

# Column level indicators









Series	Feature	Wheel base	
<b>HCX.</b> page 1010	Standard applications. Zinc-plated steel screws.	<b>76, 127, 254</b>	
<b>HCZ.</b> page 1012	Standard applications. Zinc-plated steel screws.	<b>76, 127</b>	
<b>HCX.INOX</b> page 1014	For use in corrosion resistance applications. Stainless steel assembly screws.	<b>76, 127, 254</b>	
<b>HCX.VT</b> page 1016	For use in corrosion resistance applications where stainless steel is not necessary. Technopolymer assembly screws.	<b>127, 254</b>	
<b>HCX.INOX -BW</b> page 1018	For use with hot water. Stainless steel assembly screws.	<b>76, 127, 254</b>	
<b>HCX/AR</b> page 1020	For use with fluid containing alcohol. Zinc-plated steel assembly screws.	<b>76, 127, 254</b>	
<b>HCX/P</b> page 1022	With protection frame. Zinc-plated steel assembly screws.	<b>127</b>	
<b>HCX/LT</b> page 1023	With float for indirect level reading. Zinc-plated steel assembly screws.	<b>254</b>	

15

1008

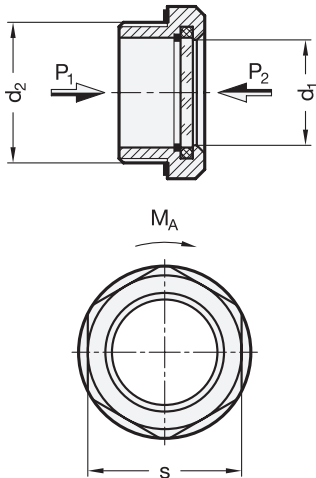
Accessories for hydraulic systems

# Column level indicators

Series	Feature	Wheel base	
<b>HCX/E</b> page 1024	With MIN level electrical sensor. Zinc-plated steel assembly screws.	<b>127</b>	
<b>HCX+ST</b> page 1026	With MIN level electrical sensor. Zinc-plated steel assembly screws.	<b>127, 254</b>	
<b>HCX+STL</b> page 1028	With temperature electrical sensor. Zinc-plated steel assembly screws.	<b>127, 254</b>	
<b>HCX/E+ST</b> page 1030	With MIN level and MAX temperature electrical sensor. Zinc-plated steel assembly screws.	<b>127</b>	
<b>HCX/E+STL</b> page 1032	With MIN level electrical sensor and temperature electrical probe. Zinc-plated steel assembly screws.	<b>127</b>	
<b>HCY/E</b> page 1034	With MIN level electrical sensor. Nickel-plated brass assembly screws.	<b>76, 127, 254</b>	
<b>HCY/E+ST</b> page 1036	With MIN level and MAX temperature electrical sensor. Nickel-plated brass assembly screws.	<b>76, 127, 254</b>	
<b>HCL</b> page 1038	With U shaped protections. Zinc-plated steel assembly screws.	<b>300, 400, 500</b>	

# Load details for oil sight glasses

Thrust loads / Mounting torques



## Compressive loads

It is assumed in the compressive loads listed here that the oil level sight glass is exposed to pressure from the rear in  $P_1$  and from the outside in  $P_2$ .

Abrupt pressure and temperature fluctuation must be avoided. Also, even minor damage to the glass can result in a substantially lower pressure resistance.

The tests carried out by Ganter were made under laboratory conditions. The test medium used was a hydraulic oil of viscosity 46 C which had been compressed to a test pressure of 100 bar using a hydraulic unit.

Pressure during the test cycles was built up gradually and also reduced slowly.

The details given below refer to the oil level sight glasses GN 743 / GN 743.1 / GN 743.2 / GN 743.3 / GN 743.4 und GN 743.5.

## Pressure load values

$d_1$	$P_1$ Maximum pressure in bar (kPa)	$P_2$ Maximum pressure in bar (kPa)
7		
11	>100 (>10000)	35 (3500)
14	>100 (>10000)	35 (3500)
18	70 (7000)	35 (3500)
24	50 (5000)	30 (3000)
32	30 (3000)	25 (2500)

## Mounting torques

$d_1$ Mounting torques	$d_2$ related thread size	$s$ Width across flats	$M_A$ Tightening torque in Nm
7	G 1/4	M 14 x 1,5	-
11	G 3/8	M 16 x 1,5	-
14	G 1/2	M 20 x 1,5	-
18	G 3/4	M 26 x 1,5	M 27 x 1,5
24	G 1	M 33 x 1,5	-
32	G 1 1/4	M 40 x 1,5	M 42 x 1,5
32	G 1 1/2	-	-

The screw-in thread must be inserted at an angle to the sealing surface (DIN 3852). A greater roughness / unevenness of the sealing surface may impair the seal tightness.

## Safety notice

On principle, the design of oil level sight glasses also needs an adequate safety coefficient to be taken into account which should normally be 4. In applications requiring higher safety levels, the coefficient must be increased accordingly.

### Disclaimer:

Our information and recommendations are given with non-binding effect and ruling out any liability, unless we have expressly committed ourselves in writing to provide information and recommendations. All products are standard elements for versatile uses and as such are subject to extensive standard tests. You should carry out your own test series to verify whether a certain product is suitable for your specific applications. We cannot be held responsible for this.