



Features

- Compact and robust stainless steel assembly 1.4435 (316L)
- Piezoresistive measuring element
- Gauge or absolute
- Pressure ranges from 0...1 m to 0...250 m water gauge
- Calibration available for all common pressure units mWS, mWC etc.
- Temperature measurement (optional)
- Measuring interval programmable 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 without removing the datalogger

Typical applications

- Recording of level measurement in
- Phreatic Water
 - Bore holes
 - Waste water
 - Reservoirs
 - Lakes, rivers
 - Sewage treatment plant



Specifications

Pressure range [mH ₂ O]	1 ... 5	> 5 ... 20	> 20 ... 250
Overpressure	3 bar	3 x FS (min. 3 bar)	3 x FS
Accuracy ¹⁾ [± % FS]	≤ 0.25	≤ 0.1	≤ 0.1
Thermal shift [± % FS/°C]			
Zero	-5...50°C	0.06	0.03
Span	-5...50°C	0.015	0.015
Temperature range ²⁾	-5...50°C		

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

²⁾ Other temperature range on request

Datalogger

Units	Pressure, pressure and temperature (temperature as option)	
Resolution	Pressure < 0.01% FS	Temperature 0.1°C
Real time clock	Quartz clock with date, start of first measurement programmable	
Data memory	130'000 measurement values - non volatile, data kept in memory even without battery - each measurement value is correlated with time and date	
Interface	RS232C (V24, three wire)	
Identification	Serial number and programmable Id. number	
Power supply	2 x Lithium battery 3.6V / size AA	- on site battery change

Configuration and Data Transfer

PC-Program for Configuration and Data Transfer

System Requirements	IBM compatible laptop or PC, Win 95/98/NT or handheld PC with Win CE 2.11 or upward	
Data Transfer	- data transfer of last measurement period - data transfer of all data - data transfer for a defined time-period - the data will be represented in a txt.file or in a graph	
Configuration	- sampling rate - number of replicates - time and date - description - starting time of first sample - depth to water - tare - upper and lower threshold value - storage threshold value - density of the measuring media - switch on/off the Datalogger - printer	time between two records (e.g. name of location) the actual press. value can be set to the real value min./max. value (optional) the density-setting will affect the level range (opt.) using the switches on the display (optional) (optional)
Data Format	Data is stored in ASCII format and may be read with programs like Excel, Lotus or similar	

Electromagnetic compatibility

Standard	Level	Typical interferences
Emission:		
EN 50081-1:1992	Generic emission standard	
EN 55022:1994	Emission, class B	
Immunity:		
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

		66 X	99XX	9595	X4	XXX	
Type	DL/N with display	66					
Pressure Type	Gauge	1					
	Absolute	2					
Pressure range ⁶⁾	0... 1.0 mH ₂ O						
	0... 1.6 mH ₂ O						
	0... 2.5 mH ₂ O						
	0... 4.0 mH ₂ O						
	0... 6.0 mH ₂ O						
	0... 10 mH ₂ O						
	0... 16 mH ₂ O						
	0... 25 mH ₂ O						
	0... 40 mH ₂ O						
	0... 60 mH ₂ O						
	0... 100 mH ₂ O						
	0... 160 mH ₂ O						
	0... 250 mH ₂ O						
	Special calibration						
Version	housing for pipe mounting, closed ¹⁾	(Fig. 2a/1)	57				
	housing for pipe mounting, open ¹⁾	(Fig. 2b/1)	58				
	housing for pipe mounting, screwed on, closed ^{1) 2)}	(Fig. 3a/1)	72				
	housing for pipe mounting, screwed on, open ^{1) 2)}	(Fig. 3b/1)	73				
Cable	PE cable ^{3) 6)}						
	PUR cable ³⁾						
	Teflon cable ³⁾						
Interface	Infrared			95			
Accuracy	≤ ± 0.25% FS (for pressure ranges ≤ 500 mbar)					1	
	≤ ± 0.1 % FS (for pressure ranges > 500 mbar)					2	
Temperature range	-5...50°C ⁷⁾					4	
Options	Ballast weight					B	
	Electronics packed in gel: Gauge pressure					C	
	Temperature measurement					E	
	Special oil filling: ASEOL Food	Halocarbon					G
							H
	Seals: EPDM	Kalrez					S
							T
	Special options					Z	

