



***King Tiger***

**A. NAIRSONS INDUSTRIES (INDIA)**

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**A. NAIRSONS INDUSTRIES (INDIA)**

**MADE IN INDIA** 



SERVING SINCE

1968

A.Nairsons Industries (India) was founded in 1968 in Ludhiana. Over the years, the company has become a leading manufacturer of KT (KING TIGER) brand of engineering components. We manufacture a wide range of components that include Adapter Sleeves, Withdrawal Sleeves, Locking Nuts, Locking Washers and a variety of other industrial and auto fasteners under these brands. Our products are used in diverse industries like Textiles, Automobiles, Rice & Sugar Mills, Cement, Mining etc Our products are manufactured in our state-of-the art plant at G.T. Road, Ludhiana (India). We have installed the best of equipment including sophisticated CNC machines and our products conform to stringent quality parameters. Our products are known nationally and internationally for their quality, durability finish and attractive packaging. Our competitiveness and customer service endeavors have led to a rapid growth in exports and our products are exported to various countries in Europe, South East Asia, Australia, Middle East and South America. Our exclusive network of stockists has contributed to a steady supply in these competitive and quality conscious markets. In India too, we have a strong national presence through our network of dealers and our range of products are consistently supplied to quality conscious customers. We are committed to provide total satisfaction to our valued customers as also the real value for their money by supplying quality goods complying to statutory as well as regulatory requirements. We are striving hard for continual improvement of all processes by research & development and regular training to our staff and workers.

Our Service Motto

SYMBOL OF QUALITY

ESTABLISHED THE TRUST SINCE 1968

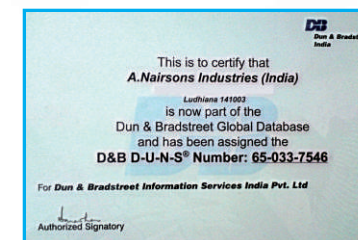
ROLLING THE BEARING SMOOTH

VALUE FOR YOUR HARD EARNED MONEY

IN EXCLUSIVELY OF BEST MATERIAL

CUSTOMERS ORIENTED COMPANY

EXCELLENT CNC QUALITY PRODUCTS



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## **Adapter Sleeve**

SERIES & RANGE (H & HE )

204 to 222 • 304 to 322 • 2304 to 2356  
3024 to 30/500 • 3120 to 31/500

Adapter sleeves are the most commonly used components for locating bearings with a tapered bore onto a cylindrical seat as they can be used on plain or stepped shafts. They are easy to install and require no additional location on the shaft. When adapter sleeves are used on plain shafts, the bearing can be located at any position on the shaft. Used for fastening the bearing with tapered bore to a smooth shaft (maximum tolerance h10). It is composed of 3 parts: sleeve, one nut and one lock washer or locking device MS. They are always supplied with this complete set.



Special & Custom Made Sizes also available

[www.ktkingtiger.com](http://www.ktkingtiger.com) / [www.ktsleeve.in](http://www.ktsleeve.in)



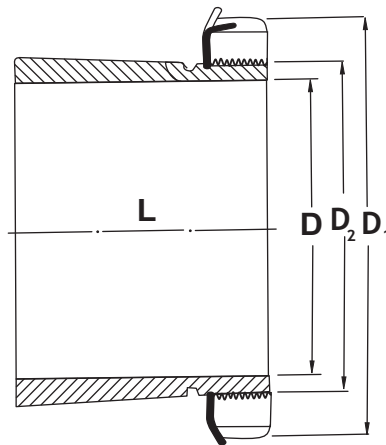


Adapter Sleeves

## 200 SERIES

Taper 1:12

Code	D		L	D <sub>1</sub>	D <sub>2</sub> METRIC THREADS mm	LOCK NUT	LOCKING DEVICE	WEIGHT KG
	H mm	HE in						
H 204	17	—	24	32	M 20 X 1	KM 04	MB 04	0.041
H 205	20	3/4	26	38	M 25 X 1.5	KM 05	MB 05	0.070
H 206	25	1	27	45	M 30 X 1.5	KM 06	MB 06	0.099
H 207	30	1 1/8	29	52	M 35 X 1.5	KM 07	MB 07	0.125
H 208	35	1 1/4	31	58	M 40 X 1.5	KM 08	MB 08	0.174
H 209	40	1 1/2	33	65	M 45 X 1.5	KM 09	MB 09	0.227
H 210	45	1 3/4	35	70	M 50 X 1.5	KM 10	MB 10	0.274
H 211	50	2	37	75	M 55 X 2	KM 11	MB 11	0.308
H 212	55	2 1/8	38	80	M 60 X 2	KM 12	MB 12	0.346
H 213	60	2 1/4	40	85	M 65 X 2	KM 13	MB 13	0.401
H 214	60	2 1/2	41	92	M 70 X 2	KM 14	MB 14	0.593
H 215	65	2 1/2	43	98	M 75 X 2	KM 15	MB 15	0.707
H 216	70	2 3/4	46	105	M 80 X 2	KM 16	MB 16	0.882
H 217	75	3	50	110	M 85 X 2	KM 17	MB 17	1.020
H 218	80	3 1/4	52	120	M 90 X 2	KM 18	MB 18	1.190
H 219	85	3 1/4	55	125	M 95 X 2	KM 19	MB 19	1.370
H 220	90	3 1/2	58	130	M 100 X 2	KM 20	MB 20	1.490
H 221	95	3 3/4	60	140	M 105 X 2	KM 21	MB 21	1.720
H 222	100	4	63	145	M 110 X 2	KM 22	MB 22	1.930



TAPER 1:12

## 300 SERIES

Taper 1:12

Code	D		L	D <sub>1</sub>	D <sub>2</sub> METRIC THREADS mm	LOCK NUT	LOCKING DEVICE	WEIGHT KG
	H mm	HE in						
H 304	17	—	28	32	M 20 X 1	KM 04	MB 04	0.045
H 305	20	3/4	29	38	M 25 X 1.5	KM 05	MB 05	0.075
H 306	25	1	31	45	M 30 X 1.5	KM 06	MB 06	0.109
H 307	30	1 1/8	35	52	M 35 X 1.5	KM 07	MB 07	0.142
H 308	35	1 1/4	36	58	M 40 X 1.5	KM 08	MB 08	0.189
H 309	40	1 1/2	39	65	M 45 X 1.5	KM 09	MB 09	0.248
H 310	45	1 3/4	42	70	M 50 X 1.5	KM 10	MB 10	0.303
H 311	50	2	45	75	M 55 X 2	KM 11	MB 11	0.345
H 312	55	2 1/8	47	80	M 60 X 2	KM 12	MB 12	0.394
H 313	60	2 1/4	50	85	M 65 X 2	KM 13	MB 13	0.458
H 314	60	2 1/2	52	92	M 70 X 2	KM 14	MB 14	0.723
H 315	65	2 1/2	55	98	M 75 X 2	KM 15	MB 15	0.831
H 316	70	2 3/4	59	105	M 80 X 2	KM 16	MB 16	1.030
H 317	75	3	63	110	M 85 X 2	KM 17	MB 17	1.180
H 318	80	3 1/4	65	120	M 90 X 2	KM 18	MB 18	1.370
H 319	85	3 1/4	68	125	M 95 X 2	KM 19	MB 19	1.560
H 320	90	3 1/2	71	130	M 100 X 2	KM 20	MB 20	1.690
H 321	95	3 3/4	74	140	M 105 X 2	KM 21	MB 21	1.950
H 322	100	4	77	145	M 110 X 2	KM 22	MB 22	2.180



M : Means Metric Thread

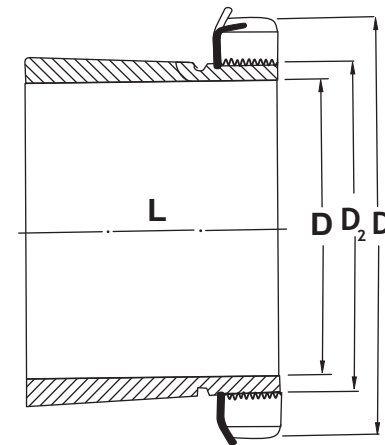
- HS/HA Series also available
- KT Adapter Sleeves are supplied complete with Lock Nut and Lock Washer



## 2300 SERIES

TAPER 1:12

H HE HA HS	D		L	D <sub>1</sub>	D <sub>2</sub> METRIC THREADS mm	LOCK NUT	LOCKING DEVICE	WEIGHT KG
	H mm	HE in						
H 2304	17	—	31	32	M 20 X 1	KM 04	MB 04	0.049
H 2305	20	3/4	35	38	M 25 X 1.5	KM 05	MB 05	0.087
H 2306	25	1	38	45	M 30 X 1.5	KM 06	MB 06	0.126
H 2307	30	1 1/8	43	52	M 35 X 1.5	KM 07	MB 07	0.165
H 2308	35	1 1/4	46	58	M 40 X 1.5	KM 08	MB 08	0.224
H 2309	40	1 1/2	50	65	M 45 X 1.5	KM 09	MB 09	0.280
H 2310	45	1 3/4	55	70	M 50 X 1.5	KM 10	MB 10	0.362
H 2311	50	2	59	75	M 55 X 2	KM 11	MB 11	0.420
H 2312	55	2 1/8	62	80	M 60 X 2	KM 12	MB 12	0.481
H 2313	60	2 1/4	65	85	M 65 X 2	KM 13	MB 13	0.557
H 2314	60	2 1/4	68	92	M 70 X 2	KM 14	MB 14	0.897
H 2315	65	2 1/2	73	98	M 75 X 2	KM 15	MB 15	1.050
H 2316	70	2 3/4	78	105	M 80 X 2	KM 16	MB 16	1.280
H 2317	75	3	82	110	M 85 X 2	KM 17	MB 17	1.450
H 2318	80	3 1/4	86	120	M 90 X 2	KM 18	MB 18	1.690
H 2319	85	3 1/4	90	125	M 95 X 2	KM 19	MB 19	1.920
H 2320	90	3 1/2	97	130	M100 X 2	KM 20	MB 20	2.150
H 2321	95	3 3/4	101	140	M105 X 2	KM 21	MB 21	2.460
H 2322	100	4	105	145	M110 X 2	KM 22	MB 22	2.740
H 2324	110	4 1/4	112	155	M120 X 2	KM 24	MB 24	3.190
H 2326	115	4 1/2	121	165	M130 X 2	KM 26	MB 26	4.600
H 2328	125	5	131	180	M 140 X 2	KM 28	MB 28	5.550
H 2330	135	5 1/4	139	195	M 150 X 2	KM 30	MB 30	6.630
H 2332	140	5 1/2	147	210	M 160 X 3	KM 32	MB 32	9.140
H 2334	150	6	154	220	M 170 X 3	KM 34	MB 34	10.200
H 2336	160	6 1/2	161	230	M 180 X 3	KM 36	MB 36	11.300
H 2338	170	6 3/4	169	240	M 190 X 3	KM 38	MB 38	12.600
H 2340	180	7	176	250	M 200 X 3	KM 40	MB 40	13.900
H 2344	200	8	183	280	Tr 220 X 4	HM 44 T	MB 44	16.700
H 2348	220	—	196	300	Tr 240 X 4	HM 48 T	MB 48	19.700
H 2352	240	—	208	330	Tr 260 X 4	HM 52 T	MB 52	24.200
H 2356	260	—	221	350	Tr 280 X 4	HM 56 T	MB 56	27.800



TAPER 1:12

- HS/HA Series also available
- KT Adapter Sleeves are supplied complete with Lock Nut and Lock Washer



