

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 Marine, LLOYD's Register...)

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.



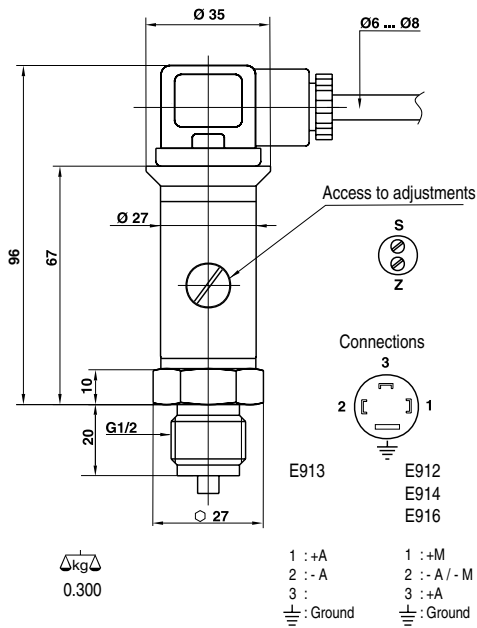
E910 with IP68 option

Technical data (20°C)

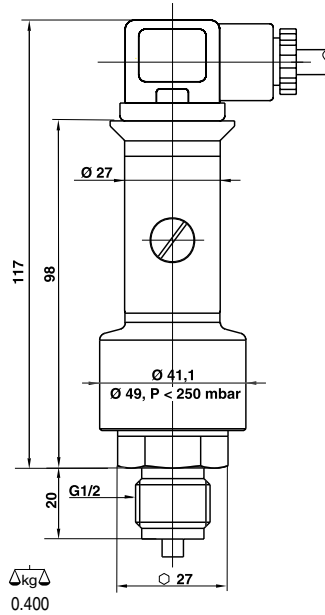
Measurement range	From 0...25 mbar to 0...600 bar Compound, gauge or absolute pressure	Operating temperature	
Output signal	E912 : 0...10 Vdc. E913 : 4...20 mA (except -1...0 bar where -1 = 20 mA, 0 = 4 mA) E914 : 1...5 Vdc. E916 : 0...20 mA	Ambient (Ta)	-25...+85°C <i>Option</i> Low T° : -40...+85°C (only for seal NBR) High T° : -25...+100°C (only for DIN 43650 connector)
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) <i>Option</i> : $\pm 0.015\%$ F.S./°C max. (except P $\leq$ 1 bar: $\pm 0.025\%$ F.S./°C)
CE Conformity	EMC Directive 89/336 CE with screened cable, screen connected at both ends PED pressure 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 $\geq$ 250 mbar and Viton® for ranges < 250 mbar
		Standard connections	Electrical : DIN 43650 connector Pressure : G1/2 Many options available
		Protection rating (EN 60529)	Standard : IP65 (DIN connector) <i>Option</i> : 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

Dimensional Drawings (mm) - Mounting Details

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

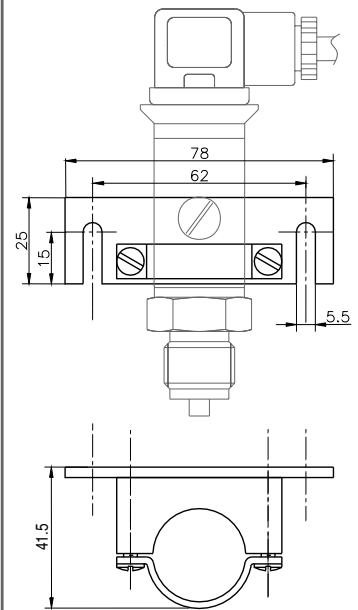


Standard version $P \geq 1$ bar
DIN 43650 plug

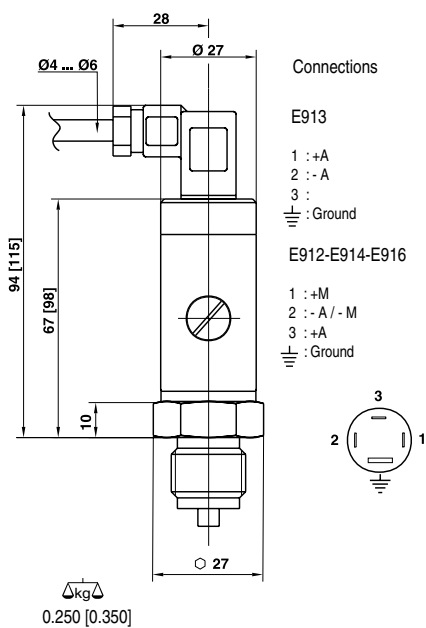


Version also used for -1...0 bar and 0...1 bar ranges with $\pm 50\%$ span adjustment option

