



E930 Transmitter for sanitary use

Stainless steel 1.4404 (316L) flush diaphragm
 Measurement of vacuum, absolute or gauge pressure
TRANSBAR® ceramic technology
 Zero adjustment as standard ($\pm 10\%$ of range)
 Welded construction – reinforced product
 Various types of pressure ports : CLAMP, SMS, DIN ,
 or homogenizer (0...60 bar to 0...400 bar)
 Modularity of electrical and hydraulic connections
 Conforms to European EMC Directive, CE marked
 Highly resistant to severe process conditions
 Intrinsically safe versions (Y930) : LCIE 99-E6074X
 certificat ; EEX ia IIC T6 or T5 approval
 A approval (option)



The hygiene flush diaphragm transmitters of the E930/Y930 series are ideally suited to fulfill the pressure measurement requirements of the food, dairy and pharmaceutical industries among others.
 The cleanliness requirements of the food processing industry have dictated the "hygienic" design of these transmitters. They can also withstand without damage the various cleaning phases specific to these industries : sterilizing cycles, autoclaving and steam flushing.

Technical Data (20°C)

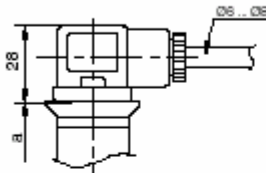
Measurement range	0...0.25 bar to 0...40 bar Compound, gauge or absolute pressure 0...60 bar to 0...400 bar homogenization version	Operating temperature	
Output signal	E932 - Y932 : 0...10 Vdc / E934 - Y934 : 1...5 Vdc E933 - Y933 : 4...20 mA / E936 - Y936 : 0...20 mA	Ambient (Ta)	Standard E930 - 15...+85°C High T° option - 15...+100°C Standard Y930 - 15...+40°C (T6 approval) - 15...+70°C (T5 approval) - 15...+100°C (Ta ≤ 50°C) High T° option - 15...+150°C (Ta ≤ 50°C)
Supply voltage	E932 : 14...40 Vdc Y932 : 14...28 Vdc E933 - E934 : 11...40 Vdc Y933 - Y934 : 11...28 Vdc E936 : 8...40 Vdc Y936 : 8...28 Vdc	Fluid	
Option	High voltage : up to 48 Vdc Low voltage : 8...32 Vdc (E933, E934) For intrinsically safe versions Y930, power supply electrical parameters device must be : $U_{lim} \leq 28$ Vdc ; $I \leq 120$ mA ; $P \leq 0.8$ W	Sterilizing	140°C max for 30 minutes
Insulation	> 100 MΩ at 250 Vdc. Option 500 Vdc	Storage	-40...+85°C
Maximum input current	E932 - Y932 / E934 - Y934 : 6 mA E936 - Y936 : < 25 mA	Zero thermal drift	$\pm 0.025\%$ FS/°C max. Option : $\pm 0.015\%$ FS/°C max $\pm 0.04\%$ FS/°C max. for P < 1 bar
Load impedance (+ M / - M)	E932 - Y932 : ≥ 2.5 kΩ E934 - Y934 : ≥ 1 kΩ E933 : $R_{L3} \leq (U_{supply} - 11)/0.02$ E933 : $R_{L3} \leq (U_{supply} - 8)/0.02$ (low voltage option) E936 : $R_{L3} \leq (U_{supply} - 6)/0.02$	Span thermal drift	Typ. : $\pm 0.01\%$ /°C - Max : $\pm 0.015\%$ /°C
CE-conformity	Standards EN50082-1 and -2 (immunity) Standards EN50081-1 et -2 (emission) with cable, screen connected at both ends Pressure standards 97/23/CE	Wetted parts	Stainless steel 1.4404 (316L) flush diaphragm
screened		Connections	Electrical : DIN 43680 connector (standard) Pressure : Clamp, DIN, SMS, welded conical threaded nipple. Filling oil (FDA approved) : LRS1, -15...+150°C (standard) Many options available
Protection rating (EN 60529)	IP65 (DIN connector) Option : IP67 or IP68 (depending on connection)	Typical response time	≤ 3 ms
Global error (linearity, hysteresis and repeatability) by reference to BFSL	Typ. : $\pm 0.2\%$ F.S. / Max : $\pm 0.3\%$ F.S.	Vibration resistance (EN 60068-2-6)	1.5 mm (10 - 55 Hz), 20 g (55 Hz - 2 kHz)
Compensated temperature range (zero and sensitivity)	- 10...+55°C. Option : - 10...+70°C	Shock resistance (EN 60028-2-32)	25 falls from 1 m on concrete ground
		Weight	From 0.300 to 1.5 kg depending on versions



