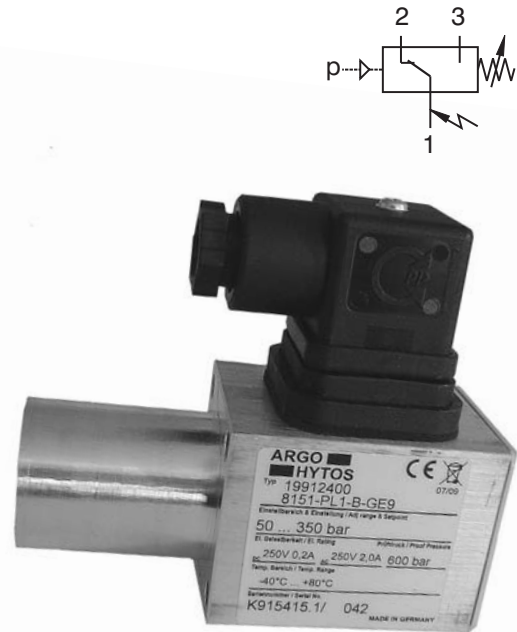


- Piston sensing system with soft sealing
- Leakage free
- Mechanical service life 10 millions of switching operations
- Micro switches UL and approved
- Silver plated contacts in micro switch
- Basic model for flange mounting



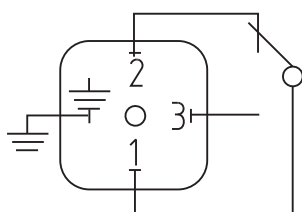
Functional Description

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

TS3	-	□	-	□	-	□
Pressure Switch						no designation without connector K1 with connector
		Pressure range				Type of subplate
		Adjustable pressure 5... 180 bar (73...2611 PSI)	18			without subplate
		Adjustable pressure 50... 350 bar (725...5076 PSI)	35			subplate type DP3-TS2-1 G1/4
						subplate type DP3-TS2-3 SAE 6



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	bar (PSI)	5 ... 180 (73...2611)	50...350 (725...5076)
Switching pressure at the range beginning difference ca. ¹⁾ at the range end	bar (PSI)	8 (116) 16 (230)	6 (87) 25 (360)
Limit value ²⁾	bar (PSI)	250 (3626)	600 (8702)
Adjustable range (Falling pressure)	bar (PSI)	3 ... 160 (44...2321)	40 ... 300 (580...4351)
Adjustable range (Rising pressure)	bar (PSI)	5 ... 180 (73...2611)	50 ... 350 (725...5076)
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	mm ² /s (SUS)	up to 1000	
Repeatability	%	± 1 from range end value ³⁾	
Enclosure type to EN 60529	IP 65		
Switching element	micro switch		
Hydraulic fluid	Hydraulic oils of power classes (HL, HLP) to DIN 51524 (Petroleum oils (HM,HL,HPL); Phosphate ester fluids(HDF-R))		
Ambient temperature range	°C (°F)	-40 ... +80 (-40...176)	
Max. temperature at the switching element	°C (°F)	+80 (176)	
Maximum degree of fluid contamination	Class 21/18/15 to ISO 4406 (1999).		
Max. vibration	g (Lbs)	15 (0.033)	
Mounting position	optional		
Weight	kg (Lbs)	0.350 (0.772)	

- 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 EN 60529 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	

