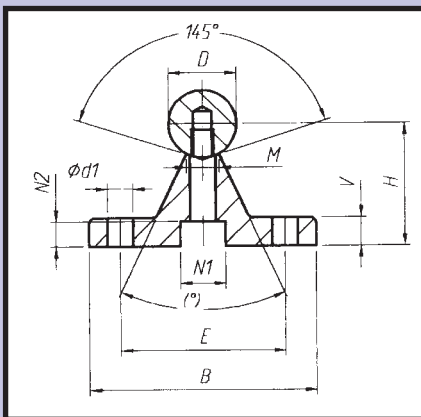
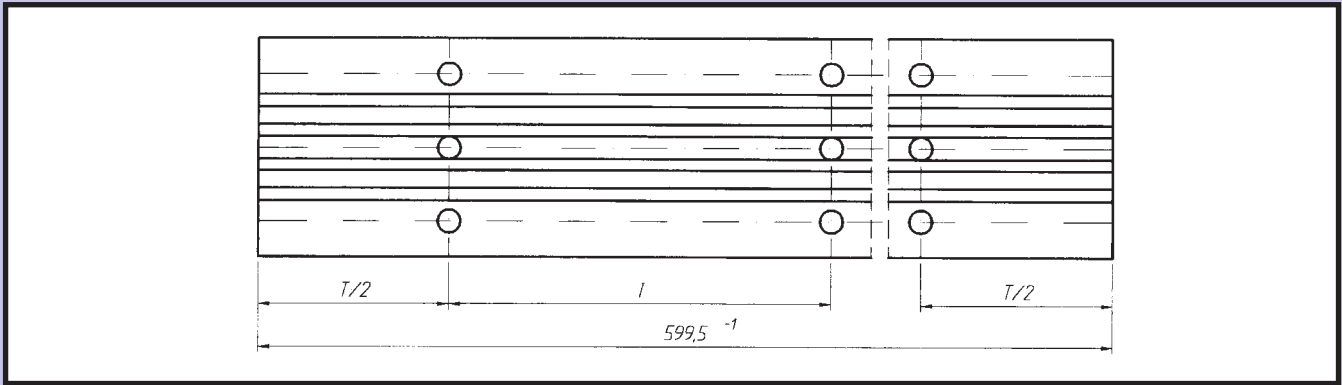




- Hardness:** Carbon Steel 61-66 Rockwell C
Corrosion Resistant Steel 54-56 Rockwell C
- Tolerance:** h6 standard, special tolerances upon request
- Finish:** Ground and polished to 8-12 cla
- Straightness:** 1-6000 standard
- Modifications:** Drilled and tapped holes, retainer grooves etc. available (send drawing)

Carbon Steel BS 070M55	Stainless Steel A1S1 440C	Diameter D	Tolerance h6	Depth of hardness	L (maximum)
CSS-6M-	SSS-6M-	6	+0 -8	1.0mm	3000mm standard (enquire for longer length if required)
CSS-8M-	SSS-8M-	8	+0 -9	1.0mm	
CSS-10M-	SSS-10M-	10	+0 -10	1.0mm	
CSS-12M-	SSS-12M-	12	+0 -11	1.6mm	
CSS-14M-	SSS-14M-	14	+0 -11	1.6mm	
CSS-16M-	SSS-16M-	16	+0 -11	1.6mm	
CSS-20M-	SSS-20M-	20	+0 -13	2.2mm	
CSS-25M-	SSS-25M-	25	+0 -13	2.2mm	
CSS-30M-	SSS-30M-	30	+0 -13	2.2mm	
CSS-40M-	SSS-40M-	40	+0 -16	3.5mm	
CSS-50M-	SSS-50M-	50	+0 -16	3.5mm	
CSS-60M-	SSS-60M-	60	+0 -19	3.5mm	
CSS-70M	SSS-70M-	70	+0 -19	3.5mm	
CSS-80M	SSS-80M-	80	+0	4.0mm	

Diameter Tolerance :0.001mm
Order by Part number and length (ie.: SSS-12M-500mm)

