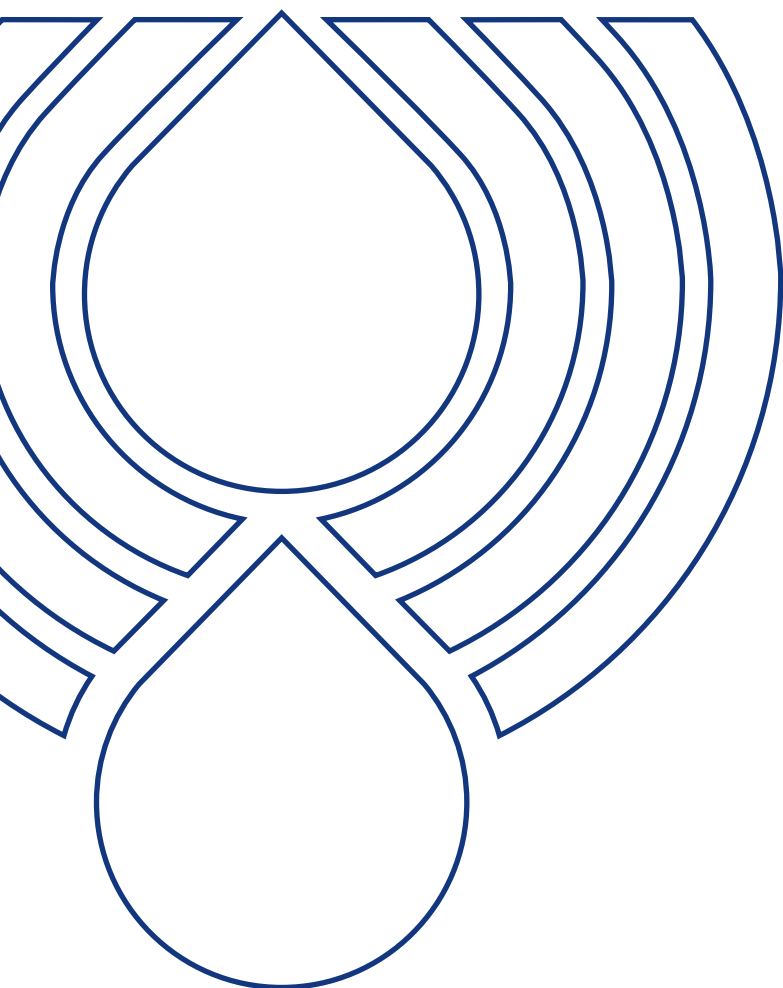


# TANK ACCESSORIES

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



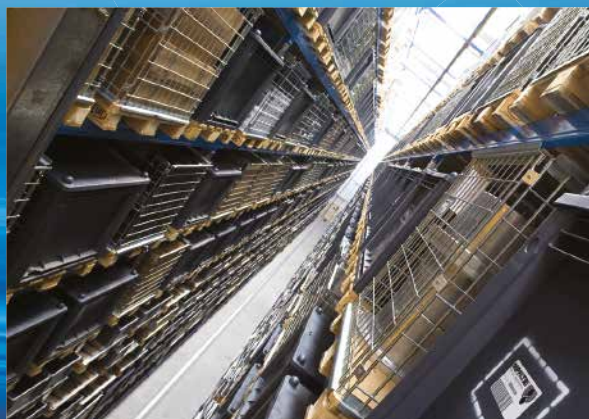
## TECHNOLOGY

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

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

## MOBILE FILTRATION UNITS

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

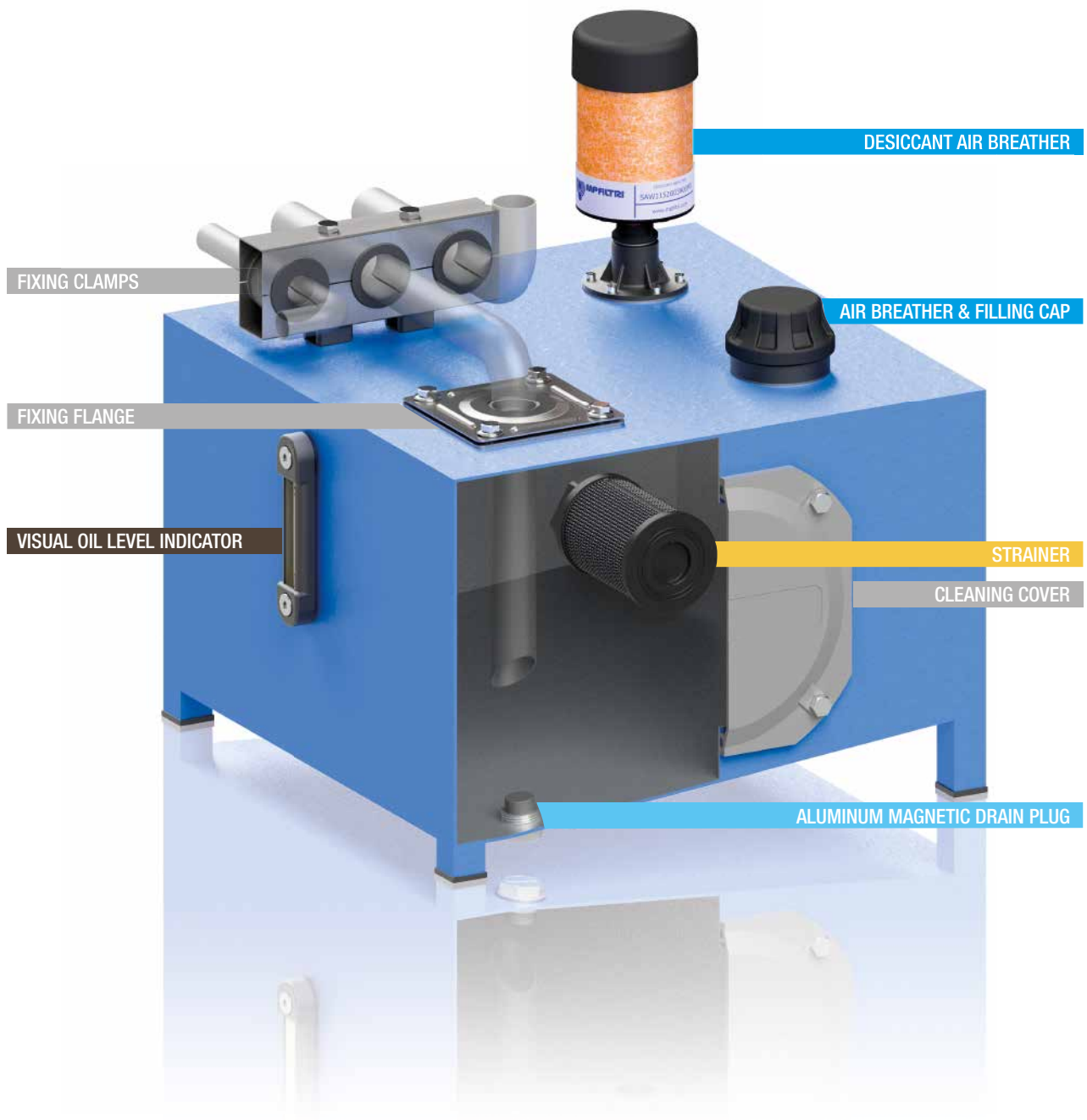
## POWER TRANSMISSION PRODUCTS

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

## TANK ACCESSORIES

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

# TANK ACCESSORIES



## 1 page INTRODUCTION

1	COMPANY
6	PRODUCT RANGE

## 10 page STRAINERS

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



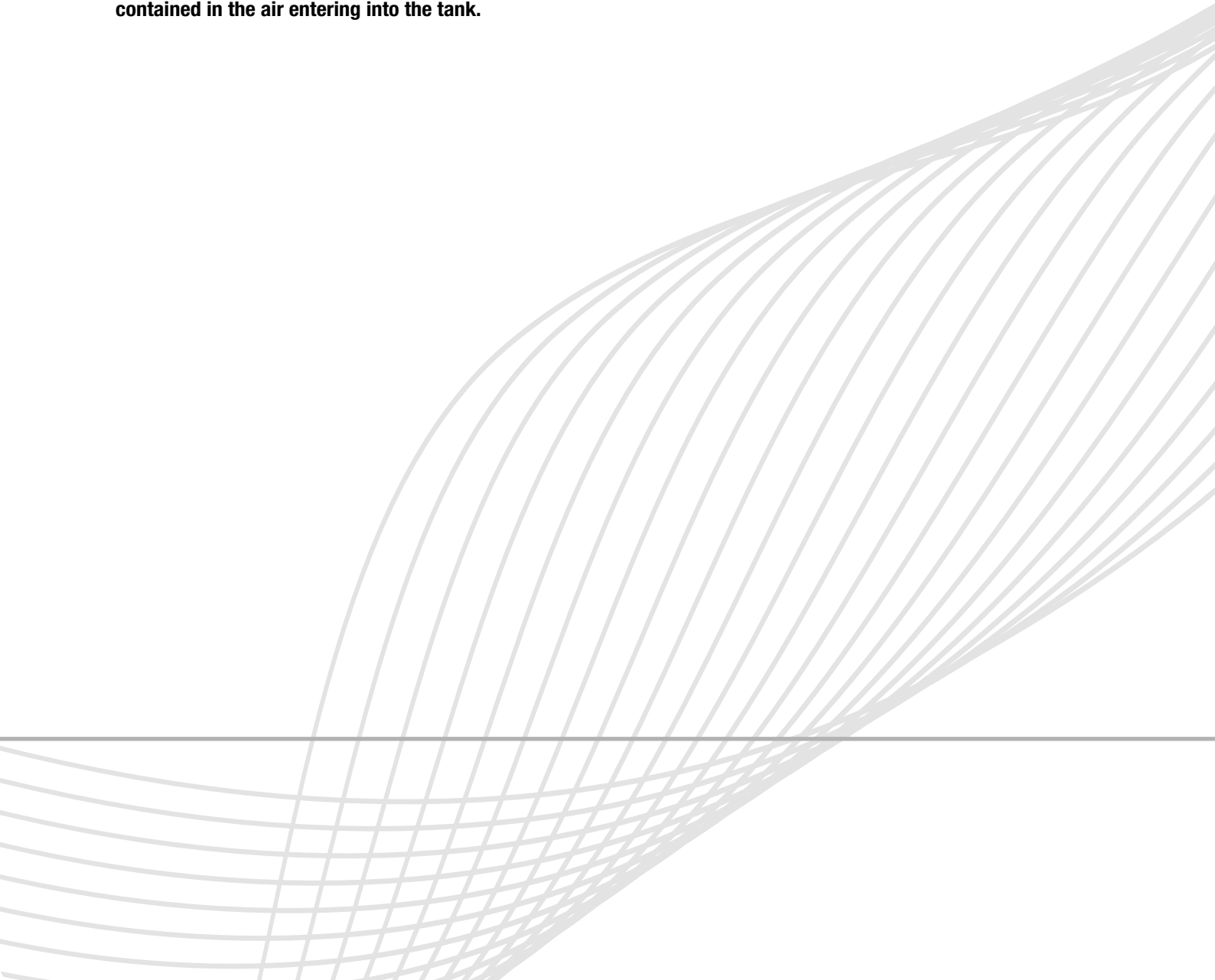
**The complete series of air breathers and filler plugs makes it possible to meet all market demands.**

**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 $\Delta p$ 0.02 bar

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

#### Materials

- Cover: Nylon
- Connection: Nylon
- Filter element: Resin impregnate 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				
<b>SAP054</b>					
<b>SAP075</b>					
Connections to the tank	SAP054	SAP075			
<b>G1</b>	G 3/8"	G 1/2"			
<b>G2</b>	G 1/2"	G 3/4"			
Filtration rating					
<b>L03</b>	Resin impregnate paper	3 µm			
<b>L10</b>	Resin impregnate paper	10 µm			
Seals					
<b>A</b>	NBR				
			Execution		
			<b>P01</b>	MP Filtri standard	
			<b>Pxx</b>	Customized	

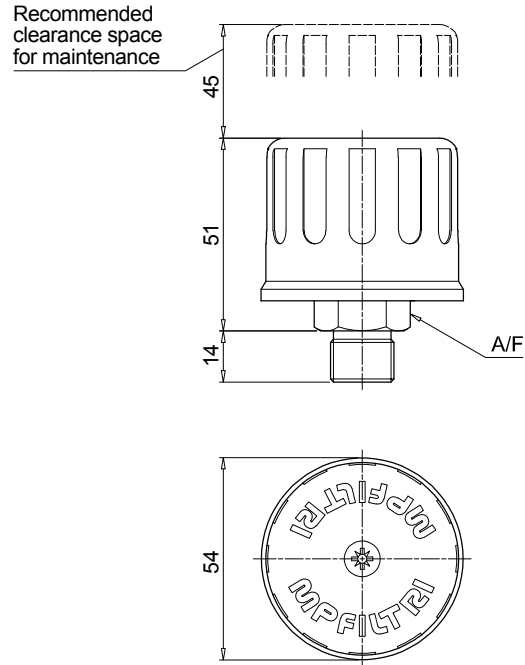
