

Configuration example: **P** **3851** **M**

Series

P Stud bolt

Size

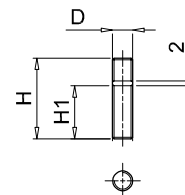
3851

78

Screws

M Metric

U UNC



Size	Screws [mm]	D [mm]	H [mm]	H1 [mm]
38 - 51	M	M8	32	21
	U	5/16" UNC		
78	M	M10	38	22
	U	3/8" UNC		

HEXAGON HEAD SCREW V

Configuration example: **V** **3851** **M**

Series

V Hexagon head screw

Size

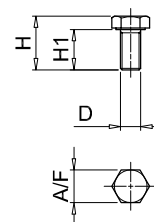
3851

78

Screws

M Metric

U UNC



Size	Screws [mm]	D [mm]	H [mm]	H1 [mm]	A/F [mm]
38 - 51	M	M8	21	16	13
	U	5/16" UNC			
78	M	M10	36	30	17
	U	3/8" UNC			

WELDING FOOT W

Configuration example: **W** **3851**

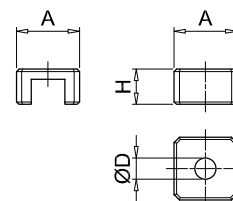
Series

W Welding foot

Size

3851

78



Size	H [mm]	ØD [mm]	H [mm]
38 - 51	25	8.5	14
78	32	11	16

OB series

Cleaning covers



Technical data

Cleaning covers

The pressure die-cast aluminium alloy cleaning covers offer superior mechanical strength and are manufactured to DIN 24339 standard. They provide easy access to the inside of the oil tank for inspection and cleaning purposes, without necessarily having to dismantle the unit. On request and also for small quantities inspection doors can be supplied with:

- customer logo
- hole cut for visual level indicator
- hole cut for visual and electrical level indicator
- oil sample plug

Compatibility with fluids

- Mineral oils types HH-LL-HM-HR-HV-HC, to ISO 6743/4 standard
- Water based emulsions types HFAE-HFAS, to ISO 6743/4 standard
- Water glycol type HFC, to ISO 6743/4 standard: ask for anodized version

OB275 and OB400 cleaning covers are designed according to DIN 24339.

Materials

- Cleaning covers: Pressure die-cast aluminium alloy / cast iron
- Seal: NBR 70 Shore A

Weight	with seal	without seal
OB275	2.06 kg	1.76 kg
OB350	2.10 kg	1.80 kg
OB356	2.10 kg	1.80 kg
OB400	3.20 kg	2.90 kg
OB475	3.70 kg	3.40 kg

Operating temperature

From -30 °C to +80 °C



Designation & Ordering code

OB

Size

OB275

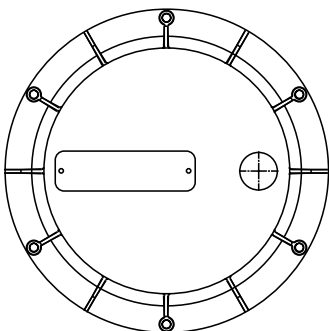
OB350

OB356

OB400

OB475

Available customization



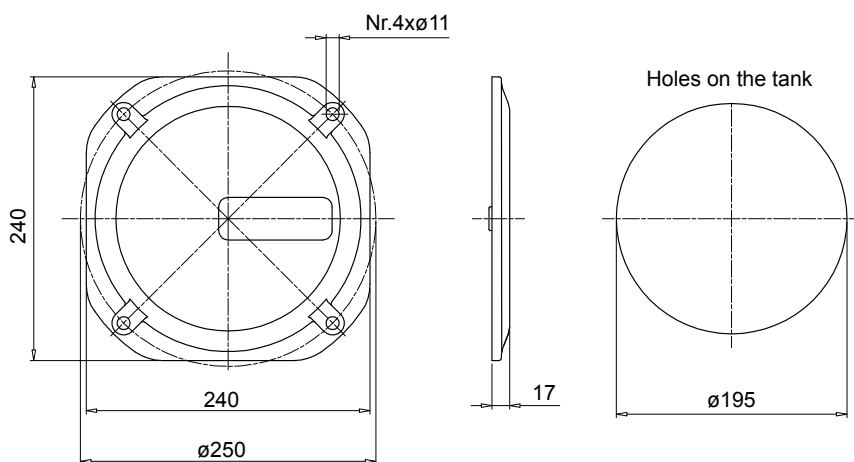
Nameplate with customer logo
Ordering information: **OB475LOGOP05**

The nameplates applied to the new inspection door are identical to those applied to the old door. The difference with the new door is that nameplates are fixed with rivets.

