

Datasheet AS DF14



AS DF14 composite bearing material is made of PTFE with lubricants and wear resistant additives. AS DF14 is a high performance material, formed with advanced technology at specific temperature and pressure. The material has good thermal conductivity, stable dimension and able to withstand high surface pressure. AS DF14 has good wear resistance and is suitable for operating under dry, wet and lubricated circumstances. AS DF14 has a very low coefficient of friction, 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 DF14 is produced under approval of ISO 9001 for all manufacturing operations and tested in laboratories.

AS DF14 is available from 20 mm inside diameter tube up to 250 mm outside diameter. Bigger sizes available on request. AS DF14 is used a material for bearings, seals, piston rings, and other wear resistant parts for machines, offshore, 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	On request
Max. outside diameter	mm	On request
Length standard	mm	On request

Physical Properties	Test Standard	Unit	Value
Density	ASTM D792	g/cm ³	2.6
Max. swell in water at 20 °C	ASTM D570	%	0.1

Mechanical Properties	Test Standard	Unit	Value
Compressive strength static	ASTM D695	MPa	35
Compressive strength dynamic	ASTM D695	MPa	30
Module of elasticity	ASTM D695	MPa	-
Tensile strength	ASTM D3410	MPa	17
Shear strength	ASTM D3410	MPa	-
Impact strength	ASTM D256	kJ/m ²	15
Hardness rockwell	ASTM D785	HRM/HRC	-

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

Friction Properties	Test Standard	Unit	Value
Coefficient of friction dynamic	Pin-on-ring	Dry against steel	0.14
Max. sliding speed	Pin-on-ring	m/s	-
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	-