

**COMPLEMENTARY  
PRODUCTS**

**CATALOG**



USA



**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.

# COMPLEMENTARY PRODUCTS

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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.

MARKET  
LEADER



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



Scan or click me!

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

The Group boasts **9** business branches



## TECHNOLOGY

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







# AND PRODUCTION

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





**SUCTION FILTERS**

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



**RETURN FILTERS**

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



**RETURN / SUCTION FILTERS**

- Mounting:
- In-Line
  - Tank top



**SPIN-ON FILTERS**

- Mounting:
- In-Line
  - Tank top



**LOW & MEDIUM PRESSURE FILTERS**

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



**HIGH PRESSURE FILTERS**

- 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, ATEX filters) 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

Pressure from 320 bar up to 1000 bar

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

### FILTERS FOR POTENTIALLY EXPLOSIVE ATMOSPHERE

Mounting:

- In-Line

### CONTAMINATION CONTROL SOLUTIONS

- 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 with 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

### COMPLEMENTARY PRODUCTS

- Electro-magnetic fluid level indicators
- Visual level indicators
- High pressure ball valves
- Pressure gauges
- Pressure switch
- Pressure Transducer
- Temperature switch
- Weld Flange

**MP Filtri offers a comprehensive range of instrumentation products as well as high pressure ball valves, float level switches, level indicators, visual flowmeters, flow switches, pressure switches, thermostatic plugs, temperature transmitters, and pressure gauges.**

# Complementary Products

Oil Level Indicators



RL



LV

Pressure Gauges



MPG

Temperature Switch



MPF5TAF/MPF7TAF

Weld Flanges



Weld Flange

Pressure Switches & Transducers



MPDF



MPBA & MPBF



MPT200/201

High pressure ball valves



MPAP2V

MPAP3V

Test Equipment



HSP690



HSP1040



HSP2000



HSP3000



HSP6000



HSP7000

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# RL Series

Electro-magnetic fluid level indicators



## Technical data

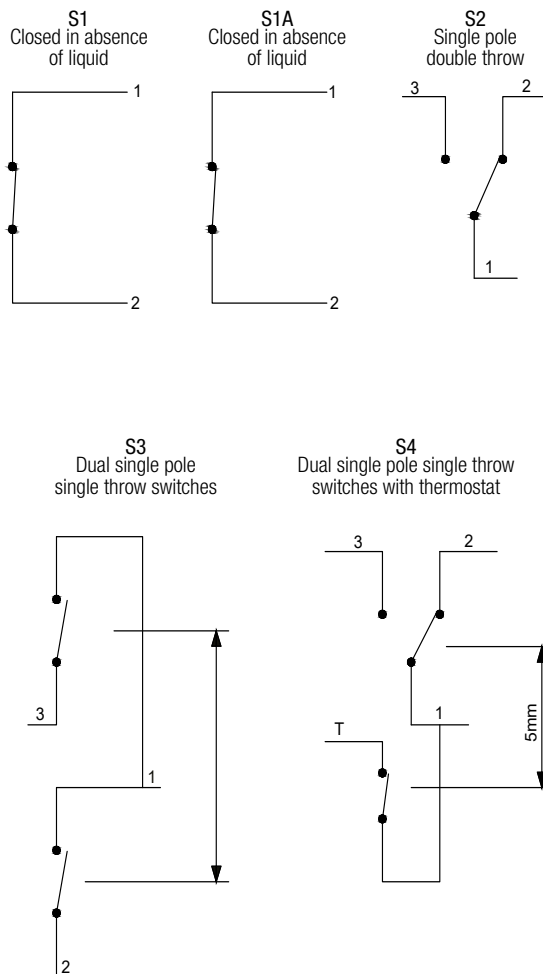
### Electrical Oil Level Indicators

#### Electro Magnetic Float Level Switches

Rapid level 'RL' Series can be single float, double float or side mounted single float types. It is specially designed to be rugged, compact and lightweight. Offering flanged and threaded mounting options. Complete range of single, double and multiple switching systems. Trouble free reed switches housed in a totally sealed unit mounted securely to the reservoir. DIN 43650 Connector as standard and IP635 rated.

#### Available features:

- Ease of Use: The control rod is cut to length "on site" with no special tools required
- Variety of Applications: The float carries no magnets and therefore can be used with a wide range of fluids
- Electrically Safe: No electrical contact with fluid. - Electrically Safe: No electrical contact with fluid.



#### RL/G1 SERIES

- Single float type
- NPT or Flange Mount

#### RL/L SERIES

- Side mounted type
- For wiring and switching circuits refer to RL/G1 series
- Distance between 1st & 2nd signal is not fixed, as the length of the control rod increases, distance between the two signals increases

#### RL/G2 SERIES

- Double float type
- Each rod activates a separate switch
- Each switch can be wired with S1, S2 configuration allowing a wide variety of signal options. Reinforced control rods available for applications with turbulence
- Wiring circuits and switching option below
- RL/G2-F3-S2-S2 incorporates sealed box connector (no DIN 43650 connector)

#### Specification

- Glass reinforced nylon housing
- DIN 43650 connector
- Stainless steel rod
- Delrin Float with silicone security joint
- 1" NPT Thread for single float type
- 1-1/4" NPT Thread for dual float type
- Flange (complete with gasket & screws) available for all types
- IP 65 rated
- RL/G2-F3-S2-S2 incorporates sealed box connector (no DIN 43650 connector)

#### Temperature

From -20 °F to + 210 °F

#### Reed switch detail (resistive load)

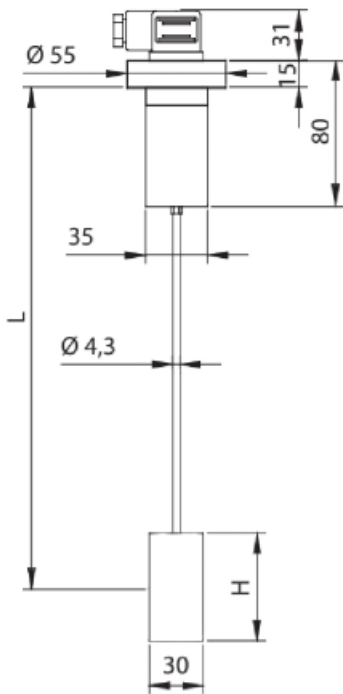
S1 & S2 Type  
 Max. Current 3A  
 DC Power 60W  
 AC Power 60VA  
 Voltage 250V



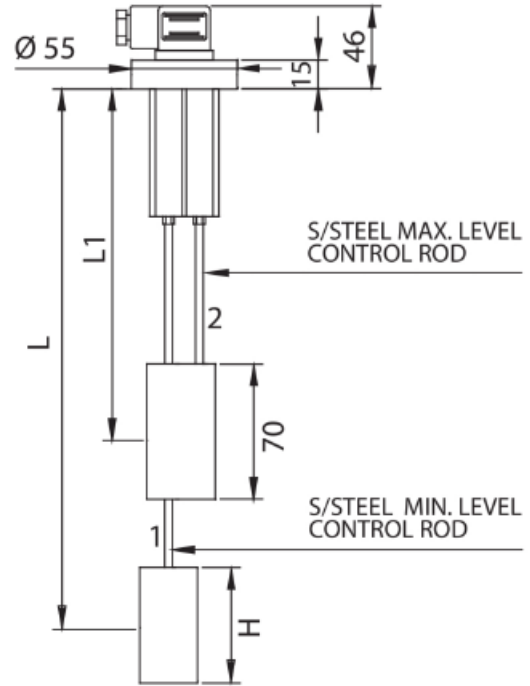
RL/G1 & RL/L		
<b>Series</b>		Configuration example 1: <b>RL/G1</b> <b>R</b> <b>F3</b> <b>S2</b>
<b>RL/G1</b> One float		Configuration example 2: <b>RL/L</b> <b>T3</b> <b>S1</b>
<b>RL/L</b> Horizontal mount		
<b>Optional</b>		
<b>R</b> Reinforced Rod		
None		
<b>Type of Mounting</b>		
<b>F3</b> Flange		
<b>1</b> 1" NPT		
<b>T3</b> 1 1/4" NPT		
<b>Wiring Scheme</b>		
	<b>RL/G1</b>	<b>RL/L</b>
<b>S1</b> Closed contact in the absence of liquid	•	•
<b>S2</b> Exchange	•	•
<b>S1A</b> Open in the absence of liquid	•	-
Note: Upper float RL-G2 only		

RL/G2		
<b>Series</b>		Configuration example : <b>RL/G2</b> <b>R</b> <b>F3</b> <b>S2</b> <b>S2</b>
<b>RL/G2</b> Two floats		
<b>Optional</b>		
<b>R</b> Reinforced Rod		
None		
<b>Type of Mounting</b>		
<b>F3</b> Flange		
<b>1</b> 1" NPT		
<b>T3</b> 1 1/4" NPT		
<b>Wiring Scheme (Lower Float)</b>		
<b>S1</b> Closed contact in the absence of liquid		
<b>S2</b> Exchange		
<b>S1A</b> Closed in the absence of liquid		
<b>Wiring Scheme (Upper Float)</b>		
<b>S1</b> Closed contact in the absence of liquid		
<b>S2</b> Exchange		
<b>S1A</b> Closed in the absence of liquid		

