



DS 400

Intelligent Electronic Pressure Switch Stainless Steel

Stainless Steel Sensor

accuracy according to IEC 60770:
standard: 0.35 % FSO
option: 0.25 % FSO

Nominal pressure

from 0 ... 100 mbar up to 0 ... 600 bar

Contacts

1 or 2 independent PNP contacts,
freely configurable

Analogue output

2-wire: 4 ... 20 mA
3-wire: 4 ... 20 mA / 0 ... 10 V
others on request

Special characteristics

- ▶ indication of measured values on a 4-digit LED display
- ▶ rotatable and configurable display module

Optional versions

- ▶ **IS-version**
Ex ia = intrinsically safe
for gases and dust
- ▶ pressure sensor welded
- ▶ customer specific versions




The electronic pressure switch DS 400 is the successful combination of

- ▶ intelligent pressure switch
- ▶ digital display

and has been specially designed for numerous applications in various industrial sectors.

As standard the DS 400 offers a PNP contact and a display module, which is mounted rotatable in the ball housing. Additional optional versions like e.g. an intrinsically safe version, a second contact and an analogue output complete the profile.

Preferred areas of use are

-  Plant and Machine Engineering
-  Heating and Air Conditioning
-  Environmental Engineering
(water – sewage – recycling)



DS 400

Electronic Pressure Switch

Technical Data

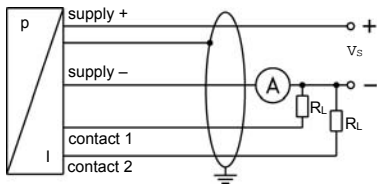
Miscellaneous	
Display	4-digit, 7-segment-LED display, visible range 37.2 x 11 mm; digit height 10 mm, range of indication -1999 ... +9999; accuracy 0.1 % ± 1 digit; digital damping 0.3 ... 30 sec (programmable); measured value update 0.0 ... 10 sec (programmable)
Current consumption (without contacts)	2-wire signal output current: max. 25 mA 3-wire signal output current: approx. 30 mA + signal current 3-wire signal output voltage: approx. 30 mA
Ingress protection	IP 67
Installation position	any 6
Weight	approx. 400 g
Operational life	> 100 x 10 ⁶ cycles
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) 7
ATEX Directive	2014/34/EU

⁶ Pressure switches are calibrated in a vertical position with the pressure connection down. If this position is changed on installation there can be slight deviation in the zero point for pressure ranges $P_N \leq 1$ bar.

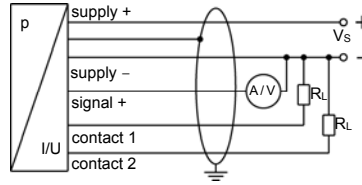
⁷ This directive is only valid for devices with maximum permissible overpressure > 200 bar

Wiring diagrams

2-wire-system (current)



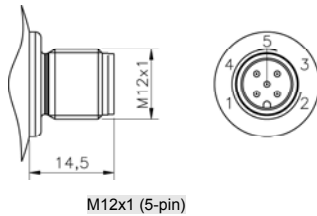
3-wire-system (current / voltage)



Pin configuration

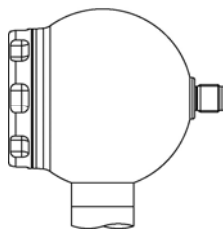
Electrical connection	M12x1 metal (5-pin)
Supply +	1
Supply -	3
Signal + (only 3-wire)	2
Contact 1	4
Contact 2	5
Shield	plug housing / pressure port

Electrical connection (dimensions in mm)

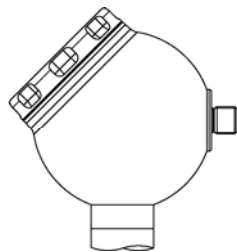


M12x1 (5-pin)

