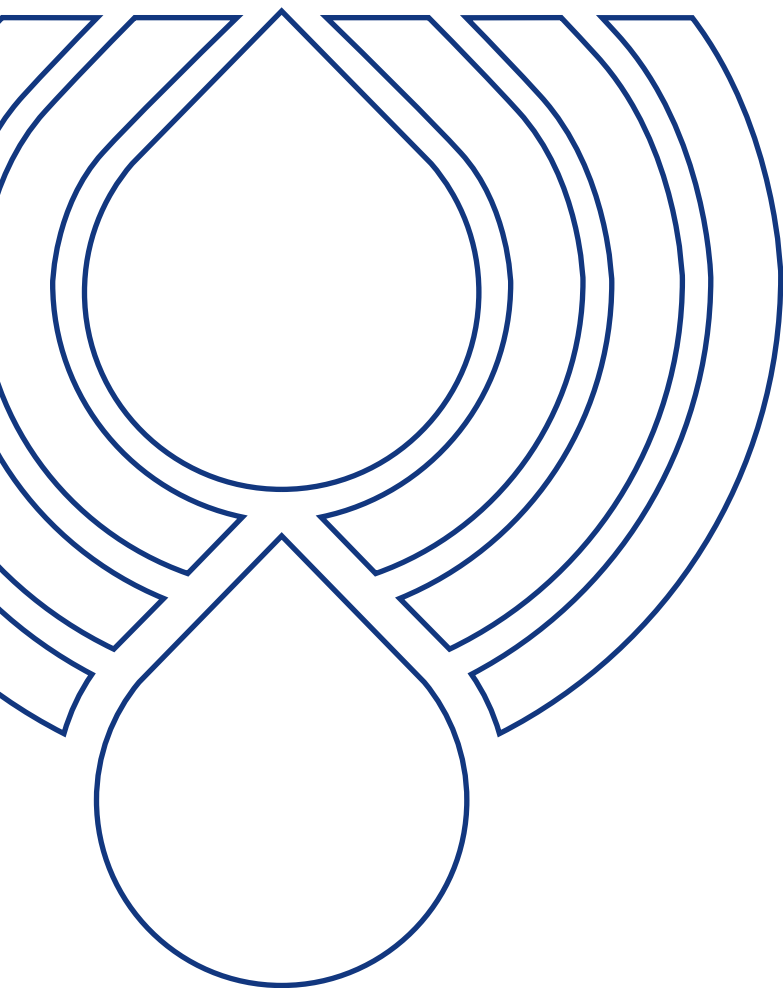


TANK ACCESSORIES

AIR BREATHERS AND FILLER PLUGS



PASSION TO PERFORM





A WORLDWIDE LEADER IN THE FIELD OF HYDRAULIC FILTRATION EQUIPMENT.

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

MARKET LEADER



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



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

WORLDWIDE PRESENCE

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

The Group boasts **8** business branches



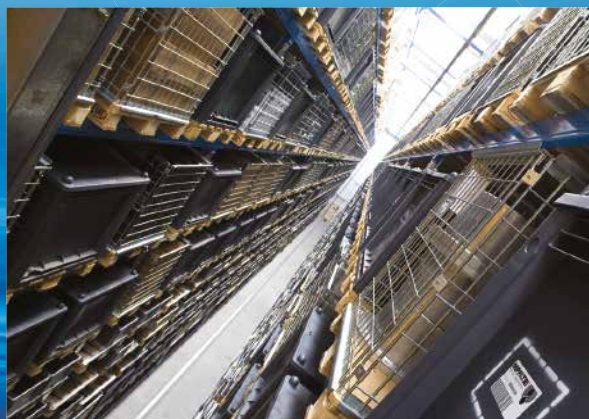
TECHNOLOGY

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



AND PRODUCTION

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





SUCTION FILTERS

Flow rates
up to 875 l/min

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

RETURN FILTERS

Flow rates
up to 3000 l/min

Pressure
up to 20 bar

Mounting:
- In-Line
- Tank top
- In single
and duplex designs

RETURN / SUCTION FILTERS

Flow rates
up to 300 l/min

Pressure
up to 80 bar

Mounting:
- In-Line
- Tank top

SPIN-ON FILTERS

Flow rates
up to 365 l/min

Pressure
up to 35 bar

Mounting:
- In-Line
- Tank top

LOW & MEDIUM PRESSURE FILTERS

Flow rates
up to 3000 l/min

Pressure
up to 80 bar

Mounting:
- In-Line
- Parallel manifold version
- In single
and duplex designs

HIGH PRESSURE FILTERS

Flow rates
up to 750 l/min

Pressure from 110 bar
up to 560 bar

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

PRODUCT RANGE

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

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

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

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



STAINLESS STEEL HIGH PRESSURE FILTERS

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

Mounting:

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



CONTAMINATION MONITORING PRODUCTS

- 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

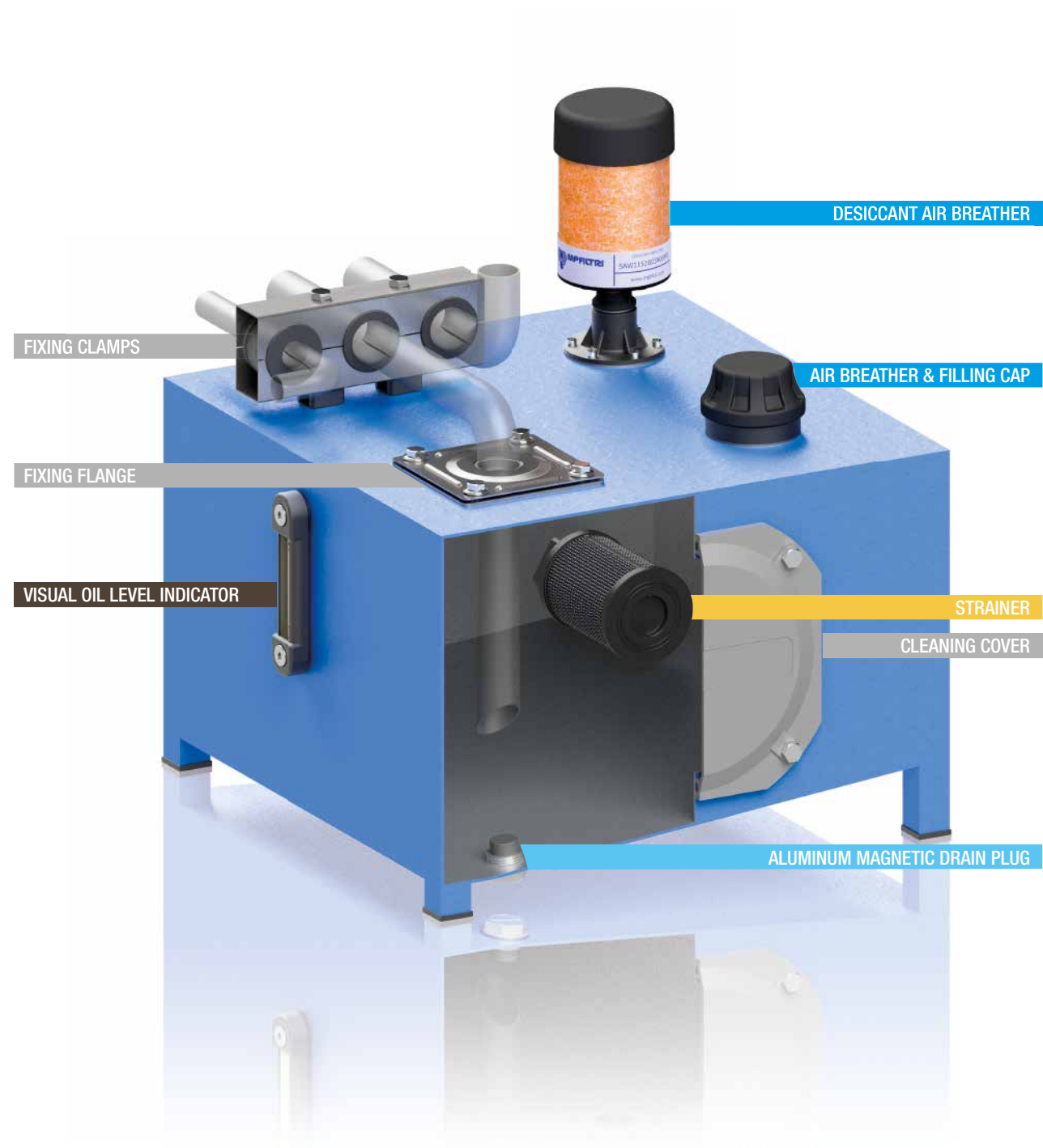
- Aluminium bell-housings for motors from 0.12 kW to 400 kW
- Couplings in Aluminium Cast Iron - Steel
- Damping rings
- Foot bracket
- Aluminium tanks
- Cleaning covers