For ordering information codes, minimum order quantities, fixing hole positions and other details not indicated in this publication, contact MP Filtri Technical and Sales Department.

Cleaning cover according to DIN 24339

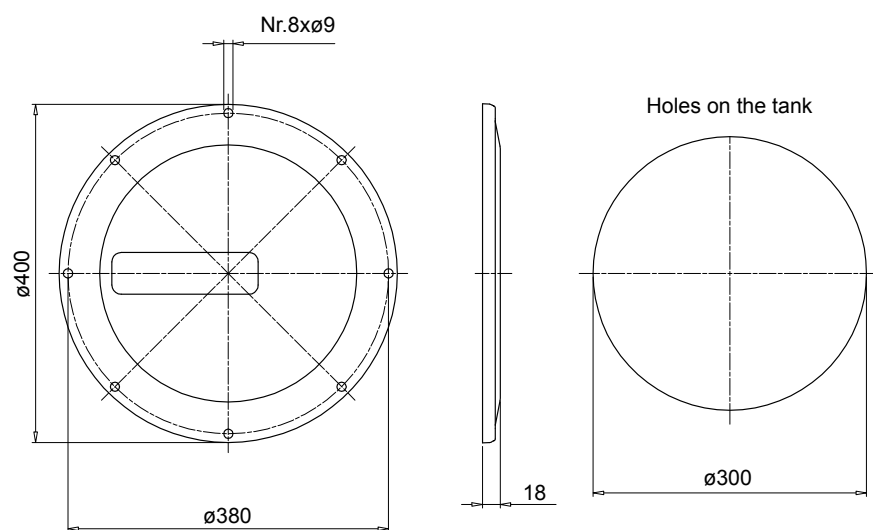
OB275



Code	Description	Seal
OB275P01GN	Door with MP Logo	NBR
OB275P02GN	Blank cover	NBR
OB275P01GV	Door with MP Logo	FPM
OB275P02GV	Blank cover	FPM

Code	Description
OB275P01	Door with MP Logo
OB275P02	Blank cover
GU0275NBR	Seal
GU0275VTN	Seal

OB400



Code	Description	Seal
OB400P01GN	Door with MP Logo	NBR
OB400P02GN	Blank cover	NBR
OB400P01GV	Door with MP Logo	FPM
OB400P02GV	Blank cover	FPM

Code	Description
OB400P01	Door with MP Logo
OB400P02	Blank cover
GU0400DINNBR	Seal
GU0400DINVTN	Seal

Dimensions

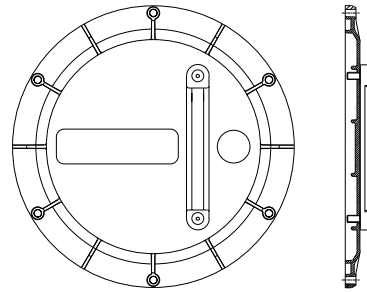
OB350			
	Code	Description	Seal
	OB350P01GN	Door with MP Logo	NBR
	OB350P02GN	Blank cover	NBR
	OB350P01GV	Door with MP Logo	FPM
	OB350P02GV	Blank cover	FPM
	Code	Description	
	OB350DIN000	Door	
	GU0350DINNBR	Seal	
	GU0350DINVTN	Seal	
OB356			
	Code	Description	Seal
	OB356P01GN	Door with MP Logo	NBR
	OB356P02GN	Blank cover	NBR
	OB356P01GV	Door with MP Logo	FPM
	OB356P02GV	Blank cover	FPM
	Code	Description	
	OB356DIN000	Door	
	GU0350DINNBR	Seal	
	GU0350DINVTN	Seal	
OB475			
	Code	Description	Seal
	OB475P01GN	Door with MP Logo	NBR
	OB475P02GN	Blank cover	NBR
	OB475P01GV	Door with MP Logo	FPM
	OB475P02GV	Blank cover	FPM
	Code	Description	
	OB475P01	Door with MP Logo	
	OB475P02	Blank cover	
	GU0475DINNBR	Seal	
	GU0475DINVTN	Seal	

LVA

LVA visual level indicators (see page 96) can also be mounted on MP Filtri cleaning covers to improve the maintenance and the service level.

