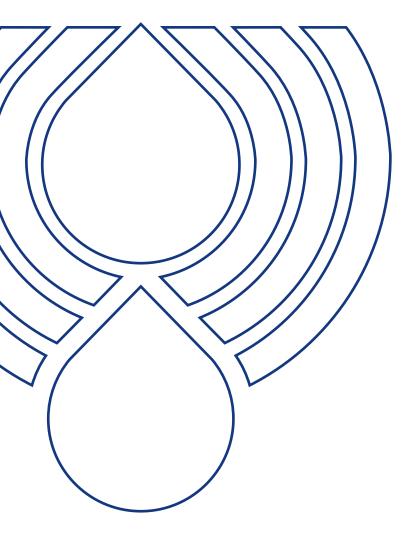
TANK ACCESSORIES



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.





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 **9 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

up to 300 l/min

Pressure

Mounting:

- In-Line

FILTERS

Flow rates

up to 80 bar

- 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 I/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 I/min Pressure from 320 bar up to 1000 bar

Mounting:

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

CONTAMINATION MONITORING PRODUCTS

- Off-line, 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

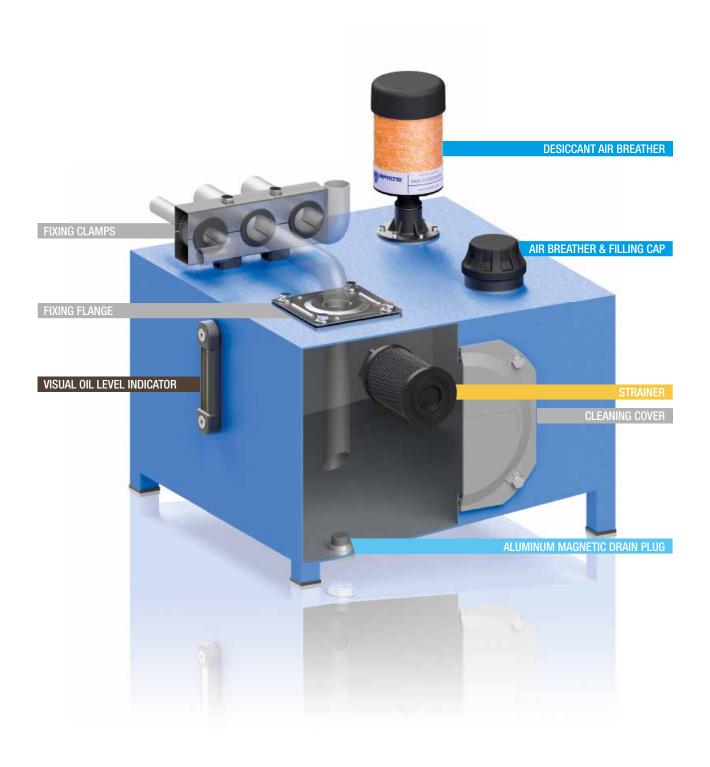
POWER TRANSMISSION PRODUCTS

- 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) pag	ge	STRAINERS
13	STR & MPA - MPM	Submerged suction filter, with bypass or magnetic column

20 pag	е	AIR BREATHERS AND FILLER PLUGS
23	SAP 054-075 - SA	Air breathers
29	SAW 115	Moisture control 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	Filler plug and air filter up to 200 I/min
53	TA 80	Steel filler plug and air filter up to 500 l/min
57	TAP 90	Filler plug and polyamide air filter up to 550 I/min
63	TAP 114	Filler plug and polyamide air filter up to 1600 l/min
67	TAP 115 & SAP 115	Filler plug and polyamide air filter up to 3000 l/min

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75	TC 50	Polyamide filler plug
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86 pag	е	VISUAL OIL LEVEL INDICATORS
89	LCP - LCC	Visual oil level indicator - round shape
95	LVA - LVU	Visual oil level indicator - vertical shape

100 page		ELECTRICAL OIL LEVEL INDICATORS
103	LEN - LEG - LET - LEM - LEU	Electric oil level indicator
115	LVK	Visual and Electric oil level indicator

(120) page		ACCESSORIES
123	EM1	Pressure gauge isolator
129	SVM	Gauge selector valve
133	FTA - FTR	Oil tank fixing flange
137	MULTIFIT 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.



Strainers



STR & MPA - MPM page 13





STR & MPA - MPM series

Flow rate up to 875 I/min



STR & MPA-MPM GENERAL INFORMATION

Description

Strainers

Flow rate up to 875 I/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 I/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 I/\min
- Magnetic column (MPM), to hold the ferrous particles

Common application:

Industrial equipment

Quantity

Series and size		pcs/pack
STR	045 - 050	12
STR	065 - 070 - 086 - 100	6
STR	140 - 150	1
MPA - MPN	1 012	12
MPA - MPN	1 015 - 025 - 030 - 045 - 050 - 075 - 095 - 120 - 150	6
MPA - MPN	1 180 - 220 - 280 - 300 - 380 - 430	1



Technical data

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
- Lind cap. darvanized 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 Polyamide

Bypass valve

Opening pressure 30 kPa (0.3 bar)

Elements

Fluid flow through the filter element from OUT to IN.

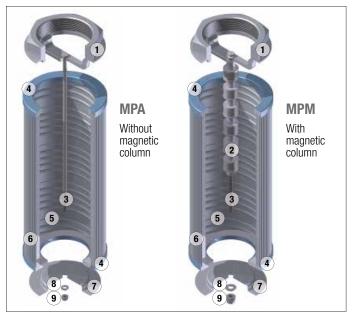
Temperature

From -25 °C to +110 °C



Weights [kg]

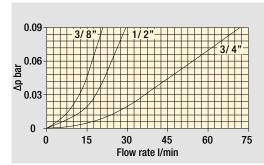
Filter series	
STR	see page 17
MPA - MPM	see page 19

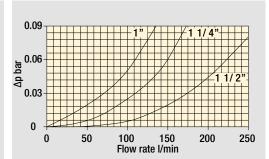


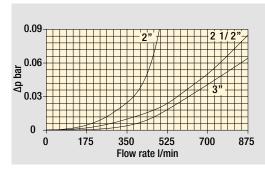
GENERAL INFORMATION STR & MPA-MPM

Pressure drop

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 [I/min]

Hydraulic symbols

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

Filter series	Style S	Style B
STR	•	•
MPA - MPM	•	
	OUT TO THE PROPERTY OF THE PRO	OUT IN

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

The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

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.



Designation & Ordering code

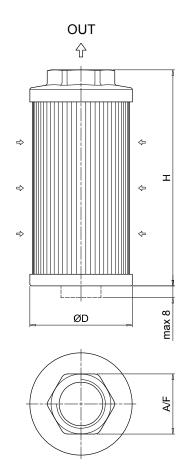
								COMPL	ETE FIL	TER							
Ser	ies a	ınd size	-	-	_	-				Configuration example 1	: STR045	1		В	G1	M60	P01
STR										Configuration example 2	: STR100	4	٦Ē	S	G2	M250	P01
STR	050									J 1		, <u> </u>		Ť		, <u></u>	
STR	065	j															
STR	070																
STR	086	}															
STR																	
STR																	
STR	150																
Len		and connect															
		RO45 STROS			'0 STR086												
1	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	-	-	-	- 4 (0)	1 1/2"	1 1/2"	3"	-									
6	-	-	-	1/2"	2"	-	3"	-									
Val																	
S		Without bypa															
В		With bypass	0.3 bar														
Thr	ead																
G1		BSP															
G2		NPT															
Filt	ratio	n rating															
M2		Wire mesh	25 µm														
M60		Wire mesh												Ex	ecution		
M90)	Wire mesh	90 µm											PO		Filtri sta	ndard
M25	50 \	Wire mesh 2	250 µm											Рх	x Cus	tomized	



(16)



Dimensions



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

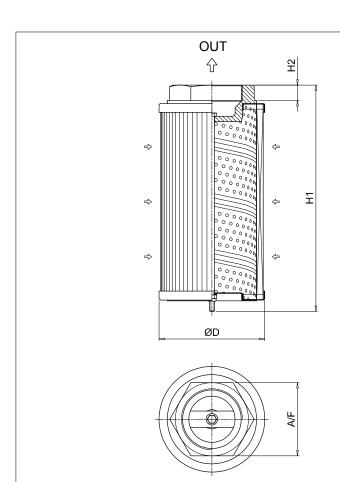


Designation & Ordering code

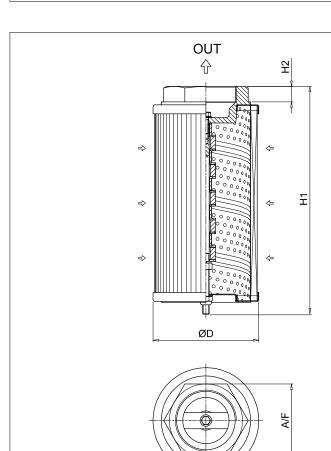
		COMPLETE FILTER	_			
Series			Configuration example 1:	MPA	030 G1	M60 P01
MPA	Without magnetic column		Configuration example 2:	MPM	430 G2	M250 P01
MPM	With magnetic column		oomigaration oxampio 2.		100 42	
	J					
Length	and connection	l				
012	3/8"					
015	1/2"	-				
025	1/2"	_				
030	3/4"	-				
045	3/4"	-				
050	1"	-				
075	1"	-				
095	1 1/4"	-				
120	1 1/4"	=				
150	1 1/2"	-				
180	1 1/2"	-				
220 280	2"	-				
300	2 1/2"	-				
380	2"	-				
430	3"	-				
730	3	-				
Thread						
G1	BSP					
G2	NPT	-				
		-				
Filtrati	on rating	l				
M25	Wire mesh 25 µm					
M60	Wire mesh 60 µm	-			Executio	n
M90	Wire mesh 90 μm	-			P01 M	P Filtri standard
M250	Wire mesh 250 µm	<u>-</u>			Pxx Cu	stomized

(18)-

Dimensions



			MPA			
					. /-	
Size	Thread	ØD	H1	H2	A/F	Weight
		[mm]	[mm]	[mm]	[mm]	[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



Size	Thread	ØD	H1	H2	A/F	Weight
		[mm]	[mm]	[mm]	[mm]	[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

MPM

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 and industrial 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

Polyamide air breather filter

SA SETIES

Metal air breather filter



SAP 054-075 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Polyamide 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 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 $\ldots)$

Common applications:

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

Flow rate Δp 0.02 bar

Flow rate [I/min]							
	Filtration rating	L03	L10				
SAP054		200	250				
SAP075		350	400				

Materials

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

Temperature

From -25 °C to +100 °C

Weight

SAP 054 - 0.06 kg SAP 075 - 0.15 kg

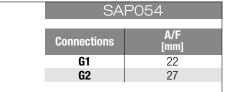


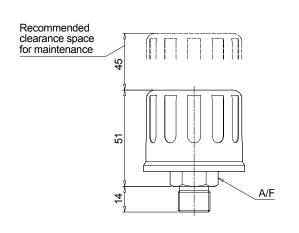
Designation & Ordering code

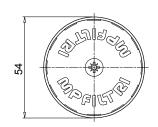
		C	OMPLETE AIR FILTER
Series and size			Configuration example : SAP054 G2 L10 A P01
SAP054 SAP075			
Connections	SAP054	SAP075	
G1	G 3/8"	G 1/2"	
G2	G 1/2"	G 3/4"	
Filtration rating			
L03 Resin impregnated paper	3 µm		
L10 Resin impregnated paper	10 µm		_
Seals			
A NBR			Execution
			P01 MP Filtri standard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

			FILTER ELEMENT				
Filter	element series and size		Configuration ex	xample :	A4	L10	P01
A4	SAP054						
A7	SAP075						
	ition rating						
L03	Resin impregnated paper	3 μm		Fuer	ulian		
L10	Resin impregnated paper	10 μm	<u> </u>	Execu P01		ri standard	
				Pxx	Custom		

Dimensions

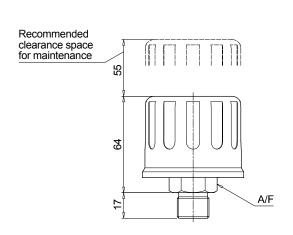


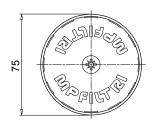




<u>S</u>AP075

Connections	A/F [mm]
G1	27
G2	32
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 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	L10					
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

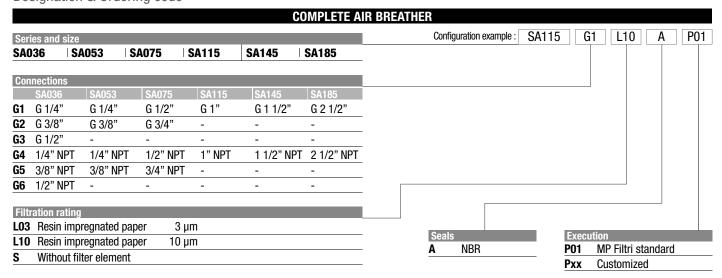
Weight



Customized

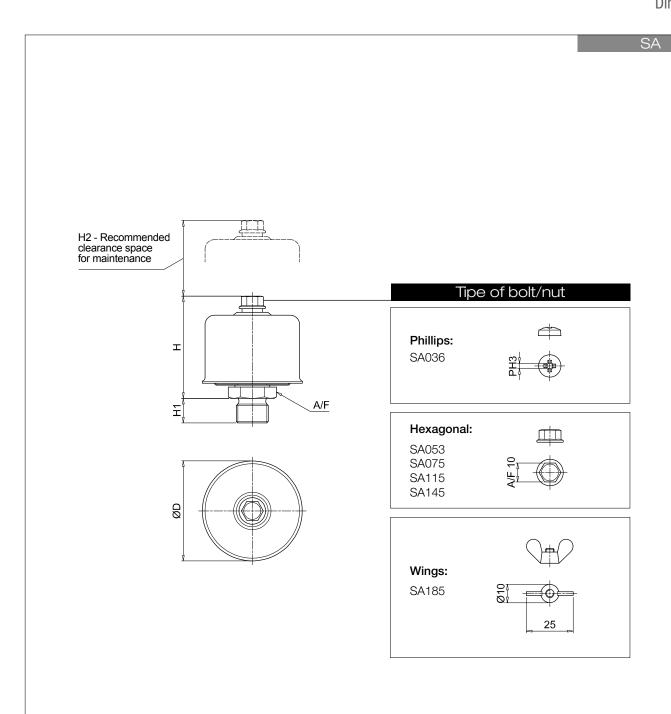
Pxx

Designation & Ordering code



				FILTE	R ELEMENT				
Filter	element series and size					Configuration example	A8	L10	P01
A05	A5 A7	A8	A10	A11			•		
	tion rating								
L03	Resin impregnated paper	3 µm							
L10	Resin impregnated paper	10 µm				Exec	ution		
						P01	MP Filtri	standard	