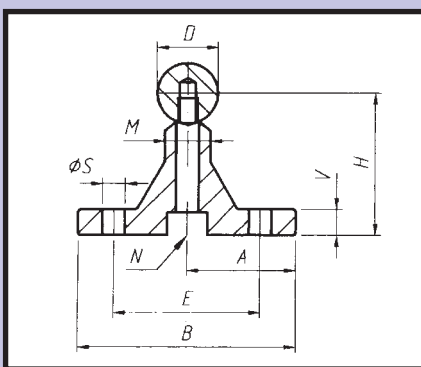


Medium Height Series - WUM

Material: Aluminium Alloy



Part No	Dh6	B	H±0.02	V	N1	N2	d1	d2	M	(°)	E	T1	T2	Weight
WUM-12	12	40	22	5	8.0	5.0	4.5	4.5	5.8	50	29	75	120	0.52
WUM-16	16	45	26	5	9.5	6.0	5.5	5.5	7.0	50	33	100	150	0.64
WUM-20	20	52	32	6	11.0	6.5	6.6	6.6	8.3	50	37	100	150	0.90
WUM-25	25	57	36	6	14.0	8.5	6.6	9.0	10.8	50	42	120	200	1.08
WUM-30	30	69	42	7	17.0	10.5	9.0	11.0	11.0	50	51	150	200	1.43
WUM-40	40	73	50	8	17.0	10.5	9.0	11.0	15.0	50	55	200	300	1.81
WUM-50	50	84	60	9	19.0	12.5	11.0	13.0	19.0	46	63	200	300	2.45
WUM-60	60	94	68	10	—	—	11.0	13.0	25.0	46	72	300	—	3.16
WUM-80	80	116	86	12	—	—	13.0	13.0	34.0	46	92	300	—	4.86

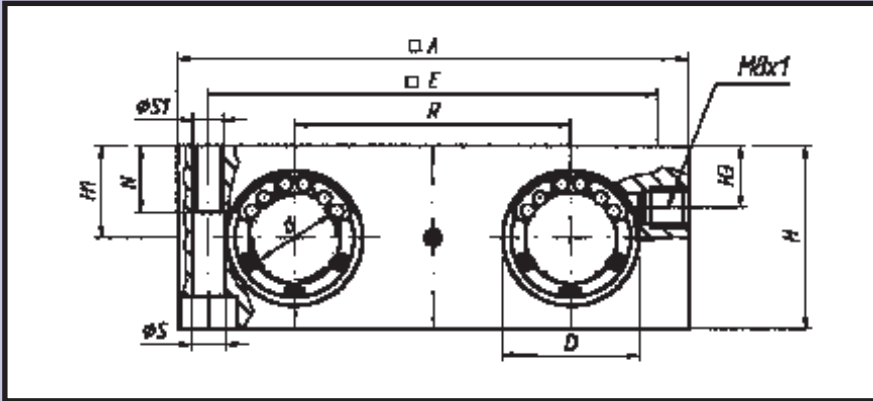


Tall Height Series - WUH

Material: Aluminium Alloy



Part No	Dh6	H±0.02	V	B	A±0.02	M	E±0.15	N	S	T1	T2	Weight
WUH-12	12	28	5	43	21.5	9	29	M4	4.5	75	120	0.64
WUH-16	16	30	5	48	24.0	10	33	M5	5.5	100	150	0.74
WUH-20	20	38	6	56	28.0	11	37	M6	6.6	100	150	1.00
WUH-25	25	42	6	60	30.0	14	42	M8	6.6	120	200	1.20
WUH-30	30	53	7	74	37.0	14	51	M10	8.6	150	200	1.80
WUH-40	40	60	8	78	39.0	18	55	M10	8.6	200	300	2.10

