



Main characteristics

Measuring range	0 ... 25 mbar up to 0 ... 600 bar (absolute or relative)
Long term stability	0.2% FS / Year
Accuracy (20 °C) (linearity, hysteresis and repeatability according Best Fit Straight Line)	$\leq \pm 0.3\%$ FS (BFSL)

Technical specifications

Measuring principle	Thick film on ceramic
Measuring ranges	0 ... 25 mbar up to 0 ... 600 bar
Type of pressure	Relative / Absolute
Accuracy (20 °C) (linearity, hysteresis and repeatability according Best Fit Straight Line)	$\leq \pm 0.3\%$ FS (BFSL) $\leq \pm 0.6\%$ FS (BFSL) for $P \leq 60$ mbar and $P = 600$ bar
Error of zero point	$\leq \pm 1\%$ FS
Error of span	$\leq \pm 1\%$ FS
Zero thermal drift	$\leq \pm 0.25\%$ FS/10 K ($P > 1$ bar) $\leq \pm 0.60\%$ FS/10 K ($P \leq 1$ bar)
Span thermal drift	$\leq \pm 0.15\%$ FS/10 K ($P > 1$ bar) $\leq \pm 0.25\%$ FS/10 K ($P \leq 1$ bar)
Long term stability	0.2% FS / Year
Response time (10 ... 90%)	≤ 3 ms

Environment

Temperature	
Storage	-40 ... + 85°C
Compensated range	-10 ... + 55°C (option -10...+70°C)
Medium	-20 ... +100°C
Ambient	-20 ... + 90°C (T5 approval) -20 ... + 70°C (T6 approval)
Protection rating	IP65 (EN 60529)
Vibration IEC60068-2-6	1.5 mm p-p (10 – 55 Hz), 20 g (55 Hz – 2 KHz)
Shock IEC60068-2-27	25 falls from 1 m on concrete ground

Main features

- Robust stainless steel housing
- Intrinsically safe version (LCIE 03 ATEX 6204 X)
- Hazardous areas : 11, 12, 21, 22

Applications

- Chemical
- Pneumatic
- Energy
- Industrial gas

Electrical specification

Output signal / Power supply	4 ... 20 mA / 11 ... 35 VDC (X913) 4 ... 20 mA / 8 ... 35 VDC (X913 low voltage option) 0 ... 20 mA / 8 ... 35 VDC (X916) 0...10 V / 14 ... 35 VDC (X912) 1,5 V / 11 ... 35 VDC (X914) 1,5 V / 8 ... 35 VDC (X914 low voltage option)
Load impedance	
Current output	$R(\Omega) \leq (U_{\text{Supply}} - 11 \text{ V}) / 0.020$ (X913) $R(\Omega) \leq (U_{\text{Supply}} - 8) / 0.020$ (X913 low voltage option) $R(\Omega) \leq (U_{\text{Supply}} - 8) / 0.020$ (X916)
Voltage output	$R \geq 2,5 \text{ K}\Omega$ (X912) $R \geq 1 \text{ K}\Omega$ (X914)
Max current consumption	
Current output	≤ 25 mA
Voltage output	≤ 6 mA
Insulation resistance	$> 100 \text{ M}\Omega$ at 250 VDC
Electrical connections	See page 3

Material

Process connection and housing	SS 1.4404 AISI 316L
Diaphragm	Ceramic (96% Al_2O_3)
Sealing	NBR ($P \geq 250$ mbar) or FKM (Viton®) ($P < 250$ mbar)

ATEX

Ex II 1 GD

Ex d IIC T5 ($T_{amb} \leq +90^{\circ}\text{C}$) Gb

Ex d IIC T6 ($T_{amb} \leq +70^{\circ}\text{C}$) Gb

Ex tb IIIC T90°C ($T_{amb} \leq +90^{\circ}\text{C}$) Db

Ex tb IIIC T70°C ($T_{amb} \leq +70^{\circ}\text{C}$) Db

LCIE 03 ATEX 6204X

WARNING - DO NOT OPEN WHEN ENERGIZED

	Dust IP6X	Gases
	T° surface	Class
$T_{amb} \leq +70^{\circ}\text{C}$	+80°C	T6
$T_{amb} \leq +90^{\circ}\text{C}$	+95°C	T5

Approvals

Conformité CE

CEM Directive 2004/108/CE (with screened cable, screen connected at both ends).

