



Push clamp with screw thread around the main body

Model Representation

HDP ① - ② ③ (Example HDP0241-AS)

① Dimension (refer to specification table)      ② Piping method      ③ Stroke code

<b>HDP</b>	0160 0221 0241 0301 0361 0451 0551 0651 0801	A: Internal thread type  R: Spherical R type	S: Short stroke  M: Standard stroke  L: Long stroke

Specification

Model	HDP0160			HDP0221			HDP0241			HDP0301			HDP0361			HDP0451			HDP0551			HDP0651			HDP0801			
Stroke code	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	
Stroke	mm	6	10	16	6	10	16	8	12	20	8	12	20	10	16	25	10	16	25	12	20	32	16	25	40	16	25	40
Clamping output force (calculation formula)	kN	F=(0.050×P)-0.024			F=(0.113×P)-0.041			F=(0.154×P)-0.060			F=(0.254×P)-0.099			F=(0.394×P)-0.150			F=(0.707×P)-0.319			F=(0.990×P)-0.452			F=(1.59×P)-0.657			F=(2.38×P)-1.04		
Clamp area	cm <sup>2</sup>	0.5			1.1			1.5			2.5			3.9			7.1			9.9			15.9			23.8		
Clamp capacity	cm <sup>3</sup>	0.3	0.5	0.8	0.7	1.1	1.8	1.2	1.8	3.1	2	3.1	5.1	3.9	6.3	9.9	7.1	11.3	17.7	11.9	19.8	31.7	25.4	39.8	63.6	38	59.4	95
Spring force for release	N	12.5 ~ 23.5			25.7 ~ 41.2			32.6 ~ 59.7			50.1 ~ 99.1			79.4 ~ 150			157 ~ 319			236 ~ 452			353 ~ 657			564 ~ 1040		
Max. operating pressure	MPa	25																										
Min. operating pressure	MPa	0.8																										
Withstand pressure	MPa	37.5																										
Operating temperature	°C	0 ~ 70																										
Weight	kg	0.03	0.04	0.05	0.06	0.08	0.1	0.08	0.1	0.15	0.15	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.8	0.8	1.0	1.3	1.4	1.7	2.2	2.2	2.7	3.6

Precautions: 1. Symbol in clamp output (calculation formula), F: clamp output (KN) P: supplied oil pressure (MPa).

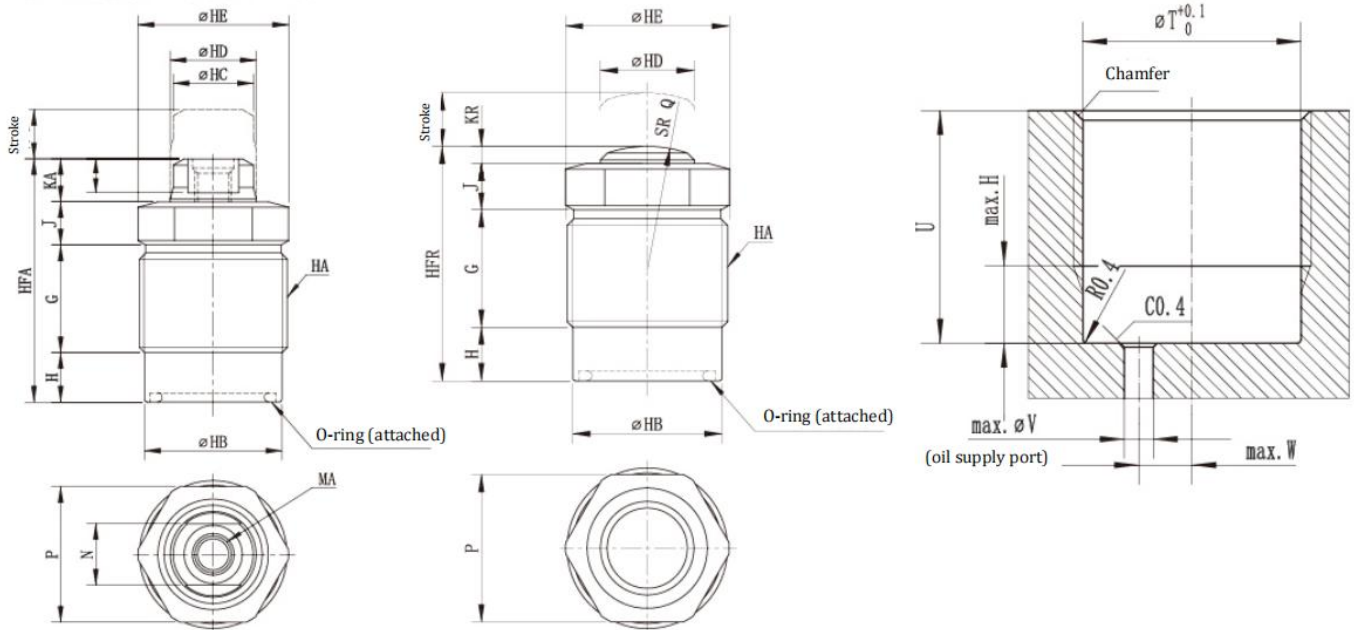
Model	Oil cylinder output force (kN)																								
	1MPa	2MPa	3MPa	4MPa	5MPa	6MPa	7MPa	8MPa	9MPa	10MPa	11MPa	12MPa	13MPa	14MPa	15MPa	16MPa	17MPa	18MPa	19MPa	20MPa	21MPa	22MPa	23MPa	24MPa	25MPa
HDP0160	0.03	0.08	0.13	0.18	0.23	0.28	0.33	0.38	0.43	0.48	0.53	0.58	0.63	0.68	0.73	0.78	0.83	0.88	0.93	0.98	1.0	1.1	1.1	1.2	1.2
HDP0221	0.07	0.19	0.30	0.41	0.52	0.64	0.75	0.86	0.98	1.1	1.2	1.3	1.4	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.6	2.7	2.8
HDP0241	0.09	0.25	0.40	0.56	0.71	0.86	1.0	1.2	1.3	1.5	1.6	1.8	1.9	2.1	2.3	2.4	2.6	2.7	2.9	3.0	3.2	3.3	3.5	3.6	3.8
HDP0301	0.16	0.41	0.66	0.92	1.2	1.4	1.7	1.9	2.2	2.4	2.7	2.9	3.2	3.5	3.7	4.0	4.2	4.5	4.7	5.0	5.2	5.5	5.7	6.0	6.3
HDP0361	0.24	0.64	1.0	1.4	1.8	2.2	2.6	3.0	3.4	3.8	4.2	4.6	5.0	5.4	5.8	6.2	6.5	6.9	7.3	7.7	8.1	8.5	8.9	9.3	9.7
HDP0451	0.39	1.1	1.8	2.5	3.2	3.9	4.6	5.3	6.0	6.8	7.5	8.2	8.9	9.6	10.3	11.0	11.7	12.4	13.1	13.8	14.5	15.2	15.9	16.6	17.4
HDP0551	0.54	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.4	10.4	11.4	12.4	13.4	14.4	15.4	16.4	17.4	18.4	19.3	20.3	21.3	22.3	23.3	24.3
HDP0651	0.93	2.5	4.1	5.7	7.3	8.9	10.5	12.1	13.7	15.2	16.8	18.4	20.0	21.6	23.2	24.8	26.4	28.0	29.6	31.1	32.7	34.3	35.9	37.5	39.1
HDP0801	1.3	3.7	6.1	8.5	10.9	13.2	15.6	18.0	20.4	22.8	25.1	27.5	29.9	32.3	34.7	37.0	39.4	41.8	44.2	46.6	48.9	51.3	53.7	56.1	58.5

