

- Piston sensing system with soft sealing
- Leakage free
- Mechanical service life 10 millions of switching operations
- Micro switches UL approved
- Silver plated contacts in micro switch
- Basic model for flange mounting



Functional Description

Pressure switch consists of an aluminum housing, a piston, a prestressed spring and a microswitch. When the pressure corresponding with the spring setting is reached, the switch closes or opens the respective electric circuit.

The pressure switch is being supplied with a connector and with two bolts. When delivered with a sandwich plate, the switch can be turned around its length axes by 90°. The subplate can be ordered separately or with the switch.

Ordering Code

TS2 - -

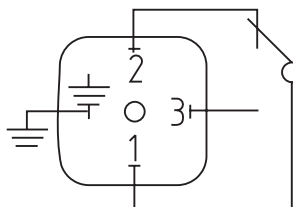
Pressure switch

Type of subplate

0 without subplate
1 subplate type DP3-TS2-1 G1/4
3 subplate type DP3-TS2-3 SAE 6

Pressure range

18 Adjustable pressure
73...2611 PSI (5 ... 180bar)
35 Adjustable pressure
725...5076 PSI (50...350 bar)



Switching function:
 One single-pole micro switch (change-over switch)
 The pressure increase closes contacts on terminals 1 - 3 and opens contacts on terminals 1 - 2

Technical Data			
Switching pressure ranges	PSI (bar)	73...2611 (5 ... 180)	725...5076 (50...350)
Switching pressure at the range beginning difference ca. ¹⁾ at the range end	PSI (bar)	116 (8) 230 (16)	87 (6) 360 (25)
Limit value ²⁾	PSI (bar)	3626 (250)	8702 (600)
Adjustable range (Falling pressure)	PSI (bar)	44...2321 (3 ... 160)	580...4351 (40 ... 300)
Adjustable range (Rising pressure)	PSI (bar)	73...2611 (5 ... 180)	725...5076 (50...350)
Max. Hysteresis (At the end of the range)	%	15	
Number of switching max.	1/min	60	
Material of the housing	Aluminium 230		
Materials in the sensing element	Stainless Steel, Turcon and NBR		
Viscosity range	SUS (mm ² /s)	up to 1000	
Repeatability	%	± 1 from range end value ³⁾	
Electrical connection	plug connector to DIN 43 650		
Switching element	micro switch		
Hydraulic fluid	Petroleum oils (HM, HL, HLP) Phosphate ester fluids (HFD-R)		
Ambient temperature range	F (°C)	-40 ... +176 (-40 ... +80)	
Max. temperature at the switching element	F (°C)	+176 (+80)	
Maximum degree of fluid contamination	Class 21/18/15 to ISO 4406 (1999).		
Max. vibration	Lbs (g)	0,033 (15)	
Mounting position	optional		
Weight	Lbs (kg)	0.772 (0.35)	

- 1) Operating data at 3.5 million switching operations.
- 2) Also short pressure peaks during the operation must not exceed this limit value.
Limit value corresponds with the max. testing pressure.
- 3) Related to pressure control at constant fluid and ambient conditions.

Electric Data of the Microswitch

Enclosure type	IP 65 (Connector DIN 43 650 A, Pg9)		
Voltage max.	V	250 AC	
Current max.	A	5	
Silver plated contacts			
Voltage		Inductive endurance	Resistance endurance
30 V		3,0 A	4,0 A
250 V		0,2 A	0,2 A
250 V~		2,0 A	3,0 A
125 V~		3,0 A	5,0 A

