



# Pressure transmitters

## Standard **E910**

## Intrinsically safe **Y910**

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.

- **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)**
- **Intrinsically safe versions (Y910) : LCIE 99-E6074X certificat ; EEX ia IIC T6 or T5 approval**



E910 with IP68 option

### Specifications (20°C)

#### Measurement range :

from 0 ... 25 mbar to 0 ... 600 bar  
Compound pressure, gauge or absolute pressure

#### Output signal :

E912 - Y912 : 0 - 10 Vdc  
E913 - Y913 : 4 - 20 mA (except -1 +0 bar where -1 = 20 mA, 0 = 4 mA)  
E914 - Y914 : 1 - 5 Vdc  
E916 - Y916 : 0 - 20 mA

#### Supply voltage :

E912 : 14 to 40 Vdc    Y912 : 14 to 28 Vdc  
E913 - E914 : 11 to 40 Vdc    Y913 - Y914 : 11 to 28 Vdc  
E916 : 8 to 40 Vdc    Y916 : 8 to 28 Vdc  
Option : high voltage: up to 48 Vdc  
low voltage: 8 to 32 Vdc (E913, E914)

For intrinsically safe versions Y910, power supply electrical parameters device must be :

$U_{supply} \leq 28$  Vdc ;  $I \leq 120$  mA ;  $P \leq 0.8$  W

#### Insulation :

> 100 M $\Omega$  at 250 Vdc. Option: 500 Vdc.

#### Maximum input current :

E912 - Y912 / E914 - Y914 : 6 mA  
E916 - Y916 : < 25 mA

#### Load impedance (+ M / - M) :

E912 - Y912 :  $\geq 2.5$  k $\Omega$   
E914 - Y914 :  $\geq 1$  k $\Omega$   
E913, E916 : see diagrams overleaf

#### Electromagnetic compatibility :

- Standards EN50082-1 and -2 (immunity)
- Standards EN50081-1 and -2 (emission: a factor of 100 below the permitted maximum) with screened cable, screen connected at both ends

#### Global error (linearity, hysteresis and repeatability) :

Typically  $\pm 0.2\%$  of F.S. } by reference to best fit straight line  
Max.  $\pm 0.3\%$  of F.S. }  
For  $P \leq 60$  mbar and  $P = 600$  bar :  
Typically  $\pm 0.6\%$  of F.S. } by reference to best fit straight line  
Max.  $\pm 1\%$  of F.S. }

#### Operating temperature :

- Ambient (Ta) :  
Standard E910 : - 25 to + 85°C  
Option E910 : low T°: - 40 to + 85°C / high T°: - 25 to + 100°C  
Standard Y910 : - 25 to + 40°C (T6 approval)  
- 25 to + 70°C (T5 approval)
- Fluid : - 25 to + 100°C (Ta  $\leq$  50°C)

#### Storage temperature :

- 40°C to + 85°C

#### Compensated temperature range (zero and sensitivity) :

Standard : - 10 to + 55°C. Option : - 10 to + 70°C

#### Zero thermal drift :

$\pm 0.025\%$  F.S./°C max. (except  $P \leq 1$  bar:  $\pm 0.04\%$  F.S./°C)  
Option:  $\pm 0.015\%$  F.S./°C max. (except  $P \leq 1$  bar:  $\pm 0.025\%$  F.S./°C)

#### Span thermal drift :

Typically  $\pm 0.01\%$ /°C  
Max.:  $\pm 0.015\%$ /°C

#### Wetted parts :

Ceramic + stainless steel 1.4404 (316L) + NBR seal (standard)

#### Standard connections :

- Electrical : DIN 43650 connector
  - Pressure : G1/2 A DIN 16288
- Many options available

#### Protection rating (EN 60529) :

Standard: IP65 (DIN connector)  
Option: IP67 or IP68 (depending on connection)

#### Typical response time :

$\leq 3$  ms

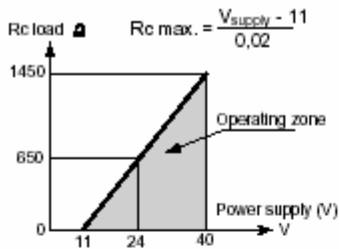
#### Vibration resistance (IEC 68-2-6) :

