

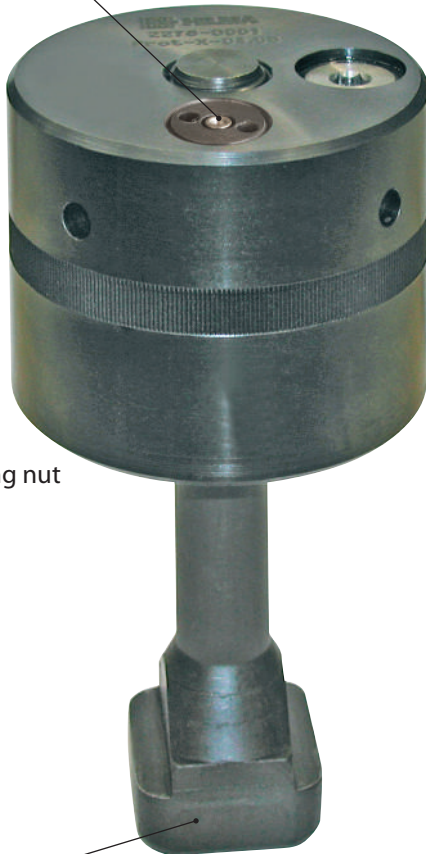
Clamping nut, hydro-mechanical

maximum power density in the smallest space



ROEMHELD
HILMA ■ STARK

Clamping force indicator pin
(option)



Clamping nut

Tie rod, supplied
separately

Applications:

- for clamping and locking dies on press beds and rams
- on beds of machine tools
- when maximum clamping force is required in the smallest space
- when no power unit is available

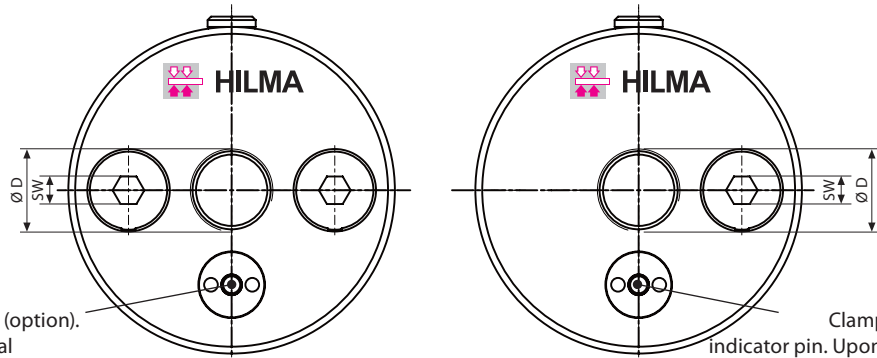
Function:

Following manual positioning of the clamping nut against the clamping edge, the integral hydraulic cushion is preloaded by turning the hexagon socket. A low torque is translated into a high clamping force.

In the case of versions without clamping force control, use a torque wrench to ensure safe and defined build-up of the clamping force. In the case of versions with clamping force control, the clamping force indicator pin will project by approx. 2.5 mm when the clamping force is reached.

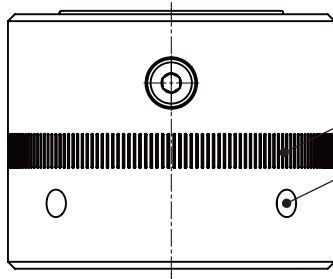
Special features:

- ◇ clamping nut with a through thread, which means high adaptability to varying heights of clamping edges and tolerances.
- ◇ safe clamping using the clamping force indicator pin (option)
- ◇ no need for adaptation of the tie rod length
- ◇ suitable for retrofit
- ◇ intensification of clamping force possible in the case of multiple clamping
- ◇ high clamping force with low torque
- ◇ easy manual clamping and unclamping

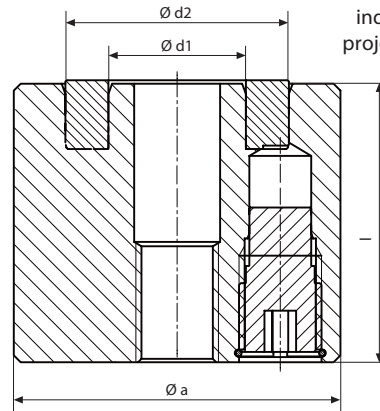
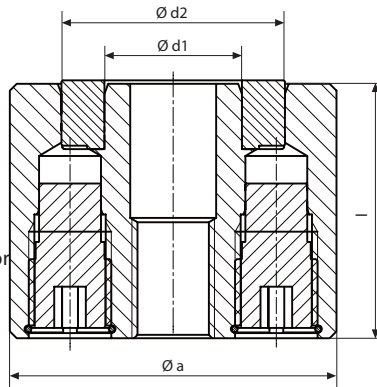


Clamping force indicator pin (option).
Upon reaching of the nominal
clamping force the
indicator pin will project by 2.5 mm

Clamping force
indicator pin. Upon reaching
of the nominal clamping force the
indicator pin will
project by 2.5 mm



Grooves to give grip
Borehole for
preloading
the nut using
a sickle
spanner



**Clamping nut,
supplied separately**

with two tightening screws

with one tightening screw

Clamping force (kN)	60	100	150
Max. stroke* (mm)	2	2	2
Tightening torque (Nm)	9	30	—
D (mm)	M 20	M 24	M 30
a (mm)	70	95	112
d1 (mm)	30	40	50
d2 (mm)	50	65	80
SW (mm)	8	8	10
l (mm)	71	75	90
Weight (kg)	2,0	3,7	6,1
without clamping force display Part no.	HCR-8.2275.0001	HCR-8.2276.0001	HCR-8.2277.0001
with clamping force display** Part no.	HCR-8.2275.0002	HCR-8.2276.0002	HCR-8.2277.0002

60	100
2	2
9	30
M 20	M 24
70	95
30	40
50	65
8	8
87	91
2,3	4,6
not available	not available
HCR-8.2275.0102	HCR-8.2276.0102

* Stroke at maximum adjustment of pressure screws. Preload the nut using a sickle spanner before operating the pressure screws.

