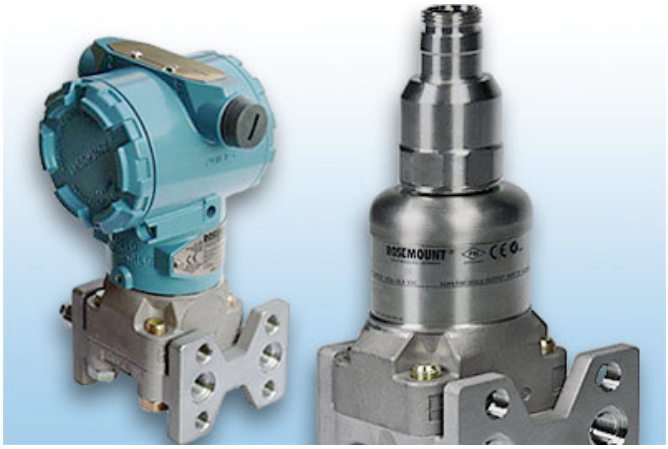
HART Pressure Transmitter 3051S

As of 01-08-2013



The Model 3051S is available for measure differential, gauge or absolute pressure. In addition there are different mechanical versions possible.

- Differential-, gauge-, absolute pressure measurement
- Measuring range from 0,25 mbar to 276 bar
- Accuracy < 0,1%F.S. with 16 bit resolution
- Updating the measuring value 20 times per second.
- Long time stability <0,1 %
- Span ratio: up to 1 : 100 stepless adjustable

Technical Description

The HART pressure transmitter 3051S can be adjusted with a HART Communicator to the 4 - 20 mA output signal. Optionally an internal LCD display can be used for reading out values without a computer. Liquid, gasous and steamous media are possible. The following specifications describes the basic versions. Further versions are available.

Specifications

Measuring Ranges

Differential-/Gauge			Absolute Pressure		
Min	Max Span		Min	Max Span	
0 - 0,25	(+/-)	7,5 mbar	0 - 12	0 -	345 mbar
0 - 1,25	(+/-)	62 mbar	0 - 21	0 -	2068 mbar
0 - 6,2	(+/-)	620 mbar	0 - 0,1	0 -	10 bar
0 - 25	(+/-)	2480 mbar	0 - 0,55	0 -	55 bar
0 - 0,21	(+/-)	20,7 bar	0 - 2,76	0 -	276 bar
0 - 1,4	(+/-)	138 bar			

Accuracy

+/-0,075 %F.S. (0,1 %F.S. *MR-Code* 0 and 1) optionally 0,05 % for reference class

Temperature Conditions

Storage: -40 to 85 °C
Operation: -20 to 120 °C

Media Compatibility

Air, gases, liquids, steamous media, corrosive / aggressive also

Enclosure

Housing : Aluminium diecast
Flange: Stainless steel
Diaphragm: Stainless steel, optionally: Hastelloy C, Monel tec.
Dimensions: HxWxD: approx. 200x120x100 mm,
Weight: approx. 3,6 kg

Plant-web and Quick-connect model with H flange

Pressure Limits

MR-Code 0 pressure resistant up to 52 bar
MR-Code 1 pressure resistant up to 137,9 bar
MR-Code 2 to 5 pressure resistant up to 250 bar

Explosion Protection

ATEX in different versions

Mounting Options

Different mounting brackets for wall, pipe or table mounting are available

Process Connections

¼“ NPT female adaption flange (standard) or coplanar flange (optionally)

Electrical Connections

Intern terminals for supply and two-wire current signal loop, cable inlet through 13,5 mm PG-connection (female thread in the body)

Power Supply

24 VDC supply and 4 to 20 mA signal output are connected with the two-wire current signal loop

Special Features

High Flexibility

By using a HART Communicator the Transmitter is easy to read out and configure. The head of the transmitter is by solving a screw rotatable by 180 °. Below a lit on the top are two buttons for configure the transmitter manually.
Span: sets the upper span limit to the actual pressure
Zero: resets the transmitter on zero

Ordering Information

Part-No.-Structure: 3051S2-AC-*PT-MR-FC-HE –DP*

Sensor Filling Media : Silicon Oil (Standard)

AC	**Accuracy Class**		
C	Standard 0,1 / 0,075	%F.S.	
P	Reference 0,05	%F.S.	(MR 2 - 5 only)
PT	**Pressure Type**		
A	Absolute		
D	Differential		
R	Gauge		

MR	**Fullscale DM: D and G**			**A**		
	Min	**Max Span**		**Min**	**Max Span**	
0	0 - 0,25	(+/-)	7,5 mbar	0 - 12	0 -	345 mbar
1	0 - 1,25	(+/-)	62 mbar	0 - 21	0 -	2068 mbar
2	0 - 6,2	(+/-)	620 mbar	0 - 0,1	0 -	10 bar
3	0 - 25	(+/-)	2480 mbar	0 - 0,55	0 -	55 bar
4	0 - 0,21	(+/-)	20,7 bar	0 - 2,76	0 -	276 bar
5	0 - 1,4	(+/-)	138 bar			

FC	**Flange Connection**
H	Adaption Flange
C	Coplanar Flange
HE	**Housing and Electrical Connection**
PW	Plant-Web housing with PG connection
QC	Without PW, Quick-Connect with 90°-Connector
DP	**LCD Display**
D	With LCD-Display, only Plant-Web
X	Without LCD-Display, only Plant-Web

Part-Nr.	**Accessories**
3051-MONTEH	2 Mounting brackets for adaption flange inkl. 8 mounting screws 7/16”

Further options, models and accessories on demand

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