

E910 Pressure Transmitter

Measurement of vacuum, absolute or gauge pressure

TRANSBAR® ceramic technology

Zero adjustment as standard ($\pm 10\%$ of range)

Welded construction – reinforced product

Modularity of electrical and hydraulic connections

Conforms to European EMC Directive, CE marked

Highly resistant to severe process conditions ($\geq 10^7$ pressure cycles)

Many approval (Bureau Veritas, DNV...)

All stainless steel transmitter

Stainless steel transmitters intended for extremely diverse industrial applications: control of fluid flow, incorporation into equipment, continuous monitoring of fluid pressure, etc.

Based on TRANSBAR® ceramic technology, these transmitters are compatible with the majority of process fluids.



E910 with IP68 option

Technical data (20°C)

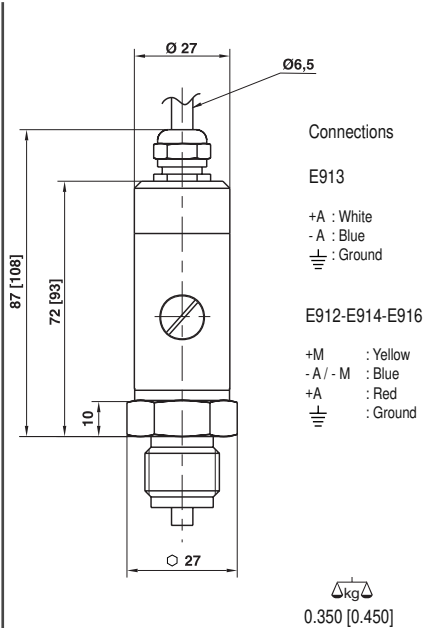
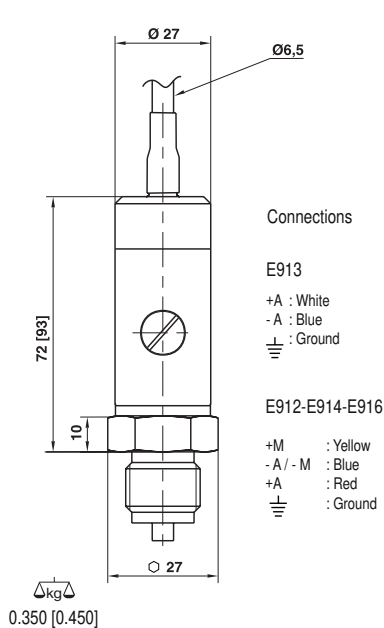
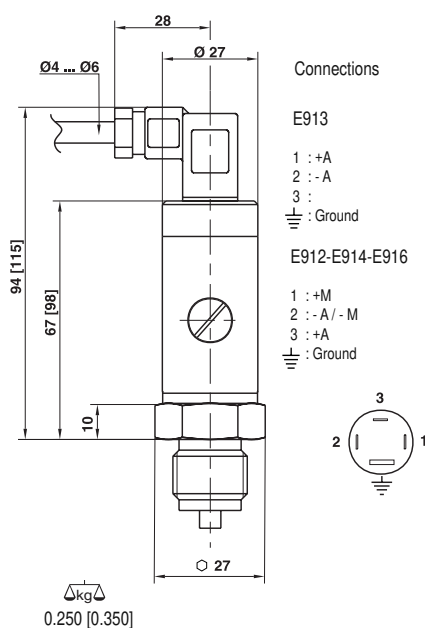
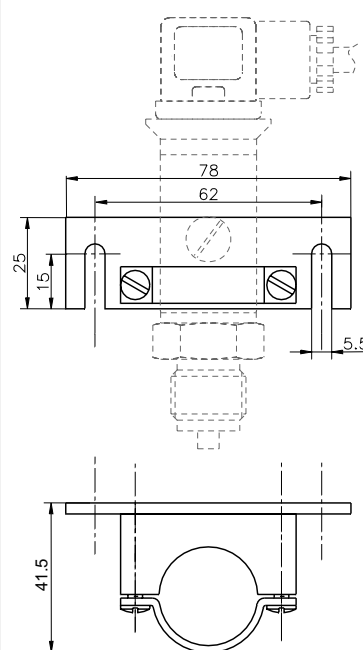
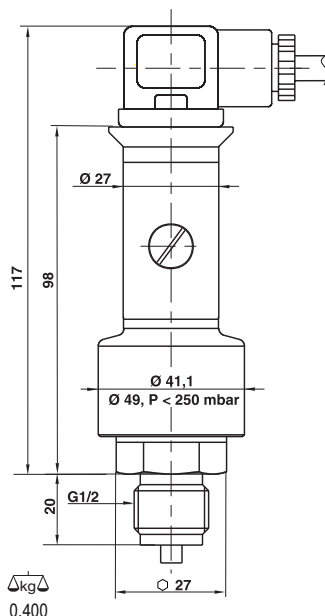
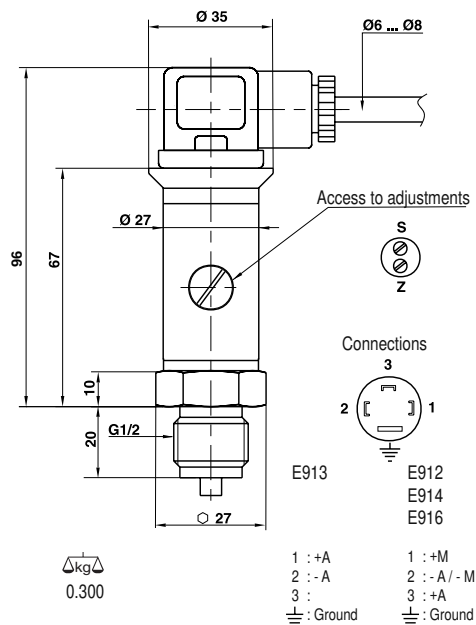
Measurement range	From 0...25 mbar to 0...600 bar Compound, gauge or absolute pressure	Operating temperature	
Output signal	E912: 0...10 Vdc. E913: 4...20 mA (except -1...0 bar where -1 = 20 mA, 0 = 4 mA) E914: 1...5 Vdc. E916: 0...20 mA	Ambient (Ta)	-25...+85°C <i>Option</i> Low T°: -40...+85°C. High T°: -25...+100°C
Supply voltage	E912: 14...40 Vdc E913-E914: 11...40 Vdc E916: 8...40 Vdc <i>Option</i> High voltage up to 48 Vdc Low voltage: 8...32 Vdc (E913, E914)	Fluid	-25...+100°C (Ta $\leq$ 50°C)
