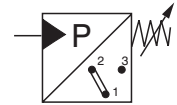


- Longer service life thanks to its piston design
- Flanged and screw connection construction
- Easy and lockable setting
- AC and DC power supply option
- Vertical grouping possibility with optionally ordered plate



## Functional Description

Pressure switches are used for switching hydraulic equipment's signalling or auxiliary circuits. The TS4 switch contacts are controlled by a piston on which front face acts the pressure of the working fluid. Using this design solution guarantees longer service life when compared to membrane switches as the result of possible loss of function due to the membrane's fatigue failure. Changeover contacts can be used for closing and opening the electric circuit. The required pressure is achieved by the hand control, secured in the selected

position by turning the internal hex on the front face of the controller. (Key included.)

The switches are supplied with a flange (DIN ISO 16873) and three M5 screws, or with a versatile screwed connection. Ordering the MTS vertical grouping plate of Size 06 or Size 10 gauge allows flanged lateral surface mounting of the pressure switch to pick-up pressure in one of the channels (A, B, P). The switch can be rotated at 90° steps during its mounting to the lateral wall of the plate.

The connector is not include in the scope of supply and must be ordered as a separate item

## Ordering Code

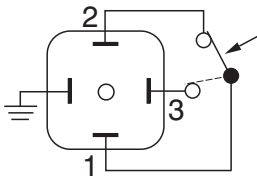
<b>TS4</b>	-	-	-	
<b>Pressure Switch</b>				
<b>Pressure range</b>				<b>Type</b>
up to 10 .... 160 bar (145 ... 2321 PSI)			<b>16</b>	with flange DIN ISO 16873 with internal thread G1/4
up to 20 .... 250 bar (290 ... 3626 PSI)			<b>25</b>	
up to 30 .... 320 bar (435 ... 4641 PSI)			<b>32</b>	
			<b>0</b>	
			<b>1</b>	

Other pressure stages and connection threads available on request.

## Technical Data

Pressure value setting range after closing	bar (PSI)	10 ...160 (145 ... 2321)	20 ... 250 (290 ... 3626)	30 ... 320 (435 ... 4641)
Working fluid maximum pressure	bar (PSI)	350 (5076)		
Connecting dimensions		see Ordering Code		
Hydraulic fluid		Hydraulic oils of power classes (HL, HLP) to DIN 51524		
Maximum degree of fluid contamination		Class 21/18/15 according to ISO 4406		
Fluid temperature range	°C (°F)	+80 (176)		
Ambient temperature	°C (°F)	-10 ...+ 80 ( 14 ...176 )		
Working fluid viscosity range	mm <sup>2</sup> / s	20 to 100 (allowable range 12 to 500)		
Frequency of switching maximum	min <sup>-1</sup>	100		
Repeatability values at closing	%	± 0,2 % of the measurement range		
Hysteresis after contacts' opening		see Characteristics		
Body material		Die-cast alloy Zn		
Sealing material		PTFE dynamic / NBR static		
Vibration resistance		10 g (10 ... 2000 Hz)		
Shock resistance		30 g (0.066 lbs)		
Electrical connection		Connector EN 175301-803-A (not included in supply)		
Power supply:	category AC 12 VDE 0660 category AC 14 VDE 0660 category DC 12 VDE 0660 category DC 14 VDE 0660	4 A / 250 VAC 1 A / 250 VAC 3 A / 28 VDC 4 A / 28 VDC		
Enclosure type to EN 60 529		IP 65		
Service life		> 6 mil. switchings		
Mounting position		unrestricted		
Weight	kg (lb)	0,325 (0.716)		

