

Precision steel shafts

Overview

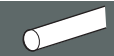
Measurements

Shaft Ø d [mm]	Heat-treated steel		Part numbers Solid shafts X46Cr13 h6			
	h6	h7				
3	R1000 003 00					
4	R1000 004 00	R1000 004 01	R1000 004 30	R1000 004 31		
5	R1000 005 00	R1000 005 01	R1000 005 30	R1000 005 31	R1000 005 20	R1000 005 21
6	R1000 006 00	R1000 006 01	R1000 006 30	R1000 006 31		
8	R1000 008 00	R1000 008 01	R1000 008 30	R1000 008 31		
10	R1000 010 00	R1000 010 01	R1000 010 30	R1000 010 31		
12	R1000 012 00	R1000 012 01	R1000 012 30	R1000 012 31	R1000 012 20	R1000 012 21
14	R1000 014 00	R1000 014 01	R1000 014 30	R1000 014 31		
15	R1000 015 00	R1000 015 01				
16	R1000 016 00	R1000 016 01	R1000 016 30	R1000 016 31	R1000 016 20	R1000 016 21
18	R1000 018 00	R1000 018 01				
20	R1000 020 00	R1000 020 01	R1000 020 30	R1000 020 31	R1000 020 20	R1000 020 21
22	R1000 022 00	R1000 022 01				
24	R1000 024 00	R1000 024 01				
25	R1000 025 00	R1000 025 01	R1000 025 30	R1000 025 31	R1000 025 20	R1000 025 21
30	R1000 030 00	R1000 030 01	R1000 030 30	R1000 030 31	R1000 030 20	R1000 030 21
32	R1000 032 00	R1000 032 01				
35	R1000 035 00	R1000 035 01				
38	R1000 038 00	R1000 038 01				
40	R1000 040 00	R1000 040 01	R1000 040 30	R1000 040 31	R1000 040 20	R1000 040 21
45	R1000 045 00	R1000 045 01				
50	R1000 050 00	R1000 050 01	R1000 050 30	R1000 050 31	R1000 050 20	R1000 050 21
55	R1000 055 00	R1000 055 01				
60	R1000 060 00	R1000 060 01	R1000 060 30	R1000 060 31	R1000 060 20	R1000 060 21
70	R1000 070 00	R1000 070 01				
80	R1000 080 00	R1000 080 01	R1000 080 30	R1000 080 31	R1000 080 20	R1000 080 21
100	R1000 100 00	R1000 100 01				
110	R1000 110 00	R1000 110 01				

Rexroth
Bosch Group

GoTo Program products are highlighted below.

Shaft Ø d [mm]	Part numbers				
	Solid Shaft		Tubular shaft		
	Hard chromium plating		Heat-treated steel		Hard chromium plating
	h6	h7	h6	h7	h7
3					
4					
5					
6					
8			R1001 008 10		
10			R1001 010 10		
12	R1000 012 60	R1000 012 61	R1001 012 10	R1001 012 11	
14					
15					
16	R1000 016 60	R1000 016 61	R1001 016 10		
18					
20	R1000 020 60	R1000 020 61	R1001 020 10	R1001 020 11	
22					
24					
25	R1000 025 60	R1000 025 61	R1001 025 10	R1001 025 11	R1001 025 41
30	R1000 030 60	R1000 030 61	R1001 030 10	R1001 030 11	R1001 030 41
32					
35					
38					
40	R1000 040 60	R1000 040 61	R1001 040 10	R1001 040 11	R1001 040 41
45					
50	R1000 050 60	R1000 050 61	R1001 050 10	R1001 050 11	R1001 050 41
55					
60	R1000 060 60	R1000 060 61	R1001 060 10	R1001 060 11	R1001 060 41
70					
80	R1000 080 60	R1000 080 61	R1001 080 10	R1001 080 11	R1001 080 41
100			R1001 100 10	R1001 100 11	
110					



Series R1700 0XX Precision Steel Shaft Specifications

Materials: --Ck55 or C55 carbon steel (similar to AISI C-1055), case hardened to min. R_c 60 to 64
Case depth shown in table 66.
--X46Cr13 stainless steel (similar to AISI 420C), case hardened to min. R_c 53.
Case depth shown in table 66.

Surface finish: 8 to 13 RA microinches

Length tolerances: +/- 1/32" for shafts up to 1.25" in diameter
+/- 1/16" for shafts up to 1.5" in diameter and over
* closer tolerances are available at additional costs

Straightness tolerance: .0015" per foot

End Conditions: Shaft ends are chamfered approximately 1/32" X 45° up to 1.25" diameter shaft and 1/16" X 45° to 1.5" diameter and up.
Other chamfers can be provided at additional costs.

Shaft Selection Table

Nominal Shaft Diameter (in.)	Part Numbers ⁽¹⁾ Class L -08	Actual Diameter	Weight lb/in	*Random Length (Avg.)	Case Depth (min.)
		Class L			
1/4	R1700 004 08	.2495/.2490	0.014	244"	0.019
3/8	R1700 006 08	.3745/.3740	0.031	244"	0.027
1/2	R1700 008 08	.4995/.4990	0.056	244"	0.031
5/8	R1700 010 08	.6245/.6240	0.087	244"	0.043
3/4	R1700 012 08	.7495/.7490	0.125	244"	0.047
1	R1700 016 08	.9995/.9990	0.223	244"	0.059
1 1/4	R1700 020 08	1.2495/1.2490	0.348	244"	0.059
1 1/2	R1700 024 08	1.4994/1.4989	0.501	244"	0.062
2	R1700 032 08	1.9994/1.9987	0.890	244"	0.086
2 1/2	R1700 040 08	2.4993/2.4985	1.391	244"	0.086
3	R1700 048 08	2.9992/2.9983	2.003	208"	0.086
4	R1700 064 08	3.9988/3.9976	3.560	208"	0.110

(Table 66)

*Consult Bosch Rexroth for details on longer lengths

(1)Stainless Steel Shaft: For Stainless Steel Shaft Class L use suffix -28. For plated, use suffix - 68

Order Example:

Part Number ---- R1700 004 08,48"

material ---- Standard carbon steel

diameter ---- 1/4" nominal

Tolerance ---- Class L diameter

Length ---- 48" long