Insulation	> 100 M Ω at 250 Vdc. Option: 500 Vdc.	Storage temperature	-40...+85°C
Maximum input current	E912-E914: 6 mA E916: < 25 mA	Compensated temperature range (zero and sensitivity)	-10...+55°C. Option: -10...+70°C
Load impedance (+M / -M)	E912: ≥ 2.5 k Ω E913: $R_{\Omega} \leq (U_{supply} - 11)/0.02$ E913: $R_{\Omega} \leq (U_{supply} - 8)/0.02$ (low voltage option) E916: $R_{\Omega} \leq (U_{supply} - 6)/0.02$	Zero thermal drift	$\pm 0.025\%$ F.S./°C max. (except P $\leq$ 1 bar: $\pm 0.06\%$ F.S./°C) Option: $\pm 0.015\%$ F.S./°C max. (except P $\leq$ 1 bar: $\pm 0.025\%$ F.S./°C)
CE Conformity	EMC Directive 89/336 CE (EN50082-1 and -2, EN50081-1 and -2) with screened cable, screen connected at both ends PED Directive 97/23/CE.	Span thermal drift	Typically: $\pm 0.01\%$ /°C / Max.: $\pm 0.015\%$ /°C
Global error (linearity, hysteresis and repeatability) by reference to BFSL	Typically: $\pm 0.2\%$ of F.S. / Max.: $\pm 0.3\%$ of F.S. For P $\leq$ 60 mbar and P = 600 bar: Typically: $\pm 0.6\%$ of F.S. / Max.: $\pm 1\%$ of F.S.	Wetted parts	Ceramic + stainless steel 1.4404 (316L) + NBR seal (standard) for ranges > 250 mbar and Viton® for ranges $\leq$ 250 mbar
		Standard connections	Electrical: DIN 43650 connector Pressure: G1/2 Many options available
		Protection rating (EN 60529)	Standard: IP65 (DIN connector) Option: IP67 or IP68 (depending on connection)
		Typical response time	≤ 3 ms
		Vibration resistance (IEC 68-2-6)	1.5 mm (10-55 Hz), 20 g (55 Hz to 2 kHz)
		Shock resistance (IEC 68-2-32)	25 falls from 1 m on concrete ground

