

RINGSDORFF® Specialty Graphite Grades for EDM

R 8340



Efficient grade for roughing

R 8500X

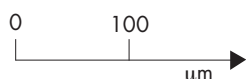


Grade for roughing and prefinishing

R 8500



Universal grade for toolmakers



R 8510



Wear resistant fine grain graphite for demanding applications

R 8650



Finishing grade for highest accuracy

R 8710



Premium finishing grade to perform high quality EDM tasks with high removal rates

Physical Properties

| | | R 8340 | R 8500X | R 8500 | R 8510 | R8650 | R 8710 |
|-------------------------------------|---|-----------------|----------------|----------------|----------------|----------------|-----------------|
| Density | g/cm ³ | 1.72 | 1.75 | 1.77 | 1.83 | 1.84 | 1.88 |
| Open Porosity | Vol.-% | 15 | 14 | 13 | 10 | 10 | 10 |
| Average Grain Size | µm | 15 | 12 | 10 | 10 | 7 | 3 |
| Average Pore Size | µm | 2.0 | 2.0 | 1.5 | 1.5 | 0.8 | 0.6 |
| Permeability | x 10 ⁻² cm ² /sec | 15 | 15 | 10 | 4 | 3 | 1 |
| Rockwell Hardness | | 80 HR 10/100 | 80 HR 5/100 | 70 HR 5/100 | 95 HR 5/100 | 95 HR 5/100 | 110 HR 5/100 |
| Flexural Strength | MPa | 45 | 43 | 50 | 60 | 65 | 85 |
| Young's Modulus | GPa | 10.5 | 10 | 10.5 | 11.5 | 12.5 | 13.5 |
| Electrical resistivity | µΩm | 12 | 15 | 14 | 13 | 14 | 13 |
| Thermal Conductivity | W m ⁻¹ K ⁻¹ | 90 | 80 | 80 | 100 | 90 | 100 |
| Thermal Exp. (293.15 - 473.15 K) | x 10 ⁻⁶ K ⁻¹ | 2.9 | 3.8 | 3.9 | 4.0 | 3.9 | 4.7 |
| Ash Value | max. % | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |

Average values.

Broad Base. Best Solutions.

Dimension List of

EDM RINGSDORFF® Iso-Graphites

| Dimension List | | | | |
|--|--|-------------------|------------------|-----------------|
| R 8340 | R 8500X R 8500 | R 8510 | R 8650 | R 8710 |
| 1550 x 410 x 200 | 1230 x 500 x 400 | 1230 x 1030 x 330 | 1230 x 480 x 260 | 610 x 390 x 190 |
| 1230 x 500 x 400 | 610 x 500 x 400 | 1230 x 500 x 400 | 610 x 480 x 260 | |
| 610 x 500 x 400 | | 610 x 500 x 400 | | |
| Ø 150 x 1230 Ø 180 x 1230 Ø 200 x 1230 Ø 225 x 1230 Ø 250 x 1230 Ø 280 x 1230 Ø 320 x 1230 Ø 350 x 1230 Ø 380 x 1230 Ø 420 x 1230 | Prepared electrode blanks for various clamping systems on request. | | | |
| We do not charge for cutting standard blocks if no off-cut material is generated. The dimensions shown above are minimum sizes in mm. | | | | |

® registered trademark of SGL Group companies

07 2008/1.5 2NÄ e Printed in Germany

This document has been prepared according to the best current knowledge and is intended to provide general information about our products and their use. In view of the wide variety of possible applications, the above data should be regarded as general information and are no guarantee of certain features of our products in a given case. If you favour us with your order, please ask for information regarding the features needed for the proposed application. Our Technical Service will furnish a feature profile for such application without undue delay.