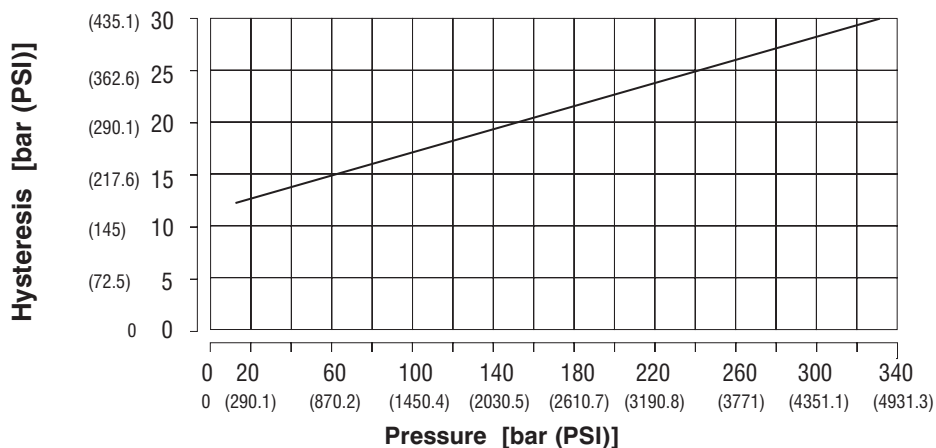
## Electrical connection



### Switching functions:

with the growing pressure the changeover switch opens the circuit of 1 – 2 terminals and closes the circuit of 1 – 3 terminals

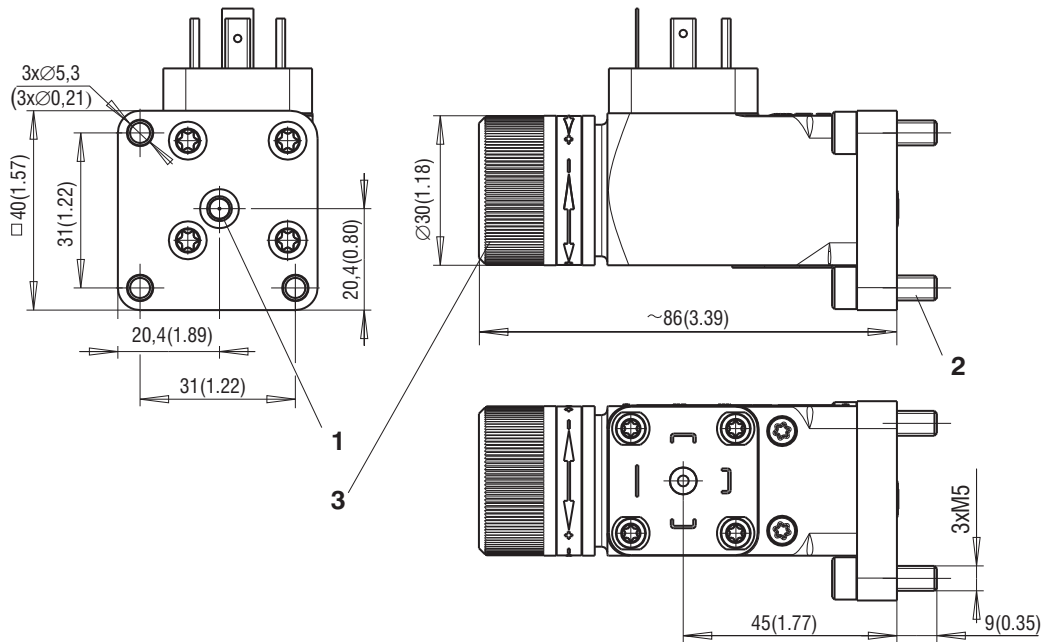
## Hysteresis after contacts' opening



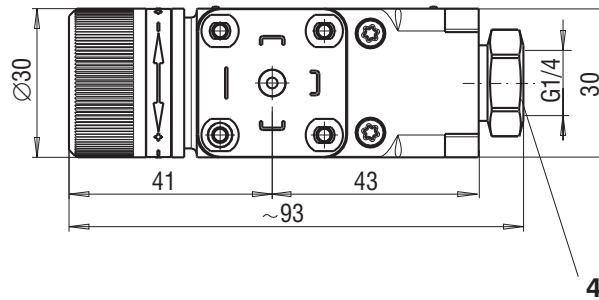
# Pressure Switch Dimensions

Dimensions millimetres (inches)

## Type TS4-xx-0 ( with flange DIN ISO 16 873)



## Type TS4-xx-1



- 1 O-ring 5 x 1,5 - supplied with each switch
- 2 3 pcs. mounting bolts M5x18 (tightening torque 5 Nm(1.124lbf))
- 3 Adjustment element - hand knob
- 4 Internal thread connection - G1/4

