# Column level indicators

with or without protection frame, technopolymer



## MATERIAL

Transparent polyamide based (PA-T) technopolymer. Resistant to shocks, solvents, oils with additives, aliphatic and aromatic hydrocarbons, petrol, naphtha, phosphoric esters.
Avoid contact with alcohol or detergents containing alcohol.

## PROTECTION FRAME

Glass-fibre reinforced polyamide based (PA) SUPER-technopolymer, black colour, matte finish. Supplied assembled, removable by a screw-driver.

## SCREWS AND NUTS

Zinc-plated steel.

## PACKING RINGS

Step-shaped for the seal on the reservoir walls and NBR synthetic rubber O-ring screw underhead.
Suggested roughness of the packing ring application surface Ra = 3 µm.

## CONTRAST SCREEN

White lacquered aluminium. The housing, in the appropriate external rear slot, guarantees the best protection from direct contact with fluid. It can be taken out from the inclined side, before assembly to allow the insertion of level lines or words.

## STANDARD EXECUTIONS

- **HCZ**: without thermometer and without protection frame.
- **HCZ/T**: with thermometer incorporated, without protection frame.
- **HCZ-P**: without thermometer, with protection frame.
- **HCZ/T-P**: with thermometer incorporated and protection frame.

## MAXIMUM CONTINUOUS WORKING TEMPERATURE

90°C (with oil).

## FEATURES AND PERFORMANCES

Ultrasound welding to guarantee a perfect seal.
Lens effect for a better visibility of the fluid level and temperature.
Special openings in the protection frame provide maximum fluid level visibility even from side positions.
All shocks are absorbed by the frame that transmits them directly onto the wall of the reservoir.

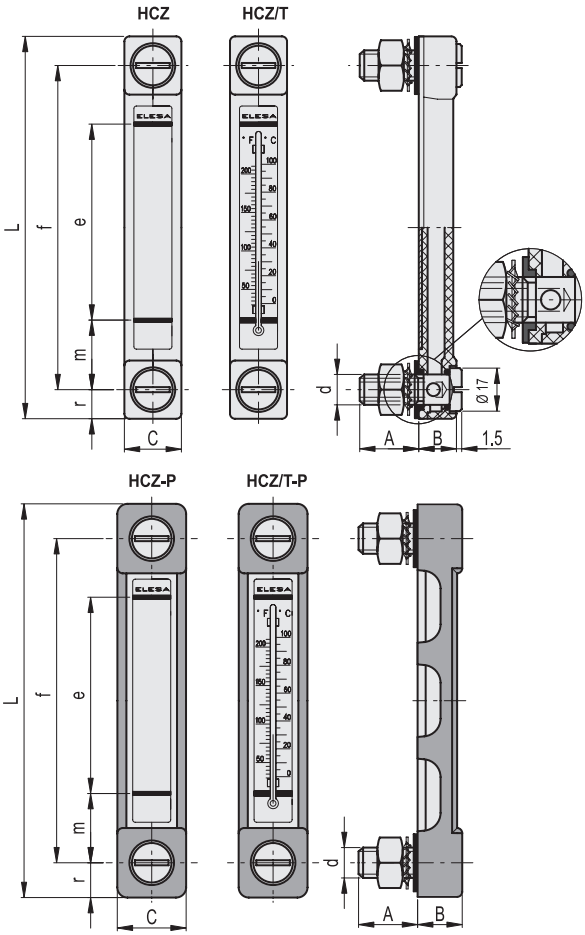
## TECHNICAL DATA

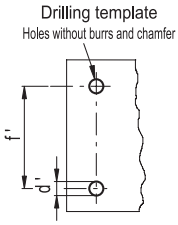
In laboratory tests carried out with mineral oil type CB68 (according to ISO 3498) at 23°C for a limited period of time, the weld stood up to: 18 bar (HCZ.76 and HCZ.127 ) 12 bar (HCZ.254).
For use with other fluids and under different pressure and temperature conditions, please contact ELESA Technical Department.
In any case we suggest to verify the suitability of the product under the actual working conditions.

## SPECIAL EXECUTIONS ON REQUEST

- HCZ.127: with M10 screws and nuts.
- UV resistant transparent technopolymer indicators.

ELESA Original design




**HCZ.**

| Code | Description | f | d | A | B | C | L | e | m | r | d'-0.2 | f'±0.2 | C# [Nm] | ⚖ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11382 | HCZ.76 | 76 | M10 | 22 | 15 | 22 | 99 | 40 | 18 | 11.5 | 10.5 | 76 | 12 | 90 |
| 11385 | HCZ.127 | 127 | M12 | 22 | 15 | 22 | 150 | 80 | 23 | 11.5 | 12.5 | 127 | 12 | 120 |
| 11388 | HCZ.254 | 254 | M12 | 22 | 15 | 24 | 278 | 203 | 25 | 12.5 | 12.5 | 254 | 12 | 150 |

**HCZ/T**

| Code | Description | f | d | A | B | C | L | e | m | r | d'-0.2 | f'±0.2 | Thermometer scale°C | Thermometer scale°F | C# [Nm] | ⚖ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11383 | HCZ.76/T | 76 | M10 | 22 | 15 | 22 | 99 | 40 | 18 | 11.5 | 10.5 | 76 | 20÷100 | 68÷210 | 12 | 91 |
| 11386 | HCZ.127/T | 127 | M12 | 22 | 15 | 22 | 150 | 80 | 23 | 11.5 | 12.5 | 127 | 0÷100 | 32÷210 | 12 | 121 |
| 11389 | HCZ.254/T | 254 | M12 | 22 | 15 | 24 | 278 | 203 | 25 | 12.5 | 12.5 | 254 | 0÷100 | 32÷210 | 12 | 170 |

**HCZ-P**

| Code | Description | f | d | A | B | C | L | e | m | r | d'-0.2 | f'±0.2 | C# [Nm] | ⚖ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11392 | HCZ.76-P | 76 | M10 | 22 | 17.5 | 27 | 105 | 40 | 18 | 14.5 | 10.5 | 76 | 12 | 101 |
| 11395 | HCZ.127-P | 127 | M12 | 22 | 17.5 | 27 | 156 | 80 | 23 | 14.5 | 12.5 | 127 | 12 | 138 |
| 11398 | HCZ.254-P | 254 | M12 | 22 | 17.5 | 31 | 284 | 203 | 25 | 15.5 | 12.5 | 254 | 12 | 150 |

**HCZ/T-P**

| Code | Description | f | d | A | B | C | L | e | m | r | d'-0.2 | f'±0.2 | Thermometer scale°C | Thermometer scale°F | C# [Nm] | ⚖ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11393 | HCZ.76/T-P | 76 | M10 | 22 | 17.5 | 27 | 105 | 40 | 18 | 14.5 | 10.5 | 76 | 20÷100 | 68÷210 | 12 | 102 |
| 11396 | HCZ.127/T-P | 127 | M12 | 22 | 17.5 | 27 | 156 | 80 | 23 | 14.5 | 12.5 | 127 | 0÷100 | 32÷210 | 12 | 139 |
| 11399 | HCZ.254/T-P | 254 | M12 | 22 | 17.5 | 31 | 284 | 203 | 25 | 15.5 | 12.5 | 254 | 0÷100 | 32÷210 | 12 | 150 |

# Maximum tightening torque.