

HOB Series

Heavy Duty Tie Rod Hydraulic Cylinder Model Description

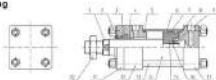
HOB		- R -		D - 63		. 35		. 100		LB		+ Y	
Type	Non-Rodless Magnet	Coil Codes	Size	Mount/Max.	Stroke	Cylinder Mounting						Options with connecting type	
HOB - Standard	3/4" Dia Magnet	Rev:	040 025	-	Standard mounting	1x	Head Flange	1	Y	Flange	1	1	1
MOD - Rodless	3/4" Dia Magnet	Dish on ends	002 010 018	01	50, 100, 150, 200	6x	Cap Flange	1	Y	Flange	1	1	1
		F: Head	040 025 040	02	250, 300, 340, 400	10	Side Eye Jugged	1	Y	Flange	1	1	1
		E: Cap	040 040 040	03	450, 500, 600, 700	12	Intermediate Flange System	1	Y	Flange	1	1	1
			0100 050 040	04	800, 900, 1000	13	Head Extension	1	Y	Flange	1	1	1
			0125 060 080			14	Side Sags	1	Y	Flange	1	1	1
			0150 040 0100			15	Adjustable Flange	1	Y	Flange	1	1	1
			0180 0100 0100			16	Adjustable Flange	1	Y	Flange	1	1	1
			0200 0100 0100			17	Adjustable Flange	1	Y	Flange	1	1	1
			Non-Standard			18	Cap Flange	1	Y	Flange	1	1	1

Features

Stroke size	040	050	063	080	0100	0125	0150	0180	0200
Working medium	Clean Standard Hydraulic Oil								
Cylinder barrel material	20#Carbon steel/SU304								
Operating pressure range	0.9-10MPa(130-2000PSI)								
Temperature range	-10 ~ +60(°C)								
Speed range	0-500mm/s								
Standard piston length(PM)	30	35	35	50	60	55	55	50	50
Piston length(PM)1324-2550mm	60	70	70	80	100	100	100	140	140
Piston length(PM)2501-4000mm	120	140	140	150	180	180	180	200	200

Construction Drawing

HOB



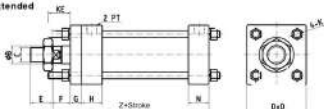
HOD



No.	Part Name	Qty.	No.	Part Name	Qty.	No.	Part Name	Qty.
1	Piston Rod	1	8	Spring Washer Nut	1	15	O-Ring	1
2	Dust Wiper	1	9	Nut	1	16	Piston	1
3	Sleeves	1	10	Piston Rod Nut	1	17	Base Cover(Cap)	1
4	Rod Seal	1	11	Flange Cover	1	18	Cylinder Barrel	1
5	O-Ring	2	12	Head Cover	1	19	Piston	1
6	Port seals	2	13	Tie Rod	4	20	Magnet Ring	1
7	Wear Ring	1	14	Cylinder Barrel	1	21	Adjustable Nut	1

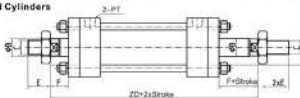
HOB Series

Tie Rod Extended

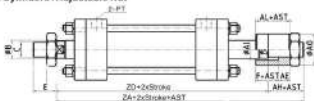


Standard HOB											
Row	ØB	C	D	ØE	L	F	G	H	T	PT	K
Ø40	25	80/PT1.5	65	45	40	20	17	80	38	38	M12
Ø50	38	80/PT1.5	80	60	40	20	17	80	38	38	M12
Ø63	38	80/PT1.5	80	60	40	20	17	80	38	38	M12
Ø80	44	80/PT1.5	110	80	40	20	20	80	40	12	M16
Ø100	50	80/PT2.0	131	95	40	20	20	80	40	10	M16
Ø125	60	80/PT2.0	161	120	70	30	30	80	40	14	M20
Ø150	68	80/PT2.0	138	144	80	30	30	80	50	24	M24
Ø180	100	80/PT2.0	238	174	100	40	40	80	50	1	M30
Ø200	100	80/PT2.0	292	190	100	40	40	80	50	1	M30