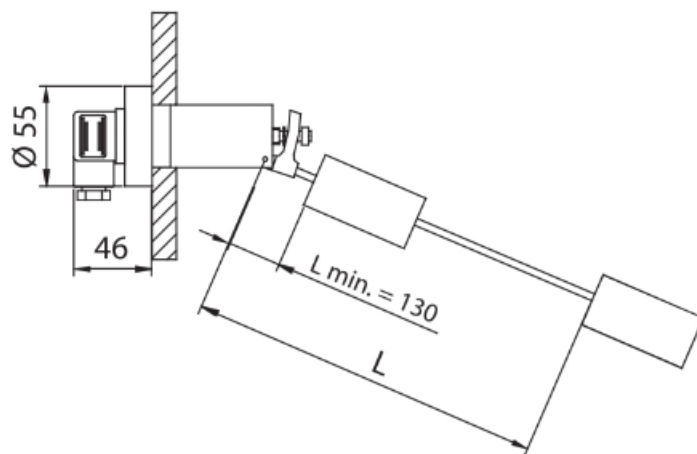
**RL / G-1**



**RL / G-2**

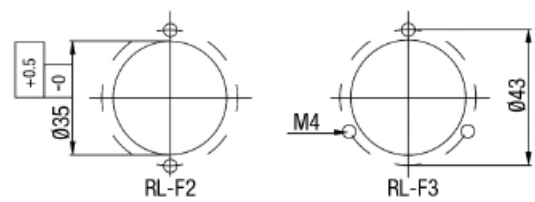


**RL / L**



Holes on the tank

k

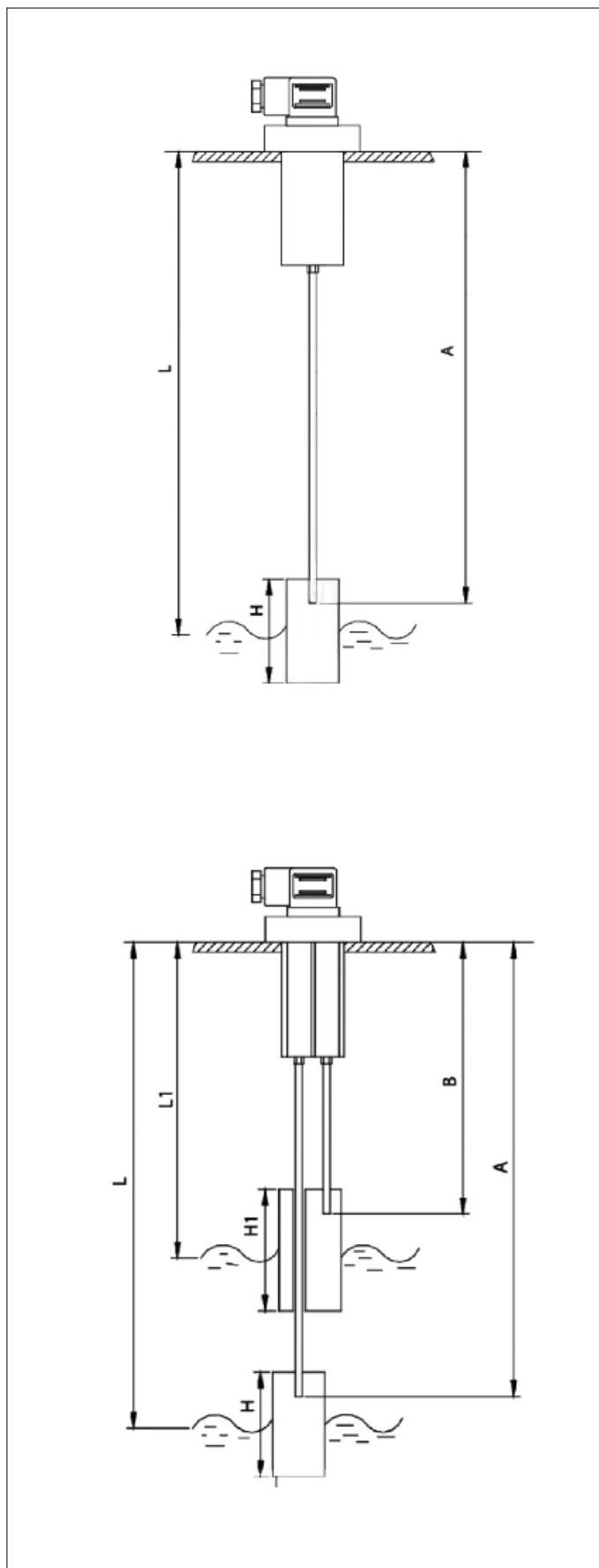


## Connection rod cutting table

Control value L= (mm)	Rod cutting for min. level A= (mm)	Control value L= (mm)	Rod cutting for max level B= (mm)
90	116 H = 35		
100	116 H = 45		
110	116 H = 55		
120	116		
140	137		
160	158		
180	179	90	62 H1 = 35
200	200	100	62 H1 = 45
220	221	120	131
240	242	140	152
260	263	160	173
280	284	180	194
300	305	200	215
320	326	220	236
340	347	240	257
360	368	260	278
380	389	280	299
400	410	300	320
420	431	320	341
440	452	340	362
460	473	360	383
480	494	380	404
500	515	400	425
520	511	420	421
540	532	440	442
560	553	460	463
580	574	480	484
600	595	500	505
620	616	520	526
640	637	540	547
660	658	560	568
680	679	580	589
700	700	600	610
720	721	620	631
740	742	640	652
760	763	660	673
780	784	680	694
800	805	700	715
820	826	720	736
840	847	740	757
860	868	760	778
880	889	780	799
900	910	800	820
920	931	820	841
940	952	840	862
960	973	860	883
980	994	880	904
1000	1015	900	925

**L - L1 = 100 mm**  
**A - B = 90 mm**

- H = 35 (L = 90 mm)
- H = 45 (L = 100 mm)
- H = 55 (L = 110 mm)
- H = 60 (L = 120 - 500 mm)
- H = 90 (L = 501 - 1000 mm)
- H1 = 35 (L1 = 90 mm)
- H1 = 45 (L1 = 100 mm)
- H1 = 70 (L1 = 120 - 1000 mm)





# LV Series

Visual level indicators



## Technical data

### Electrical Oil Level Indicators

#### Visual level indicators

Multi-control range visual level gauges. The visual level gauges allow the liquid level to be checked in a clear and precise way at any time. The principle used is that of communicating vessels: the liquid goes through the level gauge by means of hollow screws, showing the user the each point inside the tank.

The level gauges can be equipped with a tap that stops the flow from the tank to the gauge.

C/C distances of 5-19.7 inch are fully interchangeable with all major level gauges. 'U' protection screen is normally fitted in order to ensure visibility on the front part of the level gauge, but if necessary, it can be turned 90° to deliver visibility on the right or left.

Minimum level signal which can be 'Normally Open, Normally Closed, or Exchange' contacts upon request

#### Available features:

- Ease of Use: The visual gauges allow the liquid level to be checked clearly at any time
- Electrically Safe: No electrical contact with fluid.
- Variability in Size: Multiple sizes and distances meet the needs for all customers and applicaitons.

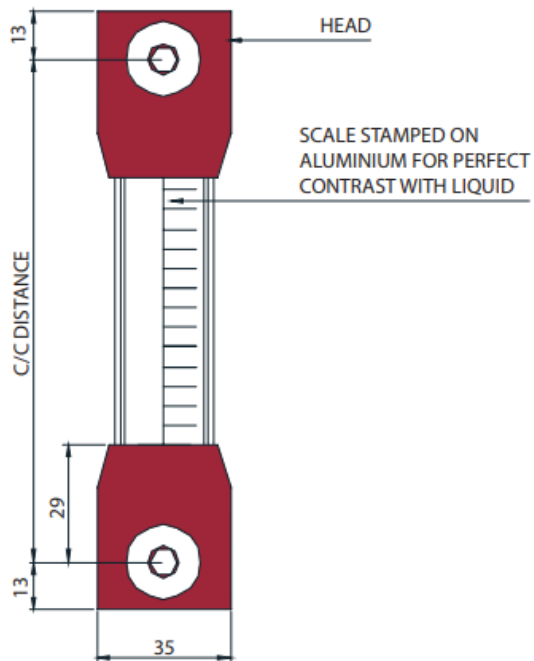
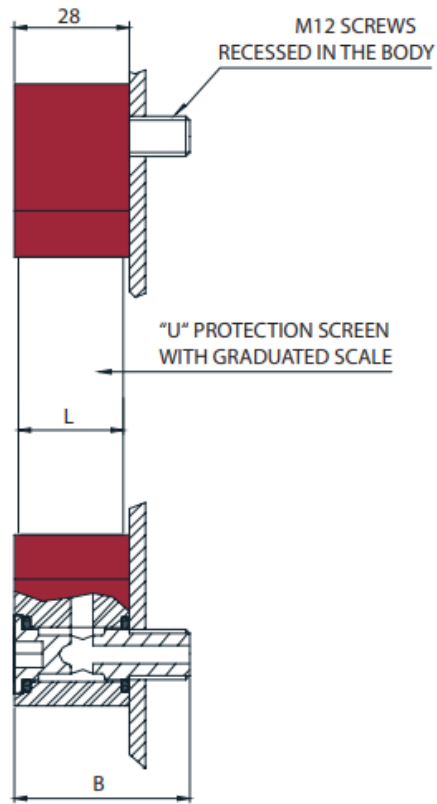
#### LV SERIES

- Side mounted that can be turned to 90° to obtain visibility if needed
- 'U' protection screen with graduated scale fitted for visibility from all angles
- Maximum Tightening Torque: 10Nm
- Maximum pressure: 35 Bar
- M10 or M12 Screws recessed in the body

## Designation & Ordering code

### COMPLETE VISUAL OIL LEVEL INDICATORS

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







# MPAP2V & MPAP3V Series

High Pressure Ball Valves



## Technical data

### Ball valves

#### High Pressure Ball Valves

MP Filtri USA offers 2-way and 3-way steel high pressure ball valves

#### MPAP2V

- Steel body
- Zinc plated
- No Leakage
- Valve can turn under maximum pressure

#### MPAP3V

- Steel body
- Zinc plated
- Valve can turn under pressure
- Counter pressure to closed port cannot be applied

#### Standard Features

- Steel body
- Zinc plated
- No leakage
- Valve can turn under maximum pressure

#### Optional Features

- Chromium plated
- Green zinc plated
- Special hand lever
- Metric thread
- Male thread
- DIN 2353 fitting port thread

#### Applications

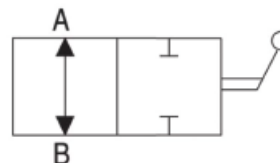
- Ball valves are used to open or close flow
- Can be opened or closed even under maximum pressure without allowing leakage

#### Installation

- Pressure flow and actuator are connected with valve ports

#### Operation

- Oil flows through valve when hand lever is in Pos. 1
- Flow stops when hand lever is in Pos. 2



## Designation & Ordering code

### COMPLETE BALL VALVE

#### Series

**MPAP2V** 2 way ball valve

Configuration example 1 : **MPAP2V** **03** **N** **P01**

Configuration example 2 : **MPAP2V** **015** **S** **P01**

#### Valve size

	NPT	SAE
<b>005</b>	-	7/16" - 20 (SAE - 4)
<b>01</b>	1/4"	-
<b>015</b>	-	9/16" - 18 (SAE - 6)
<b>02</b>	3/8"	3/4" - 16 (SAE - 8)
<b>03</b>	1/2"	7/8" - 14 (SAE - 10)
<b>04</b>	3/4"	1 1/16" - 12 (SAE - 12)
<b>05</b>	1"	1 5/6" - 12 (SAE - 16)
<b>06</b>	1 1/4"	1 5/8" - 12 (SAE - 20)
<b>07</b>	1 1/2"	1 7/8" - 12 (SAE - 24)

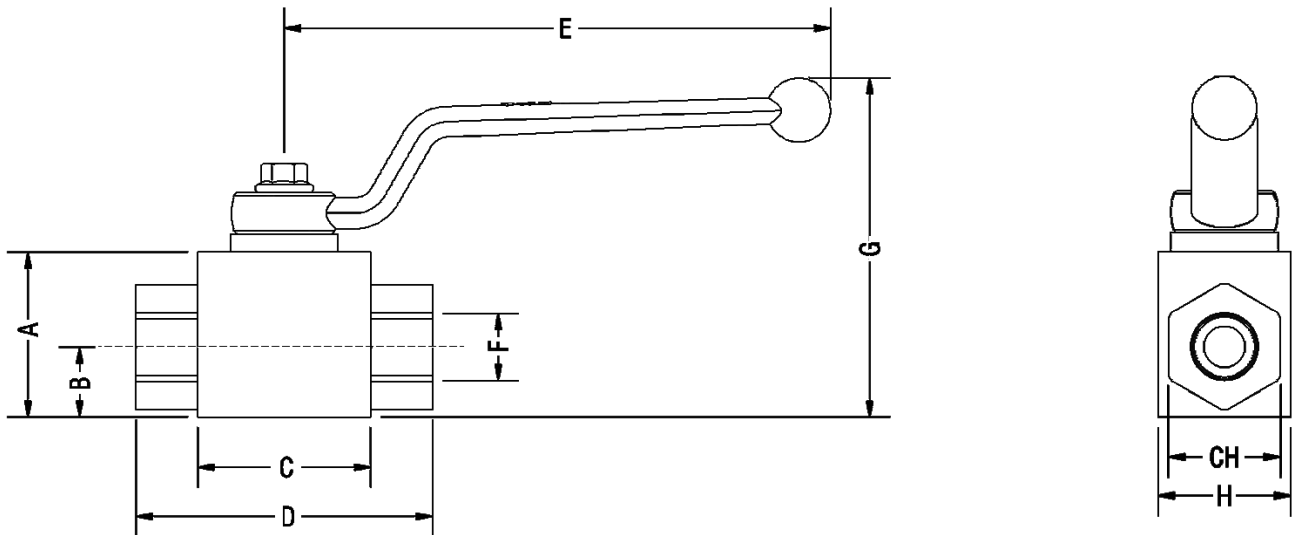
#### Connection type

**N** Thread NPT  
**S** Thread SAE

#### Execution

**P01** MP Filtri Standard

**Pxx** Custom



Valve size	A	B	C	D	E	F (NPT)	F (SAE)	G	H	Ch
005	32	13	37	69	120	-	SAE 4	72.5	28	22
01	32	13	37	69	120	1/4"	-	72.5	28	22
015	40	17	42	72	120	-	SAE 6	80.5	32	27
02	40	17	48	83	120	3/8"	SAE 8	80.5	35	30
03	46	19	47	83	155	1/2"	SAE 10	102	38	32
04	57	24	60	95	170	3/4"	SAE 12	118	48	41
05	64	28.5	65	113	170	1"	SAE 16	125	57	50
06	64	28.5	65	120	170	1 - 1/4" / 1-1/2"	SAE 20	125	60	55
07	64	28,5	65	130	170	1 - 1/2"	SAE 24	125	60	60

Dimension	005	01	015	02	03	04	05	06	07
Max Pressure (PSI)	7252	7252	7252	7252	7252	5076	42.27	4061	4061
Max Flow (gpm)	7.93	7.63	7.93	13.21	21.13	31.70	5076	42.27	42.27
Nominal Diameter (mm)	6	6	6	10	13	20	25	25	25

## Technical data

### Ball valves

#### High Pressure Ball Valves

High performance ball valve that ensures efficient fluid flow, safeguarding critical components and prolonging equipment lifespan while being protected from all materials due to its stainless steel body

#### Standard Features

- Steel body
- Zinc plated
- Valve can turn under maximum pressure
- Counter pressure to closed port cannot be applied

#### Optional Features

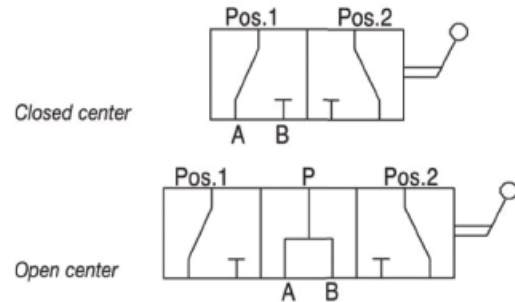
- Chromium plated
- Green zinc plated
- Special hand lever
- Metric thread
- Male thread
- DIN 2353 fitting port thread

#### Applications

- Connect single inlet flow into two outlet flows or combine two inlet flows into single outlet flow
- Control a single acting actuator