M : Means Metric Thread

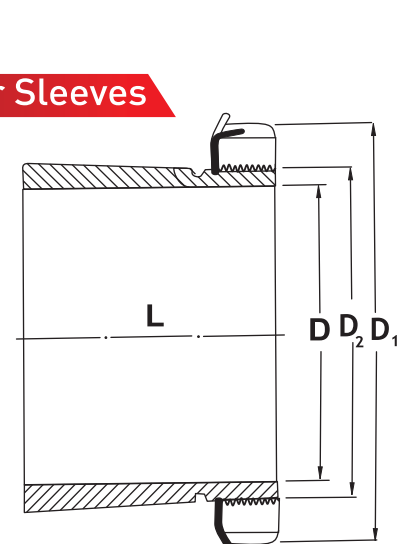


TR : Means Taperzoid Thread

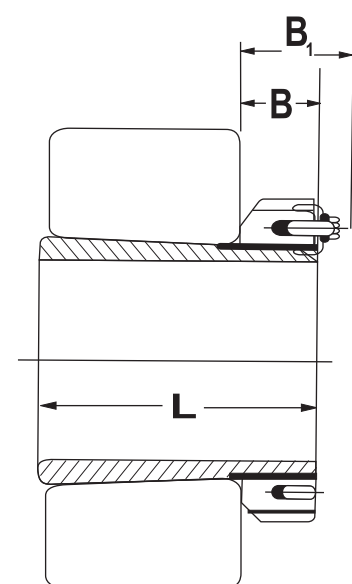




Adapter Sleeves



D ≤ 180 mm



D ≥ 200 mm

3000 Series

TAPER 1:12

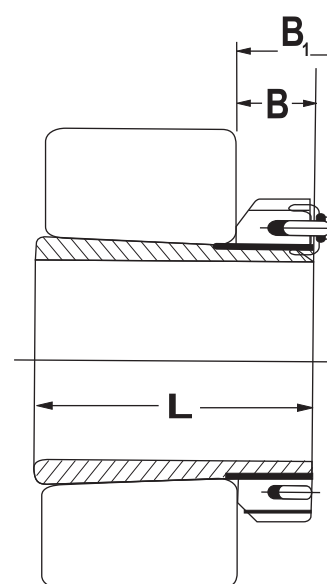
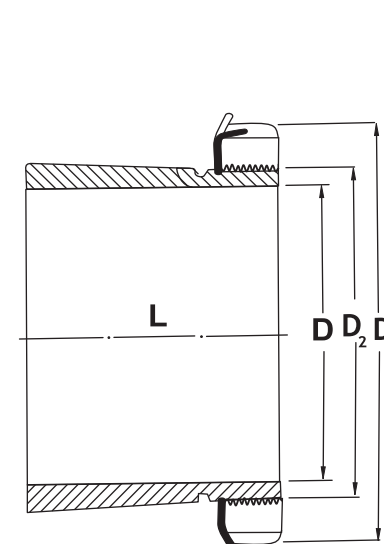
H HE	D		L	D <sub>1</sub>	B	B <sub>1</sub>	D <sub>2</sub> METRIC THREADS	LOCK NUT	LOCKING DEVICE  LOCKING PLATES	WEIGHT KG
	H mm	HE in								
H 3024	110	4 1/4	72	145	22		M 120 X 2	KML 24	MBL 24	1.930
H 3026	115	4 1/2	80	155	23		M 130 X 2	KML 26	MBL 26	2.850
H 3028	125	5	82	165	24		M 140 X 2	KML 28	MBL 28	3.160
H 3030	135	5 1/4	87	180	26		M 150 X 2	KML 30	MBL 30	3.890
H 3032	140	5 1/2	93	190	28		M 160 X 2	KML 32	MBL 32	5.210
H 3034	150	6	101	200	29		M 170 X 3	KML 34	MBL 34	5.990
H 3036	160	6 1/2	109	210	30		M 180 X 3	KML 36	MBL 36	6.830
H 3038	170	6 3/4	112	220	31		M 190 X 3	KML 38	MBL 38	7.450
H 3040	180	7	120	240	32		M 200 X 3	KML 40	MBL 40	9.190
H 3044	200	8	128	260	30	41	Tr 220 X 4	HM 3044	MS30 44	10.300
H 3048	220		133	290	34	46	Tr 240 X 4	HM 3048	MS30 48	13.200
H 3052	240		147	310	34	46	Tr 260 X 4	HM 3052	MS30 52	15.300
H 3056	260		152	330	38	50	Tr 280 X 4	HM 3056	MS30 56	17.700
H 3060	280		168	360	42	54	Tr 300 X 4	HM 3060	MS30 60	22.800
H 3064	300		171	380	42	55	Tr 320 X 5	HM 3064	MS30 64	24.600
H 3068	320		187	400	45	58	Tr 340 X 5	HM 3068	MS30 68	28.700
H 3072	340		188	420	45	58	Tr 360 X 5	HM 3072	MS30 72	30.500
H 3076	360		193	450	48	62	Tr 380 X 5	HM 3076	MS30 76	35.800
H 3080	380		210	470	52	66	Tr 400 X 5	HM 3080	MS30 80	41.300
H 3084	400		212	490	52	66	Tr 420 X 5	HM 3084	MS30 84	43.700
H 3088	410		228	520	60	77	Tr 440 X 5	HM 3088	MS30 88	65.200
H 3092	430		234	540	60	77	Tr 460 X 5	HM 3092	MS30 92	69.500
H 3096	450		237	560	60	77	Tr 480 X 5	HM 3096	MS30 96	73.300
H 30 / 500	470		247	580	68	85	Tr 500 X 5	HM 30/500	MS30/500	81.800



M : Means Metric Thread



TR : Means Taperzoid Thread



D ≥ 200 mm

3100 Series

TAPER 1:12

H HE	D		L	D <sub>1</sub>	B	B <sub>1</sub>	D <sub>2</sub> METRIC THREADS	LOCK NUT	LOCKING DEVICE  LOCK PLATES	WEIGHT KG
	H mm	HE in								
H 3120	90	3 1/2	76	130	20		M 100 X 2	KM 20	MB 20	1.800
H 3122	100	4	81	145	21		M 110 X 2	KM 22	MB 22	2.250
H 3124	110	4 1/4	88	155	22		M 120 X 2	KM 24	MB 24	2.640
H 3126	115	4 1/2	92	165	23		M 130 X 2	KM 26	MB 26	3.660
H 3128	125	5	97	180	24		M 140 X 2	KM 28	MB 28	4.340
H 3130	135	5 1/4	111	195	26		M 150 X 2	KM 30	MB 30	5.520
H 3132	140	5 1/2	119	210	28		M 160 X 3	KM 32	MB 32	7.670
H 3134	150	6	122	220	29		M 170 X 3	KM 34	MB 34	8.380
H 3136	160	6 1/2	131	230	30		M 180 X 3	KM 36	MB 36	9.500
H 3138	170	6 3/4	141	240	31		M 190 X 3	KM 38	MB 38	10.800
H 3140	180	7	150	250	32		M 200 X 3	KM 40	MB 40	12.100
H 3144	200	8	158	280	32	44	Tr 220 X 4	HM 3144	MB 44	14.700
H 3148	220		169	300	34	46	Tr 240 X 4	HM 3148	MS 3148	17.300
H 3152	240		187	330	36	49	Tr 260 X 4	HM 3152	MS 3152	22.000
H 3156	260		192	350	38	51	Tr 280 X 4	HM 3156	MS 3156	24.500
H 3160	280		208	380	40	53	Tr 300 X 4	HM 3160	MS 3160	30.200
H 3164	300		226	400	42	56	Tr 320 X 5	HM 3164	MS 3164	34.900
H 3168	320		254	440	55	72	Tr 340 X 5	HM 3168	MS 3168	49.500
H 3172	340		259	460	58	75	Tr 360 X 5	HM 3172	MS 3172	54.200
H 3176	360		264	490	60	77	Tr 380 X 5	HM 3176	MS 3176	61.700
H 3180	380		272	520	62	82	Tr 400 X 5	HM 3180	MS 3180	70.600
H 3184	400		304	540	70	90	Tr 420 X 5	HM 3184	MS 3184	84.200
H 3188	410		307	560	70	90	Tr 440 X 5	HM 3188	MS 3188	104.000
H 3192	430		326	580	75	95	Tr 460 X 5	HM 3192	MS 3192	116.000
H 3196	450		335	620	75	95	Tr 480 X 5	HM 3196	MS 3196	133.000
H31/500	470		356	630	80	100	Tr 500 X 5	HM 31/500	MS 31500	143.000



M : Means Metric Thread



TR : Means Taperzoid Thread

# Hydraulic Adapter Sleeves

## SERIES (HOH )

Hydraulic Adapter Sleeve | HOH comes with the normal sleeves dimensions, Hydraulic Adapter Sleeve | HOH are recommended for shafts or large size sets because they are provided with oil injection gutters, making the assembling and specially the disassembling easier. Hydraulic Adapter Sleeve | HOH is available for shafts from 140 mm on. Custom hydraulic series also available on request.

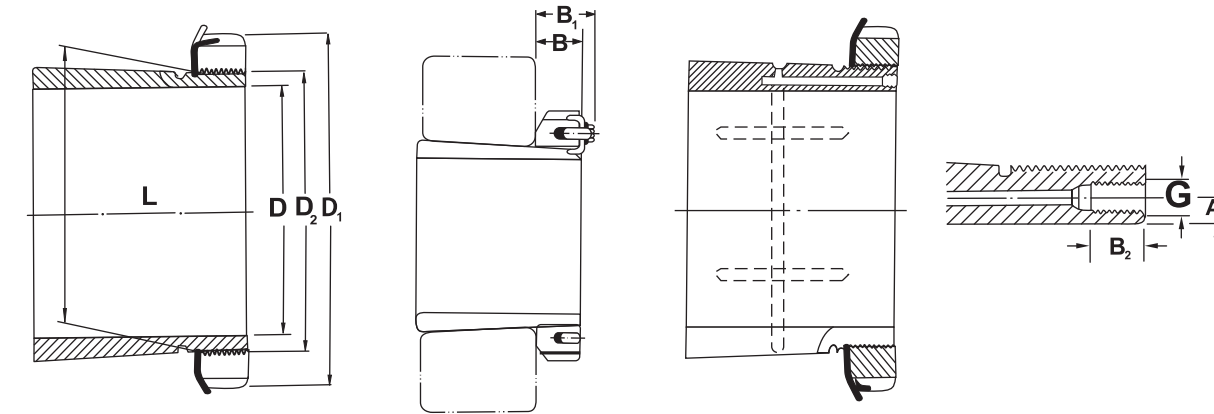


Special & Custom Made Sizes also available

[www.ktkingtiger.com](http://www.ktkingtiger.com) / [www.ktsleeve.in](http://www.ktsleeve.in)



## Hydraulic Adapter Sleeves



### 2300 Series

$D \leq 180$  mm

$D \geq 200$  mm

HOH 23 Hydraulic Adapter Sleeves No.	D	L	D <sub>1</sub>	B	B <sub>1</sub>	G	A	B <sub>2</sub>	LOCK NUT	LOCKING PLATES	METRIC THREADS D <sub>2</sub>	WEIGHT KG
HOH 2332	140	147	210	28	—	M6	4.2	7	KM 32	MB 32	M 160X3	9.140
HOH 2334	150	154	220	29	—	M6	4.2	7	KM 34	MB 34	M 170X3	10.200
HOH 2336	160	161	230	30	—	M6	4.2	7	KM 36	MB 36	M 180X3	11.300
HOH 2338	170	169	240	31	—	M6	4.2	7	KM 38	MB 38	M 190X3	12.600
HOH 2340	180	176	250	32	—	M6	4.2	7	KM 40	MB 40	M 200X3	13.900
HOH 2344	200	186	280	32	44	M6	4.2	7	HM 44 T	MB 44	Tr 220X4	16.700
HOH 2348	220	199	300	34	46	M6	4.2	7	HM 48 T	MB 48	Tr 240X4	19.700
HOH 2352	240	211	330	36	49	M6	4.2	7	HM 52 T	MB 52	Tr 260X4	24.200
HOH 2356	260	224	350	38	51	M6	4.2	7	HM 56 T	MB 56	Tr 280X4	27.800

### 3200 Series

HOH 32 Hydraulic Adapter Sleeves No.	D	L	D <sub>1</sub>	B	B <sub>1</sub>	G	A	B <sub>2</sub>	LOCK NUT	LOCKING PLATES	METRIC THREADS D <sub>2</sub>	WEIGHT KG
HOH 3260	280	240	380	40	53	M6	4.0	7	HM 3160	MS 3160	Tr 300X4	34.100
HOH 3264	300	258	400	42	56	M6	3.5	7	HM 3164	MS 3164	Tr 320X5	39.300
HOH 3268	320	288	440	55	72	M6	3.5	7	HM 3168	MS 3168	Tr 340X5	54.600
HOH 3272	340	299	460	58	75	M6	3.5	7	HM 3172	MS 3172	Tr 360X5	60.200
HOH 3276	360	310	490	60	77	M6	3.5	7	HM 3176	MS 3176	Tr 380X5	39.600
HOH 3280	380	328	520	62	82	M6	3.5	7	HM 3180	MS 3180	Tr 400X5	81.000
HOH 3284	400	352	540	70	90	M6	3.5	7	HM 3184	MS 3184	Tr 420X5	94.000
HOH 3288	410	361	560	70	90	M8	6.5	12	HM 3188	MS 3188	Tr 440X5	118.000
HOH 3292	430	382	580	75	95	M8	6.5	12	HM 3192	MS 3192	Tr 460X5	132.000
HOH 3296	450	397	620	75	95	M8	6.5	12	HM 3196	MS 3196	Tr 480X5	152.000
HOH 32/500	470	428	630	80	100	M8	6.5	12	HM 31 500	MS 31/500	Tr 500X5	166.000



