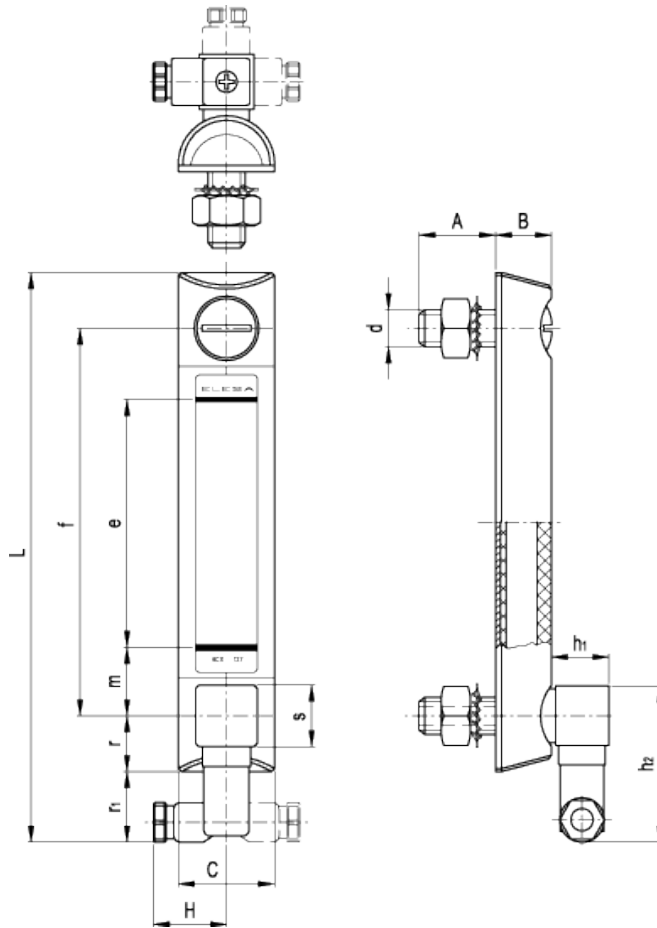


HCX-ST



Column level indicators with MAX temperature electrical sensor



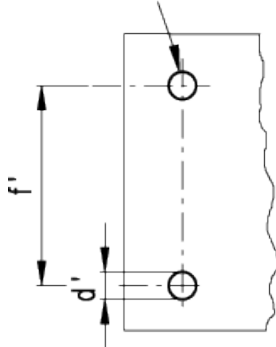
american unit
metric unit

Elesa Standards		Main dimensions														Weight
Code	Description	f	d	A	B	C	H	L	e	m	r	r ₁	h ₁	h ₂	s	lbs g
11161	HCX.127-ST-NO-M12	5 127	- M12	0.91 23	0.71 18	1.22 31	1.06 27	7.36 187	3.15 80	0.91 23	0.67 17	1.02 26	0.83 21	2.13 54	0.87x0.87 22x22	0.485 220

Elesa Standards		Main dimensions														Weight
Code	Description	f	d	A	B	C	H	L	e	m	r	r ₁	h ₁	h ₂	s	lbs g
11162	HCX.127-ST-NC-M12	5 127	- M12	0.91 23	0.71 18	1.22 31	1.06 27	7.36 187	3.15 80	0.91 23	0.67 17	1.02 26	0.83 21	2.13 54	0.87x0.87 22x22	0.485 220
11171	HCX.254-ST-NO-M12	10 254	- M12	0.83 21	0.71 18	1.38 35	1.06 27	12.4 315	7.99 203	1.02 26	0.73 18.5	0.94 24	0.83 21	2.13 54	0.87x0.87 22x22	0.584 265
11172	HCX.254-ST-NC-M12	10 254	- M12	0.83 21	0.71 18	1.38 35	1.06 27	12.4 315	7.99 203	1.02 26	0.73 18.5	0.94 24	0.83 21	2.13 54	0.87x0.87 22x22	0.584 265

Drilling template

Holes without burrs and chamfer



Drilling and installation data

Description	d' _{-0.008}	f' _{±0.008}	Maximum tightening torque [ft·lbf] [Nm]
HCX.127	0.49 12.5	5 127	9 12
HCX.254	0.49 12.5	10 254	7 10

Material

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

Screw, nuts and washers

Zinc-plated steel.