### Operation

- Hand lever is Pos. 1 allows flow to port A
- Hand lever is Pos. 2 allows flow to port B
- L type (closed center) - when hand lever is in mid position all ports are partially closed (hand lever only turns 90°)
- T type (open center) - when hand lever is in mid position all ports are completely open (hand lever turns 180°)



## Designation & Ordering code

### COMPLETE BALL VALVE

**Series**

**MPAP3V** 3 way ball valve

Configuration example 1 : MPAP3V 03 N T P01

Configuration example 2 : MPAP3V 015 S L P01

**Valve size**

	NPT	SAE
<b>005</b>	-	7/16" - 20 (SAE - 4)
<b>01</b>	1/4"	-
<b>015</b>	-	9/16" - 18 (SAE - 6)
<b>02</b>	3/8"	3/4" - 16 (SAE - 8)
<b>03</b>	1/2"	7/8" - 14 (SAE - 10)
<b>04</b>	3/4"	1 1/16" - 12 (SAE - 12)
<b>05</b>	1"	1 5/8" - 12 (SAE - 16)
<b>06</b>	1 1/4"	1 5/8" - 12 (SAE - 20)

**Connection type**

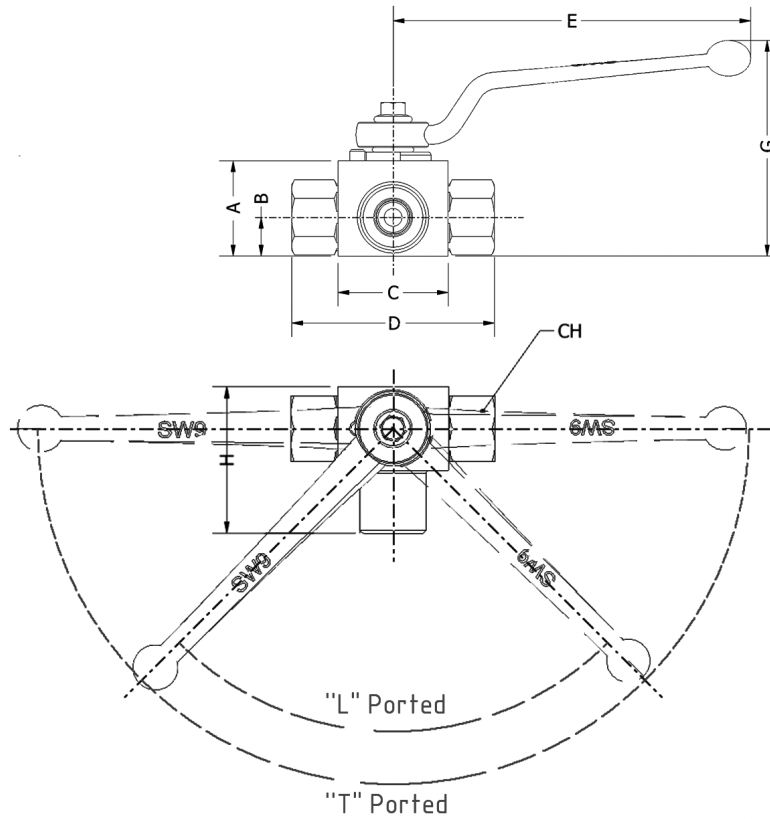
<b>N</b>	Thread NPT
<b>S</b>	Thread SAE

**Hydraulic scheme**

<b>T</b>	Open center
<b>L</b>	Close center

**Execution**

<b>P01</b>	MP Filtri Standard
<b>Pxx</b>	Custom



Valve size	A	B	C	D	E	F (NPT)	F (SAE)	G	H	Ch
005	32	13	37	69	120	-	SAE 4	72.5	49	22
01	32	13	37	69	120	1/4"	-	72.5	49	22
015	40	17	42	72	120	-	SAE 6	80.5	52	27
02	40	17	48	83	120	3/8"	SAE 8	80.5	57.5	30
03	40	17	48	83	120	1/2"	SAE 10	80.5	57.5	30
04	57	24	60	95	170	3/4"	SAE 12	118	73	41
05	64	28.5	65	113	170	1"	SAE 16	125	85	50
06	64	28.5	65	120	170	1" - 1/4"	SAE 20	125	90	55

Dimension	005	01	015	02	03	04	05	06
Max Pressure (PSI)	7252	7252	7252	7252	7252	5076	42.27	4061
Max Flow (gpm)	7.93	7.63	7.93	13.21	21.13	31.70	5076	42.27
Nominal Diameter (mm)	6	6	10	13	13	20	25	25



# MPG Series

Pressure Gauges



## Technical data

### Clogging indicators

#### Pressure gauges

MP Filtri USA offers a choice of accurate, high-visibility pressure gauges.

Liquid (Glycerine) Filled Gauge  
Stem and Back Mount  
Scale: Concentric 270° - PSI/BAR

#### Specification

- Connection: Bottom (Model A); Center back (Model D)
- Standard Threads: 1/4" NPT and SAE -4
- Accuracy: 1.5% of span
- Temperature Range: Between -20° to +80°C
- Working Range: Steady: 3/4 scale valve  
Fluctuating: 2/3 scale valve  
Short Time: full scale
- Protection Degree: IP 65
- Scale: Concentric 270° PSI/Bar

### Materials

- Socket: Copper Alloy
- Case: Stainless Steel
- Flange and Ring Stainless Steel (Model E)
- Ring: Stainless Steel (Model B)
- Bourdon Tube: Circular in copper alloy up to 600 PSI, Helical in copper alloy above 900 PSI
- Movement: Copper Alloy
- Window: Polycarbonate, Acrylic 4"
- Dial: White ABS, black scale
- Mounting: Model E: Front flange with 3 mounting holes  
Model B: With special ring and back clamp

## Designation & Ordering code

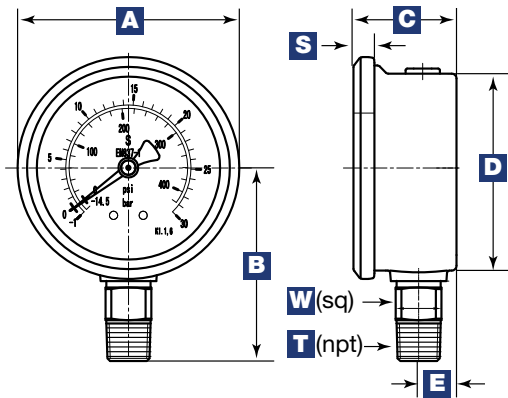
### PRESSURE GAUGE

Series		Configuration example :					
<b>MPG</b> Pressure gauge		MPG	1	V	300	A	N
Diameter							
<b>1</b>	2- 1/2"						
<b>2</b>	4"						
Gauge type							
<b>V</b>	Vacuum						
<b>P</b>	Pressure						
Pressure range							
<b>30/0</b>	30 in. Hg/0 psi	<b>600</b>	600 psi				
<b>30/30</b>	30 in. Hg/300 psi	<b>1000</b>	1000 psi				
<b>30</b>	30 psi	<b>1500</b>	1500 psi				
<b>60</b>	60 psi	<b>2000</b>	2000 psi				
<b>100</b>	100 psi	<b>3000</b>	3000 psi				
<b>160</b>	160 psi	<b>4000</b>	4000 psi				
<b>200</b>	200 psi	<b>5000</b>	5000 psi				
<b>300</b>	300 psi	<b>6000</b>	6000 psi				
<b>500</b>	500 psi	<b>10000</b>	10000 psi				
Thread							
<b>N</b>	1/4" NPT						
<b>S</b>	4 SAE (7/16" - 20 UNF)						
Style							
<b>A</b>	Bottom stem						
<b>B</b>	Panel clamp (**)						
<b>D</b>	Back stem (N/A on 4" gauge)						
<b>E</b>	Back flange (N/A on 4" gauge) (**)						

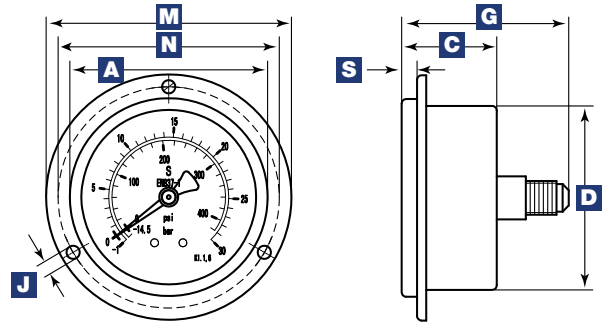
(\*\*) Panel flange and clamp may be ordered separately to fit "D" style gauge 2- 1/2" model only.

Part Number:  
MPG-1-E-Flange  
MPG-1-B-Clamp

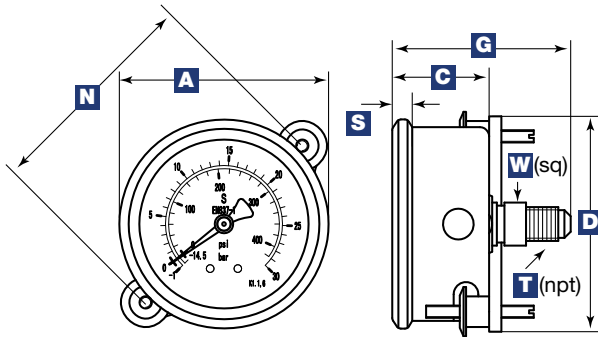




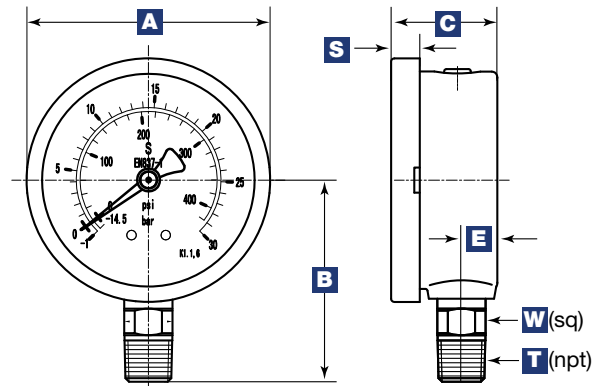
2-1/2" MPG Model A



2-1/2" MPG Model D & E



2-1/2" MPG Model B



4" MPG Model A

Size	Weight	Key	A	B	C	D	E	G	H	J	M	N	S	T	W
2- 1/2"	0.36 lbs + 0.06 lbs if filled	mm/in.	63/2.5	54/2.13	32/1.26	62/2.44	13/0.51	54/2.13	N/A	3.6/0.14	85/3.35	75/2.95	6.5/0.26	1/4 in.	14/0.55
4"	1.10 lbs + 0.66 lbs if filled	mm/in.	100/4	82/3.41	48/1.89	100/3.99	15.5/0.61	79.5/3.13	30/1.18	4.8/0.19	12/5.2	116/4.57	8/0.31	1/2 in.	12/0.87

A = Nominal Size

T = SAE -4 (7/16 -20 UNF) Connection, Supplied with Viton o-ring, hex nut, and washer



# MPDF Series

OEM Integrated Pressure Switch



## Technical data

### Clogging indicators

#### OEM Integrated Pressure Switch

One of the smallest switches in the market offering an integrated Deutsch receptacle. Plug in a mating DT04-2P plug for an instant solution to the constant water spray present in mobile applications.

