

ID Material: R1  
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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 (10bar, 10m/s):	0.40±0.05	μ
Wear Rate (79N, 7m/s):	85±10	mm <sup>3</sup> /Kwh
T <sup>9</sup> Fading (100N, 11.5m/s):	250±10	°C

### Physical properties

Hardness (DIN53505):	85±5	Shore-D
Specific Gravity (ASTM D792-91):	1.75±0.05	gr/cm <sup>3</sup>
Ignition Loss (ASTM D-2524):	30±2	%
Acetone Extraction ISO2859-1:	0.15±0.2	%
Thermal Conductivity (ASTM E1952-01):	0.49±0.01	W/m <sup>2</sup> K

### Mechanical properties

Tensile Strength (ASTM D638-10):	19±5	N/mm <sup>2</sup>
Compressive Strength (UNE 53205):	110±5	N/mm <sup>2</sup>
Shear Modulus (ASTM D2344-00):	2687±100	N/mm <sup>2</sup>
Poisson Coefficient:	0.24±0.03	
Young Modulus (ASTMD 638-10):	5506±100	N/mm <sup>2</sup>

### Recommended Working Values

T° Max. Continuous Operation:	250	°C
T° Max. Intermittent Operation:	350	°C

Material type : Rigid material

### Appearance / Formats



### Applications

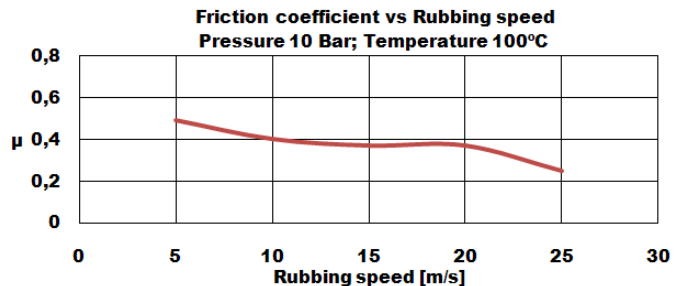
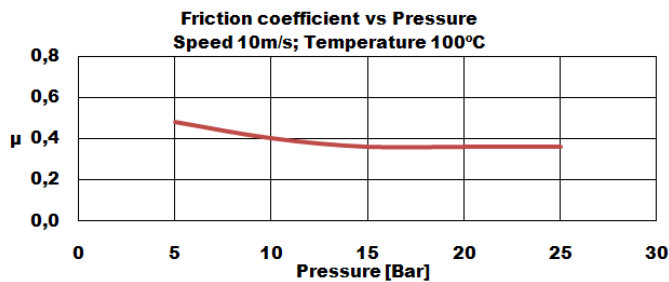
Damper Technologies - Heavy duty static applications - Holding  
Mechanical Structures - Yaw brakes -

Price Level : € € €

Reach (EC)1907/2006 - RoHS 2011/65/EU : Compliance

### Others

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



Rubbing speed, temperature and pressure are related. Changing any values will change other. The values shown represent typical conditions, but are not ultimate limits of the material.