

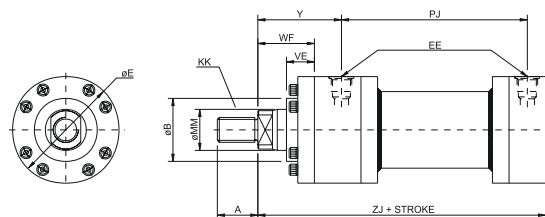


**HH
SERIES
(ISO 6022)**

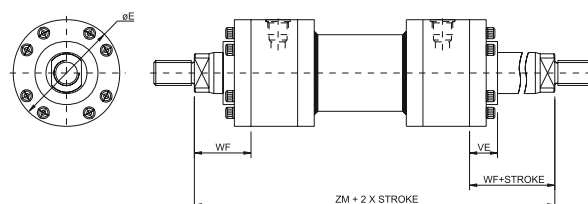
250 BAR, SERIES (HH ISO 6022)

BASIC DIMENSIONS

Bore	Rod ØMM	KK	A	EE BSP	VE	WF	ØB	ØE	Y	PJ	ZJ	ZM
50	36	M27 X 2.0	36	1/2"	29	47	63	108	95	125	240	315
63	45	M33 X 2.0	45	3/4"	32	53	75	122	105	140	270	350
80	56	M42 X 2.0	56	3/4"	36	60	90	145	122	152	300	396
100	70	M48 X 2.0	63	1"	41	68	110	175	135	170	335	440
125	90	M64 X 3.0	85	1"	45	76	132	215	165	190	390	520
160	110	M80 X 3.0	95	1 1/4"	50	85	160	270	190	230	460	610
200	140	M100 X 3.0	112	1 1/4"	61	101	220	330	225	270	540	720
250	180	M125 X 4.0	125	1 1/2"	71	113	250	390	260	325	640	845
320	220	M160 X 4.0	160	2"	88	136	320	460	310	350	750	970

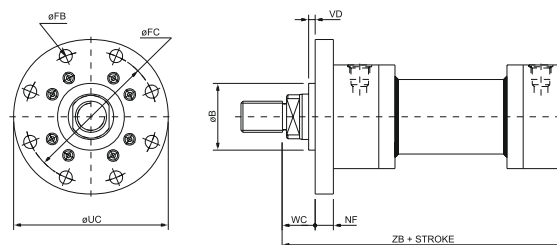


SINGLE ROD END

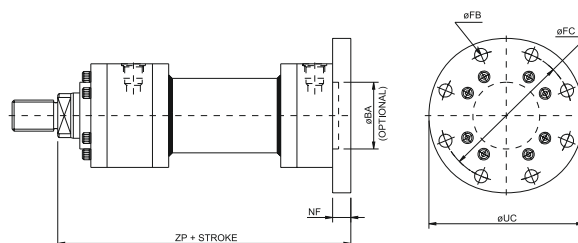


DOUBLE ROD END (NON ISO)

Bore	VD MIN	WC	FB	FC Js13	NF	ØB ØBA	ØUC	ZB MAX	ZP
50	4	22	8 X Ø13.5	132	25	63	155	244	265
63	4	25	8 X Ø13.5	150	28	75	175	274	298
80	4	28	8 X Ø17.5	180	32	90	210	305	332
100	5	32	8 X Ø22	212	36	110	250	340	371
125	5	36	8 X Ø22	250	40	132	290	396	430
160	5	40	8 X Ø26	315	45	160	360	467	505
200	5	45	8 X Ø33	385	56	200	440	550	596
250	8	50	8 X Ø39	475	63	250	540	652	703
320	8	56	8 X Ø45	600	80	320	675	764	830