### Overall dimension

### Installation part processing dimension

Piston head shape A: internal thread type

Piston head shape R: Spherical R type



Overall dimension and installation part processing dimension table

(mm)

Model	HDP0160			HDP0221			HDP0241			HDP0301			HDP0361			HDP0451			HDP0551			HDP0651			HDP0801					
Stroke code	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L
Stroke mm	6	10	16	6	10	16	8	12	20	8	12	20	10	16	25	10	16	25	12	20	32	16	25	40	16	25	40	16	25	40
HA (nominal×depth)	M16×1.5			M22×1.5			M24×1.5			M30×1.5			M36×1.5			M45×1.5			M55×2			M65×2			M80×2					
HB	14.3			20.3			22.3			28.3			34.3			43.3			52.6			62.6			77.6					
HC	7.5			11.2			13			17			19			28			34.5			42			52					
HD	8			12			14			18			22.4			30			35.5			45			55					
HE	15.5			21.2			24.5			30			35.5			45			55			66			80					
HFA	35	41	50	35	43	56	39.5	47	63.5	43.5	52.5	72	51	64	85	59	72	94.5	64	79.5	102	78	94	123.5	88	106	137			
HFR	31	37	46	30.5	38.5	51.5	35.1	42.6	59.1	38	47	66.5	45	58	79	51.1	64.1	86.6	56	71.5	94	68	84	113.5	76	94	125			
Q	-	-	-	32	40	53	38.5	46	62.5	42	51	70.5	51	64	85	60	73	95.5	67	82.5	105	82	98	127.5	92	110	141			
G	18.5	24.5	33.5	13	21	34	17.5	25	41.5	18	27	46.5	23.5	36.5	57.5	23	36	58.5	27	42.5	65	35	51	80.5	42	60	91			
H	6			8			8			9			10			12			12			13			13					
J	5			7			7			8			8			12			12			14			14					
KA	5.5			7			7			8.5			9.5			12			13			16			19					
KR	1.5			2.5			2.5			3			3.5			4			5			6			7					
L	4			5.5			5.5			7			8			10			11			13			16					
MA (nominal×depth)	M5×0.8×8			M6×7			M6×7			M8×10			M8×10			M10×11			M12×12			M16×16			M20×20					
N	7			10			10			14			17			24			30			36			41					
P	14			19			22			27			32			41			50			60			-					
T	14.5			20.5			22.2			28.5			34.5			43.5			53			63			78					
U	(min.)	12	12	12	14	14	14	14	14	14	15	15	15	16	16	16	18	18	18	20	20	20	25	25	25	25	25	25		
	(max.)	23	29	38	20	28	41	24	32	48	26	35	54	32	45	66	34	47	69	38	53	76	47	63	92	54	72	103		
V	3			3			3			6			6			8			8			8			8					
W	0			3.5			5.5			6			6			8			8			8			8					
Chamfer	C1			C1			C1			C1			C1			C1			C1.5			C1.5			C1.5					
O-seal ring	1BP9			AS568-015(90°)			17.17×1.78 (90°)			AS568-020(90°)			AS568-120(90°)			31.2×3.5			1BP39			1BP50			AS568-230(90°)					