Туре	Connections	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
	G1		69	13		27
075	G2	75		17	60	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 18		164	25	150	90
	036 053 075 115 145	036 G1 ÷ G6 053 G1-G2-G4-G5 G1 075 G2 G4 G5 115 G1 - G4 145 G1 - G4	O36 G1 ÷ G6 36 O53 G1-G2-G4-G5 53 G1 G2 75 G4 G5 115 G1 - G4 115 145 G1 - G4 145	Type Connections [mm] [mm] 036 G1 ÷ G6 36 37 053 G1-G2-G4-G5 53 53 G1 G2 75 69 G4 G5 69 69 115 G1 - G4 115 80 145 G1 - G4 145 115	O36 G1 ÷ G6 36 37 13 O53 G1-G2-G4-G5 53 53 13 O75 G2 75 69 17 G4 G5 20 115 G1 - G4 115 80 17 145 G1 - G4 145 115 25	O36 G1 ÷ G6 36 37 13 30 O53 G1-G2-G4-G5 53 53 13 50 G1 13 50 13 50 O75 G2 75 69 17 60 G4 15 20 115 G1 - G4 115 80 17 70 145 G1 - G4 145 115 25 100

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SAW 115 series

Moisture control desiccant air breathers



115 GENERAL INFORMATI

Technical data

Air breathers & Filler plugs

Moisture control desiccant air breathers Max air flow up to 453 I/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 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 [I/min]

SAW115 453

Materials

Connection: Polyamide

Internal Support Pipe: Polyamide

Screen: Polycarbonate Cover: Polvamide Dryer Agent: Silica Gel

Filter Efficiency 3 µm absolute (B₃ ≥200)

Seals NBR

Temperature From -25 °C to +90 °C

Humidity Level Below Ambient Conditions

SAW1153G03A00P01: protects 30.000 + cycles

Deliquescent: Protects 5.000 cycles

(Testing parameters 23°C, 30 l/min)

Silica Gel Weight

Length 1 0.32 kg

Length 2 0.56 kg

Length 3 0.84 kg

Total Weight

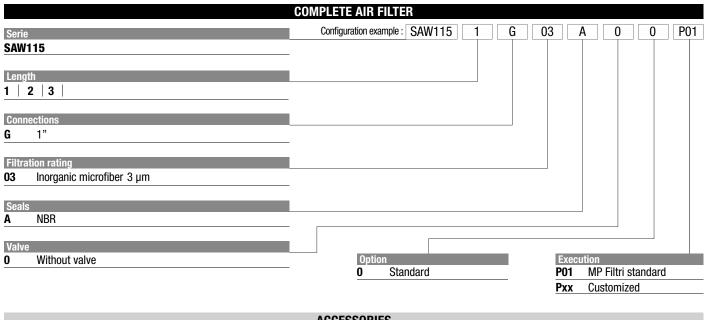
Length 1 0.60 kg

Length 2 0.90 kg

Length 3 1.20 kg



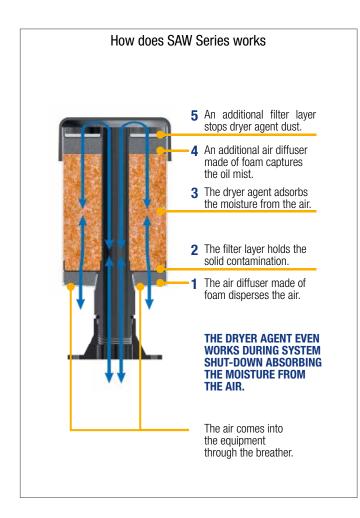
Designation & Ordering code

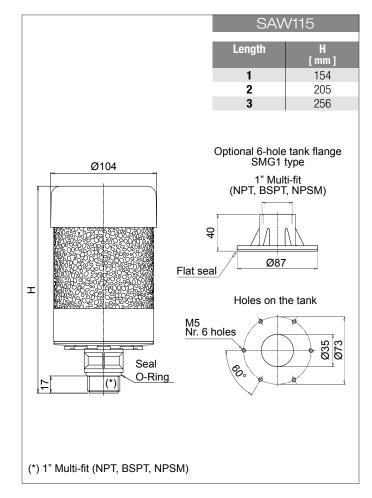


		AC	CCESSORIES					
Serie				Configuration example :	SMG	1 S A	N P0	2
SMG	Adapter Flange							
Conn	ections							1
S	Without screws		Seals		Execu	ution		
			A NBR		P02	MP Filtri standa	ard	

30

Dimensions





Silica gel



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	Holes to open		
[l/min (cfm)]			
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 breathers with interchangeable filter element



Technical data

Air breathers & Filler plugs

Metal air breathers with interchangeable filter element 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.

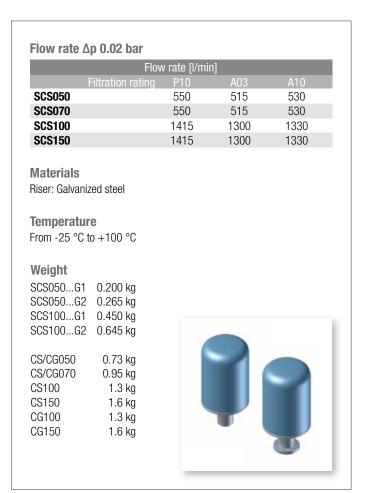
They are composed of a spin-on filter can screwed on a connection tube, directly fitted on the tank. They are directly fitted on the tank.

Available features:

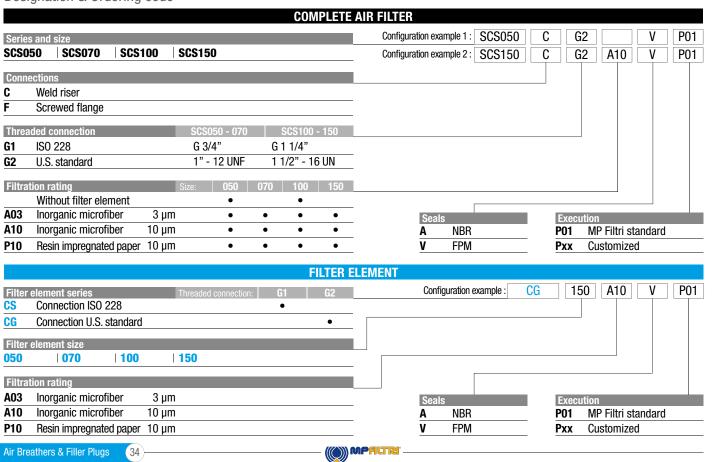
- Weld or flanged connection, for a maximum flow rate of 1415 I/min
- Fine cellulose and microfibre filtration, to get a good cleanliness level into the reservoir

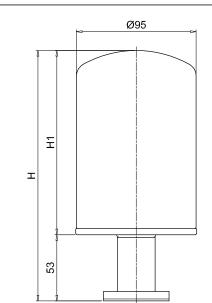
Common applications:

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

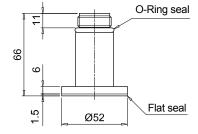


Designation & Ordering code

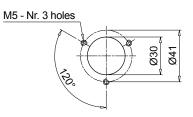




SCS050-070					
Screwed flange					
Size	H [mm]	H1 [mm]			
050	199	146			
070	263	210			

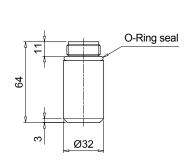


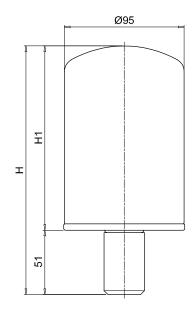
Holes on the tank

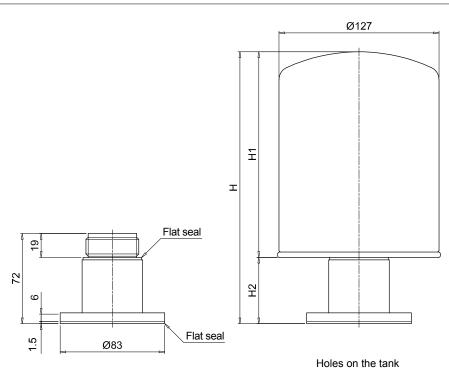


SCS050-070

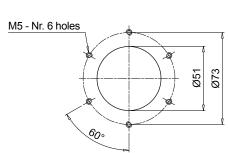
Weld riser				
Size	H [mm]	H1 [mm]		
050	197	146		
070	261	210		

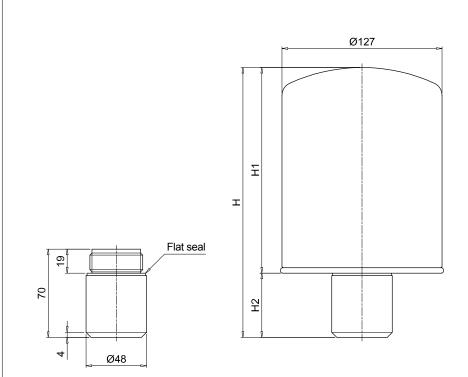






	SCS100-150						
Screwed flange							
Size	Size Connections H H1 H2 [mm] [mm]						
100	G1	231	178	53			
	G2	215	184	31			
150	G1	280	227	53			
100	G2	301	270	31			





SCS100-150 Weld riser Connections [mm] 229 [mm] 51 [mm] G1 178 100 213 184 29 G2 278 227 51 G1 150 G2 299 270 29

(36)





SME1-SMF1-SML1 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 polyamide tanks, mainly used in the mobile machines
- SMF: sloping riser made of polyamide for polyamide tanks, mainly used in the mobile machines
- SML: sloping riser made of aluminum for metal tanks, mainly used in the industrial equipment and heavy-duty applications

Materials SME

- Body: Polyamide - Seals: NBR

- Screws: Galvanized steel

Materials SMF

- Body: Polyamide - Seals: NBR

- Screws: Galvanized steel

Materials SML

- Body: Aluminium

- Seals: NBR

- Screws: Galvanized steel

Temperature

From -25 °C to +100 °C

Weight

SME 0.250 kg SMF 0.325 kg SML 0.380 kg

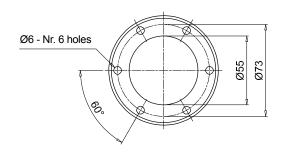


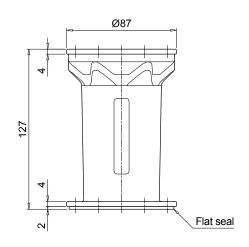
Designation & Ordering code

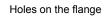
			C	OMPLETE ADAPTER				
Series	_	_	_		Configuration example :	SMF1	M	A P01
SME1	Polyamide vertical riser							
SMF1	Polyamide sloping riser			_				
SML1	Aluminium sloping riser			_				
Connec	ctions			1				
М	Metric screws			_				
U	UNC screws			=				
				_				
Seals				ı				
Α	NBR							
			Series					
Execut	ion	SME1	SMF1 SML1					
P01	MP Filtri standard		•					
P02	Standard without logo	•		_				

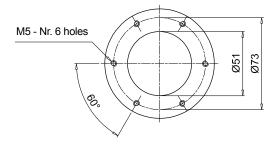
40)-

SME1



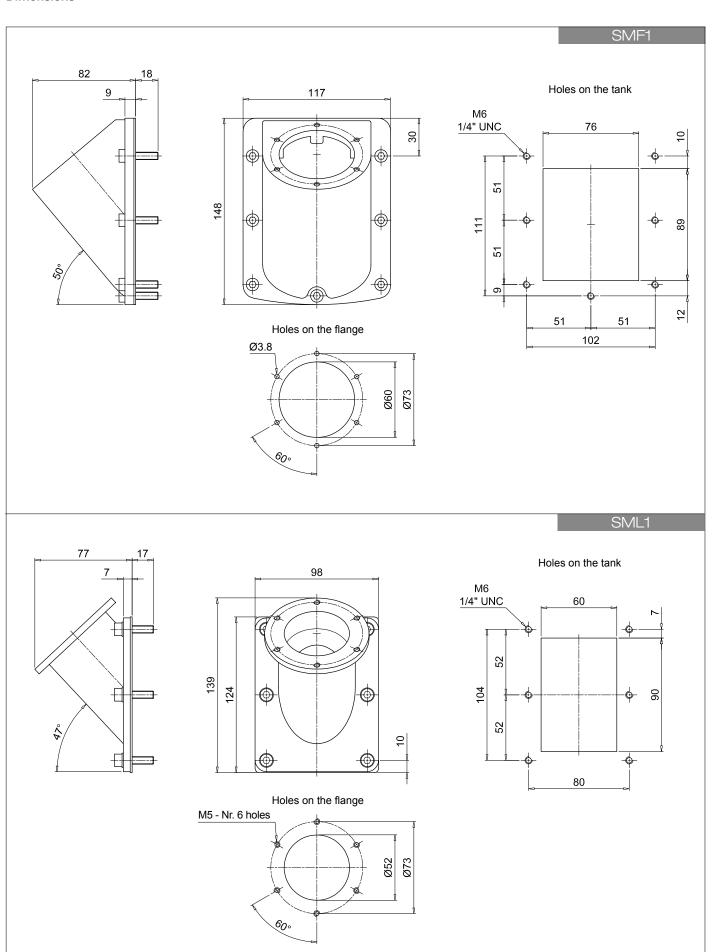






SME1-SMF1-SML1

Dimensions





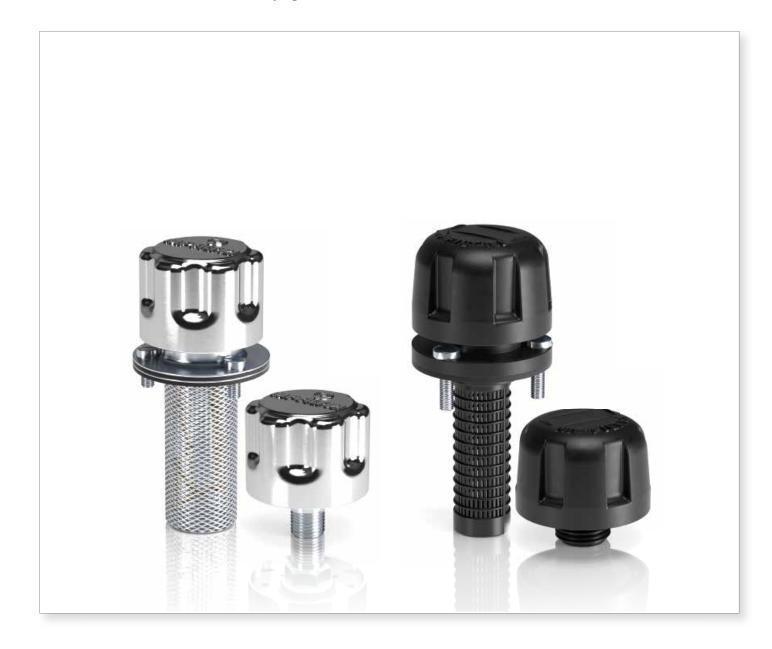


TA 46 TAP 50 SAP 50 series

Steel filler plug and air filter

Polyamide filler plug

Polyammide air filter



Technical data

Air breathers & Filler plugs

Steel filler plug and air filter Flow rates up to 200 I/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 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 I/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	10		
TA46		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: Galvanized steel
- Seals: NBR
- Chain: Brass
- Screws: Galvanized steel
- Basket: Galvanized steel

