

Datasheet AS RS60



AS RS60 bearing materials is reinforced weave polymer material special developed for very high loads and has extreme high mechanical properties. The material is very tough and can withstand high radial and axial surface pressure. AS RS60 has good wear resistance and is suitable for operating under dry, wet and lubricated circumstances. AS RS60 has a medium coefficient of friction, can withstand edge loading and has virtually no swell in water. ASEC Kunststoffen B.V. recommends to provide the counter faces with a hardened surface to protect it from wear.

AS RS60 is produced under approval of ISO 9001 for all manufacturing operations and tested in laboratories.

AS RS60 is available from 3 mm inside diameter tube up to 1250 mm outside diameter. Bigger sizes on request.

AS RS60 is applied in offshore, steel structures, machines, cranes, hydraulic cylinders and other equipment.

- (1): Hardness rockwell: HRM.
- (2): Hardness rockwell: HRC.
- (3): Coefficient of friction dynamic: oil/grease.

Material	
Material	Composite

Availability	Unit	Value
Min. inside diameter	mm	16
Max. outside diameter	mm	2000 (bigger diameter possible made of arced segments)
Length standard	mm	500 (longer on request)

Physical Properties	Test Standard	Unit	Value
Density	ASTM D792	g/cm ³	1.91
Max. swell in water at 20 °C	ASTM D570	%	0.3

Mechanical Properties	Test Standard	Unit	Value
Compressive strength static	ASTM D695	MPa	600
Compressive strength dynamic	ASTM D695	MPa	500
Module of elasticity	ASTM D695	MPa	20000
Tensile strength	ASTM D3410	MPa	60
Shear strength	ASTM D3410	MPa	80
Impact strength	ASTM D256	kJ/m ²	50
Hardness rockwell	ASTM D785	HRM/HRC	98 ⁽¹⁾

Thermal Properties	Test Standard	Unit	Value
Thermal expansion	ASTM D696	*10 ⁻⁵ / °C	7
Min. working temperature		°C	-40
Max. working temperature		°C	205
Intermittent working temperature		°C	280

Friction Properties	Test Standard	Unit	Value
Coefficient of friction dynamic	Pin-on-ring	Dry against steel	0.3
Max. sliding speed	Pin-on-ring	m/s	2
Max. pv load dry	Pin-on-ring	MPa*m/s	-
Max. pv load oil lubricated	Pin-on-ring	MPa*m/s	-
Max. pv load regular greased	Pin-on-ring	MPa*m/s	-
Wear factor	Pin-on-ring	*10 ⁻⁹ m ² /N	-