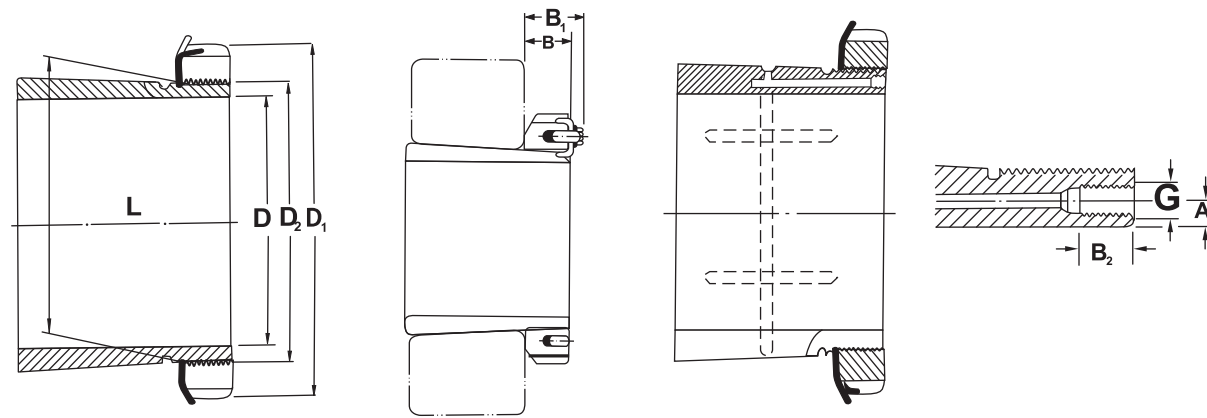
M : Means Metric Thread



TR : Means Taperzoid Thread



### Hydraulic Adapter Sleeves



3000 HYDRAULIC SERIES       $D \leq 180$  mm       $D \geq 200$  mm      TAPER 1:12

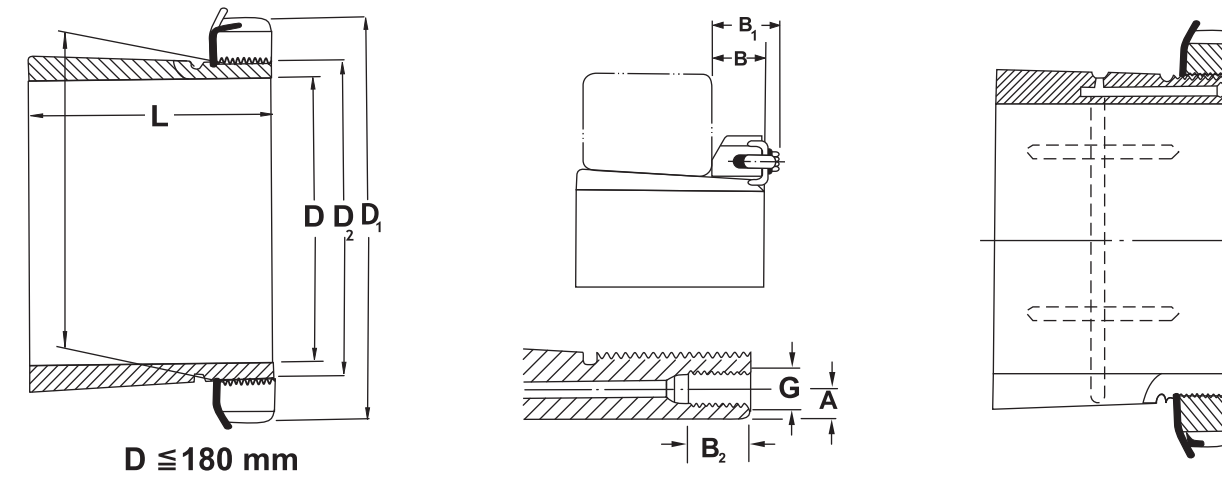
HOH 30 Hydraulic Adapter Sleeves No.	D mm	L mm	D <sub>1</sub> mm	B mm	B <sub>1</sub> mm	G mm	A mm	B <sub>2</sub> mm	D <sub>2</sub> mm	THREADS	LOCK NUT	LOCK PLATES	WEIGHT KG
HOH 3032	140	93	190	28	—	M6	4.2	7	M 160X3	KML 32	MBL 32	5.210	
HOH 3034	150	101	200	29	—	M6	4.2	7	M 170X3	KML 34	MBL 34	5.990	
HOH 3036	160	109	210	30	—	M6	4.2	7	M 180X3	KML 36	MBL 36	6.830	
HOH 3038	170	112	220	31	—	M6	4.2	7	M 190X3	KML 38	MBL 38	7.450	
HOH 3040	180	120	240	32	—	M6	4.2	7	M 200X3	KML 40	MBL 40	9.190	
HOH 3044	200	126	260	30	41	M6	4.2	7	Tr 220X4	HM 3044	MS3044	10.300	
HOH 3048	220	133	290	34	46	M6	4.2	7	Tr 240X4	HM 3048	MS 3048	13.200	
HOH 3052	240	145	310	34	46	M6	4.2	7	Tr 260X4	HM 3052	MS 3052	15.300	
HOH 3056	260	152	330	38	50	M6	4.2	7	Tr 280X4	HM 3056	MS 3056	17.700	
HOH 3060	280	168	360	42	54	M6	4.2	7	Tr 300X4	HM 3060	MS 3060	22.800	
HOH 3064	300	171	380	42	55	M6	3.5	7	Tr 320X5	HM 3064	MS 3064	24.600	
HOH 3068	320	187	400	45	58	M6	3.5	7	Tr 340X5	HM 3068	MS 3068	28.700	
HOH 3072	340	188	420	45	58	M6	3.5	7	Tr 360X5	HM 3072	MS 3072	30.500	
HOH 3076	360	193	450	48	62	M6	3.5	7	Tr 380X5	HM 3076	MS 3076	35.800	
HOH 3080	380	210	470	52	66	M6	3.5	7	Tr 400X5	HM 3080	MS 3080	41.300	
HOH 3084	400	212	490	52	66	M6	3.5	7	Tr 420X5	HM 3084	MS 3084	43.700	
HOH 3088	410	228	520	60	77	M8	6.5	12	Tr 440X5	HM 3088	MS 3088	65.200	
HOH 3092	430	234	540	60	77	M8	6.5	12	Tr 460X5	HM 3092	MS 3092	69.500	
HOH 3096	450	237	560	60	77	M8	6.5	12	Tr 480X5	HM 3096	MS 3096	73.300	
HOH 30/500	470	247	580	68	85	M8	6.5	12	Tr 500X5	HM 30/500	MS 30/500	81.800	



M : Means Metric Thread



TR : Means Taperzoid Thread



3100 Hydraulic Series       $D \leq 180$  mm       $D \geq 200$  mm      TAPER 1:12

HOH 31 Hydraulic Adapter Sleeves No.	D mm	L mm	D <sub>1</sub> mm	B mm	B <sub>1</sub> mm	G <sub>1</sub> mm	A mm	B <sub>2</sub> mm	LOCK NUT	LOCK PLATES	MATRIC THREADS D <sub>2</sub> mm	WEIGHT KG
HOH 3132	140	119	210	28	—	M6	4.2	7	KM 32	MB 32	160X3	7.670
HOH 3134	150	122	220	29	—	M6	4.2	7	KM 34	MB 34	170X3	8.380
HOH 3136	160	131	230	30	—	M6	4.2	7	KM 36	MB 36	180X3	9.500
HOH 3138	170	141	240	31	—	M6	4.2	7	KM 38	MB 38	190X3	10.800
HOH 3140	180	150	250	32	—	M6	4.2	7	KM 40	MB 40	200X3	12.100
HOH 3144	200	161	280	32	44	M6	4.2	7	HM3144	MS 3144	Tr 220X4	14.700
HOH 3148	220	172	300	34	46	M6	4.2	7	HM 3148	MS 3148	Tr 240X4	17.300
HOH 3152	240	190	330	36	49	M6	4.2	7	HM 3152	MS 3152	Tr 260X4	22.000
HOH 3156	260	195	350	38	51	M6	4.2	7	HM 3156	MS 3152	Tr 280X4	24.500
HOH 3160	280	208	380	40	53	M6	4.2	7	HM 3160	MS 31/60	Tr 300X4	30.200
HOH 3164	300	226	400	42	56	M6	3.5	7	HM 3164	MS 31/64	Tr 320X5	34.900
HOH 3168	320	254	440	55	72	M6	3.5	7	HM 3168	MS 31/68	Tr 340X5	49.500
HOH 3172	340	259	460	58	75	M6	3.5	7	HM 3172	MS 31/72	Tr 360X5	54.200
HOH 3176	360	264	490	60	77	M6	3.5	7	HM 3176	MS 31/76	Tr 380X5	61.700
HOH 3180	380	272	520	62	82	M6	3.5	7	Hm 3180	MS 31/80	Tr 400X5	70.600
HOH 3184	400	304	540	70	90	M6	3.5	7	HM 3184	MS 31/84	Tr 420X5	84.200
HOH 3188	410	307	560	70	90	M8	6.5	12	HM 3188	MS 31/88	Tr 440X5	104.000
HOH 3192	430	326	580	75	95	M8	6.5	12	HM 3192	MS 31/92	Tr 460X5	116.000
HOH 3196	450	335	620	75	95	M8	6.5	12	HM 3196	MS 31/96	Tr 480X5	133.000
HOH 31/500	470	356	630	80	100	M8	6.5	12	HM 31/500	MS 31/500	Tr 500X5	143.000



M : Means Metric Thread



TR : Means Taperzoid Thread



# Withdrawal Sleeves

SERIES & RANGE (AH, AHX )

208 to 222 • 304 to 322 • 2304 to 2356

3024 to 30/500 • 3120 to 31/500

Hydraulic series and big sizes also available on request

Withdrawal Sleeve | AH, AHX adapt themselves to the shaft diameter, while wider diameter tolerances can also be permitted than for the seat of a bearing with a cylindrical bore. Used to fix bearings with a tapered bore on supported shafts (lean). With Withdrawal Sleeve | AH, AHX the shaft must have a thread so the nut can move the sleeve against the bearing. Along with this, its accessories also available separately and so supplied on demand.

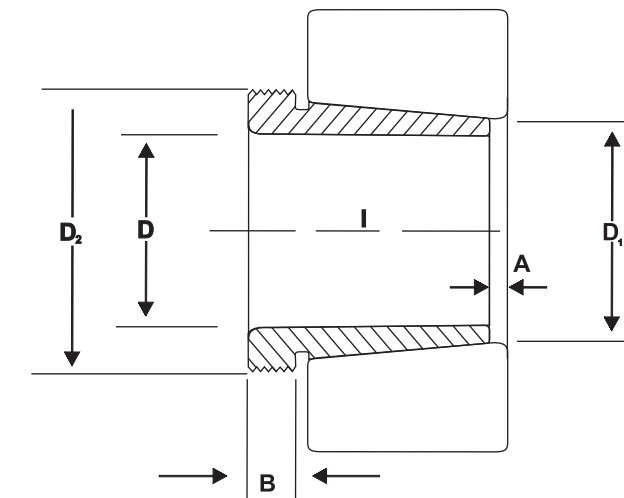


Special & Custom Made Sizes also available

[www.ktkingtiger.com](http://www.ktkingtiger.com) / [www.ktsleeve.in](http://www.ktsleeve.in)



## Withdrawal Sleeves



### AH 3

TAPER 1:12

AH 3	D mm	D <sub>1</sub> mm	I mm	A mm	D <sub>2</sub> mm	B mm	Suitable locknut	Weight Kg.
AH 308	35	40	29	3	M 45 x 1.5	6	KM 09	0.090
AH 309	40	45	31	3	M 50 x 1.5	6	KM 10	0.109
AH 310	45	50	35	3	M 60 x 2	7	KM 12	0.160
AH 311	50	55	37	3	M 65 x 2	7	KM 13	0.190
AH 312	55	60	40	3	M 70 x 2	8	KM 14	0.220
AH 313	60	65	42	3	M 75 x 2	8	KM 15	0.253
AH 314	65	70	43	4	M 80 x 2	8	KM 16	0.280
AH 315	70	75	45	4	M 85 x 2	8	KM 17	0.313
AH 316	75	80	48	4	M 90 x 2	8	KM 18	0.365
AH 317	80	85	52	4	M 100 x 2	9	KM 20	0.480
AH 318	85	90	53	4	M 105 x 2	9	KM 21	0.520
AH 319	90	95	57	4	M 110 x 2	10	KM 22	0.590
AH 320	95	100	59	4	M 115 x 2	10	KM 23	0.660
AH 322	100	110	63	4	M 130 x 2	12	KM 26	1.260

### AHX 3

AHX 3	D mm	D <sub>1</sub> mm	I mm	A mm	D <sub>2</sub> mm	B mm	Suitable locknut	Weight Kg.
AHX 310	45	50	35	3	M 55 x 2	7	KM 11	0.131
AHX 311	50	55	37	3	M 60 x 2	7	KM 12	0.161
AHX 312	55	60	40	3	M 65 x 2	8	KM 13	0.189
AHX 317	80	85	52	4	M 95 x 2	9	KM 19	0.429
AHX 318	85	90	53	4	M 100 x 2	9	KM 20	0.461
AHX 319	90	95	57	4	M 105 x 2	10	KM 21	0.532
AHX 320	95	100	59	4	M 110 x 2	10	KM 22	0.582
AHX 322	105	110	63	4	M 120 x 2	12	KM 24	0.663

AHX/G Series Also Available

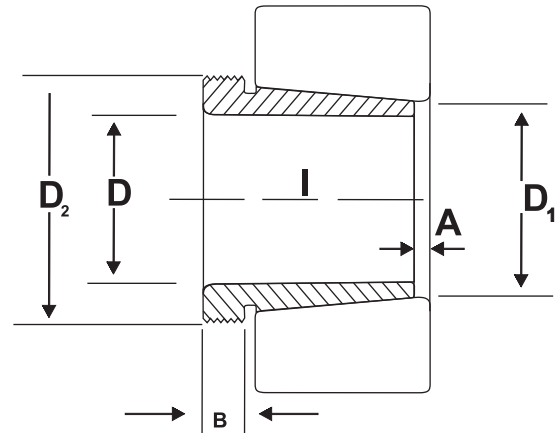


KT Withdrawal Sleeve Supplied without Nut & Washer

TR : Means Taperzoid Thread



## Withdrawal Sleeves



### AH 2300 S Series

TAPER 1:12

AH 23	D mm	D <sub>1</sub> mm	I mm	A mm	D <sub>2</sub> mm	B mm	Suitable Lock Nut Nut No.	Weight Kg.
AH 2308	35	40	40	3	M 45 x 1.5	7	KM 09	0.128
AH 2309	40	45	44	3	M 50 x 1.5	7	KM 10	0.164
AH 2310	45	50	50	3	M 55 x 2	9	KM 11	0.209
AH 2311	50	55	54	3	M 60 x 2	10	KM 12	0.253
AH 2312	55	60	58	3	M 65 x 2	11	KM 13	0.297
AH 2313	60	65	61	3	M 75 x 2	12	KM 15	0.395
AH 2314	65	70	64	4	M 80 x 2	12	KM 16	0.466
AH 2315	70	75	68	4	M 85 x 2	12	KM 17	0.534
AH 2316	75	80	71	4	M 90 x 2	12	KM 18	0.597
AH 2317	80	85	74	4	M 95 x 2	13	KM 19	0.670
AH 2318	85	90	79	4	M 100 x 2	14	KM 20	0.779
AH 2319	90	95	85	4	M 105 x 2	16	KM 21	0.886
AH 2320	95	100	90	4	M 110 x 2	16	KM 22	0.998
AH 2322	105	110	98	4	M 125 x 2	16	KM 25	1.350
AH 2324	115	120	105	4	M 135 x 2	17	KM 27	1.600
AH 2326	125	130	115	4	M 145 x 2	19	KM 29	1.970
AH 2328	135	140	125	5	M 155 x 3	20	KM 31	2.330
AH 2330	145	150	135	5	M 165 x 3	24	KM 33	2.820
AH 2332	150	160	140	6	M 180 x 3	24	KM 36	4.720
AH 2334	160	170	146	6	M 190 x 3	24	KM 38	5.250
AH 2336	170	180	154	6	M 200 x 3	26	KM 40	5.830
AH 2338	180	190	160	7	TR 210 x 4	26	HM 42 T	6.630
AH 2340	190	200	170	7	TR 220 x 4	30	HM 44 T	7.540
AH 2344	200	220	181	8	TR 240 x 4	30	HM 48 T	13.500
AH 2348	220	240	189	8	TR 260 x 4	30	HM 52 T	15.500
AH 2352	240	260	205	8	TR 290 x 4	30	HM 58 T	19.600
AH 2356	260	280	212	8	TR 310 x 5	30	HM 62 T	21.600

