



Diaphragm Separator Series 1020

Application	Mounting to Bourdon tube pressure gauges or to pressure transmitters for indirect pressure measurement of media containing solid particles, e.g. in the paper mill industry. Often also used in the paint processing and other industries.
Execution	The separator is inseparably fixed with the pressure measuring instrument to a hydraulic measuring unit; either directly, via a cooling element or via a capillary tube of stainless steel.
Type of construction	Diaphragm separator. Separation element concentrically corrugated and welded to the body; loose fixing flange.
Connection	For Haenni welding flange or appropriate measuring point.
Temperature of medium	Up to 80°C (1/2 h up to 140°C). Other temperature limits (up to 300°C) on request.
Notice	For standardized models see D1.206.2 E
Hydraulic transmission fluid	Silicon oil (standard), others on request. Option: Free of silicon, ordering-code 0794.



Selection chart

Type		Material of Separator		Material of Sealing ring		Material of loose fixing flange				Ordering code
Diaphragm separator	Standard	stainless steel 1.4571		Perbunan		stainless steel 1.4301				1020
	Long	stainless steel 1.4571		Perbunan		stainless steel 1.4301				1022
Capillary tube 1.4571	Length [m]	0.5	1	1.5	2	2.5	3	3.5	4	
	Ordering code	1205	1210	1215	1220	1225	1230	1235	1240	
Additional metallic protection hose for capillary tube										1299
Temperature of medium (e.g. 100°C)										9007/0100
Ordering example: DRC 100/611.133/125 / 1020 / 1210 / 1299 / 9007/0100 ↑ ↑ ↑ ↑ ↑ Temperature of medium 100°C Metallic protection hose Capillary tube 1 m Separator ordering code Pressure gauge (see data-sheet D1.137)										

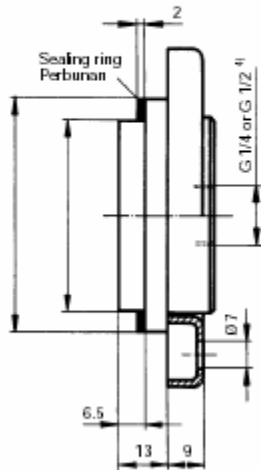
Accessories

	Material	6 bolts	Ident. number
Welding flange	C 15 K	-	J 70503.0052
Welding flange	stainless steel 1.4301	-	J 70503.0053
Welding flange	C 15 K	M6 x 20 DIN 933 galv. steel	J 70503.0062
Welding flange	stainless steel 1.4301	M6 x 20 DIN 933 stainless steel	J 70503.0063
Sealing ring (spare part)	Perbunan	Ø 59 x Ø 48 x 2	J 65085.0001

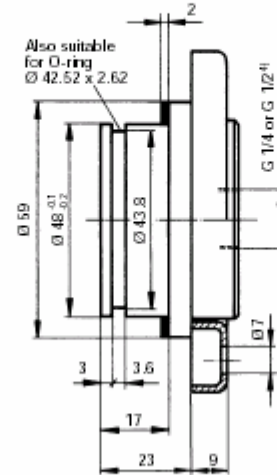
Diaphragm Separator Series 1020

Dimensions

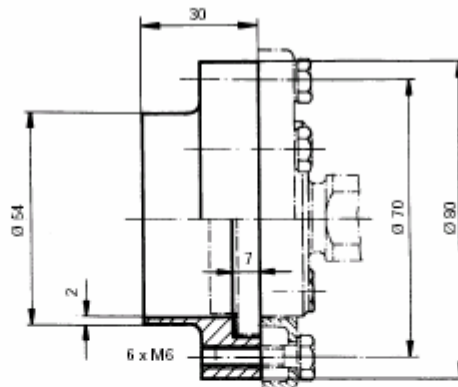
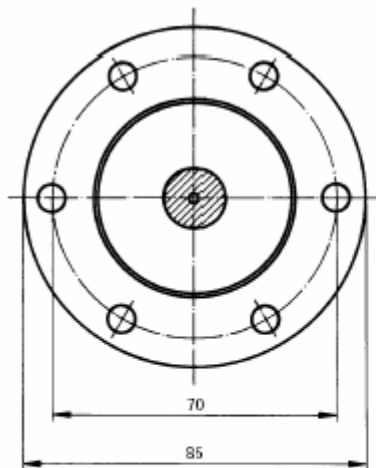
Ordering code 1020



Ordering code 1022



Welding flange ¹⁾



Pressure ranges (directive values)

Mounting to pressure gauge or pressure transmitter: NS 63, 80, 100, 160, 96 x 96, ED 518 ²⁾

Pressure range: 1.6...40 bar ³⁾

¹⁾ Not suitable for execution 1022 with O-ring sealing.

²⁾ Special modes: 60 bar.

³⁾ On request: Electronic pressure transmitters can be used for pressures ≥ 250 mbar without impairing the accuracy.

Please fill in page D1 201 so that we can properly access your needs.

⁴⁾ When ordering loose separators, please indicate thread G_v or G_v.



