

Metric Ground And Polished Shafting

PRECISION TOLERANCE h9 (SLIP FIT) IN 3m (9.84') LENGTHS

12L14 STEEL AND 304 STAINLESS STEEL

DIAMETER mm	WEIGHT		DIAMETER INCHES	TOLERANCE
	kg/m	lbs/ft		
4	0.10	0.07	0.1575	+0 / -0.030 mm +0 / -0.0012"
5	0.16	0.10	0.1969	
6	0.22	0.15	0.2362	+0 / -0.036 mm +0 / -0.0014"
7	0.30	0.20	0.2756	
8	0.40	0.26	0.3150	+0 / -0.043 mm +0 / -0.0017"
9	0.50	0.34	0.3543	
10*	0.62	0.41	0.3937	
11	0.75	0.50	0.4331	
12	0.89	0.60	0.4724	
13	1.05	0.70	0.5118	
14	1.22	0.81	0.5512	
15	1.40	0.93	0.5906	+0 / -0.052 mm +0 / -0.0020"
16*	1.59	1.06	0.6299	
17	1.79	1.20	0.6693	
18	2.01	1.34	0.7087	
19	2.23	1.50	0.7480	
20*	2.48	1.66	0.7874	
21	2.72	1.83	0.8268	
22	3.00	2.00	0.8661	+0 / -0.062 mm +0 / 0.0024"
23	3.29	2.19	0.9055	
24	3.55	2.39	0.9449	
25*	3.85	2.59	0.9843	
26	4.17	2.80	1.0236	
27	4.49	3.02	1.0630	
28	4.83	3.25	1.1024	
29	5.19	3.48	1.1417	+0 / -0.074 mm +0 / -0.0029"
30*	5.55	3.73	1.1811	
32	6.31	4.24	1.2598	
33	6.71	4.51	1.2992	
35*	7.55	5.08	1.3780	
36	7.99	5.37	1.4173	
38	8.90	5.98	1.4961	
40* ²	9.86	6.63	1.5748	+0 / -0.074 mm +0 / -0.0029"
42	10.90	7.38	1.6535	
45	12.50	8.39	1.7717	
48	14.20	9.61	1.8898	
50	15.40	10.40	1.9685	
52	16.70	11.20	2.0472	
55	18.70	12.50	2.1654	
56	19.30	13.00	2.2047	
58	20.70	13.90	2.2835	+0 / -0.074 mm +0 / -0.0029"
60	22.20	14.90	2.3622	
65	26.00	17.50	2.5591	
70	30.20	20.30	2.7559	
75	34.70	23.30	2.9528	
80	39.50	26.50	3.1496	
85	44.50	29.66	3.3465	

Special modifications available upon request.

* 12L14 steel available in 3.7 m (12 ft.) lengths.

² Available in 1144 steel.

Precision Case Hardened And Ground Shafting*

HARDNESS: HRc 60 • TOLERANCE: h6 • 1m LENGTHS

Diameter mm	Weight		Depth of Hardness mm	Diametrical Tolerance (h6) µm	Concentricity µm	Cylindricity µm
	kg/m	lbs/m				
8	0.0395	0.0869	0.6-1	0-9	4	6
12	0.0888	0.1954	1.1-1.7	0-11	5	8
16	0.1580	0.3476	1.1-1.7	0-11	5	8
20	0.2465	0.5423	1.8-2.1	0-13	6	10
25	0.3850	0.8470	1.8-2.1	0-13	6	10
30	0.5550	1.2210	2.2	0-13	6	10
40	0.9860	2.1692	2.2	0-16	8	12
50	1.5410	3.3902	2.2	0-16	8	12

1 µm (micrometer) = 0.001 mm (millimeter) • Concentricity relates to the degree of roundness • Cylindricity relates to the degree of taper, convexity (crowing) and concavity

*Inquire for linear shafting.

Key/Flat Stock

ISO-TOLERANCE h9 (SLIP FIT)

MATERIAL: C 1045

DIN 6880

Size mm	Size mm
2X2	18X18
3X3	7X18
4X4	10X20
3X5	12X20
5X5	20X20
4X6	8X20
6X6	14X22
7X7	22X22
5X8	9X22
7X8	14X25
8X8	22X25
10X10	25X25
6X10	16X28
8X10	18X32
12X12	20X36
6X12	22X40
8X12	25X45
14X14	28X50
6X14	32X56
9X14	32X63
10X16	36X70
16X16	40X80
7X16	45X90
11X18	50X100

1 Meter Lengths (39")

0.5 m (500 mm) Lengths (19.7")

0.25 m (250 mm) Lengths (9.8")

3 m lengths available in some sizes

1.4571 Stainless Steel

(AISI 316 TI)

Size mm	Size mm
2X2	7X16*
3X3	11X18
4X4	7X18
3X5	12X20
5X5	8X20
4X6	14X22
6X6	9X22
5X8	14X25
7X8	16X28
8X8	18X32
10X10	20X36
6X10	22X40
8X10	25X45
12X12	
6X12	
8X12	
6X14	
9X14	
10X16	

* = W.Nr.1.4541 (AISI 321)

Hex Rod

MATERIAL: C 1045

(replaces former C1028)

Size mm
7
8
9
10
13
16
17
19
22
24
27
30
32
36
41
46
50
55

1 Meter Lengths (39")

NOTE: 3m lengths available in some sizes. Some sizes only currently available in C1028. Check before heat treating.