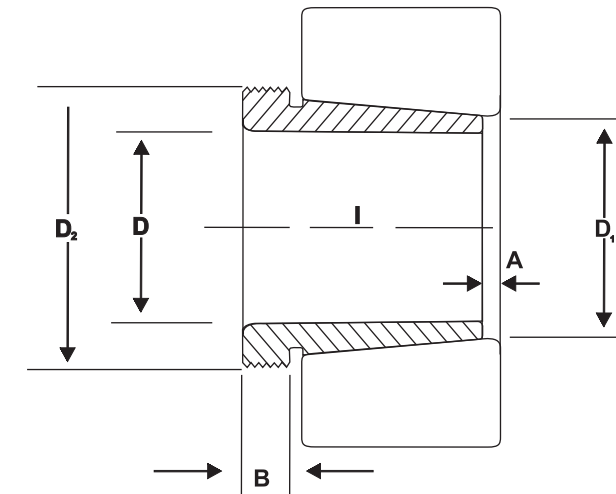
AHX/G Series Also Available



M : Means Metric Thread



TR : Means Taperzoid Thread



### AH 3000 Series

TAPER 1:12

AH30	D mm	D <sub>1</sub> mm	I mm	A mm	D <sub>2</sub> mm	B mm	Suitable Lock Nut	Weight Kg.
AHX 3024	115	120	60	4	M 130 x 2	13	KM 26	0.750
AHX 3026	125	130	67	4	M 140 x 2	14	KM 28	0.930
AHX 3028	135	140	68	5	M 150 x 2	14	KM 30	1.010
AHX 3030	145	150	72	5	M 160 x 3	15	KM 32	1.150
AH 3032	150	160	77	5	M 170 x 3	16	KM 34	2.060
AH 3034	160	170	85	5	M 180 x 3	17	KM 36	2.430
AH 3036	170	180	92	6	M 190 x 3	17	KM 38	2.810
AH 3038	180	190	96	6	TR 205 x 4	18	HML 41 T	3.320
AH 3040	190	200	102	6	TR 215 x 4	19	HML 43 T	3.800
AH 3044	200	220	111	6	TR 235 x 4	20	HML 47 T	7.400
AH 3048	200	240	116	7	TR 260 x 4	21	HML 52 T	8.750
AH 3052	240	260	128	7	TR 280 x 4	23	HML 56 T	10.700
AH 3056	260	280	131	8	TR 300 x 4	24	HML 60 T	12.000
AH 3060	280	300	145	8	TR 320 x 5	26	HML 64 T	14.400
AH 3064	300	320	149	8	TR 345 x 5	27	HML 69 T	16.000
AH 3068	320	340	162	9	TR 365 x 5	28	HML 73 T	19.500
AH 3072	340	360	167	9	TR 385 x 5	30	HML 77 T	21.000
AH 3076	360	380	170	10	TR 410 x 5	31	HML 82 T	23.200
AH 3080	380	400	183	10	TR 430 x 5	33	HML 86 T	27.300
AH 3084	400	420	186	10	TR 450 x 5	34	HML 90 T	
AHX 3088	420	440	194	11	TR 470 x 5	35	HML 94 T	
AHX 3092	440	460	202	11	TR 490 x 5	37	HML 98 T	
AHX 3096	460	480	205	12	TR 520 x 5	38	HML 104 T	
AHX 30/500	480	500	209	12	TR 540 x 5	40	HML 108 T	

AHX/G Series Also Available



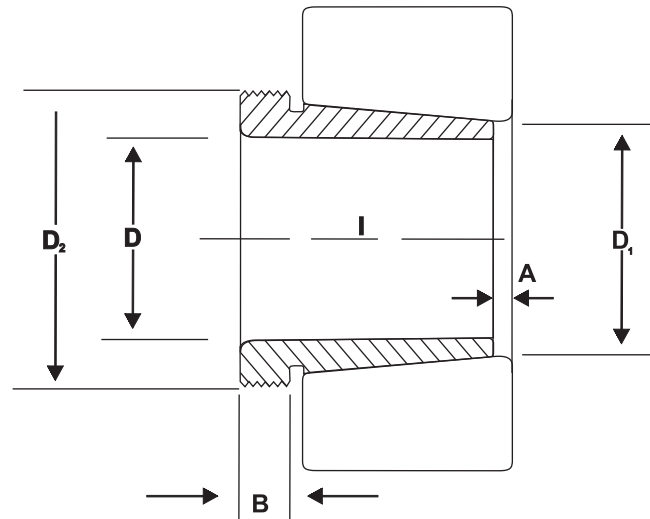
M : Means Metric Thread



TR : Means Taperzoid Thread



## Withdrawal Sleeves



### AH 3100 Series

TAPER 1:12

CODE	D mm	D <sub>1</sub> mm	I mm	A mm	D <sub>2</sub> mm	B mm	Suitable Lock Nut Nut No.	Weight Kg.
AHX 3120	95	100	64	4	M 110 x 2	11	KM 22	0.650
AHX 3122	105	110	68	4	M 120 x 2	11	KM 24	0.760
AHX 3124	115	120	75	4	M 130 x 2	12	KM 26	0.950
AHX 3126	125	130	78	4	M 140 x 2	12	KM 28	1.080
AHX 3128	135	140	83	5	M 150 x 2	14	KM 30	1.280
AHX 3130	145	150	96	5	M 165 x 3	15	KM 33	1.790
AH 3132	150	160	103	5	M 180 x 3	16	KM 36	3.210
AH 3134	160	170	104	5	M 190 x 3	16	KM 38	3.400
AH 3136	170	180	116	6	M 200 x 3	19	KM 40	4.220
AH 3138	180	190	125	6	TR 210 x 4	20	HM 42 T	4.890
AH 3140	190	200	134	6	TR 220 x 4	21	HM 44 T	5.490
AH 3144	200	220	145	6	TR 240 x 4	23	HM 48 T	10.400
AH 3148	220	240	154	7	TR 260 x 4	25	HM 52 T	12.000
AH 3152	240	260	172	7	TR 290 x 4	26	HM 58 T	16.200
AH 3156	260	280	175	8	TR 310 x 5	28	HM 62 T	17.500
AH 3160	280	300	192	8	TR 330 x 5	30	HM 66 T	20.800
AH 3164	300	320	209	8	TR 350 x 5	31	HM 70 T	24.500
AH 3168	320	340	225	9	TR 370 x 5	33	HM 74 T	29.000
AH 3172	340	360	229	9	TR 400 x 5	35	HM 80 T	33.000
AH 3176	360	380	232	10	TR 420 x 5	36	HM 84 T	35.700
AH 3180	380	400	240	10	TR 440 x 5	38	HM 88 T	39.500
AH 3184	400	420	266	10	TR 460 x 5	40	HM 92 T	
AHX 3188	420	440	270	11	TR 480 x 5	42	HM 96 T	
AHX 3192	440	460	285	11	TR 510 x 6	43	HM 102 T	
AHX 3196	460	480	295	12	TR 530 x 6	45	HM 106 T	
AHX 31/500	480	500	313	12	TR 550 x 6	47	HM 110 T	

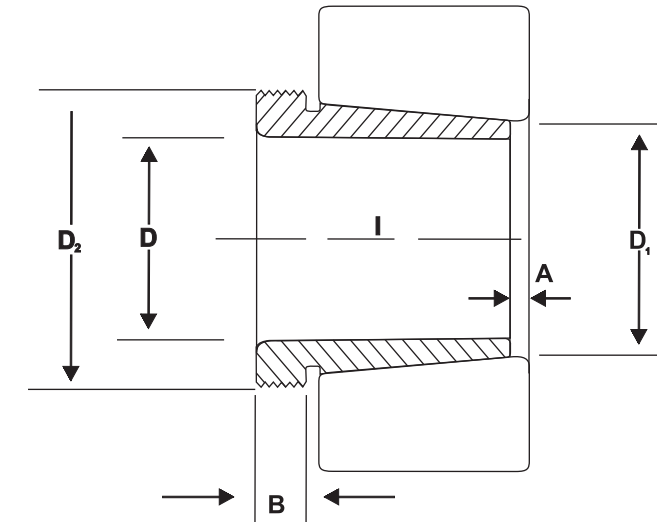
HYD/AHX/G Series Also Available



M : Means Metric Thread



TR : Means Taperzoid Thread



### AH 3200 Series

TAPER 1:12

AH32	D mm	D <sub>1</sub> mm	I mm	A mm	D <sub>2</sub> mm	B mm	Suitable Lock Nut	Weight Kg.
AHX 3218	85	90	63	4	M 100 x 2	10	KM 20	0.576
AH 3220	95	100	73	4	M 110 x 2	11	KM 22	0.894
AHX 3222	105	110	82	4	M 125 x 2	11	KM 25	1.040
AHX 3224	115	120	90	4	M 135 x 2	13	KM 27	1.300
AHX 3226	125	130	98	4	M 145 x 2	15	KM 29	1.580
AHX 3228	135	140	104	5	M 155 x 3	15	KM 31	1.840
AHX 3230	145	150	114	5	M 165 x 3	17	KM 33	2.220
AH 3232	150	160	124	6	M 180 x 3	20	KM 36	4.080
AH 3234	160	170	134	6	M 190 x 3	24	KM 38	4.800
AH 3236	170	180	140	6	M 200 x 3	24	KM 40	5.320
AH 3238	180	190	145	7	TR 210 x 4	25	HM 42 T	5.900
AH 3240	190	200	153	7	TR 220 x 4	25	HM 44 T	6.680
AH 3260	280	300	228	8	TR 330 x 5	34	HM 66 T	26.000
AH 3264	300	320	246	8	TR 350 x 5	36	HM 70 T	30.600
AH 3268	320	340	264	9	TR 370 x 5	38	HM 74 T	35.800
AH 3272	340	360	274	9	TR 400 x 5	40	HM 80 T	41.600
AH 3276	360	380	284	10	TR 420 x 5	42	HM 84 T	46.300
AH 3280	380	410	302	10	TR 440 x 5	44	HM 88 T	52.500
AH 3284	400	420	321	10	TR 460 x 5	46	HM 92 T	
AHX 3288	420	440	330	11	TR 48 x 5	48	HM 96 T	
AHX 3292	440	460	349	11	TR 510 x 5	50	HM 102 T	
AHX 3296	460	480	364	12	TR 530 x 5	52	HM 106 T	
AHX 32/500	480	500	393	12	TR 550 x 6	54	HM 110 T	

HYD/AHX/G Series Also Available



M : Means Metric Thread

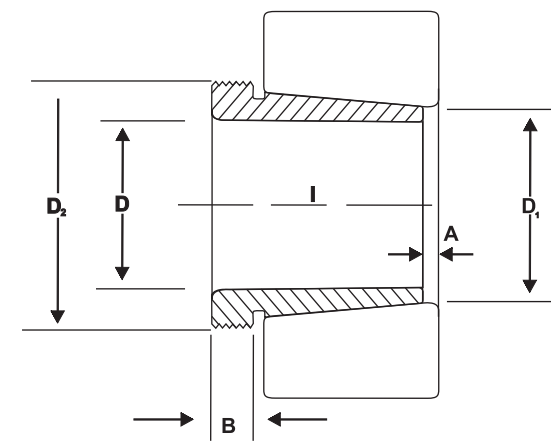


TR : Means Taperzoid Thread





## Withdrawal Sleeves



### AH 24000 Series

TAPER 1:30

CODE	D mm	D <sub>1</sub> mm	I mm	A mm	D <sub>2</sub> mm	B mm	Suitable Locknut Nut No.	Weight Kg.
AH 24020	95	100	62	9	M 105 x 2	12	KM 21	0.650
AH 24022	105	110	73	9	M 115 x 2	13	KM 23	0.650
AH 24024	115	120	73	9	M 125 x 2	13	KM 25	0.650
AH 24026	125	130	83	10	M 135 x 2	14	KM 27	0.840
AH 24028	135	140	83	10	M 145 x 2	14	KM 29	0.910
AH 24030	145	150	90	11	M 155 x 3	15	KM 31	1.040
AH 24032	150	160	95	11	M 170 x 3	15	KM 34	2.330
AH 24034	160	170	106	11	M 180 x 3	16	KM 36	2.800
AH 24036	170	180	116	11	M 190 x 3	16	KM 38	3.100
AH 24038	180	190	118	13	M 200 x 3	18	KM 40	3.500
AH 24040	190	200	127	13	Tr 210 x 4	18	HM 42 T	3.930
AH 24044	200	220	138	14	Tr 230 x 4	20	HM 46 T	8.250
AH 24048	220	240	138	15	Tr 250 x 4	20	HM 50 T	9.000
AH 24052	240	260	162	16	Tr 270 x 4	20	HM 54 T	11.800
AH 24056	260	280	162	17	Tr 290 x 4	22	HM 58 T	12.800
AH 24060	280	300	184	18	Tr 310 x 5	24	HM 62 T	15.500
AH 24064	300	320	184	18	Tr 330 x 5	24	HM 66 T	16.600

### AH 24100 Series

TAPER 1:30

AH 24020	95	100	78	9	M 105 x 2	13	KM 21	
AH 24122	105	110	82	9	M 115 x 2	13	KM 23	0.730
AH 24124	115	120	93	9	M 130 x 2	13	KM 26	1.000
AH 24126	125	130	94	10	M 140 x 2	14	KM 28	1.110
AH 24128	135	140	99	10	M 150 x 2	14	KM 30	1.250
AH 24130	145	150	115	11	M 160 x 3	15	KM 32	1.560
AH 24132	150	160	124	11	M 170 x 3	15	KM 34	3.000
AH 24134	160	170	125	11	M 180 x 3	16	KM 36	3.210
AH 24136	170	180	134	11	M 190 x 3	16	KM 38	3.680
AH 24138	180	190	146	13	Tr 200 x 3	18	KM 40	4.280
AH 24140	190	200	158	13	Tr 210 x 4	18	HM 42 T	5.100
AH 24144	200	220	170	14	Tr 230 x 4	20	HM 46 T	10.200
AH 24148	220	240	180	15	Tr 260 x 4	20	HM 52 T	12.500
AH 24152	240	260	202	16	Tr 280 x 4	22	HM 56 T	15.400
AH 24156	260	280	202	17	Tr 300 x 4	22	HM 60 T	16.300
AH 24160	280	300	224	18	Tr 320 x 5	24	HM 64 T	19.500
AH 24164	300	320	242	18	Tr 340 x 5	24	HM 68 T	

Hyd Series of 24000/24100 also available



M : Means Metric Thread



TR : Means Taperzoid Thread

## Hydraulic Withdrawal Sleeves

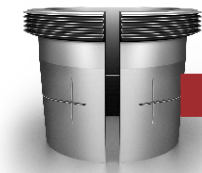
### SERIES (AOH)

Hydraulic Withdrawal Sleeve | AOH comes with the normal sleeves dimensions, Hydraulic Adapter Sleeve | AOH are recommended for shafts or large size sets because they are provided with oil injection gutters, making the assembling and specially the disassembling easier. Hydraulic Adapter Sleeve | AOH is available for shafts from 140 mm on. Custom hydraulic series also available on request.