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

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

72	page	FILLER AND DRAIN PLUGS
75		TC 50 Nylon filler plug
79		TKT - TSD Nylon filler plugs
79		TKM Aluminium magnetic drain plug

86	page	VISUAL OIL LEVEL INDICATORS
89		LCP - LCC Spy eyes
95		LVA - LVU Visual oil level indicator

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

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



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

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

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

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

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

Air Breathers & Filler Plugs



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

SAP 054-075 series

Nylon air breather filter

SA series

Metal air breather filter



Technical data

Air breathers & Filler plugs

Nylon air breather filter

Flow rate up to 400 l/min

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

They are usually directly fitted on the tank.

Available features:

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

Common applications:

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

Flow rate Δp 0.02 bar

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

Materials

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

Temperature

From -25 °C to +100 °C

Weight

SAP 054 - 0.06 kg

SAP 075 - 0.15 kg



Designation & Ordering code

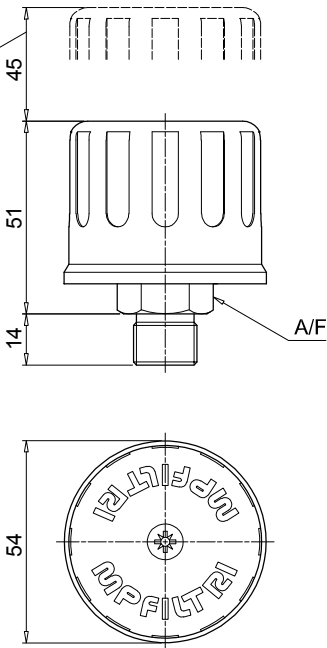
COMPLETE AIR BREATHER

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

FILTER ELEMENT

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

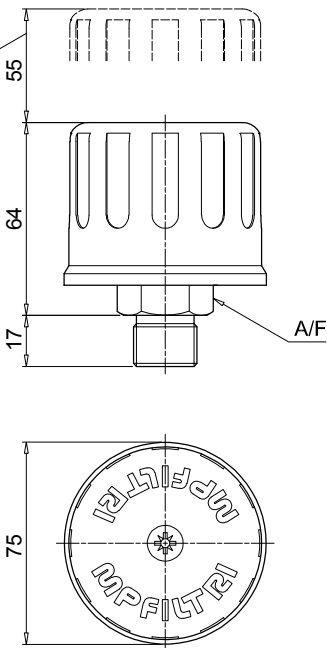
Recommended
clearance space
for maintenance



SAP054

Connection	A/F [mm]
G1	22
G2	27

Recommended
clearance space
for maintenance



SAP075

Connection	A/F [mm]
G1	27
G2	32

Air breathers & Filler plugs

Metal air breather filter

Flow rate up to 2500 l/min

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

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

Available features:

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

Common applications:

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

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	
SA036	L03	L10
SA053	140	140
SA075	250	250
SA115	350	400
SA145	800	850
SA185	1800	1850
	2300	2500

Materials

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

Temperature

From -25 °C to +100 °C

Weight

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



Designation & Ordering code

COMPLETE AIR BREATHER

Series and size

SA036 | **SA053** | **SA075** | **SA115** | **SA145** | **SA185**

Connections to the tank

	SA036	SA053	SA075	SA115	SA145	SA185
G1	G 1/4"	G 1/4"	G 1/2"	G 1"	G 1 1/2"	G 2 1/2"
G2	G 3/8"	G 3/8"	G 3/4"	-	-	-
G3	G 1/2"	-	-	-	-	-
G4	1/4" NPT	1/4" NPT	1/2" NPT	1" NPT	1 1/2" NPT	2 1/2" NPT
G5	3/8" NPT	3/8" NPT	3/4" NPT	-	-	-
G6	1/2" NPT	-	-	-	-	-

Filtration rating

L03	Resin impregnated paper	3 µm
L10	Resin impregnated paper	10 µm
S	Without filter element	

Configuration example : **SA115** | **G1** | **L10** | **A** | **P01**

Seals

A NBR

Execution

P01 MP Filtri standard
Pxx Customized

FILTER ELEMENT

Filter element series and size

A05 | **A5** | **A7** | **A8** | **A10** | **A11**

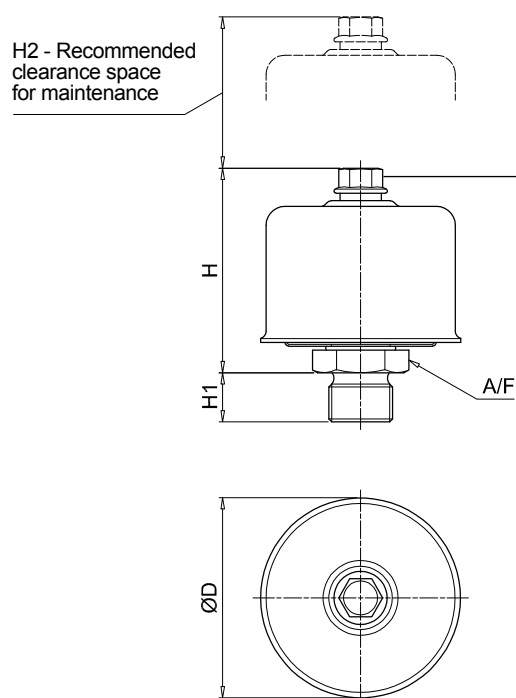
Filtration rating (filter media)

L03	Resin impregnated paper	3 µm
L10	Resin impregnated paper	10 µm

Configuration example : **A8** | **L10** | **P01**

Execution

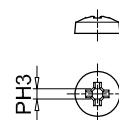
P01 MP Filtri standard
Pxx Customized



Type of bolt/nut

Phillips:

SA036

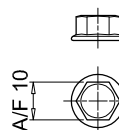
**Hex:**

SA053

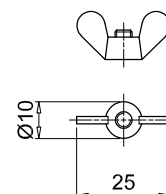
SA075

SA115

SA145

**Wings:**

SA185



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

SAW 115 series

Moisture control desiccant air breather



SAW 115 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Moisture control desiccant air breather

Max air flow up to 453 l/min

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

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

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

Available features:

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

Common applications:

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

Chemical Compatibility

Recommended:

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

Not Recommended:

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

Flow rate Δp 0.02 bar

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

Materials

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

Filter Efficiency 3µm absolute (B₃ ≥200)

