

Circular sightglass fittings to DIN 28120 or similar

Circular sightglass fittings to DIN 28121

Illuminated sightglass units VETROLUX®



Complete assembly of sightglass fitting to DIN 28120, DN 100, PN 10, with glass disc of borosilicate to DIN 7080.



Complete assembly of sightglass fitting to DIN 28120, DN 125, PN 10, with glass disc of toughened sodium silicate to DIN 8902, fitted with CHEMLUX® sightglass light fitting, type L 20 deH Sch, tilting hinge fixation

In addition to the well known programme of sightglass light fittings, MAX MÜLLER AG supplies complete sightglass fittings to or similar to DIN 28120 and to DIN 28121. These form, together with the reliable light fittings of the series CHEMLUX®, EdelLUX®, fibroLUX®, miniLUX® or metaLUX®, complete illuminated sightglass units VETROLUX® where both components are thoroughly determined and correctly chosen. The units are supplied as premounted sets, offering the following advantages:

- **Only one supplier**
- **Responsibility from one hand**
- **Components mutually adapted, avoiding therefore mounting problems or eventual expensive adjustments.**

With MAX MÜLLER AG, you have chosen the right and efficient partner, offering excellent service and high quality to very interesting prices. Ask the experts of MAX MÜLLER AG for advice and integrate VETROLUX® units into your installations. Remember: Our product range has a background of more than 40 year's experience and development. Both you and your customers will benefit from this know-how.

Application:

In all cases where chemical or physical processes, reactions or e.g. fluid levels have to be observed, controlled or read off at the interior of stirred tanks, dryers, columns, silos, centrifuges, mixers, reactors, evaporators, separators, pipelines, pressure vessels or other closed containers.

Nominal diameters:

PN 10, 16: DN 50 - 200 (DIN 28120)
 PN 6: DN 50 - 200 (similar to DIN 28120)
 PN 10, 25: DN 40 - 200 (DIN 28121)

Operating conditions:

Max. pressure: DIN 28120: 10, 16, (6) bar
 DIN 28121: 10, 25 bar
 Higher pressures on demand

Vacuum

Possible combinations:

Sightglass fittings to DIN 28120 or to DIN 28121 **may be combined with our sightglass light fittings of the series CHEMLUX®, EdelLUX®, fibroLUX®, miniLUX® or metaLUX® for use in hazardous or in safe areas.** The cover flanges are drilled and tapped to be fitted with the respective light fitting in case of ordering the complete VETROLUX® unit.

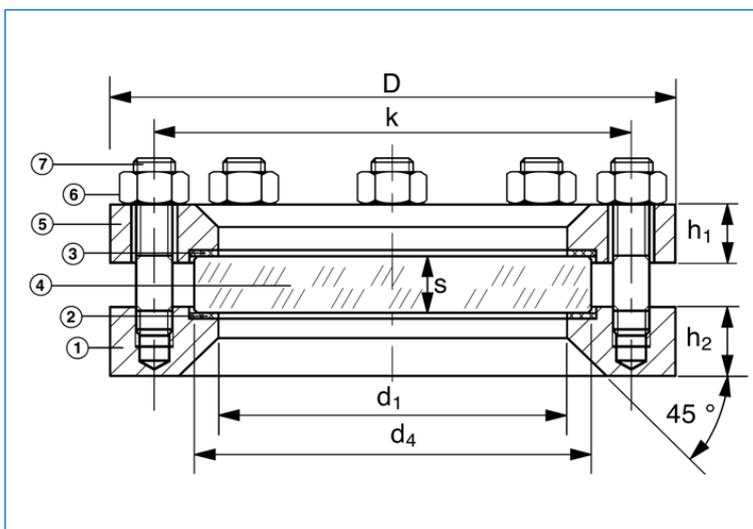
Sightglass fittings to DIN 28120 or similar **may further be equipped with window wipers of the series W, WD or WS (attention to the pressure limits!) as well as with spraying devices of the series SV / SVS** for the occasional or continuous cleaning of the sightglass disc. (See separate leaflets).

Certificates:

To be supplied against extra charge to DIN EN 10204.

Our circular sightglass fittings to be welded into or onto vessel walls correspond in their construction and assembly to the dimensions and constructional guidelines of the DIN specification 28120. The respect of the DIN prescriptions for the flange thicknesses guarantees a distortion free location of the sightglass disc. The pressure resistance of the sightglass disc is, of course, dependent on the care with which the bolts and nuts are tightened (always working on diametrically opposed pairs). For lubricated bolts, $\mu = 0.1$, the recommended tightening torque values (in Nm) are indicated in the table below. The maximum operating temperature is limited to 150 °C when using sightglass discs of sodium silicate to DIN 8902 and to 280 °C when using sightglass discs of borosilicate to DIN 7080. This temperature is also function of the quality of the used gaskets. For operating temperatures lower than -10 °C, please consult the descriptive sheet AD 2000 W 10.

Nominal diameter (DN)	Nominal pressure (PN) (bar)	Viewing diameter d_1	Glass disc		Base flange and cover flange				Bolts or studs and nuts			
			d_4	s	D	k	h_1	h_2	Number	Size	Tightening torque (Nm)	
50	6	80	100	10	165	—	—	30	4	M 16	28	
	10			15								32
	16			15								
80	6	100	125	15	200	—	—	30	8	M 16	20	
	10			15								23
	16			20								
100	6	125	150	15	220	—	—	30	8	M 16	26	
	10			20								30
	16			25								
125	6	150	175	20	250	—	—	30	8	M 16	32	
	10			20								34
	16			25								
150	6	175	200	20	285	—	—	36	8	M 20	47	
	10			25								54
	16			30								
200	6	225	250	25	340	—	—	36	8	M 20	63	
	10			30								



A special high vacuum-tight version with additional O-ring seal in different materials may be delivered on demand.

Assembly and construction materials:

		Standard	On demand*
①	Base flange	Steel RSt 37-2	1.4404
⑤	Cover flange	1.4571 (= AISI 316 Ti) or 1.4541 (= AISI 321)	(= AISI 316 L) Aluminium Titan Inconel Steel zinked
②	Gaskets	KLINGERSil C 4400	PTFE Silicone Viton Gylon
④	Glass disc	Sodium silicate to DIN 8902 (max. 150 °C)	Borosilicate to DIN 7080 (max. 280 °C) Quartz
⑥	Nuts		
⑦	Bolts or studs	5.6 / 5.2	A2 / A4

* Other materials not mentioned in the above table may also be delivered.

Mounting:

After having correctly welded the base flange ① onto or into the vessel wall, the gasket ②, the glass disc ④, the gasket ③ and the cover flange ⑤ are mounted one after the other and then the nuts ⑥ (in case of studed base flange ①) progressively crosswise tightened against the studs ⑦. The above indicated tightening torque values have to be strictly respected. Additional information may be taken from the DIN specification 28120.