#### Standard Features

- Silver Nickel alloy contacts
- Direct blade contact
- Diaphragm/Piston combination
- Integrated Deutsch receptacle
- Gold contact available

#### Applications

- Mobile equipment
- Street sweepers
- Cement trucks
- Aerial booms

#### Materials

Diaphragm: standard Nitrile (optional Viton, EPDM, HNBR)  
Housing: Steel, Zinc-plated

#### Specification

Electrical: 100 VA - 42 VDC  
Switch type: blade contact  
Protection: IP67  
Electrical connector: DT04-P2  
Mechanical range: 1,000,000 cycles at 1000 PSI (69 bar)

#### Pressure range

From 1.5 to 2175 PSI (from 0.1 to 150 bar)  
Maximum overpressure: 9000 PSI (600 bar)

#### Temperature range

From -20°F to +180 °F (from -29 °C to +82 °C) Nitrile

#### Weight

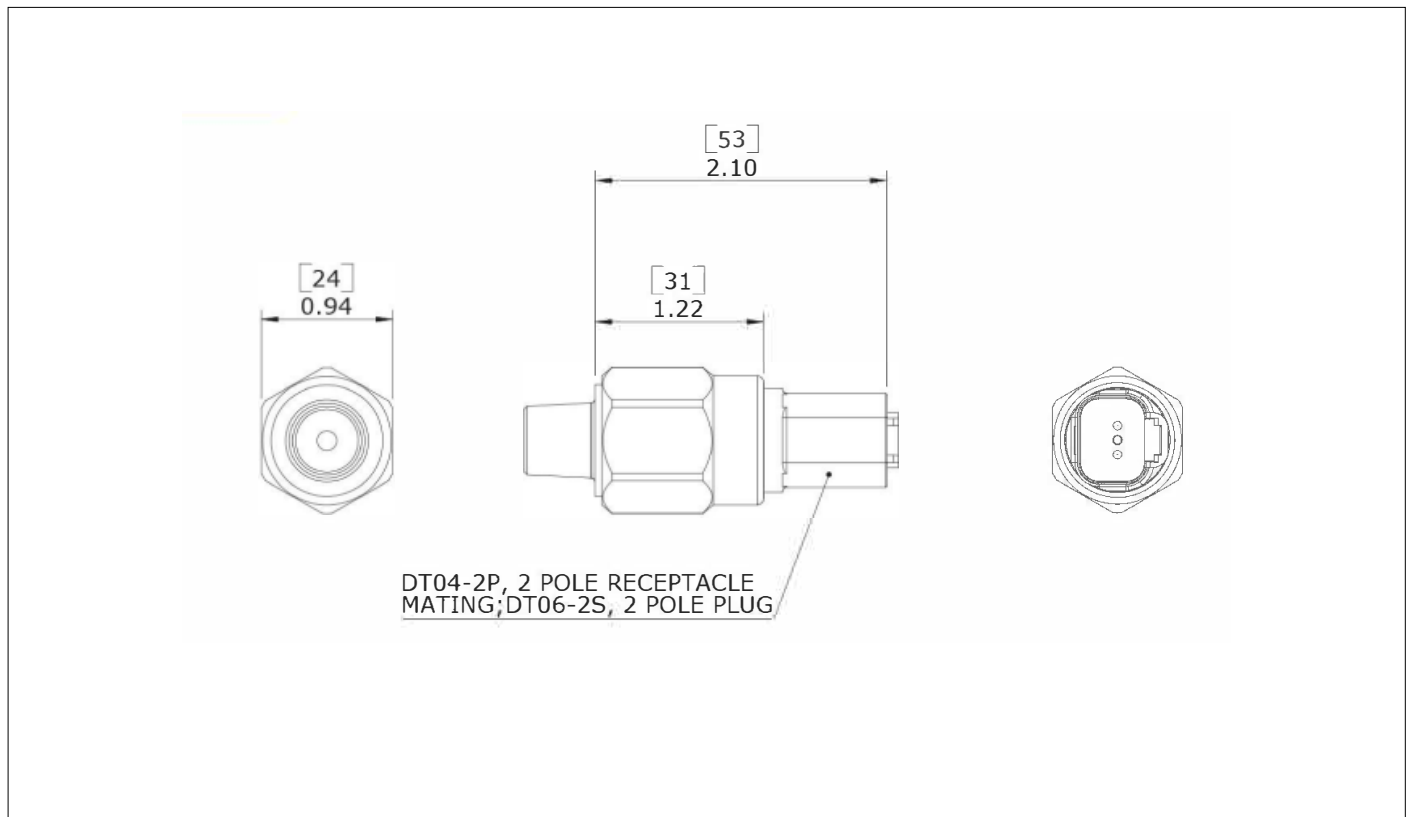
0.15 lbs (0.06 kg)

#### Available settings

22 psi ± 10%  
35 psi ± 10%  
40 psi ± 10%

\*Other settings on Request, MOQ may apply

## Dimensions



MPDF		
<b>Series</b>		
<b>MPDF</b>	OEM integrated pressure switch	
<b>Pressure selection</b>		
Adjustable range:	psi range	bar range
<b>1</b>	1.5 - 14.5	0.1 - 1.0
<b>2</b>	14.5 - 145	1.0 - 10
<b>3</b>	50 - 350	3.4 - 24
<b>4</b>	250 - 1000	17 - 69
<b>5</b>	500 - 2175	34 - 150
<b>Thread option</b>		
<b>2M</b>	1/8" NPT male	
<b>4M</b>	1/4" NPT male	
<b>2G</b>	1/8" BSPP male - G1/8	
<b>4G</b>	1/4" BSPP male - G1/4	
<b>4S</b>	7/16" - 20 SAE male with O-ring seal	
<b>6S</b>	9/16" - 18 SAE male with O-ring seal	
<b>Circuit</b>		
<b>A</b>	SPST (normally open)	
<b>B</b>	SPST (normally closed)	
<b>Electrical termination</b>		
<b>DR</b>	Integrated Deutsch Receptacle - Mates with DT06-2S	
<b>Options</b>		
<b>1</b>	FPM Diaphragm	
<b>2</b>	EPDM Diaphragm	
<b>4</b>	HNBR Diaphragm	
<b>7</b>	Gold contact 0.4 VA - 30 VDC	
<b>20</b>	Seal adjustment screw	

Set point	Direction	bar range
xxx	<b>R</b>	PSI Rising pressure
xxx	<b>F</b>	PSI Falling pressure
xxx	<b>BR</b>	BAR Rising pressure
xxx	<b>BF</b>	BAR Falling pressure

Configuration example 1:	MPDF	3	2M	A	DR	1
Configuration example 2:	MPDF	35R	M10	B	DR	2

Wiring code	
Contact	Deutsch receptacle
Common	PIN A
Normally closed	PIN B
Normally open	PIN B



# MPBA & MPBF Series

Compact OEM Pressure Switch



## Technical data

### Clogging indicators

#### Compact OEM Pressure Switch

A miniature pressure switch with high proof pressures ideal for mobile and other harsh applications. It is a well sealed design that offers ingress protection to IP68 when paired with the flying lead option. It is offered with a variety of mechanical and electrical terminations for easy integration.

#### Standard Features

- Silver Nickel alloy contacts
- Direct blade contact
- Diaphragm/Piston combination
- High ingress protection
- Compact body
- Gold contact available

#### Applications

- Industrial tools
- Garbage trucks
- Brake pressure switch

#### Materials

Diaphragm: standard Nitrile (optional Viton, EPDM, HNBR)  
Housing: zinc plated steel (optional stainless steel)

#### Specification

Electrical: 100 VA - 42 VDC  
Switch type: blade contact  
Protection: exposed terminals - IP00 (IP68 available)  
Mechanical range: 1,000,000 cycles at 1000 PSI (69 bar)  
Repeatability: +/- 3% of full set point range at 68 °F (20 °C)  
+/- 1.5 psi

#### Pressure range

Model 1: from 1.5 to 20 psi (from 0.1 to 1.4 bar)  
Model 2: from 20 to 120 psi (from 1.4 to 8.2 bar)  
Model 3: from 90 to 250 psi (from 6.2 to 1.7 bar)  
Model 4: from 250 to 950 psi (from 17 to 54 bar)  
Model 5: from 700 to 1900 psi (from 48 to 131 bar)  
Model 6: from 1000 to 3000 psi (from 69 to 206 bar)

Maximum overpressure: 9000 PSI (600 bar)

#### Temperature range

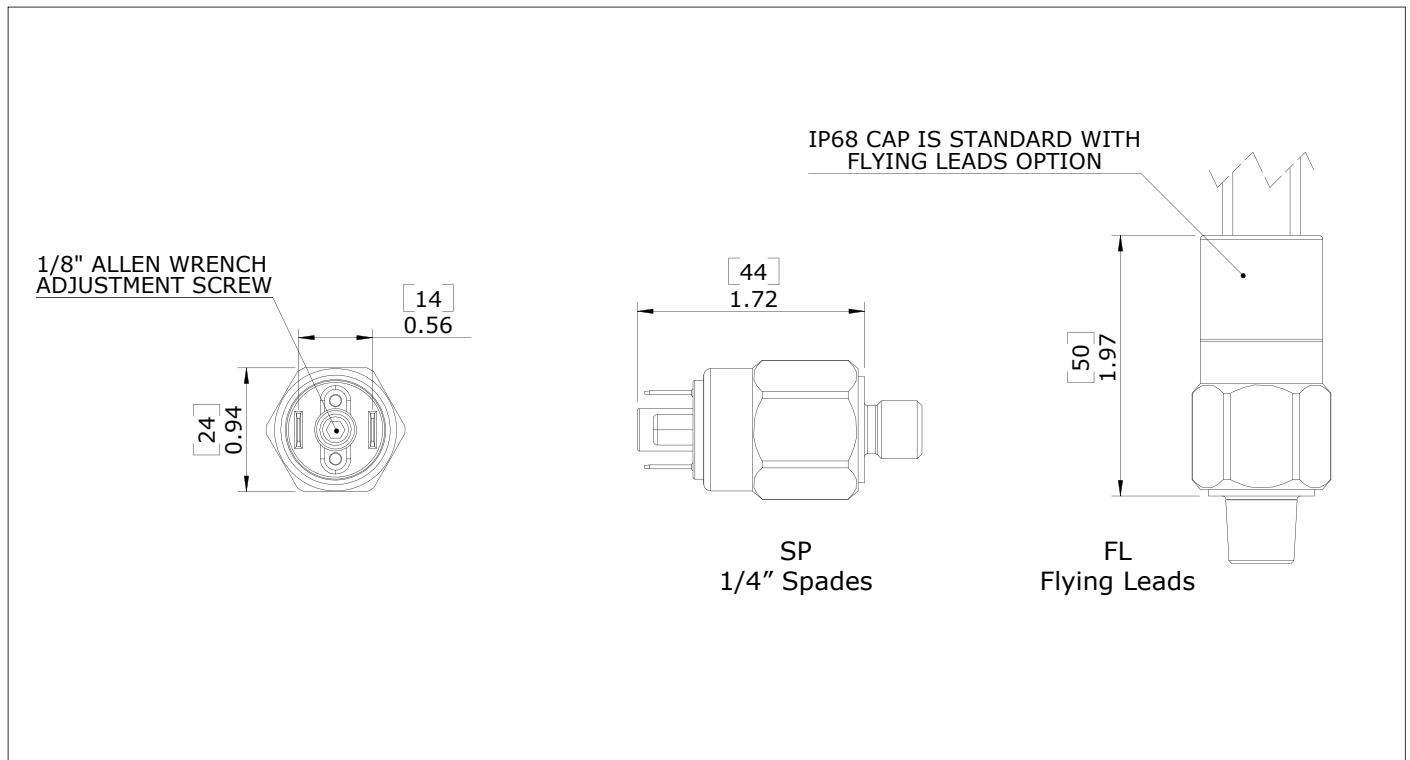
From -20°F to +180 °F (from -29 °C to +82 °C) Nitrile

#### Available settings

22 psi ± 10%  
35 psi ± 10%

\*Other Settings on request, MOQ may apply

## Dimensions





MPBA & MPBF																				
<b>Series</b>		Configuration example 1: <b>MPBA</b> <b>2</b> <b>2M</b> <b>B</b> <b>SP</b> <b>1</b> Configuration example 2: <b>MPBF</b> <b>35F</b> <b>2M</b> <b>B</b> <b>SP</b> <b>1</b>																		
<b>MPBA</b> OEM integrated pressure switch <b>MPBF</b>																				
<b>Pressure selection</b>		<table border="1"> <thead> <tr> <th>Set point</th> <th>Direction</th> <th>bar range</th> </tr> </thead> <tbody> <tr> <td>xxx</td> <td><b>R</b></td> <td>PSI Rising pressure</td> </tr> <tr> <td>xxx</td> <td><b>F</b></td> <td>PSI Falling pressure</td> </tr> <tr> <td>xxx</td> <td><b>BR</b></td> <td>BAR Rising pressure</td> </tr> <tr> <td>xxx</td> <td><b>BF</b></td> <td>BAR Falling pressure</td> </tr> </tbody> </table>				Set point	Direction	bar range	xxx	<b>R</b>	PSI Rising pressure	xxx	<b>F</b>	PSI Falling pressure	xxx	<b>BR</b>	BAR Rising pressure	xxx	<b>BF</b>	BAR Falling pressure
Set point	Direction	bar range																		
xxx	<b>R</b>	PSI Rising pressure																		
xxx	<b>F</b>	PSI Falling pressure																		
xxx	<b>BR</b>	BAR Rising pressure																		
xxx	<b>BF</b>	BAR Falling pressure																		
Adjustable range:		psi range	bar range																	
<b>1</b>	1.5 - 20	0.1 - 1.4																		
<b>2</b>	20 - 120	1.4 - 8.2																		
<b>3</b>	90 - 250	6.2 - 17																		
<b>4</b>	250 - 950	17 - 65																		
<b>5</b>	700 - 1900	48 - 131																		
<b>6</b>	1000 - 3000	69 - 206																		
<b>Thread option</b>																				
<b>2M</b>	1/8" NPT male																			
<b>4m</b>	1/4" NPT male																			
<b>2G</b>	1/8" BSPP male - G1/8																			
<b>4G</b>	1/4" BSPP male - G1/4																			
<b>4S</b>	7/16" - 20 SAE male with O-ring seal																			
<b>6S</b>	9/16" - 18 SAE male with O-ring seal																			
<b>Circuit</b>																				
<b>A</b>	SPST (normally open)																			
<b>B</b>	SPST (normally closed)																			
<b>Electrical termination</b>																				
<b>FL</b>	Flying Lead 18" long, 18 AWG, IP68 Cap is standard with this option																			
<b>FLWF</b>	Flying Lead Weatherpack connector, female, Tower, 10" long leads																			
<b>FLWM</b>	Flying Lead Weatherpack connector, male, Shroud, 10" long leads																			
<b>FLDP</b>	Flying Lead Deutsch connector, plug, 10" long leads																			
<b>FLDR</b>	Flying Lead Deutsch connector, receptacle, 10" long leads																			
<b>SP</b>	1/4" Spade																			
<b>Options</b>																				
<b>1</b>	FPM Diaphragm																			
<b>2</b>	EPDM Diaphragm																			
<b>4</b>	HNBR Diaphragm																			
<b>7</b>	Gold contact 0.4 VA - 30 VDC																			
<b>20</b>	Seal adjustment screw																			
<b>30</b>	Rubber Boot - Removable (Excludes IP68 Cap if selected)																			

Wiring code			
Contact	Flying leads	FLWF / FLWM Weatherpack	FLDR / FLDP Deutsch receptacle / pug
Common	Black	PIN A	PIN 1
Normally closed	Black	PIN B	PIN 2
Normally open	Black	PIN B	PIN 3



# MPT Series

Pressure Transducer



## Technical data

### Clogging indicators

#### Pressure Transducer

The T200 / T201 series is suitable for both mobile and industrial applications. Its small profile is ideal for space constraints. The body is machined from a single piece of 304SS to provide added protection for the internal electronics. A piezoresistive ceramic sensor along with ASIC signal conditioning provides an excellent thermally compensated output.

