

Pressure gauge for refrigeration NG 100

Application	For refrigerating installations, suction and pressure service. With fluid filling for measuring points subject to vibrations and high dynamic pressure loads, no formation of condensation
Measuring range	Corresponding to the cooling agent
Range of application	For static pressure 100%, for dynamic pressure 90% of full scale
Accuracy	Cl. 1.0 acc. EN 837-1
Execution	Similar to EN 837-1
Movement	Brass (for organic cooling agents)
Dial	White, pressure scale black Temperature scale coloured
Pointer	Aluminium, black, EN 837-1
Window	Normal glass; polycarbonate for gauges fitted with auxiliary units with adjusting device, only with organic cooling agents
Dampening liquid	System design DR: No liquid System design DRO: Glycerine 86%
Protection	System design DR: IP 54 (EN 60529/IEC 529) System design DRO: IP 65 (EN 60529/IEC 529)



Selection Chart

Ordering code	DRx 100 / 2xx.xxx
System design	
Without dampening liquid, standard	DR
With dampening liquid	DRO
Nominal size	
NG 100 ¹⁾	100
Case	
Stainless steel 1.4301, bright drawn	2
Structural shape	
Direct mounting, without flange	1
Panel mounting A	2
Wall mounting, 3 brackets	3
clamp panel mounting B	4
Connection	
Radial	1
Back, eccentric	3
Scale	
Standard	1
Measuring element	
For organic cooling agents, Cu alloy ²⁾ ³⁾	1 1

Special designs and auxiliary units

For special designs, see chapter A25
For diaphragm seals, see chapter A4

Notes

- 1) NG 160 on request
- 2) NG 100 with stainless steel measuring element (e.g. for inorganic cooling agents, NH₃):
for DRC/DRO version see chapter A21 data sheet D1.131
for DRCE/DROE version see chapter A21 data sheet D1.132
for DRCG/DROG version see chapter A21 data sheet D1.142
- 3) NG 100 with brass measuring element and contact version:
for DRE/DROE version see chapter A21 data sheet D1.129

The order number for the measuring range is to be specified according to data sheet D1.155 page 2

