

## Column level indicators with U shaped protections



- **Material**  
Transparent tube with lenticular effect in acrylic material.
- **Protection**  
Aluminium in natural colour. It can be turned by 90°C where necessary.
- **Assembly ends**  
Glass-fibre reinforced polyamide based (PA) technopolymer, black colour.
- **Screws**  
Zinc-plated steel with hexagon socket.
- **Packing ring**  
NBR synthetic rubber O-Ring.
- **Graduated contrast screen**  
Plastic material, resistant to oils and greases. Fitted to the aluminium protection by means of an adhesive tape.
- **Maximum continuous working temperature**  
70°C (with oil or water).

### Technical data

In laboratory tests carried out with mineral oil for hydraulic systems type CB68 (according to ISO 3498) with gradually increasing pressure, at 23°C, the weld stood up as follows:

- HCL.300 30 bar
- HCL.400 25 bar
- HCL.500 20 bar

In any case we suggest to verify the suitability of the product under the actual working conditions. If you need to use the indicator with other oils or fluids and under different pressure and temperature conditions, please contact ELESA Technical Department or carry out tests in order to guarantee a proper use.

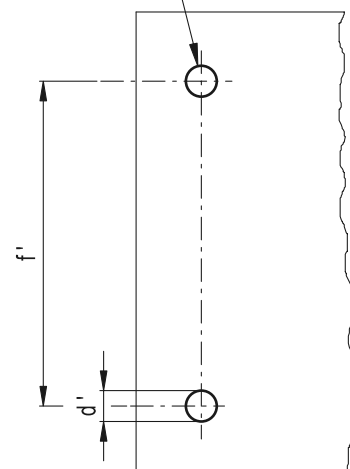
### Special executions on request (For sufficient quantities)

- Column level indicators with tubes and fixing endings in different materials to be used with special fluids and/or at high temperatures.
- AISI 316 stainless steel screws or nickel-plated brass.
- Polyamide based (PA) technopolymer float, red colour.
- Column level indicators with fitting centre-holes up to 2,000 mm.
- HCL/E column oil level indicators including float, minimum level signal, normally closed contacts (N.C.), normally open (N.A.) or change over.
- Variable position level sensors which can be placed along the axis of the indicator, with right (DX) or left (SX) connectors, normally closed (N.C.), normally open (N.A.) or change over contacts.
- Packing rings in FKM (VITON® type, registered trademark of DuPont Dow Elastomers) or in EPDM.



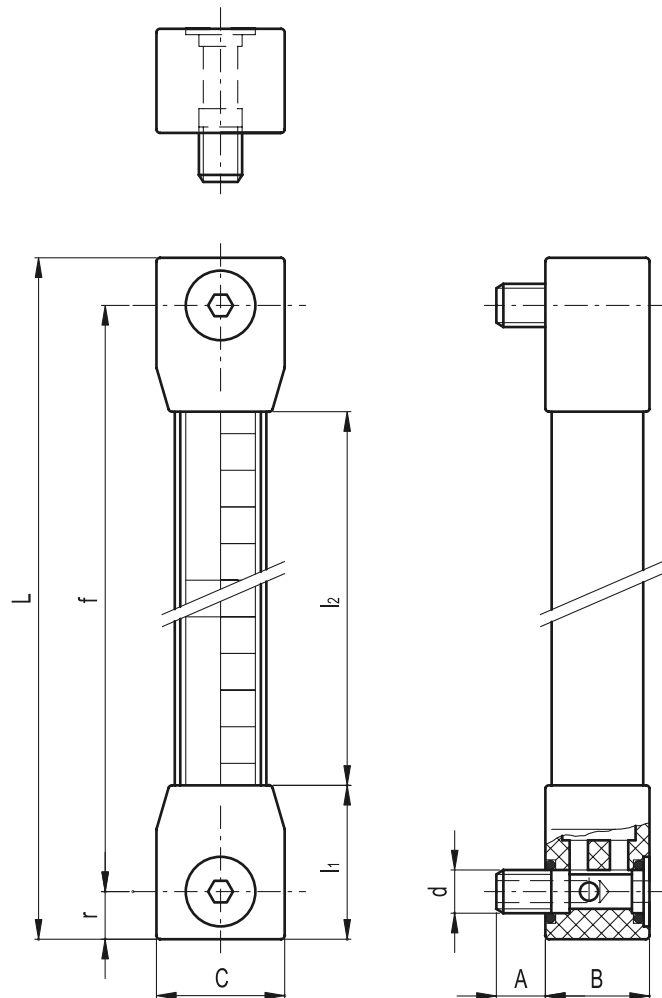
Drilling template

Holes without burr and chamfer for a proper seal of the O-ring



Drilling and installation data

Description	d'±0.2	f'±0.2	Maximum tightening torque
HCL-300	12.5	300	15 Nm
HCL-400	12.5	400	15 Nm
HCL-500	12.5	500	15 Nm



Standard Elements		Main dimensions									⚖
Code	Description	f	d	A	B	C	L	l <sub>1</sub>	l <sub>2</sub>	r	g
111211	HCL-300-M12	300	M12	13.5	28.5	35	326	42	242	13	227
111221	HCL-400-M12	400	M12	13.5	28.5	35	426	42	342	13	268
111231	HCL-500-M12	500	M12	13.5	28.5	35	526	42	442	13	306