Double Rod Cylinders



Double Rod Cylinders+Adjustable Nut



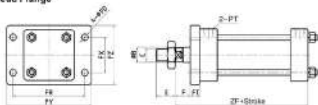
HOB HOD							HOB HOD		
Row	ØB	G	D	ØE	F	PT	Z	ZD	K
Ø40	25	80/PT1.5	65	45	40	20	158	198	M10
Ø50	38	80/PT1.5	80	56	40	20	166	213	M12
Ø63	38	80/PT1.5	80	60	40	20	166	213	M12
Ø80	44	80/PT1.5	110	60	40	20	194	234	M14
Ø100	50	80/PT2.0	131	95	50	20	209	254	M16
Ø125	60	80/PT2.0	161	120	70	30	244	328	M20
Ø150	68	80/PT2.0	181	144	80	30	274	344	M24
Ø180	100	80/PT2.0	235	175	100	35	315	400	M30
Ø200	100	80/PT2.0	290	190	100	40	305	410	M30

Remark:

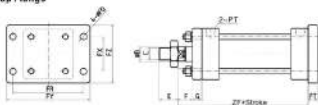
- If rod diameter need to be enlarged, the rod length will make according to the standard, unless other rules specified.
- An extra base need to be between the head and cap when stroke > 200mm.
- The rod screw not outside stage is round when the size in this series over M20mm.
- AST means the adjustable stroke specified by the customers.

HOB Series

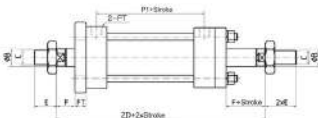
HOB+FA Head Flange



HOB+FB Cap Flange

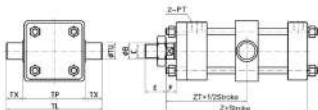


HOD+FA Double Rod Cylinders+Head Flange

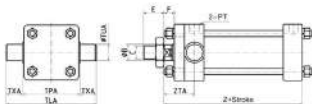


HOB-HOD							FA+FB type					
Bore	ØB	C	E	F	PT	ZF	ØPD	PT	FB	F2	FY	FZ
Ø40	25	M22xPT.5	49	29	3/8	106	12	17	93	69	115	70
Ø50	30	M24xPT.6	45	29	3/8	106	14	17	110	64	150	80
Ø63	35	M30xPT.5	45	29	5/8	160	14	17	126	69	155	90
Ø80	40	M33xPT.6	45	30	1/2	194	18	20	163	75	190	120
Ø100	50	M43xP2.0	55	35	1/2	209	20	20	186	100	220	140
Ø125	60	M53xP2.0	70	35	3/4	266	24	30	222	120	280	170
Ø150	80	M73xP2.0	80	35	3/4	274	28	30	260	155	310	230
Ø180	100	M93xP2.0	100	35	1	316	34	30	316	168	376	260
Ø200	100	M93xP2.0	100	40	1	325	35	40	335	207	425	272

HOB+TC Intermediate Fixed Trunnion



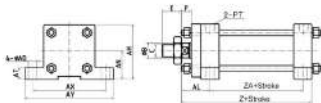
HOB+TA Head Trunnion



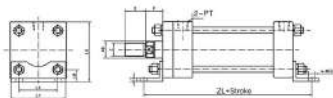
HOB						
Bore	ØB	C	E	F	PT	Z
Ø40	25	M22 x P1.5	40	20	3/8	154
Ø50	30	M25 x P1.5	40	20	3/8	168
Ø65	35	M30 x P1.5	45	20	3/8	186
Ø80	40	M33 x P1.5	45	20	1/2	194
Ø100	50	M40 x P2.0	55	25	1/2	209
Ø125	60	M50 x P2.0	70	35	3/4	255
Ø150	80	M70 x P2.0	80	35	3/4	274
Ø180	100	M90 x P2.0	100	35	1	315
Ø200	160	M90 x P2.0	100	45	1	325

Bore	TC Type					TA Type				
	ZT	ØTU	TL	TP	TX	ZTA	ØTUA	TLA	TPA	TXA
Ø40	58	20	115	75	20	53.5	20	109	85	20
Ø50	106	25	148	90	25	56	25	156	84	25
Ø65	109	32	166	102	32	58	30	164	84	30
Ø80	114	32	184	120	32	58	30	174	114	30
Ø100	124	40	229	140	40	66	35	205	138	35
Ø125	181	50	275	176	50	84	45	256	188	45
Ø150	178	60	326	206	60	95	60	260	203	50
Ø180	200	60	403	243	60					
Ø200	205	60	452	272	60					