**BOURDON
HAENNI**

made to measure

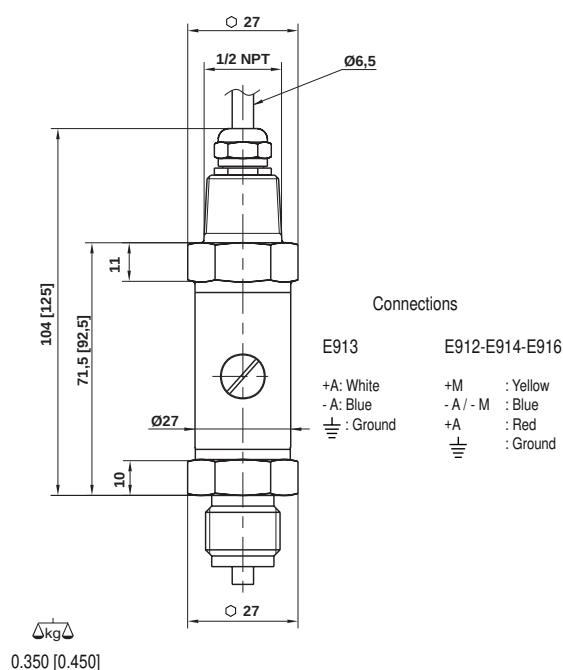
Dimensional Drawings (mm) - Mounting Details

[xx] : dimensions and weight for "P < 1 bar" versions.

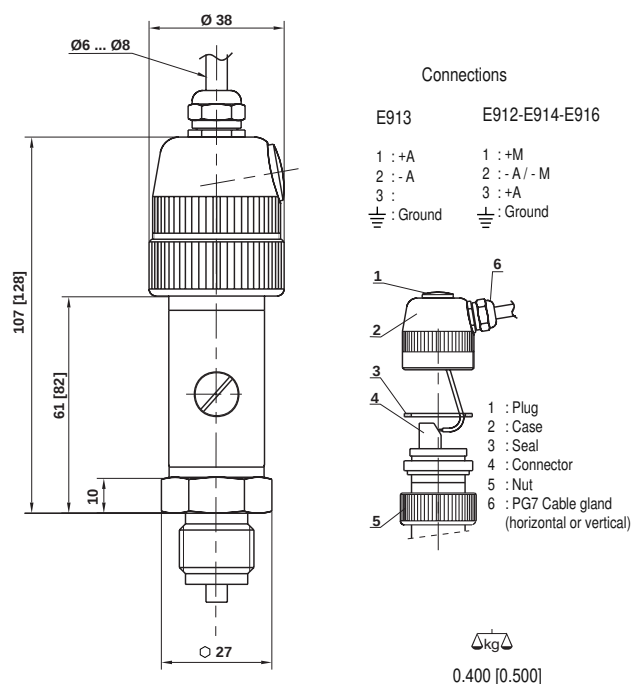


Dimensional Drawings (mm) - Mounting Details

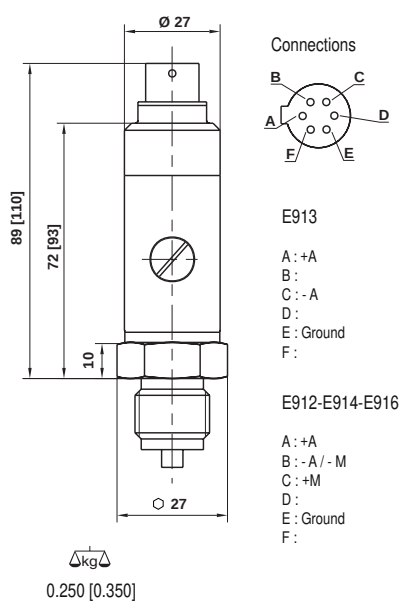
[xx] : dimensions and weight for "P < 1 bar" versions.



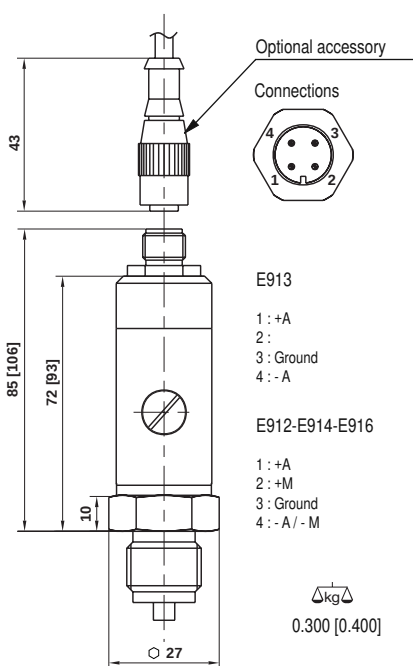
Pig tail cable outlet with 1/2 NPT male (length 1.5 m)