** Supplied including Allen key, no torque wrench is required.
Permissible temperature variation: ±20°C

T-bolt, supplied separately

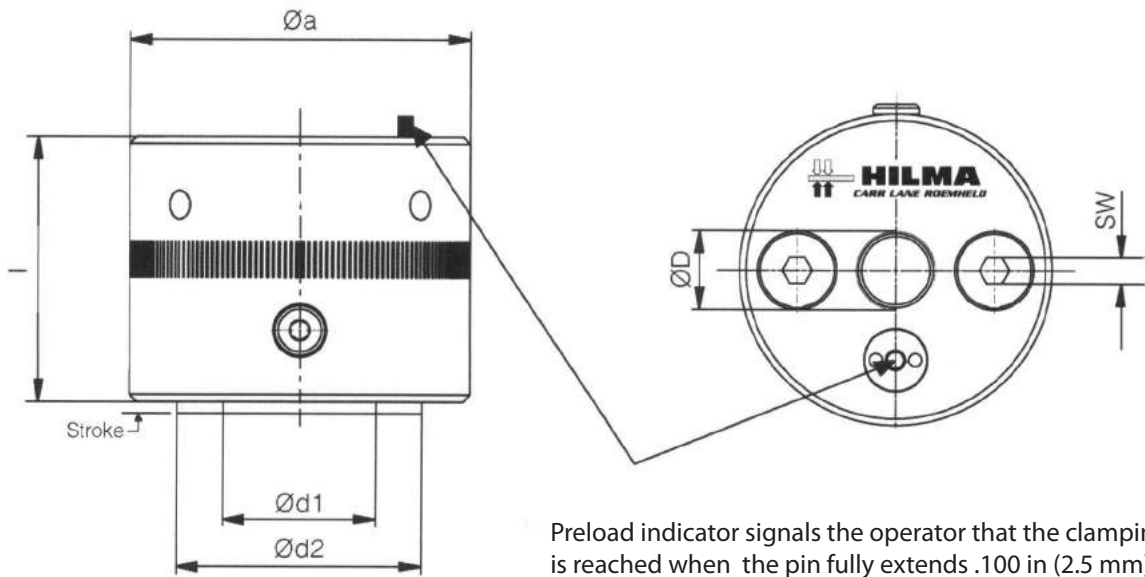
For T-slot (mm)	22	28	36
Thread	M 20	M 24	M 30
Length (mm)	200	250	250
Property class	8.8	8.8	8.8
Part no.	HCR-5700023	HCR-5700024	HCR-5700048

Clamping nut, hydraulic-mechanical

High clamping force with preload indicator



ROEMHELD
HILMA ■ STARK

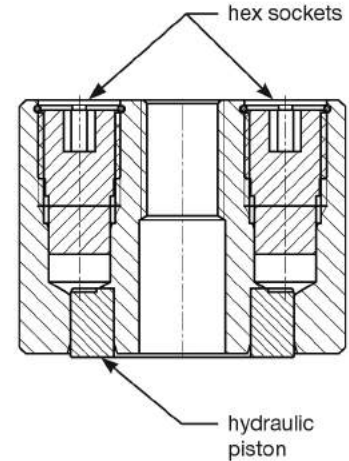


Preload indicator signals the operator that the clamping force is reached when the pin fully extends .100 in (2.5 mm).

Clamping Nut

For T-slot (inch)	$1\frac{3}{16}$	$1\frac{1}{16}$	$1\frac{5}{16}$
Clamping force (lbs)	13,400	22,400	33,700
Max. stroke* (inch)	.078	.078	.078
Tightening torque** (ft/lbs)	7	22	-
D (UNC)	$\frac{3}{4}$ -10	1-8	$1\frac{1}{4}$ -7
a (inch)	2.75	3.74	4.41
d1 (inch)	1.18	1.57	1.97
d2 (inch)	1.97	2.56	3.15
SW (mm)	8	8	10
l (inch)	2.8	2.95	3.54
Weight (lbs)	4.5	8.2	13.5
Part no.	HCR-8.2275.0003	HCR-8.2276.0003	HCR-8.2277.0003

**Delivery includes Allen wrench



T-bolt, Grade 8

For T-slot (inch)	$1\frac{3}{16}$	$1\frac{3}{16}$	$1\frac{1}{16}$	$1\frac{1}{16}$
Thread size (inch)	$\frac{3}{4}$ -10	$\frac{3}{4}$ -10	1-8	1-8
Thread length (inch)	3.5	5	4	4
Shaft length (inch)	5	7	5	6
f ¹ dimension	$\frac{1}{8}$ to $2\frac{1}{8}$	$\frac{5}{8}$ to $4\frac{1}{8}$	0 to 2	$\frac{5}{8}$ to 3
Part no.	HCR-HM-TB075-0500	HCR-HM-TB075-0700	HCR-HM-TB100-0500	HCR-HM-TB100-0600

*For maximum clamp stroke. Before adjusting the pressure screws, preload the nut using a spanner wrench.

**Each clamp is supplied with an Allen wrench. Torque wrench is not required.

Metric versions and other sizes on request.

Permissible temperature variations: +/- 35°F Max. (+/-20°C)

Maximum temperature: 212°F (100°C)