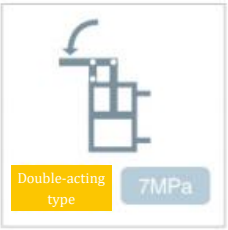


High cost performance connecting rod clamp with compact structure, large capacity and strong durability

Model Representation

HCLU ① – ②③ (Example: HCLU06-RE)

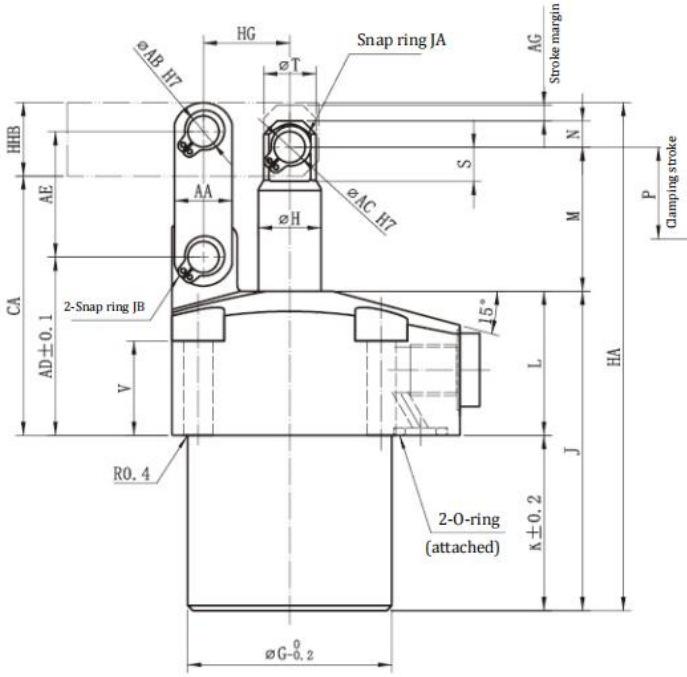
①Dimensions (refer to specification sheet)		② Clamping arm installation direction		③ Special specification mark
HCLU	02 04 06 10 16 25	–	L: left F: forward R: right	Unmarked: standard E: double-end rod specification

Specification

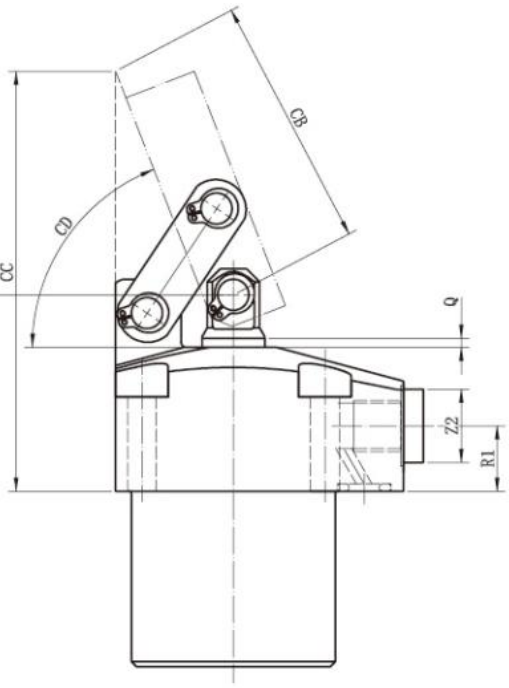
Model			HCLU02	HCLU04	HCLU06	HCLU10	HCLU16	HCLU25
Cylinder capacity (when oil pressure is 7MPa)		(kN)	3.4	5.0	6.7	10.6	17.2	26.9
Clamping force ※ 1 (when the oil pressure is 7MPa)		(kN)	2.6	3.5	4.4	7.3	12.1	18.2
Standard clamping arm length (LH)		(mm)	36.5	42	50	56.5	69.5	87.5
Bore of cylinder		(mm)	25	30	35	44	56	70
Diameter of main rod		(mm)	12	14	14	16	22.4	28
Cylinder area (clamping)		(cm^2)	4.9	7.1	9.6	15.2	24.6	38.5
Full stroke		(mm)	20.5	23.5	26	29.5	36	45
Clamping stroke		(mm)	17.5	20.5	23	26.5	33	42
Stroke margin		(mm)	3	3	3	3	3	3
Maximum flow		(R/min)	1.0	1.6	2.6	4.7	9.5	18.9
Cylinder capacity	Clamping	(cm^3)	10.0	16.7	25.0	44.8	88.6	173.3
	Release	(cm^3)	7.7	13.0	21.0	38.9	74.5	145.5
Mass		(kg)	0.7	1.0	1.4	2.3	4.0	7.4

