ideal-tek

Ball bearing steel type CR

General notes:

» **ball bearing steel** (Material number 1.3505, 100Cr6, AISI 52100)

» magnetizable

» hardened by heat treatment, max. hardness 68 HRC

» moderate resistance to corrosion

» generally used where strength, hardness and wear resistance are of primary concern

» typical applications include the production of high quality cutters and pliers ideal for cutting single or multiple filars and for lateral or internal cuts. Typical applications include cutting stents, braided mesh,catheters and guide wires in medical device manufacturing

Composition

Component	Wt.%	Component	Wt.%	Component	Wt.%
C	0.95-1.10	Si	0.15-0.35	Mn	0.25-0.45
P	≤0.030	S	≤0.030	Cr	1.35-1.65

Mechanical properties

Density	**7.85 g/cm³**
Hardness, Rockwell	**65-68 HRC**
Tensile strength, ultimate	**2400 MPa**
0.2% Yield stress	**1800 MPa**
Elongation, break	**40%**
Modulus of elasticity	**212 GPa**

Thermal properties

Coef. of lin. therm expansion	**12.0 E-6/°C**	*20°C-100°C*
Coef. of lin. therm expansion	**13.0 E-6/°C**	*20°C-300°C*
Specific heat capacity	**0.46 J/(g·K)**	
Thermal conductivity	**33 W/(m·K)**	

Electrical properties

Resistivity	**0.30 E-4 Ohm.cm**

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Pliers & Tweezers *category:*

Click to view products by Ideal-Tek *manufacturer:*

Other Similar products are found below :

0031 32750 PG-TP-30D PG-DP-18-N G77015 4-1532129-2 0037 T0058765801 571 76C RX 8130 DRP10N 0036 0032 TP 5000/15D TR 30 15 V TR 58 R A D 00 20 08 US2 13 01 614 87 28 250 SBA INCP8 30993 140-69-205 02 07 200 03 07 160 03 07 180 03 07 200 03 07 250 20 05 140 26 17 200 26 27 200 28 01 200 28 21 200 28 71 280 SB 28 81 280 SB 30 15 140 30 15 160 30 15 190 30 25 140 30 33 160 30 35 160 31 21 160 32 31 135 33 01 160 38 31 200 38 35 200 38 95 200 44 13 J0 44 13 J2 44 13 J4