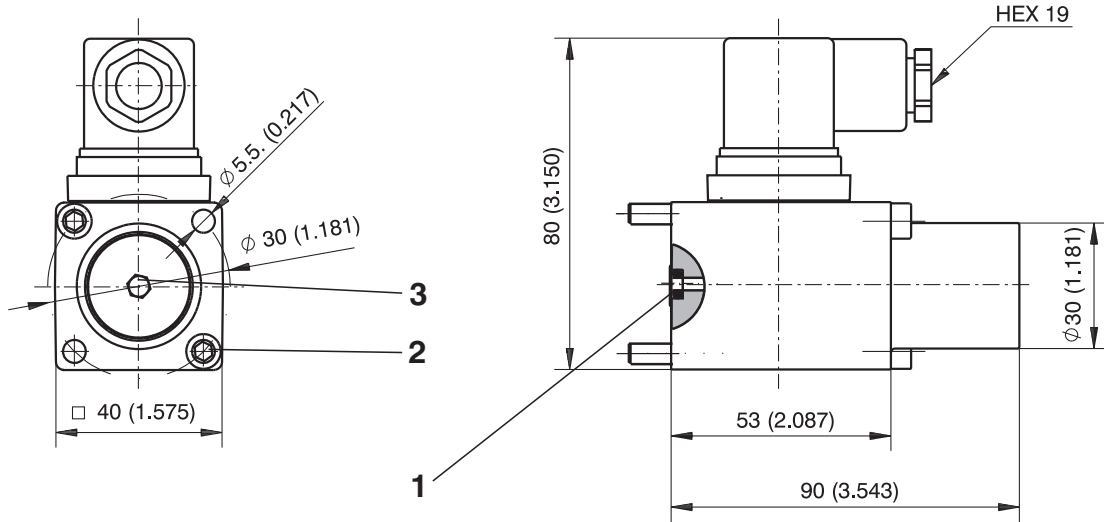
Minimum endurance 160 mA by 5 V DC

Pressure Switch Dimensions

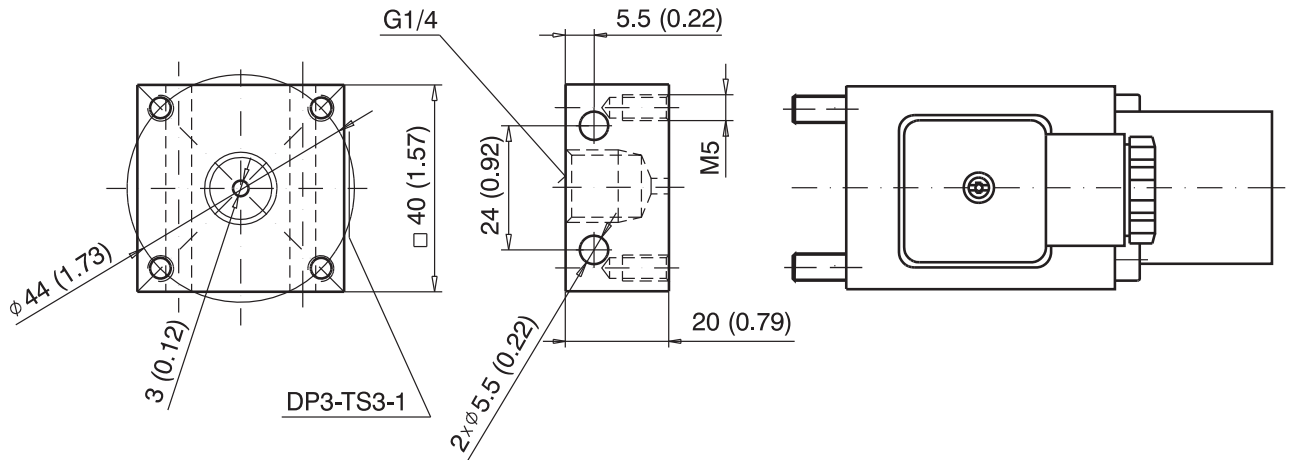
Dimensions in millimetres

Model TS3 - XX - 0

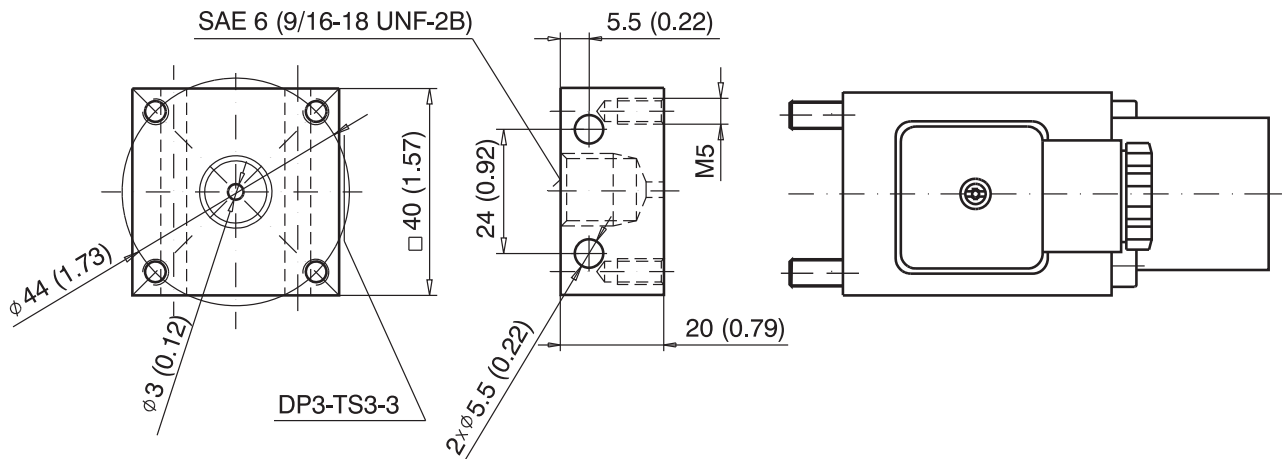
- 1a O-ring 8 x 1,5 - for adjustable pressure max 180 bar - supplied with each switch
- 1b O-ring 5 x 1,5 - for adjustable pressure max 360 bar - supplied with each switch
- 2 2 mounting bolts M5x60 (tightening torque 5 Nm) supplied with each switch
- 3 Setting of the switch point (inside HEX 5)