Temperature

From -25 °C to +100 °C

Weight

TA 46 B $0.10 \, \text{kg}$ TA 46 G/N 0.11 kg



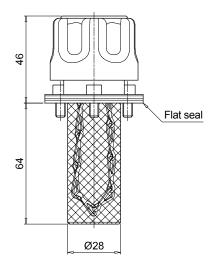
Designation & Ordering code

COMPLETE FILLER PLUG Configuration example 1: **TA46** В 03 P01 Serie **TA46** Configuration example 2: **TA46** P01 G 10 Screwed flange with bayonet mount В G G 1/4" 1/4" NPT Resin impregnated paper 3 µm 10 Polyurethane 10 µm Seals NBR Without valve Standard With basket

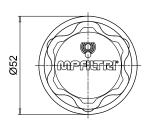
46

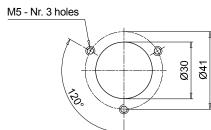
TA46

Screwed flange



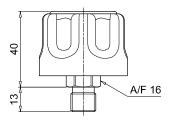
Holes on the tank

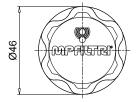




TA46

Threaded connection





TAP 50 general information

Technical data

Air breathers & Filler plugs

Filler plug and polyamide air filters Flow rates up to 200 l/min

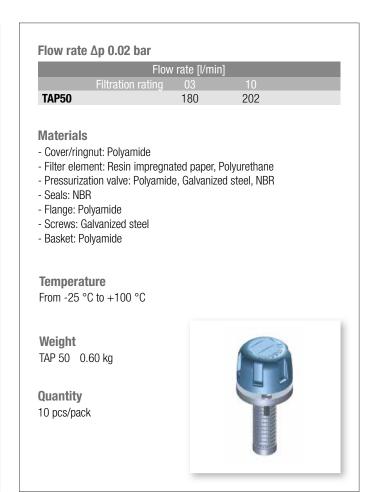
TAP50 is a range of compact plastic air breathers and filler caps for protection of the tank against the solid contamination contained into the air and filling of the fluid into the systems during the commissioning and maintenance procedures.

Available features:

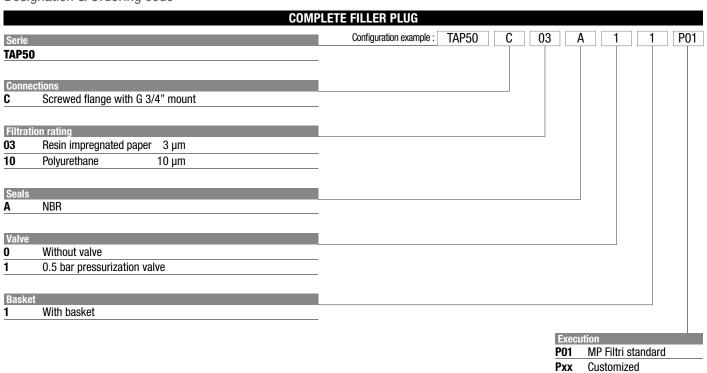
- Flanged connection with bayonet, for a maximum flow rate of 200 l/min
- Fine cellulose filtration, to get a good cleanliness level into the reservoir
- Filling basket, to hold the coarse contamination contained into the fluid and to diffuse the fluid flow into the tank

Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

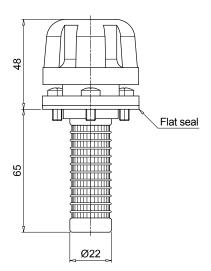


Designation & Ordering code

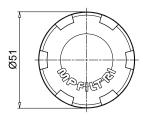


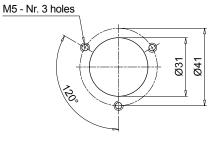
TAP50

Screwed flange



Holes on the tank





SAP 50 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Air breathers

Flow rates up to 200 I/min

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

They are 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	10			
SAP50	180	204			

Materials

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

Temperature

From -25 °C to +100 °C

Weight

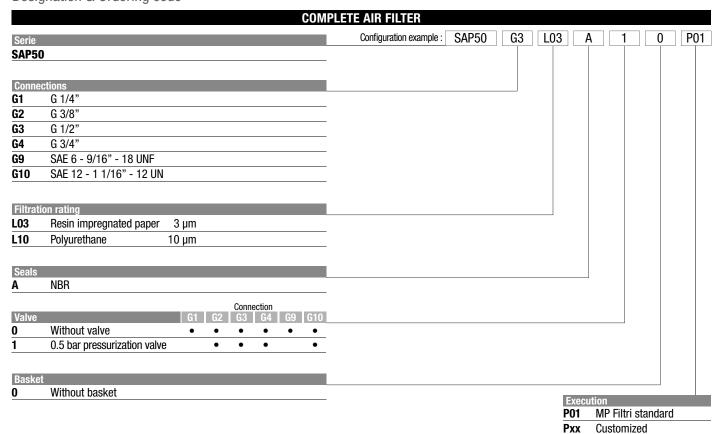
SAP 50 0.40 kg

Quantity

10 pcs/pack

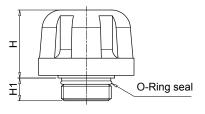


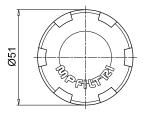
Designation & Ordering code



SAP50

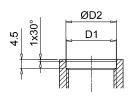
Threaded connection

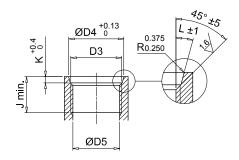




Housing on the tank for connections BPS

Housing on the tank for connections SAE





Connections	H [mm]	H1 [mm]	D1 [mm]	ØD2 [mm]	D3 [mm]	ØD4 [mm]	ØD5 [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

Steel filler plug and air filter up to 550 l/min



Technical data

Air breathers & Filler plugs

Steel filler plug and air filter Flow rates 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 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

	Flow rate [l/mir	1]	
Filtration ra	ting 03	10	
TA80	450	550	

Materials

- Cover: Chrome Plated steel
- Filter element: Resin impregnated paper, Polyurethane
- Pressurization valve: Polyamide (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

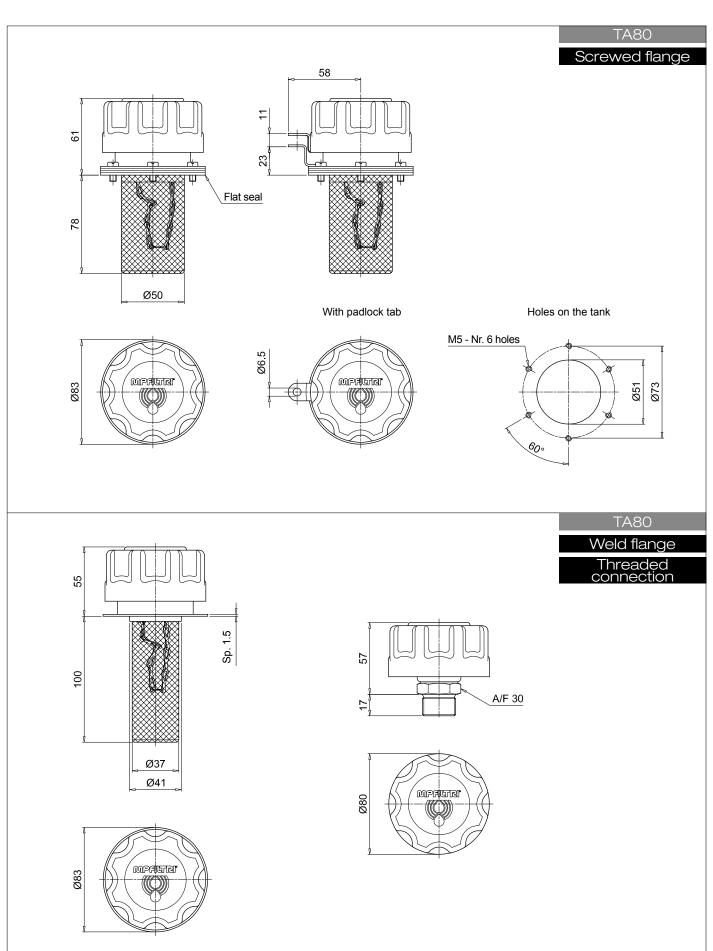
Weight

L 80 mm 0.33 kg L 100 mm 0.35 kg



Designation & Ordering code

	COMPLETE FILL	ER PLUG / COMPL	ETE AIR	FILTER	}				
Ser	e	Configuration example 1 :	TA80	В	03	Α	0	L	1 P01
TA8		Configuration example 2 :	TA80	G	10	Α	2		P01
0						, —			
B	nections Screwed flange with bayonet mount G G 3/4"								
D	Weld flange with bayonet mount N 3/4" NPT	=							
	Note hange that bajoriet mount	-							
	ation rating Connection: B D G N								
00	Without filter (blind filler plug)	=							
03	Resin impregnated paper 3 µm • • •	=							
10	Polyurethane 10 μm • • • •	-							
Sea	İs	I							
A	NBR								
Val	ve Filtration rating: 00 03 10 Without valve • • •								
1	0.3 bar pressurization valve	-							
2	0.7 bar pressurization valve	-							
9	With anti-splash feature • •	=							
<u> </u>	With this opition routino	-							
Vers	sion Connection: B D G N								
0	Standard • •	_							
L	With padlock tab •	_							
Bas									
0	Without basket • •	=				_			
1	With basket 80 mm •	=					xecution) Filtui ot-	adoud
3	With basket 100 mm	-				P(Filtri staı	iuara
						P	CX CU	stomized	





TAP 90 series

Filler plug and polyamide air filter up to 550 l/min



TAP 90 general information

Technical data

Air breathers & Filler plugs

Filler plug and polyamide air filters Flow rates 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 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	10		
TAP90		450	550		

Materials

- Cover/Ringnut: Polyamide
- Filter element: Resin impregnated paper, Polyurethane
- Pressurization valve:

Polyamide (bodies), Galvanized steel (end cap - disk), NBR (seals)

- Flange B: Polyamide
- Seals: NBR
- Screws: Galvanized steel
- Padlock tab: Galvanized steel
- Chain, Ring: Brass
- Dipstick: Phosphatized steel
- Basket: Galvanized steel, Polyamide

Temperature

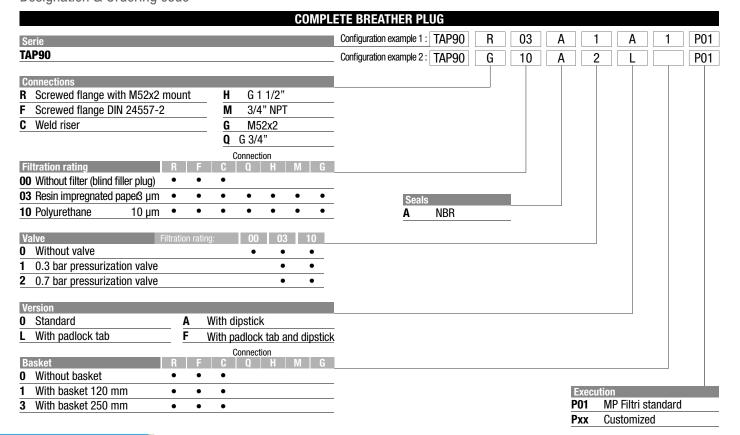
From -25 °C to +100 °C

Weight

L 120 mm 0.25 kg L 250 mm 0.31 kg



Designation & Ordering code

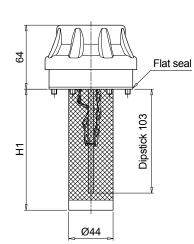


58



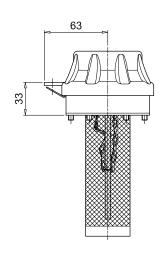
Screwed flange

Basket	H1 [mm]
1	120
3	250



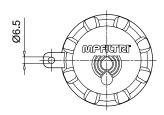
mpaurar

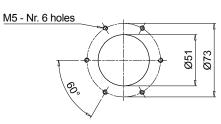
Ø



With padlock tab

Holes on the tank



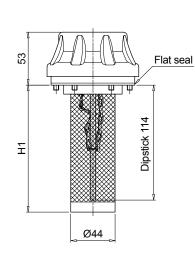


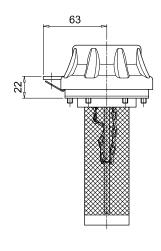
TAP90

Screwed flange

DIN 24557-2

Basket	H1 [mm]
1	120
3	250

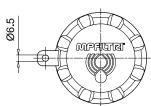


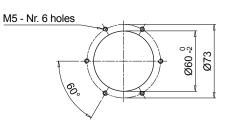


With padlock tab

Holes on the tank

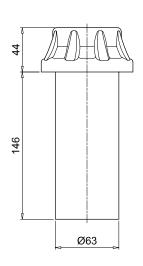


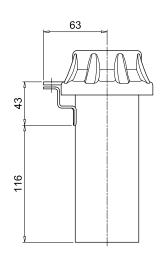




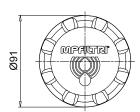
TAP90

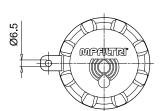
Weld riser





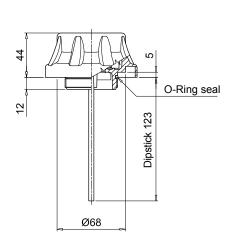
With padlock tab

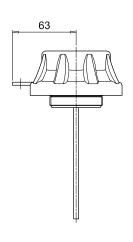




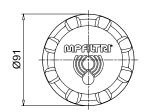
TAP90

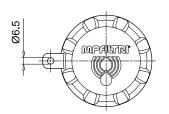
Threaded connection Connections [mm] [mm] [mm] Q G 3/4" G 1 1/2" Н 48.5 8.5 2x15° Μ 3/4" NPT G M 52x2 52.5 2x15° 8.5



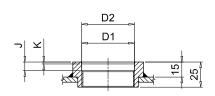


With padlock tab





Housing on the tank for connections G - H - M - Q







TAP 114 series

Filler plug and polyamide air filter up to 1600 l/min



TAP 114 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Filler plug and polyamide air filters Flow rates 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 directly fitted on the tank.