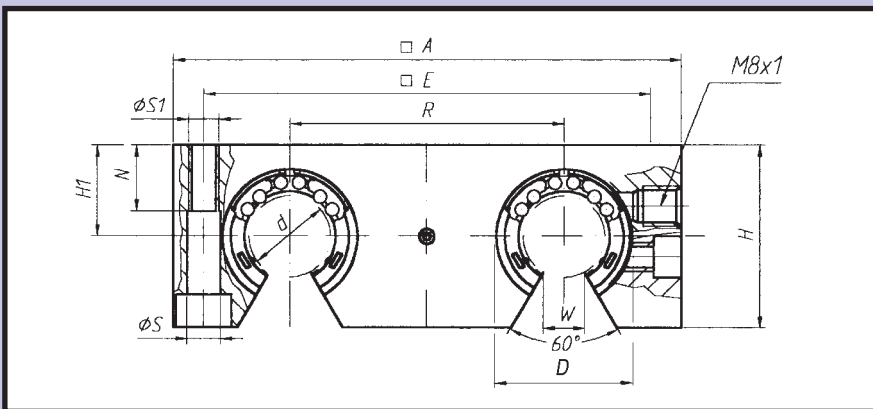


Material: Aluminium Alloy

Quadruple open self aligning linear ball bearing, two integral seals, lubrication hole M8 x 1

Part No	d	D1	A	H	H ₁	H ₃	R	N	E	S	S1	Load (N)		Weight	Length
												C (Dyn.)	Co (Stat.)		
QAG-08-S	8	16	65	23	11.5	8	32	11	55	4.3	M5	1240	1360	0.23	65
QAG-12-S	12	22	85	32	16	13	42	13	73	5.3	M6	3000	3300	0.52	85
QAG-16-S	16	26	100	36	18	15	54	13	88	5.3	M6	8800	9600	0.78	100
QAG-20-S	20	32	130	46	23	19	72	18	115	6.6	M8	16000	17600	1.74	130
QAG-25-S	25	40	160	56	28	24	88	22	140	8.4	M10	26800	29200	3.13	160
QAG-30-S	30	47	180	64	32	27	96	26	158	10.5	M12	33200	36400	4.43	180
QAG-40-S	40	62	230	79	40	35	122	34	202	13.5	M16	54800	60000	8.70	230

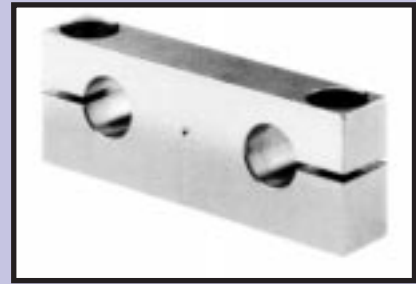
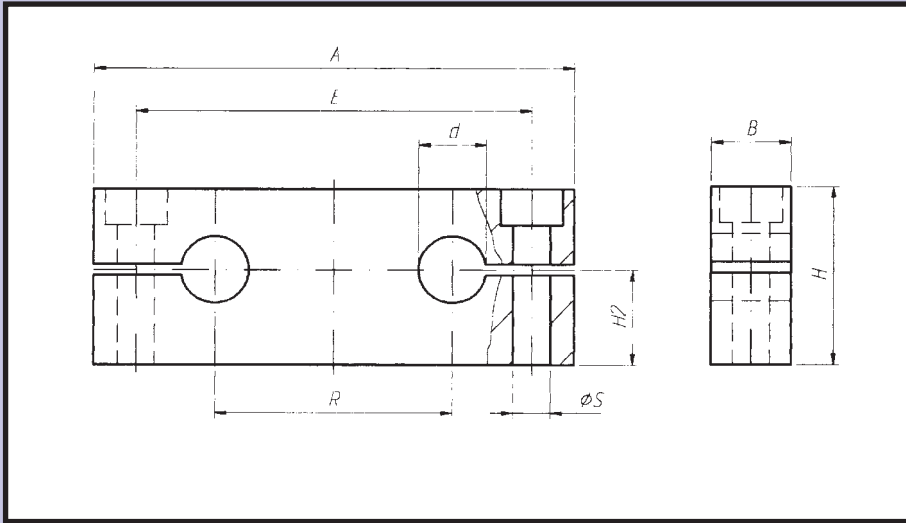
The bearing will be fixed in the housing by means of retaining rings per DIN 472 Load ratings indicated apply only for hardened and ground shafts.