Designs ⁸



side display

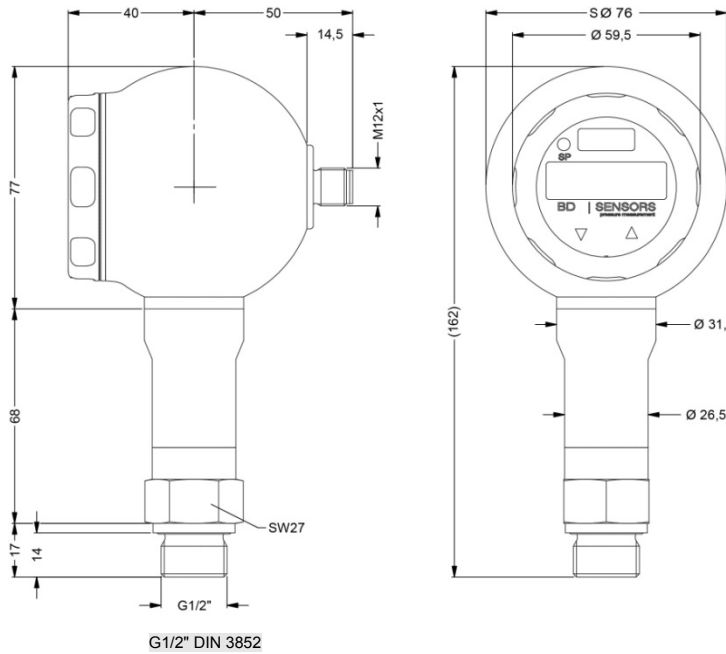


45° display (on request)

⁸ all designs in horizontal rotatable housing as standard

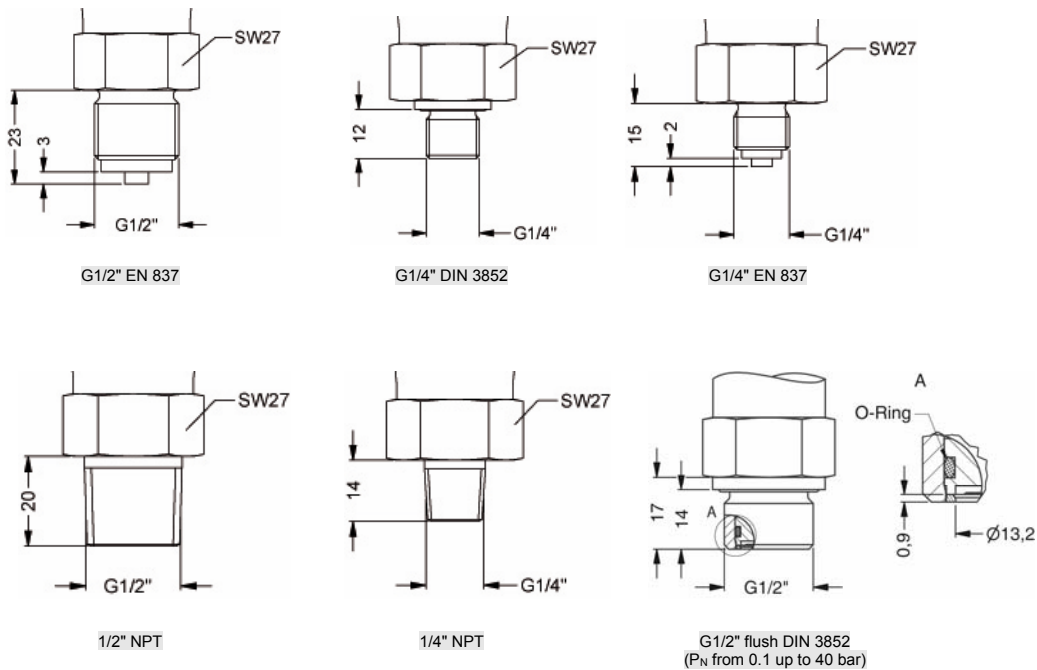
Mechanical connections (dimensions in mm)

standard



⇒ for nominal pressure $P_N > 400$ bar increases the length of devices without IS-version by 19 mm and of devices with IS-version by 39 mm

optionally



⇒ metric threads and other versions on request

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