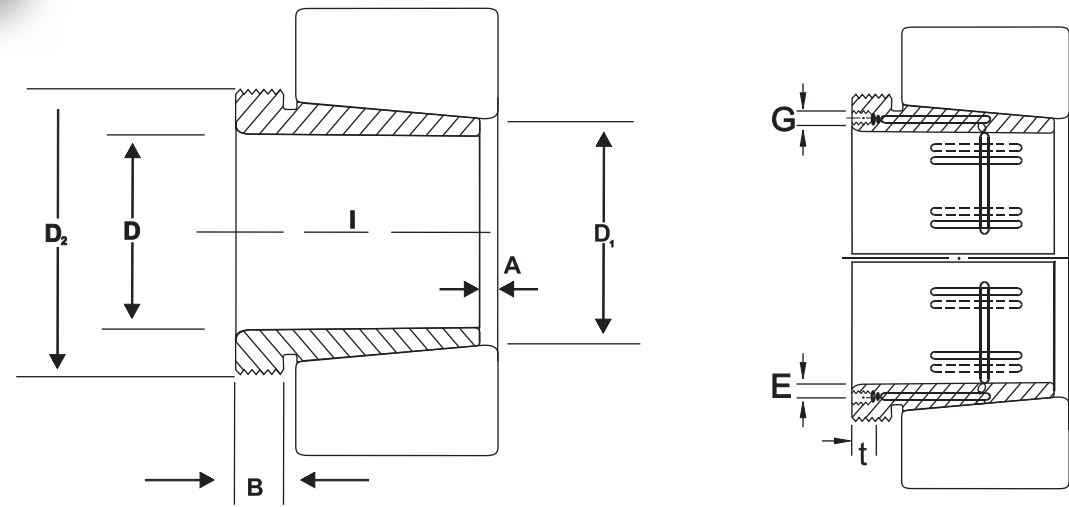


Special & Custom Made Sizes also available

[www.ktkingtiger.com](http://www.ktkingtiger.com) / [www.ktsleeve.in](http://www.ktsleeve.in)



**Hydraulic Withdrawal Sleeves**



**AOH 3000 Series**

TAPER 1:12

AOH 30	D	D <sub>1</sub>	I	A	D <sub>2</sub>	B	G	E	T	Suitable Locknut Nut No.	Weight Kg.
AOH 3032	150	160	77	5	M 170 x 3	16	M6	4	7	KM 34	2.060
AOH 3034	160	170	85	5	M 180 x 3	17	M6	4	7	KM 36	2.430
AOH 3036	170	180	92	6	M 190 x 3	17	M6	4	7	KM 38	2.810
AOH 3038	180	190	96	6	Tr 205 x 4	18	M6	4	7	HML 41 T	3.320
AOH 3040	190	200	102	6	Tr 215 x 4	19	M6	4	7	HML 43 T	3.800
AOH 3044	200	220	117	6	Tr 235 x 4	20	G 1/8	7.5	12	HML 47 T	7.400
AOH 3048	220	240	116	7	Tr 260 x 4	21	G 1/8	8.5	12	HML 52 T	8.750
AOH 3052	240	260	128	7	Tr 280 x 4	23	G 1/8	8.5	12	HML 56 T	10.700
AOH 3056	260	280	131	8	Tr 300 x 4	24	G 1/8	8.5	12	HML 60 T	12.000
AOH 3060	280	300	145	8	Tr 320 x 5	26	G 1/8	8.5	12	HML 64 T	
AOH 3064	300	320	149	8	Tr 345 x 5	27	G 1/8	8.5	12	HML 69 T	
AOH 3068	320	340	162	9	Tr 365 x 5	28	G 1/8	8.5	12	HML 73 T	
AOH 3072	340	360	167	9	Tr 385 x 5	30	G 1/8	8.5	12	HML 77 T	

**AOH 2300 Series**

TAPER 1:12

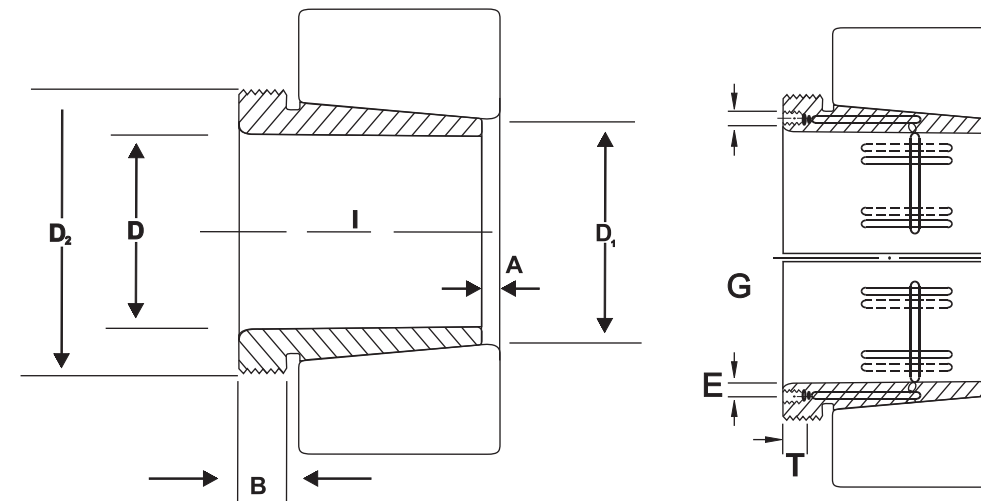
AOH 2300	D	D <sub>1</sub>	I	A	D <sub>2</sub>	B	G	E	T	Suitable Locknut Nut No.	Weight Kg.
AOH 2332	150	160	140	6	M 180 x 3	24	M6	4.5	7	KM 36	4.720
AOH 2334	160	170	146	6	M 190 x 3	24	M6	4.5	7	KM 38	5.250
AOH 2336	170	180	154	6	M 200 x 3	26	M6	4.5	7	KM 40	5.830
AOH 2338	180	190	160	7	Tr 210 x 4	26	M6	4.5	7	HM 42 T	6.630
AOH 2340	190	200	170	7	Tr 220 x 4	30	M6	4.5	7	HM 44 T	7.540
AOH 2344	200	220	181	8	Tr 240 x 4	30	G 1/8	8.5	12	HM 48 T	13.500
AOH 2348	220	240	189	8	Tr 260 x 4	30	G 1/8	8.5	12	HM 52 T	15.500
AOH 2352	240	260	205	8	Tr 290 x 4	30	G 1/8	8.5	12	HM 58 T	19.600
AOH 2356	260	280	212	8	Tr 310 x 5	30	G 1/8	8.5	12	HM 62 T	21.600



M : Means Metric Thread



TR : Means Taperzoid Thread



**AOH 3100 Series**

TAPER 1:12

AOH 31	D	D <sub>1</sub>	I	A	D <sub>2</sub>	B	G	E	T	Suitable Locknut Nut No.	Weight Kg.
AOH 3132	150	160	103	5	M 180 x 3	16	M6	4.5	7	KM 36	3.210
AOH 3134	160	170	104	5	M 190 x 3	16	M6	4.5	7	KM 38	3.400
AOH 3136	170	180	116	6	Tr 200 x 3	19	M6	4.5	7	KM 40	4.220
AOH 3138	180	190	125	6	Tr 210 x 4	20	M6	4.5	7	HM 42 T	4.890
AOH 3140	190	200	134	6	Tr 220 x 4	21	M6	4.5	7	HM 44 T	5.490
AOH 3144	200	220	145	6	Tr 240 x 4	23	G 1/8	8.5	12	HM 48 T	10.400
AOH 3148	220	240	154	7	Tr 260 x 4	25	G 1/8	8.5	12	HM 52 T	12.000
AOH 3152	240	260	172	7	Tr 290 x 4	26	G 1/8	8.5	12	HM 58 T	16.200
AOH 3156	260	280	175	8	Tr 310 x 5	28	G 1/8	8.5	12	HM 62 T	17.500

**AOH 3200 Series**

TAPER 1:12

AOH 3200	D	D <sub>1</sub>	I	A	D <sub>2</sub>	B	G	E	T	Suitable Locknut Nut No.	Weight Kg.
AOH 3232	150	160	124	6	M 180 x 3	20	M6	4.5	7	KM 36	4.080
AOH 3234	160	170	134	6	M 190 x 3	24	M6	4.5	7	KM 38	4.800
AOH 3236	170	180	140	6	M 200 x 3	24	M6	4.5	7	KM 40	5.320
AOH 3238	180	190	145	7	Tr 210 x 4	25	M6	4.5	7	HM 42 T	5.900
AOH 3240	190	200	153	7	Tr 220 x 4	25	M6	4.5	7	HM 44 T	6.680



M : Means Metric Thread



TR : Means Taperzoid Thread

# Lock Nut

## Locknut | KM, KML, HM, HM 30, HM 31, HML

Lock nuts are used to locate bearings and other components onto a shaft or adapter sleeve. They are also used for mounting bearings on tapered shaft seats and dismounting bearings from withdrawal sleeves. Lock nuts have to be secured to prevent unintentional loosening. This is done, either by a locking device that engages a key way in the shaft or key slot in the adapter sleeve, or by a locking mechanism integrated in the nut. Lock nuts with an integrated locking mechanism reduce the cost of the shaft as no key way is required. Installation is also quicker and easier because no separate locking device is necessary. However, the loosening torque of these lock nuts requires more attention.

## Precision Lock Nuts | N & AN, KMT, ZM

High precision required machines and equipment need Precision Nuts | KMT, KMTA for bearings fixation like in lathes, grinding lathes and mills. These nuts have three brass pins to lock them on the shaft, divided in angles, which are pressed against the shaft by screws. While, Precision Nuts pins inclination are equal to the thread angle, which are not exposed to axial loads, making the nut tightening at the exact grip position possible. Precision lock nuts are adjustable with locking pins and can enable the nut to be accurately positioned at right angles to the shaft or they can be used to adjust for inaccuracies or deviations of other components which are to be located on the shaft.

KM 0 to KM 40

HM 42T to HM 110T

HM 3044 to HM 30/500

HM 3144 to HM 31/500

N 00 to N 084

AN 15 to AN 30

Special Series Lock Nut  
also available on request)

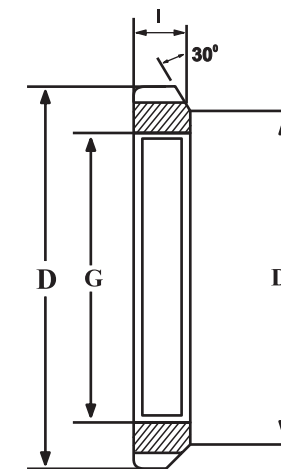
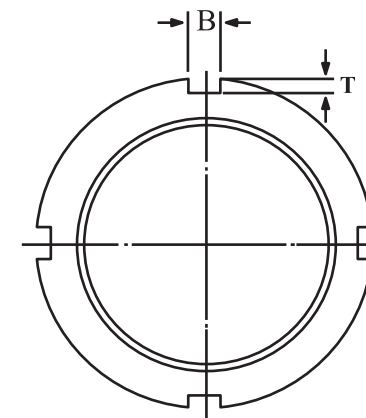


Special & Custom Made Sizes also available

[www.ktkingtiger.com](http://www.ktkingtiger.com) / [www.ktsleeve.in](http://www.ktsleeve.in)