#### Standard Features

- Piezoresistive Ceramic Sensor
- ASIC Signal conditioning

#### Applications

- Industrial Equipment
- Safety Monitoring
- Mobile Equipment

#### Materials

Ceramic  $Al_2O_3$   
NBR (Standard) or Optional: FKM,HNBR,EPDM

#### Specification

Accuracy: 0.5% BFSL  
Long term drift: < 0.3% FS @ 77°F (25°C)  
Process connection: SS304  
Vibration: 10g (20-2000Hz) for ≤ 58 PSI (4 bar)  
20g (20 - 500Hz) for ranges > 58 PSI (4 bar)  
Shock: 50 g (11 ms)  
Protection: Overvoltage, Short circuit, Reverse polarity protection  
Ingress protection: IP67 (IP65 for M2 Electrical Connection)  
Response Time: < 1 ms

#### Pressure

- Pressure range: from 0 to 7,500 psi (517 bar)
- Proof Pressure: 140% to 200% FS based on range (consult factory)
- Burst Pressure: 180% to 400% FS based on range (consult factory)

#### Compliance

- IEC/EN 61000-4-3(2006) 100V/m 80-1000MHz
- IEC/EN 61000-4-4(2004) Class 3
- IEC/EN 61000-4-6(2006) 3Vrms 0.15-80MHz
- ROHS

#### Temperatures

Thermal error:

- 7.5 psi ≥ 100 psi: 0.01% FS/°F (0.018% FS/°C)
- 100 psi > 400 psi: 0.009% FS/°F (0.016% FS/°C)
- 400 psi ≥ 1000 psi: 0.011% FS/°F (0.019% FS/°C)
- 1000 psi > 3000 psi: 0.012% FS/°F (0.021% FS/°C)
- 3000 psi ≥ 7500 psi: 0.018% FS/°F (0.028% FS/°C)

Compensated temperatures:

- MPT200 Series: from 32°F to 185°F (from 0°C to 85°C)
- MPT201 Series: from -40°F to 257°F (from -40°C to 125°C)

Operating temperatures:

from -40°F to 257°F (from -40°C to 125°C)

Storage temperature rating:

from -40°F to 275°F (from -40°C to 135°C)

#### Weight

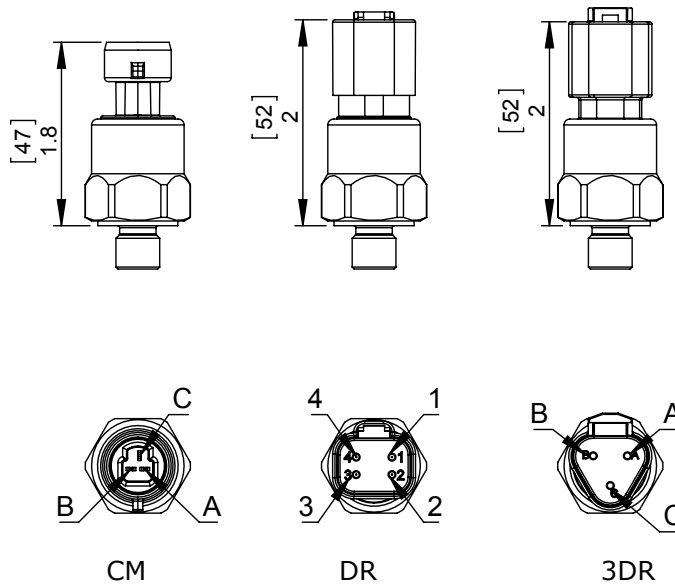
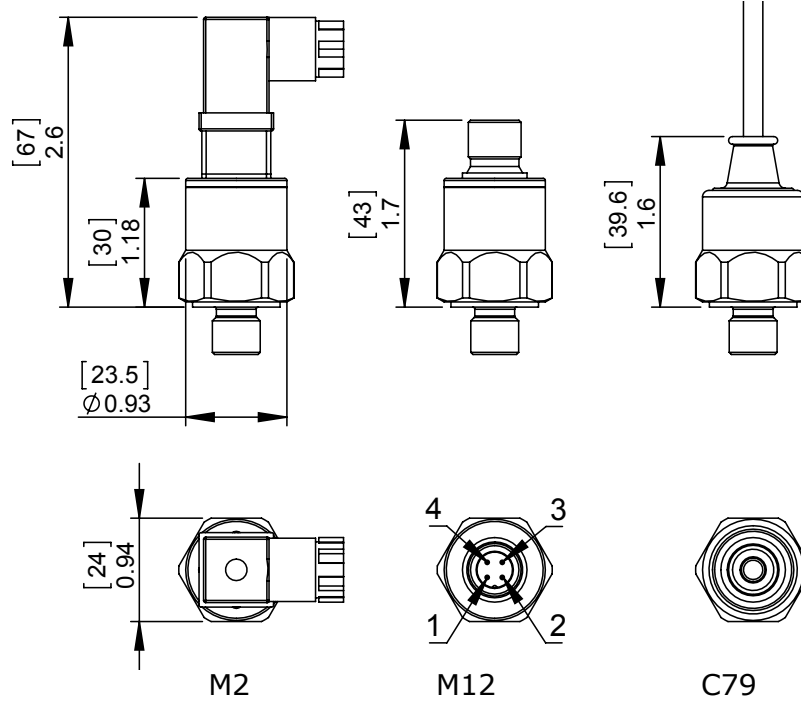
0.15 lbs (0.06 kg)

MPT		Example :	MPT200	0100P	G	3	M2	4M	N	T1	SR
<b>Series</b>											
<b>MPT200</b> Compensated Temperat. Range 32°F to 185°F (0°C to 85°C)											
<b>MPT201</b> Compensated Temperat. Range -40°F to 257°F (-40°C to 125°C)											
<b>Pressure range</b>											
	psi		bar								
	<b>0015P</b> 15 psi		<b>001B</b> 1 bar								
	<b>0030P</b> 30 psi		<b>002B</b> 2 bar								
	<b>0100P</b> 100 psi		<b>005B</b> 5 bar								
	<b>0150P</b> 150 psi		<b>010B</b> 10 bar								
	<b>0300P</b> 300 psi		<b>020B</b> 20 bar								
	<b>0400P</b> 400 psi		<b>050B</b> 50 bar								
	<b>0600P</b> 600 psi		<b>100B</b> 100 bar								
	<b>1000P</b> 1000 psi		<b>200B</b> 200 bar								
	<b>1500P</b> 1500 psi		<b>400B</b> 400 bar								
	<b>3000P</b> 3000 psi		<b>500B</b> 500 bar (**)								
	<b>5000P</b> 5000 psi										
	<b>7500P</b> 7500 psi (**)										
<b>Reference</b>											
<b>A</b>	Absolute										
<b>G</b>	Gauge										
<b>S</b>	Sealed										
<b>Output</b>											
<b>2</b>	4 -20 mA (2 wire)										
<b>3</b>	0 - 10 V (3 wire)										
<b>4</b>	0.5 - 4.5 V ratiometric										
<b>5</b>	0-5 V (3 wire)										
<b>6</b>	1 - 5 V (3 wire)										
<b>7</b>	0.5 - 4.5 V (3 wire)										
<b>8</b>	1 - 6V (3 wire)										
<b>9</b>	0.25 -10.25 V (3 wire)										
<b>Electrical connection</b>											
<b>M2</b>	DIN 43650C (Mini DIN)										
<b>M12</b>	M12, 4 pin										
<b>C79</b>	Shielded Cable 79 inches (2 meter)										
<b>DR</b>	Deutsch Receptacle DT04-4P										
<b>DR3</b>	Deutsch Receptacle DT04-3P										
<b>CM</b>	Packard, Metripack,150 Series (PS2)										
<b>Process connection</b>											
<b>2M</b>	1/8" NPT male										
<b>4M</b>	1/4" NPT male										
<b>4G</b>	1/4" BSPP male - G1/4										
<b>4S</b>	7/16" - 20 SAE male with O-ring seal										
<b>6S</b>	9/16" - 18 SAE male with O-ring seal										
<b>Seals</b>											
<b>N</b>	NPR (standard)										
<b>V</b>	Viton										
<b>H</b>	HNBR										
<b>R</b>	EPDM										
<b>Accuracy</b>											
<b>T1</b>	0.5% BFSL										
<b>Options</b>											
<b>SR</b>	Snubber										

Other material and options available upon request. Custom design available. Please consult factory.

(\*\*) 7500 psi (500 bar) is only available with 7/16 SAE thread and 9/16 SAE thread.

## Dimensions



Connector	Output				
	4 - 20 mA		Voltage		
	Supply +	Supply -	Supply +	Common	Output +
M2	1	2	1	2	3
M12	1	3	1	3	4
C79 - C158	Red	Black	Red	Black	White
DR	2	1	2	1	4
3DR	A	B	A	B	C
CM	B	A	B	A	C







# MPF Series

Temperature Switch



# MPF5TAF & MPF7TAF GENERAL INFORMATION

## Technical data

### Clogging indicators

#### Temperature Switch

The MPF5TAF and MPF7TAF model series are bimetallic temperature switches. The MPF5TAF series features a large temperature differential and the MPF7TAF series features a small temperature differential. The sensing element is designed to provide rapid temperature response.

#### Standard Features

- Temperature switch and sensor
- Compact size
- Low differential

#### Applications

- Coolant temperature switch/sensor
- Lubrication systems
- Oil reservoir temperature switch/sensor

### Materials

Housing: brass

### Specification

Electrical: 120/240 VAC - 3A Resistive  
120/240 VAC - 2.5A Inductive  
12/24 VDC - 3A Resistive  
12/24 VDC - 2A Inductive

Contact:

MPF5TAF: silver

MPF7TAF: gold

Switch type: bimetal snap action

Protection: IP65

Probe Length:

MPF5TAF: 3/4"

MPF7TAF: 1/2", 1", 2"

### Pressure

Maximum overpressure: 5000 psi (345 bar)

### Temperatures

Set point range (factory set):

MPF5TAF: from 130 °F to 300 °F (from 54 °C to 150°C)

MPF7TAF: from 40 °F to 300 °F (from 4 °C to 150°C)

Temperature differential:

MPF5TAF: Approximately 30% of Setpoint

MPF7TAF: Approximately <4% of Setpoint

Temperature exposure limit:

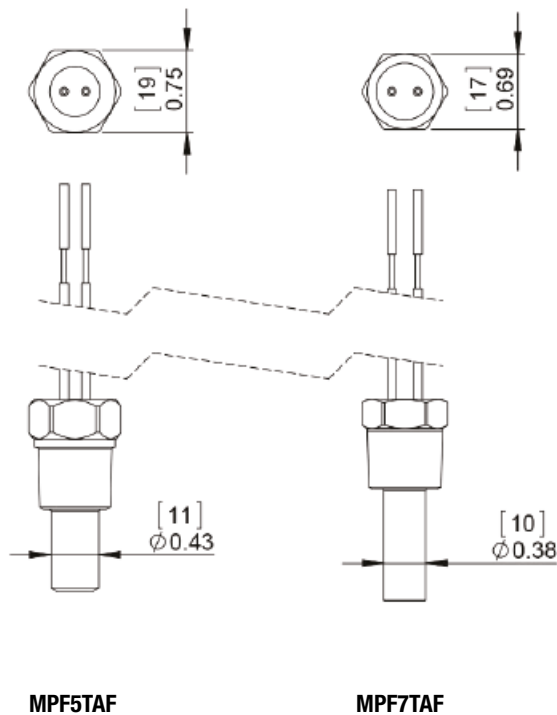
325°F (162°C)

Repeatability: +/- 7°F

### Weight

0.15 lbs (0.06 kg)

## Dimensions



# MPF5TAF & MPF7TAF

Designation & Ordering code

## MPF5TAF & MPF7TAF

Series Configuration example: **MPF5TAF** **120R** **4M08** **A** **FL**

**MPF5TAF** Approximately 30% of differential (see Specifications Table)

**MPF7TAF** Approximately <4% of differential (see Specifications Table)

### Temperature Selection (Fahrenheit Rising):

MPF5TAF Model	MPF7TAF Model
<b>130R</b>	<b>120R</b>
<b>140R</b>	<b>140R</b>
<b>150R</b>	<b>160R</b>
<b>160R</b>	<b>170R</b>
<b>170R</b>	<b>180R</b>
<b>180R</b>	
<b>190R</b>	
<b>200R</b>	
<b>220R</b>	

Other Setpoints are available upon request. Consult factory for availability.