Operating oil pressure range: 1 to 7MPa Guaranteed pressure resistance: 10.5MPa Operating ambient temperature: 0-70℃
Operating fluid: ordinary mineral oil-based hydraulic oil (equivalent to ISO-VG32)
※1: It indicates the clamping force when the standard clamping arm is installed.
The clamping force varies depending on the length of the clamping arm.

Overall Dimension

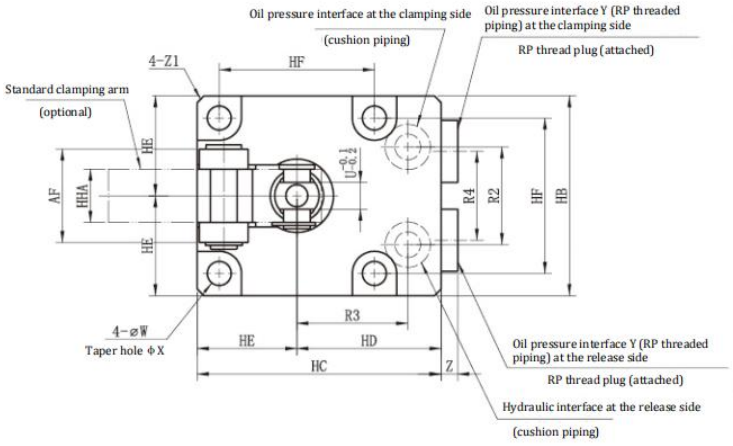


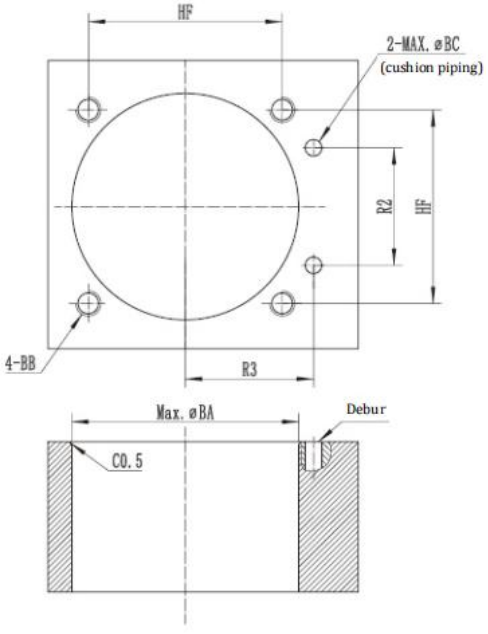
Clamping state



Released state

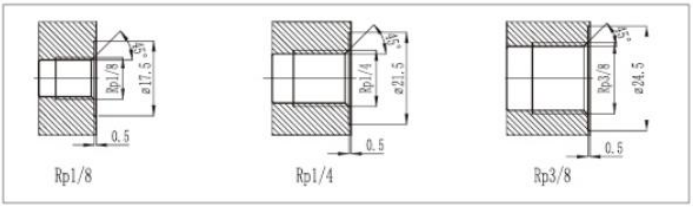
Installation Hole Processing Drawing





Overall Dimension

Model	HCLU02-$^{L}_{R}$	HCLU04-$^{L}_{R}$	HCLU06-$^{L}_{R}$	HCLU10-$^{L}_{R}$	HCLU16-$^{L}_{R}$	HCLU25-$^{L}_{R}$
HA	97.1	108.1	119.6	140.1	166.1	199.1
HB	45	50	57	70	86	108
HC	55	60	66	82	96	120
HD	32.5	35	37.5	47	53	66
HE	22.5	25	28.5	35	43	54
HF	35.1	40.1	46.1	56.1	68.1	88.1
G	39	47	53	63	78	100
H	12 f7	14 f7	14 f7	16 f7	22.4 f7	28 f7
J	60	66	71	83	95	112
K	33.5	39.5	42.5	47	55	65
L	26.5	26.5	28.5	36	40	47
M	28.5	32	34.5	40	49	61.5
N	5.5	6	6	8	11	13
P	17.5	20.5	23	26.5	33	42
Q	2	2	2	2	2.5	2.5
R1	12.5	12.5	12.5	14	14	21
R2	22	24	28	36	45	50