## KM Series

KM	G Thread	D mm	D <sub>1</sub> mm	I mm	B mm	T mm	Weight Kg
KM 00	M 10 x 0.75	18	13.5	4	3	2	0.005
KM 01	M 12 x 1.0	22	17	4	3	2	0.007
KM 02	M 15 x 1.0	25	21	5	4	2	0.010
KM 03	M 17 x 1.0	28	24	5	4	2	0.013
KM 04	M 20 x 1.0	32	26	6	4	2	0.019
KM 05	M 25 x 1.5	38	32	7	5	2	0.025
KM 06	M 30 x 1.5	45	38	7	5	2	0.043
KM 07	M 35 x 1.5	52	44	8	5	2	0.053
KM 08	M 40 x 1.5	58	50	9	6	2.5	0.085
KM 09	M 45 x 1.5	65	56	10	6	2.5	0.119
KM 10	M 50 x 1.5	70	61	11	6	2.5	0.148
KM 11	M 55 x 2.0	75	67	11	7	3	0.158
KM 12	M 60 x 2.0	80	73	11	7	3	0.174
KM 13	M 65 x 2.0	85	79	12	7	3	0.203
KM 14	M 70 x 2.0	92	85	12	8	3.5	0.242
KM 15	M 75 x 2.0	98	90	13	8	3.5	0.287
KM 16	M 80 x 2.0	105	95	15	8	3.5	0.397
KM 17	M 85 x 2.0	110	102	16	8	3.5	0.451
KM 18	M 90 x 2.0	120	108	16	10	4	0.556
KM 19	M 95 x 2.0	125	113	17	10	4	0.658
KM 20	M100 x 2.0	130	120	18	10	4	0.698
KM 21	M105 x 2.0	140	126	18	12	5	0.845
KM 22	M110 x 2.0	145	133	19	12	5	0.965
KM 23	M115 x 2.0	150	137	19	12	5	1.010
KM 24	M120 x 2.0	155	138	20	12	5	1.080
KM 25	M125 x 2.0	160	148	21	12	5	1.190
KM 26	M130 x 2.0	165	149	21	12	5	1.250
KM 27	M135 x 2.0	175	160	22	14	6	1.550
KM 28	M140 x 2.0	180	160	22	14	6	1.560
KM 29	M145 x 2.0	190	171	24	14	6	2.000
KM 30	M150 x 2.0	195	171	24	14	6	2.030
KM 31	M155 x 3.0	200	182	25	16	7	2.210
KM 32	M160 x 3.0	210	182	25	16	7	2.590
KM 33	M165 x 3.0	210	193	26	16	7	2.430
KM 34	M170 x 3.0	220	193	26	16	7	2.800
KM 36	M180 x 3.0	230	203	27	18	8	3.070
KM 38	M190 x 3.0	240	214	28	18	8	3.390
KM 40	M200 x 3.0	250	226	29	18	8	3.690



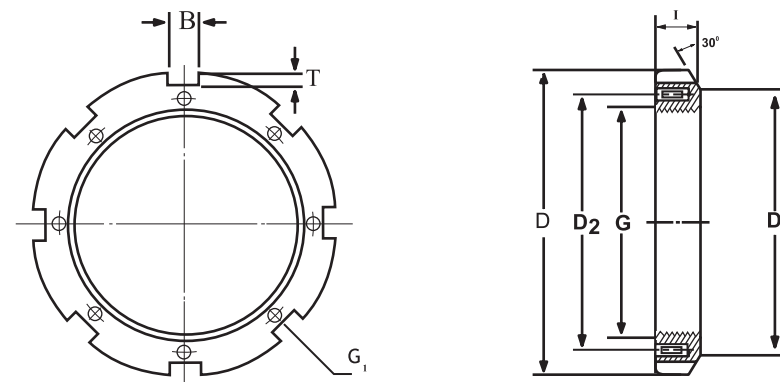
## KML Series

KML	G Thread	D mm	D <sub>1</sub> mm	I mm	B mm	T mm	Weight Kg
KML 24	M120 x 2.0	145	135	20	12	5	0.780
KML 26	M130 x 2.0	155	145	21	12	5	0.880
KML 28	M140 x 2.0	165	155	22	12	5	0.990
KML 30	M150 x 2.0	180	170	24	14	5	1.380
KML 32	M160 x 3.0	190	180	25	14	5	1.560
KML 34	M170 x 3.0	200	190	26	16	5	1.720
KML 36	M180 x 3.0	210	200	27	16	5	1.950
KML 38	M190 x 3.0	220	210	28	16	5	2.080
KML 40	M200 x 3.0	240	222	29	18	8	2.980





Locknut



### HM 3000 Series

HM 30	G	D	D <sub>1</sub>	B	T	I	D <sub>2</sub>	G <sub>1</sub>	Weight
	Thread	mm	mm	mm	mm	mm	mm	Thread	kg
HM 3044	Tr 220 x 4	260	242	20	9	30	229	M 6 x 12	3.090
HM 3048	Tr 240 x 4	290	270	20	10	34	253	M 8 x 16	5.160
HM 3052	Tr 260 x 4	310	290	20	10	34	273	M 8 x 16	5.670
HM 3056	Tr 280 x 4	330	310	24	10	38	293	M 8 x 16	6.780
HM 3060	Tr 300 x 4	360	336	24	12	42	316	M 8 x 16	9.620
HM 3064	Tr 320 x 5	380	356	24	12	42	336	M 8 x 16	9.940
HM 3068	Tr 340 x 5	400	376	24	12	45	356	M 8 x 16	1.700
HM 3072	Tr 360 x 5	420	394	28	13	45	375	M 8 x 16	12.000
HM 3076	Tr 380 x 5	450	422	28	14	48	399	M 10 x 20	14.900
HM 3080	Tr 400 x 5	470	442	28	14	52	419	M10 x 20	16.900
HM 3084	Tr 420 x 5	490	462	32	14	52	439	M10 x 20	17.400
HM 3088	Tr 440 x 5	520	490	32	15	60	462	M12 x 25	26.200
HM 3092	Tr 460 x 5	540	510	32	15	60	483	M12 x 25	29.600
HM 3096	Tr 480 x 5	560	530	36	15	60	503	M12 x 25	28.300
HM 30/500	Tr 500 x 5	580	550	36	15	68	523	M12 x 25	33.600

### HM 3100 Series

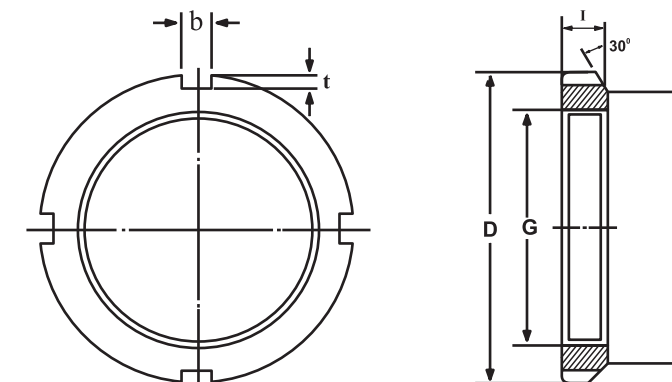
HM 31	G	D	D <sub>1</sub>	B	T	I	D <sub>2</sub>	G <sub>1</sub>	Weight
	Thread	mm	mm	mm	mm	mm	mm	Threads	Kg.
HM 3144	Tr 220 x 4	280	250	20	10	32	238	M 8x16	5.200
HM 3148	Tr 240 x 4	300	270	20	10	34	258	M 8x16	5.950
HM 3152	Tr 260 x 4	330	300	24	12	36	281	M 10x20	8.050
HM 3156	Tr 280 x 4	350	320	24	12	38	301	M 10x20	9.050
HM 3160	Tr 300 x 4	380	340	24	12	40	326	M 10x20	11.800
HM 3164	Tr 320 x 5	400	360	24	12	42	345	M 10x20	13.100
HM 3168	Tr 340 x 5	440	400	28	15	55	372	M 12x20	23.100
HM 3172	Tr 360 x 5	460	420	28	15	58	392	M 12x25	25.100
HM 3176	Tr 380 x 5	490	440	32	18	60	414	M 12x25	30.900
HM 3180	Tr 400 x 5	520	460	32	18	62	439	M 16x25	36.900
HM 3184	Tr 420 x 5	540	490	32	18	70	459	M 16x30	43.500
HM 3188	Tr 440 x 5	560	510	36	20	70	477	M 16x30	45.300
HM 3192	Tr 460 x 5	580	540	36	20	75	497	M 16x30	50.400
HM 3196	Tr 480 x 5	620	560	36	20	75	527	M 16x30	62.200
HM 31/500	Tr 500 x 5	630	580	40	23	80	539	M 16x30	63.300



M : Means Metric Thread



TR : Means Taperzoid Thread



### HM Series

HM	G	D	D <sub>1</sub>	I	B	T	D <sub>2</sub>	G <sub>1</sub>	Weight
	Thread	mm	mm	mm	mm	mm		Thread	Kg
HM 42T	Tr 210 x 4	238	270	30	20	10	250	212	4.75
HM 44T	Tr 220 x 4	250	280	32	20	10	260	222	5.35
HM 48T	Tr 240 x 4	270	300	34	20	10	280	242	6.20
HM 52T	Tr 260 x 4	300	330	36	24	12	306	262	8.55
HM 58T	Tr 290 x 4	330	270	40	24	12	346	292	11.8
HM 62T	Tr 310 x 4	350	390	42	24	12	366	312.5	13.4
HM 66T	Tr 330 x 4	380	420	52	28	15	390	332.5	20.4
HM 70T	Tr 350 x 4	410	450	55	28	15	420	352.5	25.2
HM 74T	Tr 370 x 4	430	470	58	28	15	440	372.5	28.2
HM 80T	Tr 400 x 4	470	520	62	32	18	484	402.5	40.0
HM 84T	Tr 420 x 5	490	540	70	32	18	504	422.5	46.9
HM 88T	Tr 440 x 5	510	560	70	36	20	520	442.5	48.5
HM 92T	Tr 460 x 5	540	580	75	36	20	540	462.5	55.0
HM 96T	Tr 480 x 5	560	620	75	36	20	580	482.5	67.0
HM 102T	Tr 510 x 5	590	650	80	40	23	604	513	69.0
HM 106T	Tr 530 x 5	610	670	80	40	23	624	533	78.0
HM 110T	Tr 550 x 5	640	700	80	40	23	654	553	92.5

### HML Series

HML 41T	Tr 205 x 4	232	250	30	18	8	234	207	3.43
HML 43T	Tr 215 x 4	242	260	30	20	9	242	217	3.72
HML 47T	Tr 235 x 4	262	280	30	20	9	262	237	4.60
HML 52T	Tr 260 x 4	290	310	30	20	10	290	262	5.80
HML 56T	Tr 280 x 4	310	330	30	24	10	310	282	6.72
HML 60T	Tr 300 x 4	336	360	31	24	12	336	302	9.60
HML 64T	Tr 320 x 5	356	380	32	24	12	356	322.5	10.3
HML 69T	Tr 345 x 5	384	410	33	28	13	384	347.5	11.5
HML 73T	Tr 365 x 5	404	430	45	28	13	404	367.5	14.2
HML 77T	Tr 385 x 5	422	450	37	28	14	422	387.5	15.0
HML 82T	Tr 410 x 5	452	480	39	32	14	452	412.5	19.0
HML 86T	Tr 430 x 5	472	500	41	32	14	472	432.5	19.8
HML 90T	Tr 450 x 5	490	520	41	32	15	490	452.5	23.8
HML 94T	Tr 470 x 5	510	540	43	32	15	510	472.5	25.0
HML 98T	Tr 490 x 5	540	570	45	36	15	550	492.5	34.0
HML 104T	Tr 520 x 5	570	600	47	36	15	570	523	37.0
HML 108T	Tr 540 x 5	590	620	49	40	20	590	543	43.5



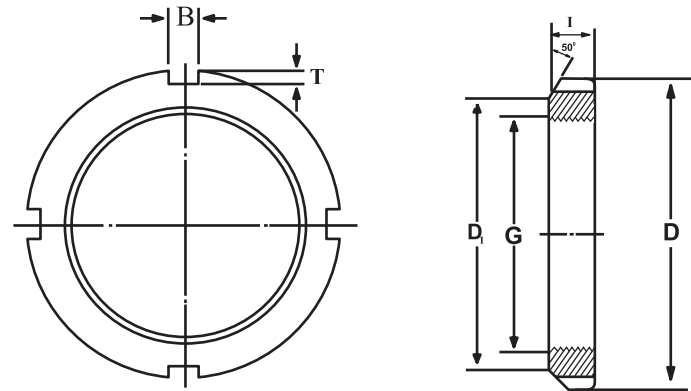
M : Means Metric Thread



TR : Means Taperzoid Thread




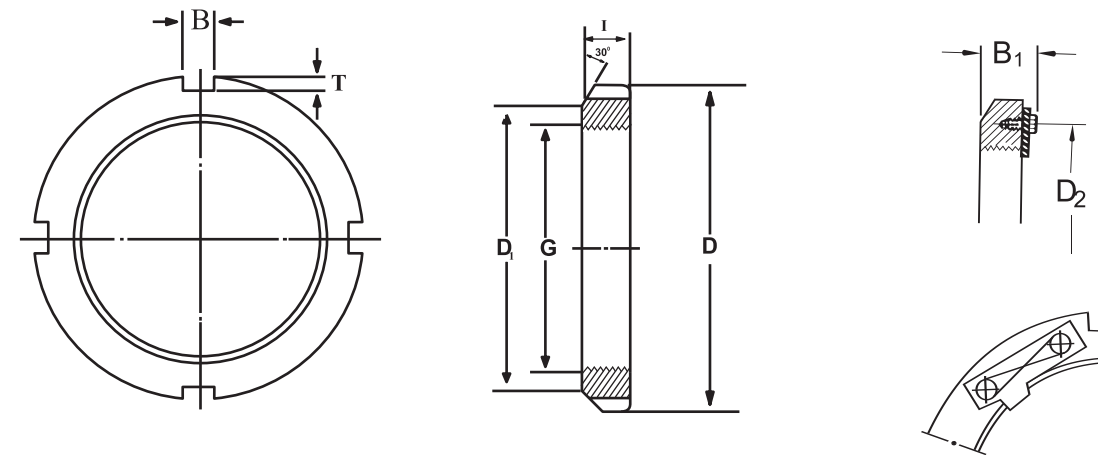
## Precision Locknut



### N Series

N	G	No. of threads per in	D	D <sub>1</sub>	I	B	T
N 00	0.391	32	0.625	0.755	0.229	0.120	0.073
N 01	0.469	32	0.719	0.880	0.323	0.120	0.073
N 02	0.586	32	0.813	1.005	0.323	0.120	0.104
N 03	0.664	32	0.938	1.130	0.354	0.120	0.104
N 04	0.781	32	1.125	1.380	0.385	0.178	0.104
N 05	0.969	32	1.291	1.568	0.416	0.178	0.104
N 06	1.173	18	1.500	1.755	0.416	0.178	0.104
N 07	1.376	18	1.813	2.068	0.448	0.178	0.104
N 08	1.563	18	2.000	2.255	0.448	0.240	0.104
N 09	1.767	18	2.281	2.536	0.448	0.240	0.104
N 10	1.967	18	2.438	2.693	0.510	0.240	0.104
N 11	2.157	18	2.656	2.974	0.510	0.240	0.135
N 12	2.360	18	2.844	3.161	0.541	0.240	0.135
N 13	2.548	18	3.063	3.380	0.573	0.240	0.135
N 14	2.751	18	3.313	3.630	0.573	0.240	0.135
AN 15	2.933	12	3.563	3.880	0.604	0.360	0.135
AN 16	3.137	12	3.844	4.161	0.604	0.360	0.135
AN 17	3.340	12	4.031	4.411	0.635	0.360	0.166
AN 18	3.527	12	4.281	4.661	0.698	0.360	0.166
AN 19	3.730	12	4.563	4.943	0.729	0.360	0.166
AN 20	3.918	12	4.813	5.193	0.760	0.360	0.166
AN 21	4.122	12	5.000	5.443	0.760	0.485	0.198
AN 22	4.325	12	5.281	5.724	0.791	0.485	0.198
AN 24	4.716	12	5.688	6.130	0.823	0.485	0.198
AN 26	5.106	12	6.188	6.755	0.885	0.610	0.260
AN 28	5.497	12	6.531	7.099	0.948	0.610	0.260
AN 30	5.888	12	7.063	7.693	0.979	0.610	0.291

