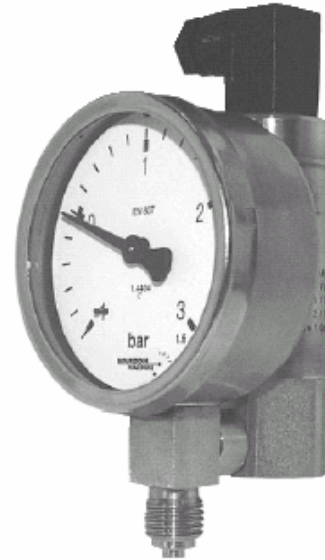




E8900 Pressure gauge with transmitter

- Compound and gauge pressure measurement
- All stainless steel pressure gauge
- Ceramic sensor, TRANSBAR® technology
- Zero and span adjustments as standard ($\pm 10\%$ of range)
- Voltage surge and reverse polarity protection
- Intrinsically safe version (Y8900)
- Ex ia IIC T6 (or T5) approval
- Conforms to European EMC directive, CE marked



The E8900 is created by the use of a stainless steel pressure gauge – Ø63, 100, 150 or 160 mm – and the E910* pressure transmitter.

It has been designed for all industrial applications to allow both a local pressure reading and remote signal transmission to a Programmable Logic Controller or other computer-based system.

* See leaflet: A11.03.UK

Technical Data (20°C)

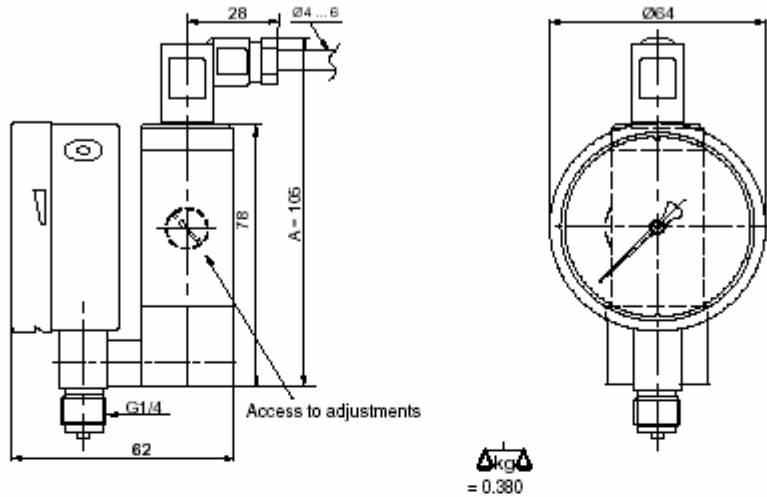
Measurement range	Compound pressure: -1...0 to -1...24 bar Gauge pressure: 0...1 to 0...400 bar	Operating temperature	Ambient (Ta) Standard E910 -25...+85°C Option E910 Low T ⁻ : -40...+85°C, High T ⁺ : -25...+100°C Standard Y910 -25...+40°C (T6 approval) -25...+70°C (T5 approval)
Output signal	E89X2-Y89X2: 0...10 Vdc. E89X3-Y89X3: 4...20 mA (except -1...0 bar or -1 = 20 mA, 0 = 4 mA) E89X4-Y89X4: 1...5 Vdc. E89X6-Y89X6: 0...20 mA	Fluid	-25...+100°C (Ta ≤ 50°C)
Supply voltage	E89X2: 14...40 Vdc. Y89X2: 14...28 Vdc E89X3-E89X4: 11...40 Vdc. Y89X3-Y89X4: 11...28 Vdc E89X6: 8...40 Vdc. Y89X6: 8...28 Vdc	Storage temperature	-40...+85°C
Option	High voltage: up to 48 Vdc Low voltage: 8...32 Vdc (E89X3, E89X4) For intrinsically safe versions Y8900, power supply electrical parameters device must be: $U_{supply} \leq 28 \text{ Vdc}; I \leq 120 \text{ mA}; P \leq 0.8 \text{ W}$	Compensated temperature range (zero and sensitivity)	-10...+55°C. Option: -10...+70°C
Insulation	> 100 MΩ at 250 Vdc. Option: 500 Vdc.	Thermal drift (transmitter)	Zero ±0.025% FS/°C max. Option: ±0.015% FS/°C Sensitivity ±0.015% FS/°C max
Maximum input current	E89X2-Y89X2 / E89X4-Y89X4: 6 mA E89X6-Y89X6: < 25 mA	Case	Stainless steel 1.4301 (304)
Load impedance (+M / -M)	E89X2-Y89X2: ≥ 2.5 kΩ E89X4-Y89X4: ≥ 1 kΩ E89X3: $R_{L0} \leq (U_{supply} - 11) / 0.02$ E89X3: $R_{L0} \leq (U_{supply} - 8) / 0.02$ (low voltage option) E89X6: $R_{L0} \leq (U_{supply} - 6) / 0.02$	Wetted parts	Ceramic + stainless steel 1.4404 (316 L) + NBR seal
CE -conformity	Standards EN50082-1 and -2 (immunity) Standards EN50081-1 et -2 (emission: a factor of 100 below the permitted maximum) with screened cable, screen connected at both ends Pressure standards 97/23/CE	Connections	Electrical: DIN 43650 connector (standard) Pressure: G1/2 (standard)
Pressure gauge accuracy (EN 837-1)	Ø 63 mm (E8900): ±1.6% of full scale Ø 100, 150 and 160 mm (E8960, E8970, E8980): ±1% of full scale	Protection rating (EN 60529)	Standard: IP65
Global error (linearity, hysteresis and repeatability) by reference to BFSL	Typically: ±0.2% of F.S. / Max.: ±0.3% F.S.	Vibration resistance (IEC 68-2-6)	BH version: 2.5 mm (5 - 20 Hz) / 5 g (20 to 1000 kHz)