Material: Aluminium Alloy

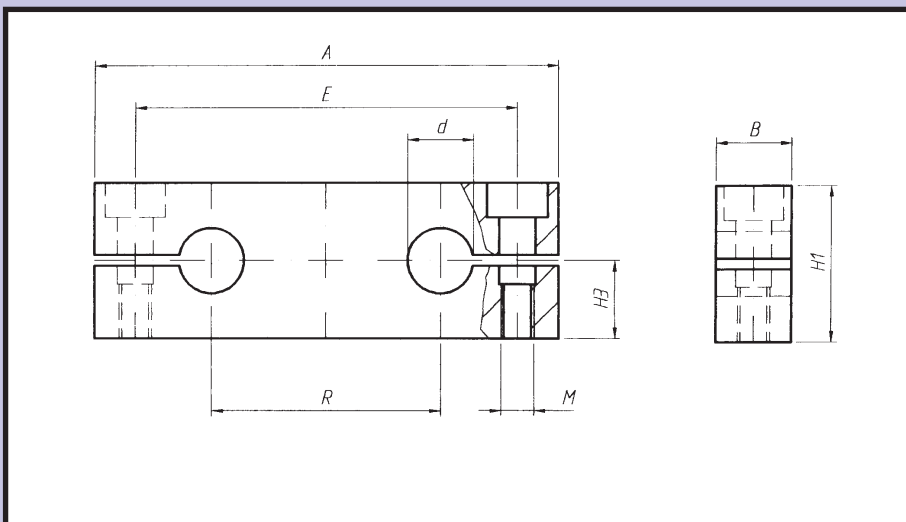
Part No	d	D1	A	H	H ₁	W	R	N	E	S	S1	Load (N)		Weight	Length
												C (Dyn.)	Co (Stat.)		
QAG-OP-12-S	12	22	85	30	18	7.0	42	13	73	5.3	M6	3000	3300	0.45	85
QAG-OP-16-S	16	26	100	35	22	9.4	54	13	88	5.3	M6	8800	9600	0.73	100
QAG-OP-20-S	20	32	130	42	25	10.2	72	18	115	6.4	M8	16000	17600	1.48	130
QAG-OP-25-S	25	40	160	51	30	12.9	88	22	140	8.4	M10	26800	29200	2.68	160
QAG-OP-30-S	30	47	180	59	35	14.5	96	26	158	10.5	M12	33200	36400	3.95	180
QAG-OP-40-S	40	62	230	77	45	20.3	122	34	202	13.0	M16	54800	60000	8.12	230

The bearing will be fixed in the housing by means of a retainsion screw. Load ratings indicated apply only for hardened and ground shafts.