Threads: American National Form NS Class 3   
All Sizes are in inches



### N Series

#### Lock nuts N 022-N 044

#### Lock plates P 48-P 800

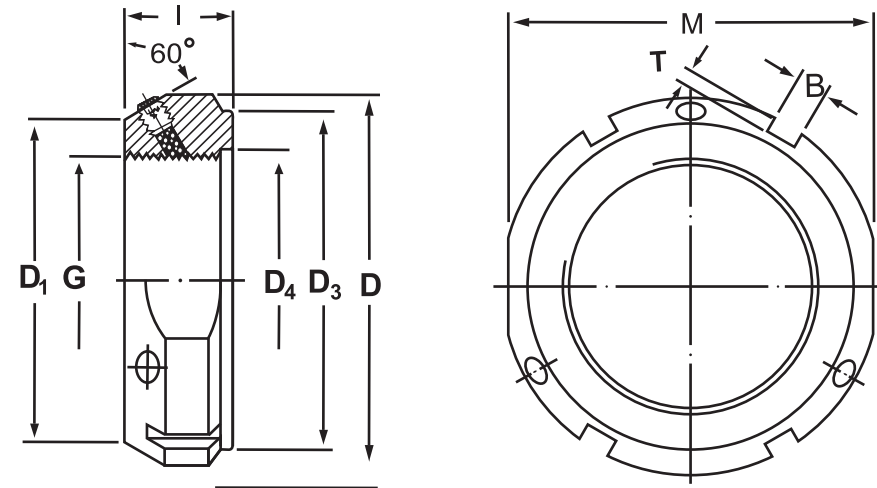
N	G	No. Of threads per in	D	D <sub>1</sub>	D <sub>2</sub>	I	B	T	B <sub>1</sub>	Hexagon Headed Screw
N 022	4.325	12	4.901	-	5.318	0.791	0.485	0.198	-	-
N 024	4.716	12	5.313	-	5.693	0.823	0.485	0.198	-	-
N 026	5.106	12	5.703	-	6.130	0.885	0.485	0.198	-	-
N 028	5.497	12	6.109	-	6.505	0.948	0.485	0.198	-	-
N 030	5.888	12	6.688	-	7.130	0.979	0.610	0.229	-	-
N 032	6.284	8	7.094	-	7.505	1.041	0.610	0.229	-	-
N 034	6.659	8	7.484	-	7.880	1.073	0.610	0.229	-	-
N 036	7.066	8	7.875	-	8.255	1.104	0.610	0.229	-	-
N 038	7.472	8	8.266	-	8.693	1.135	0.610	0.229	-	-
N 040	7.847	8	8.750	-	9.443	1.198	0.735	0.323	-	-
N 044	8.628	8	9.531	-	10.255	1.260	0.860	0.385	-	-
N 048	9.442	6	10.625	10.423	11.443	1.354	0.860	0.385	1.698	5/16-18x5/8
N 052	10.192	6	11.406	11.298	12.193	1.416	0.860	0.385	1.760	5/16-18x5/8
N 056	11.004	6	12.219	12.110	13.005	1.510	0.980	0.385	1.854	5/16-18x5/8
N 060	11.785	6	13.219	13.110	14.193	1.573	0.980	0.510	1.948	3/8-16x3/4
N 064	12.562	6	14.031	13.860	15.005	1.666	0.980	0.510	2.041	3/8-16x3/4
N 068	13.339	5	14813	14.735	15.755	1.791	0.980	0.510	2.166	3/8-16x3/4
N 072	14.170	5	15.500	15.485	16.505	1.791	1.230	0.510	2.166	3/8-16x3/4
N 076	14.957	5	16.625	16.485	17.755	1.916	1.230	0.604	2.353	1/2-13x7/8
N 080	15.745	5	17.438	17.235	18.505	2.073	1.230	0.604	2.500	1/2-13x7/8
N 084	16.532	5	18.188	18.110	19.318	2.073	1.355	0.604	2.500	1/2-13x7/8
N 088	17.319	5	19.250	19.110	20.505	2.385	1.355	0.604	2.906	5/8-11x1
N 092	18.107	5	20.688	19.985	21.255	2.385	1.355	0.604	2.906	5/8-11x1
N 096	18.894	5	20.750	20.673	22.068	2.385	1.480	0.604	2.937	5/8-11x1/4
N 500	19.682	5	21.688	21.610	22.818	2.703	1.480	0.604	3.250	5/8-11x1/4
N 530	20.867	4	23.250	23.360	24.818	2.703	1.605	0.823	3.250	5/8-11x1/4
N 560	22.048	4	24.000	24.110	25.568	2.953	1.605	0.823	3.500	5/8-11x1/4
N 600	23.623	4	26.000	25.923	27.568	2.953	1.605	0.823	3.500	5/8-11x1/4
N 630	24.804	4	27.125	27.235	28.755	2.953	1.855	0.823	3.500	5/8-11x1/4
N 670	26.379	4	29.125	28.985	30.693	3.140	1.855	0.823	3.687	5/8-11x1/4
N 710	27.961	3	30.688	30.610	32.693	3.578	1.980	1.010	4.125	5/8-11x1/4
N 750	29.536	3	32.313	32.235	34.255	3.578	2.230	1.010	4.156	5/8-11x1/4
N 800	31.504	3	34.250	34.610	36.255	3.578	2.230	1.010	4.156	5/8-11x1/4

Threads: American National Form NS Class 3 

Threads: Acme Class 3G, General Purpose  ≥ 68

All Sizes are in inches

## Precision Locknut

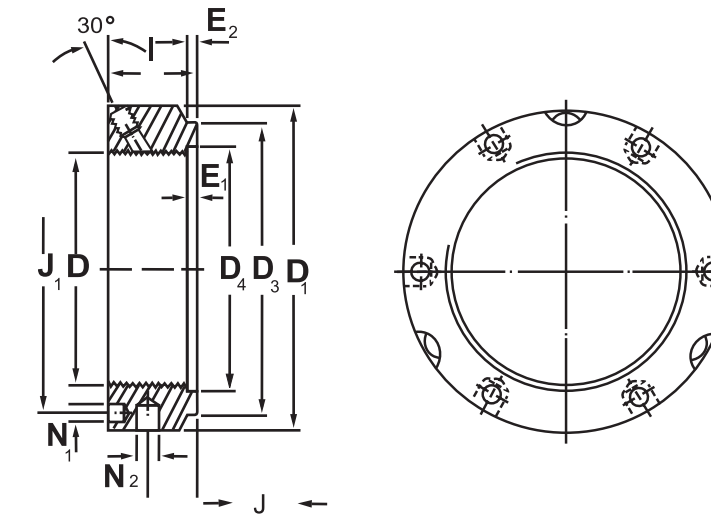


### KMT Series

KMT	D Thread	D <sub>1</sub> mm	D <sub>2</sub> mm	I mm	B mm	T mm	D <sub>3</sub> mm	D <sub>4</sub> mm	M	Grub Screws Size	Tight ening torque max.	Weight Mass
KMT 0	M 10 x 0.75	21	28	14	4	2	23	11	24	M 5	4.5	0.045
KMT 1	M 12 x 1.0	23	30	14	4	2	25	13	27	M 5	4.5	0.050
KMT 2	M 15 x 1.0	26	33	16	4	2	28	16	30	M 5	4.5	0.075
KMT 3	M 17 x 1.0	29	37	18	5	2	33	18	34	M 6	8	0.10
KMT 4	M 20 x 1.0	32	40	18	5	2	35	21	36	M 6	8	0.11
KMT 5	M 25 x 1.5	36	44	20	5	2	39	26	41	M 6	8	0.13
KMT 6	M 30 x 1.5	41	49	20	5	2	44	32	46	M 6	8	0.16
KMT 7	M 35 x 1.5	46	54	22	5	2	49	38	50	M 6	8	0.19
KMT 8	M 40 x 1.5	54	65	22	6	2.5	59	42	60	M 8	18	0.30
KMT 9	M 45 x 1.5	60	70	22	6	2.5	64	48	65	M 8	18	0.33
KMT 10	M 50 x 1.5	64	75	25	7	3	68	52	70	M 8	18	0.40
KMT 11	M 55 x 2.0	74	85	25	7	3	78	58	80	M 8	18	0.54
KMT 12	M 60 x 2.0	78	90	26	8	3.5	82	62	85	M 8	18	0.61
KMT 13	M 65 x 2.0	83	95	28	8	3.5	87	68	90	M 8	18	0.71
KMT 14	M 70 x 2.0	88	100	28	8	3.5	92	72	95	M 8	18	0.75
KMT 15	M 75 x 2.0	93	105	28	8	3.5	97	77	100	M 8	18	0.80
KMT 16	M 80 x 2.0	98	110	32	8	3.5	100	83	-	M 8	18	0.90
KMT 17	M 85 x 2.0	107	120	32	10	4	110	88	-	M 10	35	1.15
KMT 18	M 90 x 2.0	112	125	32	10	4	115	93	-	M 10	35	1.20
KMT 19	M 95 x 2.0	117	130	32	10	4	120	98	-	M 10	35	1.25
KMT 20	M 100 x 2.0	122	135	32	10	4	125	103	-	M 10	35	1.30
KMT 22	M 110 x 2.0	132	145	32	10	4	134	112	-	M 10	35	1.45
KMT 24	M 120 x 2.0	142	155	32	10	4	144	122	-	M 10	35	1.60
KMT 26	M 130 x 2.0	152	165	32	12	5	154	132	-	M 10	35	1.70
KMT 28	M 140 x 2.0	162	175	32	14	6	164	142	-	M 10	35	1.80
KMT 30	M 150 x 2.0	172	185	32	14	6	174	152	-	M 10	35	1.95
KMT 32	M 160 x 3.0	182	195	32	14	6	184	162	-	M 10	35	2.10
KMT 34	M 170 x 3.0	192	205	32	14	6	192	172	-	M 10	35	2.20
KMT 36	M 180 x 3.0	202	215	32	16	7	204	182	-	M 10	35	2.30
KMT 38	M 190 x 3.0	212	225	32	16	7	214	192	-	M 10	35	2.40
KMT 40	M 200 x 3.0	222	235	32	18	8	224	202	-	M 10	35	2.50



M : Means Metric Thread



### KMTA SERIES

KMTA	D Thread	D <sub>1</sub> mm	I mm	D <sub>2</sub> mm	D <sub>3</sub> mm	J mm	J <sub>1</sub> mm	N mm	N <sub>1</sub> mm	E mm	E <sub>1</sub> mm	Grub Screws Size
KMTA 5	M 25 x 1.5	42	20	35	26	32.5	11	4.3	4	2	2	M 6
KMTA 6	M 30 x 1.5	48	20	40	32	40.5	11	4.3	5	2	2	M 6
KMTA 7	M 35 x 1.5	53	20	47	38	45.5	11	4.3	5	3	3	M 6
KMTA 8	M 40 x 1.5	58	22	52	42	50.5	12	4.3	5	3	3	M 6
KMTA 9	M 45 x 1.5	68	22	58	48	58	12	4.3	6	3	3	M 6
KMTA 10	M 50 x 1.5	70	24	63	52	61.5	13	4.3	6	4	4	M 6
KMTA 11	M 55 x 1.5	75	24	70	58	66.5	13	4.3	6	4	4	M 6
KMTA 12	M 60 x 1.5	84	24	75	62	74.5	13	5.3	6	4	4	M 6
KMTA 13	M 65 x 1.5	88	25	80	68	78.5	13	5.3	6	4	4	M 6
KMTA 14	M 70 x 1.5	95	26	86	72	85	14	5.3	8	4	4	M 8
KMTA 15	M 75 x 1.5	100	26	91	77	88	13	6.4	8	4	4	M 8
KMTA 16	M 80 x 2	110	30	97	83	95	16	6.4	8	5	4	M 8
KMTA 17	M 85 x 2	115	32	102	88	100	17	6.4	8	5	4	M 10
KMTA 18	M 90 x 2	120	32	110	93	108	17	6.4	8	5	5	M 10
KMTA 19	M 95 x 2	125	32	114	98	113	17	6.4	8	5	5	M 10
KMTA 20	M 100x 2	130	32	120	103	118	17.5	6.4	8	5	5	M 10
KMTA 22	M 110x 2	140	32	132	112	128	17	6.4	8	5	5	M 10
KMTA 24	M 120x 2	155	32	142	122	140	17	6.4	8	5	5	M 10
KMTA 26	M 130x 3	165	32	156	132	153	17	6.4	8	5	5	M 10
KMTA 28	M 140x 3	180	32	166	142	165	17	6.4	10	5	5	M 10
KMTA 30	M 150x 3	190	32	180	152	175	17	6.4	10	5	5	M 10
KMTA 32	M 160x 3	205	32	190	162	185	17	8.4	10	5	5	M 10
KMTA 34	M 170x 3	215	32	205	172	195	17	8.4	10	5	5	M 10
KMTA 36	M 180x 3	230	32	215	182	210	17	8.4	10	5	5	M 10
KMTA 38	M 190x 3	240	32	225	192	224	17	8.4	10	5	5	M 10
KMTA 40	M 200x 3	245	32	237	202	229	17	8.4	10	5	5	M 10



