

ID Material: R1
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Revision: 8
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RP01

RP01 is black rigid friction material which consists phenol resins as a bonding system, short fibres, friction modifiers and fillers. This offers a medium high static co efficiency and an excellent mechanical resistance, very successful for wind turbine components. RP01 is fully cured and suitable for bonding and riveting.

Material data

Friction Properties (according graphics)

| | | |
|--|------------|----|
| Static Friction Coefficient (15bar, from box): | 0.55±0.05 | μ |
| Static Friction Coefficient (15bar, 100°C): | 0.50±0.05 | μ |
| Dynamic Friction Coefficient: | see charts | |
| Wear Rate: | see charts | |
| T° Fading: | >310 | °C |

Physical properties

| | | |
|------------------------------------|-----------|---------|
| Hardness (DIN53505): | 80±5 | Shore-D |
| Specific Gravity (ASTM D792): | 1.75±0.05 | gr/cm3 |
| Thermal Conductivity (ASTM E1952): | 0.49±0.01 | W/m²K |

Mechanical properties

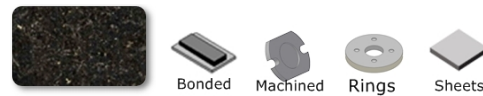
| | | |
|--------------------------------------|-----------|-------|
| Tensile Strength (ASTM D638): | 19±5 | N/mm² |
| Compressive Strength (ISO 844:2014): | 110±5 | N/mm² |
| Poisson Coefficient (ASTM D638): | 0.24±0.03 | |
| Young Modulus (ASTM D638): | 5506±100 | N/mm² |

Recommended Working Values

| | | |
|---------------------------------|-----|----|
| T° Max. Continuous Operation: | 200 | °C |
| T° Max. Intermittent Operation: | 300 | °C |

Material type : Rigid material

Appearance / Formats



Applications

Damper Technologies - Heavy duty static applications - Holding
Mechanical Structures - Yaw brakes

Price Level : € € €

Reach (EC)1907/2023 - RoHS 2015/863/EU : Compliance

Others

| | |
|-----------------------------|--|
| Recommended Mating Surface: | Perlitic cast iron, hardness HB150-200 |
| Recommended Adhesives: | Thermosetting adhesive |
| Oil Resistant: | Yes |

