

PRESSURE TRANSMITTER WITH DATALOGGER AND DISPLAY DL



65

Features

- Piezoresistive measuring element
- Standard DIN pressure ranges from 0...100 mbar to 0...1000 bar
- Calibration available for all common pressure units
- Complies with the EMC directive EN 61000
- High reliability
- Measuring interval programable from 2 s to 24 h
- Non volatile data memory for 130'000 values
- Long life battery
- Datatransfer to a PC/Notebook/Pocket PC

Typical applications

- Industrial process control
- Monitoring of pipelines
- Environmental monitoring
- Food industry
- Test and calibration systems
- Gas- and water distribution

Specifications

Pressure range	[bar]	0.1 ... 0.5	> 0.5 ... 2	> 2 ... 25	> 25 ... 600	> 600 ... 1000
Overpressure		3 bar	3 x FS (min. 3 bar)	3 x FS	3 x FS (max. 850 bar, optional up to 1500 bar)	1500 bar
Burst pressure	[bar]	> 200	> 200	> 200	> 850 (optional up to 1500 bar)	1500
Accuracy¹⁾	[± % FS]	≤ 0.25	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
Thermal shift	[± % FS/°C]					
Zero	0...70°C	0.06	0.03	0.015	0.015	0.015
	-25...85°C	0.08	0.04	0.02	0.02	0.02
Span	0...70°C	0.015	0.015	0.015	0.015	0.015
	-25...85°C	0.02	0.02	0.02	0.02	0.02
Long term stability (1 year) (typ./max.)		0.5 % FS/< 4 mbar	0.2 % FS/< 4 mbar	0.1 % FS/< 0.2% FS	0.1 % FS/< 0.2% FS	0.1 % FS/< 0.2% FS

¹⁾ Zero based non-conformity according to DIN 16086, including hysteresis and repeatability

Datalogger

Measurand	Pressure
Resolution	Pressure < 0.01% FS
Real time clock	Quartz clock with date, timer functions
Data memory	130'000 measurement values - non volatile, data kept in memory even without battery
Interface	Infrared
Identification	Serial number and user definable description
Power supply	2 Lithium batteries 3.6V
Protection class	IP 65 (cap closed)

Configuration and Data Transfer

PC-Program for Configuration and Data Transfer

System Requirements	IBM compatible Notebook or PC, Windows 95/98/NT/2000/XP or Pocket PC with Windows CE 2002 or higher
Data Transfer	- data transfer of last measurement period - data transfer for a defined time-period - the data will be represented in a txt-file or in a graph
Configuration	- storage rate - sampling rate - time and date - description - timer (start/stop) - tare - upper and lower threshold value - storage threshold value - density of the medium - printer
Data Format	Data are stored in ASCII format and may be read with programs like Excel, Lotus or similar

Electromagnetic compatibility

Standard	Level	Typical interferences
Emission: EN 61000-6-3 EN 55022	Generic emission standard Emission, class B	
Immunity: EN 61000-6-2	Generic immunity	
EN 61000-4-2	Electrostatic discharge	4kV contact, 8kV air
EN 61000-4-3	Radiated electro-magnetic field	10V/m, 80-1000 MHz, 80% AM 1kHz
EN 61000-4-3	Radiated electro-magnetic field (GSM)	10V/m, 950 MHz, 200Hz on/off
EN 61000-4-4	Fast transients (burst)	2 kV
EN 61000-4-6	Conducted radio-frequency	10V, 0.15-80 MHz, 80% AM 1kHz
EN 61000-4-5	Surge	



The pressure transmitter DL fulfils the emission and immunity requirements described in the EMC directive EM 61000.