Dimensions (mm), weight

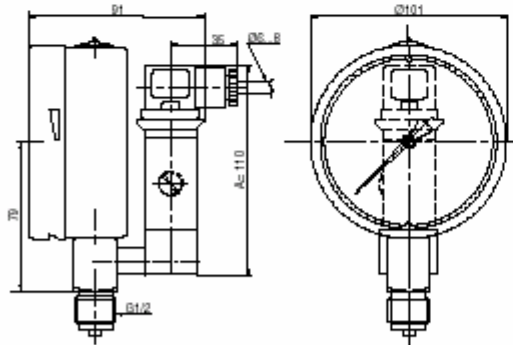
E8930 - pressure gauge Ø 63 mm
Micro DIN 43650C connector as standard

TYPE D

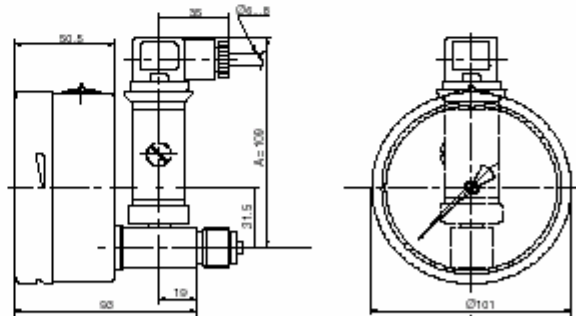


E8950 - pressure gauge Ø 100 mm
DIN 43650 connector as standard

TYPE D



TYPE F



Electrical connection	A
DIN 43650 connector	110
DIN 43650C micro plug (option 08)	108
Fig tail + PG7 cable gland (option 23)	101
Terminal strip outlet +screwed cap (option 20)	121

= 0.900

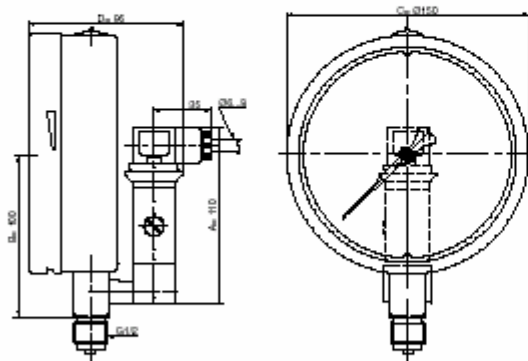
Electrical connection	A
DIN 43650 connector	109
DIN 43650C micro plug (option 08)	107
Fig tail + PG7 cable gland (option 23)	100
Terminal strip outlet + screwed cap (option 20)	120

