

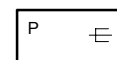
DSU: Pressure transducer

For converting the pressure (relative to the atmosphere) in liquids, gases and vapours into a proportional standard signal of 0(2)...10 V or 0(4)...20 mA.

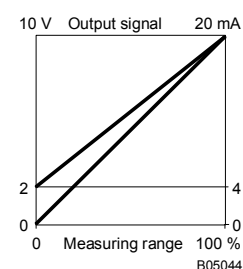
Compact light-metal housing; for mounting either onto walls or directly onto the pipe; transparent, impact-proof, thermoplastic cover; senses the pressure by means of a bourdon tube and an inductive path sensor (using SMD electronics); choice of output signals by means of a DIP switch; pressure connection G $\frac{1}{2}$ A, male thread. Housing-mounted plug with cable connector (included in delivery). Protected against physical contact; for flexible cable of 6 - 10 mm external diameter.



T05300



Y05043



Type	Measuring range bar	Max. sensor values bar	°C	Weight kg
Brass pressure sensor for non-aggressive media				
DSU 101 F001	0...1.0	1.5	70	0.6
DSU 103 F001	0...2.5	4	70	0.6
DSU 106 F001	0...6.0	10	70	0.6
DSU 110 F001	0...10	16	70	0.6
DSU 116 F001	0...16	25	70	0.6
DSU 125 F001	0...25	40	70	0.6
Stainless-steel pressure sensor for aggressive media				
DSU 201 F001	0...1.0	1.5	110	0.6
DSU 203 F001	0...2.5	4	110	0.6
DSU 206 F001	0...6.0	10	110	0.6
DSU 210 F001	0...10	16	110	0.6
DSU 216 F001	0...16	25	110	0.6
DSU 225 F001	0...25	40	110	0.6

Power supply 24 V \sim /=	\pm 20%, 50...60 Hz	Perm. ambient temp.	-20...70 °C
Power consumption	approx. 1 VA	Degree of protection	IP 65 (EN 60529)
Output signal ¹⁾	0...10 V, load > 500 Ω	Protection class	III (EN 61140)
switchable to	2...10 V, load > 500 Ω	Wiring diagram	A05045
Linearity	approx. 1%	Dimension drawing	M05046
Hysteresis	approx. 1%	Fitting instructions	MV 505364
Temperature coefficient	\sim 0.03%/K		
Permissible vacuum loading	-1.0 bar		
Type 101; 103; 106	-0.7 bar		
Type 201; 203; 206	-0.7 bar		

Accessories

- 0035465 000** Brass throttle screw for damping pressure surges
- 0214120 000** Stainless-steel throttle screw for damping pressure surges
- 0192700 000*** 1 m of copper capillary tubing for damping pressure surges
- 0114467 000*** 1 m of stainless-steel capillary tubing for damping pressure surges
- 0192222 000*** Cap nut with solder connector
- 0311572 000*** Brass screw fitting for copper tubing of \varnothing 6 mm
- 0259239 000*** Brass reduction piece G $\frac{1}{2}$ onto 7 $\frac{1}{2}$ " 20 UNF-2A for copper tubing of \varnothing 6 mm
- 0259983 000*** Fixing bracket for rail mounting: C-rail EN-50022-C20 and C30
- 0296936 000*** Fixing bracket for rail: top-hat rail EN 50022, 35 \times 7,5 or 35 \times 15
- 0259984 000*** Bracket for 3-point fixing
- 0292018 001*** Damping screw for damping pressure surges in low-viscosity media

*) Dimension drawing or wiring diagram are available under the same number

- 1) At a load of < 500 Ω , the transducer switches automatically to 0...20 mA (or 4...20 mA).
Factory setting is 0...10 V. Output is protected against short circuits and over-voltage up to 24 V \sim .

Operation

The pressure in the sensor acts on a bourdon tube, thereby producing a force on the conversion spring. The resultant movement is converted into a standard electrical signal by an inductive distance sensor. The output signal rises in proportion to the pressure.

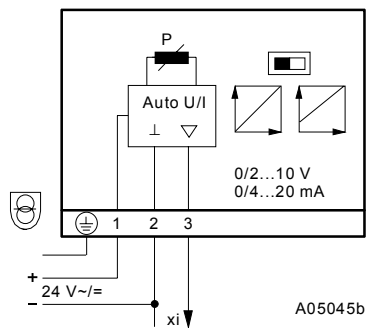
Additional details

Materials which come into contact with the medium are:
 brass, stainless steel and the seal's nitrile rubber (on the brass pressure sensor);
 stainless steel (on the stainless-steel sensor) material no. 1.4104 and 1.4541.
 To protect the DSU with a fuse, a fuse of at least 250 mA/250 V should be used.

