

# Wipers

## Series WS with sideways operated flexible shaft driven wiper blade for circular sightglasses to DIN 28120 or similar



Wiper system WS, built into a VETROLUX® sight-glass to DIN 28120, DN 100, PN 10.



Wiper system WS, built into a VETROLUX® sight-glass to DIN 28120, DN 100, PN 10, with mounted sightglass light fitting miniLUX®, type KVL 50 HDSch, 24 V, 50 W, for combined “view and light through one assembly”.

### Introduction:

Besides the well known wipers of the series W/WD which are – due to their construction principle – limited in their application since they withstand only weak pressure and/or vacuum, the wiper system WS permits to cover a wide spectrum of higher pressure and/or vacuum applications.

### Application:

Wipers of the series WS are used for the cleaning of the inner side of sightglasses built into pressure or vacuum vessels. They may be operated in hazardous as well as in safe areas. They fit by means of pressure and vacuum tight glands through the lower and cover flange of circular sightglass units to DIN 28120 or similar of DN 100 to 200.

### Operating conditions:

- Maximum pressure: 16 bar
- Vacuum: Values on request
- Maximum operating temperatures:
  - 180 °C with glass disc to DIN 7080 (borosilicate) and wiper blade in silicone
  - 200 °C with glass disc to DIN 7080 (borosilicate) and wiper blade in PTFE
  - 150 °C with glass disc to DIN 8902 (sodium silicate)

### Materials:

Wiper mechanism: Stainless steel for all parts in contact with the product  
Wiper blade: PTFE or silicone  
Sealings: PTFE (admitted for use in food processing industries)

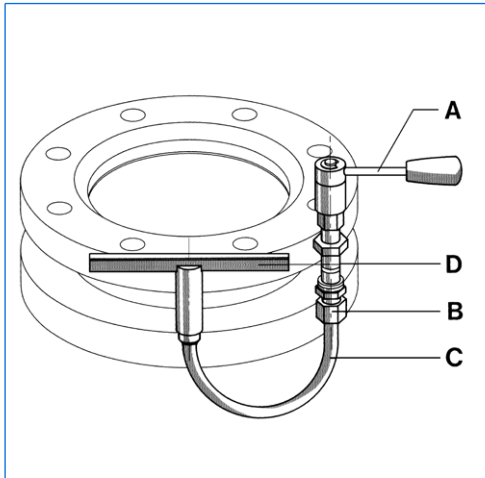
### Possible combinations:

The wiper system WS may be combined with a spraying device of the series SV/SVS as well as with the light fittings of the series CHEMLUX®, EdelLUX®, fibroLUX®, miniLUX® or metaLUX® for use in hazardous or safe areas. The light fittings may be mounted in the versions “light and view through one sightglass assembly” as well as for separate sightglasses.

### Delivery:

As a complete set with detailed mounting instructions to be built into existing sightglasses or supplied together with a complete sightglass VETROLUX® to your specifications. In the second case, MAX MÜLLER AG carries out the necessary machining of the welding and the cover flange of the sightglass.

# Assembly Mounting Dimensions



Assembly drawing of the wiper system WS

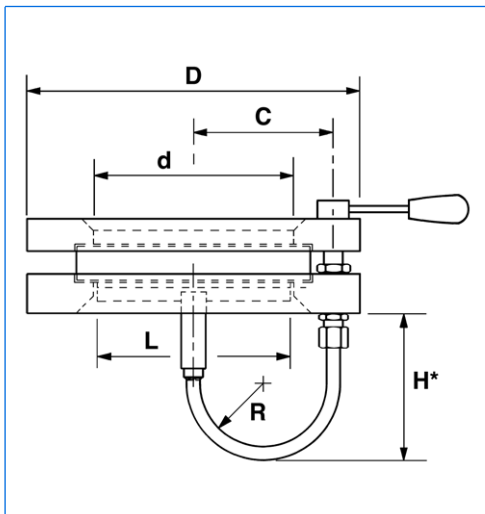
The general assembly of the wiper system WS may be seen from the left drawing:

The operating lever A with free-wheel return drives the wiper blade holder D in an uni-directional sense by means of a flexible shaft guided in the distance tube C. The tightness against pressure or vacuum is created by the gland sealings B.

If the wiper system WS is mounted into an existing sightglass, we are supplying detailed and illustrated mounting instructions with the set. If the system is ordered with a VETROLUX® sightglass, the necessary adaptations are carried out in our works.

For a correct delivery of the complete sightglass, we need the following order specifications:

1. Nominal diameter (DN)
2. Nominal pressure (PN)
3. Materials for:
  - a) Welding flange (e.g. 316 Ti  $\pm$ 1.4571)
  - b) Cover flange (e.g. carbon steel)
  - c) Studs and nuts
  - d) Sealings product side and cover side
  - e) Glass disc (DIN 7080, borosilicate or DIN 8902, sodium silicate)
  - f) Wiper blade (PTFE or silicone)



Type		WS 100	WS 125	WS 150	WS 200
Nominal diameter of the sightglass (DIN 28120)	DN	100	125	150	200
Free view	d	125	150	175	225
Overall diameter of the sightglass	D	220	250	285	340
	C	93	105	120	147,5
	R	36,5	42,5	50	64
	H <sub>max</sub> *	105	110	120	130
Wiper blade length	L	120	148	172	222

Branch office / exclusive agent:

Do you wish for more information about our wide range of light fittings for use in hazardous and safe areas, about our range of circular sightglasses to DIN 28120/28121, screwed sightglasses similar to DIN 11851, rectangular or D-ended sightglasses, pipeline flow indicators, centrally or sideways operated wipers, hinged sightglasses, spraying devices or our complete sight and lightglass units VETROLUX®? Are you interested in other types, special versions or different protection degrees? If yes, please contact us, our branch office or our local agents – it is our business! You will find the necessary indications about our sales network on the Internet.