Packing rings

NBR synthetic rubber O-Ring.

MAX temperature electrical sensor (175°F-80°C)

Zinc-plated screw with built-in sensor. Two executions available:

- HCX+ST-N.A.: with electrical contact normally open.
- HCX+ST-N.C.: with electrical contact normally closed.

Pre-set temperature for both executions is 175°F (80°C).

Swivelling two-pin connector

With built-in cable gland and contact holder. Front or side output (right or left) including protection against water sprays (protection class IP 65 according to [IEC 529 table](#) that can be increased during installation with the necessary adjustments. Flat NBR synthetic rubber packing rings.

Contrast screen

White lacquered aluminium. The housing, in the appropriate external rear slot, guarantees the best protection from direct contact with fluid, avoiding yellowing effect due to the prolonged action of the fluid at high temperatures.

It can be removed before installation to fit marks and words (for example MAX-MIN).

Assembly

- When nuts can be fitted from the inside of the reservoir, by means of the supplied set screws and nuts.
- When nuts cannot be fitted from the inside of the reservoir and the walls are thick enough, by means of the supplied set screws, without nuts, by tapping the two holes in the reservoir walls.
- When nuts cannot be fitted from the inside of the reservoir and the walls are not thick enough, by means of the supplied set screws and the [Fast Mounting Kit](#) (for HCX.127).

To ensure the best sealing of the O-rings it is recommended to apply the maximum torque on the nuts as reported in the table and a roughness of the gasket application surface Ra = 3 µm.

Maximum continuous working temperature

190°F (90°C) (with oil).

Special executions on request (For sufficient quantities)

- Level indicators for use with fluids containing alcohol or with hot water.
- Temperature electrical sensor with pre-set temperatures different from 175°F (80°C).

Features and performances

This column level indicator generates an electric signal when the temperature reaches the pre-set degrees (175°F-80°C). Assembled using ultrasound welding to guarantee a perfect seal. Entirely in transparent material: maximum fluid level visibility even from side positions.

Technical data

In laboratory tests carried out with mineral oil for hydraulic systems type CB68 (according to ISO 3498) with gradually increasing pressure, at 73°F (23°C), the weld stood up as follows:

- HCX.127-ST 18 bar
- HCX.254-ST 12 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.

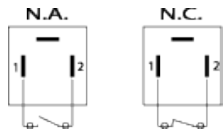
Functioning

Execution HCX+ST-N.A. with electrical contacts normally open.

- Electrical temperature sensor: the electrical circuit is closed when the pre-set temperature at 176°F (80°C) is reached.

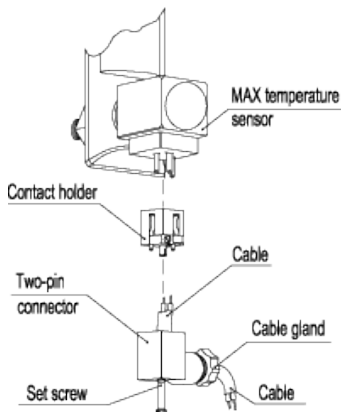
Execution HCX+ST-N.C. with electrical contacts normally closed.

- Electrical temperature sensor: the electrical circuit is open when the pre-set temperature at 175°F (80°C) is reached.



Electric characteristics	MAX temperature sensor
Power supply	AC / DC
Electric contacts	N.A. normally open N.C. normally closed
Maximum applicable voltage	150 Vac, 48 Vdc
Maximum opening current	5 A resistive loads
Maximum rated capacity	5 A
Cable gland	Pg 7 (for cables in sheath with Ø 6 or 7 mm)
Conductors cross-section	Max 1.5 mm²

Assembly instructions



Two-pin connector assembly instructions

1. Remove the connector from the indicator by unscrewing the set screw placed in the bottom, take the contact holder out and loosen the cable gland.
2. Slip on the two-pole cable into the connector (standard connector) and connect the wires to the terminals nr. 1 and nr. 2 of the contact holder.
3. Assemble by pressing the contact holder into the connector in the required position.
4. Screw the connector to the indicator and then tighten the cable gland.