### FILTER ELEMENT

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



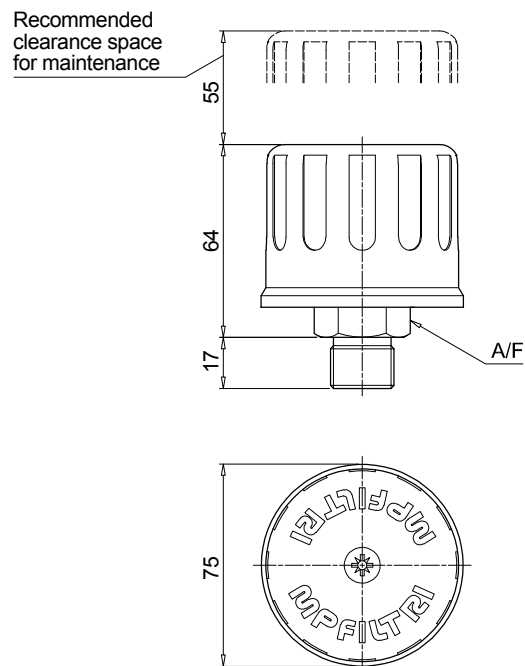
### SAP054

Connection	A/F [mm]
<b>G1</b>	22
<b>G2</b>	27



### SAP075

Connection	A/F [mm]
<b>G1</b>	27
<b>G2</b>	32



## Technical data

### Air breathers & Filler plugs

#### Metal air breather filter

#### Flow rate up to 2500 l/min

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

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

#### Available features:

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

#### Common applications:

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

#### Flow rate $\Delta p$ 0.02 bar

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

#### Materials

- Cover: Steel
- Connection: Anodized steel, Galvanized steel
- Filter element: Resin impregnate 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**

Configuration example : SA115 G1 L10 A P01

#### Connections to the tank

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

#### Filtration rating

<b>L03</b>	Resin impregnate paper	3 $\mu$ m
<b>L10</b>	Resin impregnate paper	10 $\mu$ m
<b>S</b>	Without filter element	

#### Seals

**A** NBR

#### Execution

**P01** MP Filtri standard

**Pxx** Customized

### FILTER ELEMENT

#### Filter element series and size

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

Configuration example : A8 L10 P01

#### Filtration rating (filter media)

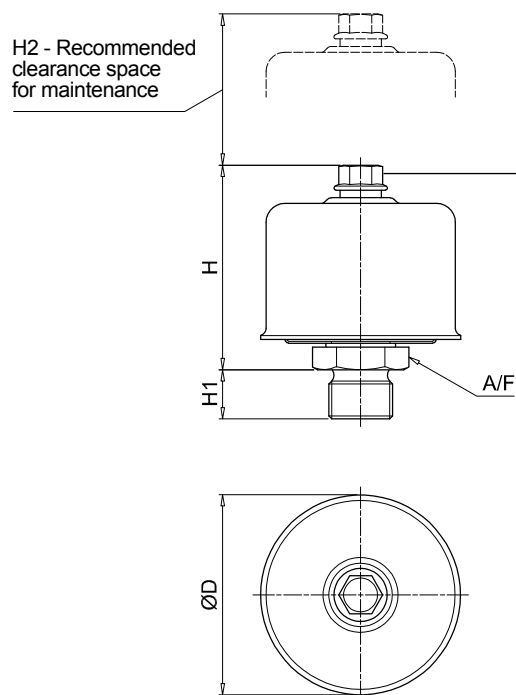
<b>L03</b>	Resin impregnate paper	3 $\mu$ m
<b>L10</b>	Resin impregnate paper	10 $\mu$ m