Bourdon Tube Pressure Gauge, liquid-filled, with Diaphragm Separator Series 1020

Application	For indirect pressure measurement of media containing solid particles, e.g. in the paper mill industry. Often also used in the paint processing and other industries.
Pressure ranges	1.6 to 40 bar
Working Range	For static pressure 100%, for dynamic pressure 90% of full scale.
Accuracy	Cl. 1.0 according to DIN 16005 / EN 837-1
Execution	Pressure Gauge NS 100 according to DIN 16064. Separator body and separation element of stainless steel 1.4571, welded. Loose fixing flange of stainless steel 1.4301, Silicon-free.
Connection	To Haenni welding flange (see reverse) or appropriate measuring point.
Case	Stainless steel 1.4301, brush finished, with Buna-N rubber front ring.
Dampening Liquid	Glycerine
Movement	Brass
Window	Normal glass
Protection	IP 65 DIN 40 050 / EN 60529
Hydraulic transmission Fluid	Glycerine



Selection chart

Ordering example:		DRO	100	4	1	3	1	11	065	0794	9711	1020
System design	Liquid filled case	DRO										
Nominal size	NS 100		100									
Case	Stainless steel 1.4301, brush finished			4								
Structural shape	Direct mounting				1							
Connection	Bottom					1						
	Lower back						3					
Indicator	Standard						1					
Measuring element	Cu-alloy							11				
Pressure ranges [bar]	0...1.6											035
	0...2.5											045
	0...4											055
	0...6											065
	0...10											075
	0...16											085
	0...25											095
	0...40											105
	0...60 ^{*)}											
Model	Silicon-free											0794
	Dial inscription: Silicon-free											9711
Diaphragm separator	Body and separation element of stainless steel 1.4571 Loose fixing flange of stainless steel 1.4301 Sealing ring Buna-N rubber											1020

^{*)}Special execution



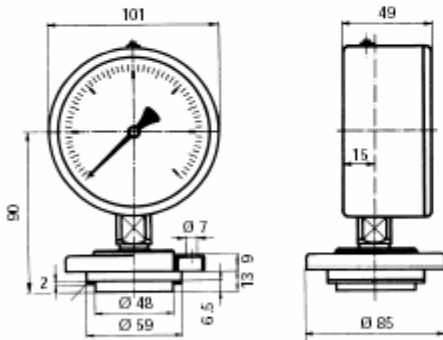
Bourdon Tube Pressure Gauge, liquid-filled, with Diaphragm Separator Series 1020

Dimensions

Structural shape/mounting direction

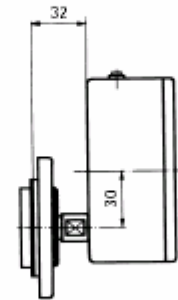
Direct mounting 11
(without rim)

Type DRO 100/411.111

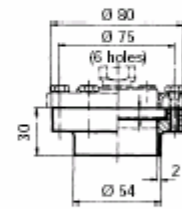


Direct mounting 13
(without rim)

Type DRO 100/413.111



Welding flange



Accessories

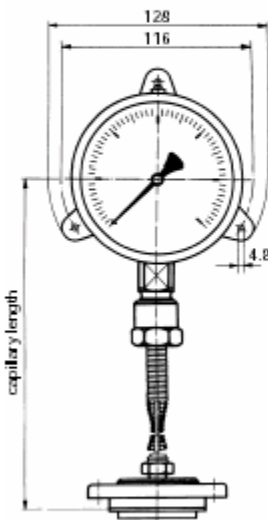
	Material	6 bolts	Ident. number
Welding flange	steel C 15 K	—	J 70503.0052
Welding flange	st. steel 1.4301	—	J 70503.0053
Welding flange	steel C 15 K	M6 x 20 DIN 933 galv. steel	J 70503.0062
Welding flange	st. steel 1.4301	M6 x 20 DIN 933 stainl. steel	J 70503.0063
Sealing ring (spare part)	Perbunan	Ø 59 x Ø 48 x 2	J 65085.0001

Standard Designs

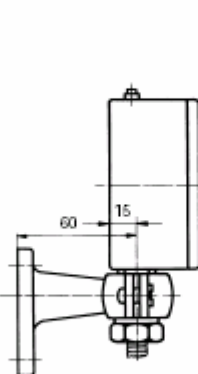
Type	Ranges	Ident. number
DRO 100/411.111 (bottom connection)	0...4 bar	0266.9461
	0...6 bar	0266.9462
	0...10 bar	0266.9463
	0...16 bar	0266.9464
DRO 100/413.111 (connection lower back)	0...2.5 bar	0267.9106
	0...4 bar	0267.9107
	0...6 bar	0267.9108
	0...10 bar	0267.9109
	0...16 bar	0267.9122

Other structural shapes: with capillary tube

Wall mounting 31

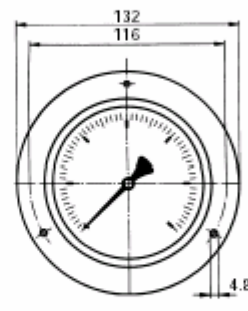


Wall mounting 11



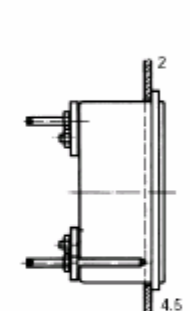
with bracket
(see data-sheet D5.505)

Panel mounting A 23



Panel cut out Ø 104
Fixation with 3 screws M4 DIN 964

Panel mounting 53



Panel cut out Ø 104
Narrow front flange
2 fixation elements

Capillary tube 1.4571	Length [m]	0.5	1	1.5	2	2.5	3	3.5
	Ordering code	1205	1210	1215	1220	1225	1230	1235