

## Sight Glass with Indicator

Versions with/w.o. extended tube  
for T-Tube or saddle type installation  
45 and 120 bar Models



<p><b>V-Series with interchangeable Indicator element</b></p> <p><b>Compact housing for operating pressures up to 45 bar (R410A and CO2 sub-critical applications).</b></p>	<p><b>Product features:</b></p> <ul style="list-style-type: none"> <li>• Connections in metric and imperial sizes</li> <li>• 100% Leak test by Helium spectrometer</li> <li>• S-Serie hermetic</li> <li>• V-Series with O-Ring, Indicator element interchangeable</li> <li>• Braze and flare types available</li> </ul>
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<b>Applicable Standards</b>	EN 378/-1/-2, EN 12420, EN 12165, EN 12735-1, EN12178:2004-02	<b>Media Compatibility</b>	See Table 1, Mineral-, Synthetic- und POE, PAG lubricants
<b>Max. oper. Pressure</b>	45 bar (H-Vers. 120 bar)	<b>Materials</b>	Housing: Brass CW617N Tube connections: CW024A
<b>Test Pressure</b>	64,4 bar (H-Vers. 172 bar)		
<b>Burst Pressure</b>	225 bar (H-Version 360 bar)		
<b>Temperature Range</b>	-40°C to 80°C	<b>Other Standards</b>	RoHS 2002/96/EC

**Table 1**

Refrigerant	Group acc. PED 2014/68/EC	Group acc. EN378	Refrigerant	Group acc. PED 2014/68/EC	Group acc. EN378
R404A	II	A1	R1234ze (E)	I	A2L
R134a			R1234yf		
R448A			R32		
R449A			R455A		
R450A			R454C		
R513A			R1270		
R744			R290	I	A3

**Description**

The maximum permissible moisture content in the refrigerants are described in DIN 8949. When these standards are met a trouble-free operation of the refrigeration system can be expected. Exceeding these values can have negative phenomena as the freezing of moisture and blocking of system components (e.g expansion valve). As a further result, it leads to the formation of acid in the refrigerant circuit with the known adverse effects. Especially when using POE oils, which are hygroscopic, hydrolysis will occur due to excessive moisture, resulting in acid and alcohol formation.

This can destroy the insulation of the windings in the motor and lead to a burn out. We therefore recommend that when the indicator shows a lime / yellow color the filter drier has to be replaced immediately and a system check should be performed.

**Indicator colour and Moisture in ppm**

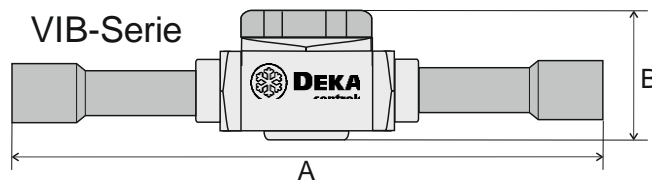
Refrigerantl	Max. allowed moisture acc. DIN 8949 mg water per kg refrigerant (ppm)	Liquid Temperature 30°C		
		green/dry	lime	yellow/wet
R22	60	< 60	> 60	> 120
R134a	50	< 50	> 50	> 100
R404A	50	< 40	> 40	> 90
R407C	50	< 50	> 50	> 120
R410A	50	< 50	> 50	> 100
R744 (10°C)	~ 600 (Liquid)	<20	>40	>75
R744 (-30°C)	~ 10 (Gas)			