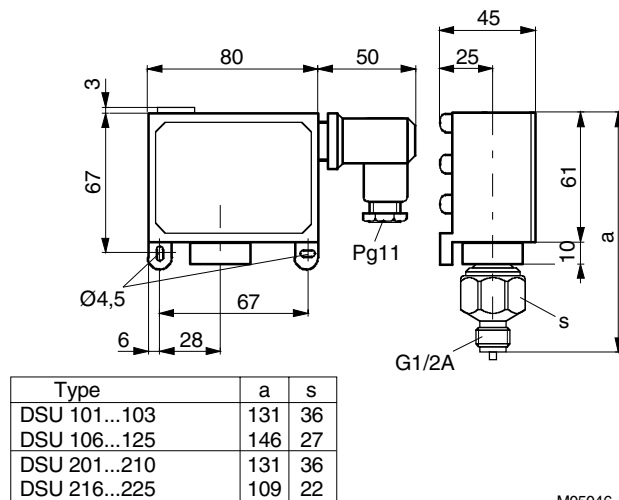
Additional technical data

Complies with:-	
EMC directive 89/336/EEC	EN 61000-6-1/ EN 61000-6-2 EN 61000-6-3/ EN 61000-6-4
Covered by Art. 3.3. of the PED without safety function	

Wiring diagram



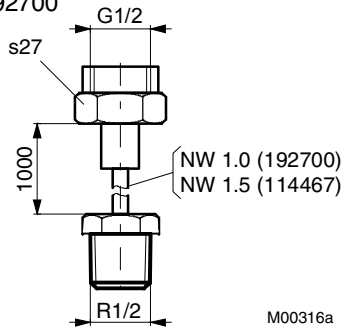
Dimension drawing



M05046

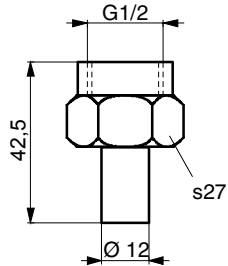
Accessories

114467
192700



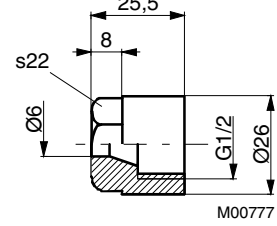
M00316a

192222



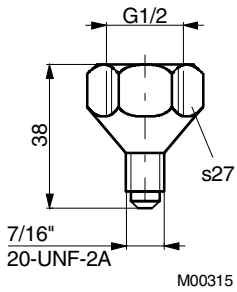
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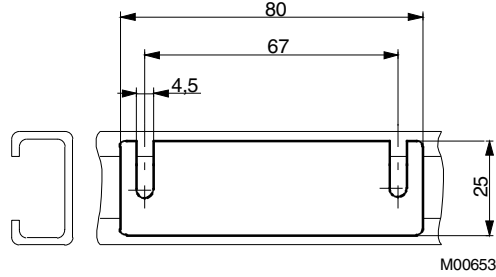
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259239



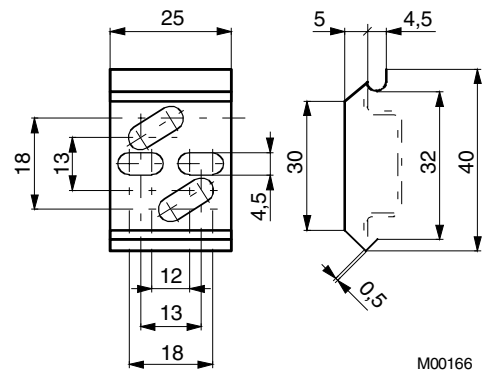
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259983



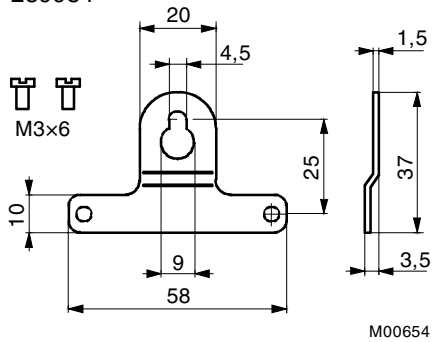
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296936



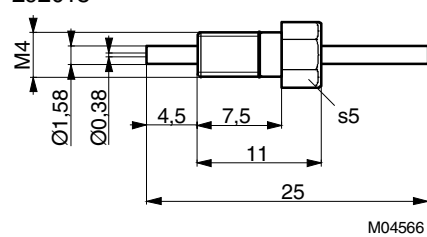
M00166

259984



M00654

292018



M04566