Seals NBR

Temperature From -25 °C to +90 °C

Humidity Level Below Ambient Conditions

SAW115G03A00P01: protects 30,000+ cycles

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

Silica Gel Weight

Lenght 1: 0.32 kg

Lenght 2: 0.56 kg

Lenght 3: 0.84 kg

Total Weight

Lenght 1: 0.60 kg

Lenght 2: 0.90 kg

Lenght 3: 1.20 kg



Designation & Ordering code

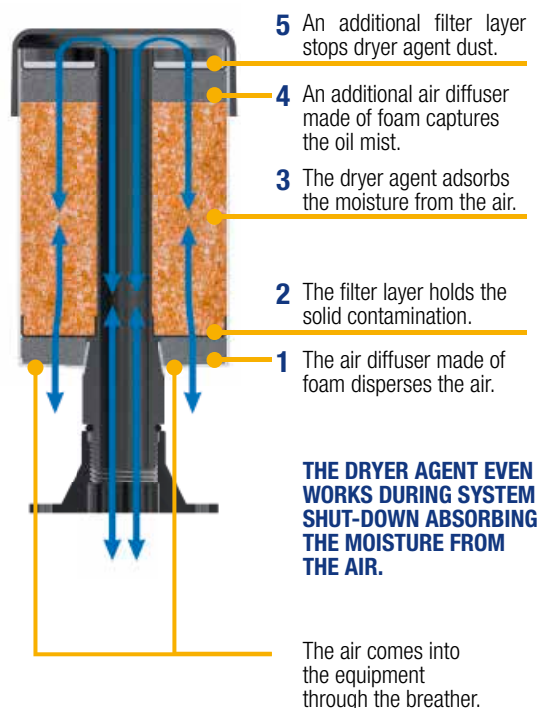
MOISTURE CONTROL DESICCANT BREATHER

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

ACCESSORIES

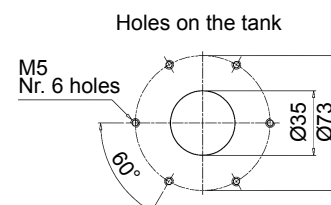
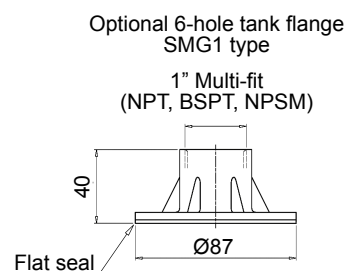
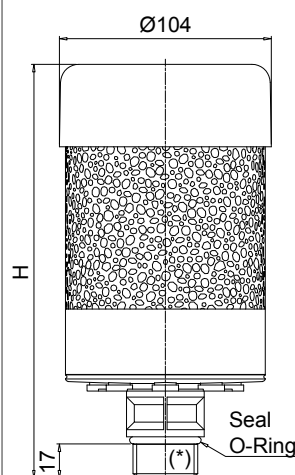
Series and size	Configuration example : SMG1 S A P02			
SMG Adapter Flange				
Connections to the tank	S Without screws			
S Without screws				
Seals		A NBR		
Execution		P02 MP Filtri standard		

How does SAW Series works



SAW115

Length	H [mm]
1	154
2	205
3	256



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

Silica gel

Active breather



Depleted breather



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

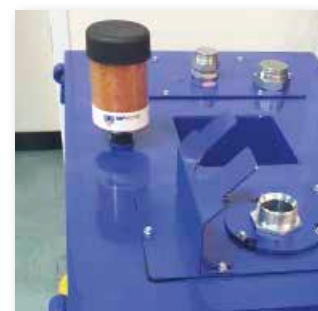
A white breather means the unit has done its job keeping moisture out of your lubricants.

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

All breathers should be changed at least once a year.

IMPORTANT

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



Air vent holes

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

IMPORTANT INSTALLATION INFORMATION

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



SCS series

Metal air breather filter



Air breathers & Filler plugs

Metal air breather filter

Flow rate up to 1330 l/min

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

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

Available features:

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

Common applications:

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

Flow rate Δp 0.02 bar

Flow rate [l/min]				
	Filtration rating	P10	A03	A10
SCS050		550	515	530
SCS070		550	515	530
SCS100		1415	1300	1330
SCS150		1415	1300	1330

Materials

Riser: Galvanized steel

Temperature

From -25 °C to +100 °C

Weight

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

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



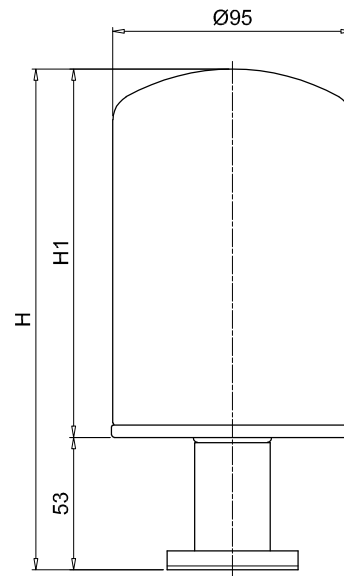
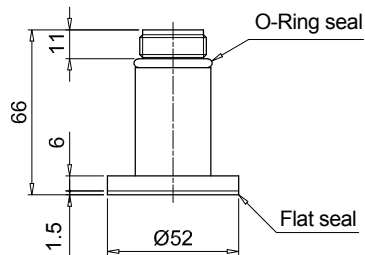
Designation & Ordering code

METAL AIR BREATHER FILTER

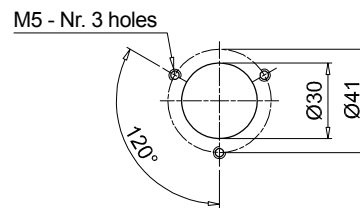
Series and size				Configuration example 1 : SCS050 C G2 V P01					
SCS050	SCS070	SCS100	SCS150	Configuration example 2 : SCS150 C G2 A10 V P01					
Connections to the tank									
C	Weld riser								
F	Screwed flange								
Threaded connection		SCS050 - 070		SCS100 - 150					
G1	Connection ISO 228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

FILTER ELEMENT

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



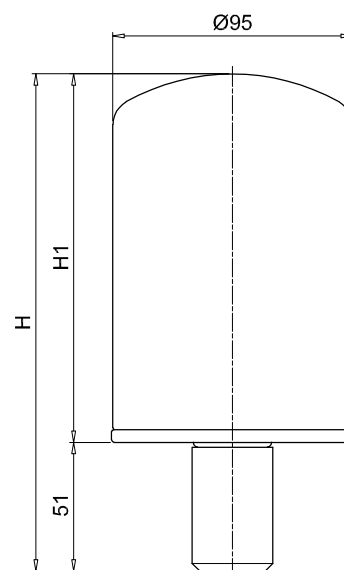
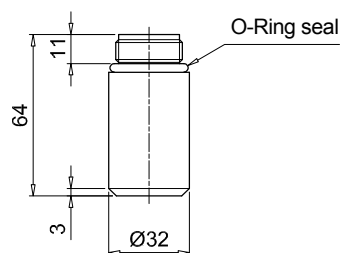
Holes on the tank



