

Pressure gauges all stainless steel, DIN Case 7870B – 7970B Series



(478 410B)



(478 580B)

- All Stainless Steel
- Dry or glycerin filled
- Ø 63, Ø 100, Ø 160 mm
- Pressure range -1 to 1000 bar
- Adjustable pointer
- Accuracy : 1 or 1,6 according to Ø
- AISI 316L connection ¼" or ½"
- Bottom or back connection
- With or without flange

APPLICATIONS

For aggressive environments and corrosive or special fluids in the chemical, petrochemical, pharmaceutical and food industries.

DESCRIPTION

Pressure gauges 7870B - 7970B Series, available in watertight case and fillable, are designed for diaphragm seals mounting and electrics contact

TECHNICAL DETAILS

Pressure range	-1 to 1000 bar
Accuracy class	1 for Ø 100 and Ø 160 1,6 for Ø 63
Design	According to EN 837-1
Pressure element	≤ 40 bar : AISI 316L C tube, argon welding ≥ 60 bar : AISI 316L helical tube, argon welding
Movement	AISI 304
Case	AISI 304 stainless steel with blow-out
Pointer	Black aluminium
Bezel	AISI 304 stainless steel, bayonet ring
Window	Safety glass
Socket, connection	AISI 316L, welded on the case G ¼" or G ½" according to Ø
Dial	White aluminium, black lettering
Graduation	bar
Protection	IP 66
Filling liquid	Glycerin
Operating temperature	Ambient : -40...+65 °C (dry) / -20...+60 °C (filled) Process : -40...+200 °C (dry) / -20...+70 °C (filled)

EC Conformity : The instrument meets the legal requirements of the current European Directives



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D-806.35-EN-AE

PR

806-35/1

REFERENCES



Bottom connection

7871B Model (dry) – 7971B Model (filled)

Measuring range	Ø 63 G ¼"		Ø 100 G ½"		Ø 160 G ½"	
	dry	filled	dry	filled	dry	filled
-1 0 bar	478 000B	479 000B	478 340B	479 340B	478 680B	479 680B
-1 1,5 bar	478 002B	479 002B	478 345B	479 345B	478 685B	479 685B
-1 3 bar	478 004B	479 004B	478 346B	479 346B	478 686B	479 686B
-1 5 bar	478 006B	479 006B	478 347B	479 347B	478 687B	479 687B
-1 9 bar	478 010B	479 010B	478 348B	479 348B	478 688B	479 688B
-1 15 bar	478 015B	479 015B	478 349B	479 349B	478 689B	479 689B
-1 24 bar	478 017B	479 017B	478 343B	479 343B	478 683B	479 683B
0 0,6 bar			478 350B	479 350B	478 690B	479 690B
0 1 bar	478 020B	479 020B	478 360B	479 360B	478 700B	479 700B
0 1,6 bar	478 030B	479 030B	478 370B	479 370B	478 710B	479 710B
0 2,5 bar	478 040B	479 040B	478 380B	479 380B	478 720B	479 720B
0 4 bar	478 050B	479 050B	478 390B	479 390B	478 730B	479 730B
0 6 bar	478 060B	479 060B	478 400B	479 400B	478 740B	479 740B
0 10 bar	478 070B	479 070B	478 410B	479 410B	478 750B	479 750B
0 16 bar	478 080B	479 080B	478 420B	479 420B	478 760B	479 760B
0 25 bar	478 090B	479 090B	478 430B	479 430B	478 770B	479 770B
0 40 bar	478 100B	479 100B	478 440B	479 440B	478 780B	479 780B
0 60 bar	478 110B	479 110B	478 450B	479 450B	478 790B	479 790B
0 100 bar	478 120B	479 120B	478 460B	479 460B	478 800B	479 800B
0 160 bar	478 130B	479 130B	478 470B	479 470B	478 810B	479 810B
0 250 bar	478 140B	479 140B	478 480B	479 480B	478 820B	479 820B
0 315 bar	478 145B	479 145B	478 485B	479 485B	478 825B	479 825B
0 400 bar	478 150B	479 150B	478 490B	479 490B	478 830B	479 830B
0 600 bar			478 500B	479 500B	478 840B	479 840B
0 1000 bar			478 502B	479 502B	478 842B	479 842B