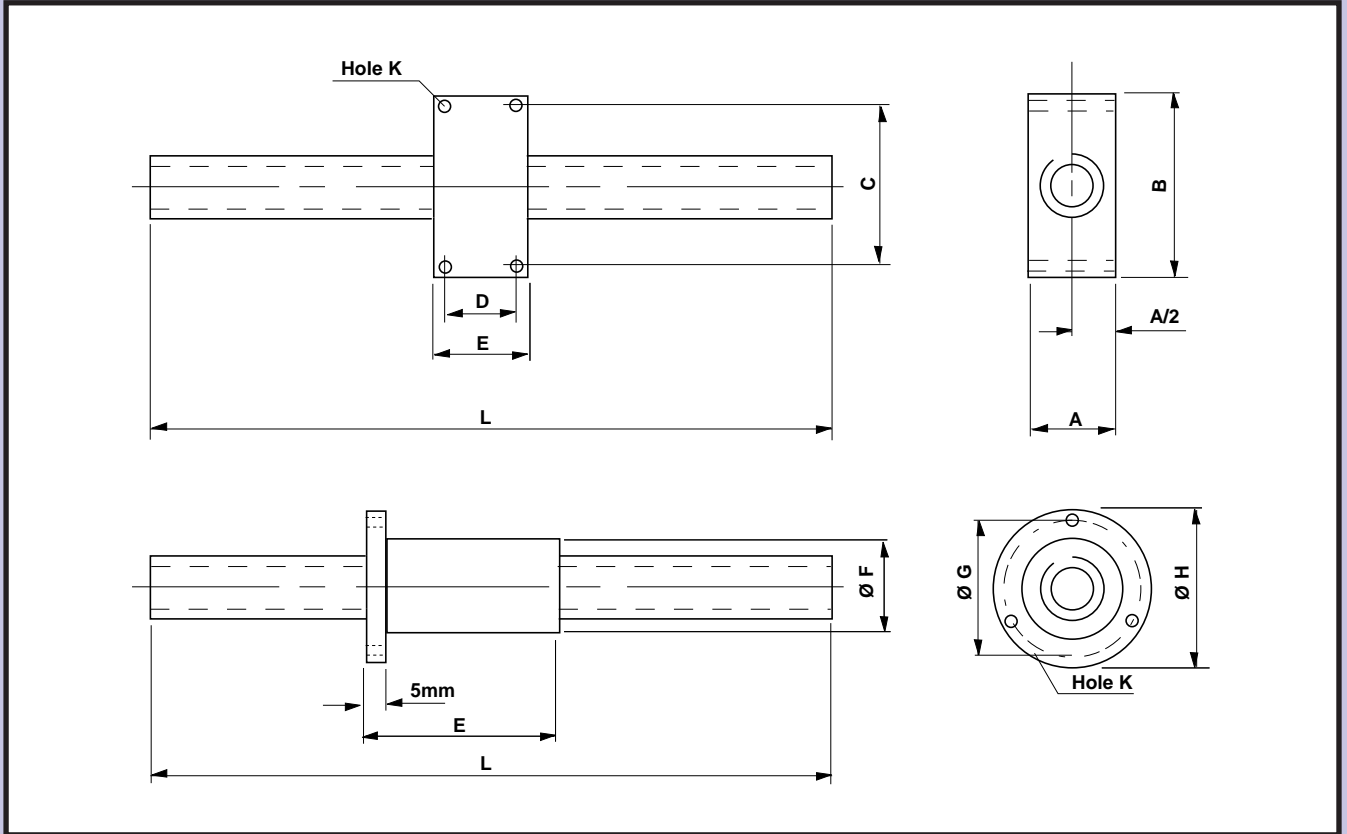
Clearance Hole Fixing
Material: Aluminium Alloy

Part No	d	A	B	H	H2±0.015	R	ØS	E	Weight
TAA-08	8	65	12	23	12.5	32	5.5	52	0.04
TAA-12	12	85	14	32	18.0	42	6.6	70	0.09
TAA-16	16	100	18	36	20.0	54	9.0	82	0.14
TAA-20	20	130	20	46	25.0	72	11.0	108	0.25
TAA-25	25	160	25	56	30.0	88	13.5	132	0.47
TAA-30	30	180	25	64	35.0	96	13.5	150	0.62
TAA-40	40	230	30	80	44.0	122	17.5	190	1.15



Tapped Hole Fixing
Material: Aluminium Alloy

Part No	d	A	B	H1	H3±0.015	R	M	E	Weight
TAB-08	8	65	12	22	11	32	M5	52	0.04
TAB-12	12	85	14	28	14	42	M6	70	0.07
TAB-16	16	100	18	32	16	54	M8	82	0.13
TAB-20	20	130	20	42	21	72	M10	108	0.22
TAB-25	25	160	25	52	26	88	M12	132	0.44
TAB-30	30	180	25	58	29	96	M12	150	0.56
TAB-40	40	230	30	72	36	122	M16	190	1.00



