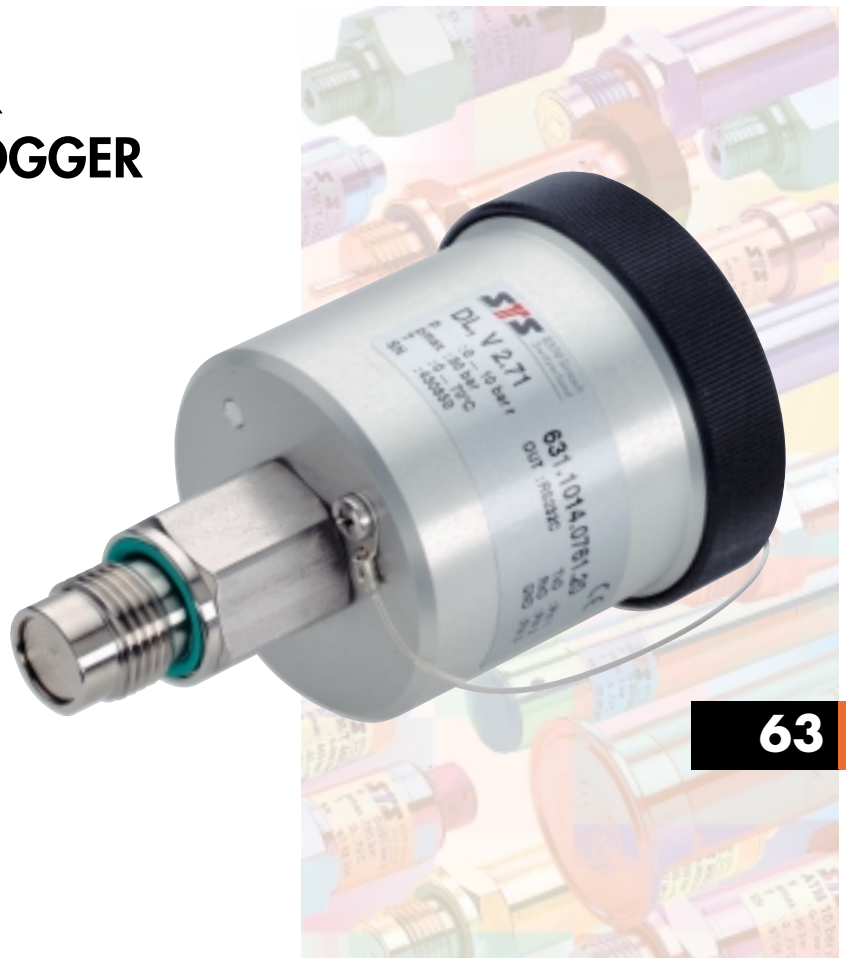


# PRESSURE TRANSMITTER WITH DATALOGGER DL



63

## Features

- Piezoresistive measuring element
- Gauge, absolute or sealed gauge
- Standard DIN pressure ranges from 0...100 mbar to 0...1000 bar
- Calibration available for all common pressure units
- Complies with the EMC directive 89/336/EEC
- High reliability
- Short delivery time
- Measuring interval programable from 2 s to 24 h
- Non volatile data memory for 130'000 measurements
- High battery life (up to 10 years)
- Transfer of data to a laptop/handheld computer

## Typical applications

- Industrial process control
- Heating and ventilation
- Environmental monitoring
- Food industry
- Test and calibration systems

## Specifications

Pressure range	[bar]	0.1 ... 0.5	> 0.5 ... 2	> 2 ... 25	> 25 ... 600	> 600 ... 1000
<b>Overpressure</b>		3 bar	3 x FS (min. 3 bar)	3 x FS	3 x FS (max. 850 bar, optional up to 1500 bar)	1500 bar
<b>Burst pressure</b>	[bar]	> 200	> 200	> 200	> 850 (optional up to 1500 bar)	1500
<b>Accuracy<sup>1)</sup></b>	[± % FS]	≤ 0.25	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
<b>Thermal shift</b>	[± % 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
<b>Long term stability (1 year)</b>		< 4 mbar	< 4 mbar	< 0.2% FS	< 0.2% FS	< 0.2% FS

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

### Datalogger

<b>Units</b>	Pressure
<b>Resolution</b>	Pressure < 0.01% FS
<b>Real time clock</b>	Quartz clock with date, start of first measurement programmable
<b>Data memory</b>	130'000 measurement values - non volatile, data kept in memory even without battery
<b>Interface</b>	RS232C (V24, three wire)
<b>Identification</b>	Serial number and programmable Id. number
<b>Power supply</b>	Lithium battery 3.6V / size AA
<b>Protection class</b>	IP 65 (cap closed)