SCS050-070

Screwed flange

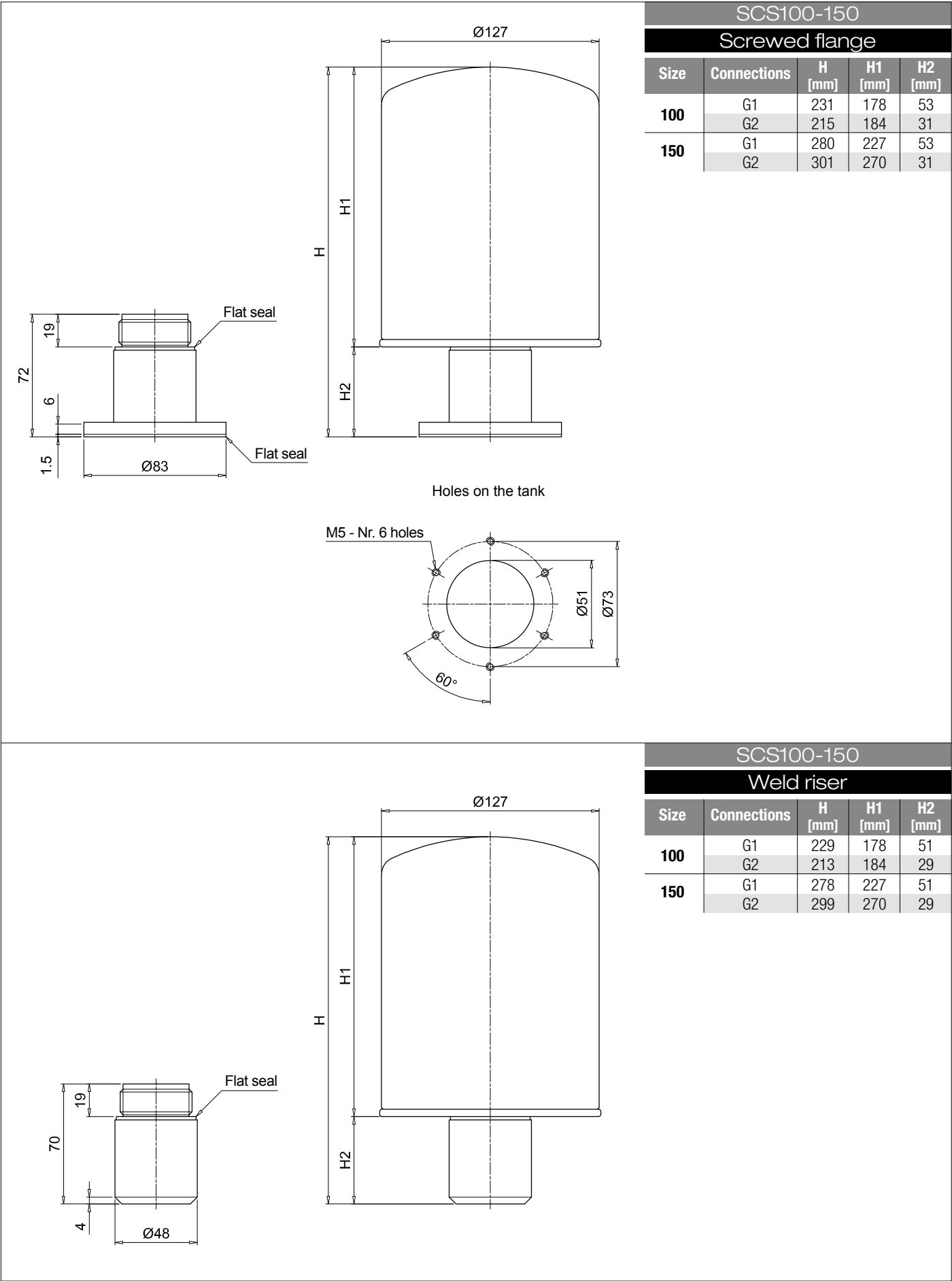
Size	H [mm]	H1 [mm]
050	199	146
070	263	210



SCS050-070

Weld riser

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



SME 1 - SMF 1 - SML 1 series

Risers for breathers and filler caps installation



Technical data

Air breathers & Filler plugs

Risers for breathers and filler caps installation

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

Available features:

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

Materials SME

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

Materials SMF

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

Materials SML

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

Temperature

From -25 °C to +100 °C

Weight

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



Designation & Ordering code

SME / SMF / SML

Series and size

- SME1** Polyamide vertical riser
SMF1 Polyamide sloping riser
SML1 Aluminium sloping riser

Configuration example: **SMF1** **M** **A** **P01**

Connections to the tank

- M** Metric screws
U UNC screws

Seals

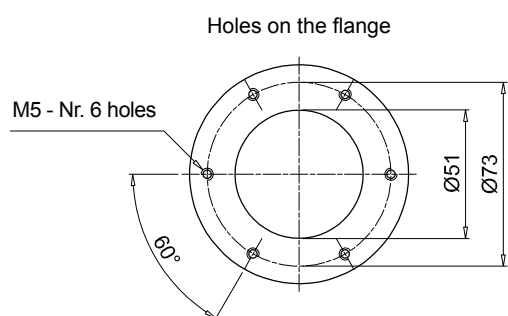
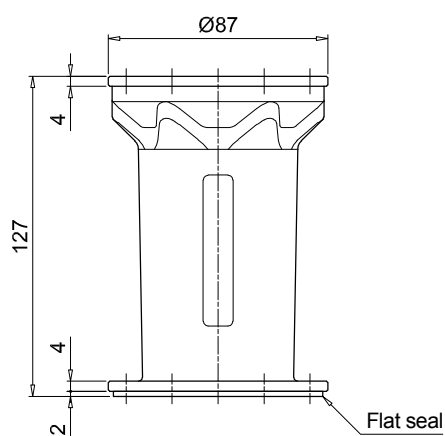
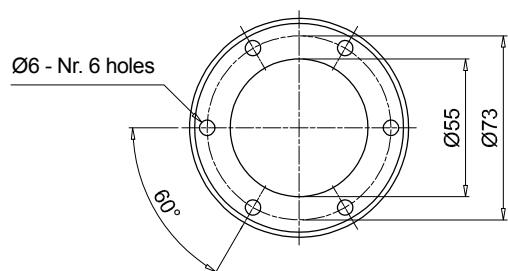
- A** NBR

Execution

Series

		SME1	SMF1	SML1
P01	MP Filtri standard		•	•
P02	Standard without logo	•		
Pxx	Customized	•	•	•

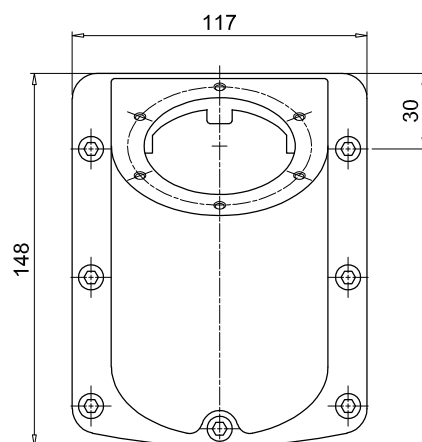
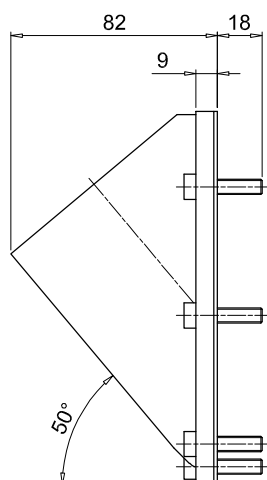
SME1



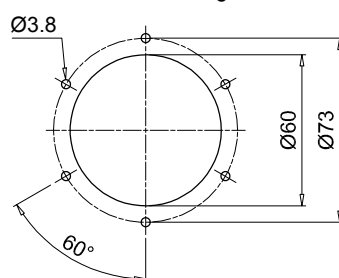
SME 1-SMF 1-SML 1

Dimensions

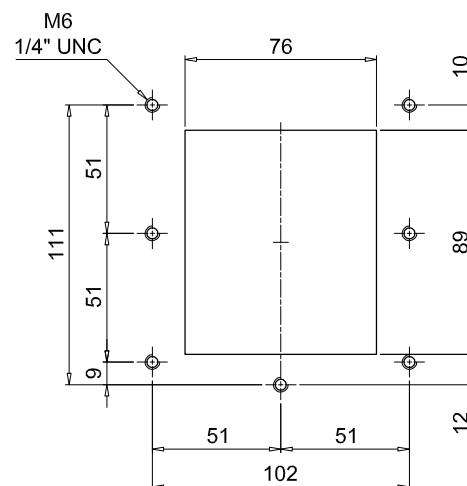
SMF1



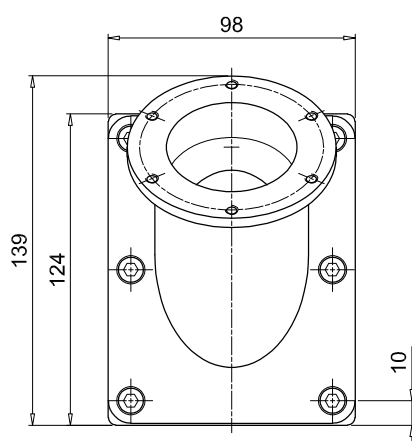
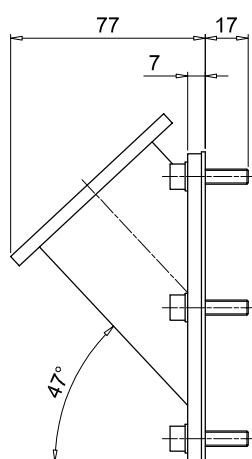
Holes on the flange



