

# Level indicators with protection frame



SUPER-Technopolymer and transparent technopolymer

## BODY

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.

### PROTECTION FRAME

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

#### PACKING RINGS

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- NBR: synthetic rubber O-Ring.
- FKM: FKM type VITON®\*O-Ring

Suggested roughness of the packing ring application surface Ra = 3  $\mu$ m.

\* Registered trademark by DuPont Dow Elastomers.

### 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

- HCX-PT: zinc-plated steel screws, nuts and washers, NBR packing ring.
- HCX-PT-SST: AISI 303 stainless steel screws, AISI 304 stainless steel nuts and washers, FKM packing ring.
- HCX-PT-VT: glass-fibre reinforced polyamide based (PA) SUPERtechnopolymer screws, AISI 304 stainless steel nuts and washers, NBR packing ring.

# 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.

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.

Thanks to the SUPER-technopolymer screws, HCX-PT-VT column level indicator can be used in corrosion resistance applications where stainless steel is not necessary.

The special slotted head of the SUPER-technopolymer screws is especially designed to reach an optimum tightening of the packing rings by applying an adequate tightening torque (ELESA patent) thus avoiding unnecessary stress to the screws.

### 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 (HCX.76-PT e HCX.127-PT) 12 bar (HCX.254-PT).

Considering the SUPER-technopolymer screws, the maximum working pressure cannot be higher than 5 bar at 20°C and 2 bar at 90°C.

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.





**METRIC** 

ELESA Original design

# SPECIAL EXECUTIONS ON REQUEST

- Indicators with two red ball-shaped floats.
- Indicators with cylindrical or step-shaped (NBR or FKM) packing rings (instead of OR) for mounting on reservoirs having rough surfaces or in any case not perfectly flat.

### ACCESSORIES ON REQUEST

When fitting is not possible from the inside of the reservoir and the walls are not thick enough, the screws can be used together with Fast Mounting Kit (see page 1221)



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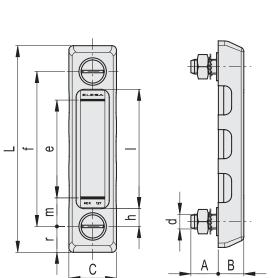
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Drilling template Holes without burrs and chamfer





НСХ-РТ		•													ME	TRIC	1
Code	Description	f	d	А	В	С	L	е	h	I	m	r	<b>d'-</b> 0.2	<b>f'</b> ±0.2	C# [Nm]	52	1
11332	HCX.76-PT-M10	76	M10	20	19	35.5	115	40	13.5	49	18	19.5	10.5	76	12	117	
11372	HCX.127-PT-M12	127	M12	22	21	39	169	80	15	96	23	21	12.5	127	12	191	
11359	HCX.254-PT-M12	254	M12	21	21.5	44.5	301	203	18	218	26	23.5	12.5	254	10	288	