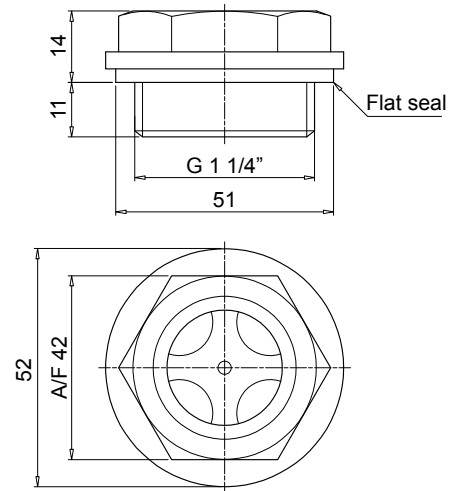
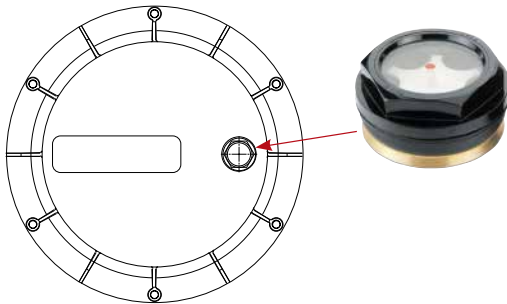
Indicator code	OB275**	OB350**	OB356**	OB400**	OB475**
LVA 10**	•	•	•	•	•
LVA 20**		•	•	•	•
LVA 30**				•	•

Note:
Preparing for to fit the level on request



LCPG42N...S

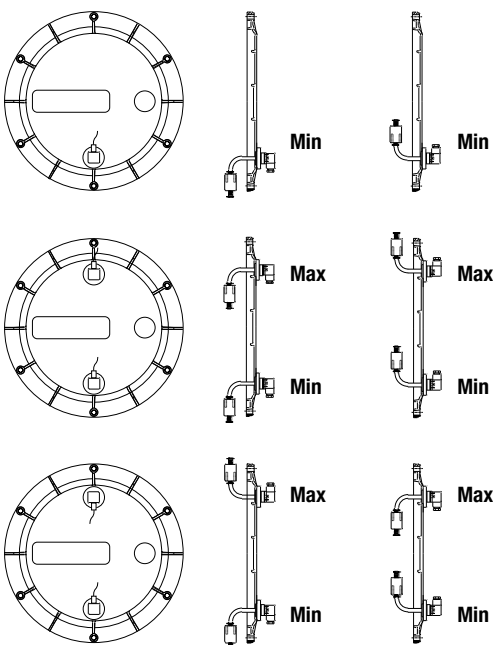
LCP spy eyes (see page 90) can also be mounted on MP Filtri cleaning covers to improve the maintenance and the service level.



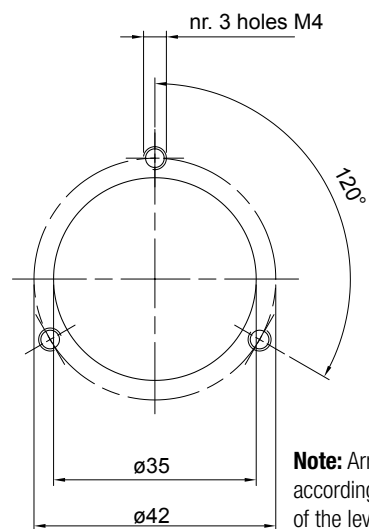
LEG

LEG series electrical level indicators (see page 106) are supplied with a 3-hole fixing flange and a reed switch having NC-NO contacts. Designed typically for installation on the vertical walls of oil tanks, these devices can also be mounted onto OB475 inspection door to indicate the minimum and maximum oil levels in the tank.

To operate correctly, the float must be positioned vertically and at a minimum distance of 35 mm from walls made of ferrous metal.