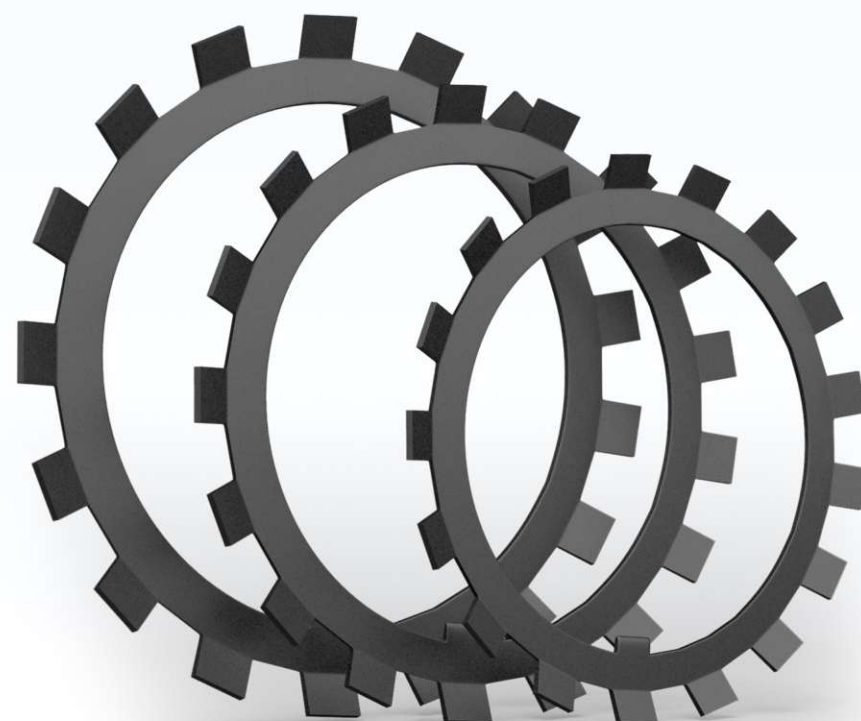
M : Means Metric Thread



# Lock Washers

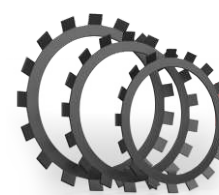
SERIES & RANGE (H & HE)  
 MB 00 to MB 56 • MBL 24 to MBL 40  
 AW Washer also available on request

Lock washers, locking clips and locking plates are simple, stable and reliable fastening elements which engage a keyway in the shaft or key slot in the adapter sleeve. The washer locks the nut in position when one of the washer tabs (tang) is bent into one of the slots on the nut. Locking clips and locking plates are attached to the nut by bolts. A locking clip consists of the clip, a hexagonal head bolt. A locking plate consists of the plate, two hexagonal head bolts and a wire. This is an accessory of the sleeve, but with own application. Its function is to lock the nut to avoid its loose from the sleeve or its own shaft.



Special & Custom Made Sizes also available

[www.ktkingtiger.com](http://www.ktkingtiger.com) / [www.ktsleeve.in](http://www.ktsleeve.in)

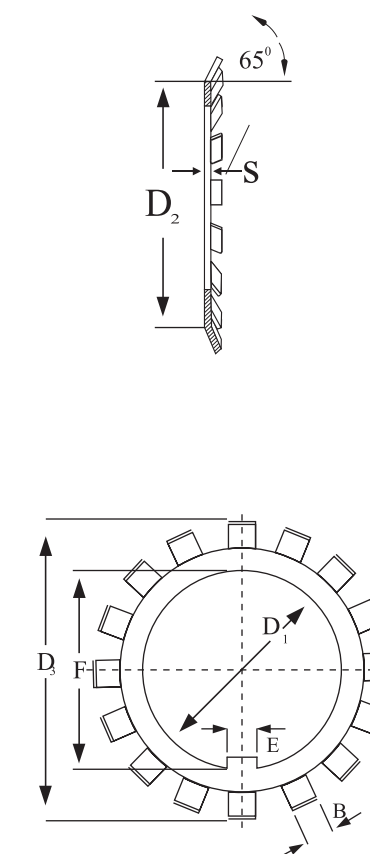


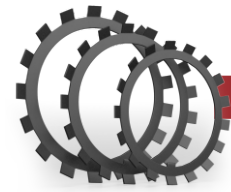
Lock Washer



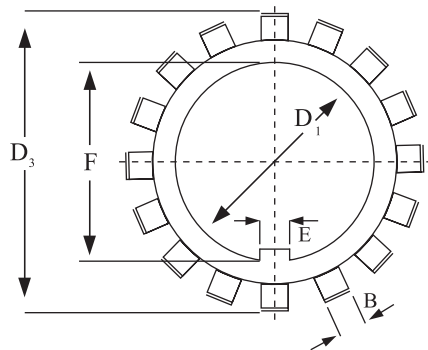
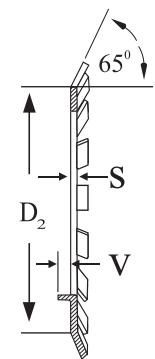
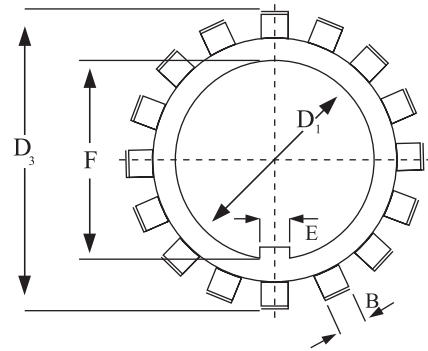
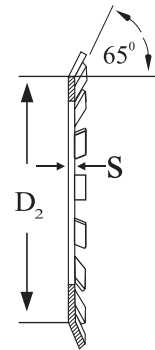
## MB SERIES

MB	D mm	D <sub>1</sub> mm	D <sub>2</sub> mm	S mm	E mm	B mm	F mm
MB 00	10	13.5	21	1	3	3	8.5
MB 01	12	17	25	1	3	3	10.5
MB 02	15	21	28	1	4	4	13.5
MB 03	17	24	32	1	4	4	15.5
MB 04	20	26	36	1	4	4	18.5
MB 05	25	32	42	1.25	5	5	23
MB 06	30	38	49	1.25	5	5	27.5
MB 07	35	44	57	1.25	6	5	32.5
MB 08	40	50	62	1.25	6	6	37.5
MB 09	45	56	69	1.25	6	6	42.5
MB 10	50	61	74	1.25	6	6	47.5
MB 11	55	67	81	1.5	8	7	52.5
MB 12	60	73	86	1.5	8	7	57.5
MB 13	65	79	92	1.5	8	7	62.5
MB 14	70	85	98	1.5	8	8	66.5
MB 15	75	90	104	1.5	8	8	71.5
MB 16	80	95	112	1.75	10	8	76.5
MB 17	85	102	119	1.75	10	8	81.5
MB 18	90	108	126	1.75	10	10	86.5
MB 19	95	113	133	1.75	10	10	91.5
MB 20	100	120	142	1.75	12	10	96.5
MB 21	105	126	145	1.75	12	12	100.5
MB 22	110	133	154	1.75	12	12	105.5
MB 23	115	137	159	2	12	12	110.5
MB 24	120	138	164	2	14	12	115
MB 25	125	148	170	2	14	12	120
MB 26	130	149	175	2	14	12	125
MB 27	135	160	185	2	14	14	130
MB 28	140	160	192	2	16	14	135
MB 29	145	171	202	2	16	14	140
MB 30	150	171	205	2	16	14	145
MB 31	155	182	212	2.5	16	16	147.5
MB 32	160	182	217	2.5	18	16	154
MB 33	165	193	222	2.5	18	16	157.5
MB 34	170	193	232	2.5	18	16	164
MB 36	180	203	242	2.5	20	18	174
MB 38	190	214	252	2.5	20	18	184
MB 40	200	226	262	2.5	20	18	194
MB 44	220	250	292	3.0	24	20	213
MB 48	240	270	312	3.0	24	20	233
MB 52	260	300	342	3.0	28	24	253
MB 56	280	320	362	3.0	28	24	273





**Lock Washers**

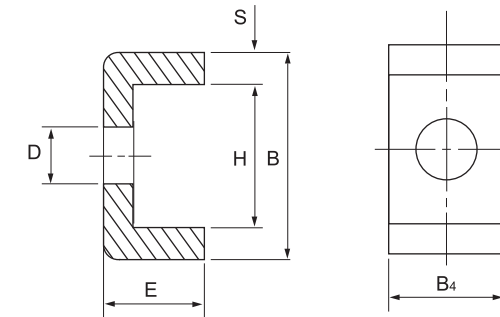


MBL	D mm	D <sub>1</sub> mm	D <sub>2</sub> mm	S mm	E mm	B mm	F mm
MBL 24	120	135	151	2	14	12	115
MBL 26	130	145	161	2	14	12	125
MBL 28	140	155	171	2	16	14	135
MBL 30	150	170	188	2	16	14	145
MBL 32	160	180	199	2.5	18	16	154
MBL 34	170	190	211	2.5	18	16	164
MBL 36	180	200	221	2.5	20	18	174
MBL 38	190	210	231	2.5	20	18	184
MBL 40	200	222	248	2.5	20	18	194

**AW SERIES**

AW	D mm	D <sub>1</sub> mm	D <sub>2</sub> mm	S mm	E mm	B mm	F mm	V mm
AW 00	10	13.5	21	1	3	3	8.5	2
AW 01	12	17	25	1	3	3	10.5	2
AW 02	15	21	28	1	4	4	13.5	2.5
AW 03	17	24	32	1	4	4	15.5	2.5
AW 04	20	26	36	1	4	4	18.5	2.5
AW 05	25	32	42	1.25	5	5	23	2.5
AW 06	30	38	49	1.25	5	5	27.5	2.5
AW 07	35	44	57	1.25	6	5	32.5	2.5
AW 08	40	50	62	1.25	6	6	37.5	2.5
AW 09	45	56	69	1.25	6	6	42.5	2.5
AW 10	50	61	74	1.25	6	6	47.5	2.5
AW 11	55	67	81	1.25	8	7	52.5	4
AW 12	60	73	86	1.5	8	7	57.5	4
AW 13	65	79	92	1.5	8	7	62.5	4
AW 14	70	85	98	1.5	8	8	66.5	4
AW 15	75	90	104	1.5	8	8	71.5	4
AW 16	80	95	112	1.8	10	8	76.5	4
AW 17	85	102	119	1.8	10	8	81.5	4
AW 18	90	108	126	1.8	10	10	86.5	4
AW 19	95	113	133	1.8	10	10	91.5	4
AW 20	100	120	142	1.8	12	10	96.5	6
AW 21	105	126	145	1.8	12	12	100.5	6
AW 22	110	133	154	1.8	12	12	105.5	6
AW 23	115	137	159	2	12	12	110.5	6
AW 24	120	138	164	2	14	12	115	6
AW 25	125	148	170	2	14	12	120	6
AW 26	130	149	175	2	14	12	125	6
AW 27	135	160	185	2	14	14	130	6
AW 28	140	160	192	2	16	14	135	8
AW 29	145	171	202	2	16	14	140	8
AW 30	150	171	205	2	16	14	145	8
AW 31	155	182	212	2.5	16	16	147.5	8
AW 32	160	182	217	2.5	18	16	154	8
AW 33	165	193	222	2.5	18	16	157.5	8
AW 34	170	193	232	2.5	18	16	164	8
AW 36	180	203	242	2.5	20	18	174	8
AW 38	190	214	252	2.5	20	18	184	8
AW 40	200	226	262	2.5	20	18	194	8
AW 44	220	250	292	3.0	24	20	213	-
AW 48	240	270	312	3.0	24	20	233	-
AW 52	260	300	342	3.0	28	24	253	-
AW 56	280	320	362	3.0	28	24	273	-

**Locking Clips**



**MS 3000 Series**

MS 30	S mm	B mm	H mm	D mm	E mm
MS 3044	4	20	12	7	13.5
MS 3048	4	20	12	9	17.5
MS 3052	4	20	12	9	17.5
MS 3056	4	24	12	9	17.5
MS 3060	4	24	12	9	20.5
MS 3064	5	24	15	9	21
MS 3068	5	24	15	9	21
MS 3072	5	28	15	9	20
MS 3076	5	28	15	12	24
MS 3080	5	28	15	12	24
MS 3084	5	32	15	12	24
MS 3088	5	32	15	14	28
MS 3092	5	32	15	14	28
MS 3096	5	36	15	14	28
MS 30/500	5	36	15	14	28

**MS 3100 Series**

MS 31	S mm	B mm	H mm	D mm	E mm
MS 3144	4	20	12	9	22.5
MS 3148	4	20	12	9	22.5
MS 3152	4	24	12	12	25.5
MS 3156	4	24	12	12	25.5
MS 3160	4	24	12	12	30.5
MS 3164	5	24	15	12	31
MS 3168	5	28	15	14	38
MS 3172	5	28	15	14	38
MS 3176	5	32	15	14	40
MS 3180	5	32	15	18	45
MS 3184	5	32	15	18	45
MS 3188	5	36	15	18	43
MS 3192	5	36	15	18	43
MS 3196	5	36	15	18	53
MS 31/500	5	40	15	18	45

