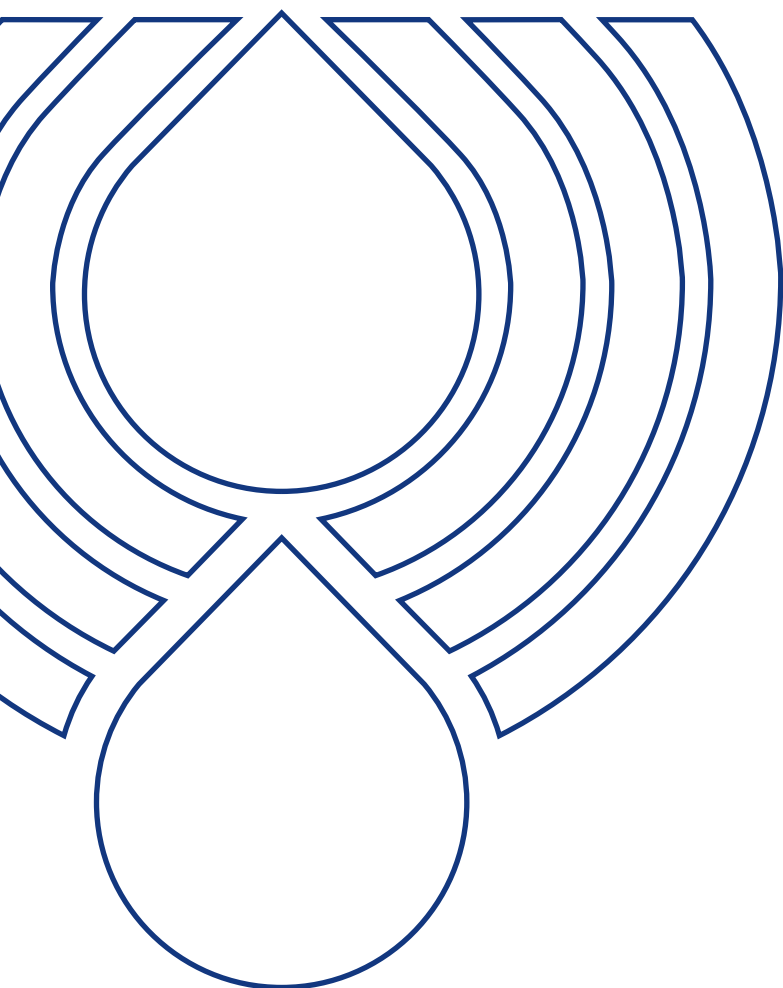


# TANK ACCESSORIES

FILLER AND DRAIN 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





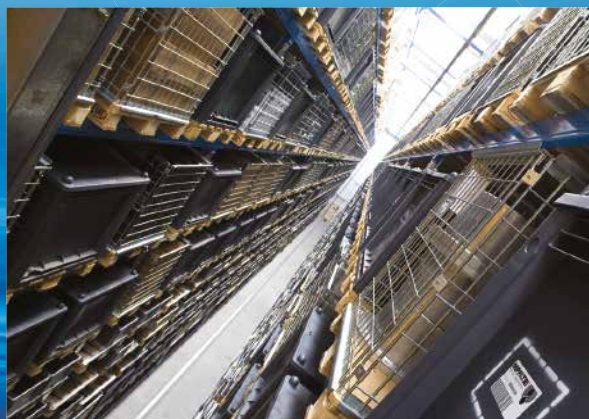
## TECHNOLOGY

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

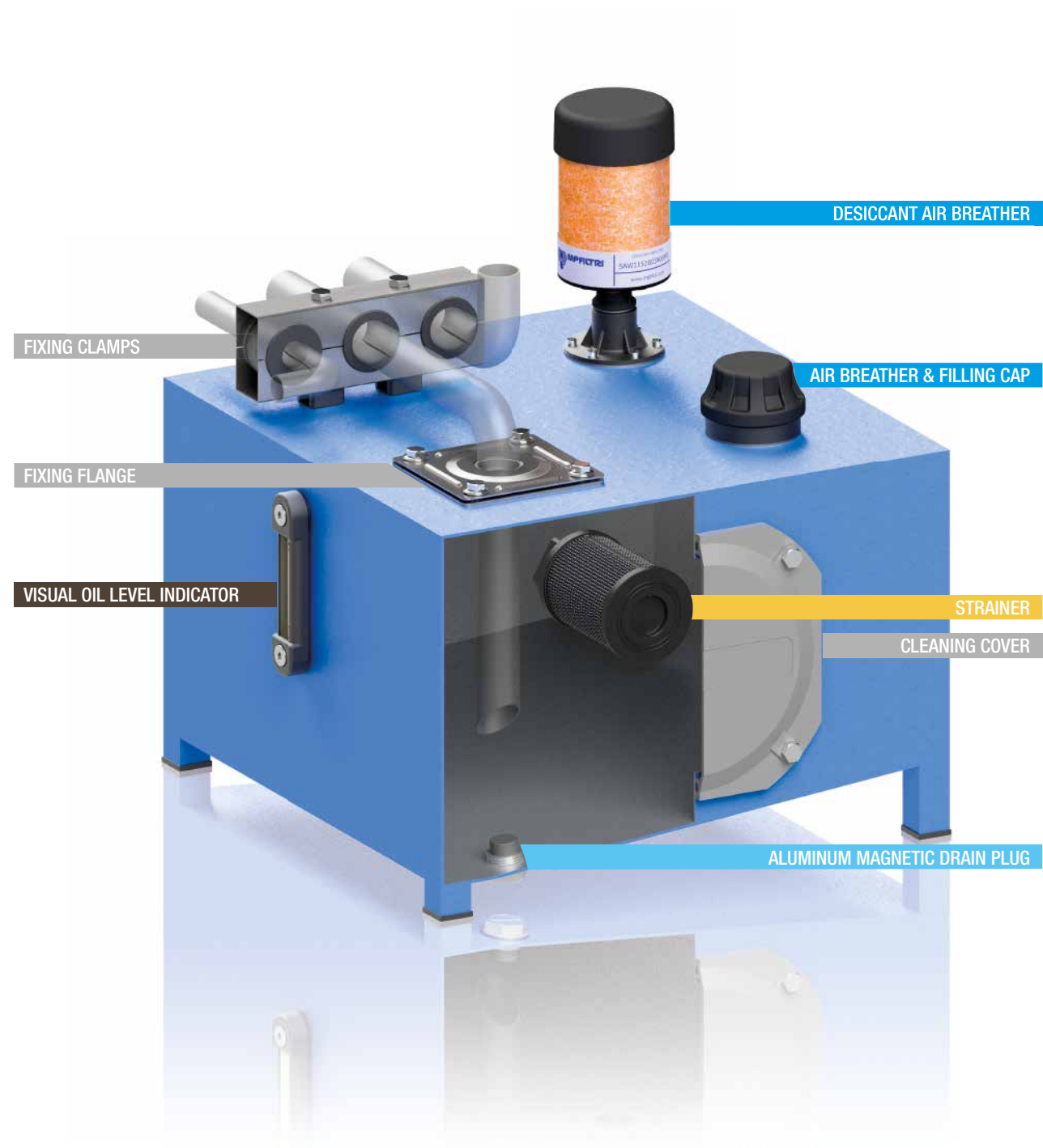
- Aluminium bell-housings for motors from 0.12 kW to 400 kW
- Couplings in Aluminium Cast Iron - Steel
- Damping rings
- Foot bracket
- Aluminium tanks
- Cleaning covers



### TANK ACCESSORIES

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

# TANK ACCESSORIES



<b>1</b>	<b>page</b>	<b>INTRODUCTION</b>
1		COMPANY
6		PRODUCT RANGE

<b>10</b>	<b>page</b>	<b>STRAINERS</b>
13		STR & MPA - MPM Submerged suction filter, with bypass or magnetic column


<b>20</b>	<b>page</b>	<b>AIR BREATHERS AND FILLER PLUGS</b>
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

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

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

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

<b>120</b>	<b>page</b>	<b>ACCESSORIES</b>
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



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



# Filler and Drain Plugs



TC 50	page 75
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# TC 50 series

Nylon filler cap



# TC 50 GENERAL INFORMATION

## Technical data

### Filler plugs

#### Nylon filler plug

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

They are usually directly fitted on the tank.