#### Execution

**P01** MP Filtri standard

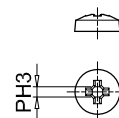
**Pxx** Customized

SA

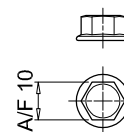


### Type of bolt/nut

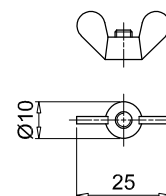
**Phillips:**  
SA036



**Hex:**  
SA053  
SA075  
SA115  
SA145



**Wings:**  
SA185



Type	Connection	ØD [mm]	H [mm]	H1 [mm]	H2 [mm]	A/F [mm]
<b>036</b>	G1 ÷ G6	36	37	13	30	22
<b>053</b>	G1-G2-G4-G5	53	53	13	50	22
<b>075</b>	G1	75	69	13	60	27
	G2			17		32
	G4			15		27
	G5			20		32
<b>115</b>	G1 - G4	115	80	17	70	38
<b>145</b>	G1 - G4	145	115	25	100	55
<b>185</b>	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 $\Delta p$ 0.02 bar

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

#### Materials

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

**Filter Efficiency** 3 $\mu$ m absolute ( $B_3 \geq 200$ )

**Seals** NBR

**Temperature** From -25 °C to +90 °C

#### Humidity Level Below Ambient Conditions

SAW115G03A00P01 : protects 30,000+ cycles

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

#### Silica Gel Weight

Lenght 1: 0.32 kg

Lenght 2: 0.56 kg

Lenght 3: 0.84 kg

#### Total Weight

Lenght 1: 0.60 kg

Lenght 2: 0.90 kg

Lenght 3: 1.20 kg



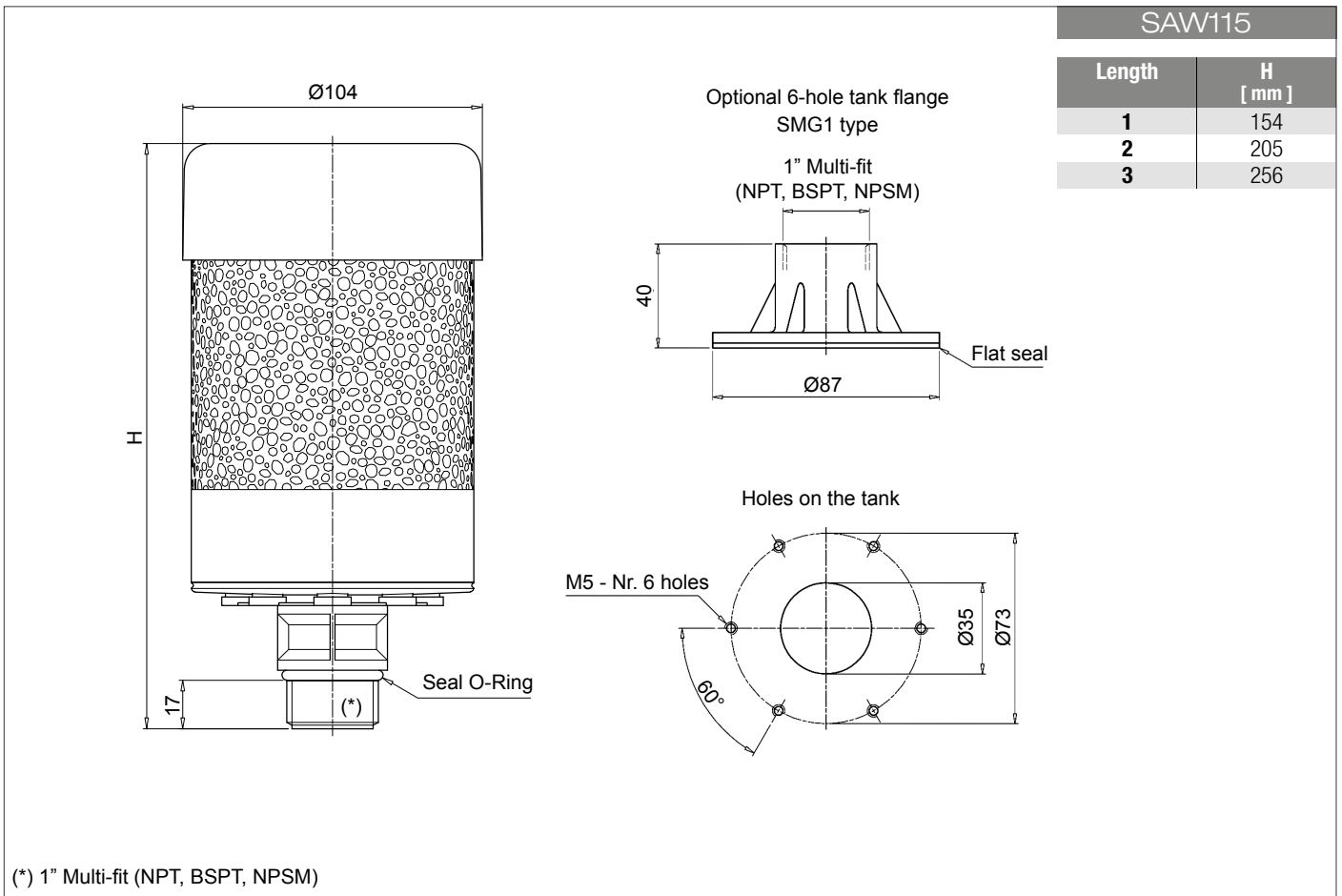
## Designation & Ordering code

### MOISTURE CONTROL DESICCANT BREATHER

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

### ACCESSORIES

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



## Silica gel

Active breather



Depleted breather



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

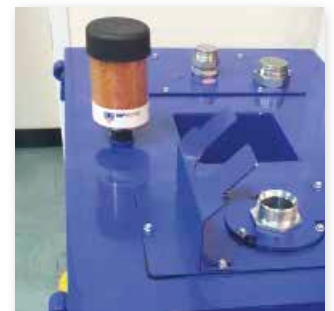
A white breather means the unit has done its job keeping moisture out of your lubricants.

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

All breathers should be changed at least once a year.

### IMPORTANT

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



## Air vent holes

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

### IMPORTANT INSTALLATION INFORMATION

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







# SCS series

Metal air breather filter



## Technical data

### Air breathers & Filler plugs

#### Metal air breather filter

#### Flow rate up to 1330 l/min

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

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

#### Available features:

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

#### Common applications:

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

### Flow rate $\Delta p$ 0.02 bar

	Flow rate [l/min]		
	Filtration rating	P10	A03
<b>SCS050</b>	550	515	530
<b>SCS070</b>	550	515	530
<b>SCS100</b>	1415	1300	1330
<b>SCS150</b>	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						
<b>SCS050</b>	<b>SCS070</b>	<b>SCS100</b>	<b>SCS150</b>	Configuration example 2 : SCS150 C G2 A10 V P01						
Connections to the tank										
<b>C</b>	Weld riser									
<b>F</b>	Screwed flange									
Threaded connection		SCS050 - 070		SCS100 - 150						
<b>G1</b>	Connection ISO 228	G 3/4"	G 1 1/4"							
<b>G2</b>	Connection U.S. standard	1" - 12 UNF	1 1/2" - 16 UN							
Filtration rating		Size:	050	070	100	150				
Without filter element			•	•	•	•				
<b>A03</b>	Inorganic microfiber	3 µm	•	•	•	•				
<b>A10</b>	Inorganic microfiber	10 µm	•	•	•	•				
<b>P10</b>	Resin impregnate paper	10 µm	•	•	•	•				
Seals								<b>Execution</b>		
<b>A</b>	NBR							<b>P01</b>	MP Filtri standard	
<b>V</b>	FPM							<b>Pxx</b>	Customized	

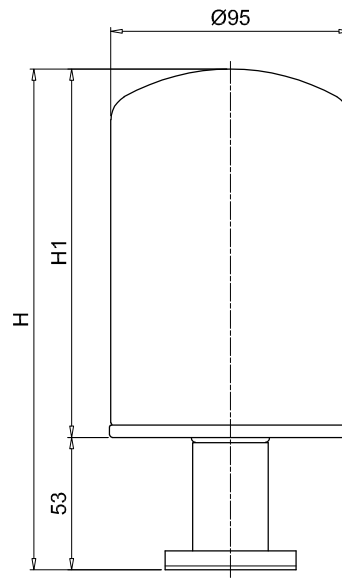
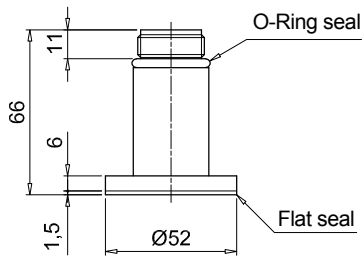
### FILTER ELEMENT

