

Submersible Transmitter

ATM/K/N - Analog Level Transmitter with Ceramic Measuring Cell



CUSTOMER BENEFITS

- Corrosion and abrasion resistant for use in for example wastewater applications
- Thanks to the ceramic measuring cell no damage to the diaphragm
- Reverse polarity and short circuit protected
- Compact design requires minimal space

Technical Specifications

PRESSURE MEASURING RANGE (MH2O)

	1	2 / 4	10
Overpressure	4 bar	6 bar	10 bar
Accuracy, (1), ($\pm$ % FS)	≤ 0.25	≤ 0.25	≤ 0.25
Thermal shift, ($\pm$ % FS/ $^{\circ}$ C)			
Zero point -20...80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Span -20...80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Long term stability, (2)	$< 0.15\%$ FS	$< 0.15\%$ FS	$< 0.15\%$ FS

	20	40	100 / 200
Overpressure	18 bar	25 bar	40 bar
Accuracy, (1), ($\pm$ % FS)	≤ 0.25	≤ 0.25	≤ 0.25
Thermal shift, ($\pm$ % FS/ $^{\circ}$ C)			
Zero point -20...80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Span -20...80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Long term stability, (2)	$< 0.15\%$ FS	$< 0.15\%$ FS	$< 0.15\%$ FS

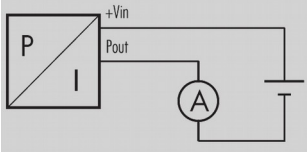
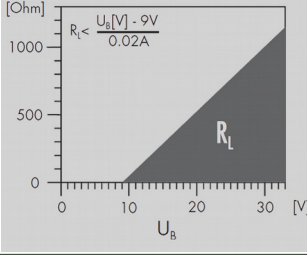
(1) Zero based accuracy according to DIN16086, incl. hysteresis and repeatability at ambient temperature

(2) 1 year (typ.)

TEMPERATURE RANGE

Operating temperature	-5 ... 50 $^{\circ}$ C
Process temperatur	-5 ... 50 $^{\circ}$ C
Storage temperatur	-10 ... 60 $^{\circ}$ C

ELECTRICAL SPECIFICATIONS

	4 ... 20 mA
Power supply, (1)	9 ... 30 V DC
Supply influence	< 0.1% FS
Circuit diagram	
Load resistance	
Load influence	< 0.1% FS

(1) Power supply with optional surge (lightning) protection: 15 ... 30 V DC

QUALIFICATIONS

	Description	Level	Typical interferences
EN 61000-4-2	Electrostatic discharge	4 kV contact / 8 kV air	
EN 61000-4-3	Irradiated RF	10V / m (0.08...1 GHz)	Radio sets, wireless phones
EN 61000-4-4	Transients (burst)	2 kV	Motors, valves
EN 61000-4-5, (1)	Surge	10 kA (8 / 20 μs)	Lightning
EN 61000-4-6	Conducted RF	10 V (0.15...80 MHz)	Frequency converters

(1) Only with optional surge (lightning) protection

PHYSICAL SPECIFICATIONS

Materials	
Transducer	Ceramic Al ₂ O ₃ (96%)
Housing	Stainless steel (316L / 1.4404)
Seals	Viton (standard), EPDM, Kalrez
Cable	PUR, PE, FEP
Weight (1)	150 g

(1) Specification for a ATM/K/N, closed, cable

Equipment

OVERVIEW

10.00.0091	Accessories overview

Additional documents

OPERATING AND SAFETY INSTRUCTIONS

	Article number
10.88.0092	DMM029

Ordering information

		X	XXXX	XXXX	XX	XXX
Type						
	ATM/K/N	54				
Pressure type						
	Gauge	1				
	Absolute (vacuum)	2				
Pressure measuring range						
	100 mbar...20 bar	XX				
Process connection						
	Standard (Fig. 1)	85				
	Customized connections available	99				
Electrical connection						
	PE cable black IP 68		13			
	PUR cable, black (1)		15			
	PUR cable with G 1/2 M , black (Fig. 2), (1)		32			
	FEP cable, IP 68, black (1)		21			
	Customized connection available		99			
Output signal						
	4 ... 20 mA		05			
	4 ... 20 mA surge overvoltage protection		08			
Accuracy						
	≤ ± 0.25 % FS			1		
Temperature range						
	-5...50 °C compensated process temperature: -5...50 °C	(allow		4		
Option 1						
	Seals: Viton (Standard)				U	
	Seals: EPDM				S	
	Seals: Kalrez (Level)				T	
Option 2						
	Humidity filter element for gauge versions (only for PUR and PE cable)				Z	
Option 3						

(1) Please specify the required cable length and medium

Technical drawings

Dimensions

Fig. 1

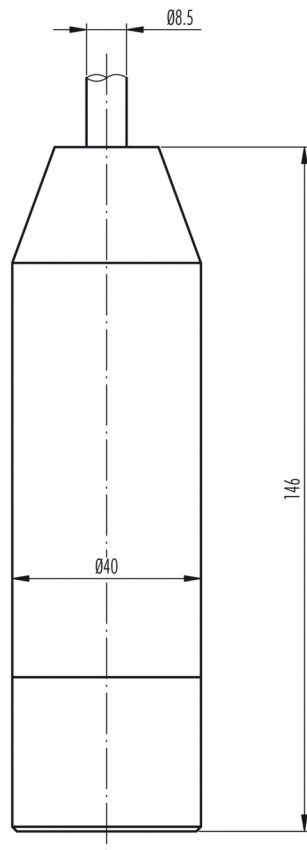
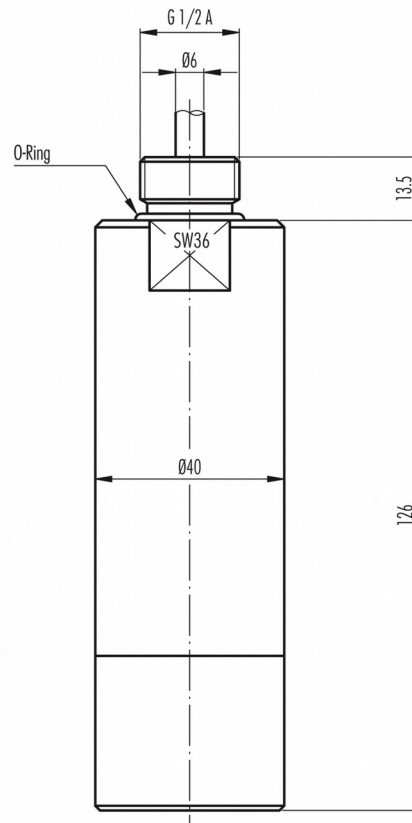


Fig. 2



Colour 2-Wire
white +Vin
yellow Pout