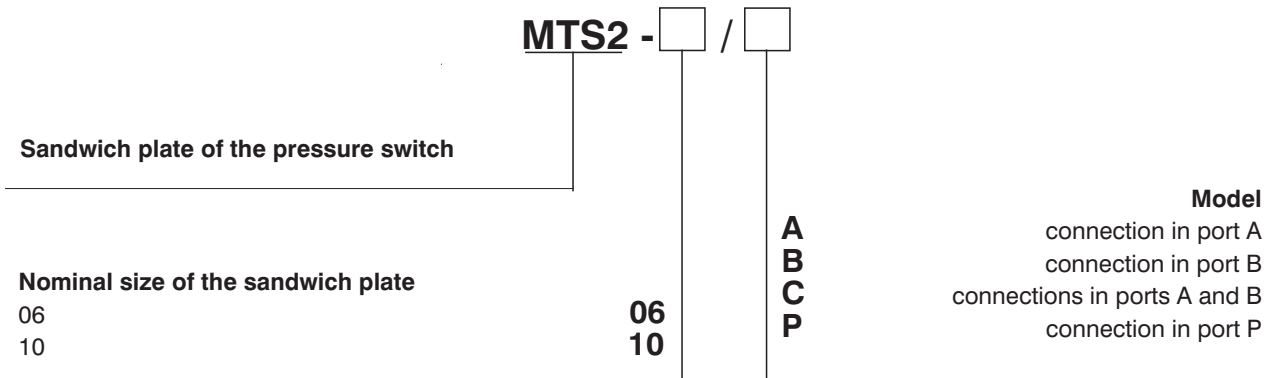
Model TS3 - XX - 1



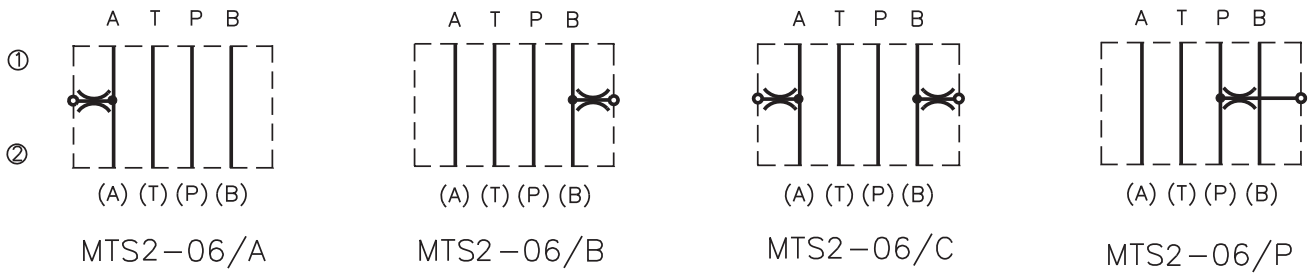
Model TS3 - XX - 3



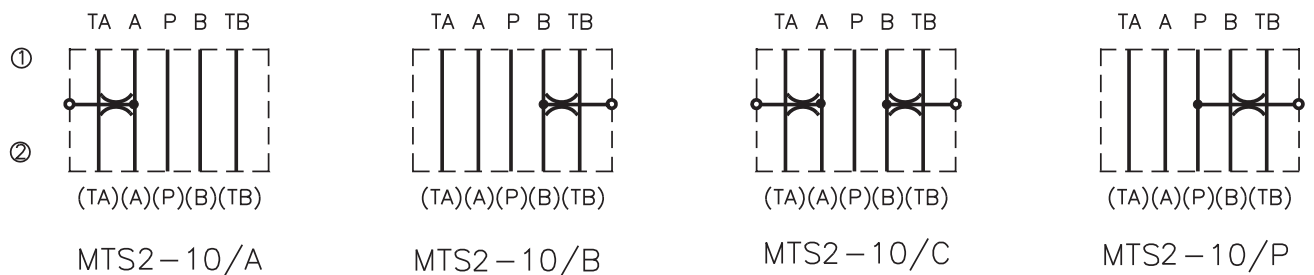
Ordering Code of Sandwich Plates



Models of sandwich plates size 06