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

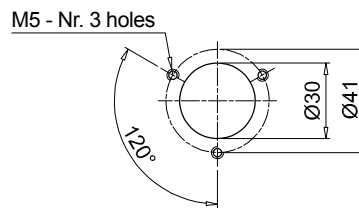
### SCS050-070

#### Screwed flange

Size	H [mm]	H1 [mm]
<b>050</b>	199	146
<b>070</b>	263	210



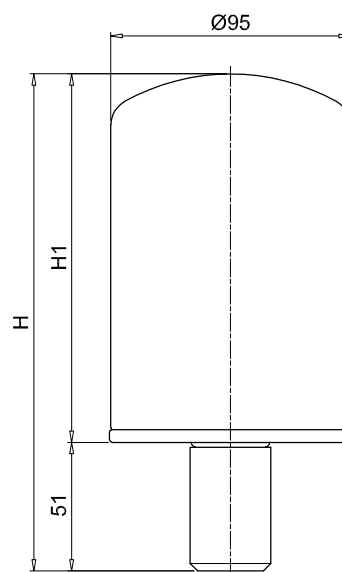
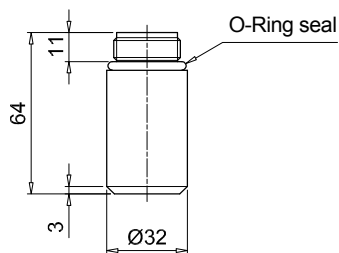
Holes on the tank



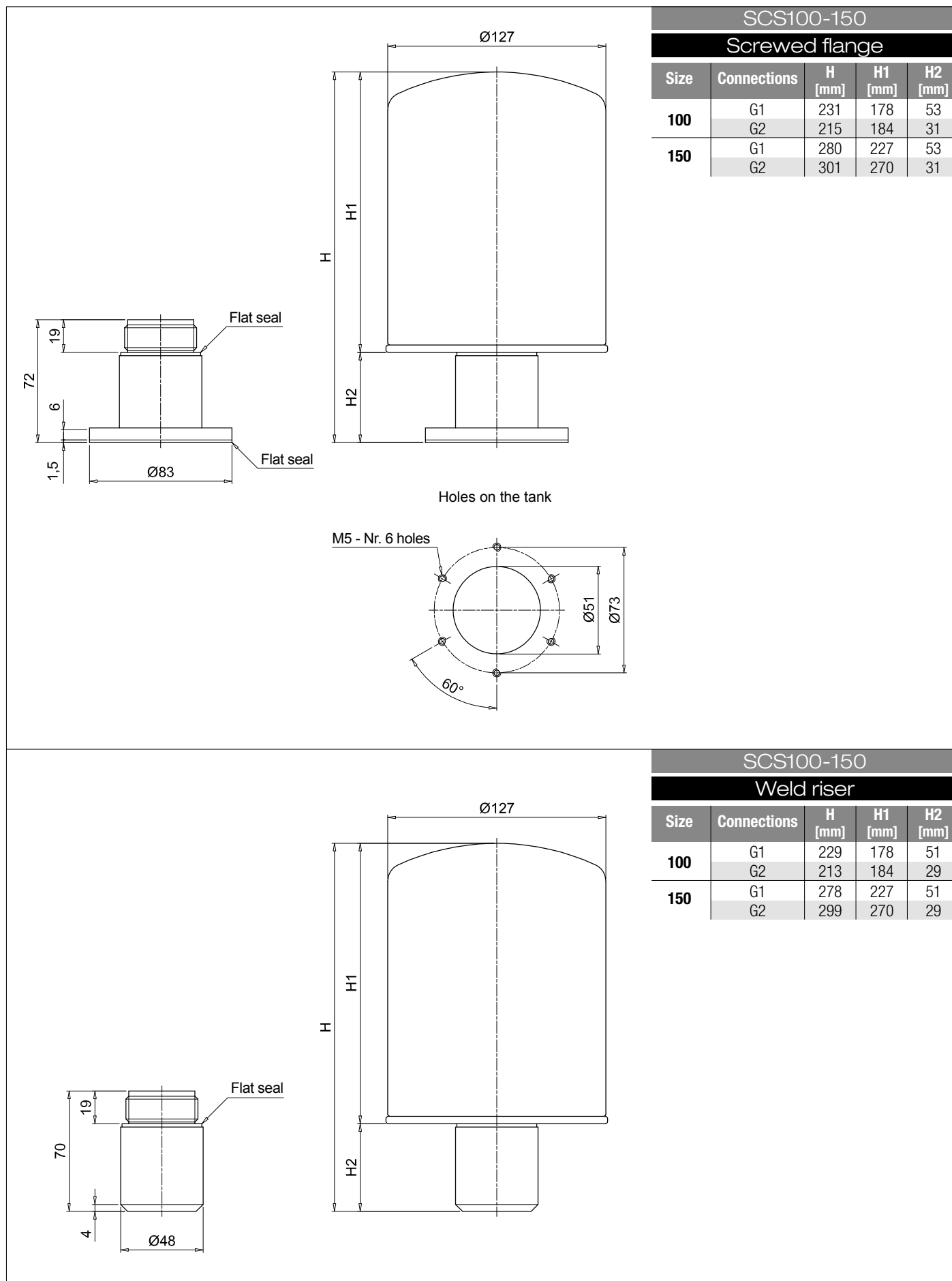
### SCS050-070

#### Weld riser

Size	H [mm]	H1 [mm]
<b>050</b>	197	146
<b>070</b>	261	210



## Dimensions







# SME 1 - SMF 1 - SML 1 series

Risers for breathers and filler caps installation



### Technical data

#### Air breathers & Filler plugs

#### Risers for breathers and filler caps installation

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

#### Available features:

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

#### Materials SME

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

#### Materials SMF

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

#### Materials SML

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

#### Temperature

From -25 °C to +100 °C

#### Weight

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



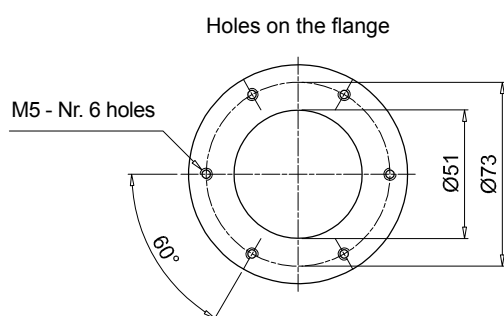
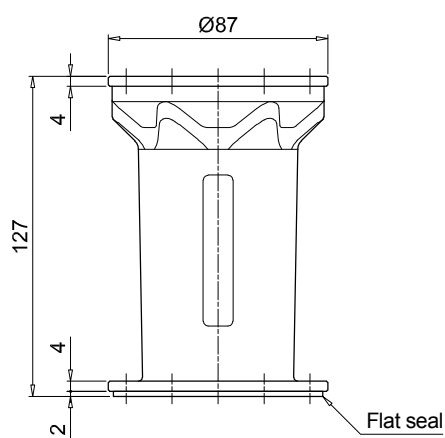
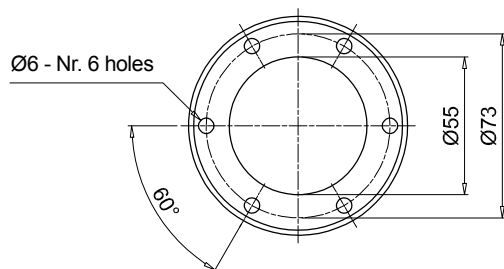
### Designation & Ordering code

