



Oil pressure single-acting lever clamp

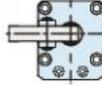
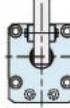
Model: HTMA-1
High pressure (3.5 to 35MPa)
High capacity · Compact type

Model Representation

Single-acting cylinder

HTMA ① - ② (Example HTMA0400-1CC)

① Dimension (refer to specification sheet) ② Platen direction

HTMA	0250-1 0400-1 0600-1 1000-1 1600-1 2500-1 3200-1	—	L	C	R
			CL: left CF: forward CR: right		

Specification

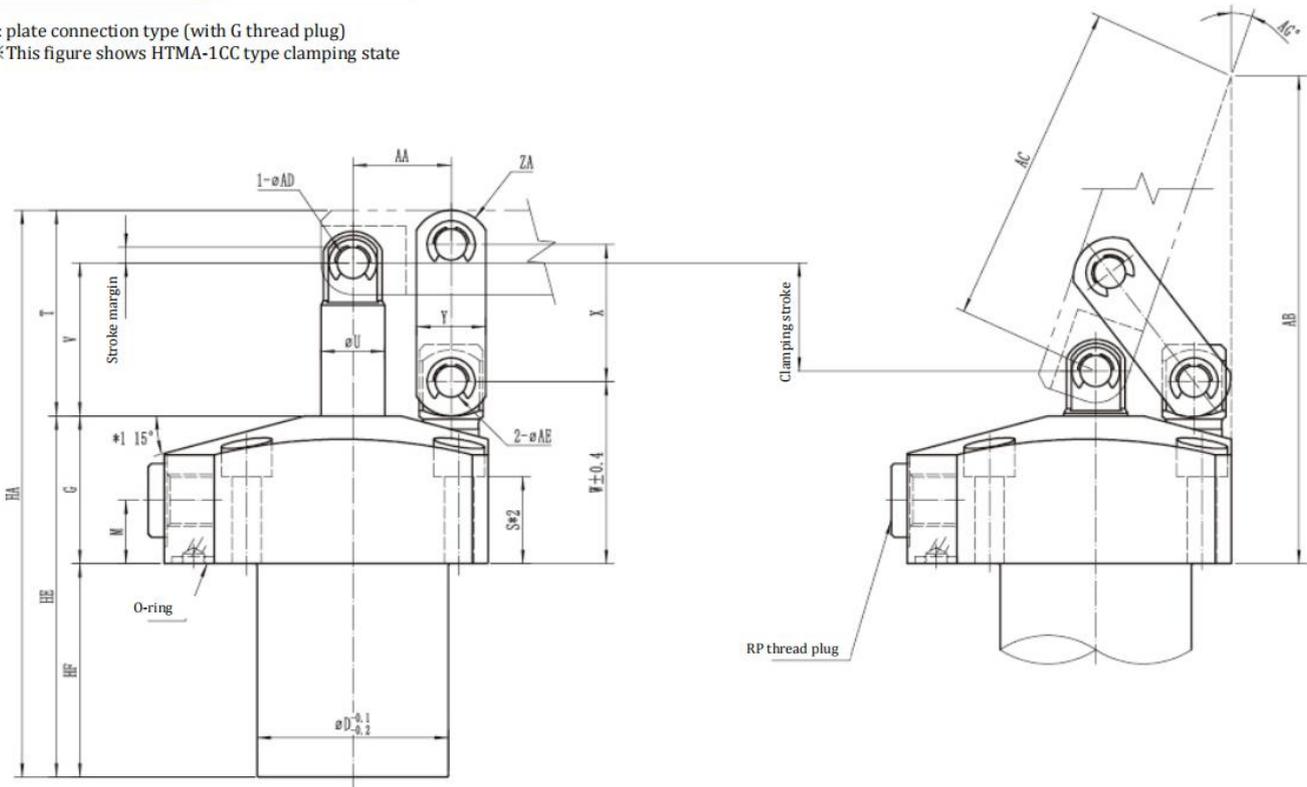
Model		HTMA0250-1	HTMA0400-1	HTMA0600-1	HTMA1000-1	HTMA1600-1	HTMA2500-1	HTMA3200-1	
Cylinder capacity (at 35MPa)	(KN)	2.5	3.6	6.6	10.5	16.5	20.7	27	
Clamping force	When the oil pressure is 35MPa	(KN)	2.6	3.7	6.6	9.1	15	28	40
	Clamping arm length (LH)	(mm)	29	34	38	49	58	59	68
Main rod diameter	(mm)	10	12	14	18	22	28	32	
Bore of cylinder	(mm)	11.5	14	18	22	28	32	38	
Cylinder area (clamping)	(cm ²)	0.78	1.12	2	3.1	4.8	6	8	
Full stroke	(mm)	20.5	23.5	26	29.5	35	41	49	
Clamping stroke	(mm)	17.5	20.5	23	26.5	32	38	46	
Rotation stroke	(mm)	3	3	3	3	3	3	3	
Return spring force	(KN)	0.03~0.12	0.045~0.2	0.086~0.22	0.13~0.29	0.22~0.51	0.56~0.62	0.31~0.73	
Maximum operating pressure	(Mpa)	35.0							
Minimum operating pressure	(Mpa)	3.5							
Withstand pressure	(Mpa)	40.0							
Operating temperature	°C	0~70							