OPTIONS

- Bar/PSI scale : Add P at the end of the reference
- NPT thread : Add N at the end of the reference
- NPT thread + bar/PSI scale : Add T at the end of the reference
- ATEX version : Add A at the end of the reference
- Polycarbonate window : Add C at the end of the reference
- 316 SS case : Add S at the end of the reference
- Cleaning for oxygen for dry pressure gauge : Add X at the end of the reference
- Diaphragm seals mounting : See chapter "Diaphragm seals" - Doc 813-xx
- Electric contact mounting : See Doc 807-xx
- Red adjustable pointer / Red max pointer : See Doc 816-33
- Calibration certificate : See Doc 800-76

For an other options : Contact the technical service



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D-806.35-EN-AE

PR

806-35/2

REFERENCES



Center back connection

Ø 63 : 7874B Model (dry) – 7974B Model (filled)



Lower back connection

Ø 100, Ø 160 : 7875B Model (dry) – 7975B Model (filled)

Measuring range	Ø 63 G ¼"		Ø 100 G ½"		Ø 160 G ½"	
	dry	filled	dry	filled	dry	filled
-1 0 bar	478 170B	479 170B	478 510B	479 510B	478 850B	479 850B
-1 1,5 bar	478 172B	479 172B	478 515B	479 515B	478 855B	479 855B
-1 3 bar	478 174B	479 174B	478 516B	479 516B	478 856B	479 856B
-1 5 bar	478 176B	479 176B	478 517B	479 517B	478 857B	479 857B
-1 9 bar	478 178B	479 178B	478 518B	479 518B	478 858B	479 858B
-1 15 bar	478 179B	479 179B	478 519B	479 519B	478 859B	479 859B
-1 24 bar	478 181B	479 181B	478 513B	479 513B	478 853B	479 853B
0 0,6 bar			478 520B	479 520B	478 860B	479 860B
0 1 bar	478 190B	479 190B	478 530B	479 530B	478 870B	479 870B
0 1,6 bar	478 200B	479 200B	478 540B	479 540B	478 880B	479 880B
0 2,5 bar	478 210B	479 210B	478 550B	479 550B	478 890B	479 890B
0 4 bar	478 220B	479 220B	478 560B	479 560B	478 900B	479 900B
0 6 bar	478 230B	479 230B	478 570B	479 570B	478 910B	479 910B
0 10 bar	478 240B	479 240B	478 580B	479 580B	478 920B	479 920B
0 16 bar	478 250B	479 250B	478 590B	479 590B	478 930B	479 930B
0 25 bar	478 260B	479 260B	478 600B	479 600B	478 940B	479 940B
0 40 bar	478 270B	479 270B	478 610B	479 610B	478 950B	479 950B
0 60 bar	478 280B	479 280B	478 620B	479 620B	478 960B	479 960B
0 100 bar	478 290B	479 290B	478 630B	479 630B	478 970B	479 970B
0 160 bar	478 300B	479 300B	478 640B	479 640B	478 980B	479 975B
0 250 bar	478 310B	479 310B	478 650B	479 650B	478 985B	479 980B
0 315 bar	478 315B	479 315B	478 655B	479 655B	478 982B	479 982B
0 400 bar	478 320B	479 320B	478 660B	479 660B	478 990B	479 985B
0 600 bar			478 670B	479 670B	478 995B	479 990B
0 1000 bar			478 672B	479 672B	478 992B	479 992B

OPTIONS (an other options : Contact the technical service)

- Bar/PSI scale : Add P at the end of the reference
- NPT thread : Add N at the end of the reference
- NPT thread + bar/PSI scale : Add T at the end of the reference
- ATEX version : Add A at the end of the reference
- Polycarbonate window : Add C at the end of the reference
- 316 SS case : Add S at the end of the reference
- Cleaning for oxygen for dry pressure gauge : Add X at the end of the reference
- Diaphragm seals mounting : See chapter "Diaphragm seals" - Doc 813-xx
- Electric contact mounting : See Doc 807-xx
- Red adjustable pointer / Red max pointer : See Doc 816-33
- Calibration certificate : See Doc 800-76

With back or front flange :



Back flange - Bottom connection
7872B - 7972B Model



Front flange - Lower back connection
7878B - Type 7978B Model

- 1- Select 7871-7971 or 7875-7975 Model reference
- 2- Replace the reference 47x xxxB by 48x xxxB