### Configuration and Data Transfer

#### PC-Program for Configuration and Data Transfer

<b>System Requirements</b>	IBM compatible laptop or PC, Windows 95/98/NT or handheld PC with Windows CE 2.11 or upward	
<b>Data Transfer</b>	- 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	- data transfer of all data
<b>Configuration</b>	- sampling rate - number of replicates - time and date - description - starting time of first sample - tare - storage threshold value - density of the measuring media	time between two records  (e.g. name of location)  the actual pressure value can be set to the real value (optional) the density-setting will affect the level range (optional)
<b>Data Format</b>	Data are stored in ASCII format and may be read with programs like Excel, Lotus or similar	

## Electromagnetic compability

	Standard	Level	Typical interferences
<b>Emission:</b>			
EN 50081-1:1992	Generic emission standard		
EN 55022:1994	Emission, class B		
<b>Immunity:</b>			
EN 50082-2:1995	Generic immunity		
EN 61000-4-2:1995	Electrostatic discharge	4kV contact, 8kV air	
ENV 50140:1993	Radiated electro-magnetic field	10V/m, 80-1000 MHz, 80% AM 1kHz	Cellular phones, radio sets
ENV 50204:1995	Radiated electro-magnetic field (GSM)	10V/m, 950 MHz, 200Hz on/off	Digital portable phones
EN 61000-4-4:1995	Fast transients (burst)	2 kV	Motors, valves
ENV 50141:1993	Conducted radio-frequency	10V, 0.15-80 MHz, 80% AM 1kHz	Cellular phones, radio sets



The pressure transmitter DL fulfill the emission and immunity requirements described in the EMC directive 89/336/EEC.

## Ordering Information

63 X . XXXX . XX61 . XX . XXX

<b>Type</b>	DL	63				
<b>Pressure type</b>	Gauge	1				
	Absolute	2				
	Sealed gauge	3				
<b>Pressure range</b>	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			
<b>Process connection</b>	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		
<b>Electrical connection</b>	Connector RSF 4, 4-pin <sup>2)</sup>			07		
	Special electrical connection			99		
<b>Interface</b>	RS232C				61	
<b>Accuracy</b>	≤ ±0.25% FS (for pressure ranges ≤ 500 mbar)					1
	≤ ±0.1 % FS (for pressure ranges > 500 mbar)					2
<b>Temperature range</b>	0...70°C compensated (media temperature 0... 80°C)					0
	-25... 85°C compensated (media temperature -25... 100°C)					1
	Special temperature range					9
<b>Options</b>	Throttle <sup>1)</sup>					A
	Special oil filling:	ASEOL Food				G
		Halocarbon				H
	Seals:	EPDM				S
		Kalrez				T
	Special options					Z

<sup>1)</sup> Possible with pressure connection Fig. 2 or Fig. 3 only

<sup>2)</sup> Data transfer cable **not** included (ordering code VART009)

## Materials

<b>Process connection, diaphragm</b>	Stainless steel 1.4435 (316L)	(other materials on request)
<b>Housing</b>	Aluminium Al MgCl1	(colorless, eloxadized)
<b>Cap</b>	Plastic TEKA Form ELS	
<b>Seals (standard)</b>	Viton	(other materials see ordering information)

**Pressure Connection**

**Dimensions**

**Electrical Connection**

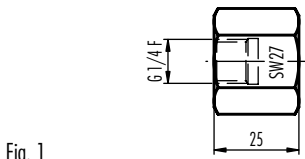


Fig. 1

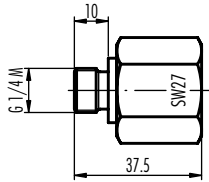


Fig. 2

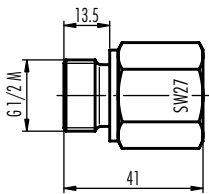


Fig. 3

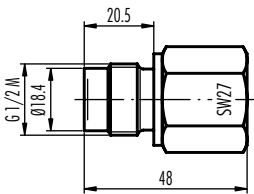


Fig. 4

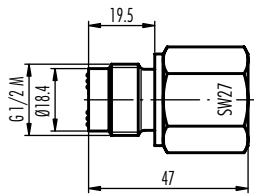
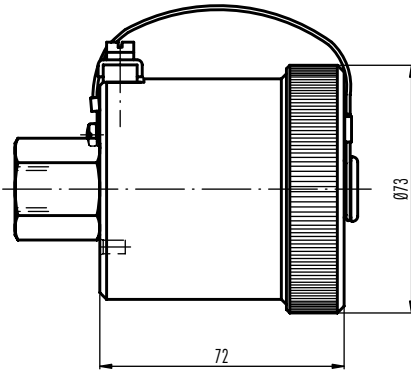
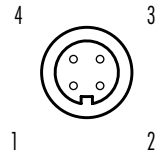


Fig. 5



Cable socket connector



Pin	RS232C
1	TxD
2	RxD
3	GND

Specifications may change without notice. Release 06/01

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