

CAPACITIVE PRESSURE TRANSMITTER TYPE 41X/41XEI

The Series 41 X combines the ceramic measurement cell for low pressure ranges with the μ P electronics of the digital Series 30 transmitter. The pressure values from the signals of the pressure and temperature sensors are determined by polynomial compensation (see reverse). The values can be displayed and stored on a PC via an RS485 interface and programming can also be carried out.

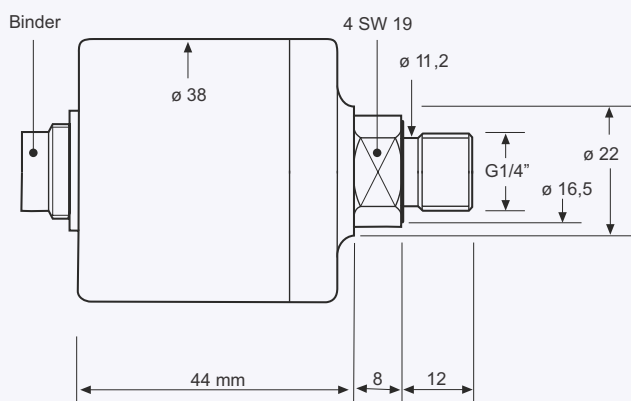
The transmitters are calibrated to the base range. The PROG30 software permits programming of the analog output signal in each section of the range within the base range (e.g. range 100 mbar. Output 4...20 mA for 20...60 mbar).

With KELLER RS converters K-100 Series, up to 128 transmitters can be hooked together into a bus system and read by means of a PC or laptop. READ30 software allows the current pressure of each transmitter to be read or the pressure activity of several transmitters to be recorded or stored whilst "on line".

This pressure transmitter is also available as intrinsically safe version (Series 41XeI). It is used in explosion exposed areas, where the categories 1 and 2 are required.



*by splitting the 10 mbar range



Electrical Connections

Output	Function	Binder 723	DIN 43650	MIL C-264882	Lumberg M12	Cable
4...20 mA 2 Wire	OUT/GND	1	1	C	1	white
	+Vcc	3	3	A	3	black
0...10 V 3 Wire	GND	1	1	C	1	white
	+OUT	2	2	B	2	red
	+Vcc	3	3	A	3	black
Digital	RS485A	4		D	4	blue
	RS485B	5		F	5	yellow



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Specifications

	Standard FS Pressure Ranges		
	30	100	300
PR-41 X (relative) PD-41 X (diff.)	30	100	300
Overpressure	300	1000	1500
Neg. Overpressure	30	100	300
	2-Wire	3-Wire	
Supply (U_B) 41 X	8...28 VDC	13...28 VDC	
Supply (U_B) 41 X Ei	10...30 VDC	15...30 VDC	
Analog Output (scaleable)	4...20 mA	0...10 V	
Load (k Ω)	$<(U_B - U_{Bmin.}) / 20$ mA	≥ 100	
Error Band typ.*	$\pm 0,1$ %FS	$\pm 0,2$ %FS	
Error Band max.*	$\pm 0,2$ %FS	$\pm 0,3$ %FS	
* Within the compensated temperature range			
Stability	FS ≥ 100 mbar: $\pm 0,1$ %FS	FS ≤ 100 mbar: $\pm 0,1$ mbar	
Operating Temperature	-20...80 °C		
Compensated Range	10...50 °C		