### Thread options

	MPF5TAF Model		MPF7TAF Model	
	3/4" Probe	1/2" Probe	1" Probe	2" Probe
1/4" NPT	<b>4M12</b>	<b>4M08</b>	<b>4M16</b>	<b>4M32</b>
3/8" NPT	<b>6M12</b>	<b>N/A</b>	<b>6M16</b>	<b>N/A</b>
1/2" NPT	<b>8M12</b>	<b>8M08</b>	<b>8M16</b>	<b>8M32</b>
3/4" - 16 SAE with Viton O-ring seal	<b>8S12</b>	<b>N/A</b>	<b>8S16</b>	<b>N/A</b>

### Circuit

**A** SPST (Normally Open)

**B** SPST (Normally Closed)

### Electrical termination

**FL** Flying Lead 18" long, 18 AWG, IP68 Cap is standard with this option

**FLWF** Flying Lead Weatherpack connector, female, Tower, 10" long leads

**FLWM** Flying Lead Weatherpack connector, male, Shroud, 10" long leads

**FLDP** Flying Lead Deutsch connector, plug, 10" long leads

**FLDR** Flying Lead Deutsch connector, receptacle, 10" long leads

**FLCM** Flying Lead, Metripack, male, 150 series, 10" long leads

**FLCF** Flying Lead, Metripack, female, 150 series, 10" long leads

**FLPM** Flying Lead Metripack 280 connector, male, 10" long leads

**FLPF** Flying Lead Metripack 280 connector, female, 10" long leads

Other material and options available upon request. Please consult factory for details.

### Wiring code

Contact	Flying leads	FLWF / FLWM / FLCM / FLCF / FLPM / FLPF	FLDR / FLDP
Common	Black	PIN A	PIN 1
Normally closed	Black	PIN B	PIN 2
Normally open	Black	PIN B	PIN 2



# Weld Flanges

---



# Weld flange GENERAL INFORMATION

## Technical data

## Installation example

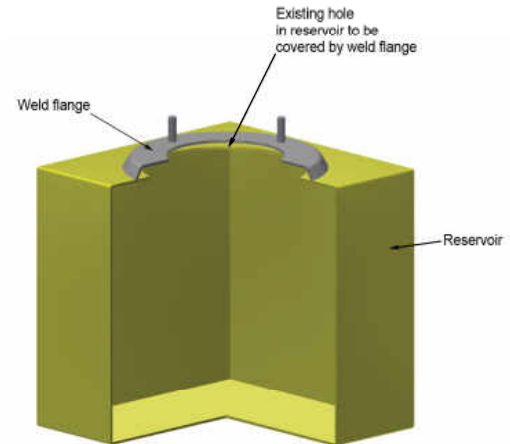
### Accessories

#### Weld flange

Weld Flanges are designed to mount MP Filtri tank top filters onto metal tanks that have existing holes that do not match the desired filter. Round as well as square versions are available.

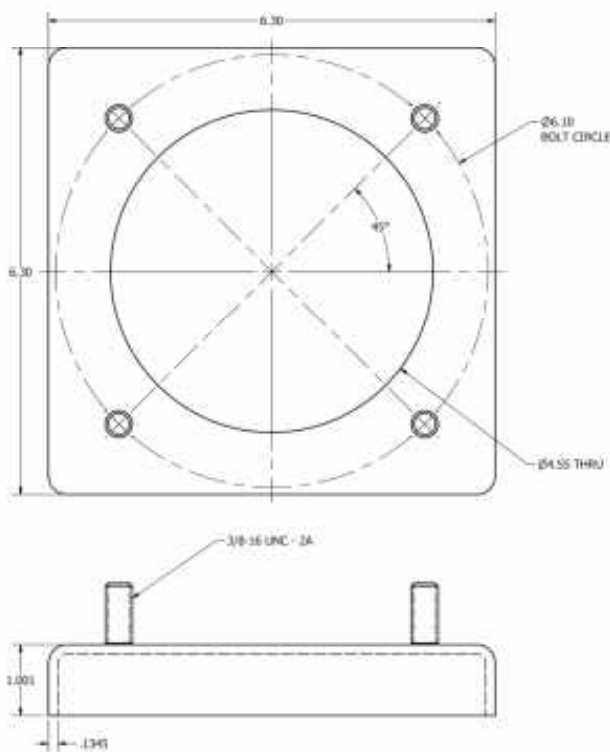
#### Standard Features

- Material: 1 gauge ASTM A569 steel
- Mounting surface flatness: 0.0007 in/in
- Press fit and tack welded studs