HOB+LA Side Lugs



HOB+LB Side End Angles



HOB

Bove	ØB	C	E	F	PT
Ø40	25	M22 x P1.5	40	20	3/8
Ø50	30	M26 x P1.5	40	20	3/8
Ø63	35	M30 x P1.5	45	20	3/8
Ø80	40	M30 x P1.5	40	20	1/2
Ø100	50	M40 x P2.0	65	25	1/2
Ø125	60	M50 x P2.0	70	35	3/4
Ø150	60	M70 x P2.0	80	35	3/4
Ø180	100	M80 x P2.0	100	35	1
Ø200	100	M90 x P2.0	100	40	1

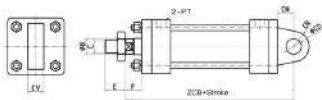
LA Type

LB Type

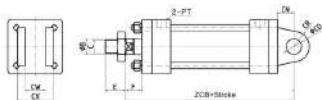
Bove	ZR	Z	AR	AH	AL	ØAD	AT	AX	AY	Z	ØLD	LA	LB	LY	LH
Ø40	88	135	37.5	70	50	12	14	90	112	210	11	24	45	66	79
Ø50	98	136	45	85	60	14	17	110	140	220	14	29	58	85	94
Ø63	95	158	50	95	65	14	19	120	158	234	16	29	60	95	104
Ø80	113	134	60	115	80	16	20	150	194	300	18	30	89	129	131
Ø100	120	209	68.5	135	90	21	27	170	210	210	20	44	95	140	150
Ø125	135	225	80	171	94	24	30	220	230	300	24	53	122	169	195
Ø150	160	271	11.9	209	99	28	36	270	324	380	28	63	160	209	220
Ø180	180	315	143	290	107	35	40	330	383	460	35	63	175	240	266
Ø200	185	325	161	292	112	35	50	360	435	475	35	78	190	265	301

HOB Series

HOB+CA Cap Detachable Eye



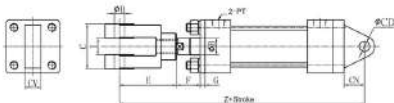
HOB+CB Cap Detachable Clevis



HOB						
Bore	ØB	C	E	F	PT	ZCB
Ø40	28	M22 x P1.5	40	20	3/8	198
Ø50	30	M25 x P1.5	40	20	3/8	210
Ø63	35	M30 x P1.5	45	20	3/8	220
Ø80	40	M33 x P1.5	45	20	1/2	264
Ø100	50	M40 x P2.0	60	25	1/2	289
Ø125	60	M50 x P2.0	70	35	3/4	365
Ø150	80	M70 x P2.0	80	35	3/4	384
Ø180	100	M90 x P2.0	100	35	1	455
Ø200	100	M90 x P2.0	100	40	1	475

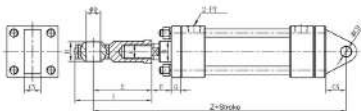
CA+CB Type						
Bore	ØCO	CR	CR	CV	CW	CX
Ø40	18	25	15	33	23	47
Ø50	20	35	20	32	23	47
Ø63	25	45	25	30	31	59
Ø80	30	60	30	35	38	79
Ø100	35	60	35	40	41	81
Ø125	50	70	30	35	50	108
Ø160	80	80	40	40	61	121
Ø180	90	100	40	40	61	161
Ø200	90	110	30	30	91	171

HOB+CA+Y Cap Detachable Eye+Female Rod Clevis



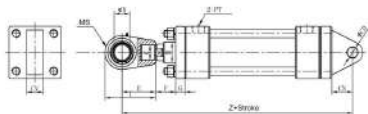
HOB+CA+Y												
Bore	ØB	C	ØD	E	F	G	PT	Z	ØR	ØC	I	ØV
Ø40	35	62	93	76	20	17	3/8	268	25	18	24	22
Ø50	38	56	23	76	20	17	3/8	288	25	20	28	22
Ø63	35	70	33	86	20	17	3/8	368	45	25	30	30
Ø80	42	70	23	86	20	20	1/2	344	55	30	30	35
Ø100	50	70	35	85	25	25	1/2	388	65	35	35	40
Ø125	60	80	43	100	25	30	3/4	455	75	50	35	55
Ø150	85				26	30	3/4		80	60		60
Ø160	100				25	40	1		100	80		80
Ø200	100				40	40	1		110	80		90