R3	25	28	30.5	36	42	57
R4	20	22	26	30	38	50
S	6.5	7	7	9	10.8	14.5
T	10	12	12	14	20	26
U ※1	6	6	8	10	11	16
V	18	17	17	20	20	20
W	5.5	5.5	6.8	9	11	14
X	10	10	12	15	18.5	20
Y	Rp1/8	Rp1/8	Rp1/8	Rp1/4	Rp1/4	Rp3/8
Z	3.8	3.8	3.8	4.8	4.8	4.8
Z1	C1.5	C2.5	C2.5	C3	C3.5	C5.5
Z2	14	14	14	19	19	22
O-ring	6.8×1.9	6.8×1.9	6.8×1.9	7.8×1.9	7.8×1.9	9.8×1.9
AA	11	13	15	19	25	32
AB	$6^{+0.012}_{0}$	$6^{+0.012}_{0}$	$8^{+0.015}_{0}$	$10^{+0.015}_{0}$	$14^{+0.018}_{0}$	$16^{+0.018}_{0}$
AC	$6^{+0.012}_{0}$	$6^{+0.012}_{0}$	$6^{+0.012}_{0}$	$8^{+0.015}_{0}$	$12^{+0.018}_{0}$	$14^{+0.018}_{0}$
AD	34	36	39	48	54.5	65
AE	24	26	30	35.5	44	53
AF	21	21	28	37	46	56
AG	3	3	3	3	3	3
BA	40	48	54	64	79	101
BB	M5	M5	M6	M8	M10	M12
BC	4	4	4	6	6	8
CA	49.5	52.5	57	68	80	96
CB	48.0	59.6	67.3	78.7	98.2	133.5
CC	80.2	92.5	101.3	120.4	144.7	189.2
CD	About 69°	About 71°	About 70°	About 70°	About 69°	About 72°
HHA	12	12	16	19	22	32
HHB	14	16	20	25	31	38
HG	16.5	18.5	21	24.5	30.5	37.5
JA ※2	STW-6	STW-6	STW-6	STW-8	STW-12	STW-14
JB ※2	STW-6	STW-6	STW-8	STW-10	STW-14	STW-16



※1: It indicates the width of the opposite side of the front end of the piston rod.

