



Process Lighting and  
Visual Control Systems

**Lumiglas**  
Product Overview

**PAPENMEIER**



#### Circular sight glass fitting to DIN 28120 or similar

- Circular flange mounting for welding into or onto the vessel
- Complete with seals and gaskets, sight glass disk and screw connections
- Sizes: DN 50 to DN 200
- Viewing port: 80 to 225 mm
- Max. 16 bar
- Operating temperature: 280°C with borosilicate glass DIN 7080, 150°C with soda-lime glass DIN 8902
- Materials: steel, stainless steel, special alloys
- Seal and gaskets to suit application
- Special versions
- Data sheet: 3755.165



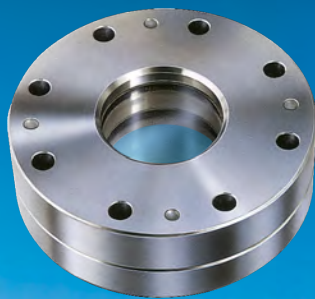
#### Circular sight glass fitting in stainless steel for non-pressurized vessels

- The advantages of this lightweight flange for non-pressurized vessels (outside the scope of DIN 28120) are:
  - Small outside diameter, thus requiring smaller cut-out in the vessel
  - Less protrusion above the weld
  - Lower weight
  - Easier to clean
  - Lower costs
- Sizes: DN 50 to DN 300
- Viewing port: 80 to 300 mm
- Pressure resistance: 0-2 bar, depending on size
- Operating temperature: 280°C with borosilicate glass DIN 7080, 150°C with soda-lime glass DIN 8902
- Materials: steel, stainless steel, special alloys
- Seal and gaskets to suit application
- Special versions
- Data sheet: 3755.197



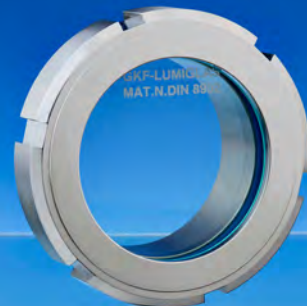
#### Circular sight glass fitting DIN 28121 or similar

- Circular flange mounting for screwing onto weld neck flanges
- Complete with sight glass disk inserted between two gaskets
- The fitting is supplied as a unit which has been mechanically pre-tensioned
- Sizes: DN 40 to DN 200
- Viewing port: 48 to 150 mm
- Max. 25 bar
- Operating temperature: 200°C with borosilicate glass DIN 7080
- Materials: steel, stainless steel, special alloys
- Special versions
- Data sheet: 3755.166



#### Double-glazed safety sight glass fitting

- Circular flange mounting for screwing onto weld neck flanges
- Complete with two independent glass disks separated by a spacer ring
- Should one of the glass disks be damaged, the second one ensures full operating safety
- Sizes: DN 50 to DN 200
- Viewing port: 65 to 175 mm
- Max. 10 bar (higher pressure ratings on request)
- Operating temperature: 280°C with borosilicate glass DIN 7080, 150°C with soda-lime glass DIN 8902
- Materials: steel, stainless steel, special alloy
- Special versions, e.g. with heating element
- Data sheet: 3755.167



#### Screw-type sight glass fitting MV

- Similar to DIN 11851
- The weld necks are welded onto or into the vessel
- Complete with seals and gaskets, sight glass disk and threaded cover nut
- Sizes: DN 50 to DN 150
- Viewing port: 50 to 150 mm
- Max. 6 bar
- Operating temperature: 260°C with borosilicate glass DIN 7080, 150°C with soda-lime glass DIN 8902
- Materials: steel, stainless steel, special alloys
- Seal and gaskets to suit application
- Special versions
- Data sheet: 3755.168



#### Screw-type sight glass fitting MV-S for aseptic applications

- Similar to DIN 11864-1 (dairy type screwed fittings)
- The weld necks are welded onto or into the vessel
- Aseptic screwed pipe unions with fused metal-sight glass disk, borosilicate glass
- Max. 25 bar
- Operating temperature: max. 240°C
- Combination options: this sight glass can be combined with various Lumistar "sterile technology" luminaires. Specially adapted Lumistar luminaires available for Ex and non-Ex environments
- Data sheet: 3755.241



