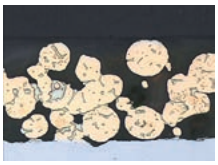
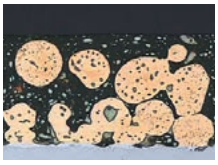
SI 1431
For technical personnel only!
1/2

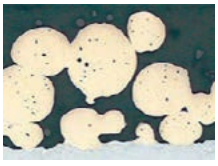
SERVICE **INFORMATION**

KS PERMAGLIDE® PLAIN BEARINGS MATERIALS AND APPLICATIONS

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

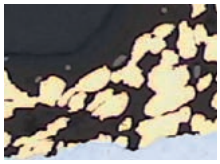
Material	Structure	Illustration	Characteristics	Applications (examples)
Highly resilient and resistant **P180** Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PTFE, $BaSO_4$		• Very low stick-slip tendency • Extremely resilient, especially with edge wear • Low and constant friction value • Very good wear resistance in dry running and wet running • Excellent chemical resistance	• Fluid pumps • Compressors • Shock absorbers • Actuators • Steering systems • Solenoid applications • Seat adjusters • Hydraulics • Pneumatics
High Performance **P147*** Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous bismuth-tin bronze • PTFE, $BaSO_4$		• Good corrosion protection • High chemical resistance • Salt spray tested	• Applications with swivel motion • Windscreen wipers • Hinges
All-rounder **P10** Reduced PFOA	• Steel back • Porous lead bronze • PTFE, Pb		• Very good dry running properties • Good emergency running properties • Can be used in oil	• Fire damper • Gear pump • Wind turbine systems • Packaging machines • Agricultural machines
High pv value **P11** Reduced PFOA	• Bronze back • Porous tin bronze • PTFE, Pb		• Good thermal conductivity • For high velocities • Good corrosion protection • Very good emergency running properties	• 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

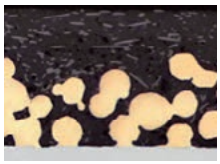
Material	Structure	Illustration	Characteristics	Applications (examples)
High Performance **P141*** Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PTFE, ZnS, CF, additives		• Suitable for heavy loads in oil • High wear resistance	• Hydrodynamic systems • Dampers • Pumps • Compressors
High Performance **P170*** Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PTFE, additives		• Particularly suitable for oscillatory motion • High wear resistance with micro-movement	• Dual mass flywheel • Belt tensioner • Vibration damper

* On request

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

Material	Structure	Illustration	Characteristics	Applications (examples)
Lubricated low friction value P200 Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PVDF, $BaSO_4$, friction and wear-reducing additives		• Ready to install with oil distributing pockets • Good damping characteristics • High chemical resistance	• Dampers • Agitators
Wet runner P202*, P203* Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PVDF, $BaSO_4$, friction and wear-reducing additives		• P202: with machining allowance, smooth surface • P203: ready to install, smooth surface	• Hydrodynamic applications • Hydraulic applications • Pneumatic applications • Radial piston machines
Stable P209* Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PVDF, $BaSO_4$, friction and wear-reducing additives		• Reduced sliding layer thickness • Increased durability	• 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 REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PEEK, CF, friction and wear-reducing additives		• Ready to install, without oil distributing pockets • High thermal stability • Extremely high wear resistance	• Hydrodynamic applications in diesel fuel • Fuel injection pumps
Adaptive P240*, P243* Unleaded PFOA-free REACh compliant RoHS conform pb free	• Steel back • Porous tin bronze • PA, friction and wear-reducing additives		• Continuous operating temperature up to +150°C (short-term up to +200°C) • Adaptable • Dampable	• Hydrodynamic applications • Brakes • Machine tools • Construction machines • Kingpins • Pumps • Chassis • Industrial trucks

* On request