

For the pressure measurement in refrigeration systems and heat pumps, there are numerous devices that are modified accordingly for this special application. This overview highlights the characteristic features that could not be included in the scope of the data sheets for reasons of space.

The refrigerants are categorized in safety classes according to DIN EN 378-1 Annex E and DIN EN 817. The safety class includes the degree of flammability (combustibility) and the toxicity.

Flammability

- Class 1 non-flammable
- Class 2L lower flammability
- Class 2 flammable
- Class 3 higher flammability

Toxicity

- Class A lower toxicity
- Class B higher toxicity

This results in the following safety classes A1, A2L, A2, A3, B1, B2L, B2, B3.

In the following table, common refrigerants are assigned to the various safety classes.

		Degree of Flammability				
		Class 1	Class 2L	Class 2	Class 3	
Toxicity	A	R407C	R32	R406A	R170	
		R410A	R1234yf		R290	
		R417A	R1234ze		R600	
		R422A			R1270	
		R448				
		R449A				
		R450A				
		R452A				
		R504				
		R507A				
		R513A				
		R744				
		B	-	R717	R723	-

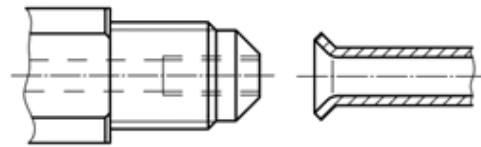
The most striking feature of the refrigeration gauges is the design with a combined pressure and temperature scale. The temperature scale is based on the former DIN 16112 (coloured dotted scale). The temperature points are assigned according to the vapour pressure curve of the respective refrigerant. Upon request, temperature scales for several refrigerants can be printed on the pressure gauge so that one pressure gauge can be used for several refrigerants.

Other characteristics of refrigeration gauges

- Brass connection
- Stainless steel connection for the application with R717 (NH₃), with helium leak detection
- Window laminated safety glass
- Connection thread 7/16" – 20 UNF, see drawing below

Connection thread for refrigeration gauges

Thread 7/16" – 20 UNF with sealing cone according to DIN 3866 For non-soldering connection with 6 mm tube (1/4" flared tube)



Standard connections are also available as bottom connection and as back / centre back connection, just as they are available for the respective basic model.

The following models are available as refrigeration gauge

- RCh 63 – 1 / RCh 63 – 3
- RChg 63 – 1 / RChg 63 – 3
- RSCh 63 – 1
- RChg 80 – 1
- RCh 100 – 1 / RCh 100 – 3
- RChg 100 – 1 / RChg 100 – 3
- RSCh 100 – 3

Refrigeration gauges can also be supplied with case filling or for subsequent filling.

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