Layout of fixing holes for LEG level indicator



Note: Prepared for visual indicator on request

Note: Arrange the holes according to the position of the level indicator

SE10LT series

Aluminium tanks



SE10LT GENERAL INFORMATION

Technical data

Aluminium tanks

With 10 litres capacity, MP Filtri aluminium tank SE10LT allows the assembly of a compact hydraulic power unit.

Made of pressure die-cast aluminium alloy, these tanks feature superior strength and optimum design and are ideal for compact hydraulic power units.

Generously proportioned fins ensure efficient cooling.

The tank is supplied with:

- M6 threaded fixing holes for lid
- feet with M8 threaded fixing holes
- G 3/8" threaded drain hole

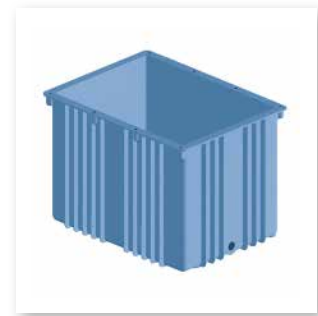
The lid is sealed by a gasket made of special paper, which must be ordered separately indicating code "GUS 10.0".

Material

Pressure die-cast aluminium alloy

Weight

SE10LT 4 kg



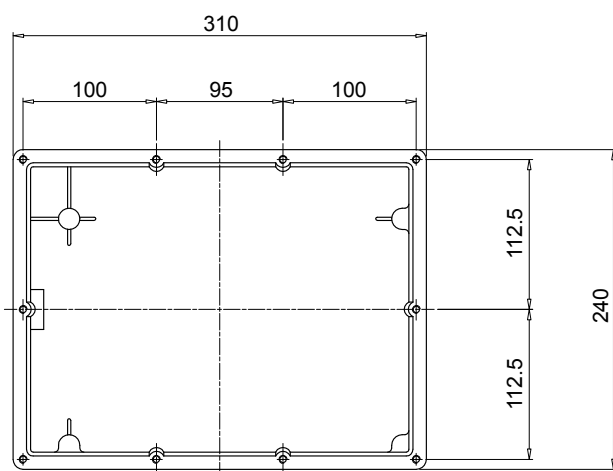
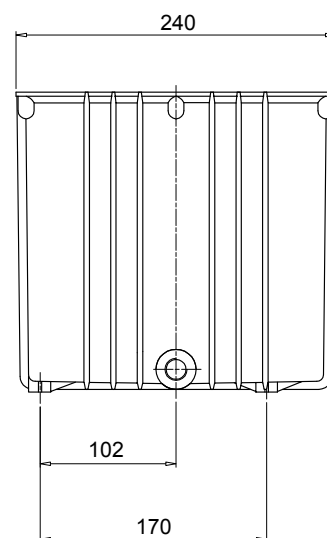
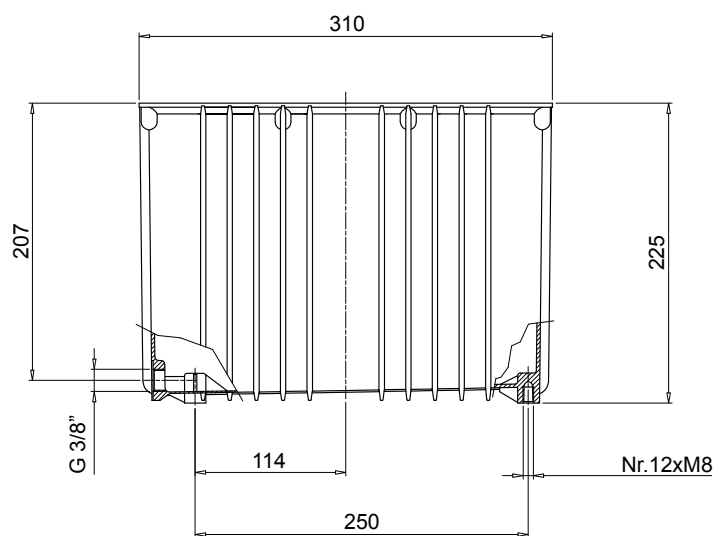
Designation & Ordering code

SE10LT

Size

SE10LT

SE10LT



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