HOB+CA+PHS Cap Detachable Eye + Spherical Rod Eye PHS Series



HOB+CA+PHS													
Bore	ØB	C	ØD	E	F	G	NPT	Z	ØR	ØC	H	ØV	
Ø40	35	M32X1.5	23	84	20	17	3/8	282	25	18	28	111	22
Ø50	38	M24X2	25	94	20	17	3/8	312	25	20	31	124	22
Ø63	35	M30X2	30	110	20	17	3/8	328	45	25	37	145	30
Ø80	40	M30X2	30	110	20	20	1/2	304	55	30	37	145	35

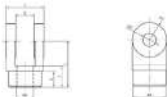
HOB+CA Cap Detachable Eye+Spherical Rod Eye GSKK Series



HOB - GSKK													
Bore	ØR	C	ØD	E	F	G	MPT	Z	CR	BCD	MS	I	CV
Ø48	25	M24X2	50	75	20	17	3/8	270	25	18	28	100	22
Ø60	30	M24X2	50	75	20	17	3/8	290	35	20	28	108	22
Ø63	35	M20X1	25	95	20	17	3/8	318	45	25	40	132	35
Ø80	40	M30X2	25	95	20	20	1/2	354	50	30	40	132	35
Ø100	50	M30X1	40	105	25	20	1/2	304	60	35	45	155	48
Ø125	60	M40X1	50	135	35	30	3/4	430	70	50	55	185	55
Ø150	80	M4X1	60	170	35	30	3/4	554	80	60	65	240	65
Ø180	100	M50X1	80	210	35	40	1	665	100	80	80	305	80
Ø200	100	M50X1	60	210	40	40	1	665	110	90	80	305	80

MOB, HOB Rod End

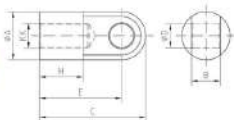
Y Female Rod Clevis



KK	A	B	C	D	E	J	H
M8*1,25	16	18	17	9	41	10	9
M10*1,25	18	14	17	8	41	12	9
M14*1,5	24	16	44	12	54	20	14
M16*1,5	28	16	44	12	58	20	14
M22*1,5	42	24	58	20	79	30	20

KK	A	B	C	D	E	J	H
M20*1,5	38	28	58	20	79	30	20
M20*1,5	32	30	70	20	80	30	23
M40*2	78	30	76	25	82	46	34
M50*2	80	30	80	40	100	50	40

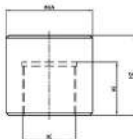
I Conneting



KK	A	B	C	φD	E	H
M14*1,5	30	25	73	12	57	32
M16*1,5	30	25	73	12	57	32
M22*1,5	40	30	76	16	58	32
M26*1,5	60	32	110	20	85	43

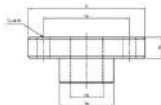
KK	A	B	C	φD	E	H
M30*1,5	55	35	116	25	86	45
M48*2	75	45	100	35	90	50
M50*2	80	55	150	50	108	50

H Welded Bushing



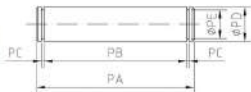
Model	φA	HC	HE	HZ
HH-010	20	M10XP1,25	18	30
HH-012	25	M12XP1,25	18	30
HH-014	30	M14XP1,5	20	35
HH-016	30	M16XP1,5	20	35
HH-022	40	M22XP1,5	28	45
HH-025	45	M25XP1,5	28	45
HH-033	55	M30XP1,5	33	50
HH-040	65	M40XP2,0	40	60
HH-050	75	M50XP2,0	55	75
HH-070	100	M70XP2,0	60	80
HH-090	120	M90XP2,0	80	100