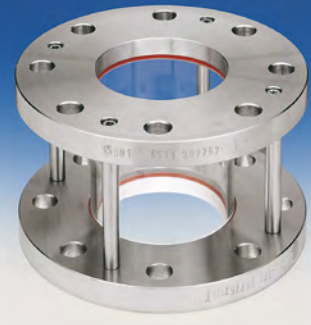
#### Oblong sight glass fitting, rectangular

- for welding into or onto the vessel wall
- Complete with sight glass plate inserted between the relevant gaskets and bolted in place
- Dimensions:  
Length 250 to 1000 mm,  
Width 70 mm,  
Viewing port: 18 mm; max. 16 bar
- Operating temperature: 243°C with borosilicate glass DIN 7081, 100°C with soda-lime glass DIN 8903
- Materials: steel, stainless steel, special alloys
- Seal and gaskets to suit application
- Special versions
- Data sheet: 3755.170



#### Oblong sight glass fitting, oval

- for welding into or onto the vessel wall
- Complete with sight glass plate inserted between the relevant gaskets and bolted in place
- Dimensions:  
Length 186 to 791 mm,  
Width 80 to 116 mm,  
Viewing port: 15 to 50 mm; max. 25 bar
- Operating temperature: 243°C with borosilicate glass DIN 7081, 100°C with soda-lime glass DIN 8903
- Materials: steel, stainless steel, special alloys
- Seal and gaskets to suit application
- Special versions
- Data sheet: 3755.438



#### Sight glass fitting for visual flow indication

- Flanged on both ends acc. to DIN 2642 for installation in pipes
- Application: for visual inspections and for monitoring the flow and filling level in pipelines
- Connecting flange: DIN 2642 (dimensions PN 10)
- Materials: to meet customers' requirements (steel, stainless steel, etc.)
- Overall length: DIN 3202 F1
- Max. 6 bar
- Operating temperature: max. 220°C
- Glass cylinder: borosilicate glass
- Data sheet: 3755.186



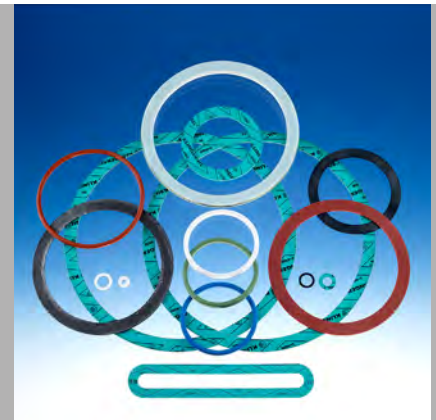
#### Hinged sight glass fitting SKS/ESKS

- Quick-release screwed closure enables fast opening and closing
- Applications: Ideal in facilities in which it is necessary to add and/or draw off substances during operations
- Depending on the type, the fitting is welded into the vessel wall or bolted onto a flat surface
- Viewing port: SKS 150 = 165 mm, SKS 225 = 235 mm
- Pressure-tight up to max 1.0 bar
- Operating temperature: 200°C with borosilicate glass, 150°C with soda-lime glass
- ESKS: version with luminaire
- Data sheet: 3755.169



#### Circular sight glass disks for applications with pressure stressing

- Borosilicate glass DIN 7080  
Temperature: up to 280°C  
Data sheet: 3755.162
- Soda-lime glass DIN 8902  
Temperature: up to 150°C  
Data sheet: 3755.163
- Glass disks with hole for wiper unit  
Data sheet: 3755.164
- Quartz glass  
Temperature: up to 1000°C
- Fused metal-glass sight glasses
- Special glass disk versions



