

Pull clamp with screw thread around the main body

Model Representation

HDR ① - ② ③ (Example: HDR0241-AS, HDR0551 -RM)

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

HDR	0221	0451	—	A: Internal thread type R: Spherical R type	S: Short stroke M: Standard stroke L: Long stroke
	0241	0551			
	0301	0651			
	0361	0801			

Specification

Model	HDR0221			HDR0241			HDR0301			HDR0361			HDR0451			HDR0551			HDR0651			HDR0801			
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	
Stroke	mm	4	6	10	5	8	12	6	10	16	6	10	16	8	12	20	8	12	20	10	16	25	10	16	25
Clamping output force (calculation formula)	kN	F=(0.072×P)-0.051			F=(0.126×P)-0.067			F=(0.217×P)-0.108			F=(0.412×P)-0.175			F=(0.628×P)-0.313			F=(0.993×P)-0.471			F=(1.55×P)-0.726			F=(2.53×P)-1.08		
Cylinder area	cm ²	0.7			1.3			2.2			4.1			6.3			9.9			15.5			25.3		
Cylinder capacity	cm ³	0.3	0.4	0.7	0.6	1.0	1.5	1.3	2.2	3.5	2.5	4.1	6.6	5.0	7.5	12.6	7.9	11.9	19.9	15.5	24.9	38.9	25.3	40.5	63.3
Spring force for release	N	30.2~50.8			38.8~67.2			56.5~108			92~175			141~313			213~471			327~726			513~1076		
Maximum operating pressure	MPa	25																							
Minimum operating pressure	MPa	1.0																							
Withstand pressure	MPa	37.5																							
Operating temperature	°C	0 ~ 70																							
Weight	kg	0.07	0.08	0.1	0.1	0.1	0.15	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.3	1.5	1.8	2.2	2.5	3.0

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

Cylinder capacity output

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
HDR 0221	0.02	0.09	0.17	0.24	0.31	0.38	0.45	0.53	0.60	0.67	0.74	0.81	0.89	0.96	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.7
HDR 0241	0.06	0.19	0.31	0.44	0.56	0.69	0.82	0.94	1.1	1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.5	2.6	2.7	2.8	3.0	3.1
HDR 0301	0.11	0.33	0.54	0.76	0.98	1.2	1.4	1.6	1.8	2.1	2.3	2.5	2.7	2.9	3.1	3.4	3.6	3.8	4.0	4.2	4.5	4.7	4.9	5.1	5.3
HDR 0361	0.24	0.65	1.1	1.5	1.9	2.3	2.7	3.1	3.5	3.9	4.4	4.8	5.2	5.6	6.0	6.4	6.8	7.2	7.6	8.1	8.5	8.9	9.3	9.7	10.1
HDR 0451	0.32	0.94	1.6	2.2	2.8	3.5	4.1	4.7	5.3	6.0	6.6	7.2	7.9	8.5	9.1	9.7	10.4	11.0	11.6	12.2	12.9	13.5	14.1	14.8	15.4
HDR 0551	0.52	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.4	12.4	13.4	14.4	15.4	16.4	17.4	18.4	19.4	20.4	21.4	22.4	23.4	24.4
HDR 0651	0.82	2.4	3.9	5.5	7.0	8.6	10.1	11.7	13.2	14.8	16.3	17.9	19.4	21.0	22.5	24.1	25.6	27.2	28.7	30.3	31.8	33.4	34.9	36.5	38.0
HDR 0801	1.5	4.0	6.5	9.0	11.6	14.1	16.6	19.2	21.7	24.2	26.8	29.3	31.8	34.3	36.9	39.4	41.9	44.5	47.0	49.5	52.1	54.6	57.1	59.6	62.2

