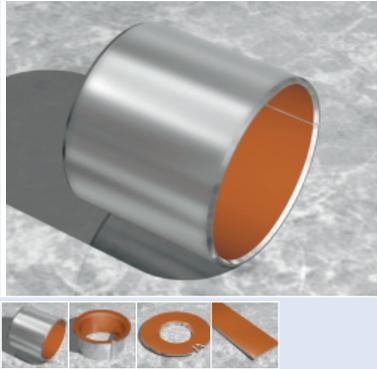


DP4™ Bearing Material	Characteristics	Applications
	<ul style="list-style-type: none"> Compliant with the European Union's End of Life Vehicles (ELV) directive 2000/53/EC on the elimination of hazardous materials in the construction of passenger cars and light trucks Compliant with the European Union Directive 2002/95/EC concerning the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Regulation) <p>Lubricated conditions</p> <ul style="list-style-type: none"> Good wear resistance and low friction performance over a wide range of load, speed and temperature conditions Very good performance in oil lubricated heavy duty hydraulic applications DP4™ offers benefits in applications where corrosion of the lead in DU® may occur DP4™ offers improved wear and friction performance along with good chemical resistance compared to DU® <p>Dry conditions</p> <ul style="list-style-type: none"> DP4™ performs well dry under light duty applications Particularly suitable for intermittent operation under reciprocating or oscillating movements 	<p>Automotive Braking systems, clutches, gearbox and transmissions, hinges: door, bonnet, boot, cabriolet roof tops, pedals; pumps: axial piston, radial piston, gear and vane; seat mechanisms, steering systems, struts and shock absorbers, wiper systems, etc.</p> <p>Industrial Aerospace, agricultural equipment, construction equipment, food and beverage, material handling equipment, forming machines: metal, plastic and rubber; office equipment, medical and scientific equipment, packaging equipment, pneumatic and hydraulic cylinders, pumps and motors, railroad and tramways, textile machinery, valves, etc.</p>

Composition & Structure	Operating Conditions	Availability										
<p>Metal-polymer composite material Steel + porous bronze sinter + PTFE + fillers</p>	<table border="1"> <tr> <td>dry</td> <td>good</td> </tr> <tr> <td>oiled</td> <td>very good</td> </tr> <tr> <td>greased</td> <td>good</td> </tr> <tr> <td>water</td> <td>fair</td> </tr> <tr> <td>process fluid</td> <td>good</td> </tr> </table>	dry	good	oiled	very good	greased	good	water	fair	process fluid	good	<p>Ex Stock</p> <ul style="list-style-type: none"> Cylindrical bushes, flanged bushes, thrust washers, flanged washers and strip <p>To order</p> <ul style="list-style-type: none"> Non-standard parts
dry	good											
oiled	very good											
greased	good											
water	fair											
process fluid	good											

Microsection	Bearing Properties	Unit	Value
 <p>Sliding layer PTFE + fillers</p> <p>Porous bronze sinter</p> <p>Steel backing</p>	<p>Dry</p> <p>Maximum sliding speed v</p> <p>Maximum pv factor</p> <p>Coefficient of friction f</p> <p>Oil lubrication</p> <p>Maximum sliding speed v</p> <p>Maximum pv factor</p> <p>Coefficient of friction f</p> <p>General</p> <p>Maximum temperature T_{max}</p> <p>Minimum temperature T_{min}</p> <p>Maximum load p static</p> <p>Maximum load p dynamic</p> <p>Shaft surface finish R_a - dry operation</p> <p>Shaft hardness</p>		<p>m/s</p> <p>MPa x m/s</p> <p>–</p> <p>m/s</p> <p>MPa x m/s</p> <p>–</p> <p>°C</p> <p>°C</p> <p>MPa</p> <p>MPa</p> <p>µm</p> <p>HB</p> <p>2.5</p> <p>1.0</p> <p>0.04-0.25</p> <p>5.0</p> <p>10.0</p> <p>0.02-0.08</p> <p>+280</p> <p>-200</p> <p>250</p> <p>140</p> <p>0.4±0.1</p> <p>>200</p>