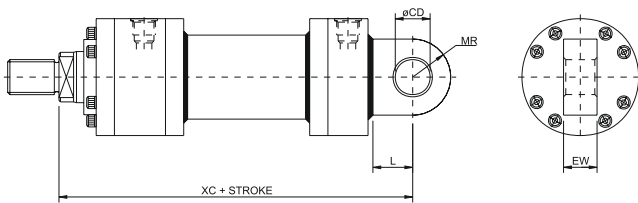


MF3 : HEAD END CIRCULAR FLANGE MOUNTING

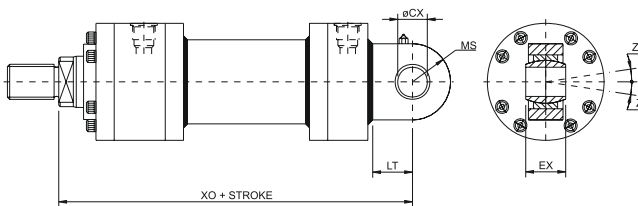


MF4 : CAP END CIRCULAR FLANGE MOUNTING

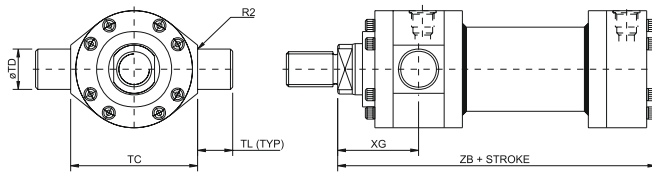
All Unspecified Dimensions are in MM



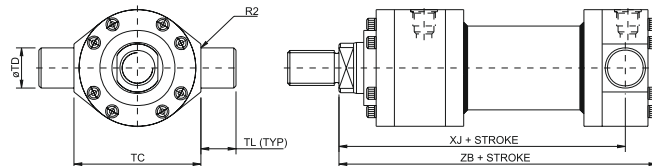
MP3 : CAP FIXED EYE MOUNTING



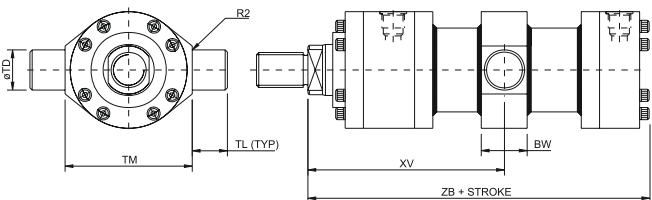
MP5 : CAP FIXED EYE WITH SPHERICAL PLAIN BEARING MOUNTING



MT1 : HEAD END TRUNNION MOUNTING



MT2 : CAP END TRUNNION MOUNTING



MT4 : INTERMEDIATE TRUNNION MOUNTING

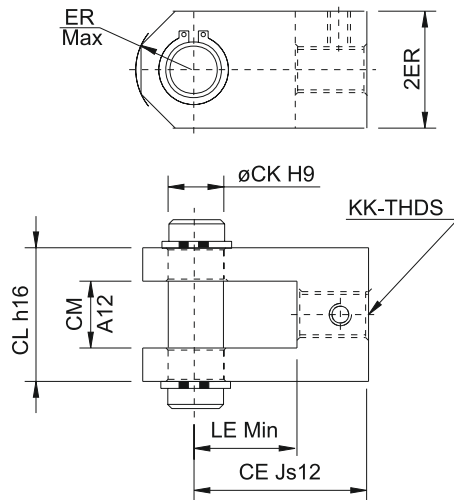
Bore	ØCD	ØCX	EX or EW MIN	L/LT MAX	MR/MS	XC/XO	Z
50	32	32	32	40	40	305	4°
63	40	40	40	50	50	348	
80	50	50	50	63	63	395	
100	63	63	63	71	71	442	
125	80	80	80	90	90	520	
160	100	100	100	112	112	617	
200	125	125	125	160	160	756	
250	160	160	160	200	200	903	
320	200	200	200	250	250	1080	

Bore	TD f8	TL J16	TC h12	XG	XJ	ZB MAX
50	32	25	112	82	220	224
63	40	32	125	92	245	274
80	50	40	150	104	274	305
100	63	50	180	118	312	340
125	80	63	224	138	364	396
160	100	80	280	158	434	467
200	125	100	335	186	516	550
250	160	125	425	214	620	652
320	200	160	530	268	680	764