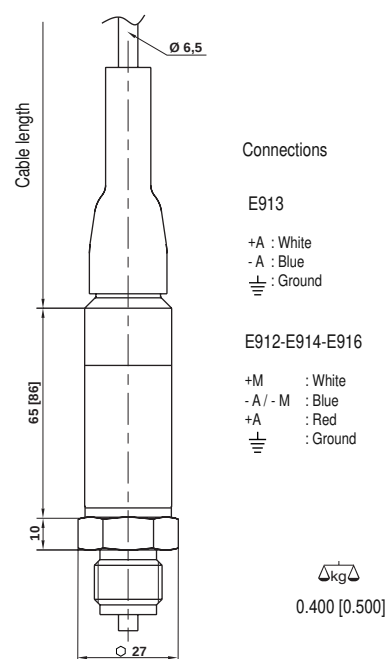
terminal strip outlet + screwed cap



6 contacts HE302 plug



M12, 4 contacts plug



Submersible cable (length 1.5 m)

Options

Degreased. **Code 50764**

Lightning protection. **Code 50809**

Marine version. **Code 50808**

Supply voltage (high⁽¹⁾ - **Code 52180**) (low⁽¹⁾ - **Code 52181**)

Ambient temperature (high⁽¹⁾ - **Code 52221**) (low⁽¹⁾ - **Code 52220**)

Compensated temperature range (-10 ... +70 °C). **Code 52158**

Zero thermal drift : ± 0.015 % of range/°C max. **Code 52159**

Span adjustment ± 10 % of range. **Code 52151**

Span adjustment ±50% of range (except for ranges ≤ 0...+0.25 bar and 0...+600 bar). **Code 52152**

Calibration of sensor with certificate: Q1060

Thread locking

Other hydraulic connections

Additional length of cable

Stainless steel surface mounting brackets. **Code 50409**

Other units: kPa (code D), MPa (code E), kg/cm² (code F), psi (code H), mbar (code N)

Atmospheric pressure measurement (Range: 800...1200 mbar absolute)

Other electrical connections:

DIN 43650C micro plug (IP65 ⁽²⁾). **Code 52165**

Pig tail (1.5 m) (IP65). **Code 52160**

Pig tail (1.5 m) + PG7 cable gland (IP65, IP67 ⁽³⁾). **Code 52161**

Pig tail cable outlet with 1/2 NPT male (1.5 m) (IP65). **Code 52162**

Terminal strip outlet + screwed cap (IP65, IP67). **Code 52166**

6 contacts HE302 plug (IP65). **Code 52163**

M12, 4 contacts plug (IP65). **Code 52164**

Submersible cable (IP68 version ⁽⁴⁾). **Code 52168**

⁽¹⁾ see specifications for details / ⁽²⁾ IP65 : water spray / ⁽³⁾ IP67 : temporary immersion /

⁽⁴⁾ IP68 : prolonged immersion

Measuring Ranges

	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

Ordering Details - E910

Model	1'...3' digit	E91xxxxxx-xxxx
Standard	E91	
Output signal	4' digit	
0...10 Vdc	2	
4...20 mA	3	
1...5 Vdc	4	
0...20 mA	6	
Hydraulic connection	5' digit	
G 1/4	2	
G 1/2 standard	3	
1/4 NPT	5	
1/2 NPT	6	
Sensor seal	6' digit	
NBR (Nitril) standard	3	
CR (Neoprene) (P ≥ 250 mbar)	4	
EPDM (P ≥ 250 mbar)	5	
Kalrez® (P ≥ 1 bar)	7	
FKM (Viton®)	9	
Kalrez® and Viton® are registered trademarks of DuPont Dow Elastomers		
Pressure range	7'...9' digit	
See codes in tables	xxx	
Pressure type	10' digit	
Absolute	A	
Gauge	R	
Option		
See data sheet "1 day delivery" options	-xxxx	

code	Range in mbar			
N05	0	+	25	R
N06	0	+	40	R
N07	0	+	60	R
N08	0	+	100	R
N09	0	+	160	R
N10	0	+	250	A R
N11	0	+	400	A R
N12	0	+	600	A R

code	Range in bar. Vacuum pressure			
B59	-1	+	0	R
B72	-1	+	0.6	R
B74	-1	+	1.5	R
B76	-1	+	3	R
B77	-1	+	5	R
B79	-1	+	9	R
B81	-1	+	15	R
B82	-1	+	24	R
B1L	-1	+	39	R
B15	0	+	1	A R
B16	0	+	1.6	A R
B18	0	+	2.5	A R
B19	0	+	4	A R
B20	0	+	6	A R
B22	0	+	10	A R
B24	0	+	16	A R
B26	0	+	25	A R
B27	0	+	40	A R
B29	0	+	60	A R
B31	0	+	100	A R
B33	0	+	160	A R
B35	0	+	250	A R
B38	0	+	400	A R
B39	0	+	600	A R

1 day delivery time for the codes in bold type

UK/04-2004 This data sheet may only be reproduced in full.