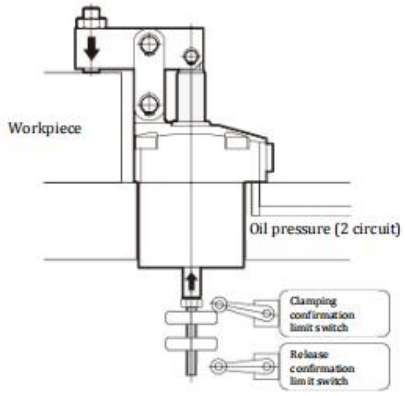
Model Representation

HCLU① – ② E (Example: HCLU06-RE)

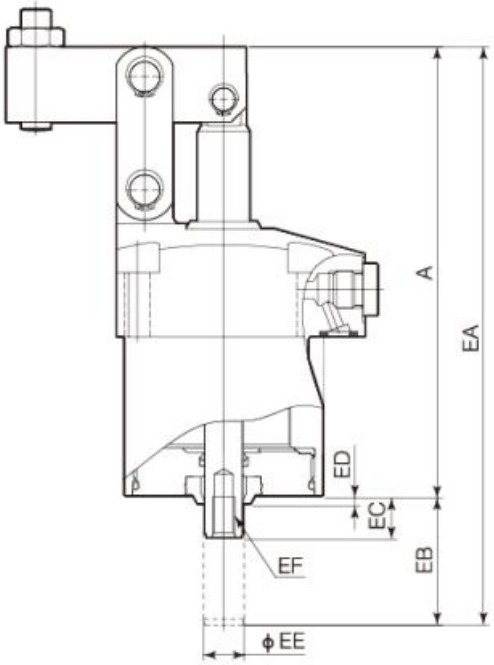
	① Dimensions ※		② Clamping arm installation direction
HCLU	02 04 06 10 16 25	–	L: left F: forward R: right
			E: double-end rod specification

※: Please refer to the following clamping capacity.

Use Example



Overall Dimension



(mm)

Model	HCLU02-$^{L}_{R}$FE	HCLU04-$^{L}_{R}$FE	HCLU06-$^{L}_{R}$FE	HCLU10-$^{L}_{R}$FE	HCLU16-$^{L}_{R}$FE	HCLU25-$^{L}_{R}$FE
Cylinder capacity (clamping)	9.0 cm³	14.8 cm³	22.9 cm³	41.6 cm³	84.6 cm³	164.3 cm³
A	97	108	119.5	140	166	199
EA	125.5	139.5	153.5	177.5	210	252
EB	28.5	31.5	34	37.5	44	53
EC	11	11	11	11	11	11
ED	2	2	2	2	2	2
EE	8	10	10	12	12	16
EF	M5×0.8 deep 8	M6×1 deep 11	M6×1 deep 11	M8×1.25 deep 15	M8×1.25 deep 15	M10×1.5 deep 18
Mass	0.7 kg	1.0 kg	1.4 kg	2.4 kg	4.0 kg	7.4 kg

Clamping Capacity

Compared with the standard specification, the double-end rod specification reduces the clamping force slightly due to the smaller area of the cylinder on the clamping side.

Calculation example

When the oil pressure of HCLU10-FE or HCLU10-FA is 7.0Mpa and the length of clamping arm is 60mm, the clamping force of standard specification HCLU10-F is 6.6kN

Clamping force of HCLU10-FE or HCLU10-FA: 6.6×0.93=6.1kN

Model	HCLU02-$^{L}_{R}$FEA	HCLU04-$^{L}_{R}$FEA	HCLU06-$^{L}_{R}$FEA	HCLU10-$^{L}_{R}$FEA	HCLU16-$^{L}_{R}$FEA	HCLU25-$^{L}_{R}$FEA
Clamping capacity coefficient	0.90	0.89	0.92	0.93	0.95	0.95
Cylinder area (clamping)	4.4 cm²	6.3 cm²	8.8 cm²	14.1 cm²	23.5 cm²	36.5 cm²
Cylinder capacity (when oil pressure is 7MPa)	3.1 kN	4.4 kN	6.2 kN	9.9 kN	16.4 kN	25.5 kN
Clamping force (when the oil pressure is 7MPa) ※1	2.3 kN	3.1 kN	4.0 kN	6.8 kN	11.5 kN	17.2 kN

※1: It indicates the clamping force when installing the standard clamping arm.