#### Available features:

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

#### Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

### Materials

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

### Temperature

From -25 °C to +100 °C

### Weight

TC 50 G1" conn. 0.70 kg

TC 50 with ringnut 0.10 kg

### Quantity

25 pcs/pack



## Designation & Ordering code

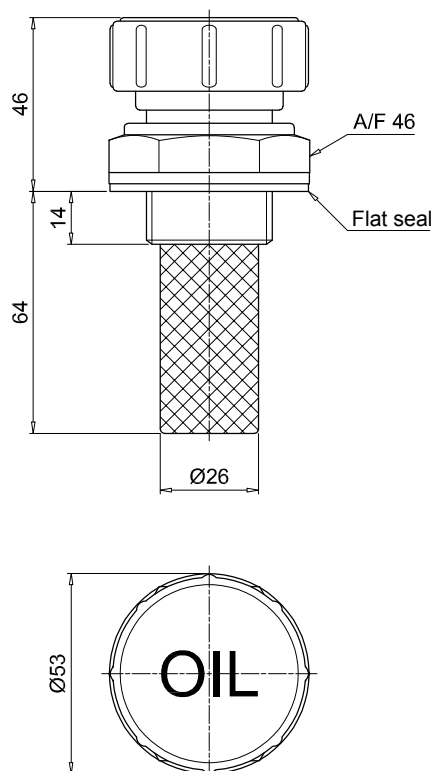
### FILLER PLUG - TC50

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



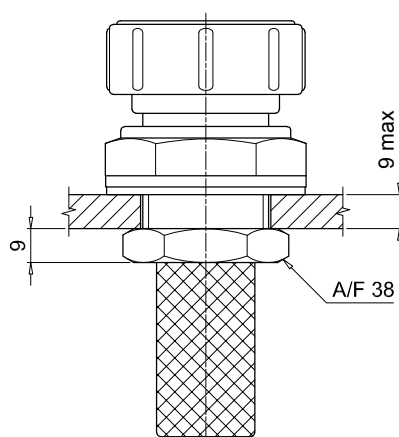
## TC50

### Threaded connection

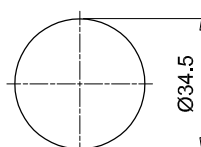


## TC50

### With ringnut



Through hole on the tank





# TKT - TSD - TKM series

Nylon and aluminium filler and drain plugs



## Technical data

### Filler plugs

#### Nylon filler plug

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

#### Available features:

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

#### Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

### Materials

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

### Temperature

From -25 °C to +100 °C

### Weight

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

### Quantity

25 pcs/pack

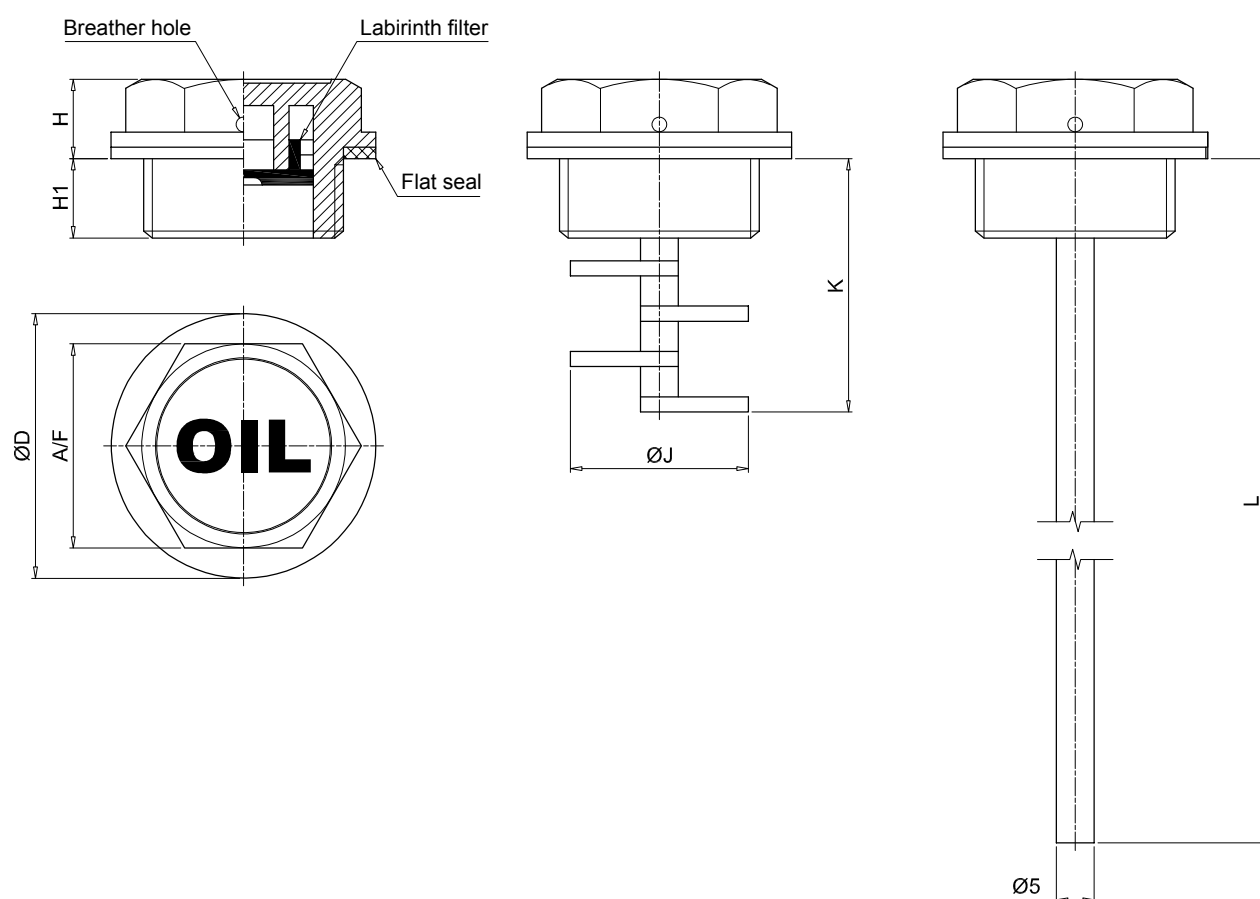


## Designation & Ordering code

### FILLER PLUG - TKT

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





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

# TSD GENERAL INFORMATION

## Technical data

### Filler plugs

#### Nylon filler plug

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

They are usually directly fitted on the tank.