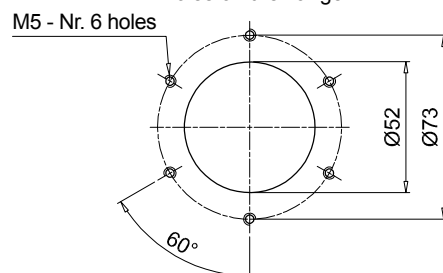
Holes on the tank



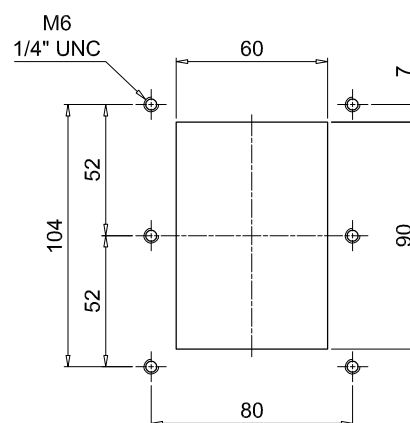
SML1



Holes on the flange



Holes on the tank



TA 46

TAP 50

SAP 50 series

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

**Nylon oil filler
and breather plug**

**Nylon air
breather filter**



Technical data

Air breathers & Filler plugs

Metal oil filler and air breather filler cap

Flow rate up to 200 l/min

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

Available features:

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

Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	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: Phosphatized steel
- Seals: NBR
- Chain, ring: Cork gasket
- Screws: Galvanized steel
- Basket: Brass

Temperature

From -25 °C to +100 °C

Weight

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



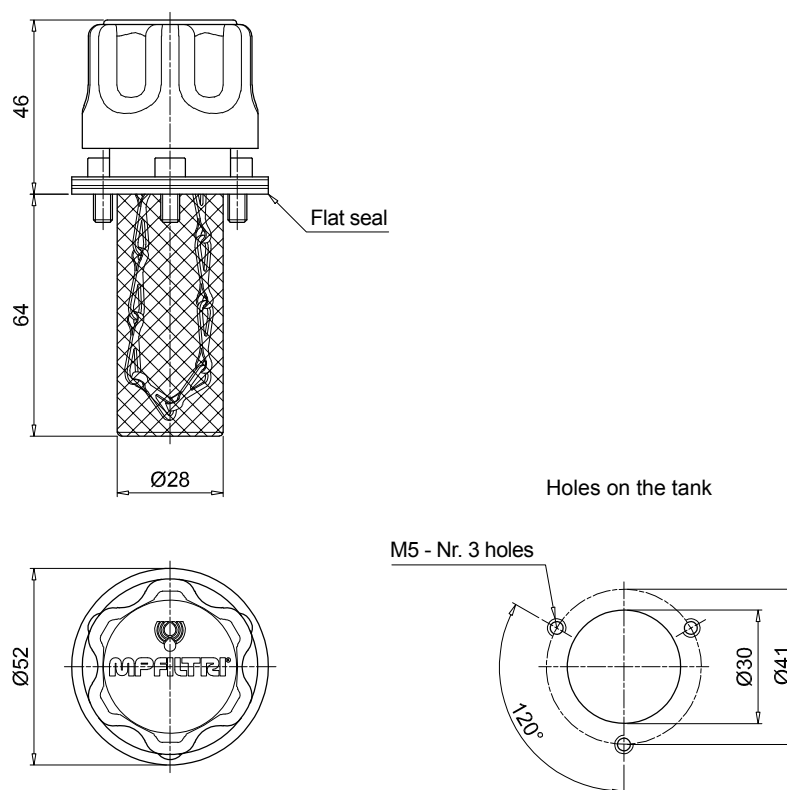
Designation & Ordering code

COMPLETE AIR BREATHER - TA46

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

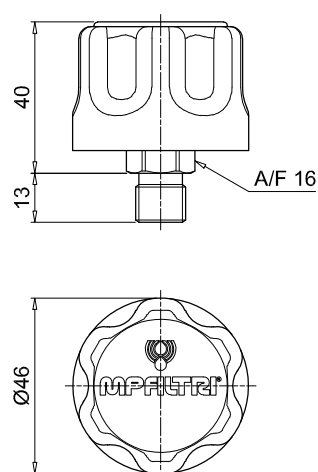
TA46

Screwed flange



TA46

Threaded connection



TAP 50 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and breather plug

Flow rate up to 200 l/min

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

Available features:

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

Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	
	03	10
TAP50	180	202

Materials

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

Temperature

From -25 °C to +100 °C

Weight

0.60 kg

Quantity

10 pcs/pack



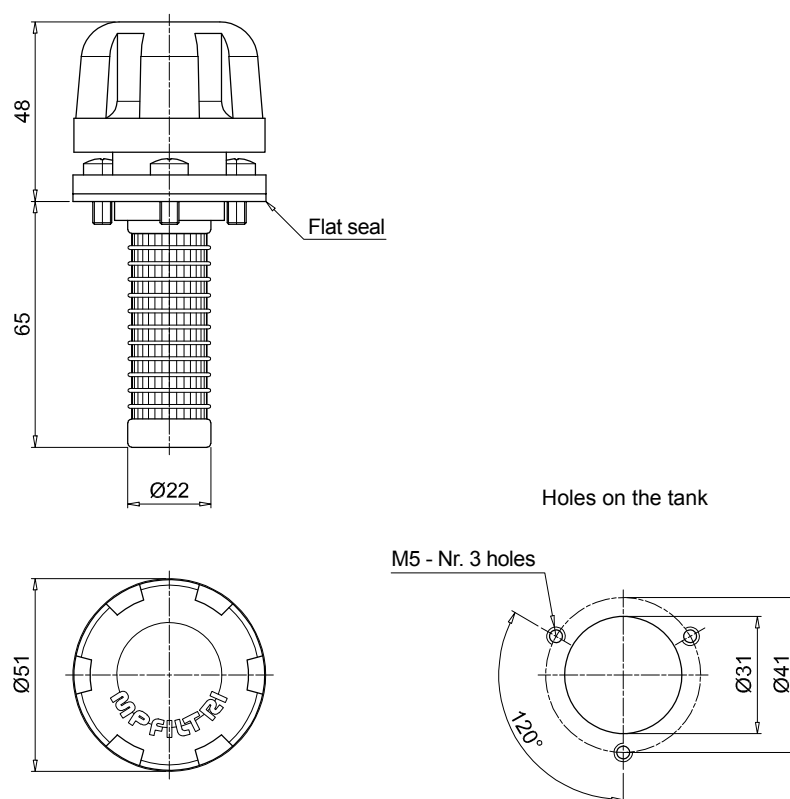
Designation & Ordering code

COMPLETE OIL FILLER PLUG - TAP50

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

TAP50

Screwed flange



SAP 50 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon air breather filter

Flow rate up to 200 l/min

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

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

Available features:

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

Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	
	03	10
SAP50	180	204

Materials

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

Temperature

From -25 °C to +100 °C

Weight

0.40 kg

Quantity

10 pcs/pack



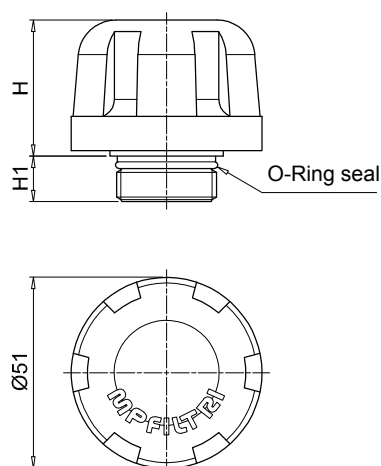
Designation & Ordering code

COMPLETE AIR BREATHER - SAP50

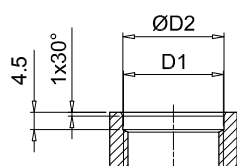
Series and size		Configuration example : SAP50							G3	L03	A	1	0	P01
SAP50 Nylon air filter														
Connections to the tank														
G1	G 1/4"													
G2	G 3/8"													
G3	G 1/2"													
G4	G 3/4"													
G9	SAE 6 - 9/16" - 18 UNF													
G10	SAE 12 - 1 1/16" - 12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

SAP50

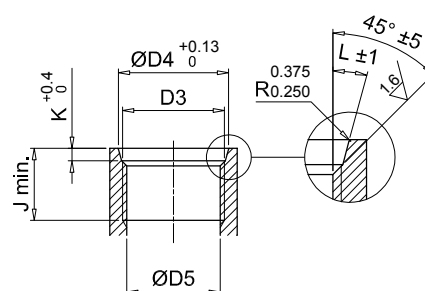
Threaded
connection



Housing on the tank
for connections GAS



Housing on the tank
for connections SAE



Connections	H [mm]	H1 [mm]	D1 [mm]	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

Metal oil filler and air breather filler cap



TA 80 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Metal oil filler and air breather filler cap

Flow rate up to 550 l/min

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

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

Available features:

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

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

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

Materials

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

Temperature

From -25 °C to +100 °C

Weight

L 80 mm 0.33 kg
L 100 mm 0.35 kg



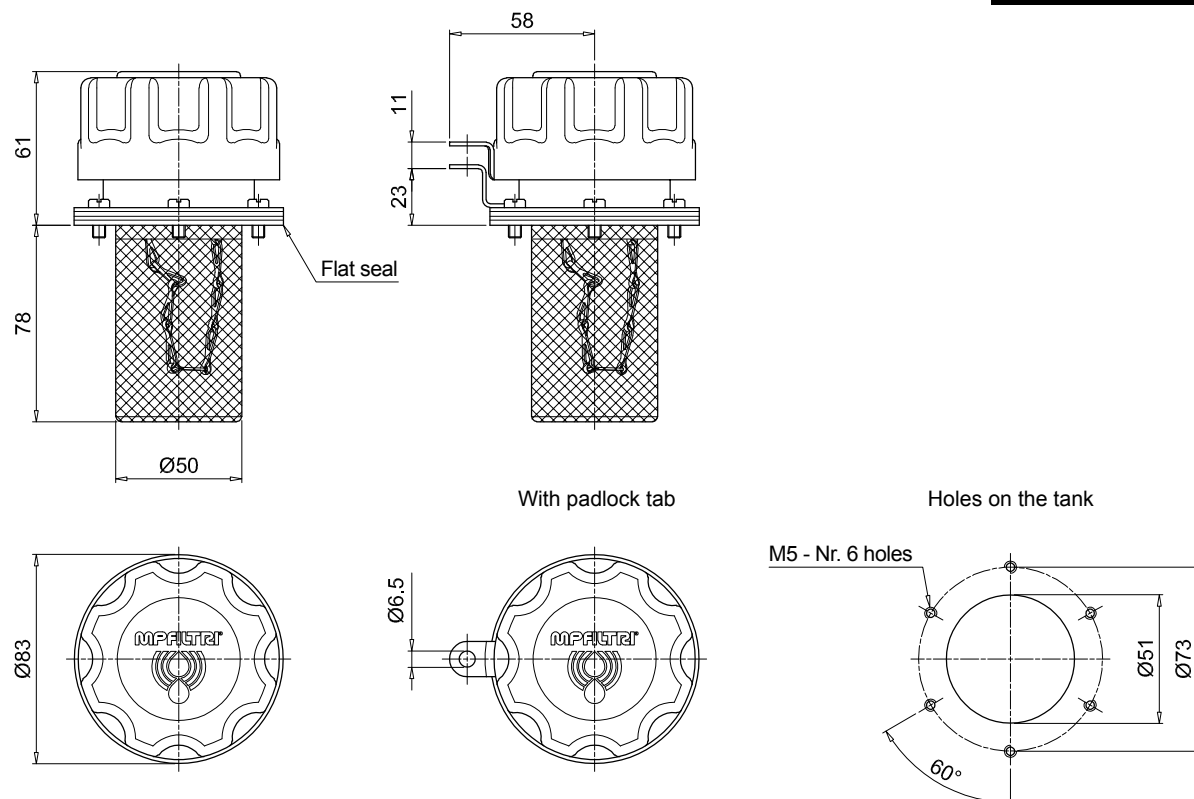
Designation & Ordering code

COMPLETE BREATHER PLUG - TA80

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

TA80

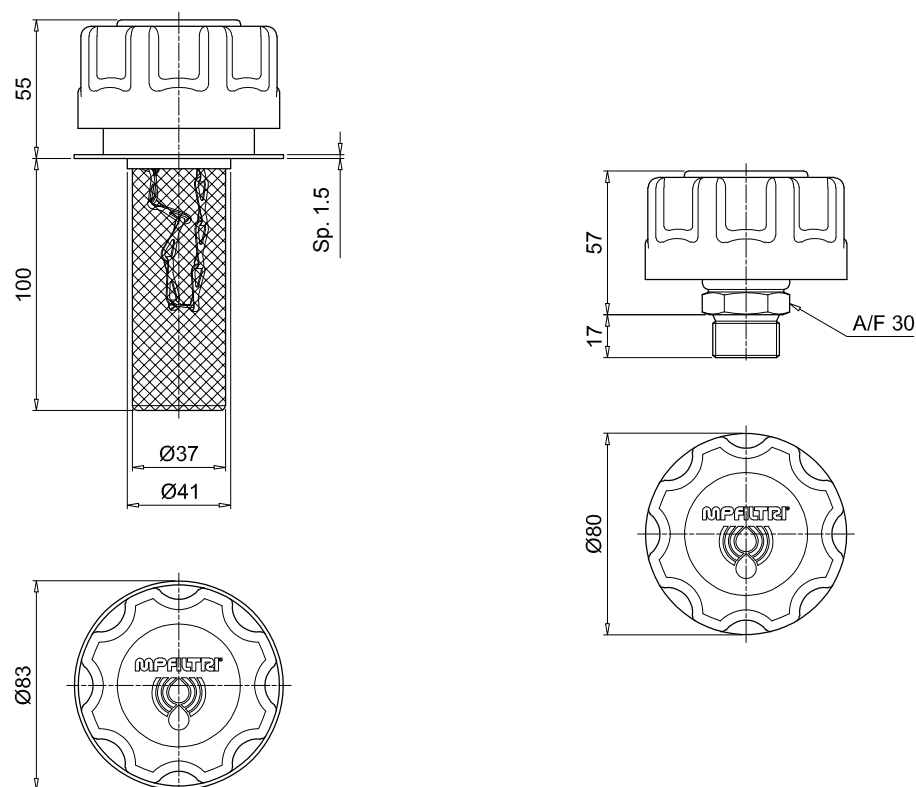
Screwed flange



TA80

Weld flange

Threaded connection



TAP 90 series

Nylon oil filler and air breather filler cap



TAP 90 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap

Flow rate up to 550 l/min

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

They are usually directly fitted on the tank.