**V-Series Models (with interchangeable Indicator element)**

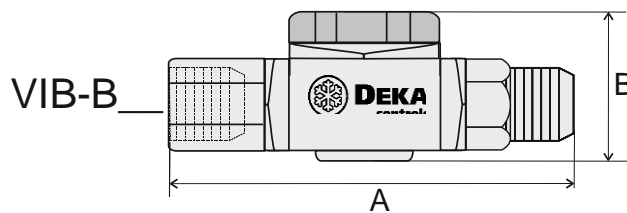
Sight glass with Indicator	P/N	Braze Conn.		Dimension (mm)		PED Cat.		Weight (kg)
		metric	inch	A	B	Fluid II	Fluid I	
VIB-006	17600	6mm		147	28	Art. 4.3	Art. 4.3	0,17
VIB-014	17607		1/4"					
VIB-010	17601	10mm						
VIB-038	17608		3/8"					
VIB-012	17609		1/2"					
VIB-012m	17602	12mm		161	35			0,26
VIB-016	17603	16mm	5/8"			0,26		
VIB-018	17604	18mm		171	35			
VIB-022	17605	22mm	7/8"			0,38		
VIB-028	17606	28mm		175	45		0,34	
VIB-118	17610		1-1/8"			I	0,35	

**Dimension**



**Sight glass with flare conn.**

Sight glass with Indicator Types	P/N	Flare Connection female x male	Dimension (mm)		Weight kg
			A	B	
VIB-B14	17620	1/4"-SAE (6mm)	77	28	0,16
VIB-B38	17621	3/8"-SAE (10mm)	80	33	0,17
VIB-B12	17622	1/2"-SAE (12mm)	93	35	0,22
VIB-B58	17623	5/8"-SAE (16mm)	91	39	0,26

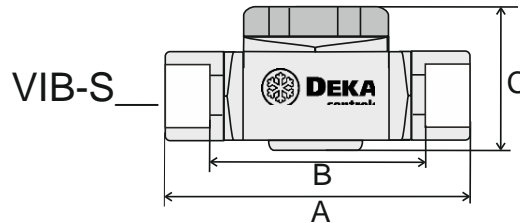


**Sight glass Body (w/o tubing)**

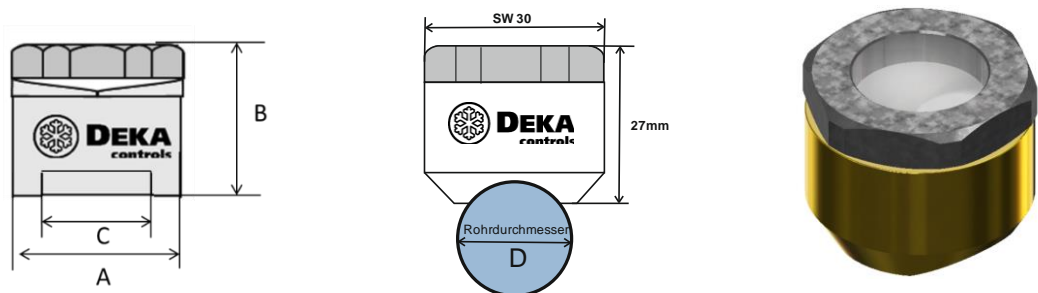
Sight Glass with Indicator	P/N	Braze Conn		Dimension (mm)			Oper. Press.	Weight (g)
		metric	inch	A	B	C		
VIB-S10	17611	10mm		57	41	28	45 bar	120
VIB-S12m	17612	12mm		66	46	35		190
VIB-S16	17613	16mm	5/8"	66	41	35		180
VIB-S22	17614	22mm	7/8"	65	40	45		260

Sight Glass with Indicator	P/N	Braze Conn		Dimension (mm)			Oper. Press.	Weight (g)
		metric	inch	A	B	C		
VIBH-S10	17630	10mm		57	41	28	120 bar	122
	17631							35
VIBH-S12m		12mm		66	46	35		182
VIBH-S16	17632	16mm	5/8"	66	41	35		262
VIBH-S22	17633	22mm	7/8"	65	40	45		