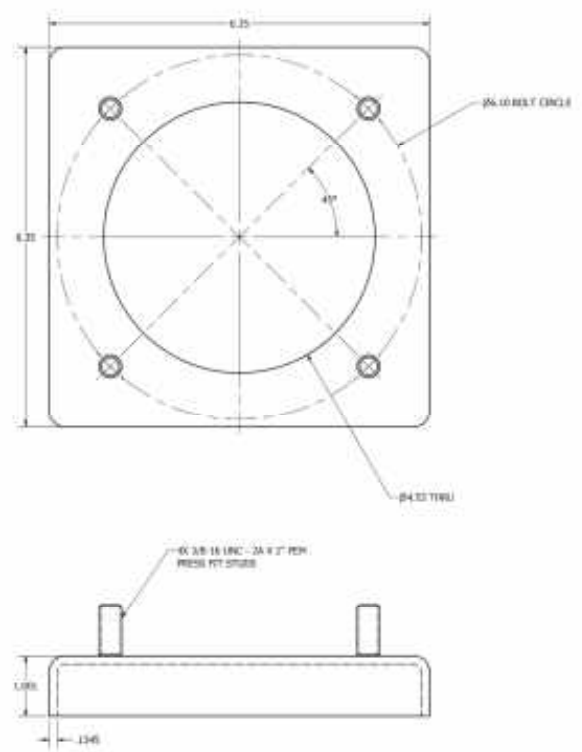


### SUCTION FILTER WELD FLANGE

**SFMC 250**  
Threaded connections

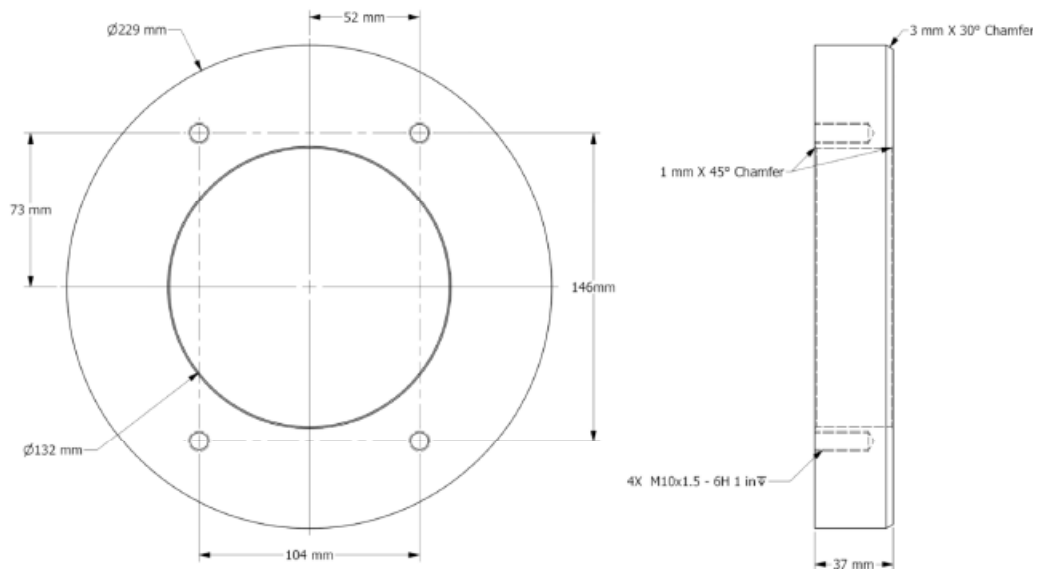


**SFMC 250**  
Flanged connections

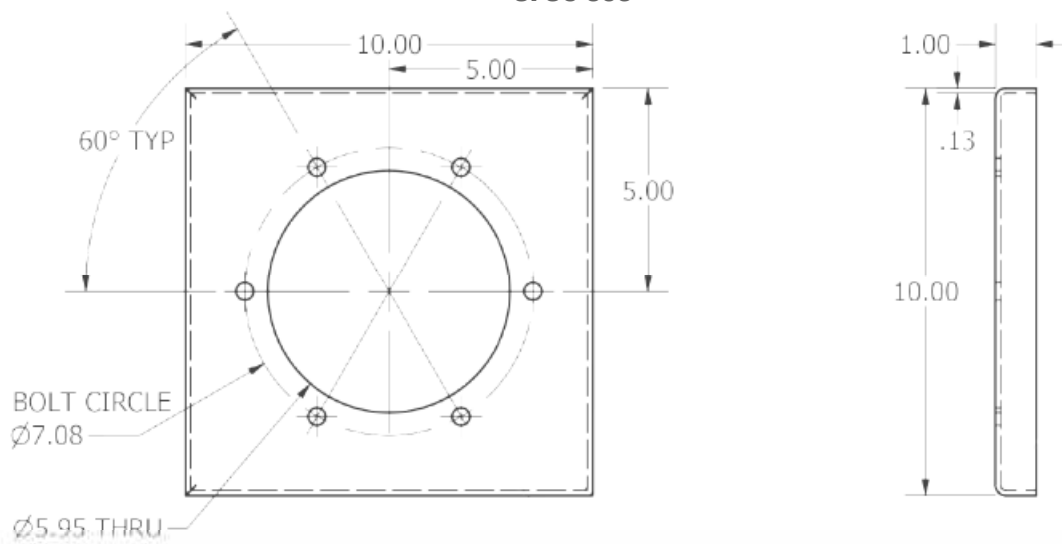


## SUCTION FILTER WELD FLANGE

### SFSC 500



### SFSC 503

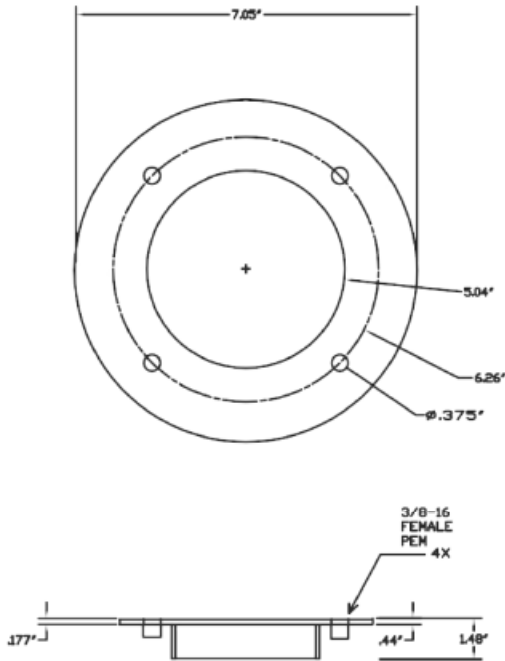


# Weld flange

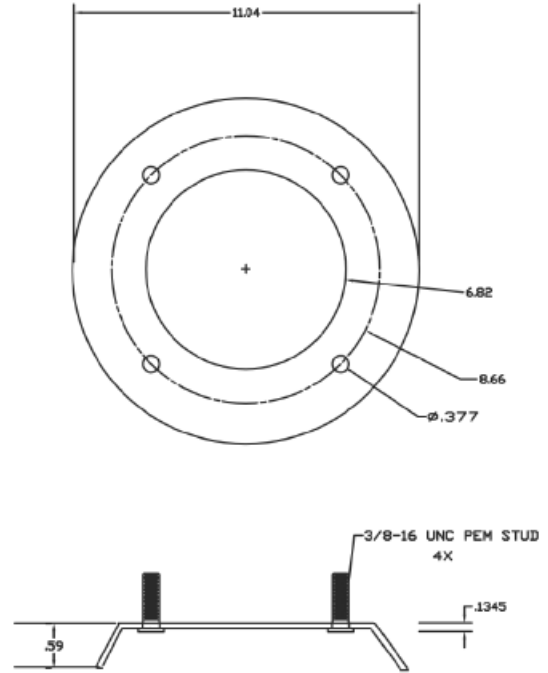
## Dimensions

### RETURN FILTER WELD FLANGE

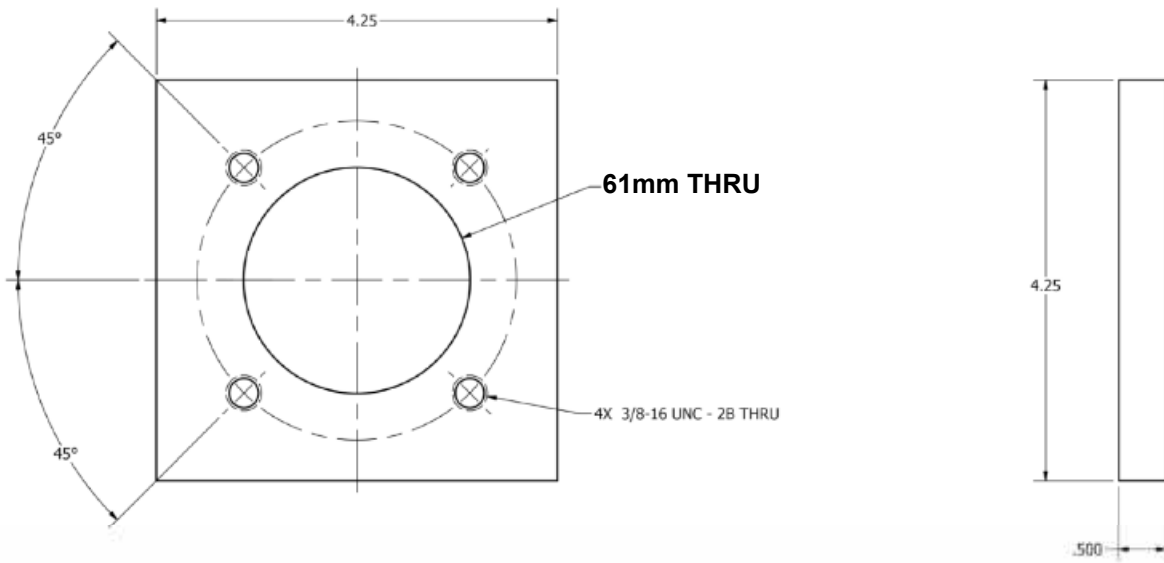
**MPF/MPFX 184 Round**



**MPF/MPFX 400 Round  
MPF/MPFX 750 Round**



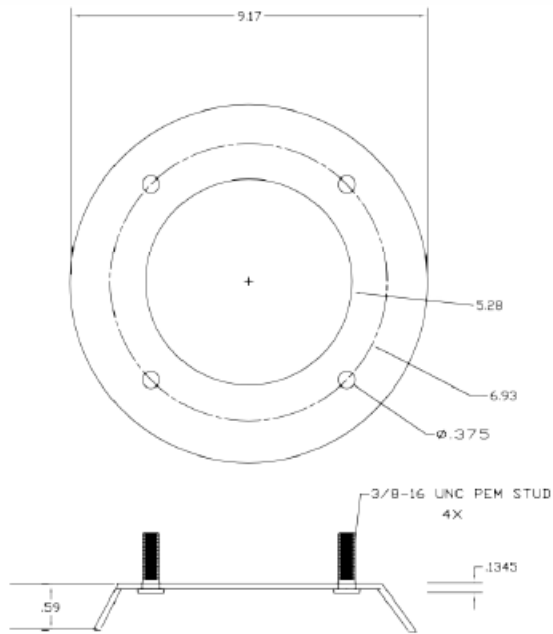
**MPT/MPTX 027 Round**



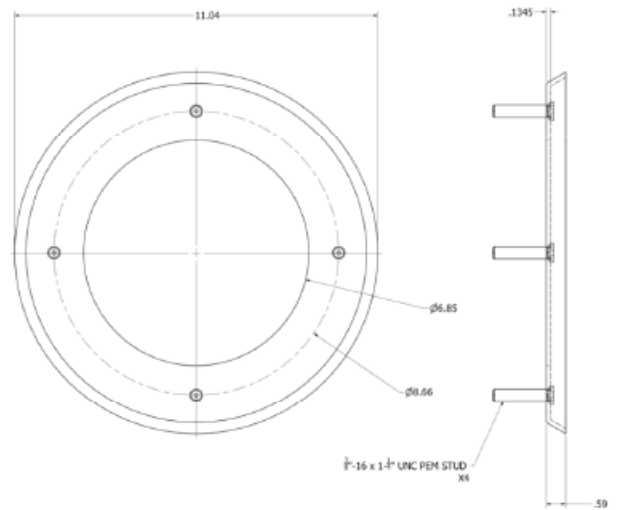


## RETURN FILTER WELD FLANGE

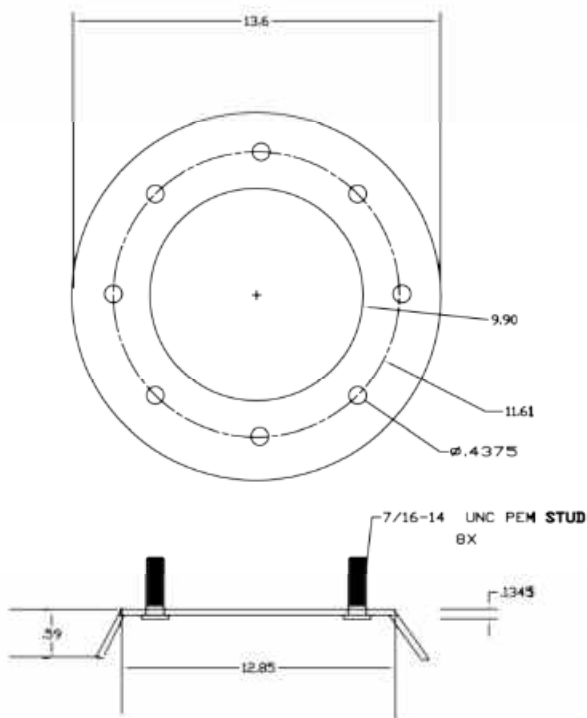
**MPH 250**



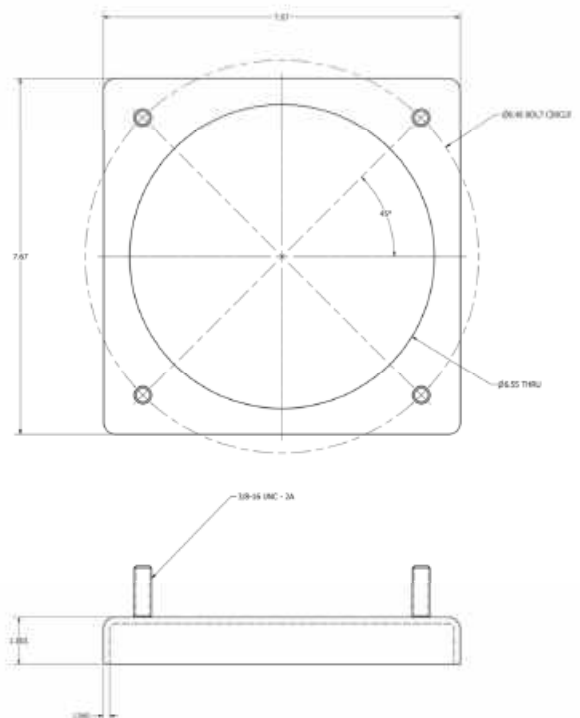
**MPH 630**



**MPH 850**



**MPH 630 Square**





# HSP Series

Test Equipment



HSP1040



HSP2000



HSP3000



HSP6000



HSP690



HSP7000

# HSP1040

## Technical data

### Hydraulic Hose Coupling Kit

#### Temperature and Pressure Test Kit

JIC 37° Hose Couplings are pivotal test kits used to obtain pressure of temperature checks during servicing or fault finding. Install JIC Hose Couplings between the female swivel nut of the flexible hose and the fixed male connection.

All probes may be connected and disconnected at full system pressure without fluid loss or ingress of dirt.

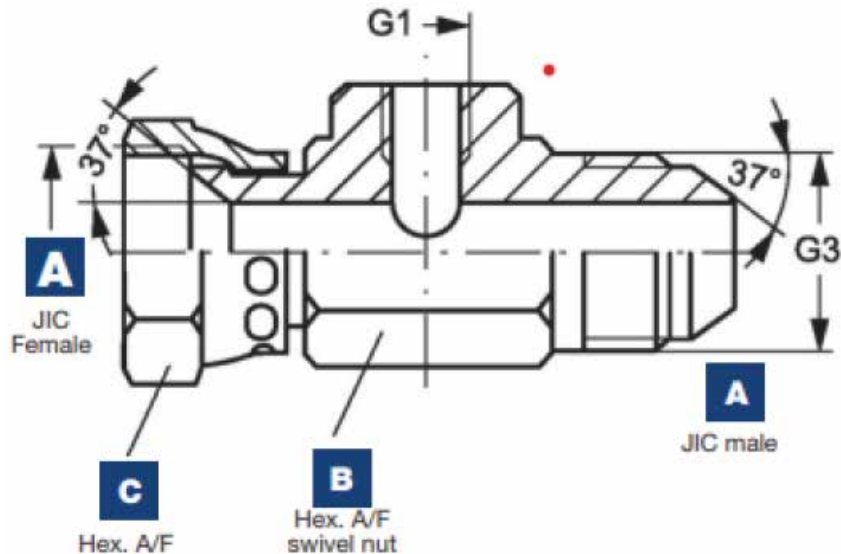
#### Available features

- Ease of Use: The male and female connections are designed to apply to all connection types
- Electrically Safe: No electrical contact with fluid.
- Variability in Size: Multiple sizes and distances meet the needs for all customers and applications.
- Flexibility: Can be used with direct or remote test probes

#### JIC Hydraulic Hose Series

- Fitted with a test point plug
- JIC 37° cone seat, Sizes: 1/4" to 1-1/2"
- 20°C to +200°C
- 4°F to 392°F
- Comes standard with Viton seals
- Material/Coating: Steel, Zinc/Nickel-Plated

## Dimensions & Ordering Code



Part Number	Size	A JIC 37° Thread ISO 8434-2	G1 SAE straight thread Oring Boss Port	B	C	Working Pressure
HSP1040-4MV	1/4"	7/16" -20 UNF	7/16" -20 UNF	36 mm	17 mm	6100 psi
HSP1040-6MV	3/8"	9/16" -18 UNF	7/16" -20 UNF	36 mm	19 mm	5000 psi
HSP1040-8MV	1/2"	3/4" -16 UNF	7/16" -20 UNF	36 mm	22 mm	5000 psi
HSP1040-10MV	5/8"	7/8" -14 UNF	7/16" -20 UNF	36 mm	27 mm	5000 psi
HSP1040-12MV	3/4"	1- 1/6" -12 UN	7/16" -20 UNF	41 mm	32 mm	5000 psi
HSP1040-16MV	1"	1- 5/16" -12 UN	7/16" -20 UNF	46 mm	38 mm	3600 psi
HSP1040-20MV	1- 1/4"	1- 5/8" -12 UN	7/16" -20 UNF	50 mm	50 mm	3600 psi
HSP1040-24MV	1- 1/2"	1- 7/8" -12 UN	7/16" -20 UNF	60 mm	60 mm	2400 psi

### Test Point Plugs

The HSP2000 test point plugs are designed to be complementary and interchangeable with similar equipment from other manufacturers.

Test point plugs and probes are installed in the hydraulic system to monitor conditions without the need for system shutdown. They allow connection to a pressure gauge and can be used in both mobile or industrial applications where system monitoring is required.

Available with Skydrol Hydraulic Fluid compatibility for Aerospace properties.

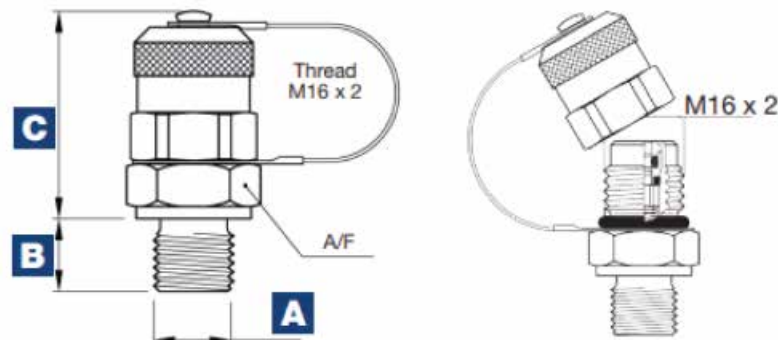
### Available features

- Flexibility: HSP2000's design allows for interchangeability with similar equipment to adapt to the customer's current equipment easily
- Electrically Safe: No electrical contact with fluid.
- Variability in Size: Multiple sizes and distances meet the needs for all customers and applications.

