60S Pneumatic/Allfluid/Hydraulic - Pressure Sensor

- > -1 ... 400 bar in different pressure ranges
- > Port size G1/4
- > Robust pressure sensor for pneumatic, allfluid & hydraulic applications
- > Wide temperature range
- > Excellent long life
- > Suitable for harsh industrial environments
- > High over pressure resistance
- > UL listed

Technical features

Medium:
For neutral and aggressive, gaseous and liquid fluids
Pressure range:
-1 ... 10 bar (-14.5 ... 145 psi)
0 ... 6 bar (0 ... 87 psi)
0 ... 10 bar (0 ... 145 psi)
0 ... 16 bar (0 ... 230 psi)
0 ... 25 bar (0 ... 360 psi)
0 ... 100 bar (0 ... 1450 psi)
0 ... 250 bar (0 ... 3625 psi)
0 ... 400 bar (0 ... 5800 psi
Pressure-type:
Relative pressure, Vacuum
Mounting position:
Optional
Process connection:
G1/4 external

Accuracy/Deviation:
Repeatability:
< ± 0,05 % (Temp.-fluctuation < 10 K)
Characteristics deviation:
< ± 0,5 % (linearity incl. hysteresis and repeatability, limit value)
Linearity deviation:
< ± 0,1 % (BFSL) - best fit straight line / < ± 0,2 (LS) - limit value setting
Hysteresis deviation:
< ± 0,2 %
Long-term stability:
< ± 0,1 % (per 6 months)
Shock resistance:
50 g, (11ms), DIN EN 60068-2-27
Vibration resistance:
20 g, 10 ... 2000 Hz, DIN EN 60068-2-6
Protection:
IP67, IP69K, DIN EN 60529

Tightening torque:
25 ... 35 Nm (depends on lubrication, seal and pressure rating)
Weight:
0,059 kg (0.13 lbs)
Ambient/Medium-temperature:
Ambient:
-40 ... +90°C (-40 ... +194°F)
Medium:
-40 ... +90°C (-40 ... +194°F)
Air supply must be dry enough to avoid ice formation at temperature below +2°C (+35°F)

Materials:
Housing:
Stainless steel (1.4404/316L) & (1.4542/17-4PH/630); PEI
Wetted parts:
Stainless steel 1.4542/17-4PH/630)
Connection seal:
FKM

Electrical parameters

Electrical connection:
M12 x 1 (contacts gold plated)
Power supply:
UB = 8,5 ...36 VDC
Reverse-polarity protected, (acc. EN 50178 SELV/PELV)

Analogue output current:
4 ... 20 mA
Output signal:
1 x Analogue signal
Power-on delay time:
< 0,1 s
Min. insulation resistance:
100 MΩ (500 V DC)
Step response time:
1 ms

Electromagnetic compatibility:
EN 61000-6-2; EN 61000-6-3
Max. load
(Ub – 8,5 V) / 21,5 mA; @8,5V= 0 Ω; @12V max. 160 Ω; @24V max. 720 Ω
Protection class:
III

Technical data – Analogue output signal 4 ... 20 mA

Symbol	Connection	Measuring range (bar)	(psi)	Over pressure*1 (bar)	(psi)	Output signal	Model
	G1/4	-1 ... 10	-14,5 ...145	25	360	4 ... 20 mA	60S-V110G-A42-AA
	G1/4	0 ... 6	0 ... 87	15	215	4 ... 20 mA	60S-P006G-A42-AA
	G1/4	0 ... 10	0 ... 145	25	360	4 ... 20 mA	60S-P010G-A42-AA
	G1/4	0 ... 16	0 ... 230	40	580	4 ... 20 mA	60S-P016G-A42-AA
	G1/4	0 ... 25	0 ... 360	65	940	4 ... 20 mA	60S-P025G-A42-AA
	G1/4	0 ... 100	0 ... 1450	250	3625	4 ... 20 mA	60S-P100G-A42-AA
	G1/4	0 ... 250	0 ... 3625	625	9060	4 ... 20 mA	60S-P250G-A42-AA
	G1/4	0 ... 400	0 ... 5800	1000	14500	4 ... 20 mA	60S-P400G-A42-AA

*1) Over pressure, short-term pressure peaks are not allowed to exceed this limit value during operation.

Operative utilization of the over pressure is not permitted. The over pressure corresponds to the maximum testing pressure.

Electrical connection M12 x 1 (A-coding)

PIN-No.	Signal	Cable
1	+UB	brown
2	Analogue (4 ... 20 mA)	white

Cable colours according to: DIN EN 60947-5-2

Option selector

60S-★★★★★- A42-AA

Measuring range (bar)	Substitute
-1 ... 10	**V110G**
0 ... 6	**P006G**
0 ... 10	**P010G**
0 ... 16	**P016G**
0 ... 25	**P025G**
0 ... 100	**P100G**
0 ... 250	**P250G**
0 ... 400	**P400G**

Accessories

Cable 5 Pin A-coded M12 - M12

Cable (m)	Model
0.6	NC-125FS-125MS-A
1.0	NC-125FS-125MS-1
2.0	NC-125FS-125MS-2
5.0	NC-125FS-125MS-5

Cable 5 pin A-coded M12 – Open end

Cable (m)	Model
5.0	NC-125FS-00000-5

Cable 90° 5 pin A-coded M12 – Open end

Cable (m)	Model
2.0	0523058000000000
5.0	0523053000000000

Wireable M12 A-coded connector without cable

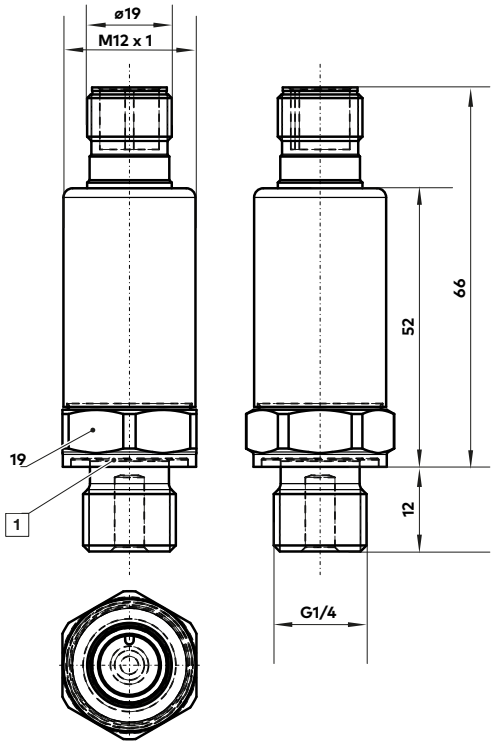
Model
0523055000000000

Wireable M12 A-coded 90° connector without cable

Model
0523056000000000

Dimensions pressure sensor

Dimensions in mm
Projection/First angle



1 Seal

Warning

These products are intended for use in industrial compressed air and fluid systems only. Do not use these products where pressures and temperatures can exceed those listed under **»Technical features/dat**a«. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult Norgren GmbH.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.
System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.