

## Datasheet ASRS30



ASRS30 bearing materials are reinforced woven polymers specially developed for high loads and smooth running underwater or wet conditions. The material contains an ideal concentration of molybdenum disulphide, which gives excellent results in areas where reduced friction and wear are required. ASRS30 has good wear resistance and is suitable for dry, wet (excellent) and lubricated conditions. ASRS30 has a low coefficient of friction, is resistant to edge loading and will hardly swell in water.

### Application

High load sliding bearings, water pumps, sliding pads, wear rings, hinges, hydraulic cylinders, material handling, agricultural equipment

### Material

Synthetic fiber with polyester resin with friction modifiers.

### Availability

	Value	Unit
Tube inside diameter	20	mm
Tube outside diameter	2500	mm
Length standard	500	mm
Sheet thickness	2,5-200	mm
Sheet size	600x600	mm
Inside diameter	on request	
Outside diameter	on request	
Flange diameter	on request	
Flange height	on request	
Total length	on request	



## ASRS30 - Specifications

### Physical properties

	Test standard	Value	Unit
Density	ASTM D792	1,24	g/cm <sup>3</sup>
Max. swell in water at 20 °C	ASTM D570	0,10	%

### Mechanical properties

	Test standard	Value	Unit
Compressive strength static	ASTM D695	330	MPa
Module of elasticity - Youngs modulus	ASTM D695	2300	MPa
Tensile strength	ASTM D3410	60	MPa
Shear strength	ASTM D3410	80	MPa
Impact strength	ASTM D256	50	kJ/m <sup>3</sup>
Hardness	ASTM D785	98	HRM/HRC
Dynamic load capacity		on request	

### Thermal properties

	Test standard	Value	Unit
Thermal expansion Parallel to laminate		on request	
Thermal expansion Normal to laminate	ASTM D696	7,0	[-]
Min. working temperature		-40	°C
Max. working temperature		120	°C
Intermittent working temperature		140	°C

### Friction properties

	Test standard	Value	Unit
Coefficient of friction dynamic	pin-on-ring/dry against steel	0,08-0,13	[-]
Max. sliding speed	Pin-on-ring	2,2	m/s
Max. Pv-load dry	pin-on-ring	0,23	MPa*m/s
Max. Pv-load oil lubricated	pin-on-ring	0,40	MPa*m/s
Max. Pv-load on regular greased	pin-on-ring	0,50	MPa*m/s
Wear factor	Pin-on-ring	5	*10 <sup>-9</sup> mm <sup>2</sup> /N

### Electrical properties

	Test standard	Value	Unit
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