Available features:

- Flanged connection, for a maximum flow rate of 1600 I/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

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

Materials

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

Temperature

From -25 °C to +100 °C

Weight

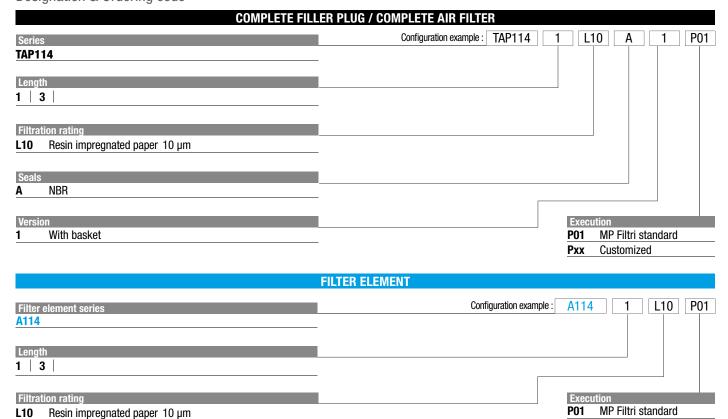
TAP 114 length 1 0.185 kg TAP 114 length 3 0.200 kg



Pxx

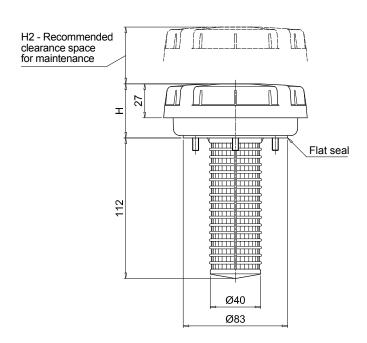
Customized

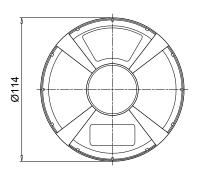
Designation & Ordering code



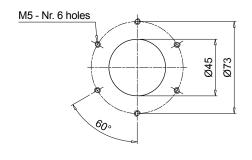
64

TA	P114	
Length	H [mm]	H2 [mm]
1	43	30
3	70	60





Holes on the tank





TAP 115 - SAP 115

Filler plug and polyamide air filter up to 3000 l/min



TAP 115 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Filler plug and polyamide air filters Flow rates 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 directly fitted on the tank.

Available features:

- Flanged connection, for a maximum flow rate of 2150 I/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

Filtration rating A03 TAP115 length 1 1600	L10	
TAP115 length 1 1600		
	2000	
TAP115 length 2 2150	2150	

Materials

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

Clogging indicators

- Manual reset
- Set pressure 0.062 bar $\pm 10\%$

Temperature

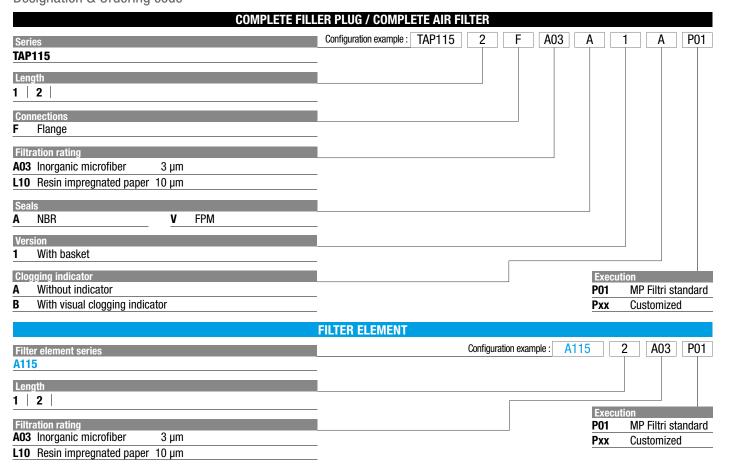
From -25 °C to +100 °C

Weight

TAP 115 length 1 0.460 kg TAP 115 length 2 0.585 kg



Designation & Ordering code



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	TAP115 Length H H2 [mm]
H2 - Recommended clearance space for maintenance Wisual clogging indicator Flat seal	Holes on the tank M5 - Nr. 6 holes

Technical data

Air breathers & Filler plugs

Filler plug and polyamide air filters Flow rates 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 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	L10			
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			
SAP115 length 2 - G1 1/2"	3000	3000			

Materials

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

Clogging indicators

- Manual reset
- Set pressure 0.062 bar ±10%

Temperature

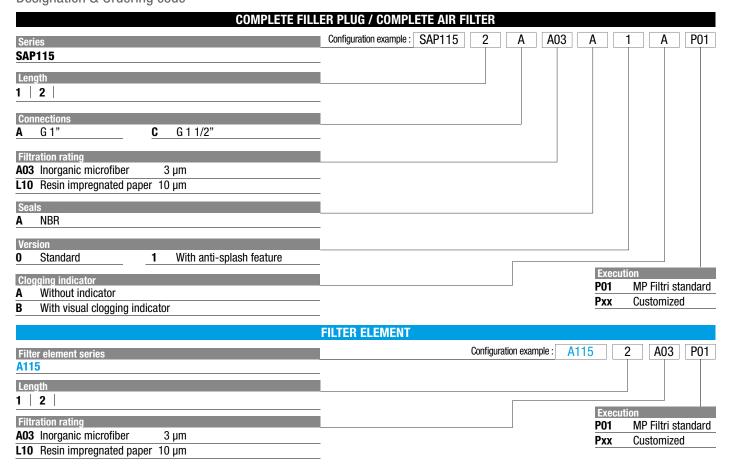
From -25 °C to +100 °C

Weight

SAP 115 length 1 0.410 kg SAP 115 length 2 0.525 kg

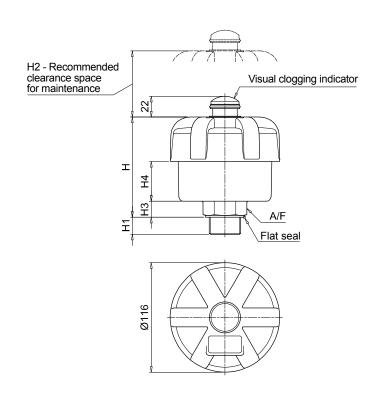


Designation & Ordering code



70

		S	4P118	5			
Length	Connections	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	A/F [mm]
4	А	106	18	55	17	42	41
	С	111	23	55	22	42	55
2	Α	170	18	80	17	106	41
2	С	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

Polyamide filler plug



TC 50 GENERAL INFORMATION

Technical data

Filler and Drain Plugs

Polyamide 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 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: Polyamide
- Filter element: Galvanized steel
- Filler cap: Polyamide
- Strainer: Galvanized steel / Polyamide AISI 304 / Polyamide
- Collar: Polyamide
- 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



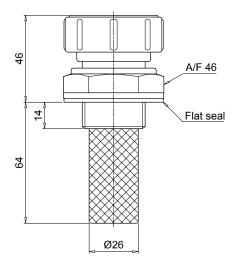
Designation & Ordering code

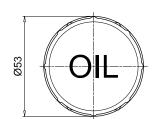
	COI	MPLETE FILLER PLU	IG							
Serie	s	Configuration example :	TC50	G1	L90	Р	R	0 0	70 P0	1
TC50								T		
Conn	ections									
G1	G 1"									
GA	With ringnut									
Filtra	tion rating									
L90	Galvanized steel									
Seals										
Р	Inorganic fiber									
Cove	r colour									
R	Red									
Y	Yellow									
Cove	r wording									
0	Oil									
N	Neutral									
Bask										
S	Without basket									
C70	With basket 70 mm - galvanized steel					Evo	cution			
170	With basket 70 mm - AISI 304					P01		iltri stan	dard	
						Pxx		mized		_

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TC50

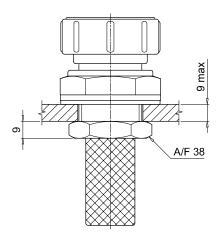
Threaded connection



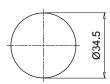


TC50

With ringnut



Through hole on the tank





TKT - TSD - TKM series

Filler and draining plugs



Filler and draining plugs

Polyamide filler plug

TKT is a range of polyamide compact filler plugs for filling of the fluid into the systems during the commissioning and maintenance procedures. They are 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: Polyamide
- Seals: NBR, Inorganic fibre
- Labyrinth: Polyamide
- 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

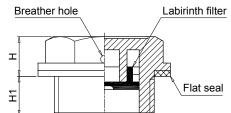
Quantity

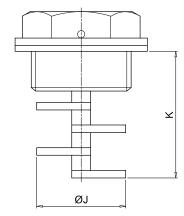
25 pcs/pack

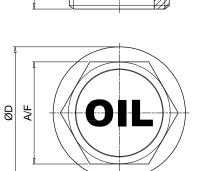


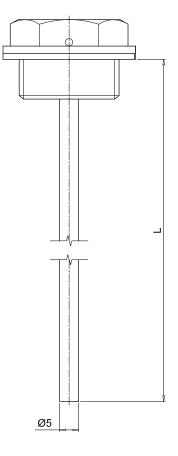
Designation & Ordering code

200	ignation & ordoring of	,00															
					COI	MPLETE FILLER PL	.UG										
Serie	c					Configuration example :	TKT	G26	N	N	1	Α		F	5		P01
TKT	ა					g	1111	_ GEO	T	1		$\ddot{\top}$					1
1111			V	ersion		_											
Conn	ections	S	A	F	L	I											
G13	G 1/4"	•	•		•												
G16	G 3/8"	•	•	•	•	=											
G20	G 1/2"	•	•	•	•	=											
G26	G 3/4"	•	•	•	•	=											
G33	G 1"	•	•	•		_											
G42	G 1 1/4"	•	•	•		_											
G48	G 1 1/2"	•	•	•		_											
G60	G 2"	•	•														
Colo																	
N	Black polyamide					=											
Covo	r wording																
O	r wording Oil	N	Neutra														
U	UII	IN				=											
Seals		S	A	ersion F	L	I											
A	NBR		•	•								_					
В	Inorganic fiber	•			•	=											
	-					=											
Brea	ther hole																
S	Without breather hole	F	With br	reather h	ole	=											
Vous	•••										Eve	un line					
Versi S	on Standard	F	With a	nti_enlae	h feature	I				-	<u> </u>	utior M		tri et	anda	ard	
A	With dipstick	<u> </u>		ıbyrinth f		-				-	PXX			nize		ai U	
A	พาเมา นาคอนเปล	L	willila	wyriiidi i	IIICI	=					XX	U	เอเปเ	ше	u		









Connections	ØD [mm]	A/F [mm]	H [mm]	H1 [mm]	ØJ [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

Filler / draining plugs

Polyamide filler plug

TSD is a range of polyamide 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 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: Polyamide
- Cover: Polyamide
- Seal: NBR
- Filter: Galvanized steel
- Anti-splash feature: Polyamide
- 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

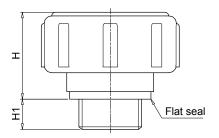
25 pcs/pack

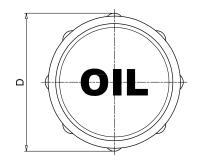


Designation & Ordering code

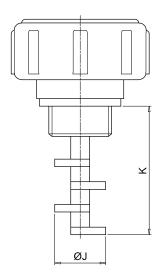
zooigiiaaon a oraoiiiig	,		CO	MPLETE FILLER PL	UG								
Series				Configuration example :	TSD	G26	R	G	1	1	F	S	P0
TSD				_									
Connections													
616 G 3/8"	G33	G 1"											
620 G 1/2"	G42	G 1 1/4"		=									
G26 G 3/4"	G48	G 1 1/2"		_									
110 0 0/ 1				_									
Cover colour													
R Red	Y	Yellow		_									
Cover wording													
Oil Noutral													
Neutral				_									
Gasoil Gasoil				_									
Seals													
NBR										J			
		0	over wording	=									
Filter element		N	0 G										
Without filter element		•	• •	=									
A Steel filter element		•	•	_									
Version S Standard													
				_									
				_					Execu		Ciltri o	tondora	
With anti-splash feature				=				_	201 200			tandard	<u> </u>
								<u> </u>	XX	us	tomize	;u	

Version S

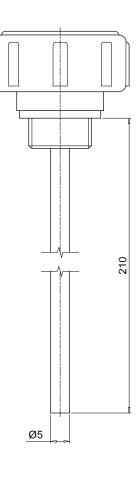




Version F



Version A



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

Filler / draining plugs

Aluminium 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 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 avec insert magnétique
- 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