Available features:

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

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]	
	Filtration rating	
TAP90	03	10
	450	550

Materials

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

Temperature

From -25 °C to +100 °C

Weight

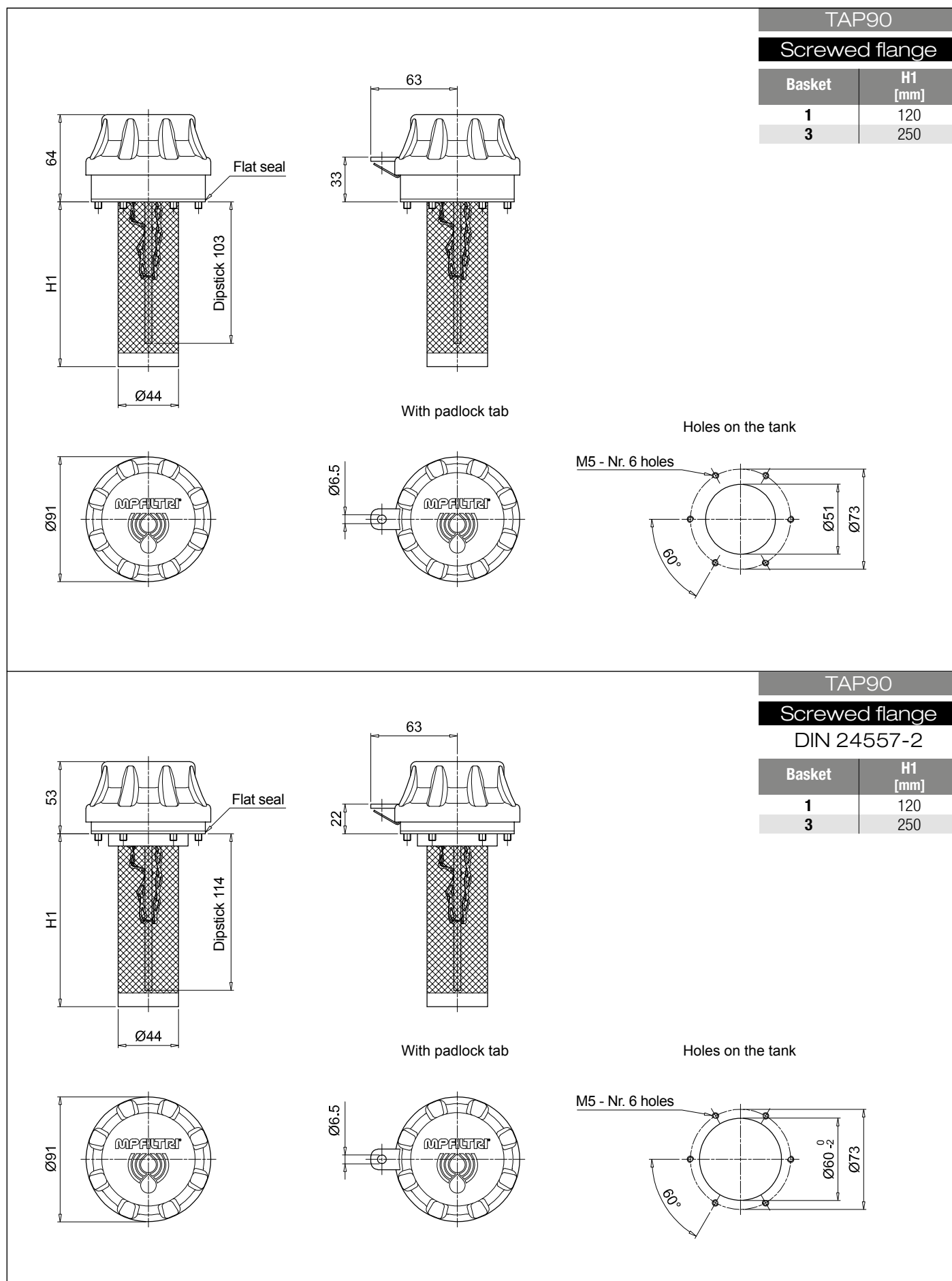
L 120 mm 0.25 kg
L 250 mm 0.31 kg



Designation & Ordering code

COMPLETE BREATHER PLUG - TAP90

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

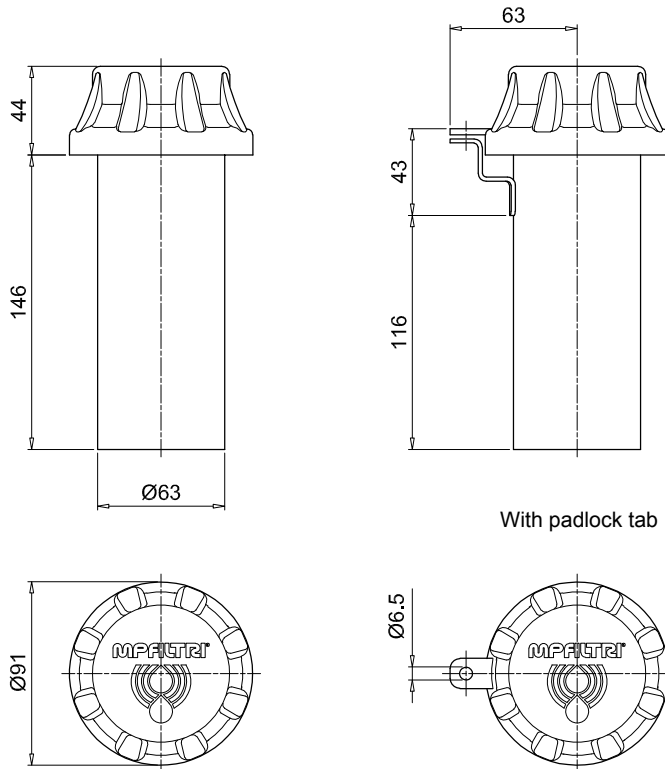


TAP 90

Dimensions

TAP90

Weld riser

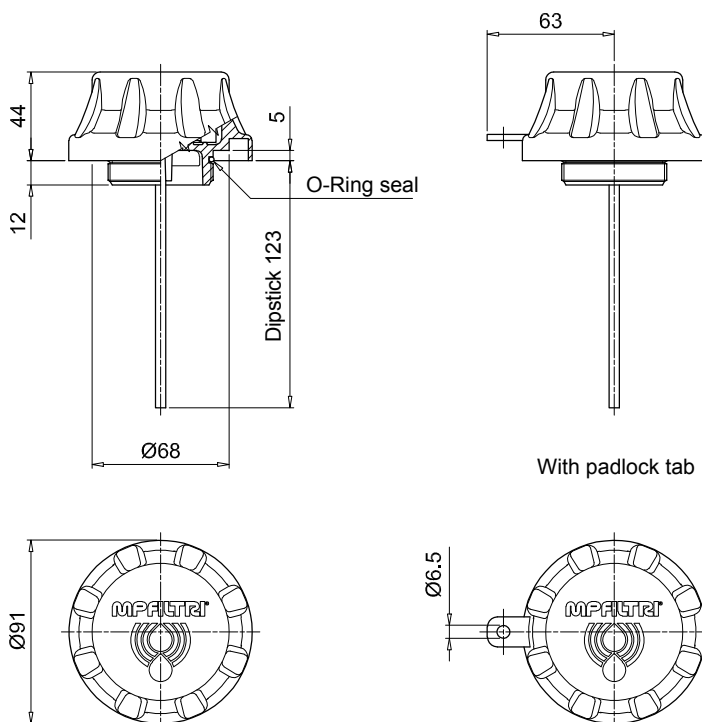


With padlock tab

TAP90

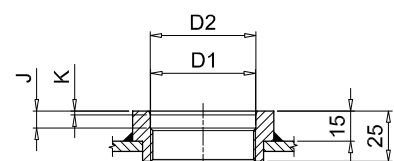
Threaded connection

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



With padlock tab

Housing on the tank
for connections GH-MT



TAP 114 series

Nylon oil filler and air breather filler cap



TAP 114 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap

Flow rate up to 1600 l/min

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

They are usually directly fitted on the tank.