#### SME / SMF / SML

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

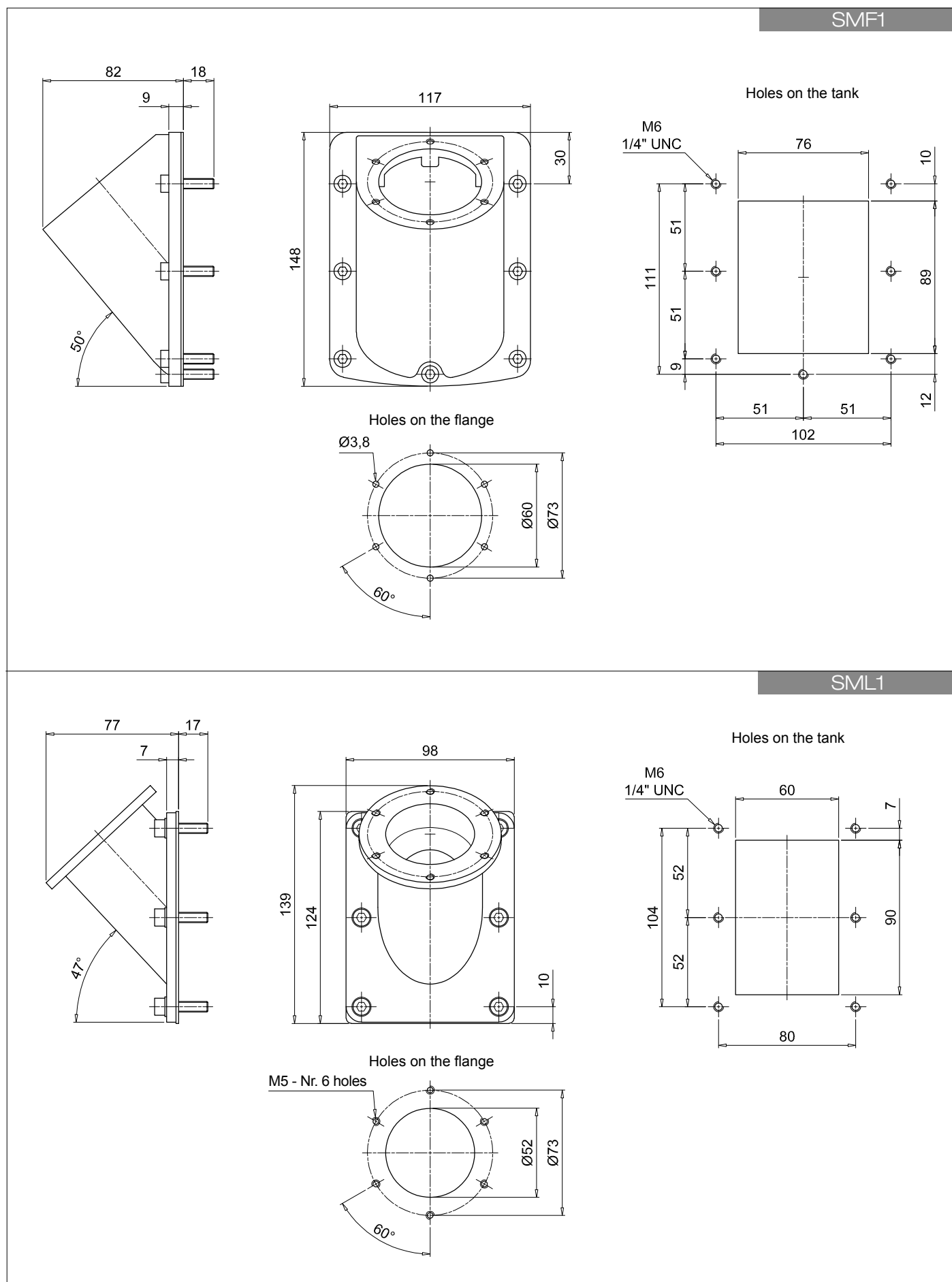


SME1



# SME 1-SMF 1-SML 1

## Dimensions







TA 46

TAP 50

SAP 50 series

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

**Nylon oil filler  
and breather plug**

**Nylon air  
breather filter**



## Technical data

### Air breathers & Filler plugs

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

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

#### Available features:

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

#### Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

#### Flow rate $\Delta p$ 0.02 bar

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

#### Materials (version G/N)

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

#### Materials (version B)

- Cover: Chrome plated steel
- Filter element: Resin impregnate 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



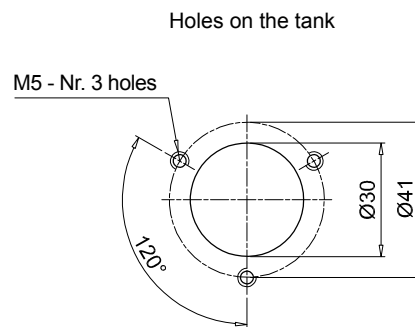
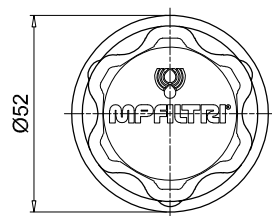
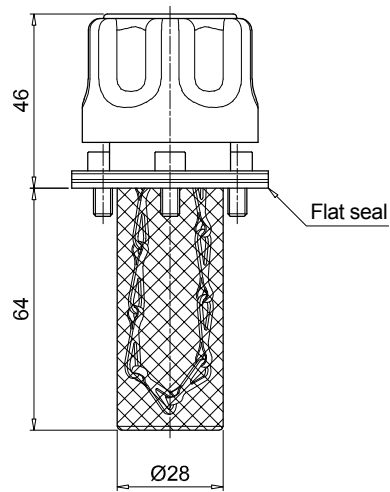
## Designation & Ordering code

### COMPLETE AIR BREATHER - TA46

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

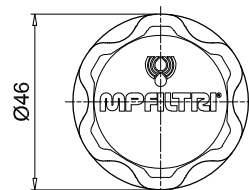
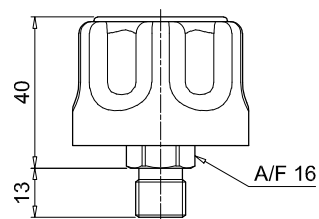
TA46

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 $\Delta p$ 0.02 bar

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

### Materials

- Cover/ringnut: Nylon
- Filter element: Resin impregnate 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

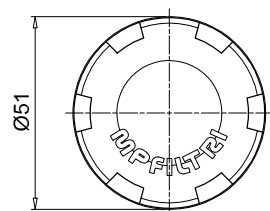
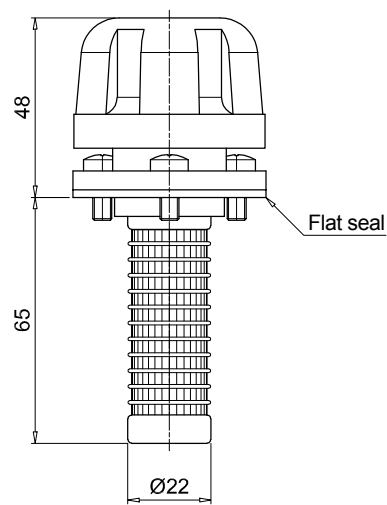
### COMPLETE OIL FILLER PLUG - TAP50

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



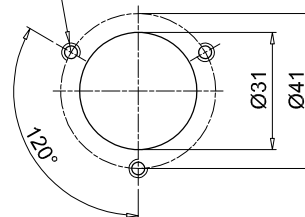
TAP50

Screwed flange



Holes on the tank

M5 - Nr. 3 holes



# SAP 50 GENERAL INFORMATION

## Technical data

### Air breathers & Filler plugs

#### Nylon air breather filter

#### Flow rate up to 200 l/min

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

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

#### Available features:

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

#### Common applications:

- Compact hydraulic systems
- Compact mobile machines
- Industrial equipment

### Flow rate $\Delta p$ 0.02 bar

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

### Materials

- Cover/Connection: Nylon
- Filter element: Resin impregnate 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



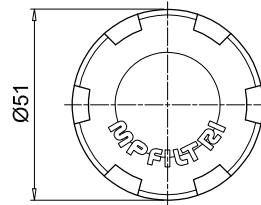
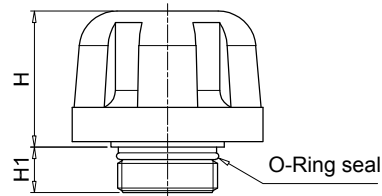
## Designation & Ordering code

### COMPLETE AIR BREATHER - SAP50

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

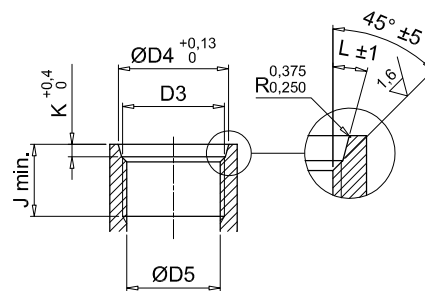
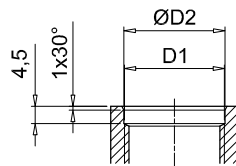
SAP50