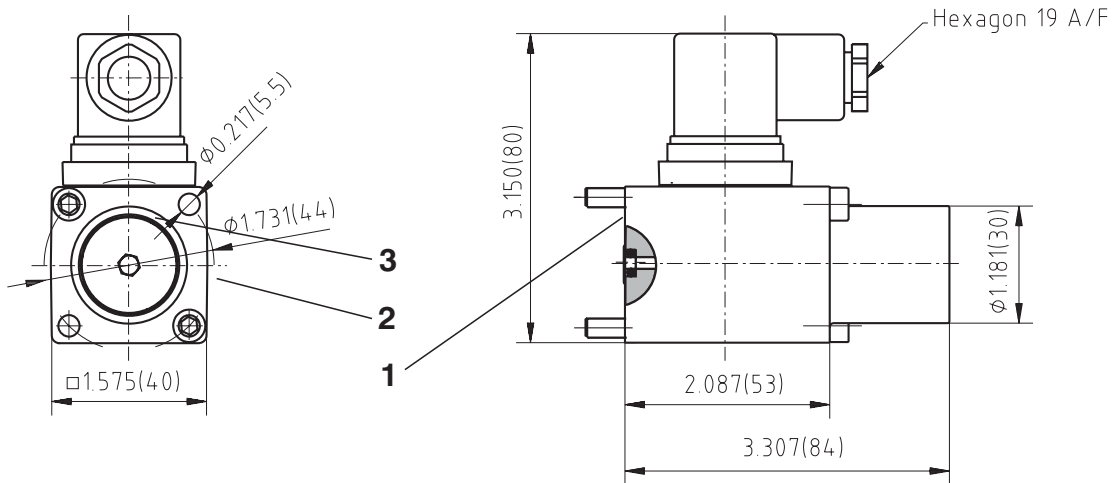
Minimum endurance 160 mA by 5 V DC

Pressure Switch Dimensions

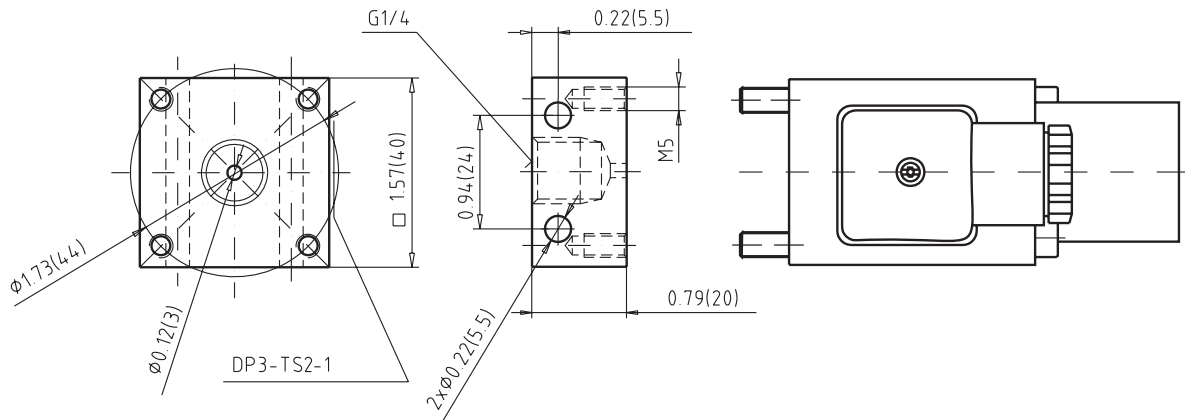
Dimensions in inches (millimetres)

Model TS2 - XX - 0

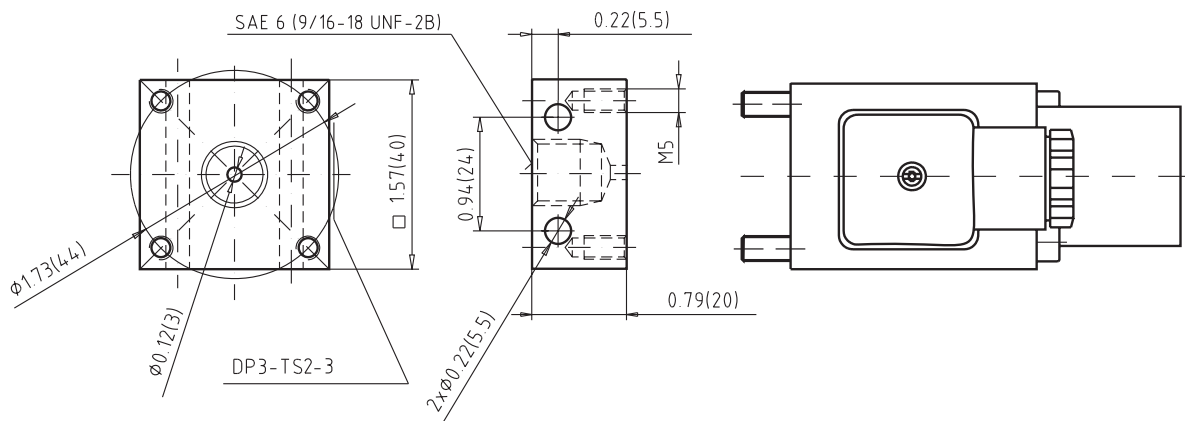
- 1a O-ring 8 x 1,5 - for adjustable pressure max 2611 PSI (180 bar) - supplied with each switch
- 1b O-ring 5 x 1,5 - for adjustable pressure max 5076 PSI (360 bar) - supplied with each switch
- 2 2 mounting bolts M5x60 (tightening torque 3.69 lbf.ft (5 Nm) supplied with each switch
- 3 Setting of the switch point (inside hexagon 5 mm)