Materials: Screw: Stainless Steel (400 Series)
Nut: Delrin

Lead Error: ± 0.10mm/100mm

Repeatability: 0.08mm

Straightness: 0.05mm/100mm

Backlash: 0.08mm

Temp Range: -18°C to +93°C

Rectangular nut	Round nut	Dia.	Lead	A	B	C	D	E	ØF	ØG	ØH	K	L
TTM4KS1-300 TTM6KS2-300 TTM8KS4-300	TTM4LS1-300 TTM6LS2-300 TT8MLS4-300	4 6 8	1 2 4	12	32	25	One hole per side	20	12	20	28	3.4	300
TTM10KS2-500 TTM10KS20-500	TTM10LS2-500 TTM10LS20-500	10 10	2 20	16	45	35		20	16	25	35	4.5	500
TTM12KS5-500 TTM12KS10-500	TTM12LS5-500 TTM12LS10-500	12 12	5 10	20	50	40		15	25	20	30	40	4.5
TTM16KS4-1000 TTM16KS10-500	TTM16LS4-1000 TTM16LS10-500	16 12	4 10	25	50	40	15	25	25	35	45	4.5	1000
TTM20KS4-1000 TTM20KS10-1000 TTM20KS20-1000	TTM20LS4-1000 TTM20LS10-1000 TTM20LS20-1000	20 20 20	4 10 20	30	60	50	20	30	30	40	50	5.5	1000
TTM25KS5-1000 TTM25KS10-1000 TTM25KS20-1000	TTM25LS5-1000 TTM25LS10-1000 TTM25LS20-1000	25 25 25	5 10 20	35	60	50	20	30	35	45	55	5.5	1000

Stainless Steel Leadscrews, R H and L H Threads

Manufactured to ISO Standard, DIN 103

Features

- ✓ Single start
- ✓ Rolled
- ✓ High tensile strength
- ✓ Accurate Tooth profile
- ✓ Trapezoidal thread form
- ✓ High resistance to abrasion
- ✓ Press finished thread flank

Tolerance Zone: 7e

Material: 1.4305

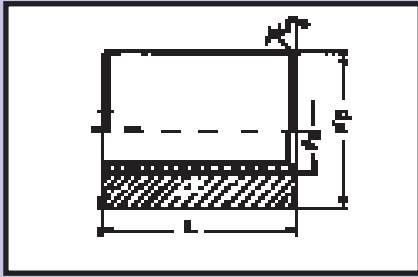
Standard Accuracy: ± 0.15mm/300mm

Radial Deviation: Ø 10 to 24 = 0.8mm/Metre

Ø 28 to 50 = 1.2mm/Metre

Diameter x Lead (mm)	Hand	Length (mm)			
		1000	1500	2000	3000
10 x 3	RH	641-010	641-110	641-210	641-310
	LH	641-410	641-510	641-610	641-810
12x 3	RH	641-012	641-112	641-212	641-312
	LH	641-412	641-512	641-612	641-812
14 x 4	RH	641-014	641-114	641-214	641-314
	LH	641-414	641-514	641-614	641-814
16 x 4	RH	641-016	641-116	641-216	641-316
	LH	641-416	641-516	641-616	641-816
20 x 4	RH	641-020	641-120	641-220	641-320
	LH	641-420	641-520	641-620	641-820
24 x 5	RH	641-024	641-124	641-224	641-324
	LH	641-424	641-524	641-624	641-824
30 x 6	RH	641-030	641-130	641-230	641-330
	LH	641-430	641-530	641-630	641-830
36 x 6	RH	641-036	641-136	641-236	641-336
	LH	641-436	641-536	641-636	641-836
40 x 7	RH	641-040	641-140	641-240	641-340
	LH	641-440	641-540	641-640	641-840
50 x 8	RH	641-050	641-150	641-250	641-350
	LH	641-450	641-550	641-650	641-850