T Connecting



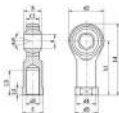
Model	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK
HT-010	M10X1.25	30	25	8	36	53	6	7			
HT-012	M12X1.25	23	25	8	43	63	6	7			
HT-014	M14X1.3	36	30	10	53	73	6	8			
HT-016	M16X1.4	30	30	10	63	73	6	9			
HT-022	M22X1.5	40	40	15	83	93	6	11			
HT-026	M26X1.5	40	40	15	78	110	6	13			
HT-030	M30X1.3	53	50	20	93	130	6	15			
HT-040	M40X2.0	63	60	25	103	140	6	18			
HT-050	M50X2.0	75	60	25	113	150	6	17			
HT-070	M70X2.0	106	70	30	148	190	6	25			
HT-090	M90X2.0	126	85	40	171	220	6	22			

Pin



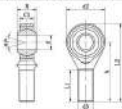
Ø Forado	PA	PB	PC	ØD	ØPC
M14*1.5	52	44.2	1.15	12	11.5
M16*1.5	62	44.2	1.15	12	11.5
M22*1.5	90	52.5	1.25	20	18
M26*1.5	88	58.2	1.25	20	18
M30*1.5	78	70.2	1.25	20	18

Female Spherical Rod Eye



Part NO.	Size												r°	Load	Weight	Old Item NO.
	4	03	08	15	8	10	15	20	25	30	35	40				
POSA5	5	M5x8	18	12.5	10	8	4	8	37	38	8	38	13			5875K
POSA6	6	M6x1	20	13	11	8	5	8.75	38	15	10	45	12	7.20	0.267	5875K
POSA8	8	M8x1.25	24	16	14	12	5	8	38	18	12.5	48	12	11.08	0.348	5875K
POSA10	10	M10x1.5	28	19	17	14	6.3	10.5	40	20	15	57	12	14.34	0.378	5875K
POSA12	12	M12x1.75	32	22	19	16	6.3	12	50	22	17.5	66	12	17.06	0.718	5875K
POSA14	14	M14x2	36	25	22	18	8	10.5	37	25	20	75	12	24.04	0.773	5875K
POSA16	16	M16x2	40	27	22	21	8	12	54	28	22	84	12	30.28	0.256	5875K
POSA18	18	M18x2	46	31	27	23	10	16.5	71	32	26	94	12	35.04	0.320	5875K
POSA20	20	M20x2.5	50	34	30	25	10	18	71	32	27.5	100	12	40.08	0.42	5875K
POSA22	22	M22x3	54	37	32	28	12	20	84	37	30	111	12	52.08	0.54	5875K
POSA24	24	M24x3	60	42	35	31	12	22	86	42	32.5	124	12	60.08	0.70	5875K
POSA26	26	M26x3	66	46	41	33	14	26	100	41	37	136	12			5875K
POSA30	30	M30x3	75	53	41	37	16	28	110	51	40	145	12	81.08	1.30	5875K

Male Spherical Rod Eye



Item NO.	Size												r°	Load	Weight	Old Item NO.
	4	6	10	15	20	25	30	35	40	45	50	55				
POSA5	M5x6	5	16	8	8	33	19	42	13	4.40	0.021	5487K				
POSA6	M6x1	6	20	8	8.75	34	22	46	13	8.58	0.024	5487K				
POSA8	M8x1.25	8	24	10	8	42	25	54	13	12.80	0.038	5487K				
POSA10	M10x1.5	10	28	14	10.5	44	29	62	13	17.50	0.050	5487K				
POSA12	M12x1.75	12	32	16	12	54	33	70	13	24.50	0.153	5487K				
POSA14	M14x2	14	36	18	13.5	60	36	77	13	28.53	0.205	5487K				
POSA16	M16x2	16	40	21	15	64	40	86	13	25.50	0.280	5487K				
POSA18	M18x2.5	18	46	23	16.5	72	44	96	13	40.00	0.070	5487K				
POSA20	M20x3	20	50	25	18	78	47	105	13	60.50	0.475	5487K				
POSA22	M22x3.5	22	56	28	20	84	51	111	13	60.00	0.660	5487K				
POSA24	M24x3	24	60	31	22	86	57	124	13			5487K				
POSA26	M26x3	26	66	33	24	103	62	136	13	81.00	1.070	5487K				
POSA30	M30x3	30	75	37	26	110	66	145	13			5487K				