# Ordering Code of Sandwich Plates

MTS -  /

Sandwich plate of the pressure switch

Nominal size of the sandwich plate

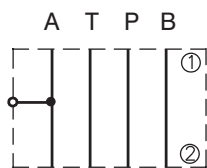
06  
10

06  
10

A  
B  
C  
P

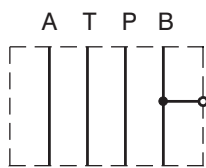
**Type**  
connection in port A  
connection in port B  
connections in ports A and B  
connection in port P

## Types of sandwich plates size 06



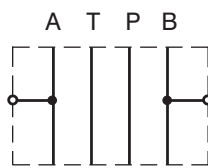
(A) (T) (P) (B)

MTS-06/A



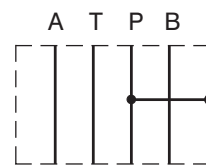
(A) (T) (P) (B)

MTS-06/B



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

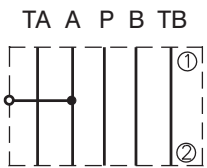
MTS-06/C



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

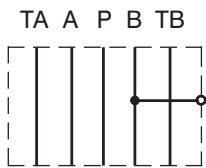
MTS-06/P

## Types of sandwich plates size 10



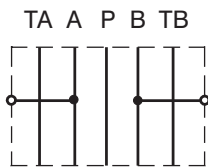
(TA)(A)(P)(B)(TB)

MTS-10/A



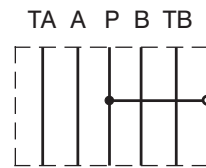
(TA)(A)(P)(B)(TB)

MTS-10/B



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

MTS-10/C



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

MTS-10/P

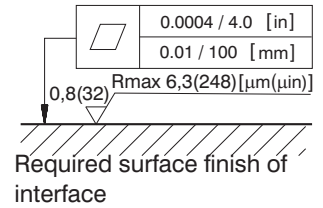
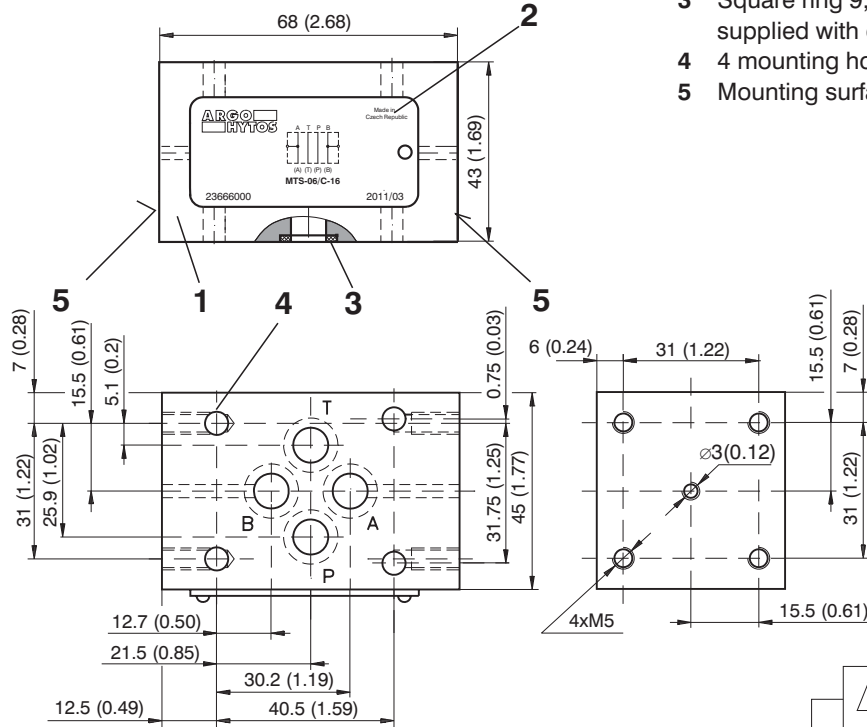
- ① valve side
- ② subplate side

# Sandwich Plate Dimensions

Dimensions in millimetres (inches)

