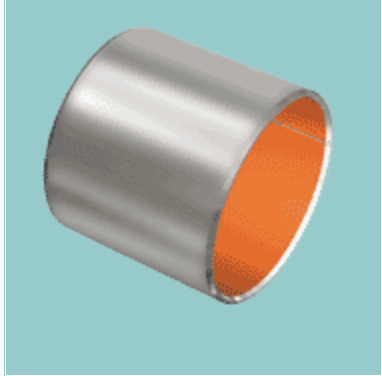
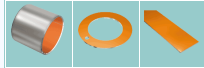



Characteristics	Applications	DS™
<ul style="list-style-type: none"> <li>Marginally lubricated and dry bearing material developed for oscillating conditions</li> <li>DS does not cause fretting corrosion damage to the shaft under low amplitude oscillating movements</li> <li>Performance is similar to DX, but with lower friction</li> </ul>	<p><b>Automotive</b></p> <ul style="list-style-type: none"> <li>Steering gear</li> <li>power steering</li> <li>pedal bushes</li> <li>seat slides</li> <li>king-pin bushes</li> <li>tailgate pivots</li> <li>brake caliper bushes, etc.</li> </ul> <p><b>Industrial</b></p> <ul style="list-style-type: none"> <li>Mechanical handling and lifting equipment</li> <li>machine slides</li> <li>hydraulic cylinders</li> <li>hydraulic motors</li> <li>ski-lifts</li> <li>pneumatic equipment</li> <li>medical equipment</li> <li>textile machinery</li> <li>agricultural equipment</li> <li>scientific equipment, etc.</li> </ul>	 

Composition & Structure	Operating Conditions		Availability
Steel + porous bronze sinter + acetal + filler	dry	good	<b>Ex Stock</b>
	oiled	very good	
	greased	very good	<b>To order</b>
	water	fair	
	process fluid	fair	
			<ul style="list-style-type: none"> <li>N/A</li> <li>Cylindrical bushes</li> <li>thrust washers</li> <li>strip and special parts (all forms also available with lubrication indents)</li> </ul>

Bearing Properties	Unit	Value	Microsection	
<b>Dry</b>				
Maximum sliding speed U	m/s	1.5		
Maximum PU factor	$N/mm^2 * m/s = W/mm^2$	1.4		
Coefficient of friction f	–	0.15-0.30		
<b>Grease lubrication</b>				
Maximum sliding speed U	m/s	2.5		
Maximum PU factor	$N/mm^2 * m/s = W/mm^2$	2.8		
Coefficient of friction f	–	0.05-0.10		
<b>General</b>				
Maximum temperature T <sub>max</sub>	°C	+130		
Minimum temperature T <sub>min</sub>	°C	-60		
Maximum load P static	$N/mm^2$	110		
Maximum load P dynamic	$N/mm^2$	45		
Shaft surface finish Ra	µm	0.4		
Shaft hardness	HB	>200		
Shaft hardness for longer service life	HB	>350		