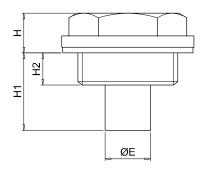
25 pcs/pack

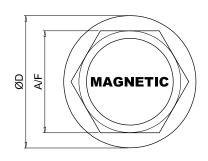


Designation & Ordering code

	GC	OMPLETE DRAIN PLUG
Serie	S	Configuration example : TKM G20 B P01
TKM		_
		_
Conn	ections	
G13	G 1/4"	
G16	G 3/8"	
G20	G 1/2"	
G26	G 3/4"	
G33	G 1"	
Seals		
В	Inorganic fiber	
		_
		Execution
		P01 MP Filtri standard
		Pxx Customized

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Connections	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

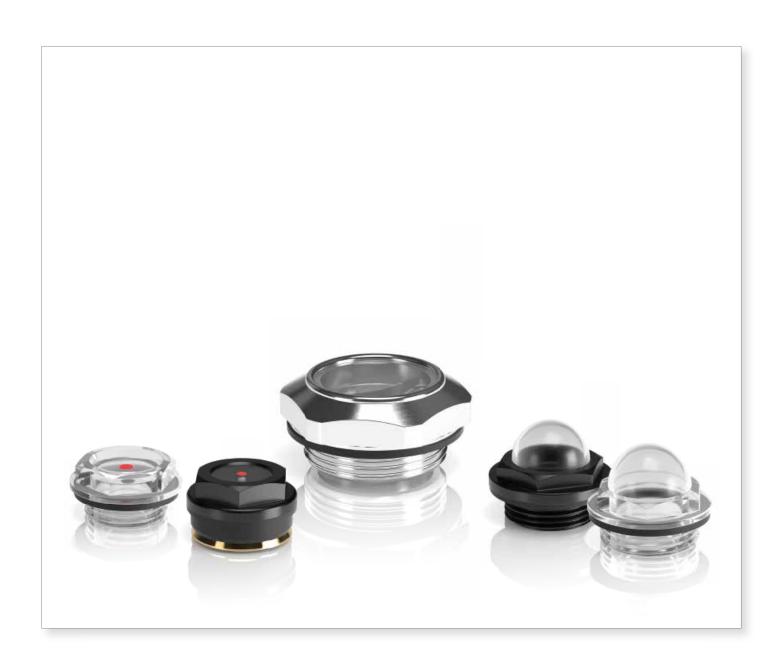


LCP - LCC	page 89
LVA - LVU	95



LCP - LCC series

Visual oil level indicator - round shape



Visual Oil Level Indicators

Visual oil level indicator - round shape

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"
- Contrast baffle, to allow an easy monitoring of the level
- Special fixing kit, for reliable sealing even in thanks 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 baffle : Polyamide

- Seals: NBR

M Series

Weight LCPG20 6 g LCPG26 9 g

LCPG33 13 g

Materials

- Body: Aluminium - Lens: Thermoplastic

- Contrast baffle : Polyamide

- Seals: Inorganic fibre

N Series

Weight LCPG13 2g 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: Polyamide - Lens: Thermoplastic

- Contrast baffle : Polyamide

- Seals: Inorganic fibre, NBR

- Special fixing kit: Brass, NBR



Temperature

From -20 °C to +80 °C

Quantity

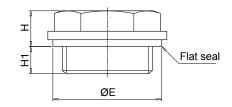
25 pcs/pack

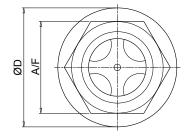
Designation & Ordering code

COMPLETE VISUAL OIL LEVEL INDICATOR											
Series	Configuration example 1 : LCP G26		N	S	В	S	P01				
LCP	Configuration example 2: LCP G42	Ī	T	S	Α		P01				
	Configuration example 3: I CP G20		M	С	Α		P01				
Conne	ctions Material: N I W		···		, <u>, , , , , , , , , , , , , , , , , , </u>						
G13	G 1/4" • •										
G16 G20	G 3/8"										
G26	G 3/4" • •										
G33	G 1" • • •										
G42	G 1 1/4" • •										
G48	G 1 1/2"										
G60	G 2" ◆										
Mater N	Black Polyamide T Transparent polyamide M Aluminium Material: N T M	 - !									
Contra S	st baffle Connection: G13 G16 G20 G26 G33 G42 G48 G60 G13 G16 G20 G26 G33 G42 Without contrast baffle • • • • • • • • • • • • • • • • • •	_									
C	With contrast baffle • • • • • • • • • • •										
Seals	Material: N T M Expansion kit: S K										
Α	NBR • • •										
В	Inorganic fiber •										
Specia S K	Material: N T M		į		n IP Filtri s ustomize		i				

90







without expansion kit												
Connections	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							

53.5

47

64

16

16

11

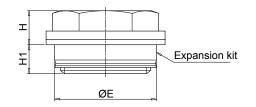
18

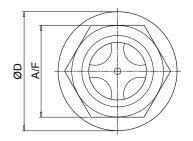
G48

G60

58

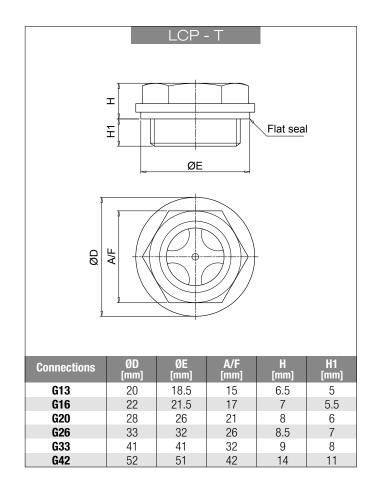
74

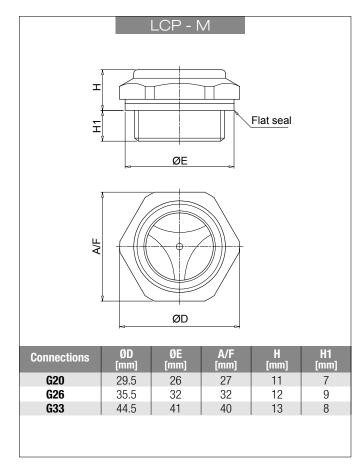




	with	expan	sion kit		
Connections	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G20	28	26	22	9	8
G26	35	30	27	10	8.5
G33	42	40	34	13	11
G42	52	50	42	13.5	11.5
G48	58	55	47	15.5	11.5

Note: for installation onto OB Cleaning covers see page 147





Note: for installation onto OB Cleaning covers see page 147



Visual Oil Level Indicators

Visual oil level indicator - round shape

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 thanks with thin walls

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

N Series

WeightMaterialsLCCG267 g- Body: PolyamideLCCG4220 g- Lens: Polyamide

LCCG60 40 g - Contrast screen: Polyamide

- Seals: Inorganic fibre, NBR

- Expansion kit: Brass / NBR

T Series

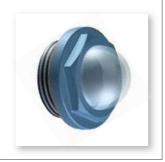
WeightMaterialsLCCG162 g- Body: PolyamideLCCG204 g- Seals: NBRLCCG339 g

Temperature

From -20 °C to +80 °C

Quantity

25 pcs/pack



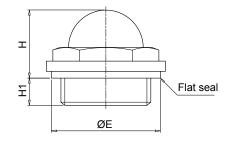
Customized

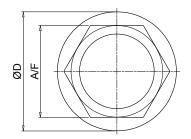
Designation & Ordering code

	GUIVIP	TELE AIS	AL UIL LEVEL	INDICATORS						
Series			Confi	guration example 1 :	LCC	G20	N	Α	K	P
_CC			Confi	guration example 2 :	LCC	G33	T	Α	7	P
							Т		- T	
	ections Material: N	T								
313	G 1/4"									
316	G 3/8"	•								
G20	G 1/2"	•								
326	G 3/4"	•								
333	G 1" •	•								
342	G 1 1/4"									
348	G 1 1/2" •									
i 60	G 2"									
Mater										
l	Black polyamide T Transparent poly	amide								
01-	Material: N	T								
Seals	Expansion kit: S K NBB									
, /										
3	Inorganic fiber •									
	Material: N	7								
Expan	ision kit Connection: G20 G26 G33 G42 G48 G60									
	Without expansion kit • • • • •									
(With expansion kit • • • •									
						r	xecutio	1 _		
									standar	d

LCC - N

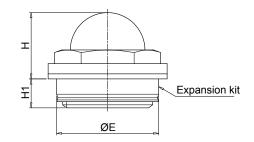
without expansion kit

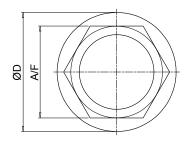




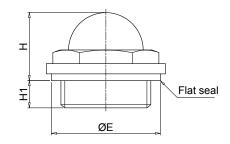
Connections	ØD [mm]	ØE [mm]	A/F [mm]	H [mm]	H1 [mm]
G20	28	26	22	17.5	17.5
G26	35	32	27	20	8
G33	42	41	34	24	10
G42	52	51	44	30	11
G48	58	53.5	50	33	11.5
G60	74	72	64	39	18

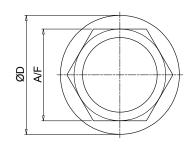
with expansion kit





Connections	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





Connections	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 indicator - vertical shape



Visual Oil Level Indicators

Oil level indicator - vertical shape

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
- Polyamide guard
- Seal: NBR / FPM

Operating pressure

Max 1 bar at +80°C

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



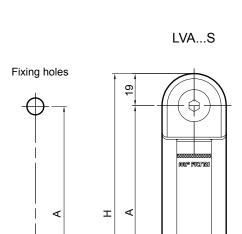
Designation & Ordering code

Door	griation a ordering code									
	COMPLETE	VISUAL OIL LEVEL INDICAT	ORS							
Series		Configuration example :	LVA	20	Т		A	Р	M10	S01
LVA								T		
		_								
Size										
10	20 30									
		-								
Therm	nometer	l								
S	Without thermometer	-								
T	With thermometer	-								
Seals										
Α	NBR	_								
V	FPM	_								
Cover	material									
P	Polyamide	_								
	ections	L								
M10 M12	M10 M12	=								
U38	3/8" UNC	_		_						
U12	G 1/2" UNC	_		Exec S01		MD EIH	tri, with	nute		
012	U 1/2 UNU	=		S02			tri, with			
				JUZ	iay i	411 I III	LII, VVILI	ivut III	นเป	



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

Туре	B [mm]	C [mm]
LVAM10	M10	10.5
LVAM12	M12	12.5
LVAU38	3/8" UNC	10.0
LVAU12	1/2"UNC	13.5

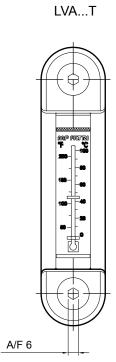


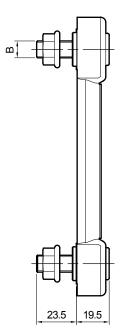
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38





Visual Oil Level Indicators

Oil level indicator - vertical shape

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: Polyamide
- Connection G 3/8": Nickel plated brass
- G 3/8" valve: Steel
- Seal: NBR
- Pipe: Borosilicate glass, Acrylic
- Float: Polyamide
- Protection: Aluminium
- Clamps min-max: Polyamide

Temperature

From -25 °C to +70 °C

Weight

 Series
 version U
 version S

 LVU 0500
 0.780 kg
 0.580 kg

 LVU 1000
 1.150 kg
 0.790 kg

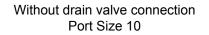
 LVU 1500
 1.550 kg
 1.100 kg

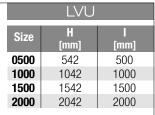
 LVU 2000
 1.950 kg
 1.400 kg

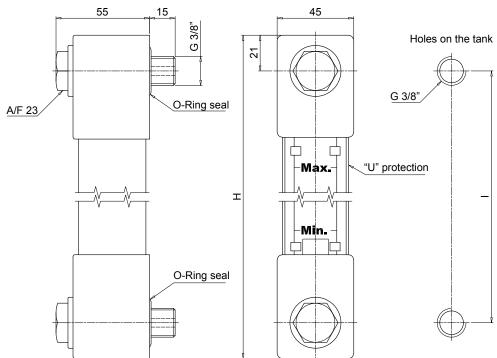


Designation & Ordering code

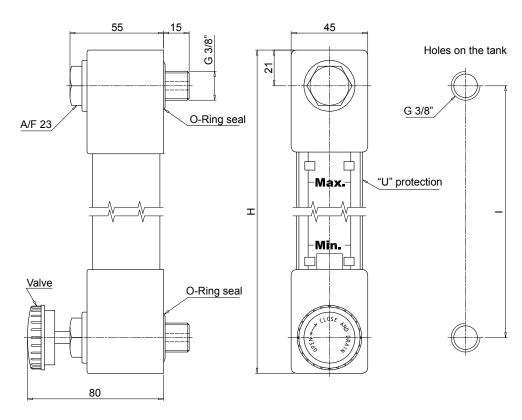
			COMF	PLETE	VISUAL	OIL LEVEL INDICATOR	RS								
Serie	es .					Configuration exam	ple :	LVU	050	0	U	Α		10	P01
LVU														Π	
Size															
0500	Distance between center = 500 mm														
1000	Distance between center = 1000 mm														
1500	Distance between center = 1500 mm														
2000	Distance between center = 2000 mm														
Differe	ent sizes on request														
			Siz	ze											
Body		500	1000	1500	2000										
S	Standard plexiglass	•	•	•	•	_									
U	Plexiglass, with "U" protection	•	•	•	•	=									
P	Borosilicate glass, with "U" protection	•	•	•		_									
Seals	;														
Α	NBR					_									
V	FPM														
Conn	ections														
10	G 3/8"					=									
20	G 3/8", with drain valve					=				Ever	ution				
										P01			i stano	lard	
										Рхх		stom			







With drain valve connection Port Size 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 sufficient to invert the float.



