



Bourdon Tube Pressure Gauges DR 80

Application	For refrigeration compressors, both for suction and pressure applications
Pressure ranges	According to the used cooling agents
Range of application	For static pressure 100%, for dynamic pressure 90% of full scale
Accuracy	Cl. 1.0 according to DIN 16005 / EN 837-1
Design	DIN 16064 / EN 837-1
Movement	Brass (for organic cooling agents) Stainless steel (for inorganic cooling agents – NH ₃)
Dial	White, pressure scale black temperature scale coloured DIN 16112, 16125
Pointer	Aluminium, black DIN 16099
Case	With Buna-N Rubber frontring
Window	Normal glass; polycarbonate for gauges fitted with auxiliary units with adjusting device, only with organic cooling agents
Damping liquid	Glycerine 86%, with DRO Without liquid, with DR
Protection	IP 54 (EN 60529 / IEC 529) with DR IP 65 (EN 60529 / IEC 529) with DRO



Selection chart

Ordering code	DRx 80 / xxx.xxx
System design	
Standard	DR
with filling	DRO
Nominal size	
NS 80	80
Case	
Steel, black	3
Stainless steel 1.4301, brush finish.	4
Structural shape	
Direct mounting, without flange	1
Panel mounting A	2
Wall mounting, 3 brackets	3
Panel mounting, narrow flange with fixation elements	5
Connection	
radial	1
eccentric back	3
Indicator	
Standard	1
Measuring elements	
for organic cooling agents, Cu alloy	11
for inorganic cooling agents (NH ₃)	
Stainless steel 1.4571	33

Special designs and auxiliary units
For special designs see D1.901





Selection Chart

Range							
Cooling agent	Suction side Order		Pressure side Order		Pressure side Order		
	No.	Range	No.	Range	No.	Range	
R 011	110	- 1 ... + 1.5 bar - 30 ... + 40 °C	130	- 1 ... + 3 bar - 30 ... + 60 °C			
R 012	180	- 1 ... + 9 bar - 60 ... + 40 °C	270	- 1 ... + 15 bar - 60 ... + 60 °C	350	- 1 ... + 24 bar - 60 ... + 80 °C	
R 12 B1	160	- 1 ... + 5 bar - 30 ... + 50 °C	280	- 1 ... + 15 bar - 30 ... + 95 °C			
R 13	190	- 1 ... + 12.5 bar overpr. safe. 2 fold - 120 ... - 15 °C	290	- 1 ... + 24 bar overpr. safe 1.6 fold - 100... + 5 °C	360	- 1 ... + 40 bar - 80 ... + 25 °C	
R 13 B1	200	- 1 ... + 12.5 bar overpr. safe 2 fold - 80 ... + 10 °C	310	- 1 ... + 24 bar - 80 ... + 40 °C			
R 21	140	- 1 ... + 5 bar - 40 ... + 55 °C	250	- 1 ... + 12.5 bar - 10 ... + 100 °C			
R 22	210	- 1 ... + 12.5 bar - 60 ... + 30 °C	320	- 1 ... + 24 bar - 60 ... + 60 °C	370	- 1 ... + 40 bar - 30 ... + 80 °C	
R 113	120	- 1 ... + 1.5 bar - 30 ... + 75 °C	170	- 1 ... + 5 bar - 30 ... + 110 °C			
R 114	150	- 1 ... + 5 bar - 40 ... + 55 °C	260	- 1 ... + 12.5 bar - 10 ... + 95 °C	380	- 1 ... + 24 bar - 10 ... + 130 °C	
R 123	400	- 1 ... + 1.5 bar - 30 ... + 55 °C	410	- 1 ... + 3 bar - 30 ... + 70 °C			
R 134 A	420	- 1 ... + 9 bar - 60 ... + 39 °C	440	- 1 ... + 24 bar - 60 ... + 77 °C	450	- 1 ... + 40 bar - 40 ... + 100 °C	
R 402 A	530	- 1 ... + 12.5 bar - 100 ... + 23 °C	540	- 1 ... + 24 bar - 100... + 50 °C			
R 404 A	460	- 1 ... + 12.5 bar - 50 ... + 28 °C	470	- 1 ... + 24 bar - 50 ... + 50 °C			
R 500	240	- 1 ... + 12.5 bar - 40 ... + 40 °C	340	- 1 ... + 24 bar - 40 ... + 70 °C			
R 502	220	- 1 ... + 12.5 bar - 60 ... + 30 °C	330	- 1 ... + 24 bar - 60 ... + 55 °C	390	- 1 ... + 40 bar - 40 ... + 80 °C	
R 22	500	- 1 ... + 9 bar	520	- 1 ... + 24 bar	510	- 1 ... + 15 bar	
R 12		overpr. safe 2fold - 60 ... + 20 °C - 60 ... + 40 °C		- 60 ... + 60 °C - 40 ... + 83 °C		- 60 ... + 40 °C - 60 ... + 60 °C	
R 22	600	- 1 ... + 9 bar	620	- 1 ... + 24 bar	610	- 1 ... + 15 bar	
R 12		overpr. safe 2fold		- 60 ... + 60 °C		- 60 ... + 40 °C	
R 502		- 60 ... + 20 °C - 60 ... + 40 °C - 60 ... + 15 °C		- 40 ... + 83 °C - 60 ... + 55 °C		- 60 ... + 60 °C - 60 ... + 35 °C	
R 134 A	640	- 1 ... + 12.5 bar	650	- 1 ... + 24 bar			
R 404 A		- 60 ... + 50 °C - 50 ... + 28 °C		- 60 ... + 77 °C - 50 ... + 50 °C			
NH ₃ (R 717)	230	- 1 ... + 12.5 bar - 60 ... + 30 °C	300	- 1 ... + 24 bar r. m. at 16 bar - 60 ... + 50 °C			

other cooling agents on request