#### Available features:

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

#### Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

### Materials

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

### Temperature

From -25 °C to +100 °C

### Weight

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

### Quantity

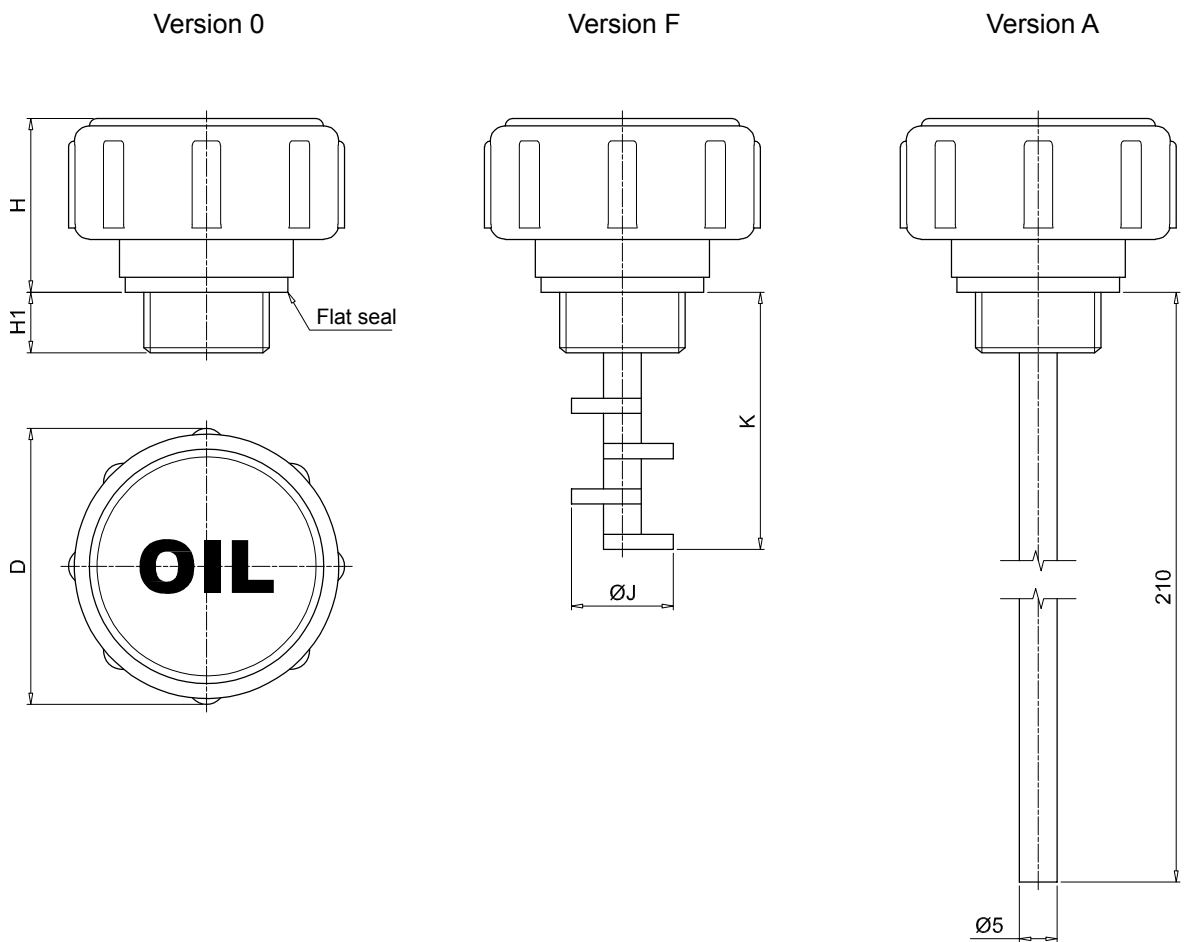
25 pcs/package



## Designation & Ordering code

### FILLER PLUG - TSD

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



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

## Technical data

### Drain plugs

#### Aluminium magnetic drain plug

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

#### Available features:

- Male threaded connections up to G 1"

#### Common applications:

- Hydraulic systems
- Mobile machines
- Industrial equipment

#### Materials

- Body: Aluminium
- Seal: Inorganic fibre

#### Temperature

From -25 °C to +100 °C

#### Weight

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

#### Quantity

1 pc/pack



## Designation & Ordering code

### DRAIN PLUG - TKM

#### Series and size

**TKM**

Configuration example : TKM G20 B P01

#### Connections to the tank

**G13** Thread G 1/4"

**G16** Thread G 3/8"

**G20** Thread G 1/2"

**G26** Thread G 3/4"

**G33** Thread G 1"

#### Seals

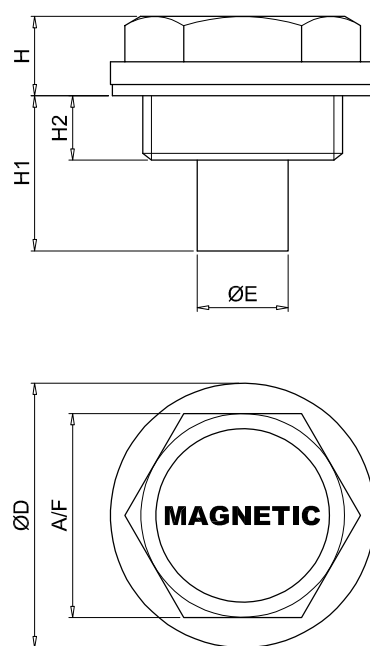
**B** Inorganic fiber

#### Execution

**P01** MP Filtri standard

**Pxx** Customized





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