Electrical Oil Level Indicators



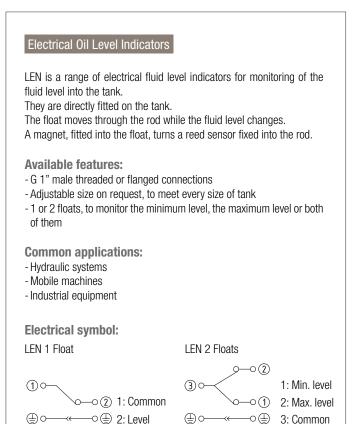
LEN - LEG - LET - LEM - LEU page 103



LEN - LEG - LET - LEM - LEU series

Electrical oil level indicators





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

Materials

- Flange/Threaded body: Aluminium
- Tube: Brass
- Float: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

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

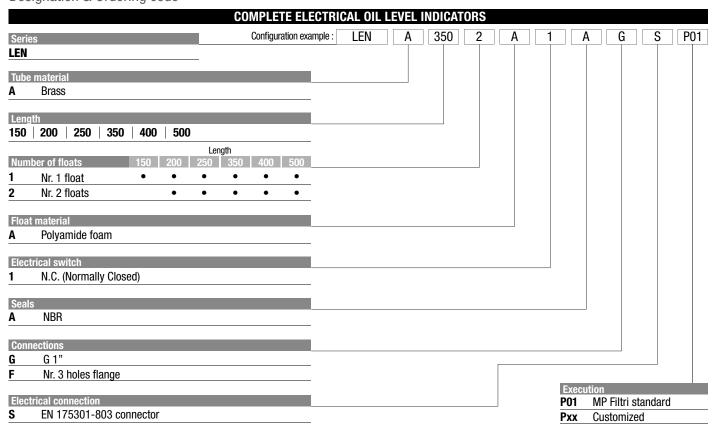
Weight

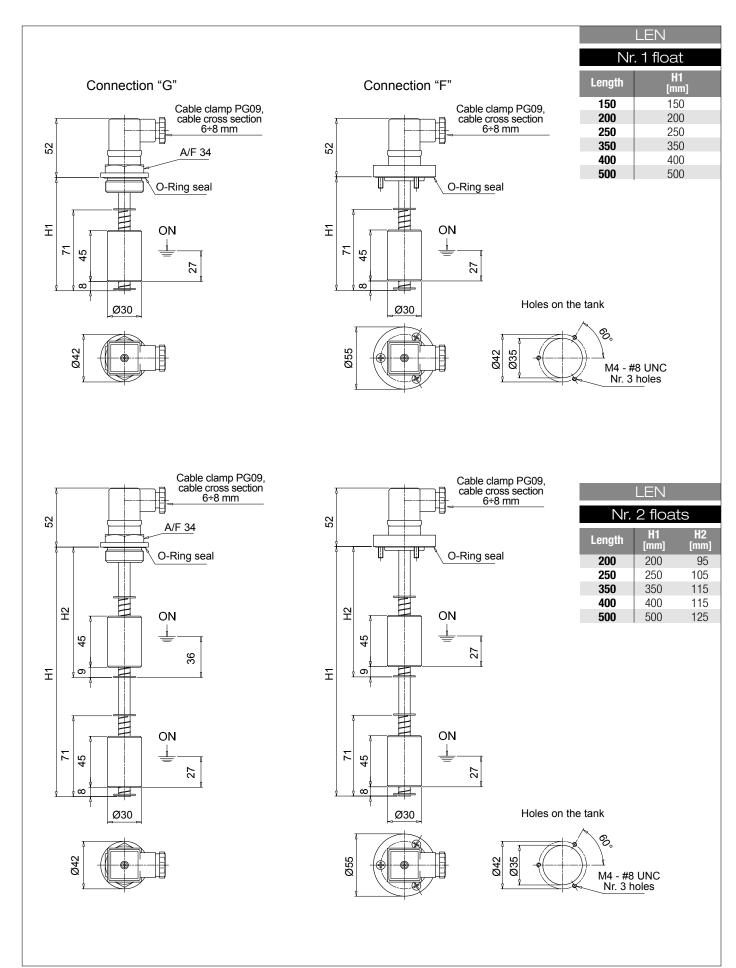
LEN 1 float 0.185 kg LEN 2 floats 0.230 kg



Designation & Ordering code

simply invert the float.





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.

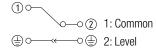
Available features:

- Flanged connections
- Adjustable size on request, to meet every size of tank
- Floating monitor for oil level check

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:



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: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

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



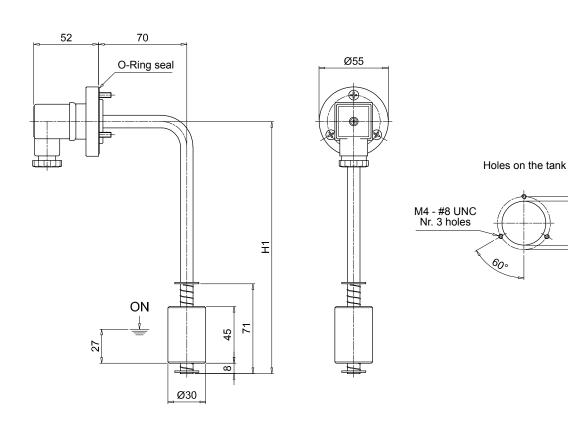
Designation & Ordering code

COMPLETE ELECTRICAL OIL LEVEL INDICATOR Configuration example : 200 LEG LEG Tube material **Brass** Length 102 200 Number of floats Nr. 1 float Float material Polyamide foam N.C. (Normally Closed) NBR Nr. 3 holes flange MP Filtri standard EN 175301-803 connector Customized



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

Ø35 Ø42





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.

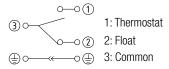
Available features:

- G 1" male threaded or flanged connections
- Adjustable size on request, to meet every size of tank
- Floating monitor for oil level check

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:



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: Polyamide foam
- O-Ring: NBR
- Circlip: Phosphor bronze
- Contact: N.C. (Normally Closed)

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

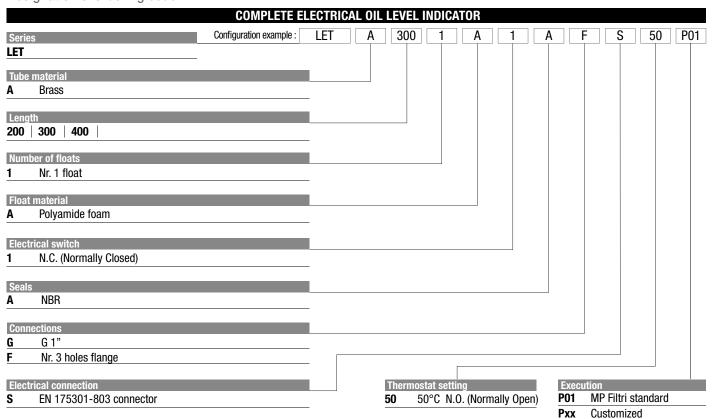
From -15 °C to +80 °C

Weight

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



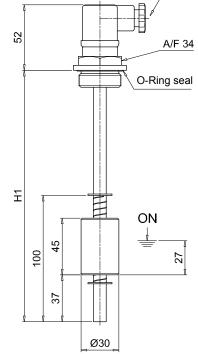
Designation & Ordering code

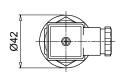


LE	ĒΤ
Length	H1 [mm]
200	200
300	300
400	400

Connection "G"

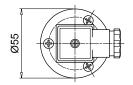
Cable clamp PG09, cable cross section 6÷8 mm



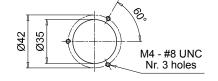


Connection "F"

Cable clamp PG09, cable cross section 6÷8 mm 52 O-Ring seal Ξ ON 100 27 37



Ø30



Holes on the tank

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 to meet every size of tank
- Floating monitor for oil level check
- Integrated thermostat, to get a remote monitoring of the temperature

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:

LEM without thermostat

LEM with thermostat 1: Thermostat

√—○② 1: Common o—o ② 2: Float -> (3: Common

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: Polyamide 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

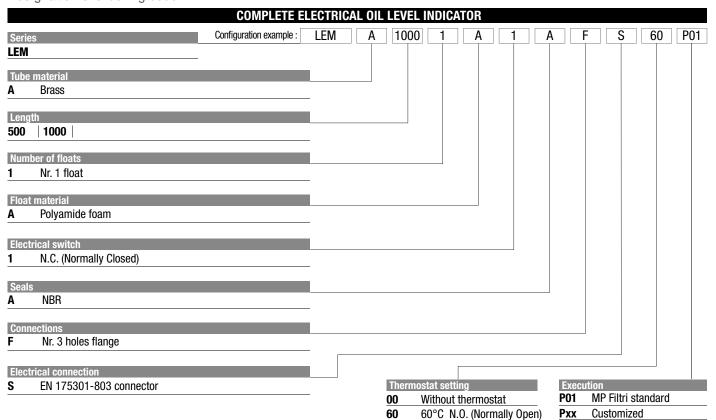
Temperature

From -15 °C to +80 °C

Weight LEM 0.406 kg

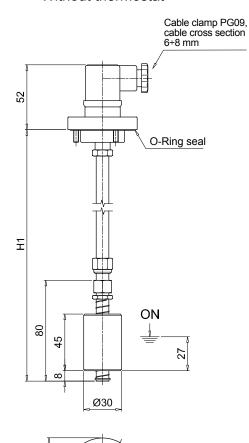


Designation & Ordering code

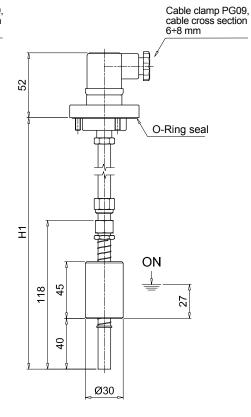


LEM									
Length	H1 [mm]								
500	500								
1000	1000								

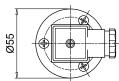
Without thermostat

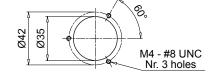


With thermostat



Holes on the tank





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.

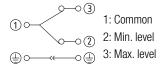
Available features:

- Flanged connections
- Setting size for each tank type
- Double Floating monitor for oil level check

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Electrical symbol:



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

Materials

- Flange / Threaded body: Aluminium
- Tube: AISI 304
- Float: NBR, 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

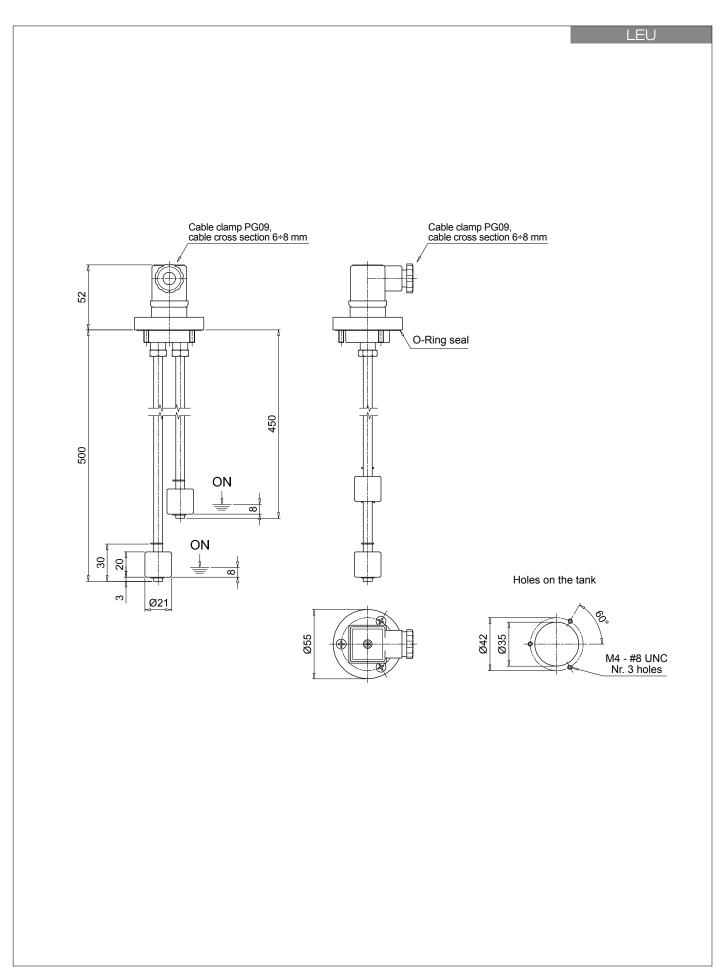
From -15 °C to + 80 °C

Weight LEU 0.415 kg



Designation & Ordering code

	COMPLETE ELECTRICAL OI	L LEVEL INI	DICATOR					
Series	Configuration example :	LEU	B 2	3	1 /	4 F	S	P01
LEU			\Box					
Tube material								
B AISI 304			_					
Number of floats								
Nr. 2 floats								
Float material								
B NBR								
1 N.C. (Normally Closed)								
1 11.0. (Normany Globba)								
Seals								
A NBR								
Connections								
F Nr. 3 holes flange							J	
Electrical connection								
S EN 175301-803 connector								
					Exect	ution		
					P01		tri standa	ď
					Pxx	Custor	nized	





LVK series

Electrical and visual oil level indicator



Electrical 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.