= 0.900

Dimensions (mm), weight

E8970 - pressure gauge Ø 150 mm
DIN 43650 connector as standard

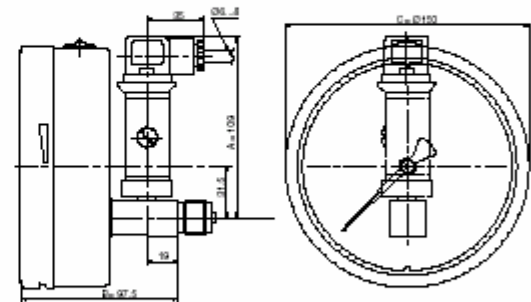
TYPE D



Electrical connection	A
DIN 43650 connector	110
DIN 43650C micro plug (option 08)	108
Pig tail + PG7 cable gland (option 23)	101
Terminal strip outlet +screwed cap (option 20)	121

= 1.200

TYPE F



Electrical connection	A
DIN 43650 connector	109
DIN 43650C micro plug (option 08)	107
Pig tail + PG7 cable gland (option 23)	100
Terminal strip outlet +screwed cap (option 20)	120

= 1.200

E8980 - pressure gauge Ø 160 mm
DIN 43650 connector as standard

TYPE D

A = 110
B = 105
C = Ø 160
D = 95

= 1.300

TYPE F

A = 109
B = 97,5
C = Ø 160

= 1.300

Connections

Connector DIN and Micro DIN

	E/Y89X3	E/Y89X2/4/6
1	+Supply	+ Meas.
2	- Supply	- Meas./-Supply
3		+ Supply
	Ground	Ground

Cable outlet + cable gland PG7

	E/Y89X3	E/Y89X2/4/6
White	+Supply	
Blue	- Supply	- Meas./-Supply
Red		+Supply
Yellow		+ Meas.
Screen		



Options

Uncoded Options (have to be listed after the code)

Lightning protection
 Supply voltage (high/low)⁽¹⁾
 Ambient temperature (high/low)⁽¹⁾
 Compensated temperature range (-10...+70°C)
 Zero thermal drift: ±0.015% of range/°C max.
 Calibration of sensor with certificate: Q1060
 B type of mounting (back connection + flange) for Ø100, 150 and 160 mm
 Other units: kPa (code D), MPa (code E), kg/cm² (code F), psi (code H),
 mbar (code N)
 Mounting on chemical seals : please call us
 Other : please call us

Coded Options

Other electrical connections:
 08. DIN 43650C micro plug (IP65 ⁽²⁾)
 23. Pig tail (1.5 m) + PG7 cable gland (IP65, IP67 ⁽³⁾)
 20. Terminal strip outlet + screwed cap (IP65, IP67)

⁽¹⁾ see specifications for details / ⁽²⁾ F65: water spray / ⁽³⁾ IP67: temporary immersion

Measuring Ranges (bar)

Range	Compound pressure	-1+0	-1+0.6	-1+1.5	-1+3	-1+5	-1+9	-1+15	-1+24	-	-	-	-	-	
Pressure		1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400
Max. overpressure*		1.3	3	4	8	12	20	32	50	80	120	200	320	500	800

* pressure gauge

Ordering Details - E8900

		x89xx xxxxx xxx												
Model	1'...3' digit	E89												
Standard		Y89												
Intrinsically safe														
Dial diameter	4' digit													
Ø 63		3												
Ø 100		5												
Ø 150		7												
Ø 160		8												
Output signal	5' digit													
0...10 Vdc		2												
4...20 mA standard		3												
1...5 Vdc		4												
0...20 mA		6												
Type of mounting	6' digit													
Bottom connection (Ø 63 - 100 - 150 - 160 mm)		D												
Back connection (Ø 100 - 150 - 160 mm)		F												
Hydraulic connection	7'...8' digit													
G 1/4 (standard Ø 63 mm)		02												
G 1/2 (standard Ø 100 - 150 - 160 mm)		03												
1/4 NPT		05												
1/2 NPT		06												
Cell O'Ring	9' digit													
NBR (nitril) standard		3												
Type of liquid filling	10' digit													
Dry		0												
BH1 filling (-20...+70°C)		1												
BH3 filling (-25...+85°C)		3												
Pressure range	11'...13' digit													
See codes in tables														

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