Threaded connection



Housing on the tank for connections GAS

Housing on the tank for connections SAE



Connections	H [mm]	H1 [mm]	D1 [mm]	$\text{Ø}D2$ [mm]	D3 [mm]	$\text{Ø}D4$ [mm]	$\text{Ø}D5$ [mm]	J min. [mm]	K [mm]	L
<b>G1</b>	36	12	G 1/4"	13.5	-	-	-	-	-	-
<b>G2</b>	36	12	G 3/8"	17	-	-	-	-	-	-
<b>G3</b>	36	12	G 1/2"	21.5	-	-	-	-	-	-
<b>G4</b>	36	12	G 3/4"	26.7	-	-	-	-	-	-
<b>G9</b>	36	12	-	-	SAE 6 - 9/16" - 18 UNF	15.6	13.081 12.751	12.7	2.5	12°
<b>G10</b>	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 $\Delta p$ 0.02 bar

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

#### Materials

- Cover: Chrome Plated steel
- Filter element: Resin impregnate paper, Polyurethane
- Pressurization valve: Nylon (bodies), Galvanized steel (end cap - disk), Steel (spring), NBR (seals)
- Flange and anti-splash feature: Galvanized steel
- Seals: Cork Gasket, 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

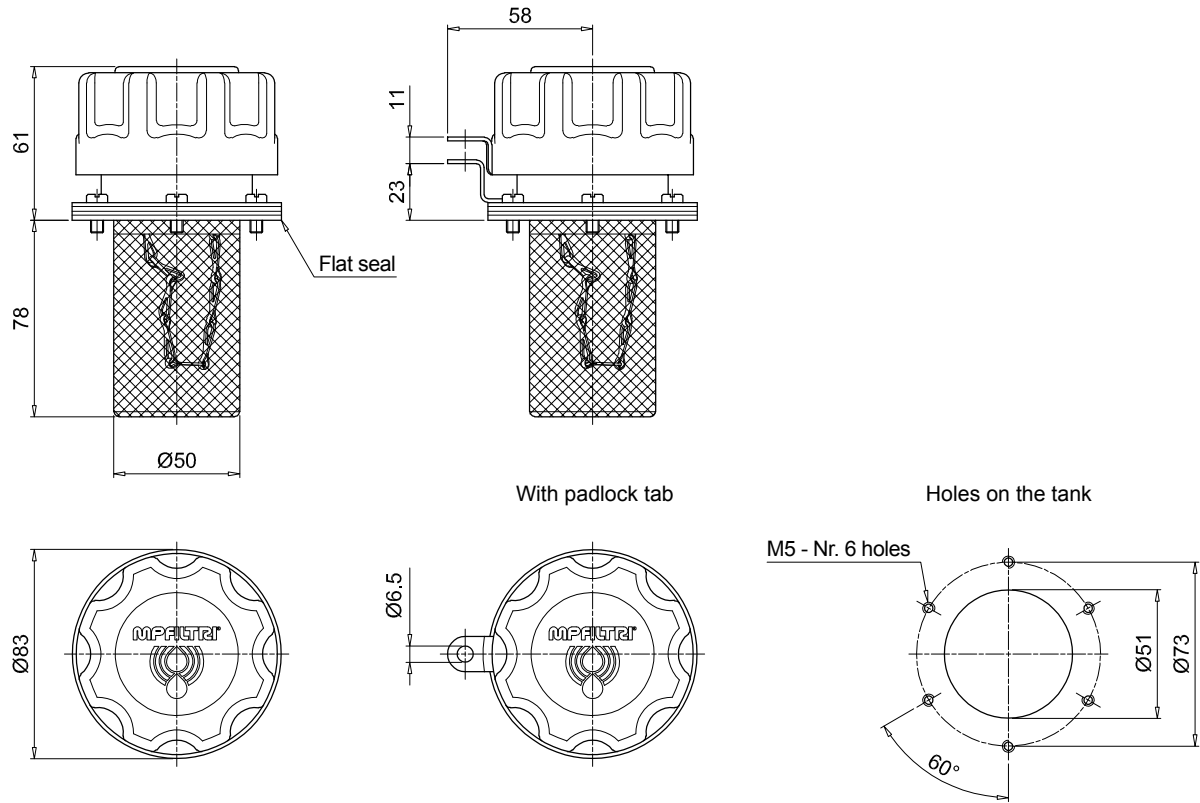


## Designation & Ordering code

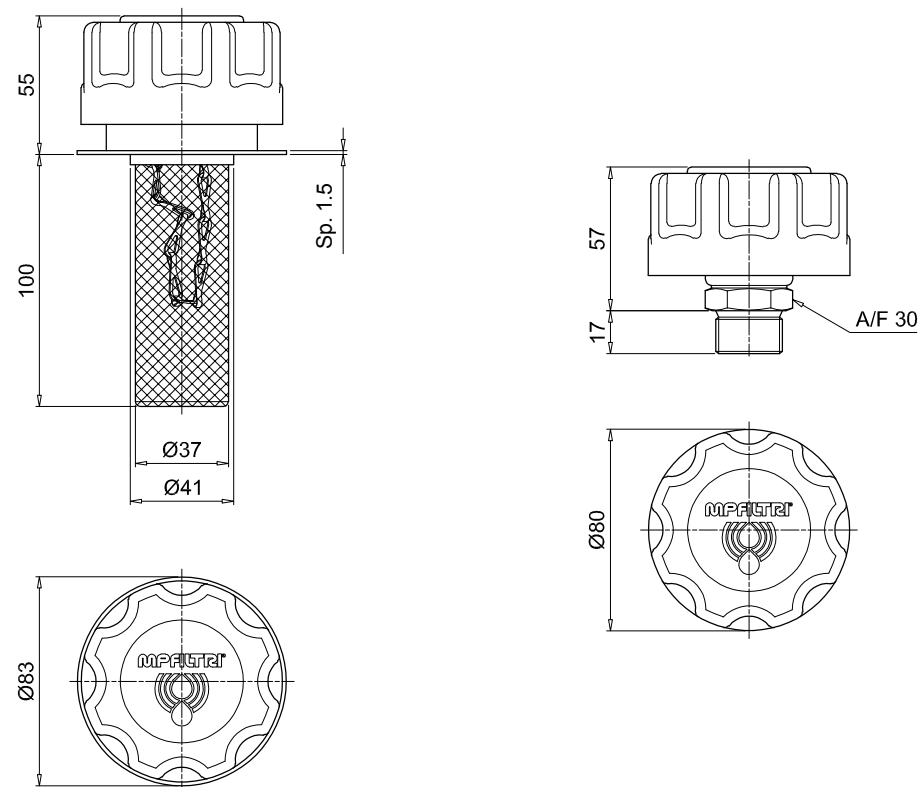
### COMPLETE BREATHER PLUG - TA80

Series and size	Configuration example 1:								Configuration example 2:							
<b>TA80</b>	TA80	B	03	A	0	L	1	P01	TA80	G	10	A	2			P01
Connections to the tank	<b>B</b> Screwed flange with bayonet mount		<b>G</b> Thread G 3/4"													
	<b>D</b> Weld flange with bayonet mount		<b>N</b> Thread 3/4" NPT													
Filtration rating	Connection:	B	D	G	N											
<b>00</b> Without filter (blind filler plug)		•	•													
<b>03</b> Resin impregnate paper 3 µm		•	•	•	•											
<b>10</b> Polyurethane 10 µm		•	•	•	•											
Seals																
<b>A</b> NBR																
Valve	Filtration rating:	00	03	10												
<b>0</b> Without valve		•	•	•												
<b>1</b> 0.3 bar pressurization valve			•	•												
<b>2</b> 0.7 bar pressurization valve			•	•												
<b>9</b> With anti-splash feature			•	•												
Version	Connection:	B	D	G	N											
<b>0</b> Standard		•	•													
<b>L</b> With padlock tab		•														
Basket	Connection:	B	D	G	N											
<b>0</b> Without basket		•	•													
<b>1</b> L = 80 mm		•														
<b>3</b> L = 100 mm			•													
Execution																
<b>P01</b> MP Filtri standard																
<b>Pxx</b> 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 $\Delta p$ 0.02 bar