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

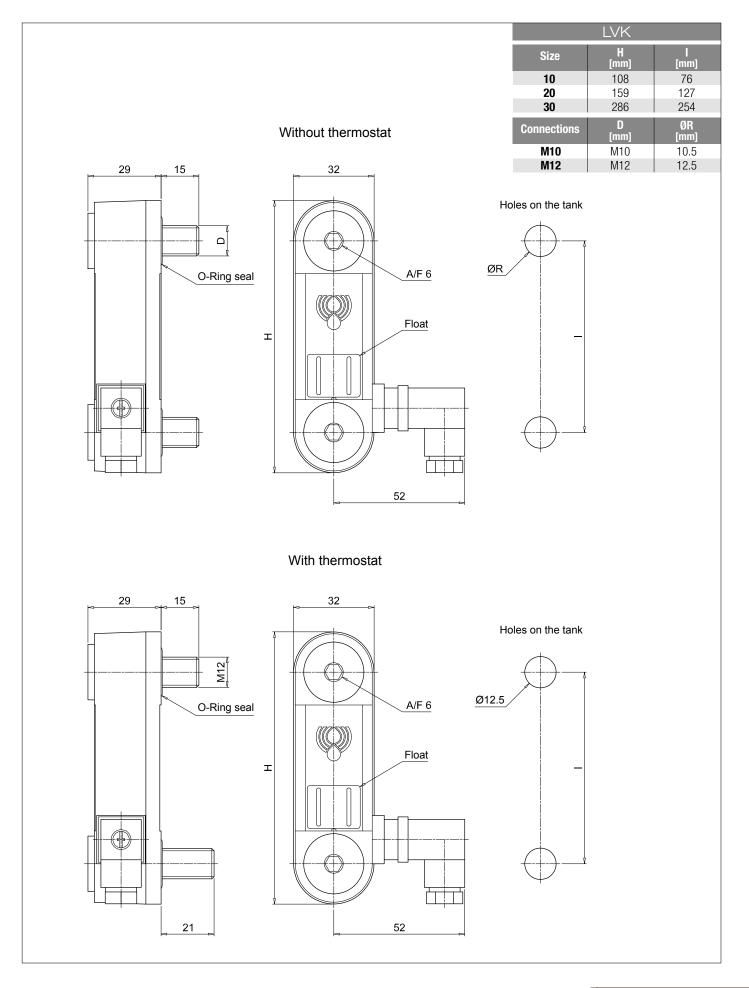
Weight

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

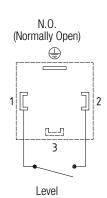


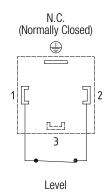
Designation & Ordering code

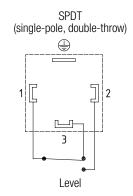
		CON	/IPLET	E ELE	CTRIC	CAL AND VISUAL	OIL L	EVEL I	INDIC	ATO	RS								
Series	S					Configuration example	e :	LVK	20		Α	M	12	1		T		5	P01
LVK							,												
Lengt	h					ı													
10	20 30					_													
Seals						1													
A	NBR										_								
Conne	ections					- I													
M10	Screws M10 M12	Scr	ews M1	12									_						
Electr	ical switch in absence of fluid																		
1	N.O. (Normally Open)																		
2	N.C. (Normally Closed)					_													
3	SPDT (single-pole, double throw)					=													
			Con	nection		_													
Versio			M10	I I	V112														
S	Standard		•		•	_													
<u> </u>	With thermostat				•	-													
Р	With PT100 sensor				•	_													
Thern	nostat setting	9	Ve	ersion	P	1													
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)			•		_							Ev	/ecu	tion				
6	60°C N.C. (Normally Closed)			•		-							PO			Filtri	stano	dard	
7	70°C N.C. (Normally Closed)			•		=							Px		Cust				
-						=													

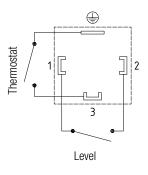


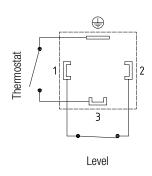
Electrical symbols

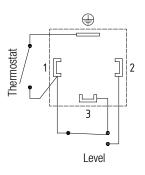


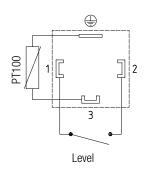


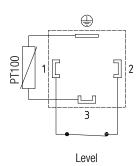


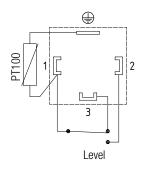














EM1 & SVM gauge isolator valves are designed to protect pressure gauges from pressure shocks when the pressure reading is not required.

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

MULTIFIX 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
MULTIFIX SFT	137
OB	143
SE10LT	149



EM1 series

Pressure gauge isolator





Accessories

Pressure gauge isolator

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.

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: Polyamide
- Stop ring: Steel
- Spring: Steel
- Nameplate: Aluminium
- Nut-screw: Galvanized 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

Materials C

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

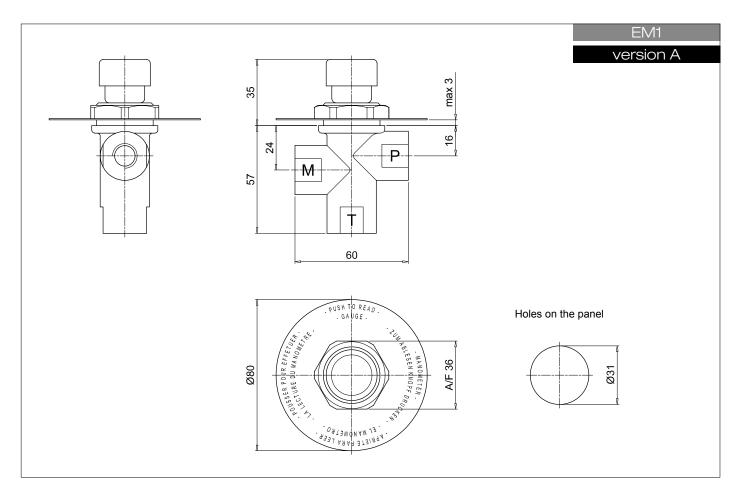


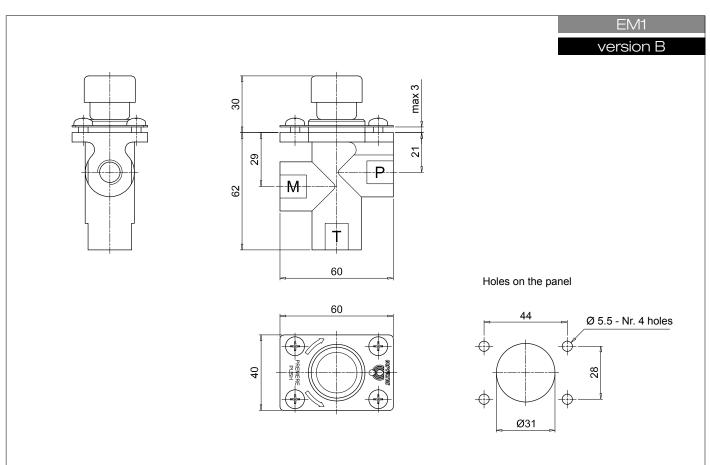
Designation & Ordering code

	COMPLET	PRESSURE-GAUGE IS	OLATOR					
Seri	as a second and a second a second and a second a second and a second a second and a second a second and a second and a second and a second and a second a second and a second a second and a second and a second a second and a second and a second a second a second a second and a second and a second and a s		Configuration example :	EM1	Α	G2	Α	P01
EM1								
Vers	ion							
Α	Threaded connections, panel mount with hex nut							
В	Threaded connections, panel mount with screws							
C	Manifold/threaded connections, panel mount with screws	_						
Con	nection							
G1	G 1/4"							
G2	1/4" NPT	_						
G3	SAE 5 - 1/2" - 20 UNF	=						
Seal	S							
A	NBR							
٧	FPM	=						
		_						
Eve	eution							
	MP Filtri standard							
	Customized	=						



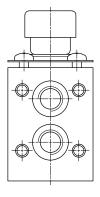
124

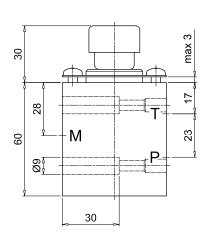


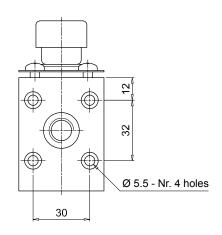


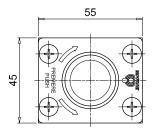
EM1

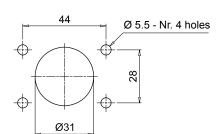
version C











Holes on the panel





SVM series

Gauge selector valve



SVM GENERAL INFORMATION

Technical data

Accessories

Gauge selector valve

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 depressurize the pressure gauge by means of the T fitting connected to the reservoir.

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: Polyamide
- Ringnut: Polyamide
- Nut-screw: Galvanized steel, Phosphatized steel

Operating pressure

400 bar

Operating temperature

From -25 °C to + 100 °C

Weight

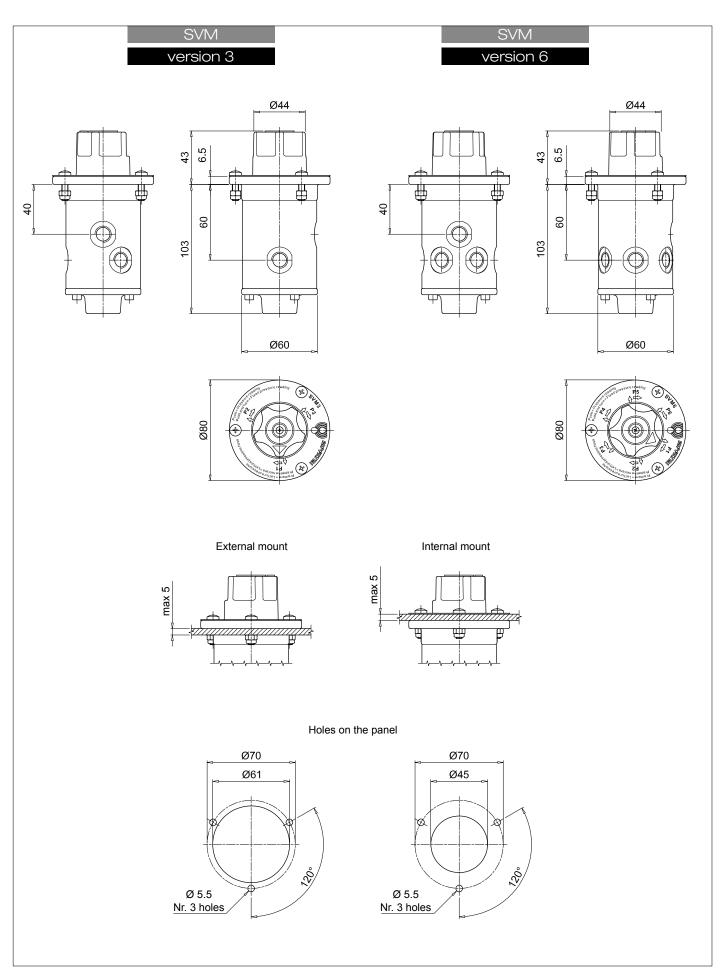
SVM version 3 1.547 kg SVM version 6 1.507 kg



Designation & Ordering code

	COMPLE	TE GAUGE ISOLATOR VALVE
Seri	ies	Configuration example : SVM 3 G1 A P01
SVN		
Vers	sion	
3	3 pressure ports	
6	6 pressure ports	_
	nection	
G1	G 1/4"	_
G2	1/4" NPT	_
G3	SAE 5 - 1/2" - 20 UNF	-
Sea	ls	
Α	NBR	
V	FPM	- -
Evo	cution	
	MP Filtri standard	
$\overline{}$	Customized	-







FTA -FTR series

Oil tank fixing flange



\exists GENERAL INFORMATION

Technical data

Accessories

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 temperature

From -25 °C to + 100 °C

Materials

- Flange: Galvanized steel
- Flange seal: Inorganic fibre

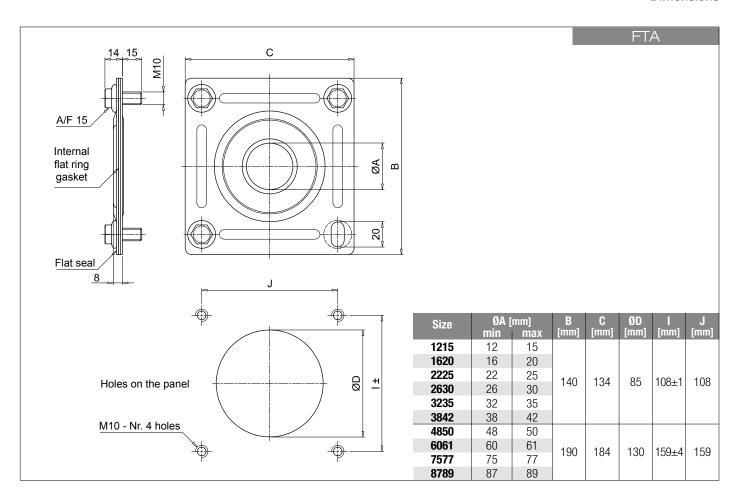
- Tube seal: NBR - Screw: Galvanized steel	
Weight FTA FTA 1215	Weight FTR FTR 0610

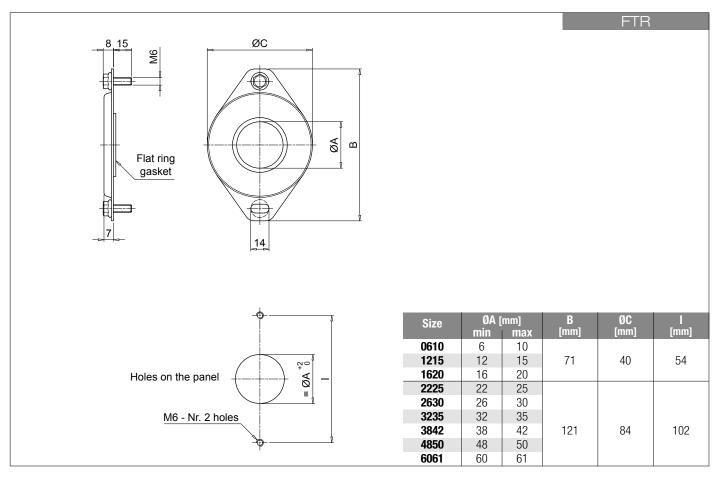
Designation & Ordering code

				COMPLET	TE OIL TANK	(FIXING F	LANGE					
Series							Configuration example :	FTA	2630	G	Α	
FTA		FTR					3 i j			Ĭ		-
-					_							
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		•		_							
					_							
	e seals		FTA	FTR								
G	Inorganic fiber		•		=							
0	Without seal			•	=							
Pipe s												
Α	NBR				_							
					_							
Execu												
P01	MP Filtri standard				-							
Pxx	Customized				_							



(134)





(136)



MULTIFIX SFT series

Fixing clamps



Accessories

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



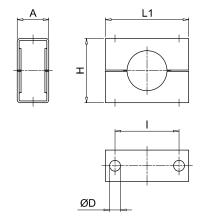
Designation & Ordering code

				CON	MPLETE FIXING CLAMP
Serie					Configuration example : SFT 51 19 P01
SFT					
01					
Size					
38	Height 38 mm - 1 1/2"				_
51	Height 51 mm - 2"				
78	Height 78 mm - 3"				
Num	ber of pipe	38	51	78	
1	Single pipe	•	•	•	_
16	Nr. 16 pipes			•	
19	Nr. 19 pipes		•		
26	Nr. 26 pipes	•			_
Exec	ution				
P01	MP Filtri standard				
Pxx	Customized				-