¹⁾ Version for pipe mounting, minimum diameter 2"

²⁾ Gauge version for cable length > 50m

³⁾ Please specify the required cable length and media

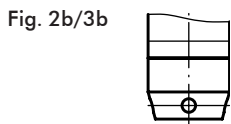
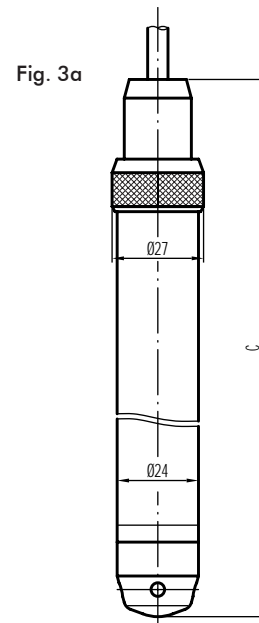
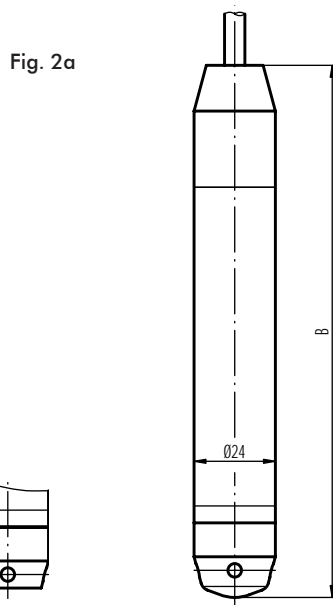
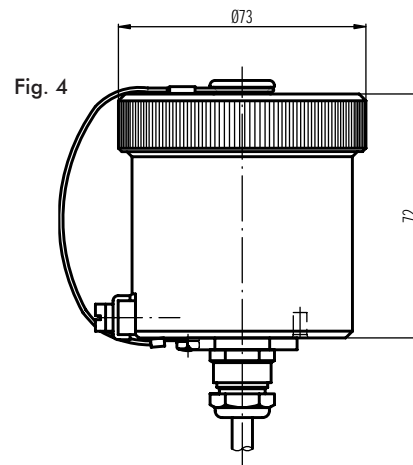
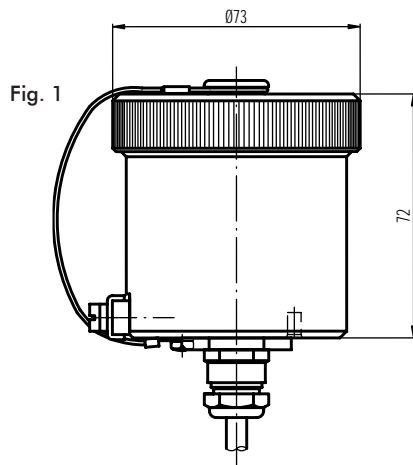
⁴⁾ Other temperature range on request

⁵⁾ mWS, mWC etc. available

⁶⁾ Suitable for drinking water (food approved)

⁷⁾ Data transfer cable **not** included (ordering code VART144)

Dimensions



Version	Front	Fig.	Length	Weight [g]	Length ³⁾	Weight ³⁾ [g]
gauge	closed	2a	B=157	195	B=244	425
	open	2b	B=153	195	B=240	425
	closed	3a	C=259.5	300		
	open	3b	C=255.5	300		

³⁾ with ballast weight

Fig. 1 Battery housing for Datalogger and display
 Fig. 4 Battery housing for display
 Fig. 3a/3b Battery built into the transmitter housing

Specifications may change without notice. Stand 06/01