Precautions

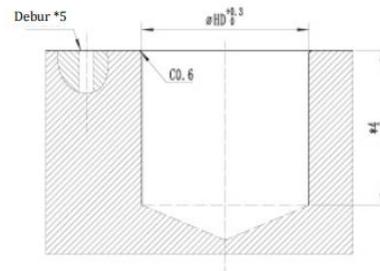
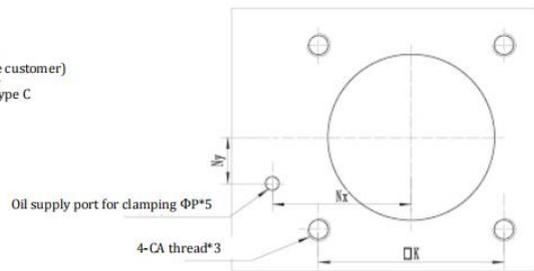
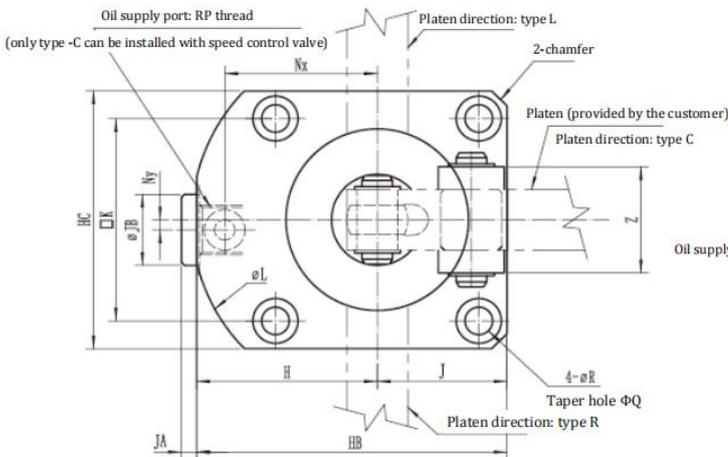
- ※1. In the clamping force calculation formula, F: clamping force (KN); P: supplied oil pressure (MPa); L: distance from the center of the piston to the clamping point (mm).
- *2. It indicates the minimum pressure at which the clamp operates under no-load conditions.
- *3. It indicates the weight of the single lever clamp, excluding the platen.

Overall dimension

C: plate connection type (with G thread plug)
 ※ This figure shows HTMA-1CC type clamping state



Installation hole processing drawing



Precautions

- ※1. Only the HTMA1000 flange has an inclination angle of 12°.
- ※2. This product does not include the installation bolts. Please configure it by yourself according to the installation height and with reference to the S dimension.

Precautions

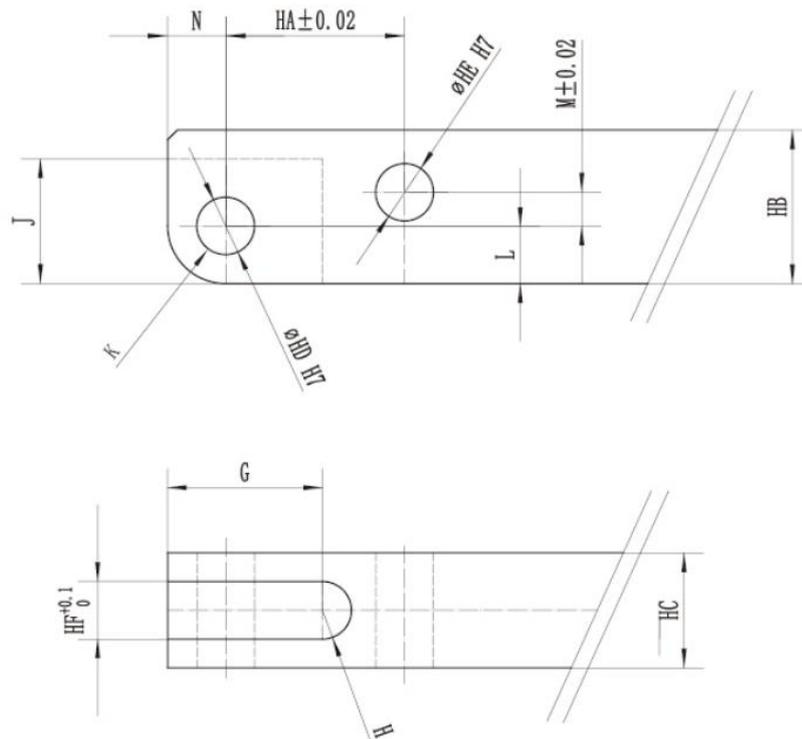
- ※3. Please refer to the S dimension and determine the CA thread depth of the installation bolt according to the installation height.
- ※4. Please refer to the HF dimension and determine the depth of the main body installation hole øHD according to the installation height.
- ※5. This process indicates -C: plate connection type.