Model TS2 - XX - 1



Model TS2 - XX - 3



Ordering Code of Sandwich Plates

MTS2 - /

Sandwich plate of the pressure switch

Valve size of the sandwich plate

D 03 (06 mm)
D 05 (10 mm)

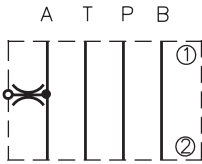
D 03 (06)
D 05 (10)

A
B
C
P

Model

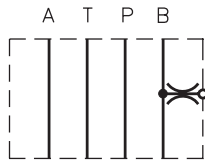
connection in port A
connection in port B
connections in ports A and B
connection in port P

Models of sandwich plates size 06



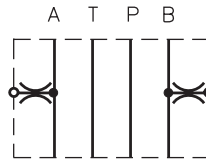
(A) (T) (P) (B)

MTS2-06/A



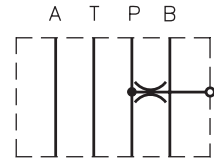
(A) (T) (P) (B)

MTS2-06/B



(A) (T) (P) (B)

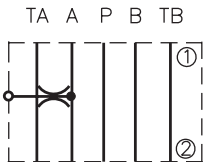
MTS2-06/C



(A) (T) (P) (B)

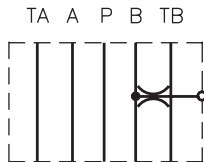
MTS2-06/P

Models of sandwich plates size 10



(TA)(A)(P)(B)(TB)

MTS2-10/A



(TA)(A)(P)(B)(TB)

MTS2-10/B



(TA)(A)(P)(B)(TB)

MTS2-10/C



(TA)(A)(P)(B)(TB)