## WORLDWIDE NETWORK

### HEADQUARTERS

**MP Filtri S.p.A.**  
Pessano con Bornago  
Milano - Italy  
+39 02 957031  
[sales@mpfiltri.it](mailto:sales@mpfiltri.it)

### BRANCH OFFICES

**ITALFILTRI LLC**  
Moscow - Russia  
+7 (495) 220 94 60  
[mpfiltrirussia@yahoo.com](mailto:mpfiltrirussia@yahoo.com)

**MP Filtri Canada Inc.**  
Concord, Ontario - Canada  
+1 905 303 1369  
[sales@mpfiltricanada.com](mailto:sales@mpfiltricanada.com)

**MP Filtri France SAS**  
Villeneuve la Garenne  
France  
+33 (0)1 40 86 47 00  
[sales@mpfiltrifrance.com](mailto:sales@mpfiltrifrance.com)

**MP Filtri Germany GmbH**  
St. Ingbert - Germany  
+49 (0) 6894 95652-0  
[sales@mpfiltri.de](mailto:sales@mpfiltri.de)

**MP Filtri India Pvt. Ltd.**  
Bangalore - India  
+91 80 4147 7444 / +91 80 4146 1444  
[sales@mpfiltri.co.in](mailto:sales@mpfiltri.co.in)

**MP Filtri (Shanghai) Co., Ltd.**  
Shanghai - Minhang District - China  
+86 21 58919916 116  
[sales@mpfiltrishanghai.com](mailto:sales@mpfiltrishanghai.com)

**MP Filtri U.K. Ltd.**  
Bourton on the Water  
Gloucestershire - United Kingdom  
+44 (0) 1451 822 522  
[sales@mpfiltri.co.uk](mailto:sales@mpfiltri.co.uk)

**MP Filtri U.S.A. Inc.**  
Quakertown, PA - U.S.A.  
+1 215 529 1300  
[sales@mpfiltriusa.com](mailto:sales@mpfiltriusa.com)

## PASSION TO PERFORM



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