



SI 1431
For technical personnel only!
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SERVICE INFORMATION

PERMAGLIDE® PLAIN BEARINGS MATERIALS AND APPLICATIONS

MATERIAL PERMAGLIDE® P1 – MAINTENANCE-FREE, UP TO 280 °C

Material	Structure	Illustration	Characteristics	Applications (examples)
Highly resilient and resistant P180 Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PTFE, BaSO₄ 		<ul style="list-style-type: none"> Very low stick-slip tendency Extremely resilient, especially with edge wear Low and constant friction value Very good wear resistance in dry running and wet running Excellent chemical resistance 	<ul style="list-style-type: none"> Fluid pumps Compressors Shock absorbers Actuators Steering systems Solenoid applications Seat adjusters Hydraulics Pneumatics
High Performance P147* Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous bismuth-tin bronze PTFE, BaSO₄ 		<ul style="list-style-type: none"> Good corrosion protection High chemical resistance Salt spray tested 	<ul style="list-style-type: none"> Applications with swivel motion Windscreen wipers Hinges
All-rounder P10 Reduced PFOA	<ul style="list-style-type: none"> Steel back Porous lead bronze PTFE, Pb 		<ul style="list-style-type: none"> Very good dry running properties Good emergency running properties Can be used in oil 	<ul style="list-style-type: none"> Fire damper Gear pump Wind turbine systems Packaging machines Agricultural machines
High pv value P11 Reduced PFOA	<ul style="list-style-type: none"> Bronze back Porous tin bronze PTFE, Pb 		<ul style="list-style-type: none"> Good thermal conductivity For high velocities Good corrosion protection Very good emergency running properties 	<ul style="list-style-type: none"> Outdoor applications Construction machines Maritime applications, e.g. pumps/turbines, chains for flood gates/sluices, flaps and hinges


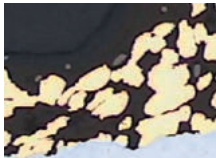




MATERIAL PERMAGLIDE® P1 – MAINTENANCE-FREE, UP TO 250 °C

Material	Structure	Illustration	Characteristics	Applications (examples)
High Performance P141* Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PTFE, ZnS, CF, additives 		<ul style="list-style-type: none"> Suitable for heavy loads in oil High wear resistance 	<ul style="list-style-type: none"> Hydrodynamic systems Dampers Pumps Compressors
High Performance P170* Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PTFE, additives 		<ul style="list-style-type: none"> Particularly suitable for oscillatory motion High wear resistance with micro-movement 	<ul style="list-style-type: none"> Dual mass flywheel Belt tensioner Vibration damper


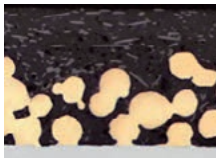


* On request



MATERIAL PERMAGLIDE® P2 – LOW-MAINTENANCE, UP TO 130 °C

Material	Structure	Illustration	Characteristics	Applications (examples)
Lubricated low friction value P200 Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PVDF, BaSO₄, friction and wear-reducing additives 		<ul style="list-style-type: none"> Ready to install with oil distributing pockets Good damping characteristics High chemical resistance 	<ul style="list-style-type: none"> Dampers Agitators
Wet runner P202*, P203* Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PVDF, BaSO₄, friction and wear-reducing additives 		<ul style="list-style-type: none"> P202: with machining allowance, smooth surface P203: ready to install, smooth surface 	<ul style="list-style-type: none"> Hydrodynamic applications Hydraulic applications Pneumatic applications Radial piston machines
Stable P209* Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PVDF, BaSO₄, friction and wear-reducing additives 		<ul style="list-style-type: none"> Reduced sliding layer thickness Increased durability 	<ul style="list-style-type: none"> High-pressure pumps Gearbox bearings

MATERIAL PERMAGLIDE® P2 – LOW-MAINTENANCE, UP TO 200 °C

Material	Structure	Illustration	Characteristics	Applications (examples)
Durable in fuel P213* Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PEEK, CF, friction and wear-reducing additives 		<ul style="list-style-type: none"> Ready to install, without oil distributing pockets High thermal stability Extremely high wear resistance 	<ul style="list-style-type: none"> Hydrodynamic applications in diesel fuel Fuel injection pumps
Adaptive P240*, P243* Unleaded PFOA-free 	<ul style="list-style-type: none"> Steel back Porous tin bronze PA, friction and wear-reducing additives 		<ul style="list-style-type: none"> Continuous operating temperature up to +150°C (short-term up to +200°C) Adaptable Dampable 	<ul style="list-style-type: none"> Hydrodynamic applications Brakes Machine tools Construction machines Kingpins Pumps Chassis Industrial trucks

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