Selection Chart

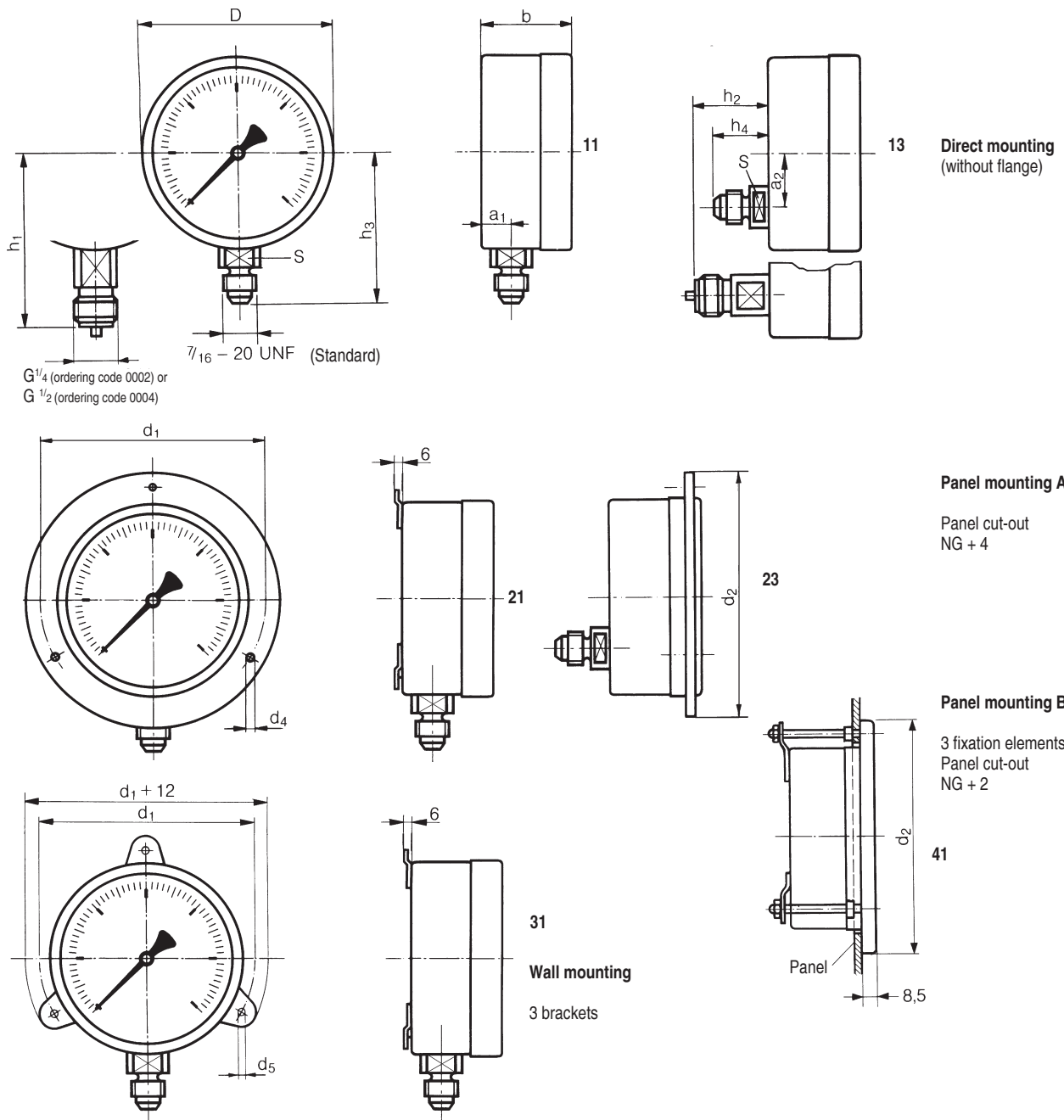
Range						
Cooling agent	Suction side		Pressure side		Pressure side	
	Order number	Indication range	Order number	Indication range	Order number	Indication range
R 11 (red)	110	- 1 ... + 1.5 bar - 30 ... + 40 °C	130	- 1 ... + 3 bar - 30 ... + 60 °C		
R 13 (red)	190	- 1 ... + 12.5 bar Overpressure-safe - 120 ... - 15 °C	290	- 1 ... + 24 bar Overpressure-safe - 100...+ 5 °C	360	- 1 ... + 40 bar - 80 ... + 25 °C
R 13 B1 (red)	200	- 1 ... + 12.5 bar Overpressure-safe - 80 ... + 10 °C	310	- 1 ... + 24 bar - 80 ... + 40 °C		
R 21 (red)	140	- 1 ... + 5 bar - 40 ... + 55 °C	250	- 1 ... + 12.5 bar - 10 ... + 100 °C		
R 22 (green)	210	- 1 ... + 12.5 bar - 60 ... + 30 °C	320	- 1 ... + 24 bar - 60 ... + 60 °C	370	- 1 ... + 40 bar - 30 ... + 80 °C
R 113 (red)	120	- 1 ... + 1.5 bar - 30 ... + 75 °C	170	- 1 ... + 5 bar - 30 ... + 110 °C		
R 114 (red)	150	- 1 ... + 5 bar - 40 ... + 55 °C	260	- 1 ... + 12.5 bar - 10 ... + 95 °C	380	- 1 ... + 24 bar - 10 ... + 130 °C
R 123 (red)	400	- 1 ... + 1.5 bar - 30 ... + 55 °C	410	- 1 ... + 3 bar - 30 ... + 70 °C		
R 134 A (blue)	420	- 1 ... + 9 bar - 60 ... + 39 °C	440	- 1 ... + 24 bar - 60 ... + 77 °C	450	- 1 ... + 40 bar - 40 ... + 100 °C
R 402 A (red)	530	- 1 ... + 12.5 bar - 100 ... + 23 °C	540	- 1 ... + 24 bar - 100...+ 50 °C	550	- 1 ... + 40 bar - 100 ... + 60 °C
R 404 A (red)	460	- 1 ... + 12.5 bar - 50 ... + 28 °C	470	- 1 ... + 24 bar - 50 ... + 50 °C	480	- 1 ... + 40 bar - 50 ... + 66 °C
R 500 (red)	240	- 1 ... + 12.5 bar - 40 ... + 40 °C	340	- 1 ... + 24 bar - 40 ... + 70 °C		
R 134 A (blue)	640	- 1 ... + 12.5 bar	650	- 1 ... + 24 bar	660	- 1 ... + 40 bar
R 404 A (red)		- 60 ... + 50 °C - 50 ... + 28 °C		- 60 ... + 77 °C - 50 ... + 50 °C		- 40 ... + 100 °C - 50 ... + 66 °C
NH ₃ (red) *) (R 717)	230	- 1 ... + 12.5 bar - 60 ... + 30 °C	300	- 1 ... + 24 bar - 60 ... + 50 °C		

*) NH₃ only with stainless steel measuring element, see chapter A21, data sheet D1.133

other cooling agents on request

Dimensions

Structural shape/connection



Size table

NG	D	a ₁	a ₂	b Standard	d ₁	d ₂	d ₄	d ₅	h ₁	h ₂	h ₃	h ₄	Thread	S	Weight approx. kg	
															DR	DRO
100	101	15	30	49	116	132	4.8	4.8	-	-	71	-	$7/16-20$	22	0,6	1,0
													UNF	11		
													$G^{1/2}$ ¹⁾	22		
													$G^{1/4}$ ¹⁾	11		

Notes:

- $G^{1/2}$ with reducer as special design (ordering code 0004)
- $G^{1/4}$ with reducer as special design (ordering code 0002)

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