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

### Materials

- Cover/Ringnut: Nylon
- Filter element: Resin impregnate 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

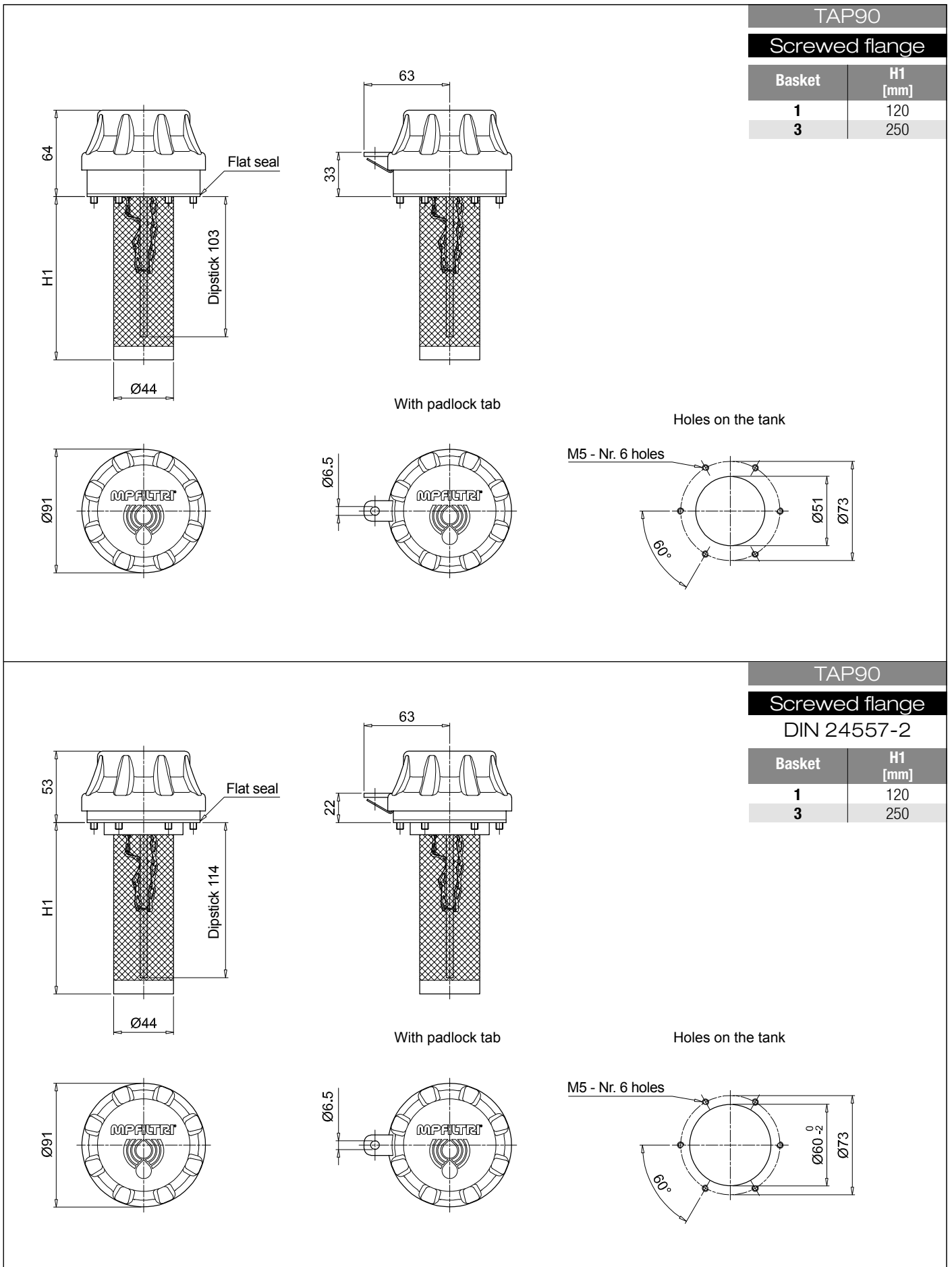
L 120 mm 0.25 kg  
L 250 mm 0.31 kg



## Designation & Ordering code

### COMPLETE BREATHER PLUG - TAP90

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

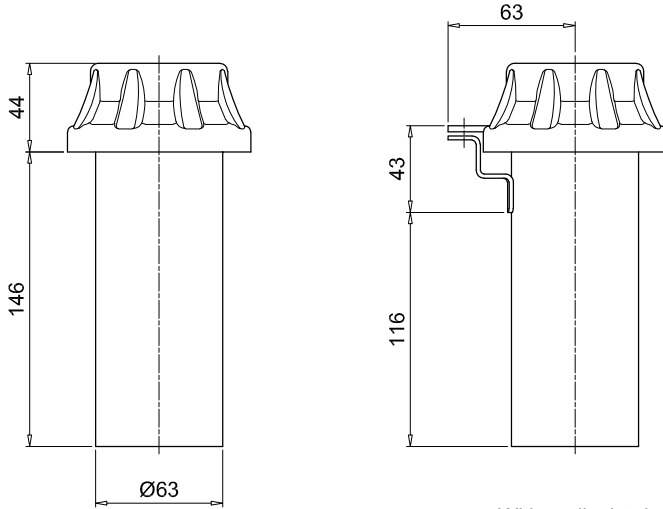


# TAP 90

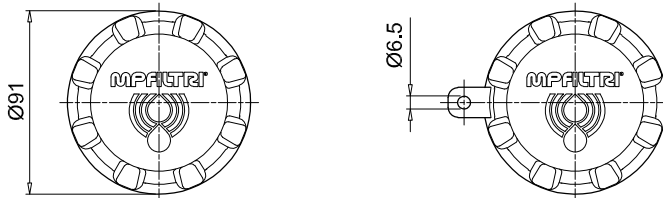
## Dimensions

TAP90

Weld riser



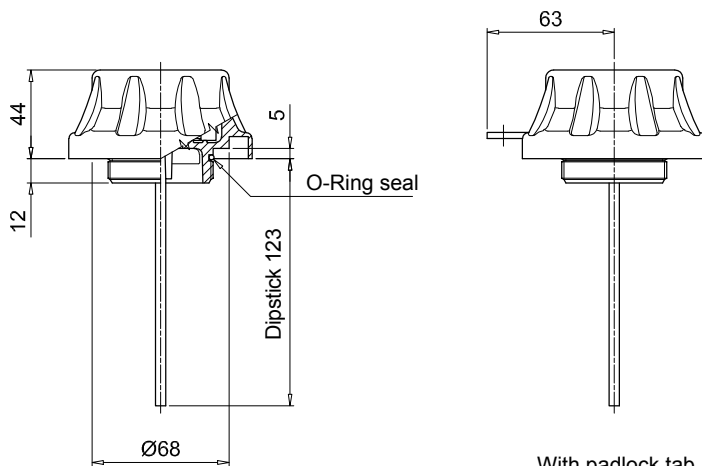
With padlock tab



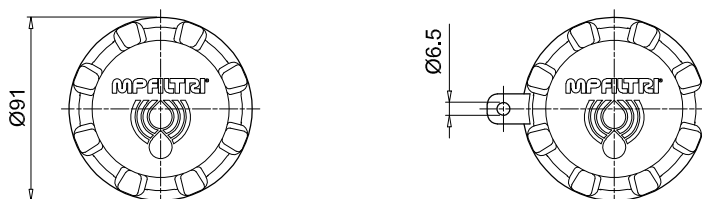
TAP90

Threaded connection

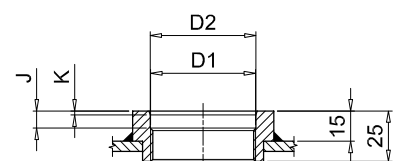
Connection	D1 [mm]	D2 [mm]	J [mm]	K [mm]
Q	G 3/4"	-	-	-
H	G 1 1/2"	48.5	8.5	2x15°
M	3/4" NPT	-	-	-
G	M 52x2	52.5	8.5	2x15°



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 $\Delta p$ 0.02 bar

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

### Materials

- Cover: Nylon
- Filter element: Resin impregnate 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