MTS2-10/P

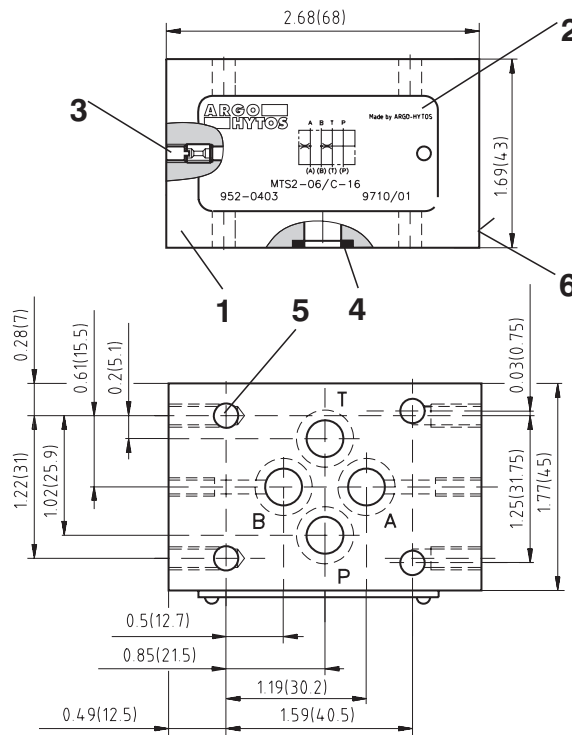
① valve side

② subplate side

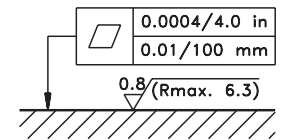
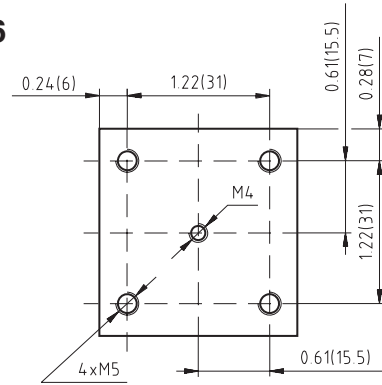
Sandwich Plate Dimensions

Dimensions in inches and (millimetres)

MTS2 - 06/C

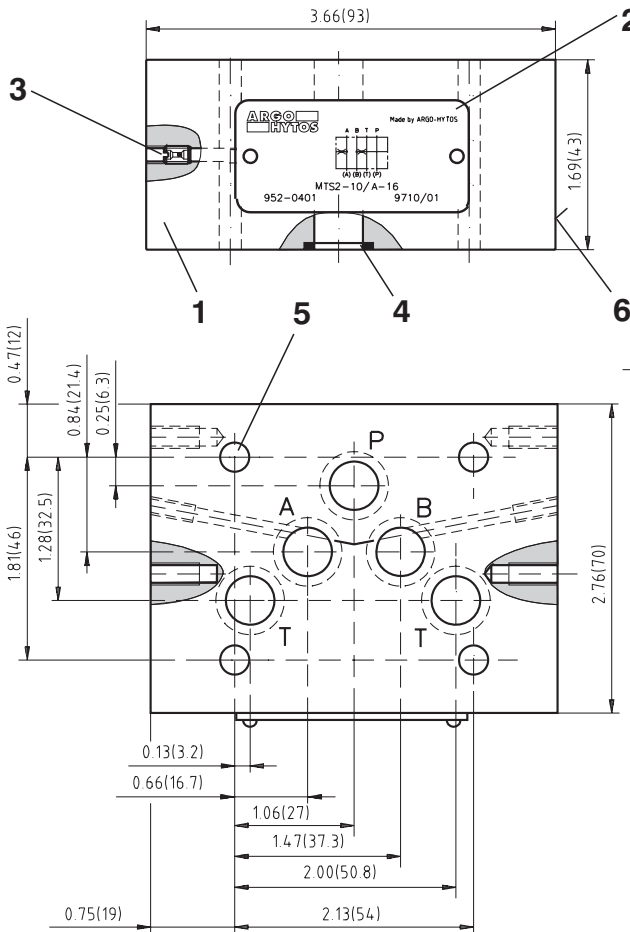


- 1 Sandwich plate
- 2 Name plate
- 3 Damping orifice M4xØ0.4
- 4 Square ring 9.25 x 1.68 (4 purchase) supplied with each plate
- 5 4 mounting holes
- 6 Mounting surface for TS

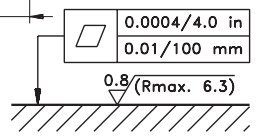
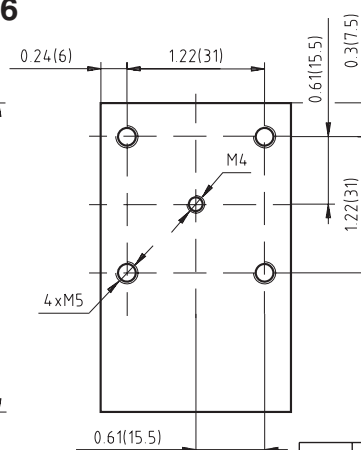