Bore	TD f8	TL J16	TM h12	XV MIN	XV MAX+	BW	ZB MAX	STROKE
50	32	25	112	178	138	38	244	40
63	40	32	125	198	153	48	274	45
80	50	40	150	223	173	58	305	50
100	63	50	180	264	177	73	340	87
125	80	63	224	311	209	88	396	102
160	100	80	280	364	246	108	467	118
200	125	100	335	424	296	113	550	128
250	160	125	425	525	320	180	652	205
320	200	160	530	630	340	220	764	290

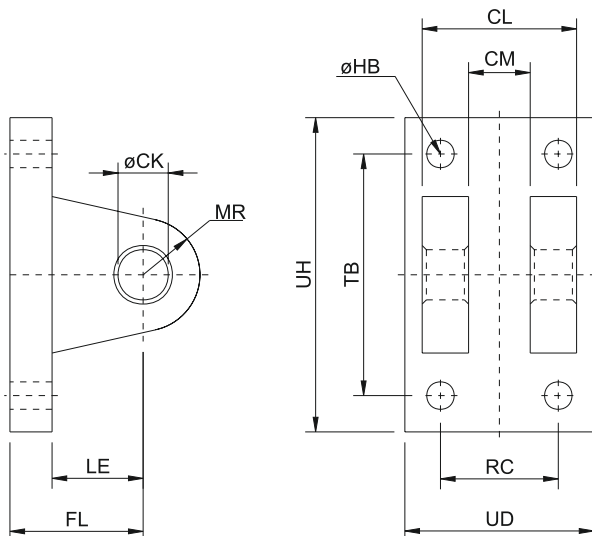
All Unspecified Dimensions are in MM

250 BAR SERIES-HH



TYPE	FORCE NEWTONS	KK-THDS	CL	CE	CK	C,	LE	ER
20	20,000	M16 X 1.5	45	52	20	20	27	25
25	32,000	M20 X 1.5	56	65	25	25	34	32
32	50,000	M27 X 2	70	80	32	32	42	40
40	80,000	M33 X 2	90	97	40	40	52	50
50	125,000	M42 X 2	110	120	50	50	64	63
63	200,000	M48 X 2	140	140	63	63	75	71
80	320,000	M64 X 3	170	180	80	80	94	90

ROD CLEVIS (WITH PIVOT PIN) (ISO : 8132-1986)

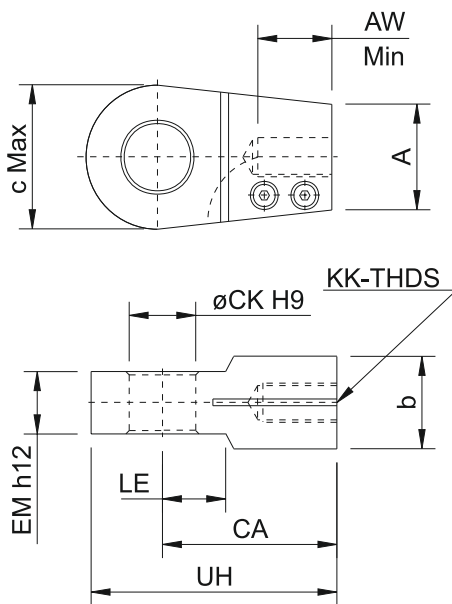


TYPE	NORMAL FORCE NEWTONS	CK H9	FL Js12	LE MIN	HB H13	MR MAX	CM A12	TB Js14	CL h16	RC Js14	UD MAX	UH MAX
20	20,000	20	45	30	11	20	20	75	45	32	58	98
25	32,000	25	55	37	13.5	25	25	85	56	40	70	113
32	50,000	32	65	43	17.5	32	32	110	70	50	85	143
40	80,000	40	76	52	22	40	40	130	90	65	108	170
50	125,000	50	95	65	26	50	50	170	110	80	130	220
63	200,000	63	112	75	33	63	63	210	140	100	160	280
80	320,000	80	140	95	39	80	80	250	170	125	210	320

