Clamping piston with grooved ring



Task:

METRON – clamping pistons with grooved rings are suitable for hydraulic clamping of moveable machine parts, e. g. bottom slides, tailstocks, milling desks, etc., which are to be clamped temporarily on their guide ways. .

Application in the first line in places where greater strokes are required.

They can be used both in individual cylinders and - in groups and communicating with one another- in clamping gibs.

The clamping pistons do not require any maintenance. After the first greasing when mounting the further greasing is automatically effected by the hydraulic oil sticking to the wall of the cylinder.

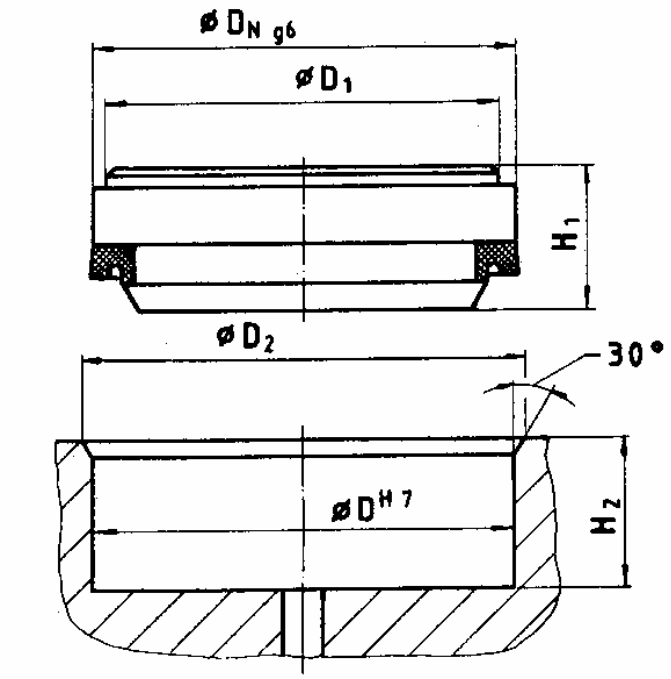
Technical data:

Material:	Piston Rg 7, grooved ring Simrit base AUN
Pressure medium:	Hydraulic liquids and lubricants on mineral oil basis
Service pressure:	Max. 200 bars
Operational temperature:	-30° C bis + 80° C

Finding of the clamping or holding force resp. corresponding to page K 05-01/1.

Dimension table page 2

METRON® Meßtechnik und Maschinenbau GmbH Telefon: (0201) 83235-0 www. m e t r o n - e s s e n . de
D-45025 ESSEN • Postfach 10 25 62 Telefax: (0201) 324653 E-Mail: info@metron–essen. de



D_N (mm)	F (cm^2)	D_1 (mm)	D_2 (mm)	H_1 (mm)	H_2 (mm)	grooved ring
16	2,01	14	19,5	22	23	AUN 8-21
22	3,80	20	25,5	22	23	AUN 14-21
28	6,15	26	31,5	22	23	AUN 20-47
32	8,04	30	35,5	22	23	AUN 24-30
42	13,85	37	45,5	22	23	AUN 30-38
52	21,23	48	55,5	22	23	AUN 40-56
64	32,15	60	67,5	22	23	AUN 53-5

Max. clamping pressure 200 bars, admissible operational temperature -30° C up to + 100° C.

Finding of the clamping force: $F = A \bullet n \bullet p$ in daN

A = effective piston surface in cm^2

n = number of clamping pistons

p = oil pressure in bars

The frictions of the sealing elements can be neglected, as they are ≤ 0,1 %.

METRON® Meßtechnik und Maschinenbau GmbH Telefon: (0201) 83235-0 www. m e t r o n - e s s e n . de
D-45025 ESSEN • Postfach 10 25 62 Telefax: (0201) 324653 E-Mail: info@metron–essen. de