Models of sandwich plates size 10

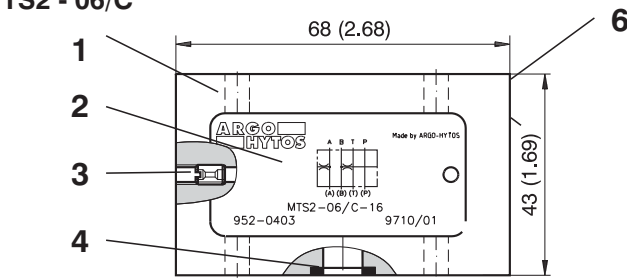


① valve side
② subplate side

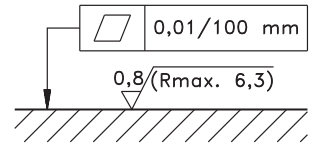
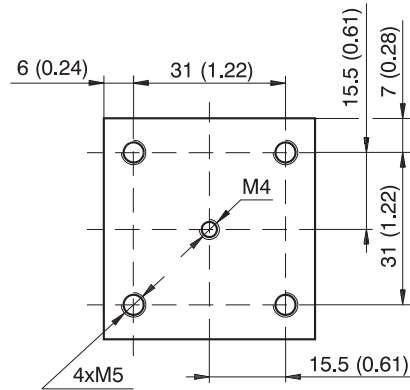
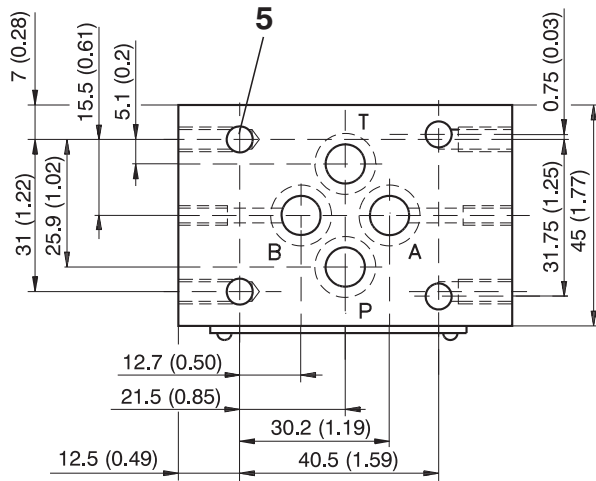
Sandwich Plate Dimensions

