



M&S sight glasses and lanterns (cylinder sight glasses) are used for the visual observation of fluids (liquid media) in hygienic systems, e.g. in pipelines, in containers and apparatus.

The viscosity, colour, mixing ratios or flow behaviour of the respective fluid can be observed.

M&S manufactures sight glasses, cylinder sight glasses and sight glass fittings, which can be type-wise selected according to the customer's requirements and the desired information needs.

### Cyl. sight glass and sight glass



### Illuminated sight glass fitting



#### Usage

#### Features

#### Versions

- For visual observation and optical control of fluids
  - \* in pipelines, containers and apparatus with normal demands on hygienic properties.

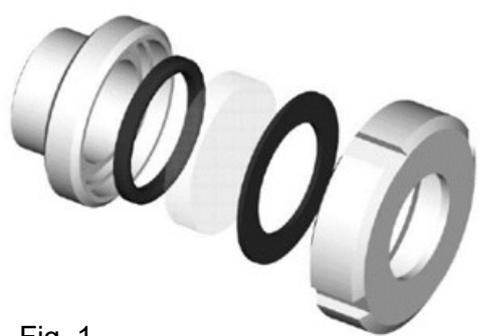
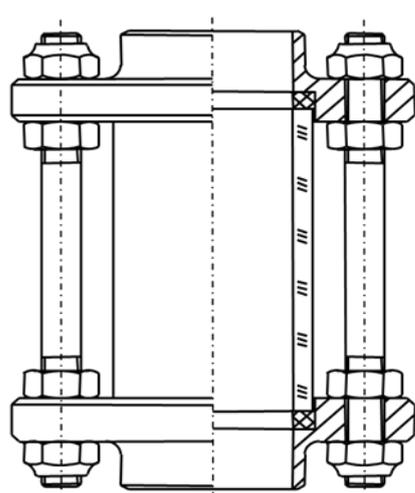
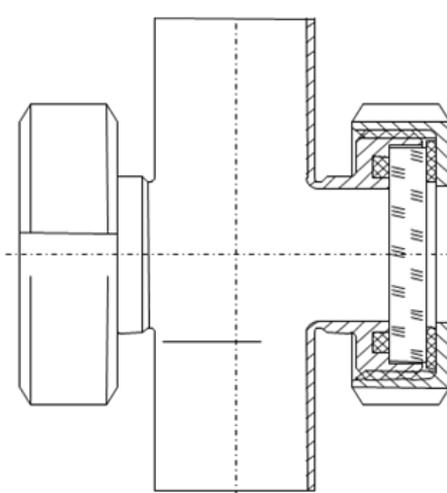
#### Usage

#### Features

#### Versions

- Sight glasses, cylinder sight glasses, sight glass fittings
  - \* Cleanable (CIP);
  - \* Safe to operate;
  - \* Cost-effective design;
  - \* Can be combined with lightning equipment.
- Sight glass fittings
  - \* Connection possibility for
    - ◆ Valves (e.g. sampling or venting);
    - ◆ Measuring instruments (e.g. pressure or temperature measurement).



Usage	Features	Versions
<ul style="list-style-type: none"><li>• Sizes<ul style="list-style-type: none"><li>* Sight glass (figure 1)<ul style="list-style-type: none"><li>◆ DN 25 - 150;</li></ul></li><li>* Cylinder sight glass (lantern), (figure 2)<ul style="list-style-type: none"><li>◆ DN 10 - 150;</li></ul></li><li>* Sight glass fitting (figure 3)<ul style="list-style-type: none"><li>◆ DN 25 - 100.</li></ul></li></ul></li><li>• Process connections<ul style="list-style-type: none"><li>* Male parts according to DIN 11851 (MM);</li><li>* Welding ends (WW);</li><li>* Optional with other connecting elements from the M&amp;S product range.</li></ul></li><li>• Materials<ul style="list-style-type: none"><li>* Housing<ul style="list-style-type: none"><li>◆ 1.4301/AISI 304;</li><li>◆ 1.4404/AISI 316L.</li></ul></li><li>* Glass<ul style="list-style-type: none"><li>◆ Borosilicate;</li><li>◆ Hard glass (tempered glass, not with the cylinder sight glasses).</li></ul></li><li>* Gaskets (FDA compliant): EPDM, FKM, NBR.</li></ul></li><li>• Surfaces<ul style="list-style-type: none"><li>* In contact with product <math>Ra \leq 1,6 \mu\text{m}</math>;</li><li>* Not in contact with product <math>Ra \leq 3,2 \mu\text{m}</math>;</li><li>* Other surfaces on request.</li></ul></li><li>• Permissible working pressure<ul style="list-style-type: none"><li>* Sight glass and sight glass fitting<ul style="list-style-type: none"><li>◆ 6 bar (DN 25 - 150).</li></ul></li><li>* Cylinder sight glass<ul style="list-style-type: none"><li>◆ 10 bar (DN 10 - 65);</li><li>◆ 8 bar (DN 80);</li><li>◆ 6 bar (DN 100);</li><li>◆ 7 bar (DN 125 -150).</li></ul></li></ul></li><li>• Permissible working temperature<ul style="list-style-type: none"><li>* Depending on gasket material and type of glass.</li></ul></li><li>• Accessories<ul style="list-style-type: none"><li>* Sight glass illumination optional.</li></ul></li></ul>		 <p data-bbox="1005 716 1085 761">Fig. 1</p>  <p data-bbox="1005 1388 1085 1433">Fig. 2</p>  <p data-bbox="1005 2016 1085 2060">Fig. 3</p>