

Precision steel shafts

Ordering information

Heat-treated solid steel shafts

As part of a linear guide, the role of the shaft places strict requirements on the materials used.

We offer the ideal shaft material for any diameter range.

Extremely consistent surface hardness and hardness depth combine with outstanding purity, consistent structure and balanced grading for extraordinarily long service life under rolling loads.

Available diameters (mm)	Ø d (mm)	Lengths (m)
3, 5, 6, 8, 10, 12, 14, 15, 16, 18, 20, 22,	3	0.4
24, 25, 30, 32, 35, 38, 40, 45, 50, 55, 60,	5 and 6	5.8
70, 80, 100, 110	8 and higher	6.1

Solid shafts with shaft diameters 20 mm to 8 m in length available upon request.

Sections combine for longer overall lengths.

Linear bushings roll over seams with ease.

Materials	Hardness
Cf53	Min. 60 HRC

Material number	
h6 tolerance	R1000 xxx 00
h7 tolerance	R1000 xxx 01

xxx = diameter in mm

Ordering example

Solid shaft, Ø = 25, h7, heat-treated steel, 460 mm long

Material number:
R1000 025 01, 460 mm

ISO 683-17/EN 10088 stainless steel solid shafts

The right choice for applications where corrosion resistance and cleanliness are critical, e.g., in the food industry, semiconductor production and medical equipment. X 90 CrMoV 18 is more resistant to lactic acid than X 46 Cr 13.

Materials	Available diameters (mm)
X 46 Cr13	4, 5, 6, 8, 10, 12, 14, 16, 20, 25, 30, 40, 50, 60, 80
X 90 CrMoV 18	3, 12, 16, 20, 25, 30, 40, 50, 60, 80

Ø d (mm)	Lengths (m)
3	0.4
4 – 10	3.6
12 – 80	6.1

Sections combine for longer overall lengths.

Linear bushings roll over seams with ease.

Materials	Hardness
X 46 Cr 13	Min. 54 HRC
X 90 CrMoV 18	Min. 55 HRC

Material number for X 46 Cr 13	
h6 tolerance	R1000 0xx 30
h7 tolerance	R1000 0xx 31

Material number for X 90 CrMoV 18	
h6 tolerance	R1000 0xx 20
h7 tolerance	R1000 0xx 21

xx = diameter in mm

Ordering example:

Solid shaft, Ø = 16, h6, stainless steel X 46 Cr 13, 350 mm long

Material number:
R1000 016 30, 350 mm

Materials

	Code	Material no.
Heat-treated steel Solid shaft	Cf53	1.1213
	C60	1.0601
ISO 683-17/EN 10088 stainless steel	X 46 Cr 13	1.4034
	X 90 CrMoV 18	1.4112