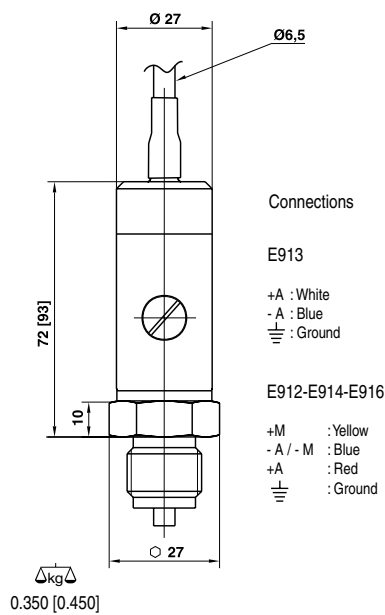
Standard version $P < 1$ bar
DIN 43650 plug



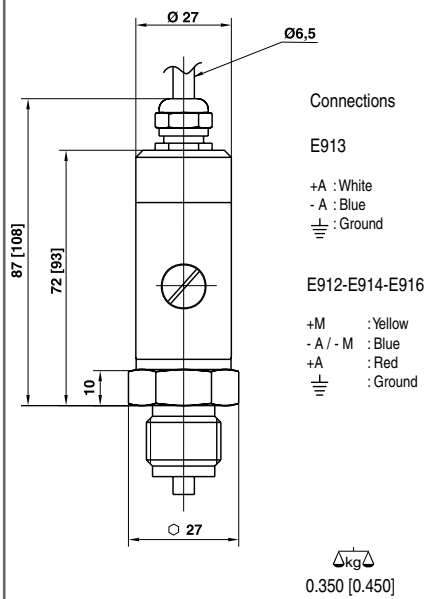
Option : Stainless steel surface
mounting brackets



DIN 43650C micro plug (8 mm)



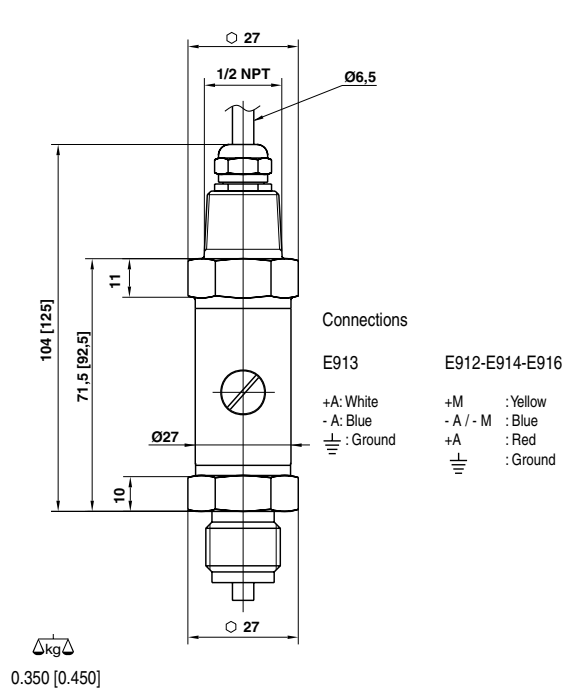
Pig tail (length 1.5 m)



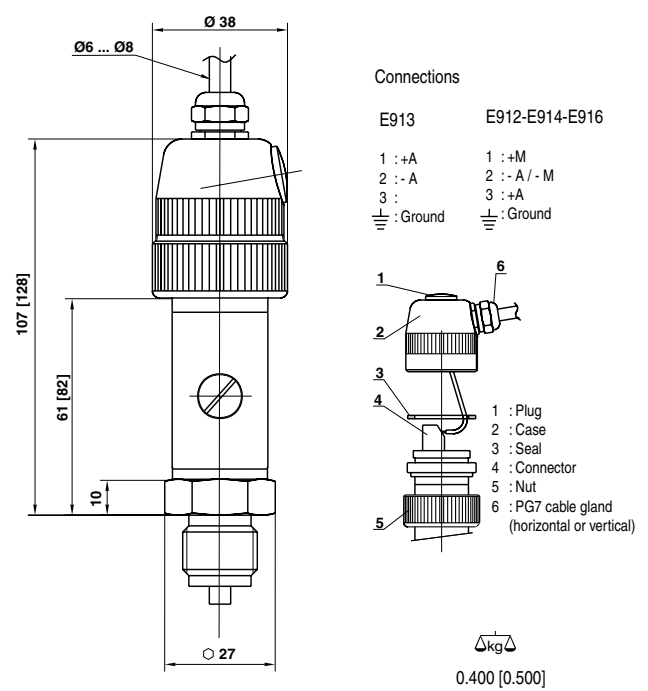
Pig tail (length 1.5 m) + PG7 cable gland

Dimensional Drawings (mm) - Mounting Details

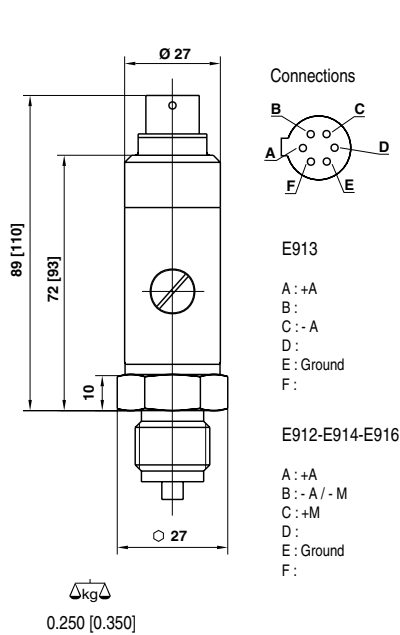
[xx] : dimensions and weight for "P < 1 bar" versions.