Ordering Information

65 X . XXXX . XXXX . XX . X

Type	DL with display	65				
Pressure type	Gauge	1				
	Absolute	2				
	Sealed gauge	3				
Pressure range	0...100 mbar		00			
	0...160 mbar		01			
	0...250 mbar		02			
	0...400 mbar		03			
	0...600 mbar		04			
	0...1.0 bar		05			
	0...1.6 bar		06			
	0...2.5 bar		07			
	0...4.0 bar		08			
	0...6.0 bar		09			
	0...10 bar		10			
	0...16 bar		11			
	0...25 bar		12			
	0...40 bar		3	13		
	0...60 bar		3	14		
	0...100 bar		3	15		
	0...160 bar		3	16		
	0...250 bar		3	17		
	0...400 bar		3	18		
	0...600 bar		3	19		
0...1000 bar		3	20			
	other pressure range		99			
Process connection	G 1/4 female	(Fig. 1)		00		
	G 1/4 M	(Fig. 2)		11		
	G 1/2 M	(Fig. 3)		13		
	G 1/2 M, frontal diaphragm	(Fig. 4)		14		
	G 1/2 M, flush diaphragm	(Fig. 5)		15		
	Special process connection			99		
Interface	Infrared ²⁾			95	95	
Accuracy	≤ ± 0.25% FS (for pressure ranges ≤ 500 mbar)					1
	≤ ± 0.1 % FS (for pressure ranges > 500 mbar)					2
Temperature range	0...70°C compensated (media temperature 0... 80°C)					0
	-25...85°C compensated (media temperature -25...100°C)					1
	Special temperature range					9
Options	Throttle ¹⁾					A
	Version titanium					K
	Special oil filling in the TD: ASEOL Food					G
	Halocarbon					H
	Seals: Viton (standard)					U
	EPDM					S
	Kalrez					T
Special options						Z

¹⁾ Available only with pressure connection Fig. 2 or Fig. 3

²⁾ Infrared data transfer cable not included (ordering code VART144)

Materials

Process connection, diaphragm	Stainless steel 1.4435 (316L) other materials (e.g. titanium) on request
Housing	Aluminium Al Mg Si1 (colorless, eloxadized)
Cap	Plastic POM black
Seals (standard)	Viton (other materials see ordering information)

Pressure Connection

Dimensions

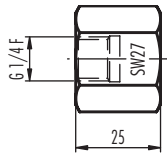


Fig. 1

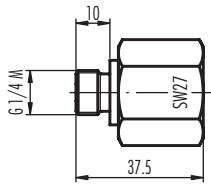


Fig. 2

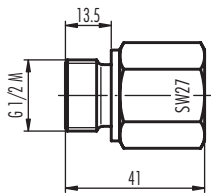


Fig. 3

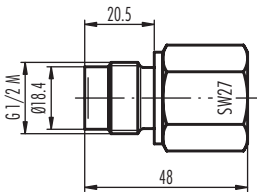


Fig. 4

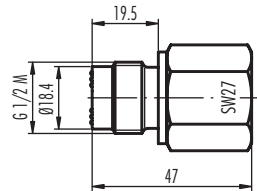
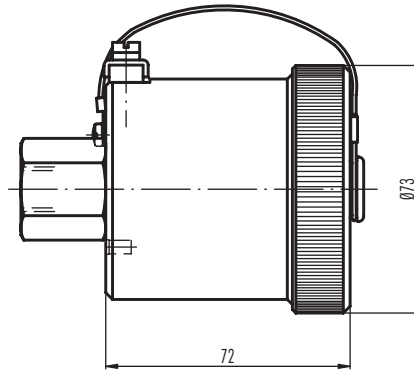


Fig. 5



Specifications may change without notice.

DEDO30A Release 08/2003

Switzerland

STS Sensor Technik Sirnach AG
 Rütihofstrasse 8
 CH - 8370 Sirnach
 Phone: +41 (0) 71 969 49 29
 Fax: +41 (0) 71 969 49 20
 e-mail: sales@sts-ag.ch
 Internet: www.sts-ag.ch

Germany

STS Sensoren Transmitter Systeme GmbH
 Mercedesstrasse 1
 D - 71063 Sindelfingen
 Phone: +49 (0) 7031 811 920
 Fax: +49 (0) 7031 811 958
 e-mail: sts.gmbh@t-online.de
 Internet: www.sts-ag.ch

Italy

STS Italia s.r.l.
 Via Gesù 5
 I - 20090 Opera (MI)
 Phone: +39 02 57607073/074
 Fax: +39 02 57607110
 e-mail: stsopera@tin.it
 Internet: www.sts-ag.ch

France

STS France
 66, Avenue de la Gare
 FR - 74100 Annemasse
 Phone: +33 (0)4 5037 6925
 Fax: +33 (0)4 5039 4225
 e-mail: info@stsfrence.fr
 Internet: www.sts-ag.ch