1.5 mm (10-55 Hz), 20 g (55 Hz to 2 kHz)

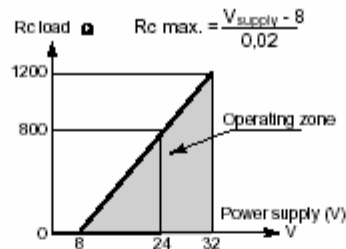
#### Shock resistance (IEC 68-2-32) :

25 falls from 1 m on concrete ground

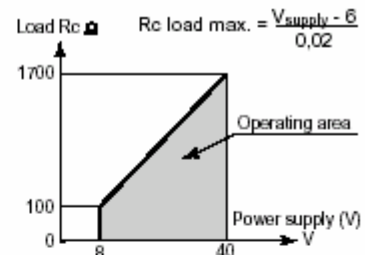
## Load diagrams



E913 : 4-20 mA standard



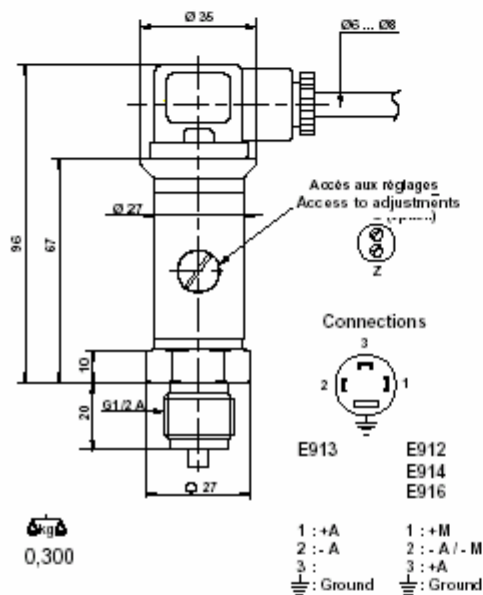
E913 : 4-20 mA low voltage



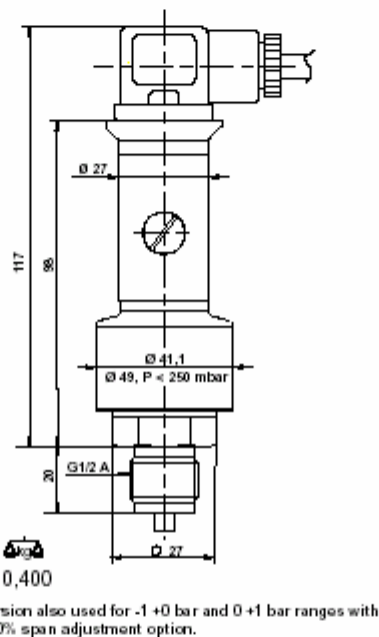
E916 : 0-20 mA version

## Dimensions (mm), connections

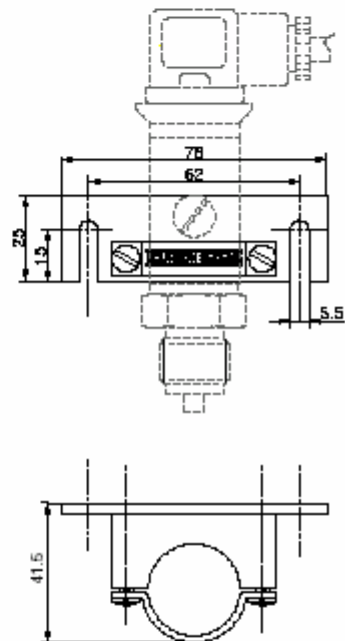
### Standard. $P \geq 1$ bar DIN 43650 connector