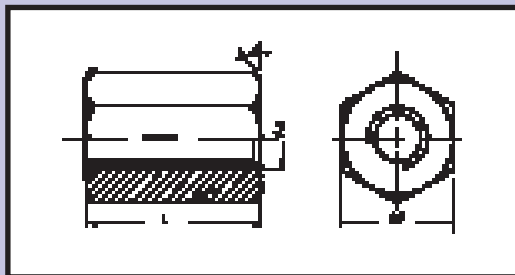
Round Nut Design



Materials: Steel: C35
 Bronze: RG7
 Nylatron: GSM
Tolerance Zone: 7H

Trapezoidal Threads Ø	Single-thread right			Single-thread left			L	ØD
	Steel Part No.	Red Bronze Part No.	Nylatron Part No.	Steel Part No.	Red Bronze Part No.	Nylatron Part No.		
10 x 3	643 210	643 310	-	643 710	643 810	-	20	22
12 x 3	643 212	643 312	643 412	643 712	643 812	643 912	24	26
14 x 4	643 214	643 314	-	643 714	643 814	-	28	30
16 x 4	643 216	643 316	643 416	643 716	643 816	643 916	32	36
20 x 4	643 220	643 320	643 420	643 720	643 820	643 920	40	45
24 x 5	643 224	643 324	643 424	643 724	643 824	643 924	48	50
28 x 5	643 228	643 328	643 428	643 728	643 828	643 928	56	60
30 x 6	643 230	643 330	643 430	643 730	643 830	643 930	60	60
32 x 6	643 232	643 332	643 432	643 732	643 832	643 932	64	60
36 x 6	643 236	643 336	643 436	643 736	643 836	643 936	72	75
40 x 7	643 240	643 340	643 440	643 740	643 840	643 940	80	80
44 x 7	643 244	643 344	643 444	643 744	643 844	643 944	88	80
48 x 8	643 248	643 348	643 448	643 748	643 848	643 948	96	90
50 x 8	643 250	643 350	643 450	643 750	643 850	643 950	100	90

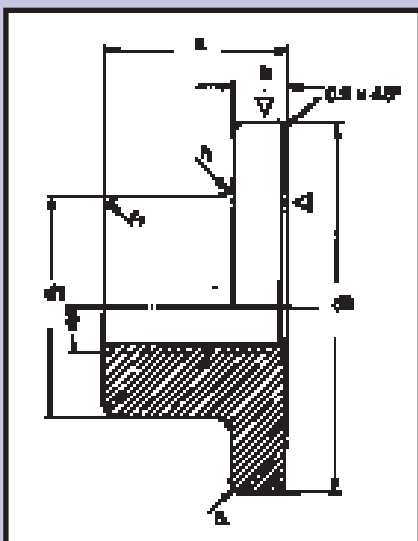
Hexagonal Nut Design



Materials: Steel: C35
Tolerance Zone: 7H

Trapezoidal Threads d Ø	L	A/F	Single-thread	
			Left Part No.	Right Part No.
10 x 3	15	17	643 110	643 610
12 x 3	18	19	643 112	643 612
14 x 4	21	22	643 114	643 614
16 x 4	24	27	643 116	643 616
20 x 4	30	30	643 120	643 620
24 x 5	36	36	643 124	643 624
28 x 5	42	46	643 128	643 628
30 x 6	45	46	643 130	643 630
32 x 6	48	46	643 132	643 632
36 x 6	54	55	643 136	643 636
40 x 7	60	65	643 140	643 640
44 x 7	66	65	643 144	643 644
48 x 8	72	75	643 148	643 648
50 x 8	75	75	643 150	643 650

Flanged Nut Design



Materials: Steel: C35
 Bronze: RG7
Tolerance Zone: 7H

Trapezoidal Threads Ø	Single-thread right		Single-thread left		DIN 7168			
	Grey cast Iron Part No.	Red Bronze Part No.	Grey cast Iron Part No.	Red Bronze Part No.	a	b	d1	d2
10 x 3	644 010	644 110	644 310	644 410	14	5	20	33
12 x 3	644 012	644 112	644 312	644 412	18	6	22	40
14 x 4	644 014	644 114	644 314	644 414	22	10	30	50
16 x 4	644 016	644 116	644 316	644 416	22	10	30	50
20 x 4	644 020	644 120	644 320	644 420	24	10	36	60
24 x 5	644 024	644 124	644 324	644 424	30	11	45	70
28 x 5	644 028	644 128	644 328	644 428	45	13	50	80
30 x 6	644 030	644 130	644 330	644 430	45	13	50	80
32 x 6	644 032	644 132	644 332	644 432	45	13	50	80
36 x 6	644 036	644 136	644 336	644 436	55	15	60	90
40 x 7	644 040	644 140	644 340	644 440	60	16	70	110
44 x 7	644 044	644 144	644 344	644 444	60	16	70	110
48 x 8	644 048	644 148	644 348	644 448	67	17	80	120
50 x 8	644 050	644 150	644 350	644 450	67	17	80	120