Pressure Directive PED 97/23/CE

ATEX Directive 94/9/CE

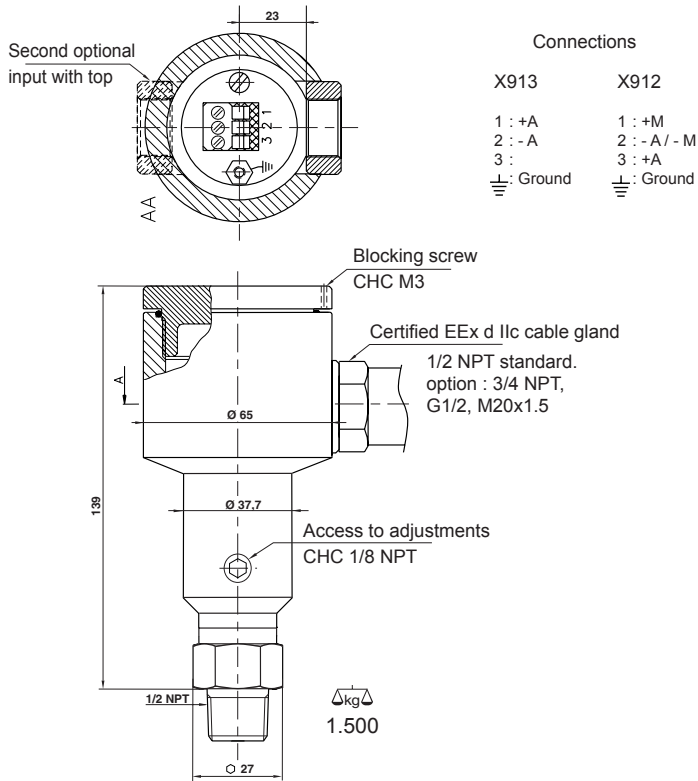
For the application in Ex zone you have to respect the conditions mentioned in the type Examination Certificate (LCIE 03 ATEX 6204 X).
 You find the certificates and manuals under <http://www.baumer.com>

Measuring ranges and overpressure safety

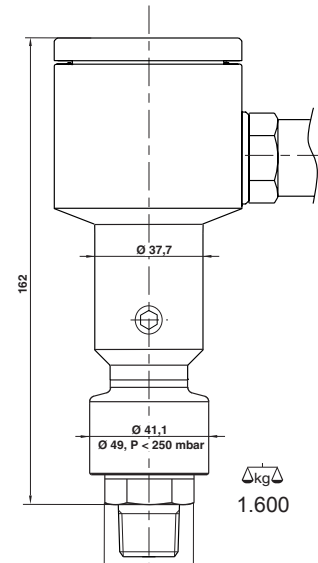
X910	Pressure in mbar								Pressure in bar														
Compound Pressure	—	—	—	—	—	—	—	—	-1+0	-1+0.6	-1+1.5	-1+3	-1+5	-1+9	-1+15	-1+24	1+39	—	—	—	—	—	—
Pressure	25	40	60	100	160	250	400	600	1	1.6	2,5	4	6	10	16	25	40	60	100	160	250	400	600
Measurement range	27.5	44	66	110	175	275	440	660	1.1	1.75	2.75	4.4	6.6	11	17.6	27.5	44	66	110	176	275	440	660
Max. over pressure	110	110	275	500	500	1000	1000	1000	3	3	4	8	12	20	32	50	80	120	200	320	500	600	800
Burst pressure	200	200	500	1000	1000	2000	2000	2000	6	6	7	12	18	30	48	75	120	180	300	480	600	800	1000

Dimensions (mm)

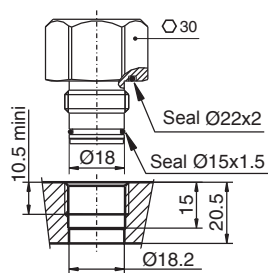
**Internal terminal strip with cable gland
 $P \geq 1$ bar**



**Internal terminal strip with cable gland
 $P < 1$ bar**

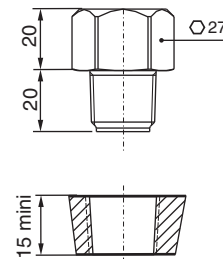


**Process connection flush diaphragm
G1/2 (2 seals)**



Code L

**Process connection flush diaphragm
1/2 NPT (without seal)**



Code E

Ordering details X91x

		X91	-	x	.	x	.	x	.	xxx	.	x
Model												
Pressure transmitter		X91	-									
Output signal												
0...10 V				2								
4...20 mA				3								
1 ... 5 V				4								
0 ... 20 mA				6								
Process connection												
G½ EN 837						3						
½ NPT						6						
G½ flush diaphragm (2 seals)						L						
½ NPT flush diaphragm (without seal)						E						
Sealing												
NBR	P ≥ 250 mbar							3				
FKM (Viton®)	P < 250 mbar							9				
Pressure range and unit in bar												
0...0.025	Only pressure type relative										N05	
0...0.04	Only pressure type relative										N06	
0...0.06	Only pressure type relative										N07	
0...0.1	Only pressure type relative										N08	
0...0.16	Only pressure type relative										N09	
0...0.25											N10	
0...0.4											N11	
0...0.6											N12	
-1...0	Only pressure type relative										B59	
-1...0.6	Only pressure type relative										B72	
-1...1.5	Only pressure type relative										B74	
-1...3	Only pressure type relative										B76	
-1...5	Only pressure type relative										B77	
-1...9	Only pressure type relative										B79	
-1...15	Only pressure type relative										B81	
-1...24	Only pressure type relative										B82	
-1...39	Only pressure type relative										B1L	
0...1											B15	
0...1.6											B16	
0...2.5											B18	
0...4											B19	
0...6											B20	
0...10											B22	
0...16											B24	
0...25											B26	
0...40											B27	
0...100											B31	
0...160											B33	
0...250											B35	
0...400											B38	
0...600											B39	
Kind of pressure												
Relative												R
Absolute												A