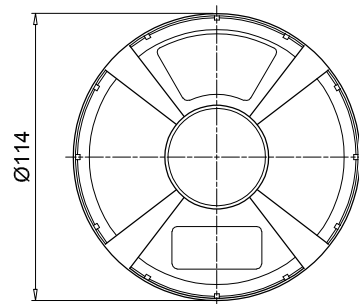
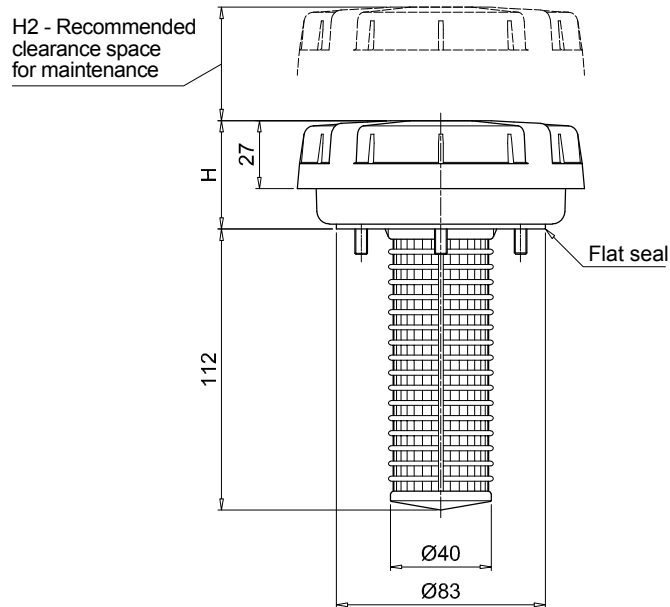
Series and size	Configuration example : TAP114 1 L10 A 1 P01					
<b>TAP114</b>						
Length	1   3					
Filtration rating	L10 Resin impregnate paper 10 µm					
Seals	A NBR					
Version	1 With basket					
						<b>Execution</b>
						P01 MP Filtri standard
						Pxx Customized

### FILTER ELEMENT

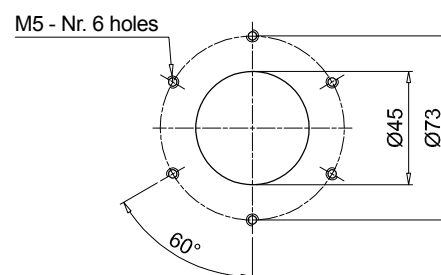
Filter element series and size	Configuration example : A114 1 L10 P01			
<b>A114</b>				
Length	1   3			
Filtration rating	L10 Resin impregnate paper 10 µm			
				<b>Execution</b>
				P01 MP Filtri standard
				Pxx Customized



TAP114		
Length	H [mm]	H2 [mm]
<b>1</b>	43	30
<b>3</b>	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 $\Delta p$ 0.02 bar

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

#### Materials

- Cover/flange: Nylon
- Filter element: Microfibre, Resin impregnate 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							
<b>TAP115</b> Screwed flange connection								
<b>Length</b> 1   2								
<b>Connection to the tank</b> F Flange								
<b>Filtration rating</b> A03 Inorganic microfiber 3 $\mu$ m   L10 Polyurethane 10 $\mu$ m								
<b>Seals</b> A NBR V FPM								
<b>Version</b> 1 With basket								
<b>Clogging indicator</b> A Without indicator B With visual clogging indicator								
								<b>Execution</b> P01 MP Filtri standard Pxx Customized

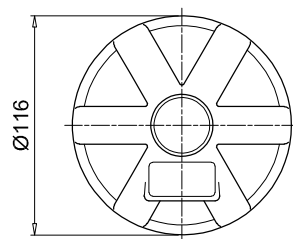
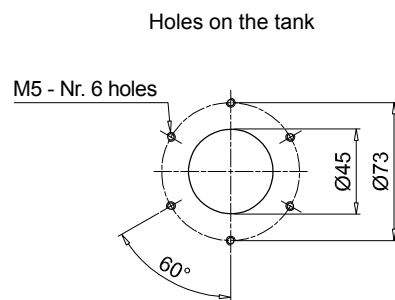
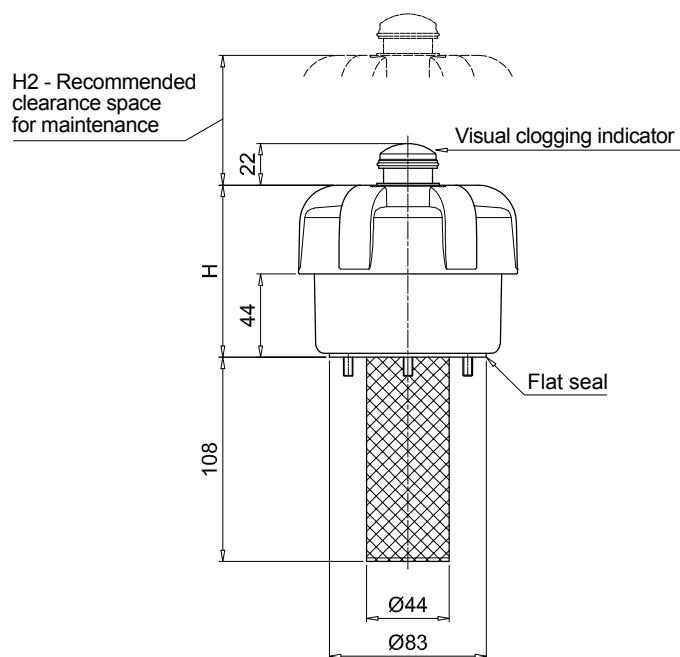
### FILTER ELEMENT

Filter element series and size	Configuration example : A115 2 A03 P01			
<b>A115</b>				
<b>Length</b> 1   2				
<b>Filtration rating</b> A03 Inorganic microfiber 3 $\mu$ m   L10 Polyurethane 10 $\mu$ m				
				<b>Execution</b> P01 MP Filtri standard Pxx Customized

# TAP 115

## Dimensions

TAP115		
Length	H [mm]	H2 [mm]
<b>1</b>	91	55
<b>2</b>	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
- 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 $\Delta p$ 0.02 bar

	Flow rate [l/min]	
	Filtration rating A03	L10
<b>SAP115 length 1 - G1"</b>	1830	2170
<b>SAP115 length 2 - G1"</b>	2800	2800
<b>SAP115 length 1 - G1 1/2"</b>	1995	2330
<b>SAP115 length 2 - G1 1/2"</b>	3000	3000

### Materials

- Cover/flange: Nylon
- Filter element: Microfibre, Resin impregnate 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

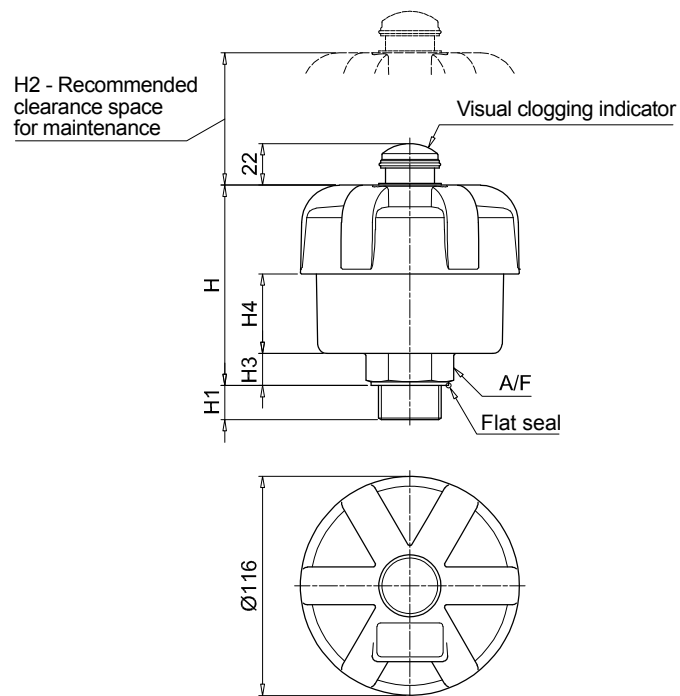
### COMPLETE BREATHER PLUG - SAP115

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

### FILTER ELEMENT

Filter element series and size	Configuration example: A115 2 A03 P01			
<b>A115</b>				
<b>Length</b>	1	2		
<b>Filtration rating</b>	A03		L10	
A03 Inorganic microfiber 3 µm				
L10 Polyurethane 10 µm				
<b>Execution</b>	P01			
P01 MP Filtri standard				
Pxx Customized				

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





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