Example :

The model 7871, Ø 63 ¼", 0-10 bar : ref. 478 070B becomes in 7872 (back flange) : 488 070B
The model 7875, Ø 63 ¼", 0-10 bar : ref. 478 240B becomes in 7878 (front flange) : 488 240B



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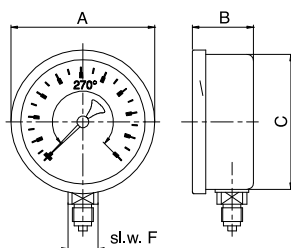
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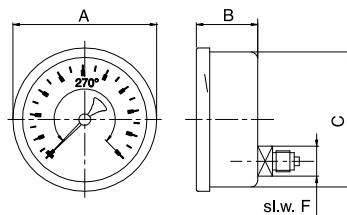
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806-35/3

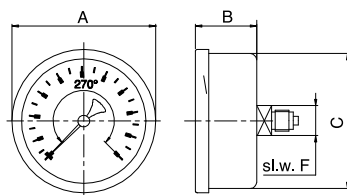
Bottom connection



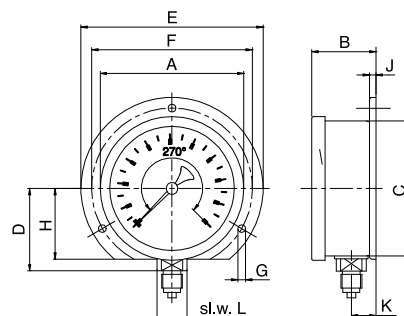
Lower back connection



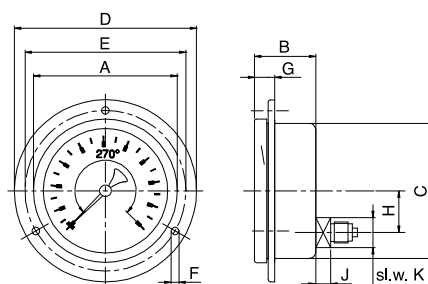
Center back connection



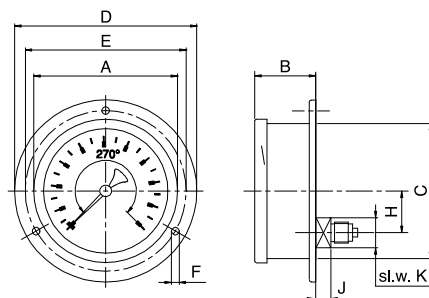
Back flange – Bottom connection



Front flange – Lower back connection



Back flange – Lower back connection



Bottom connection

	A	B	C	F	Dry [kg]	Filled [kg]
Ø 63	68	30	63	14	0,140	0,25
Ø 100	100	49	100	22	0,60	1,00
Ø 160	160	50	150	22	1,020	2,10

Back flange – Bottom connection

	A	B	C	D	E	F	G	H	J	K	L	Dry [kg]	Filled [kg]
Ø 63	68	31,2	63,0	35,5	85	75	3,6	33	3	11,5	14	0,175	0,35
Ø 100	105	49	99	63,0	132	116	5,0	52	4	19,5	22	0,600	1,10
Ø 160	160	50,0	150	97,0	196	178	6,0	83	6	24,0	22	1,360	2,40

Lower back connection

	A	B	C	F	Dry [kg]	Filled [kg]
Ø 100	110	49	100	22	0,565	1,10
Ø 160	160	50	150	22	1,120	2,20

Front flange – Lower back connection

	A	B	C	D	E	F	G	H	J	K	Dry [kg]	Filled [kg]
Ø 100	105	48	99	132	116	4,8	13,5	33,4	11	22	0,64	1,15
Ø 160	160	50	150	196	178	6	21,0	52,0	17	22	1,54	2,64

Center back connection

	A	B	C	F	Dry [kg]	Filling [kg]
Ø 63	68	30	63	14	0,140	0,25
Ø 100						
Ø 160						

Front flange – Lower back connection

	A	B	C	D	E	F	H	J	K	Dry [kg]	Filling [kg]
Ø 63											
Ø 100	105	48	99	132	116	4,8	33,4	11	22	0,64	1,15
Ø 160	160	50	150	196	178	6	52,0	17	22	1,54	2,64



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806-35/4