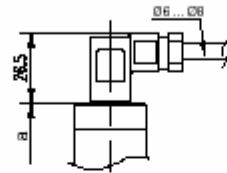
Configuration and dimensions (mm) of the transmitter

Electrical connections

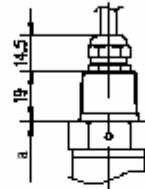
DIN 43650 connector
(standard)



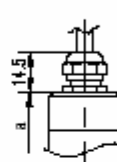
Option 08
DIN 43650C micro plug



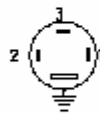
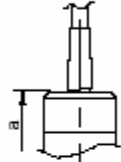
Option 54
Pig tail cable outlet
with 1/2 NPT male (1.5 m)



Option 23
Pig tail +
PG7 cable gland
(1.5 m)



Option 22
pig tail
(1.5 m)

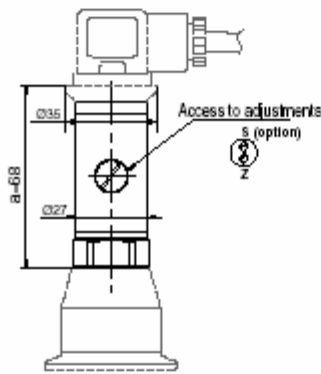


	E/Y933	E/Y932/4/6
1	+A	+M
2	-A	-A / -M
3	+A	+A
4	Ground	

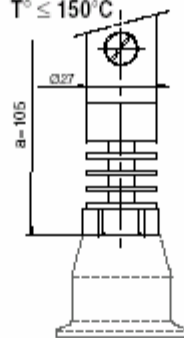
	E/Y933	E/Y932/4/6
White	+A	
Blue	-A	-A / -M
Red		+A
Yellow		+M
Ground	Ground	

Transmitter body

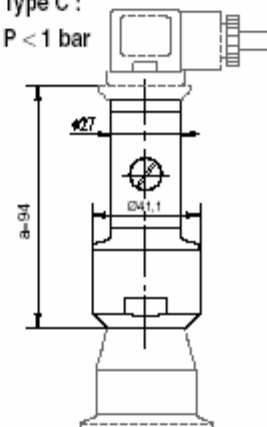
Type A :
G1/2 standard
P ≥ 1 bar



Type B :
high temperature
option
T° ≤ 150°C

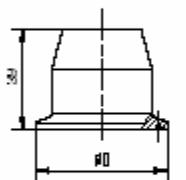


Type C :
P < 1 bar



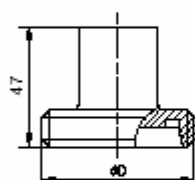
Hydraulic connections

CLAMP ISO 2852



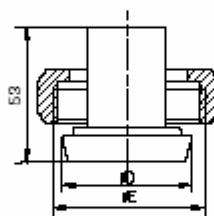
DN	ØD	Bar
DN25	Ø50.5	2.5 ≤ P < 40
DN38	Ø50.5	0.4 ≤ P < 40
DN51	Ø64	0.25 ≤ P < 40

DIN 11851FF



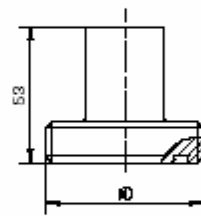
DN	ØD	Bar
DN32	58x1/8"	0.6 ≤ P ≤ 40
DN40	65x1/8"	0.4 ≤ P ≤ 40
DN50	78x1/8"	0.25 ≤ P ≤ 40

DIN 11851FL



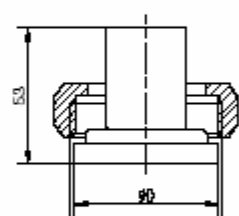
DN	ØD	ØE	Bar
DN32	Ø50	58x1/8"	0.6 ≤ P ≤ 40
DN40	Ø56	65x1/8"	0.4 ≤ P ≤ 40
DN50	Ø68	78x1/8"	0.25 ≤ P ≤ 40

