



SI 1431
For technical personnel only!
1/2

SERVICE INFORMATION

KS PERMAGLIDE® PLAIN BEARINGS MATERIALS AND APPLICATIONS

MATERIAL KS 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 Windscreens 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 KS 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


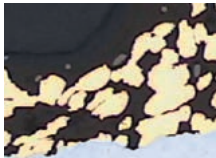






SI 1431


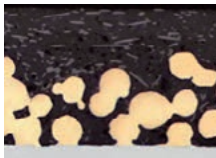


For technical personnel only!

2/2

MATERIAL KS 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 KS 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

* On request

All information is non-binding. We can accept no responsibility for its correctness and completeness. We always welcome feedback about any errors in the catalogue, and will correct them in future editions. We reserve the right to change the product specifications, materials, the appearance and the scope of supply of our products at any time. The illustrations are non-binding. Prior to installation, always check whether the purchased product is suitable for the intended purpose, including with regard to the current legal requirements (e.g. RoHS, REACH). Please note that the products offered in the catalogue are not intended for use in aircraft and spacecraft. The installation must also always be carried out by qualified personnel. Illustrations, schematic diagrams and other data are provided for the purpose of explanation and depiction, and cannot be taken as the basis for installation.