

Conical sleeve type workpiece support with greatly improved reliability

Model Representation

HCST ①-② (Example: HCST06-L)

① Dimensions (refer to specification sheet)

② Rising spring force

HCST	04	-	L: Standard type H: Strong type
	06		
	10		
	16		
	25		

Specification

Model		HCST04	HCST06	HCST10	HCST16	HCST25	
Workpiece support force (when oil pressure is 7Mpa) ※1	(KN)	5	7	10	16	25	
Cylinder capacity	(cm ³)	0.7	0.9	1.2	2.1	3.3	
Rising spring force※2	L: Standard type	(N)	5.2~9.4	5.1~9.9	8.4~14.2	6.1~12.5	7.2~16.8
	H: Strong type	(N)	6.9~11	7.9~12.6	10.8~16.6	11.3~20.6	13.8~23.4
Support plunger stroke	(mm)	8	12	12	16	16	
Maximum allowable mass of cap	(kg)	0.15	0.2	0.2	0.3	0.3	
Mass	(kg)	0.5	0.9	1.1	1.8	3.1	

Operating oil pressure range: 2.5 ~ 7MPa Guaranteed pressure resistance: 10.5MPa Operating ambient temperature: 0-70°C

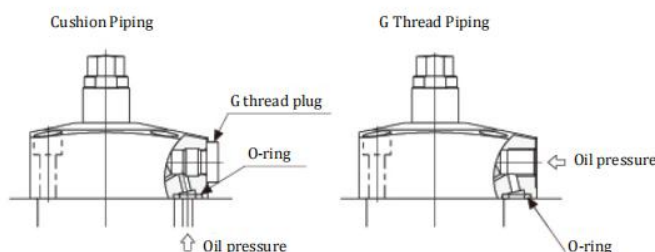
Operating fluid: ordinary mineral oil-based hydraulic oil (equivalent to ISO-VG32)

※ 1: When the workpiece support is used opposite to the clamp, in order to make the support force reach more than 1.5 times of (clamping force + cutting load), please select the workpiece support and clamp with matching model.

※ 2: The rising spring force indicates the spring force supporting the rising end and the falling end of the plunger rod.

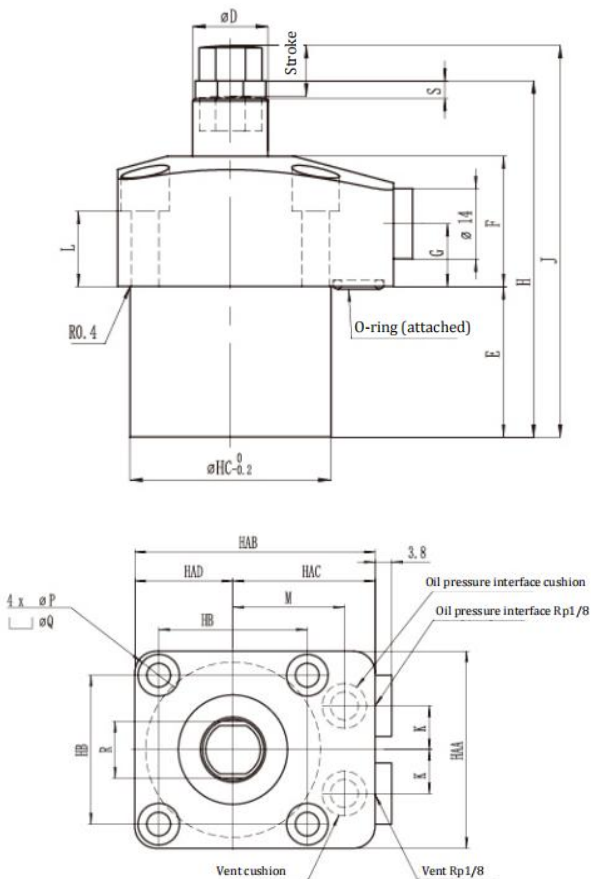
Piping Method

HCST workpiece holder can be piped in cushion piping and G thread piping.



Overall Dimension

(mm)



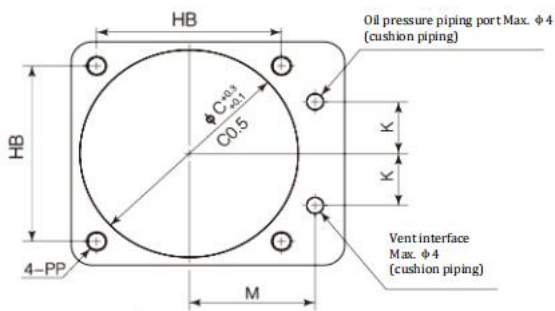
Model	HCST04 - ^L _H	HCST06 - ^L _H	HCST10 - ^L _H	HCST16 - ^L _H	HCST25 - ^L _H
HAA	45	52	56	65	78
HAB	55.1	61.1	65.1	73.1	85.1
HAC	32.5	35	37	40.5	46
HAD	22.5	26	28	32.5	39
HB	34	40	44	52	62
HC	40 f7	47 f7	52 f7	60 f7	72 f7
D	15	16	20	22	25
E	21	32	33	47	67
F	26	26	28	30	30
G	12.5	12.5	12.5	12.5	12.5
H	60	75	78	99	120
J	67.1	82.1	85.1	108.1	129.1
K	10	12	13	15	18
L	15	15	16.5	15.9	12
M	25.5	28	30	33.5	39
P	5.5	5.5	5.5	6.8	9
PP	M5	M5	M5	M6	M8
Q	9.5	9.5	9.5	11	14
R	13	13	17	19	22
S	4	4	4.5	5	6
O-ring Z	6.8×1.9	6.8×1.9	6.8×1.9	6.8×1.9	6.8×1.9

Note 1. The maximum surface roughness of the installation surface shall be processed to Rz6.3 or less.

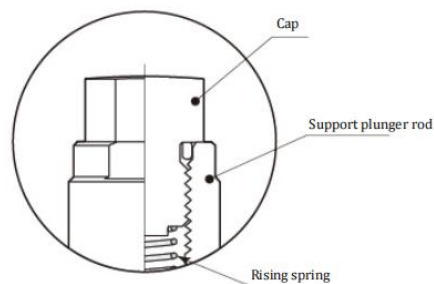
2. Please be sure to install the cap before use. (Otherwise the rising spring will not be able to support the workpiece)

3. Installation bolts are not included.

Installation Hole Processing Drawing



Top Detail of Support Plunger Rod



Oil Pressure (Mpa)	Workpiece Support Force (KN)				
	HCST04	HCST06	HCST10	HCST16	HCST25
2.5	1.4	2.0	2.8	4.5	7.0
3.0	1.8	2.6	3.6	5.8	9.0
3.5	2.2	3.1	4.4	7.1	11.0
4.0	2.6	3.7	5.2	8.3	13.0
4.5	3.0	4.2	6.0	9.6	15.0
5.0	3.4	4.8	6.8	10.9	17.0
5.5	3.8	5.3	7.6	12.2	19.0
6.0	4.2	5.9	8.4	13.4	21.0
6.5	4.6	6.4	9.2	14.7	23.0
7.0	5.0	7.0	10.0	16.0	25.0

Load(KN)	Deformation Amount (µm) is the unusable range				
	HCST04	HCST06	HCST10	HCST16	HCST25
0	0	0	0	0	0
5	23	19	16	13	9
7		27	22	18	13
10			31	26	18
15				38	27
20					36
25					45

When the oil pressure is 7MPa