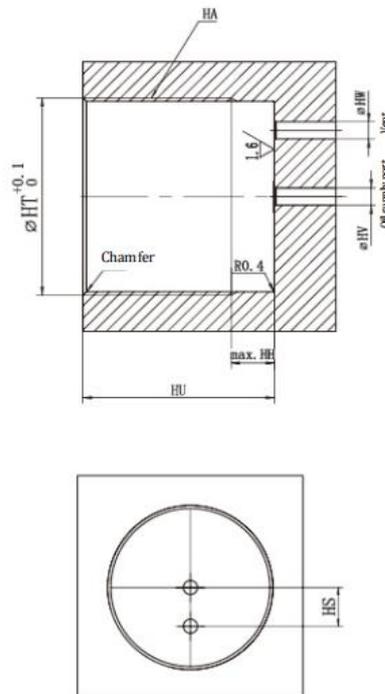
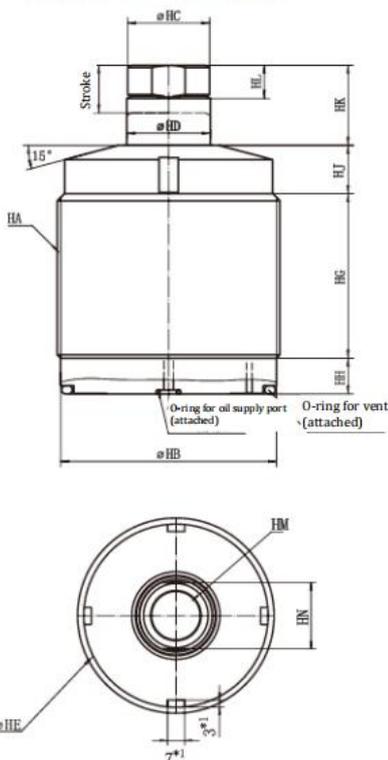
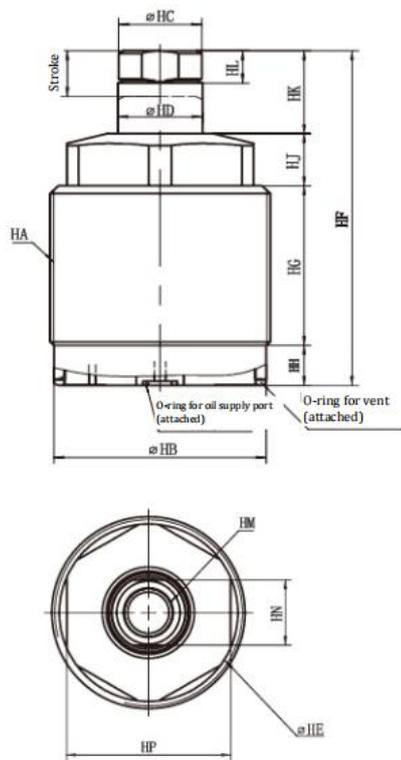
Overall dimension

Installation part processing dimension

※The figure below shows HDR0221-□/ HDR0241-□/ HDR0301-□/ HDR0361-□/ HDR0451-□/ HDR0551-□/ HDR0651

※The figure below shows HDR0801-□
Precautions

*1. Different from other body sizes, fish-lip pincer is required. The user is asked to prepare the corresponding size of fish-lip pincer.



Overall dimension and installation part processing dimension table

mm

Model	HDR0221			HDR0241			HDR0301			HDR0361			HDR0451			HDR0551			HDR0651			HDR0801					
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	4	6	10	5	8	12	5	8	12	5	8	12	8	12	20	8	12	20	10	16	25	10	16	25	10	16	25
HA (nominal×depth)	M22×1.5			M24×1.5			M30×1.5			M36×1.5			M55×2			M55×2			M65×2			M80×2					
HB	20.3			22.4			28.3			34.3			43.4			52.6			62.7			77.6					
HC	9.5			9.5			11.5			13.5			15.5			19.5			24.5			29.5					
HD	10f7			10f7			12f7			14f7			16f7			20f7			25f7			30					
HE	19			21.2			26.5			33			40			50			60			75					
HF	48.5	53.5	65.5	51.6	59.6	71.6	59.5	71.5	88.5	63	74.5	91.5	72.1	83.1	103.1	79	91	112	93.1	109.1	135.1	103	119	145			
HG	23.5	26.5	34.5	25	30	38	28.5	36.5	47.5	28	35.5	46.5	33	40	52	33	41	54	42	52	69	49.5	59.5	76.5			
HH	8			8			9			10			12			12			13			13					
HJ	8			8.5			10			12			12			16			17			17.5					
HK	9	11	15	10	13	17	12	16	22	13	17	23	15	19	27	18	22	30	21	27	36	23	29	38			
HL	4.5			4.5			5.5			6.5			6.5			8.5			10			11.5					
HM (nominal×depth)	M6×11			M6×11			M8×18			M8×18			M10×20			M12×22			M16×28			M20×31					
HN	8			8			10			12			14			17			22			27					
HP	17			19			24			30			36			46			55			-					
HS	7			7~7.5			7~10.5			10.5~13.5			12.5~16			14.5~20			18.5~25.5			24.5~32					
HT	20.5			22.5			28.5			34.5			43.5			53			63			78					
HU	(min.)	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.)	31	34	42	32	37	45	37	45	56	37	45	56	44	51	63	44	52	65	54	64	81	62	72	89		
HV	3			3			3			3			5			5			5			5					
HW	3			3			3			3			5			5			5			5					
Chamfer	C1			C1			C1			C1			C1			C1.5			C1.5			C1.5					
O-seal ring for oil supply port	1BP5			4.8×1.9			1BP5			1BP5			6.8×1.9			1BP7			6.8×1.9			1BP7					
O-seal ring for vent	AS568-017 (90°)			18.77×1.78 (90°)			AS568-022 (90°)			AS568-026 (90°)			37.77×2.62 (90°)			AS568-133 (90°)			56.82×2.62 (90°)			AS568-232 (90°)					