Dimensions in millimetres

MTS2 - 06/C

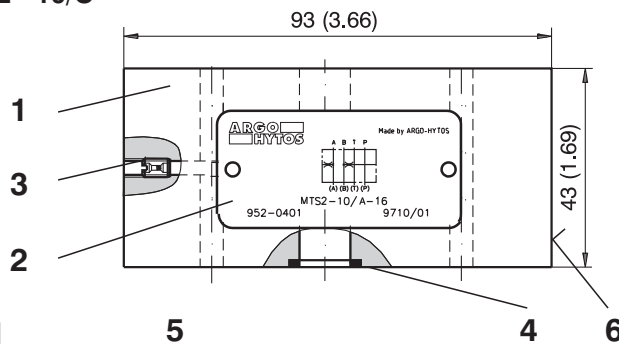


- 1 Sandwich plate
- 2 Name plate
- 3 Damping orifice M4xØ0.4
- 4 Square ring 9.25 x 1.68 (4 purchase) supplied with each plate
- 5 4 mounting holes
- 6 Mounting surface for TS

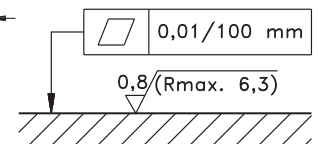
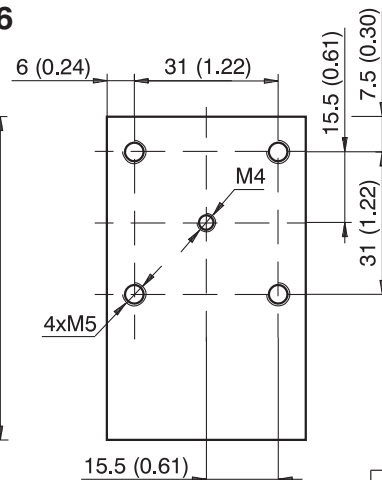
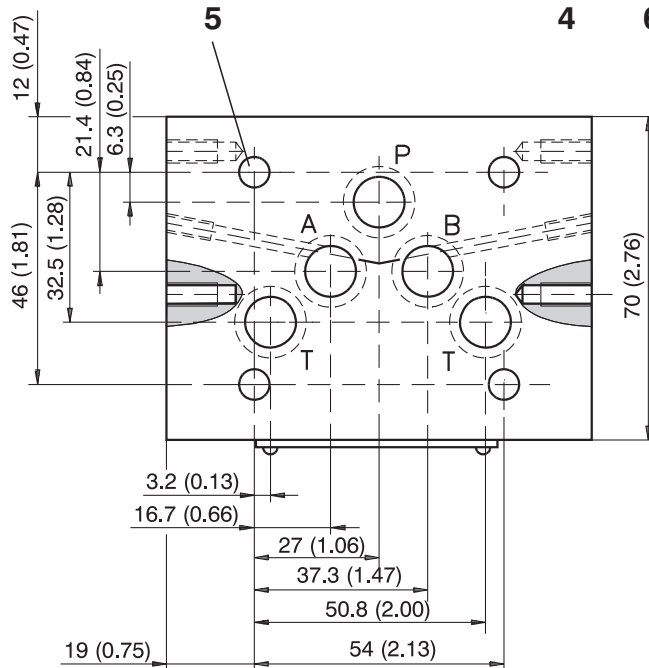