**Dimension**



**Brazing sight glasses for T-Tube (X-type) and saddle type (T Type)**



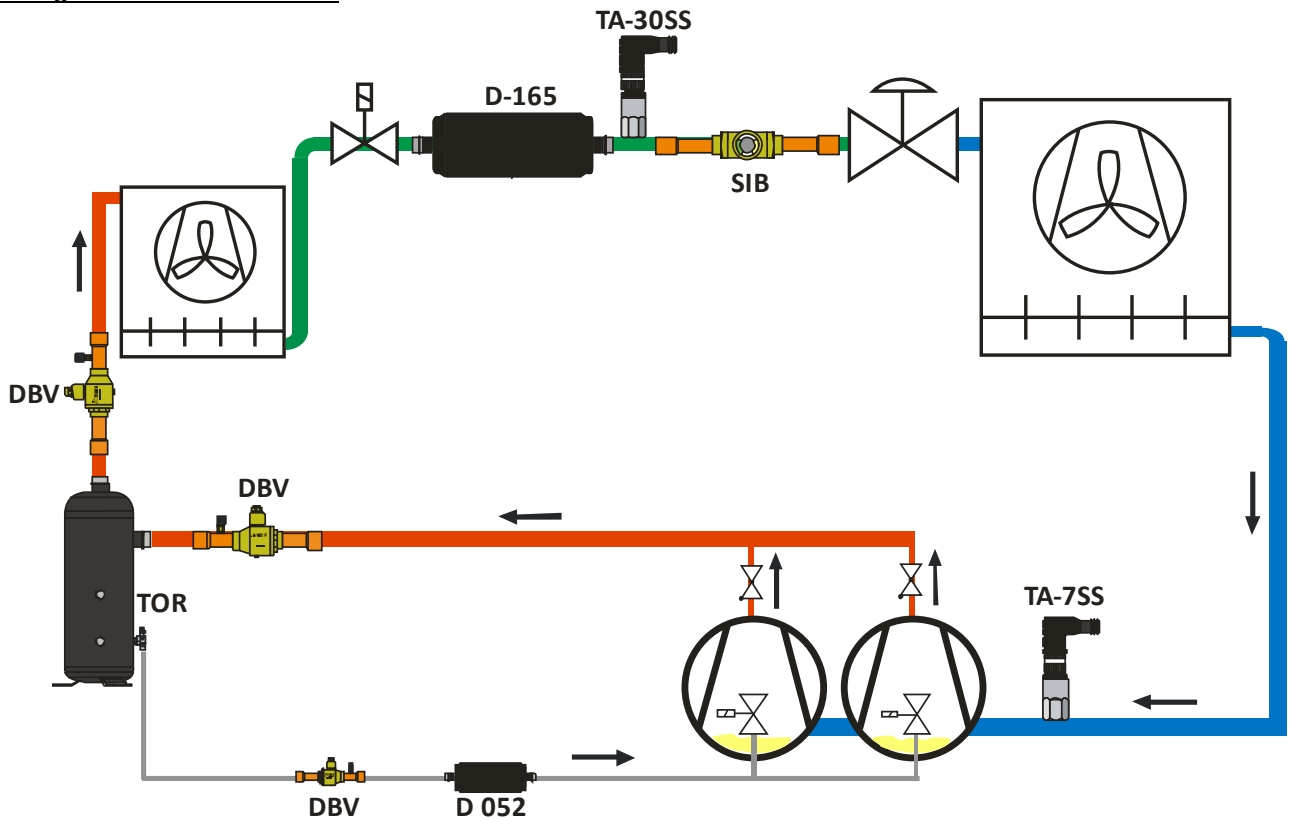
VIB-X35

VIB-T\_\_

Sight Glass with Indicator	P/N	Conn. Braze	Dimension (mm)				PED Cat.		Max Oper. Press.	Weight (g)
			A	B	C	D	Fluid II	Fluid I		
VIB-X35	17628	35 mm	35	25	28		I	II		120
VIB-T22	17625	22 mm				22	./.	./.	45 bar	108
VIB-T28	17626	28 mm				28	./.	II		105
VIB-T35	17627	35 mm				35	I	II		104

Sight Glass with Indicator	P/N	Conn. Braze	Dimension (mm)				PED Cat.		Max PED Cat.	Weight (g)
			A	B	C	D	Fluid II	Fluid I		
VIBH-X35	17634	35 mm	35	25	28		I	II		122
VIBH-T22	17635	22 mm				22	./.	./.	120 bar	110
VIBH-T28	17636	28 mm				28	./.	II		108
VIBH-T35	17637	35 mm				35	I	II		106

Cycle diagram with DEKA Products



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