SST	•											INC	OX STAINL		TRIC
Description	f	d	А	В	С	L	е	h	I	m	r	<b>d'-</b> 0.2	<b>f'</b> ±0.2	C# [Nm]	۵'۵
HCX.76-PT-SST-M10	76	M10	20	19	35.5	115	40	13.5	49	18	19.5	10.5	76	12	119
HCX.127-PT-SST-M12	127	M12	22	21	39	169	80	15	96	23	21	12.5	127	12	193
HCX.254-PT-SST-M12	254	M12	21	21.5	44.5	301	203	18	218	26	23.5	12.5	254	10	290
νт	•													ME	TRIC
Description	f	d	А	В	С	L	е	h	Ι	m	r	d'-0.2	<b>f'</b> ±0.2	C# [Nm]	5
HCX.127-PT-VT-M12	127	M12	22	21	39	169	80	15	96	23	21	12.5	127	6	147
HCX.254-PT-VT-M12	254	M12	21	21.5	44.5				218	26	23.5	12.5	254	6	248
	Description HCX.76-PT-SST-M10 HCX.127-PT-SST-M12 HCX.254-PT-SST-M12 VT Description HCX.127-PT-VT-M12	Description   f     HCX.76-PT-SST-M10   76     HCX.127-PT-SST-M12   127     HCX.254-PT-SST-M12   254     VT   v     Description   f     HCX.127-PT-VT-M12   127	Description   f   d     HCX.76-PT-SST-M10   76   M10     HCX.127-PT-SST-M12   127   M12     HCX.254-PT-SST-M12   254   M12     VT   V   V   V     Description   f   d     HCX.127-PT-VT-M12   127   M12	Description   f   d   A     HCX.76-PT-SST-M10   76   M10   20     HCX.127-PT-SST-M12   127   M12   22     HCX.254-PT-SST-M12   254   M12   21     VT        Description   f   d   A     HCX.127-PT-VT-M12   127   M12   21	Description   f   d   A   B     HCX.76-PT-SST-M10   76   M10   20   19     HCX.127-PT-SST-M12   127   M12   22   21     HCX.254-PT-SST-M12   254   M12   21   21.5     VT           Description   f   d   A   B      HCX.127-PT-VT-M12   127   M12   22   21	Description   f   d   A   B   C     HCX.76-PT-SST-M10   76   M10   20   19   35.5     HCX.127-PT-SST-M12   127   M12   22   21   39     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5     VT   V     Description   f   d   A   B   C     HCX.127-PT-VT-M12   127   M12   22   21   39	Description   f   d   A   B   C   L     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115     HCX.127-PT-SST-M12   127   M12   22   21   39   169     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301     VT   V   V   V   V   V   V   V     Description   f   d   A   B   C   L     HCX.127-PT-VT-M12   127   M12   22   21   39   169	Description   f   d   A   B   C   L   e     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40     HCX.127-PT-SST-M12   127   M12   22   21   39   169   80     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203     VT   V   Image: Construct of the state of t	Description   f   d   A   B   C   L   e   h     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5     HCX.127-PT-SST-M12   127   M12   22   21   39   169   80   15     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18     VT   Image: Market M	Description   f   d   A   B   C   L   e   h   I     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5   49     HCX.127-PT-SST-M12   127   M12   22   21   39   169   80   15   96     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18   218     VT   V <t< td=""><td>Description   f   d   A   B   C   L   e   h   I   m     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5   49   18     HCX.76-PT-SST-M12   127   M12   22   21   39   169   80   15   96   23     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18   218   26     VT</td><td>Description   f   d   A   B   C   L   e   h   I   m   r     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5   49   18   19.5     HCX.76-PT-SST-M12   127   M12   22   21   39   169   80   15   96   23   21     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18   218   26   23.5     VT   •</td><td>Description   f   d   A   B   C   L   e   h   I   m   r   d'02     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5   49   18   19.5   10.5     HCX.76-PT-SST-M12   127   M12   22   21   39   169   80   15   96   23   21   12.5     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18   218   26   23.5   12.5     VT   V   V   V   V   V   V   V   Immatrial   M12   22   21   39   169   80   15   96   23   21   12.5     VT   V   V   V   V   V   Immatrial   M   M   M   M   M   M d'0.2     HCX.127-PT-VT-M12   127   M12   22   21   39</td><td>Description f d A B C L e h I m r d'02 ft/122   HCX.76-PT-SST-M10 76 M10 20 19 35.5 115 40 13.5 49 18 19.5 10.5 76   HCX.76-PT-SST-M12 127 M12 22 21 39 169 80 15 96 23 21 12.5 127   HCX.254-PT-SST-M12 254 M12 21 21.5 44.5 301 203 18 218 26 23.5 12.5 254   VT V V V V V M r d'0.2 ft/12.2   Description f d A B C L e h I m r d'0.2 ft/12.2   HCX.127-PT-VT-M12 127 M12 22 21 39 169 80 15 96 23 21 12.5 127   Description f d A B</td></t<> <td>SSI r d A B C L e h I m r d'02 ft02 C# Nm]   HCX.76-PT-SST-M10 76 M10 20 19 35.5 115 40 13.5 49 18 19.5 10.5 76 12   HCX.76-PT-SST-M10 76 M10 20 19 35.5 115 40 13.5 49 18 19.5 10.5 76 12   HCX.127-PT-SST-M12 127 M12 22 21 39 169 80 15 96 23 21 12.5 127 12   HCX.254-PT-SST-M12 254 M12 21 21.5 44.5 301 203 18 218 26 23.5 12.5 254 10   VT Image: Colored Colore</td>	Description   f   d   A   B   C   L   e   h   I   m     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5   49   18     HCX.76-PT-SST-M12   127   M12   22   21   39   169   80   15   96   23     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18   218   26     VT	Description   f   d   A   B   C   L   e   h   I   m   r     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5   49   18   19.5     HCX.76-PT-SST-M12   127   M12   22   21   39   169   80   15   96   23   21     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18   218   26   23.5     VT   •	Description   f   d   A   B   C   L   e   h   I   m   r   d'02     HCX.76-PT-SST-M10   76   M10   20   19   35.5   115   40   13.5   49   18   19.5   10.5     HCX.76-PT-SST-M12   127   M12   22   21   39   169   80   15   96   23   21   12.5     HCX.254-PT-SST-M12   254   M12   21   21.5   44.5   301   203   18   218   26   23.5   12.5     VT   V   V   V   V   V   V   V   Immatrial   M12   22   21   39   169   80   15   96   23   21   12.5     VT   V   V   V   V   V   Immatrial   M   M   M   M   M   M d'0.2     HCX.127-PT-VT-M12   127   M12   22   21   39	Description f d A B C L e h I m r d'02 ft/122   HCX.76-PT-SST-M10 76 M10 20 19 35.5 115 40 13.5 49 18 19.5 10.5 76   HCX.76-PT-SST-M12 127 M12 22 21 39 169 80 15 96 23 21 12.5 127   HCX.254-PT-SST-M12 254 M12 21 21.5 44.5 301 203 18 218 26 23.5 12.5 254   VT V V V V V M r d'0.2 ft/12.2   Description f d A B C L e h I m r d'0.2 ft/12.2   HCX.127-PT-VT-M12 127 M12 22 21 39 169 80 15 96 23 21 12.5 127   Description f d A B	SSI r d A B C L e h I m r d'02 ft02 C# Nm]   HCX.76-PT-SST-M10 76 M10 20 19 35.5 115 40 13.5 49 18 19.5 10.5 76 12   HCX.76-PT-SST-M10 76 M10 20 19 35.5 115 40 13.5 49 18 19.5 10.5 76 12   HCX.127-PT-SST-M12 127 M12 22 21 39 169 80 15 96 23 21 12.5 127 12   HCX.254-PT-SST-M12 254 M12 21 21.5 44.5 301 203 18 218 26 23.5 12.5 254 10   VT Image: Colored Colore

# Maximum tightening torque.

Accessories for hydraulic systems