### HSP SERIES

- Conforms to ISO 1517-2
- Material/Coating: Steel, Zinc/Nickel-Plated  
Stainless Steel AISI 316-DIN 14436 (optional)
- Seals: Viton (-4°F to 392°F / -20°C to 200°C) Standard  
Buna (-22°F to 248°F / -30°C to 120°C) (Optional)
- Working Pressure: 91,000 psi (630 BAR) max
- Burst Pressure: >36,000 psi
- Compatibility: Hydraulic oils and mineral based oils
- All test points are supplied with integrated anti-vibration O-ring

## Dimensions & Ordering Code



Part Number	A	B	C	A/F	Max Pressure	Weight
HSP2000-BV	1/4" BSPP	0.47"	1.38"	0.75"	9100 psi	0.16 lbs
HSP2000-BV-SKYDROL	1/4" BSPP	0.47"	1.38"	0.75"	9100 psi	0.16 lbs
HSP2000-DV	7/16"-20 UNF (SAE-4)	0.43"	1.38"	0.67"	9100 psi	0.14 lbs
HSP2000-DV-SKYDROL	7/16"-20 UNF (SAE-4)	0.43"	1.38"	0.67"	9100 psi	0.14 lbs
HSP2000-EV	9/16-18 UNF (SAE-6)	0.47"	1.38"	0.75"	9100 psi	0.16 lbs
HSP2000-HV 1/4" NPTF	1/4" NPTF	0.55"	1.30"	0.67"	9100 psi	0.15 lbs
HSP2000-HVSS	1/4" NPTF	0.55"	1.30"	0.67"	9100 psi	0.15 lbs
HSP2000-KV	1/8" NPTF	0.37"	1.30"	0.67"	5800 psi	0.13 lbs

# HSP3000

## Technical data

### Pressure Gauge Connection

The HSP3000 are used to connect the gauge to the hose probe assemblies (HSP6000). These adaptors are designed to be complementary to and interchangeable with similar equipment from other manufacturers using ISO 15171-2 standards.

Adaptors may be bulkhead mounted in a control console or test panel, or hand held for use in servicing and fault finding to obtain pressure checks when required.

Test Point Plugs (HSP2000) installed in the hydraulic system allow connection and disconnection at full system pressure without loss of oil or ingress of dirt.

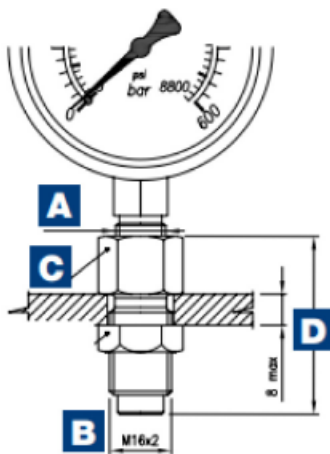
### Available features

- Ease of Use: The visual gauges allow the liquid level to be checked clearly at any time
- Electrically Safe: No electrical contact with fluid.
- Variability in Size: Multiple sizes and distances meet the needs for all customers and applications.

### HSP 3000 Series

- Conforms to ISO 15171-2 standards
- Max Working pressure: 9100 psi (630 BAR)
- Material/Coating: Steel, Zinc/Nickel Plated
- To suit 1/4" or 1/2" NPTF
- Designed for use with HSP6000, HSP2000, and MPG series pressure gauge

## Dimensions & Ordering Code



Part Number	A Thread	B Thread	C (A/F)	D	Max Panel Thickness
HSP3000-2NV	1/4" NPTF	M16 x 2	19 mm	51 mm / 2" 58 mm	8mm / 0.31"
HSP3000-4NV	1/2" NPTF	M16 x 2	27 mm	/ 2.28"	8mm / 0.31"

### Hose/Probe Testing Assembly

#### Hose Testing Kit

These Hose/Probe assemblies are designed to be complementary to and interchangeable with similar equipment from other manufacturers using ISO 15171-2 standards.

The Hose/Probe forms the link between the ISO 15171-2 hydraulic system Test Point Plugs and the Pressure Gauge/Adaptor assemblies, the whole arrangement being used to obtain random pressure checks during servicing and fault finding.

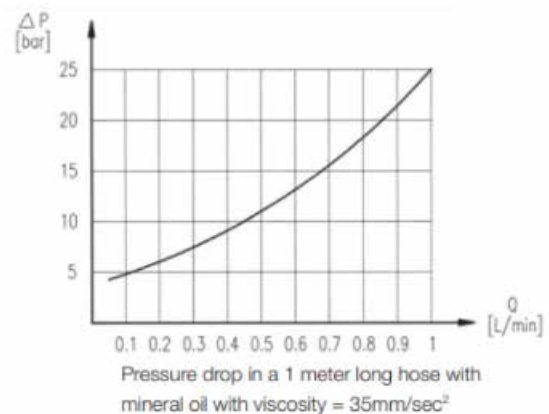
Probes may be connected and disconnected at full system pressure without fluid loss or ingress of dirt.

#### Available features

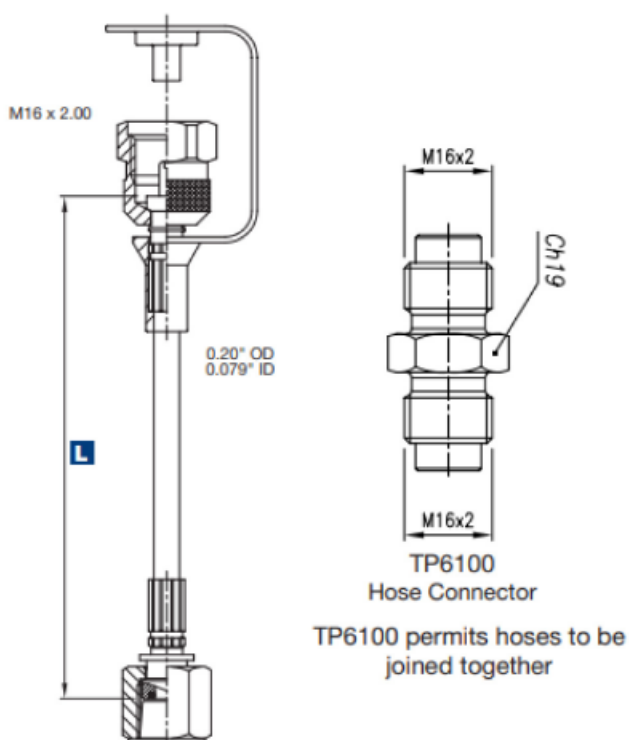
- Ease of Use: The visual gauges allow the liquid level to be checked clearly at any time
- Electrically Safe: No electrical contact with fluid.
- Variability in Size: Multiple sizes and distances meet the needs for all customers and applications.

#### HSP 6000 SERIES

- Working Pressure: 91000 PSI (630 BAR)
- Working Temperature: -20°C to 100°C  
-4°F to 212°F
- Temperature / 100% Working Pressure: -20°C to 50°C  
-4°F to 122°F
- Hose Material & Cover: Polyamide
- Material/Coating: Steel, Zinc/Nickel-Plated
- Nominal Bore (DN) (mm) DN2
- Inside Diameter: 2mm +/- 1mm
- Outside Diameter: 5mm +/- 1mm
- Weight per meter: 18g



## Dimensions & Ordering Code



Part Number	L Length
HSP6000-12	12" / 30.5 cm
HSP6000-24	24" / 61.0 cm
HSP6000-36	36" / 91.4 cm
HSP6000-48	48" / 122 cm
HSP6000-60	60" / 152 cm
HSP6000-72	72" / 183 cm
HSP6100	Hose Connector

# HSP690

## Technical data

### Fluid Sampling Kit

The equipment comprises a screw-on probe connected by a flexible hose to an adjustable flow control valve which allows steady state fluid samples to be extracted from the working system without having to disrupt your progress.

When used in conjunction with Test Point Plugs (HSP2000), the equipment facilitates the removal of fluid samples from selected points throughout a system without danger of extraneous contamination, even with the system at full working pressure and temperature.

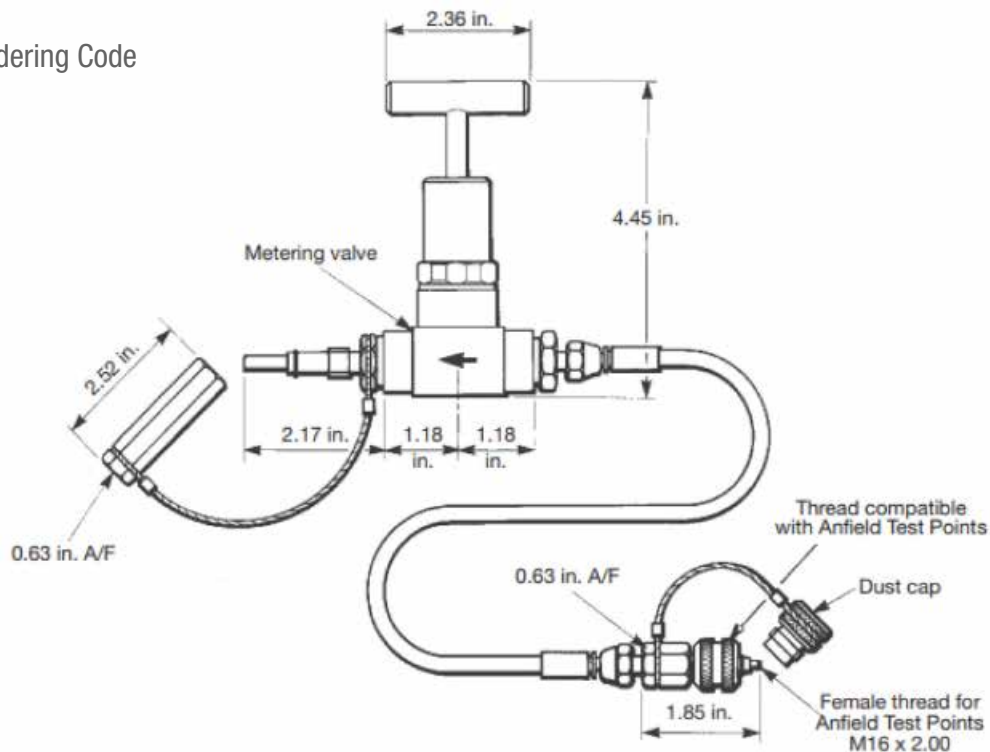
### Available features

- Ease of Use: The valve and hose allow for easy removal of fluid for sampling during operation
- Electrically Safe: No electrical contact with fluid.

### HSP690

- Designed for off-line bottle sampling
- Adjustable flow control for steady state samples
- Operates up to 6000 PSI (414 Bar) system pressure
- Viton Seals are standard: -20°C to 200°C  
-4° F to 392°F

## Dimensions & Ordering Code



Part Number	Length of Hose
HSP690-CMV	40" (1000 MM)



## Pressure Gauge Adaptor

This Direct Gauge Adaptor Probe is designed for use with Test Point Plugs (HSP2000) or with plugs of other manufacturers to ISO 15171-2 standard.

The probe can be attached to any one of a number of plugs installed throughout the hydraulic system to facilitate random pressure readings during servicing and fault finding.

Probes may be connected or disconnected at full system pressure without loss of oil or ingress of dirt

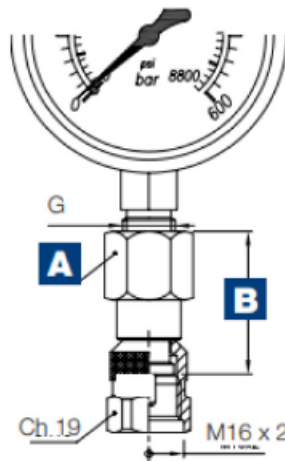
## Available features

- Ease of Use: The gauges allow the liquid pressure readings to be checked clearly at any time
- Electrically Safe: No electrical contact with fluid.
- Variability in Size: Multiple gauge thread sizes allows for variability of products that are compatible

## HSP 7000 SERIES

- Conforms to ISO 15171-2 standards
- Working pressure up to 9100 PSI (630 BAR)
- Material/Coating: Steel, Zinc/Nickel-Plated  
Stainless Steel AISI 316- DIN 14436 (Optional)
- For use with MPG Series 2-1/2" & 4" diameter glycerine filled pressure gauges
- Suitable for HSP2000 and HSP1014 Series test point plugs

## Dimensions & Ordering Code



Part Number	Gauge Thread	A (A/F)	B
HSP7000-2NV	1/4" NPTF	19 mm	1.34"
HSP7000-4SV	7/16" - 20 (SAE 4)	19 mm	1.34"
HSP7000-4NV	1/2" NPTF	19 mm	1.34"



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