0.8 (Rmax. 6.3)
Required surface finish of interface

MTS2 - 10/C



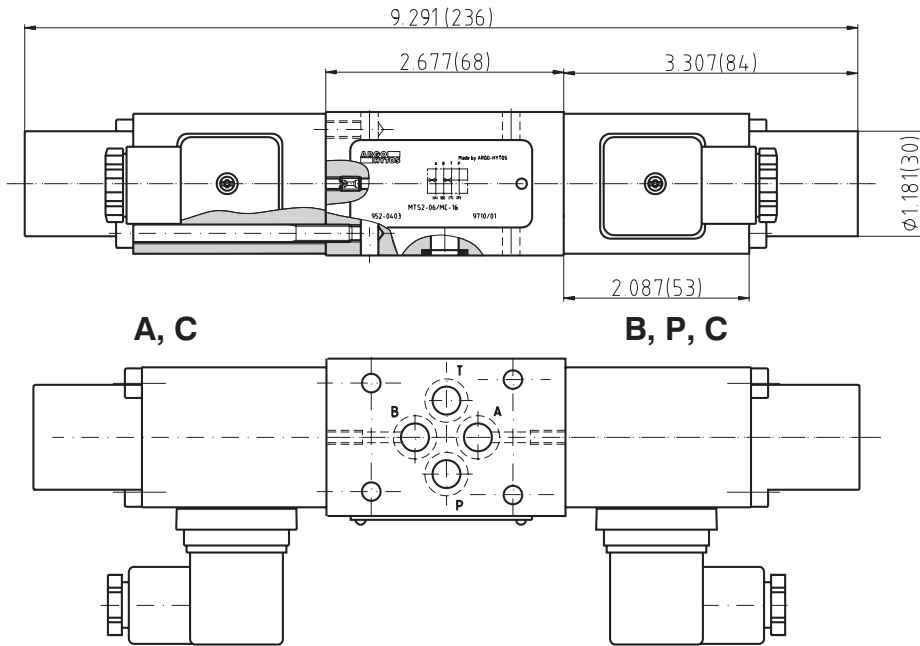
- 1 Sandwich plate
- 2 Name plate
- 3 Damping orifice M4xØ0.4
- 4 Square ring 12.42 x 1.68 (5 purchase) supplied with each plate
- 5 4 mounting holes
- 6 Mounting surface for TS



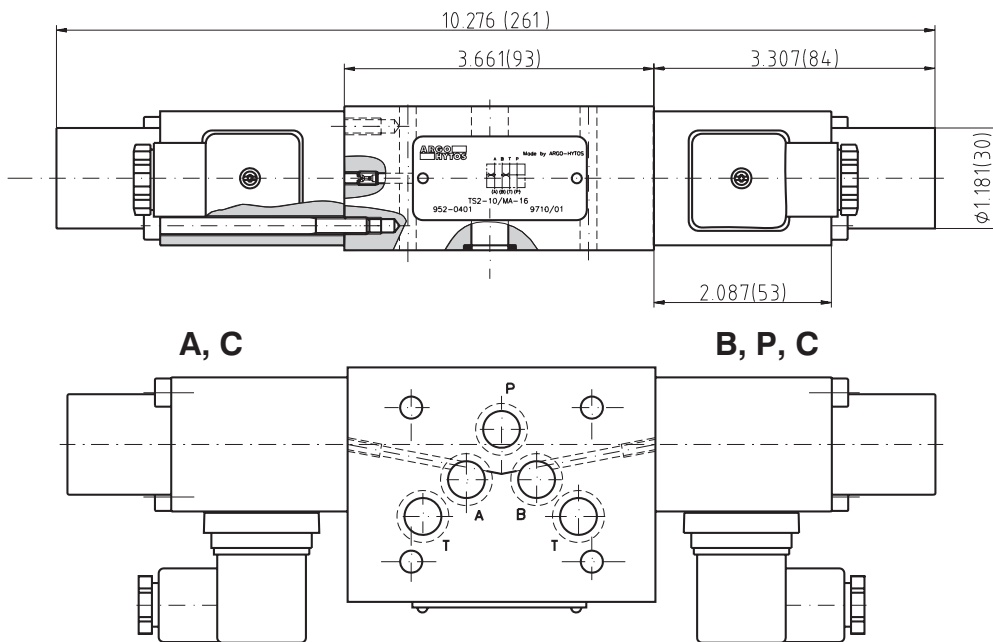
0.8 (Rmax. 6.3)
Required surface finish of interface

Mounting Instructions for MTS2

MTS2 - 06



MTS2 - 10



Caution!

- The plastic packaging is recyclable.
- Certified documentation is available per request.

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