SMS 1145FF



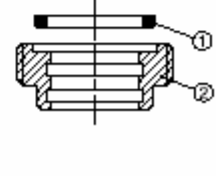
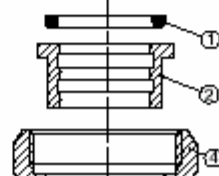
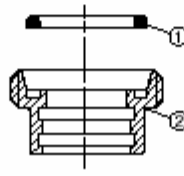
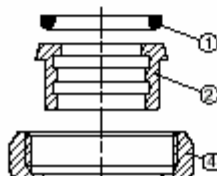
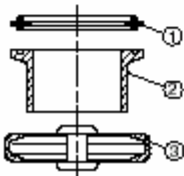
DN	ØD	Bar
DN38	60x1/8"	0.4 ≤ P ≤ 40
DN51	70x1/8"	0.25 ≤ P ≤ 40

SMS 1145FL



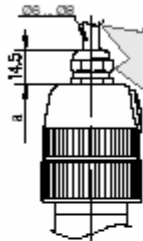
DN	ØD	ØE	Bar
DN38	Ø55.2	60x1/8"	0.4 ≤ P ≤ 40
DN51	Ø63.2	70x1/8"	0.25 ≤ P ≤ 40

Connection accessories





Option 20
Terminal strip outlet +
screwed cap

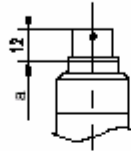


Especially dedicated to food, chemistry,
pharmaceutical industries



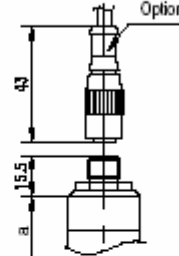
	EY933	EY932/4/6
1	+A	+M
2	-A	-A/-M
3		+A
4	Masse	

Option 09
6 contacts HE302 plug



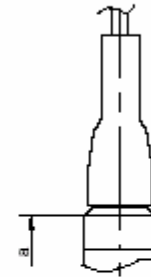
	EY933	EY932/4/6
A	+A	+A
B		-A/-M
C	-A	+M
D		
E	Masse	
F		

Option 24
M12 4 contacts plug



	EY933	EY932/4/6
1	+A	+A
2		+M
3	Masse	
4	-A	-A / -M

Option 27
Submersible cable (IP68)



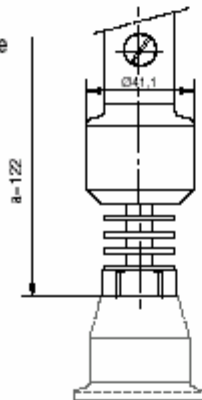
	EY933	EY932/4/6
Blanc	+A	+M
Bleu	-A	-A / -M
Rouge		+A
Tresse		

Type D :

P < 1 bar

High temperature
option

T° ≤ 150°C



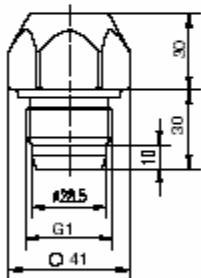
Body transmitter dimension according to the electrical
connection (a in mm)

	a (mm)	Type A	Type B	Type C	Type D
DIN 43650 connector	68	105	94	122	
Micro DIN 43650C connector	68	105	94	122	
Fig tail	72.5	109.5	98.5	126.5	
Fig tail + PG7 cable gland	72.5	109.5	98.5	126.5	
Fig tail cable outlet with 1/2 NPT	72	109	98	126	
Terminal strip outlet + screwed cap	107	144	133	161	
6 contacts HE302 plug	77.5	114.5	103.5	131.5	
M12, 4 contacts plug	71	108	97	125	
Submersible cable, IP68 ⁽¹⁾	75.5	112.5	101.5	129.5	