Overall dimension

Model	HTMA0250-1	HTMA0400-1	HTMA0600-1	HTMA1000-1	HTMA1600-1	HTMA2500-1	HTMA3200-1
Full stroke	20.5	23.5	26	29.5	35	41	49
Clamping stroke	17.5	20.5	23	26.5	32	38	46
Stroke margin	3	3	3	3	3	3	3
HA	94.1	107.6	121.1	140.6	173.1	202.1	233.1
HB	54	61	69	82.5	94.5	109.5	127
HC	45	51	60	73	85	100	120
HD	33	36	43	48	60	70	85
HE	60.5	68.5	75.5	86.5	106	123	139
HF	34.5	40.5	45.5	53.5	68	81	89
G	26	28	30	33	38	42	50
H	31.5	35.5	39	46	52	59.5	67
J	22.5	25.5	30	36.5	42.5	50	60
K	34.1	40.1	47.1	57.1	65.1	75.1	88.1
L	68	73	80	97	112	129	147
M	11	12	13	14	16	17	19
Nx	26	30	33.5	40	45	52.5	60
Ny	5	0	0	0	0	0	0
P	3	3	3	3	5	5	5
Q	9	9	11	14	17.5	20	20
R	5.5	5.5	6.8	9	11	14	14
S	15.5	16.5	16	17.5	17.5	18	24
T	30.5	35	37.5	45	55	64.5	77
U	10 f7	12 f7	16 f7	20 f7	25 f7	28 f7	32 f7
V	25	29	31.5	37	45	52	62
W	31.5	34.5	37.5	42	49	54.5	64
X	22	26	30	35.5	43.5	52.5	64
Y	13	13	16	19	25	28	32
Z	21	21	28	37	40	49	64
ZA	R7.5	R7.5	R10	R12	R15	R16	R18
Chamfer	3	3	(\varnothing 80)	(\varnothing 97)	(\varnothing 112)	(\varnothing 129)	(\varnothing 147)
AA	16	18.5	21	24.5	30	36	44
AB	78.7	92.4	103.9	118.4	131.8	148.5	173.6
AC	50.2	61.2	71.7	83	90.8	104.6	122.5
AD	6	6	6	8	10	12	15
AE	6	6	8	10	12	15	18
AG	20.2	18.9	19.9	20.5	21.5	22.4	23.1
CA	M5X0.8	M5X0.8	M6	M8	M10	M12	M12
JA	3	3	3	3	3.5	3.5	3.5
JB	14	14	14	14	19	19	19
RP thread	RP1/8	RP1/8	RP1/8	RP1/8	RP1/4	RP1/4	RP1/4
O-seal ring	4.8×1.9	4.8×1.9	4.8×1.9	4.8×1.9	6.8×1.9	6.8×1.9	6.8×1.9

Designed dimension for lever platen

※For reference when designing and making platen.



Designed dimension table for lever platen

(mm)

Corresponding machine model	HTMA0250	HTMA0400	HTMA0600	HTMA1000	HTMA1600	HTMA2500	HTMA3200
HA	16	18.5	21	24.5	30	36	44
HB	14	16	20	25	32	38	45
HC	12 ⁰ _{-0.3}	12 ⁰ _{-0.3}	16 ⁰ _{-0.3}	19 ⁰ _{-0.3}	22 ⁰ _{-0.3}	25 ⁰ _{-0.3}	32 ⁰ _{-0.4}
HD	6 ^{+0.012} ₀	6 ^{+0.012} ₀	6 ^{+0.012} ₀	8 ^{+0.015} ₀	10 ^{+0.015} ₀	12 ^{+0.018} ₀	15 ^{+0.018} ₀
HE	6 ^{+0.012} ₀	6 ^{+0.012} ₀	8 ^{+0.015} ₀	10 ^{+0.015} ₀	12 ^{+0.018} ₀	15 ^{+0.018} ₀	18 ^{+0.018} ₀
HF	6	6	8	10	11	13	16
G	11.5	13	12.5	16	20	24	28
H	R3	R3	R4	R5	R5.5	R6.5	R8
J	12	13	13	17.5	22	26	30.5
K	R5.5	R6	R6	R8	R10	R11	R13
L	5.5	6	6	8	10	11	13
M	2.5	3.5	6	7.5	9.5	13	16
N	5.5	6	6	8	10	11	13

Precautions

1. Please refer to the capacity curve to design and process the length of platen.
2. Do not design and process the platen beyond the size range specified in the above table. Otherwise, the clamping force will not meet the specification value and may cause faults such as deformation, clamping stagnation and abnormal action.