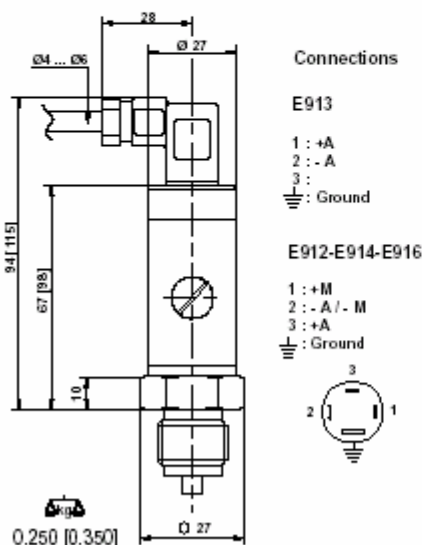
### Standard version for $P < 1$ bar



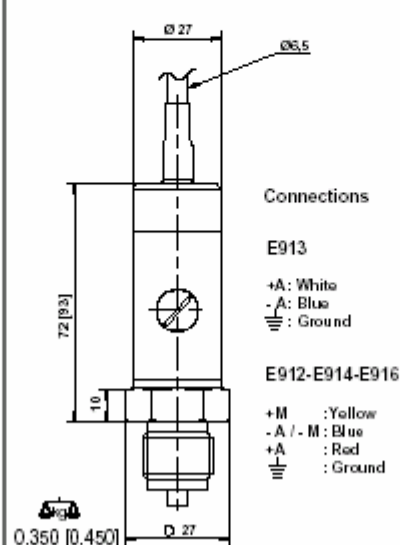
### Option : Stainless steel surface mounting brackets



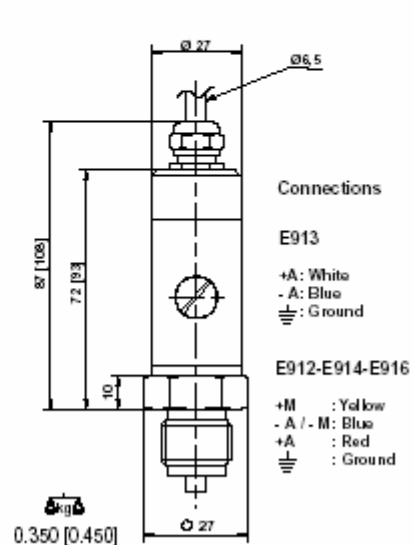
### Option Micro DIN 43650C connector (8 mm)