(1) no access to adjustments

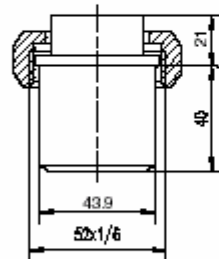
DR0

2.5 ≤ P ≤ 40 bar



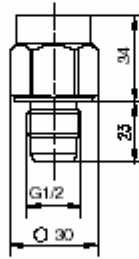
DR2

0.6 ≤ P ≤ 40 bar

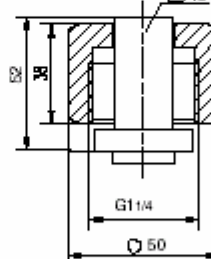


DR8

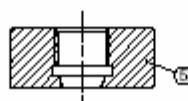
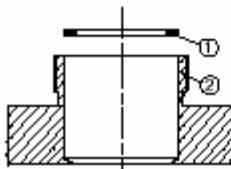
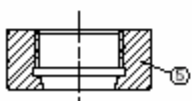
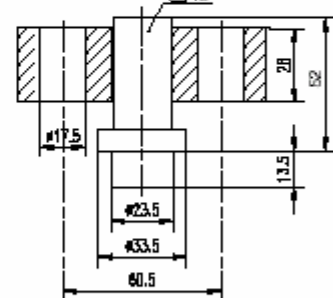
7 ≤ P ≤ 400 bar



Homogeneizer 622
60 ≤ P ≤ 600 bar



Homogeneizer 623
60 ≤ P ≤ 600 bar



① Seal (EPDM)

② Endpiece

③ Collar


④ Nut

⑤ Welded nipple



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.
- Span adjustment ±10% of range
- Span adjustment ±50% of range (except for P ≤ 1 bar)
- Calibration of sensor with certificate: Q1060
- Stainless steel surface mounting brackets
- Other hydraulic connections (Micro-CLAMP DN 17.2, ...)
- Additional length of cable
- Other units: kPa (code D), MPa (code E), kg/cm² (code F), psi (code H), mbar (code N)
-  approval

Coded Options

- Other electrical connections:
- 08. DIN 43650C micro plug (IP65 ⁽²⁾)
 - 22. Pig tail (1.5 m) (IP65)
 - 23. Pig tail (1.5 m) + PG7 cable gland (IP65, IP67 ⁽³⁾)
 - 54. Pig tail cable outlet with 1/2 NPT male (1.5 m) (IP65)
 - 20. Terminal strip outlet + screwed cap (IP65, IP67)
 - 09. 6 contacts HE302 plug (IP65)
 - 24. M12, 4 contacts plug (IP65)
 - 27. Submersible cable (IP68 version ⁽⁴⁾)

⁽¹⁾ see specifications for details / ⁽²⁾ P65: water spray / ⁽³⁾ IP67: temporary immersion / ⁽⁴⁾ IP68: prolonged immersion

Measuring Ranges (bar)

Pressure range	compound	—	—	—	-1+0	-1+0.6	-1+1.5	-1+3	-1+5	-1+9	-1+15	-1+24	-1+39	—	—	—	—	—
	pressure	0.25	0.4	0.6	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400
Measurement range	0.275	0.44	0.66	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	1	1	1	3	3	4	8	12	20	32	50	80	120	200	320	500	600	800
Burst pressure	2	2	2	6	6	7	12	18	30	48	75	120	180	300	480	600	800	1000

Ordering Details - E930

	x93x	xxx	xxxx
Model	1'...3' digit		
Standard	E93		
Intrinsically safe	Y93		
Output signal	4' digit		
0...10 Vdc	2		
4...20 mA	3		
1...5 Vdc	4		
0...20 mA	6		
Hydraulic connection	5'...7' digit		
CLAMP ISO DN 25	125		
CLAMP ISO DN 38	138		
CLAMP ISO DN 51	151		
SMS FF DN 38	238		
SMS FF DN 51	251		
SMS FL DN 38 + nut	338		
SMS FL DN 51 + nut	351		
DIN FF DN 32	432		
DIN FF DN 40	440		
DIN FF DN 50	450		
DIN FL DN 32 + nut	532		
DIN FL DN 40 + nut	540		
DIN FL DN 50 + écrou	550		
DR0 (G1 with conical threading)	DR0		
DR2 + nut	DR2		
DR8 (G1/2 with conical threading)	DR8		
Homogeneization version with nut	622		
Homogeneization version with flange	623		
Pressure range	8'...10' digit		
See codes in tables		xxx	
Pressure type	11' digit		
Absolute			A
Gauge			R

Code	Range in bar.	
	Vacuum pressure.	Pressure
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
B1L	-1	+ 39
B10	0	+ 0,25
B11	0	+ 0,4
B12	0	+ 0,6
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
B39	0	+ 600

See in the central pages the pressure compatibilities charts according to the hydraulic connection