CLEVIS BRACKET (ISO : 8132-1986)

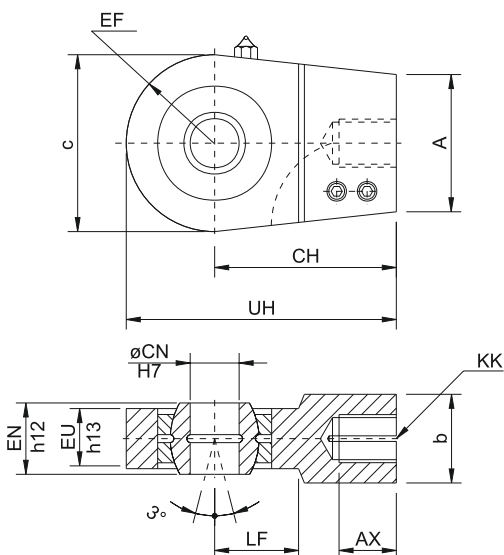
Note : These dimensions are valid for operation at 160 bar of cylinders with bore size of 40 mm (type 20) upto and including 160 mm (type 80); they are also valid for operation at 250 bar of cylinders with bore size of 50 mm (type 32) upto and including 125 mm (type 80).

All Unspecified Dimensions are in MM



ROD EYE
(ISO : 6981-1992)

TYPE	FORCE NEWTONS	KK-THDS	AW	CA	CK	EM	c	b	A	UH	LE
20	20,000	M16 X 1.5	23	52	20	20	50	25	48	77	22
25	32,000	M20 X 1.5	29	65	25	25	62	30	54	97	27
32	50,000	M27 X 2	37	80	32	32	76	38	66	120	32
40	80,000	M33 X 2	46	97	40	40	97	47	80	147	41
50	125,000	M42 X 2	57	120	50	50	118	58	96	183	50
63	200,000	M48 X 2	64	140	63	63	142	70	114	211	62
80	320,000	M64 X 3	86	180	80	80	180	90	148	270	78
100	500,000	M80 X 3	96	210	100	100	224	110	178	322	98
125	800,000	M100 X 3	113	260	125	125	290	135	200	420	120
160	1250,000	M125 X 4	126	310	160	160	346	165	250	510	150
200	2000,000	M160 X 4	161	390	200	200	460	215	320	640	195



ROD EYE WITH SPHERICAL BEARING
(ISO : 6982-1992)

TYPE	SOC. HD CAP SCREW	NORMAL FORCE NEWTONS	CN H7	KK	AX MIN	EN h12	CH	LF	b	A	EU	EF	c MAX	UH
20	M8	20,000	20	M16 X 1.5	23	20	52	22	25	48	17	25	50	77
25	M8	32,000	25	M20 X 1.5	29	25	65	27	30	54	21	32	62	97
32	M10	50,000	32	M27 X 2	37	32	80	32	38	66	27	40	76	120
40	M10	80,000	40	M33 X 2	46	40	97	41	47	80	32	50	97	147
50	M12	125,000	50	M42 X 2	57	50	120	50	58	96	40	63	118	183
63	M12	200,000	63	M48 X 2	64	63	140	62	70	114	52	71	142	211
80	M16	320,000	80	M64 X 3	86	80	180	78	90	148	66	90	180	270
100	M20	500,000	100	M80 X 3	96	100	210	98	110	178	84	112	224	322
125	M20	800,000	125	M100 X 3	113	125	260	120	135	200	102	160	290	420
160	M24	1250,000	160	M125 X 4	126	160	310	150	165	250	130	200	346	510
200	M30	2000,000	200	M160 X 4	161	200	390	195	215	320	162	250	460	640

All Unspecified Dimensions are in MM