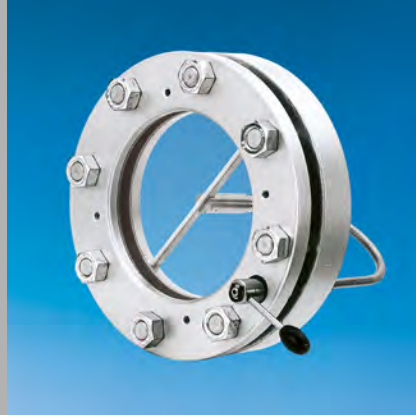
#### Lumiglas seals and gaskets

- for Lumiglas products and other brands
- DIN and customised versions
- Formats: flat seal, O-ring seal, O-ring seal with lip, PTFE-covered corrugated ring gaskets
- Material of seals and gaskets: silicon, PTFE, Perbutan Viton, EPDM, Neoprene, C4400
- Available from stock depending on application
- Other materials on request



#### Lumiglas sight glass wiper SW I

- For manual cleaning of glass disks in sight glass fittings
- For circular sight glass fittings to DIN 28120 or similar and for screw-type sight glass fittings
- Max. overpressure: 6 bar
- Temperature: up to 220°C (depending on the sight glass disk used)
- Data sheet: 3755.171



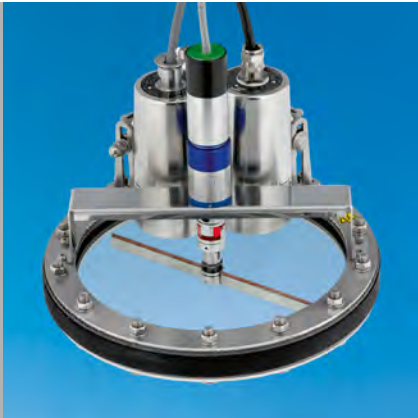
#### Lumiglas sight glass wiper SW II

- For manual cleaning of glass disks in sight glass fittings
- Installation with pressure-tight bolted connections through the base- and counterflange of the sight glass fitting
- Suitable for vessels that are subject to certification and used in vacuum and pressure operations in potentially explosive or non-explosive environments
- For circular sight glass fittings to DIN 28120, DN 100 - DN 200
- Max. overpressure: 16 bar
- Temp.: up to 220°C (depends on sight glass disk)
- Data sheet: 3755.172



#### Lumiglas spray device

- For circular sight glass fittings to DIN 28120 or similar
- Ensures the intermittent or continuous automatic cleaning of sight glass disks in sight glass fittings
- Suitable for vessels that are subject to certification and used in vacuum and pressure operations in potentially explosive or non-explosive environments
- Data sheet: 3755.173



#### Lumiglas Ex motor drive EMA I-Ex

- EEx d IIC T5 CE IIC GD 95°C
- Motor drive for connecting various control elements, especially in potentially explosive environments: gas zones 1 and 2; dust zones 21 and 22
- Powerful Ex motor drive in small, compact design for versatile applications, incl. operating sight glass wipers on sight glass disks
- Data sheet: 3755.435



#### Metaglas and Lumiglas products

- A fused metal sight glass is made up of a sight glass disk which is fused into a metal ring
- Fused metal sight glasses can be combined with various Lumiglas products, such as
  - Lumistar luminaires
  - Lumiglas fittings
  - Lumiglas seals and gaskets
  - Lumiglas sight glass wipers



#### Lumiglas Ex motor drive EMA I-Ex

- EEx d IIC T5 CE IIC GD 95°C
- Small, powerful Ex motor drive, e.g. for operating wipers on sight glass disks in short-term operations (also for continuous operations, depending on the application)
- High torque, excellent traction, low power consumption
- Explosion groups: gas IIC and dust IIIC
- Temp. class: gas up to T5, dust up to 95°C
- Ambient temperature: -20°C to +50°C
- Rated voltage: DC 12 V
- Nominal current: up to 0.5 A continuous load at 40°C
- Electrical connection: by integrated cable, 5 m
- Fastening: by special mounting
- Data sheet: 3755.436

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