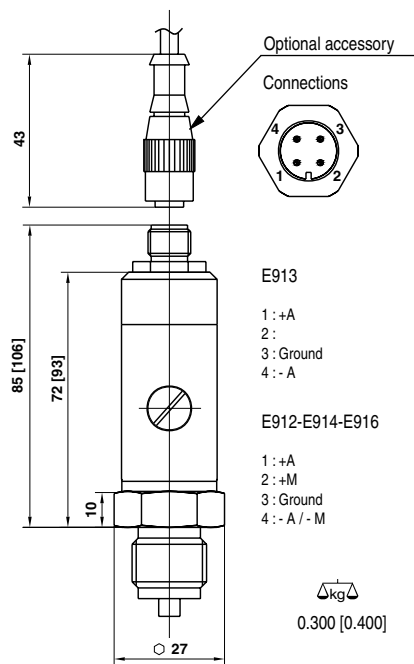
Pig tail cable outlet with 1/2 NPT male (length 1.5 m)



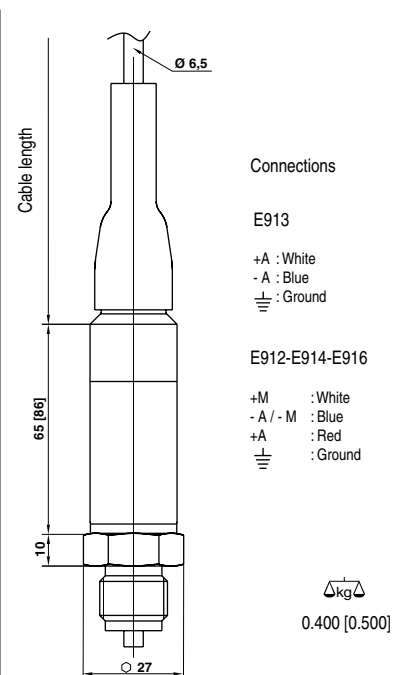
Terminal strip + screwed cap



6 contacts HE302 plug



M12, 4 contacts plug



Submersible cable (length 1.5 m)

Options

Specific cleaning (gas application). **Code 0829**

Drinking water application. **Code 0619**

Oxygen application **Code 0765**

Lightning protection. **Code 0809**

Marine version. **Code 0808**

Supply voltage (high⁽¹⁾) - **Code 2180** (low⁽¹⁾) - **Code 2182**

Ambient temperature (high⁽¹⁾) - **Code 2221** (low⁽¹⁾) - **Code 2220**

Compensated temperature range (-10 ... +70 °C). **Code 2158**

Zero thermal drift : ± 0.015 % of range/°C max. **Code 2159**

Span adjustment ± 10 % of range. **Code 2151**

Span adjustment ± 50 % of range (except for ranges $\leq 0 \dots +0.25$ bar and $0 \dots +600$ bar). **Code 2152**

Calibration of sensor with certificate: Q1060

Thread locking **Code 0771**

Other hydraulic connections

Additional length of cable

Stainless steel surface mounting brackets. **Code 0409**

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 2165**

Pig tail (1.5 m) (IP65). **Code 2160**

Pig tail (1.5 m) + PG7 cable gland (IP65, IP67 ⁽³⁾). **Code 2161**

Pig tail cable outlet with 1/2 NPT male (1.5 m) (IP65). **Code 2162**

Terminal strip outlet + screwed cap (IP65, IP67). **Code 2166**

Terminal strip outlet + cap with M20x150 thread and gland

(IP65, IP67). **Code 2167**

6 contacts HE302 plug (IP65). **Code 2163**

M12, 4 contacts plug (IP65). **Code 2164**

Submersible cable (IP68 version ⁽⁴⁾). **Code 2168**

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

⁽⁴⁾ IP68 : prolonged immersion

Measuring Ranges

Compound and pressure	Pressure in mbar								Pressure in bar															
	—	—	—	—	—	—	—	—	-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

E91xxxxxx	
Model	1'...3' digit
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
M20x150	9
Sensor seal	6' digit
NBR (Nitril) standard except (P < 250 mbar)	3
CR (Neoprene) except (P < 250 mbar)	4
EPDM	5
FFKM Chemraz® 505 1 bar $\leq$ P $\leq$ 250 bar	7
FKM (Viton®)	9
Viton® is a registered trademark of DuPont Dow Elastomers	
Pressure range	7'...9' digit
See codes in tables	xxx
Pressure type	10' digit
Absolute	A
Gauge	R
Some products in the E913 range are on one day delivery (ex-works) : please contact	

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

ELECTROSÓN