Required surface finish of interface

MTS2 - 10/C



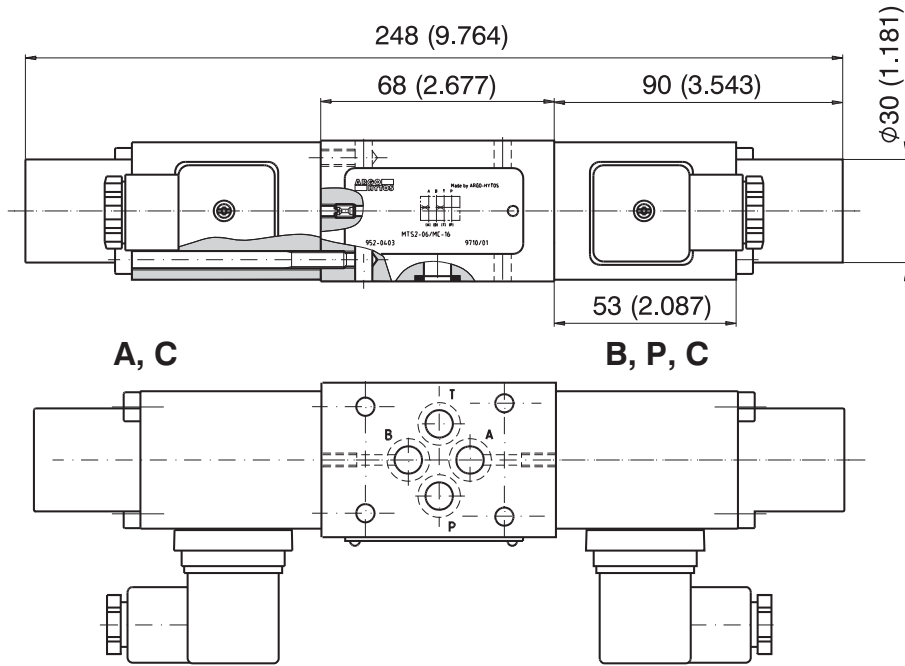
- 1 Sandwich plate
- 2 Name plate
- 3 Damping orifice M4xØ0.4
- 4 Square ring 12.42 x 1.68 (5 purchase) supplied with each plate
- 5 4 mounting holes
- 6 Mounting surface for TS



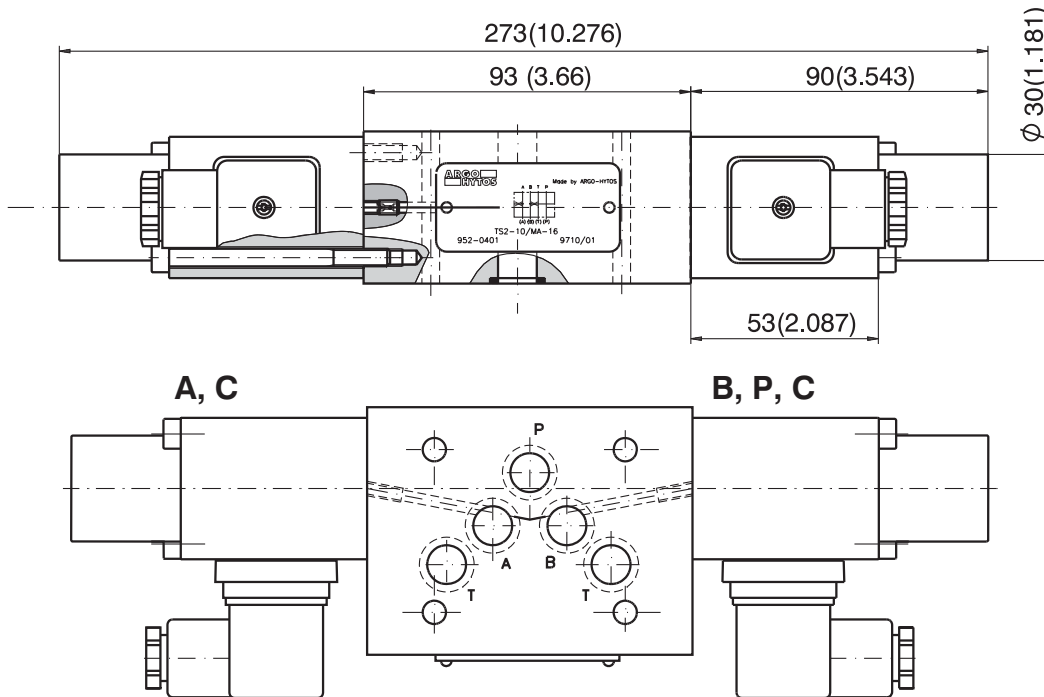
Required surface finish of interface

Mounting Instructions for MTS2

MTS2 - 06



MTS2 - 10



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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