

# **Level Indicators [LIR]**

DN 10 ÷ DN 25 PN 16 ÷ PN 40

# **Application**

 Level Indicators are designed specifically for fluid level control in boilers and tanks.

#### **Materials**

- Level indicator valves are produced of cast carbon steel.
- Internal parts made of stainless
  stacks
- Body in which the glass is placed is made of cast carbon steel.
- In standard feature the glass is reflex, produced by renowned European producers.
- All gaskets are made of graphite which are anticipated for a longterm work

## **Production and delivery**

 Level indicator valves are very robust construction which makes possible quick closing.

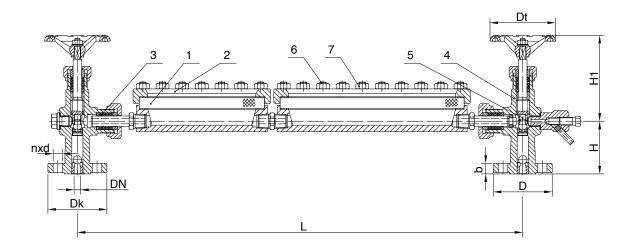
- Valve has connection according to EN 1092-1.
- Glass is placed in the machine processed two-part body and fastened with the bolts.
- Body with glass is in the valve body free rotary as for as final tightening the gaskets in the body.
- Technical conditions of delivery and testing are according to EN 12266-1.

### **Options**

- Level indicator for aggressive fluids made of chemical resistant materials
- Shape of flange connections according to other standards and norms
- Features with transparent glass and with mica shields.
- Level indicator complete with counter flanges, bolting and gaskets

#### **Installation instructions**

- Before installation and first run, the connecting pipeline should be thoroughly cleaned of all impurities and extraneous materials.
- By first run, suitable for need, tighten the gaskets on the valves where the glass is sealed.
- When installing, take care of the axial and normal adjustment of connections to avoid body distortion and glass damages.
- In the case of glass replacement, tighten the bolts on the glass body alternately from the middle towards ends with final torque of 25 Nm.



**Drawing F.2.1 Parts and dimensions** 

List of materials Table F.2.1

	Part		Application			
Item			Media can not corode the glass (e.g. oil, or hydrocarbons)	Media that can corode the glass (e.g. high temperature alkaline solutions, or hydrofluorik acid or steam saturated, or boiler-water)		
1	Glass	Reflex	up to T=120 °C → Pmax =40 bar	T <sub>max</sub> =243°C → for Pmax =35 bar (stem saturated)		
		Transparent	for T=400 °C   —Pmax =22 bar	up to T=120°C → Pmax =40 bar for T=400°C → Pmax =22* bar		
2	Glass Body		1.0619			
3	Connection Gasket		pure graphite			
4	Valves		1.0619			
5	Internal Parts Of Valves		min. 13%Cr			
6	Stud Bolts		A 193 B7 / 1.7225			
7	Nuts		A 194 2H / 1.1191			

<sup>\*</sup> For water steam saturated must used mica shields

[LIR] Dimensions Table F.2.2

DN	D	Dk	b	d	n	Dt	Н	H1		
	(mm)									
10	90	60	16	- 14	4	100	80	130		
15	95	65								
20	105	75	18							
25	115	85								
L(mm)	350, 440, 575, 675, 755, 800, 890, 980, 1025, 1070, 1115 mm and other dimensions according to Customer request									

