

## Datasheet AS RS31

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

### Material

Material Composite

### Availability

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 <sup>3</sup>	1.23
Max. swell in water at 20 °C	ASTM D570	%	0.1

Mechanical Properties	Test Standard	Unit	Value
Compressive strength static	ASTM D695	MPa	320
Compressive strength dynamic	ASTM D695	MPa	85
Module of elasticity	ASTM D695	MPa	2250
Tensile strength	ASTM D3410	MPa	60
Shear strength	ASTM D3410	MPa	80
Impact strength	ASTM D256	kJ/m <sup>2</sup>	50
Hardness rockwell	ASTM D785	HRM/HRC	98 <sup>(1)</sup>

Thermal Properties	Test Standard	Unit	Value
Thermal expansion	ASTM D696	*10 <sup>-5</sup> / °C	7
Min. working temperature		°C	-40
Max. working temperature		°C	120
Intermittent working temperature		°C	140

Friction Properties	Test Standard	Unit	Value
Coefficient of friction dynamic	Pin-on-ring	Dry against steel	-
Max. sliding speed	Pin-on-ring	m/s	2.2
Max. pv load dry	Pin-on-ring	MPa*m/s	0.23
Max. pv load oil lubricated	Pin-on-ring	MPa*m/s	0.4
Max. pv load regular greased	Pin-on-ring	MPa*m/s	0.5
Wear factor	Pin-on-ring	*10 <sup>-9</sup> m <sup>2</sup> /N	-