138

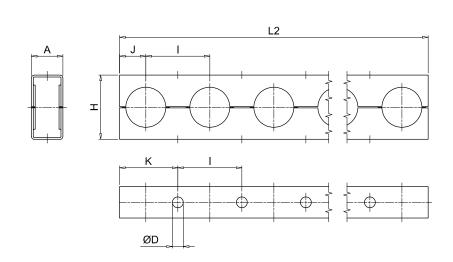
SFT

Single pipe



SFT

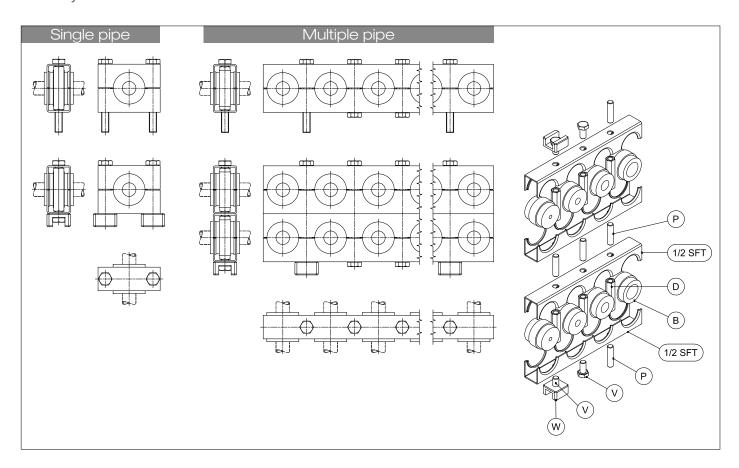
Multiple pipe

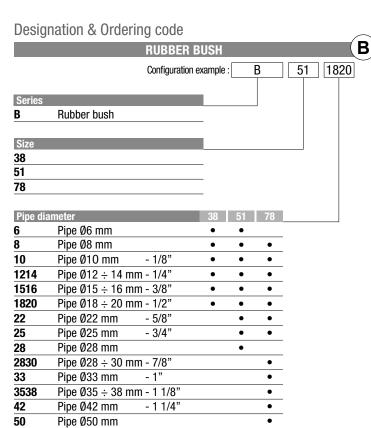


Size	A [mm]	ØD [mm]	H [mm]	l [mm]	J [mm]	K [mm]	L1 [mm]	L2 [mm]
38	25	8.7	38	38.1	15	34	56	982
51	25	8.7	51	50.8	21	46	66	956
78	41	11.1	78	76.2	35	73	95	1213

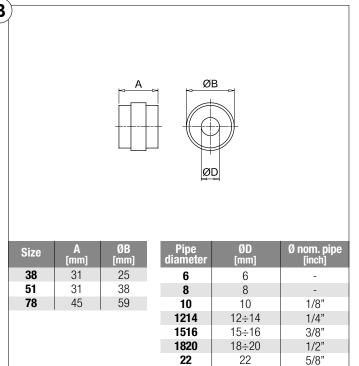
SFT MULTIFIX

Assembly





(140)



25

28

2830

33 3538

42

50

25

28

28÷30 33

35÷38

42

50

3/4"

7/8"

1"

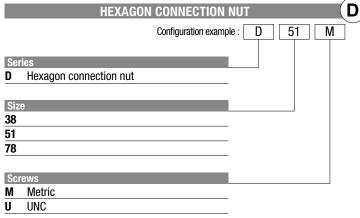
1 1/8"

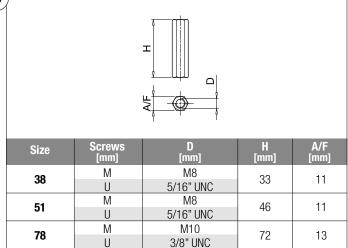
1 1/4"

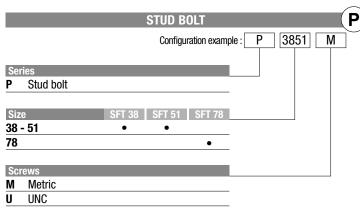
Dimensions

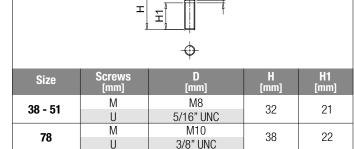
Designation & Ordering code

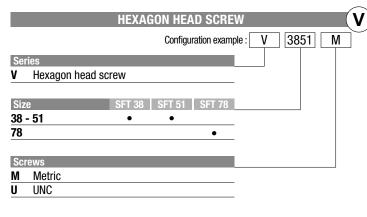
Dimensions

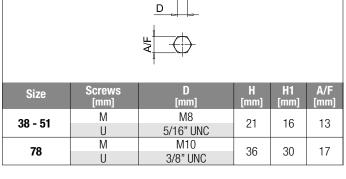


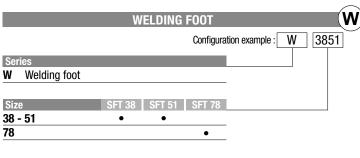


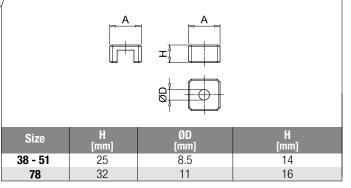














OB series

Cleaning covers



Technical data

Accessories

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
- Seal: NBR 70 Shore A

Weight	with seal	without sea
0B275	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
0B475	3.70 kg	3.40 kg

Operating temperature

From -30 °C to +80 °C

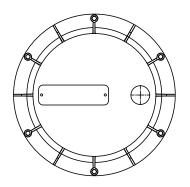


Designation & Ordering code

Size	
OB275	
OB350	
OB356	
OB400	
0B475	

COMPLETE CLEANING COVER

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.

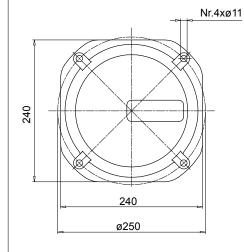
For ordering information codes, minimum order quantities, fixing hole positions and other details not indicated in this publication, contact MP Filtri Technical and Sales Department.

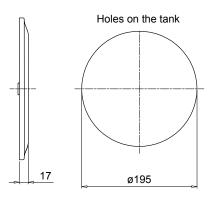


Dimensions

Cleaning cover according to DIN 24339

OB275

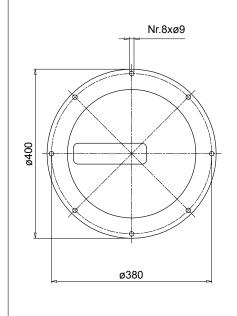


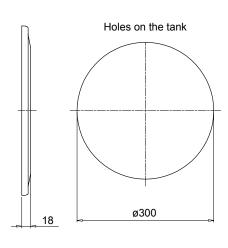


Code	Description	Seal
OB275P01GN	Door with MP Logo	NBR
OB275P02GN	Blank cover	NBR
OB275P01GV	Door with MP Logo	FPM
OB275P02GV	Blank cover	FPM

Code	Description
OB275P01	Door with MP Logo
0B275P02	Blank cover
GU0275NBR	Seal
GU0275VTN	Seal

OB400



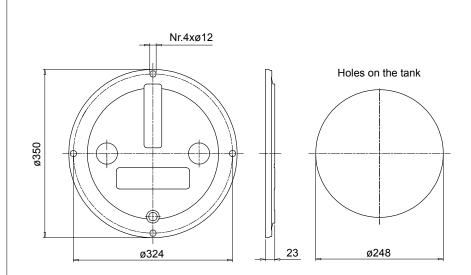


Code	Description	Seal
OB400P01GN	Door with MP Logo	NBR
OB400P02GN	Blank cover	NBR
OB400P01GV	Door with MP Logo	FPM
OB400P02GV	Blank cover	FPM

Code	Description
OB400P01	Door with MP Logo
0B400P02	Blank cover
GU0400DINNBR	Seal
GU0400DINVTN	Seal

OB350 - OB356 - OB475

Dimensions

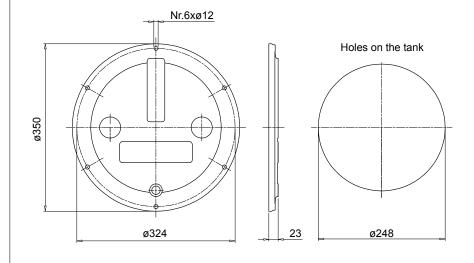


OB350

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

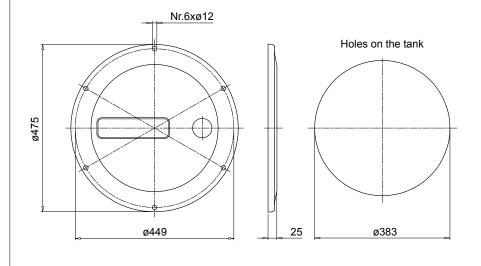
OB356



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
0B475P02	Blank cover
GU0475DINNBR	Seal
GU0475DINVTN	Seal

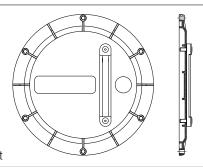
Installations

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.

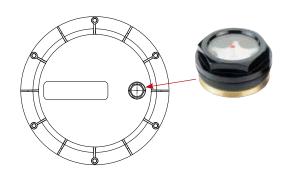
Indicator code	OB275**	OB350**	OB356**	OB400**	OB475**
LVA 10**	•	•	•	•	•
LVA 20**		•	•	•	•
LVA 30**				•	•

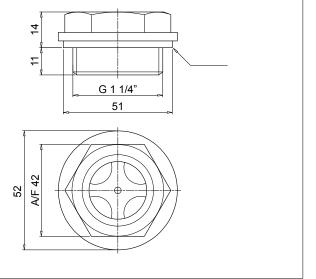




LCPG42N...S

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

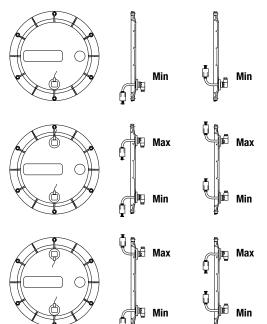




LEG

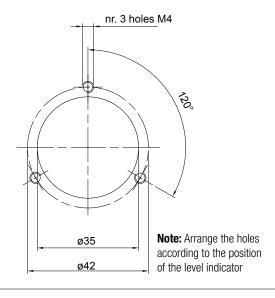
LEG series electrical level indicators (see page 106) are supplied with a 3-hole fixing flange and a reed switch having NC-NO contacts. Designed typically for installation on the vertical walls of oil tanks, these devices can also be mounted onto OB475 inspection door to indicate the minimum and maximum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



Note: Prepared for visual indicator on request

Layout of fixing holes for LEG 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



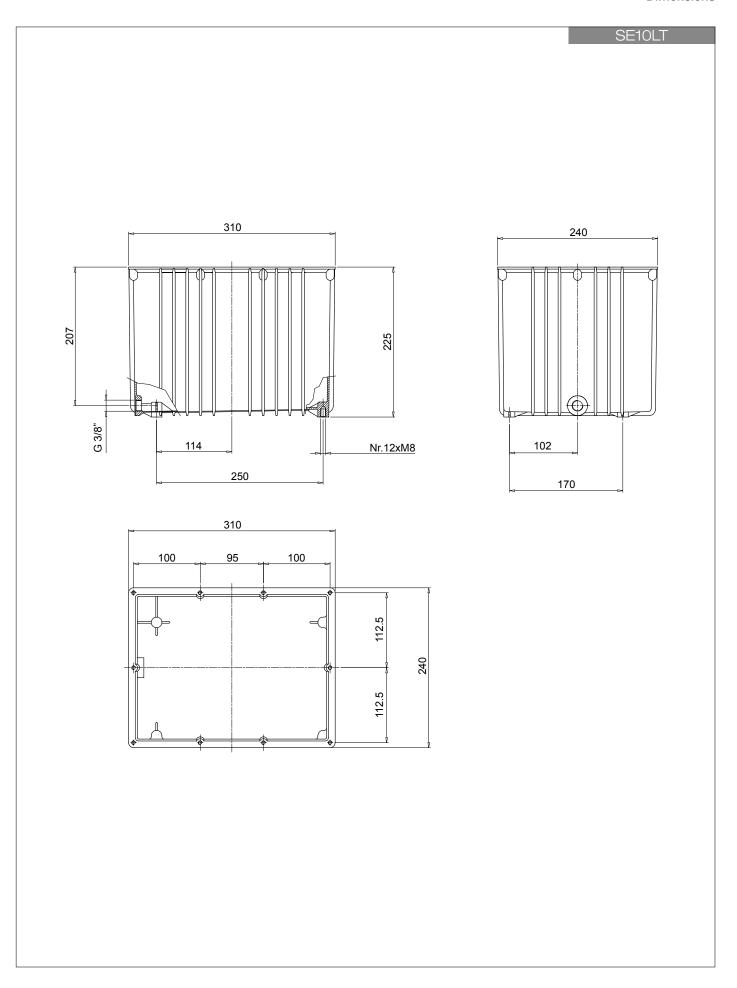
Designation & Ordering code

SE10LT

Size

SE10LT

Dimensions



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WORLDWIDE NETWORK

HEADQUARTERS

MP Filtri S.p.A.

Pessano con Bornago Milano Italy sales@mpfiltri.com

BRANCH OFFICES

ITALFILTRI LLC

Moscow Russia mpfiltrirussia@yahoo.com

MP Filtri Canada Inc.

Concord, Ontario Canada sales@mpfiltricanada.com

MP Filtri France SAS

Lyon AURA France sales@mpfiltrifrance.com

MP Filtri Germany GmbH

St. Ingbert Germany sales@mpfiltri.de

MP Filtri India Pvt. Ltd.

Bangalore India sales@mpfiltri.co.in

MP Filtri (Shanghai) Co., Ltd.

Shanghai P.R. China sales@mpfiltrishanghai.com

MP Filtri SEA PTE Ltd.

Singapore sales-sea@mpfiltri.com

MP Filtri U.K. Ltd.

Bourton on the Water Gloucestershire United Kingdom sales@mpfiltri.co.uk

MP Filtri U.S.A. Inc.

Quakertown, PA U.S.A. sales@mpfiltriusa.com

PASSION TO PERFORM