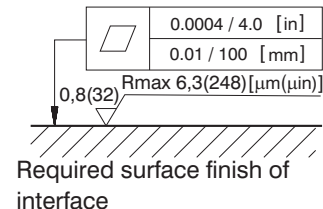
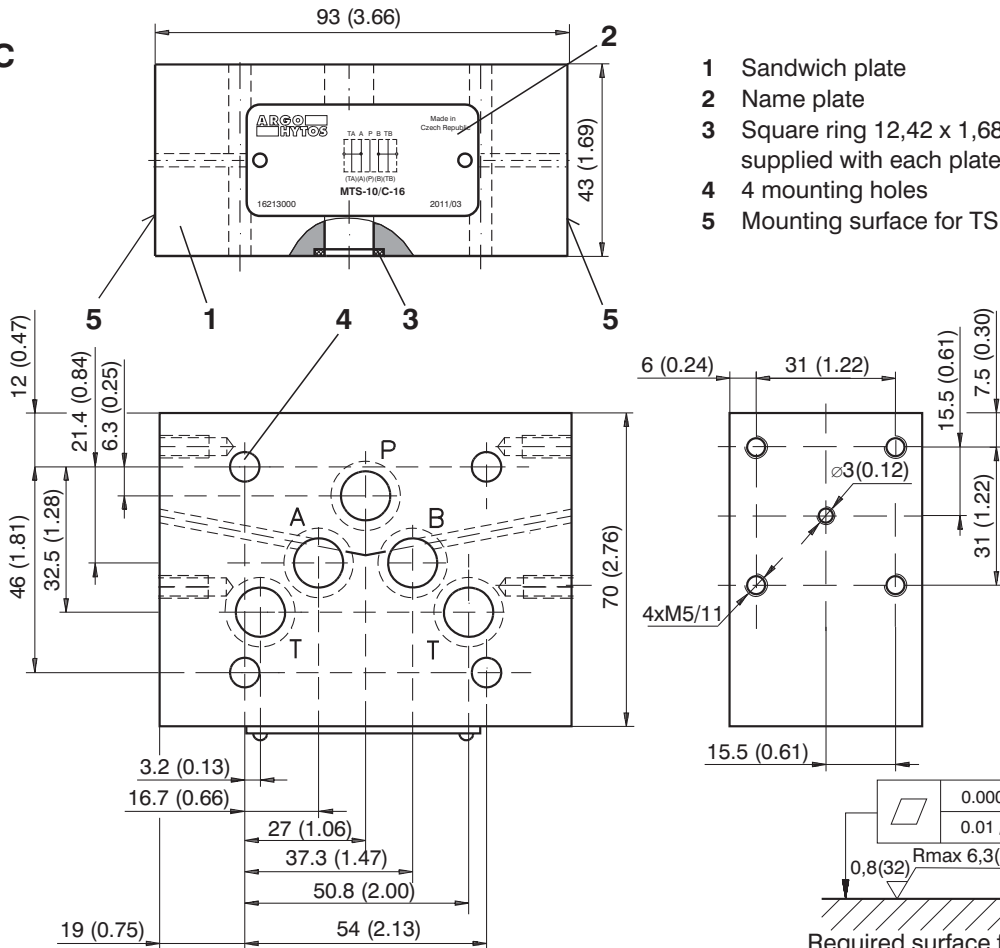
## MTS - 06/C

- 1 Sandwich plate
- 2 Name plate
- 3 Square ring 9,25 x 1,68 (4 purchase) supplied with each plate
- 4 4 mounting holes
- 5 Mounting surface for TS



## MTS - 10/C

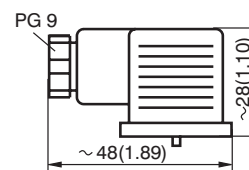
- 1 Sandwich plate
- 2 Name plate
- 3 Square ring 12,42 x 1,68 (5 purchase) supplied with each plate
- 4 4 mounting holes
- 5 Mounting surface for TS



## Accessories

### Connectors EN 175301-803-A

Type	Solenoid connections	Ordering Number
Connector	Standard	28787900



## Caution

- The packing foil is recyclable.
- The technical information regarding the product presented in this catalogue is for descriptive purposes only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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