### Option Cable outlet (length 1.5 m)

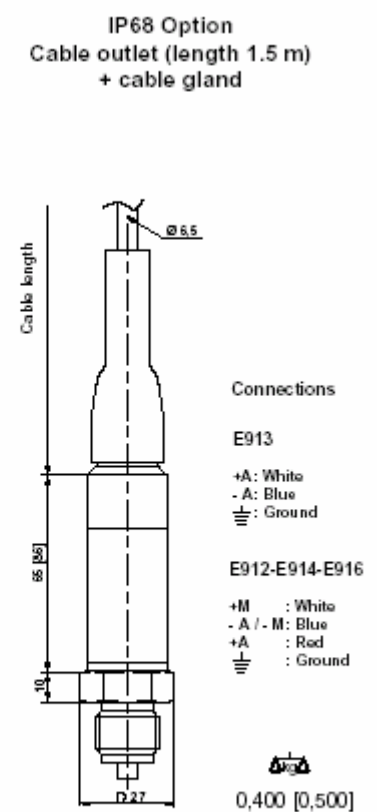
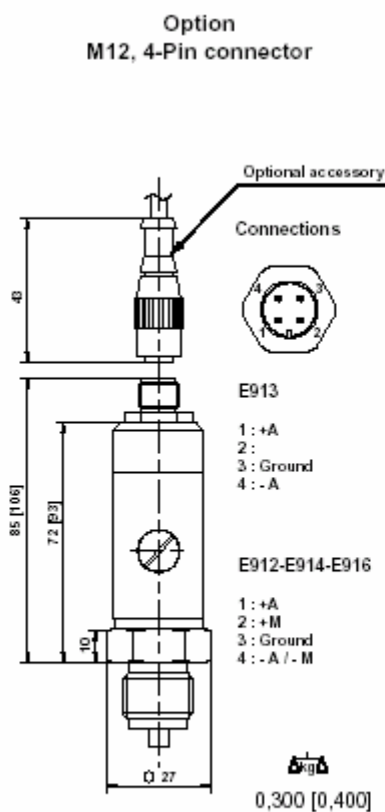
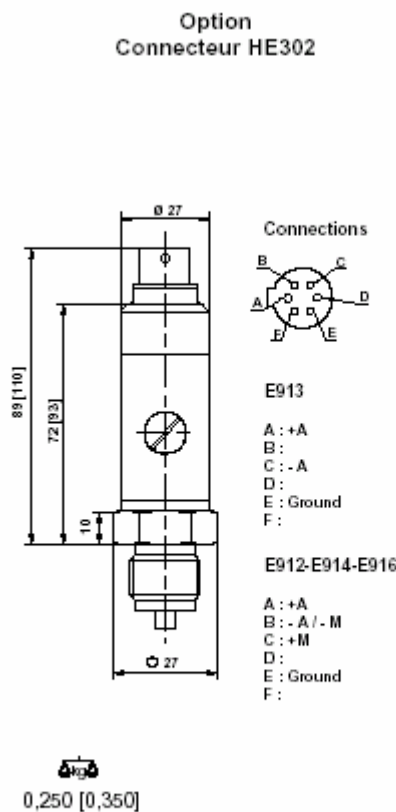
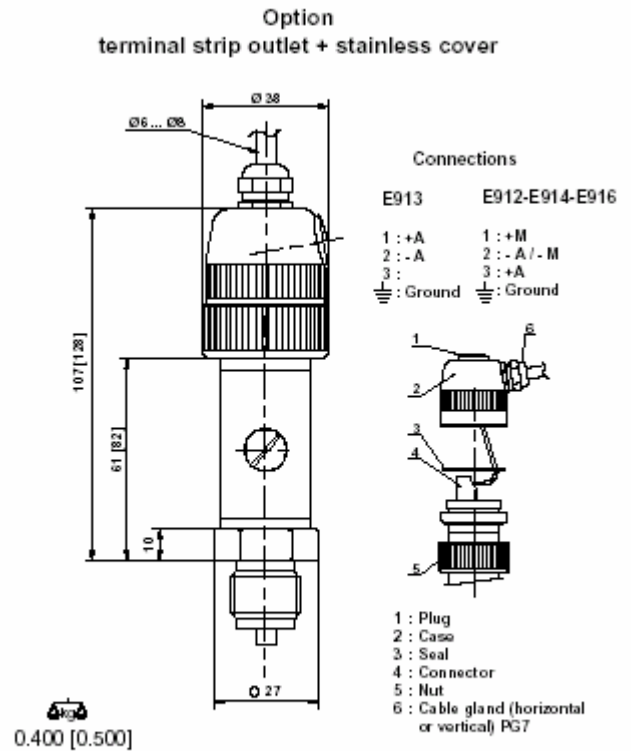
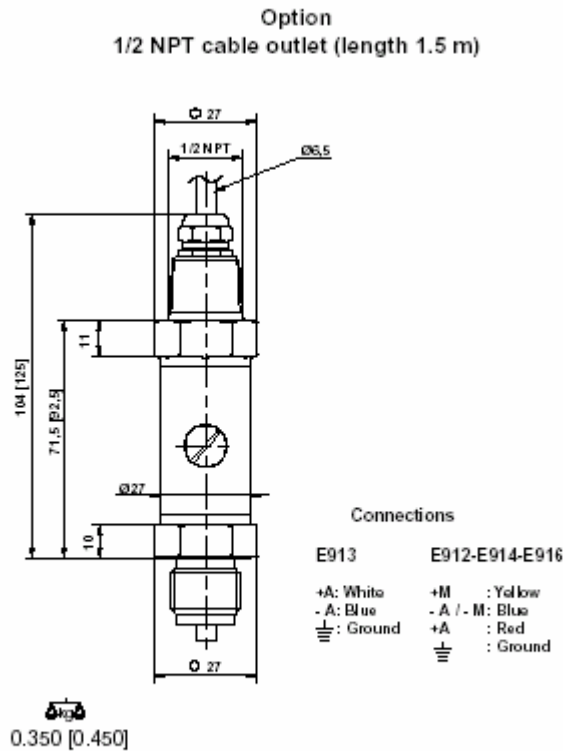


### Option Cable outlet (length 1.5 m) + PG7 Cable gland



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

# Dimensions (mm), connections



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