Available features:

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

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

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

Materials

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

Temperature

From -25 °C to +100 °C

Weight

Length 1 - 0.185 kg

Length 2 - 0.200 kg



Designation & Ordering code

COMPLETE BREATHER PLUG - TAP114

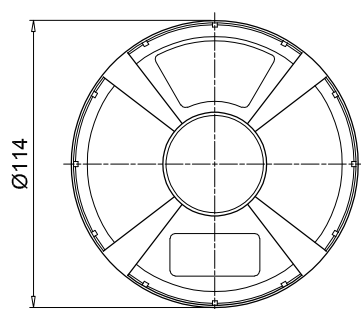
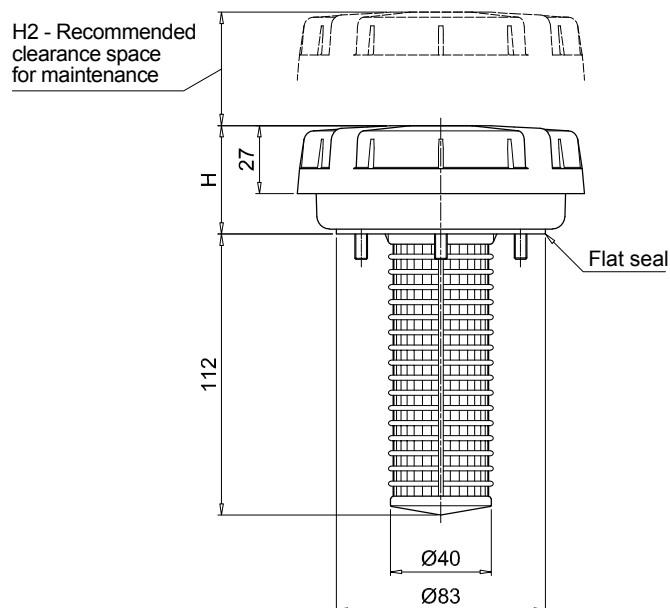
Series and size	Configuration example : TAP114 1 L10 A 1 P01					
TAP114						
Length						
1 3 						
Filtration rating						
L10 Resin impregnated paper 10 µm						
Seals						
A NBR						
Version						
1 With basket						
						Execution
						P01 MP Filtri standard
						Pxx Customized

FILTER ELEMENT

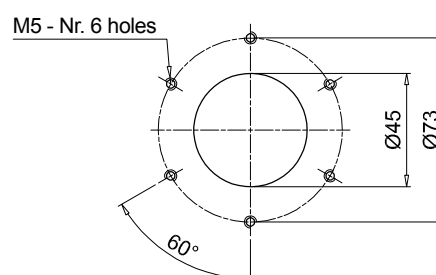
Filter element series and size	Configuration example : A114 1 L10 P01			
A114				
Length				
1 3 				
Filtration rating				
L10 Resin impregnated paper 10 µm				
				Execution
				P01 MP Filtri standard
				Pxx Customized

TAP114

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



Holes on the tank



TAP 115 & SAP 115

Nylon oil filler and air breather filler cap



TAP 115 GENERAL INFORMATION

Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap

Flow rate up to 2150 l/min

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

They are usually directly fitted on the tank.

Available features:

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

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]		
	Filtration rating	A03	L10
TAP115 length 1		1600	2000
TAP115 length 2		2150	2150

Materials

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

Clogging indicators

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

Temperature

From -25 °C to +100 °C

Weight	Length 1	Length 2
TAP 115	0.46 kg	0.585 kg



Designation & Ordering code

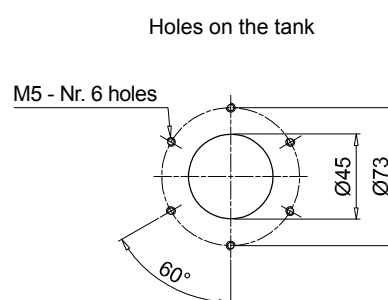
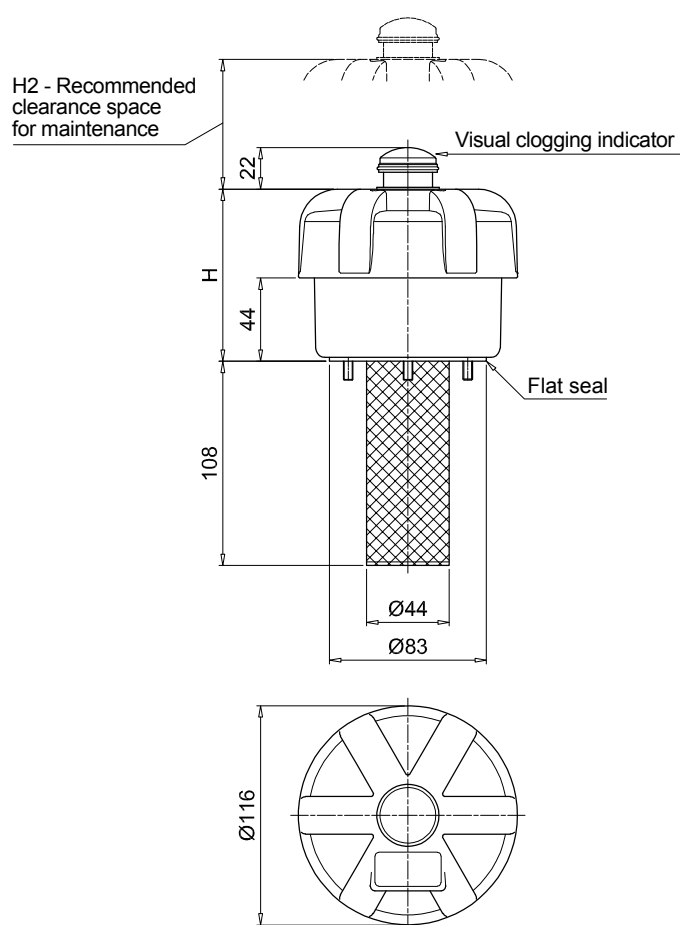
COMPLETE BREATHER PLUG - TAP115

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

FILTER ELEMENT

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

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



Technical data

Air breathers & Filler plugs

Nylon oil filler and air breather filler cap

Flow rate up to 3000 l/min

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

Available features:

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

Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

Flow rate Δp 0.02 bar

	Flow rate [l/min]		
	Filtration rating	A03	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

Materials

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

Clogging indicators

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

Temperature

From -25 °C to +100 °C

Weight	Length 1	Length 2
SAP 115	0.41 kg	0.525 kg



Designation & Ordering code

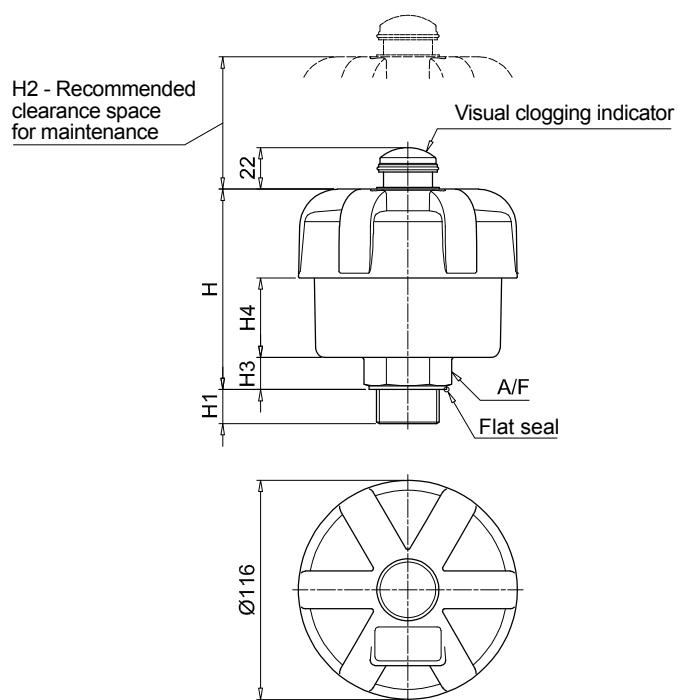
COMPLETE BREATHER PLUG - SAP115

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

FILTER ELEMENT

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

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





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 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



mpfiltri.com