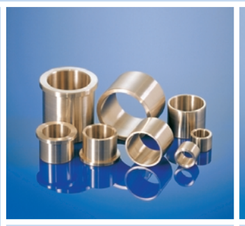
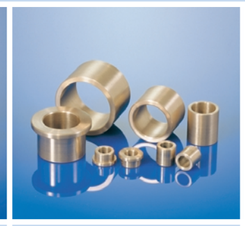
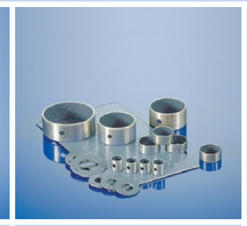
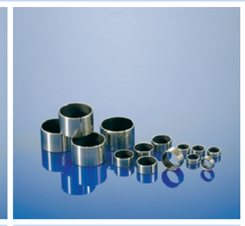
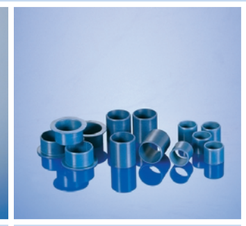
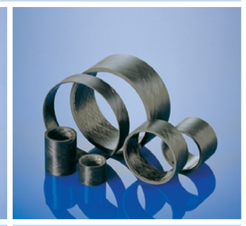
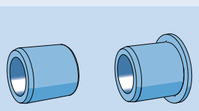
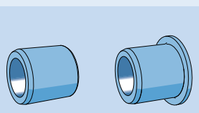
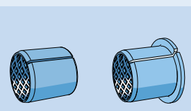
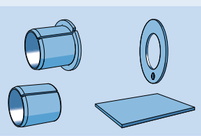
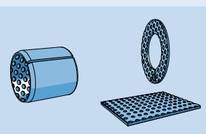
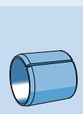
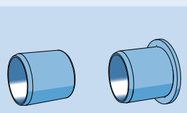
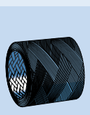
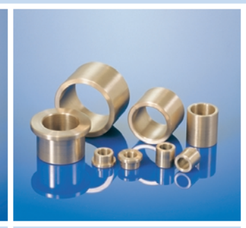
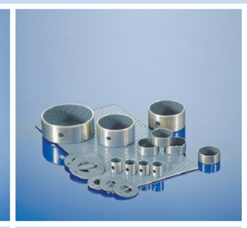
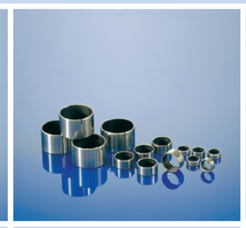
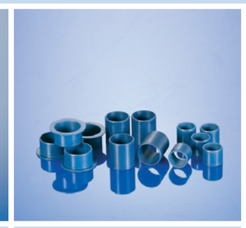
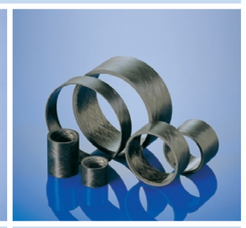
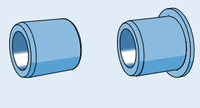
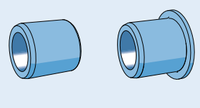
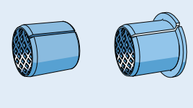
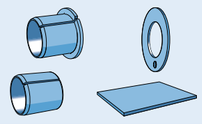
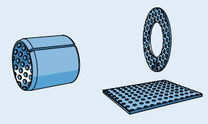
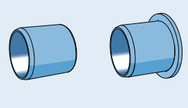
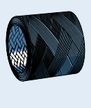
SKF Bushings – Product Guide

	 **Solid Bronze** The all-round runner	 **Sintered Bronze** The fast runner	**Wrapped Bronze** The cross country runner	**PTFE Composite** The long runner	 **POM Composite** The up-hill runner	 **Stainless Backed Composite** The smooth & shiny runner	 **PTFE Polyamide** The jogging runner	 **Filament Wound** The heavy duty runner
Self-lubricating performance	–	+	–	++	+	++	++	++
Maintenance-free operation	–	+	0	++	+	++	++	++
Dirty environment	+	0	++	–	0	–	–	+
Corrosion resistant	+	0	+	0	0	++	++	++
High temperature	+	–	+	++	0	+	0	+
High load	0	–	0	+	++	+	0	++
Shock loads/vibrations	+	0	+	0	0	0	–	++
High sliding velocity	–	++	0	+	+	+	0	–
Low friction	–	+	–	++	++	++	0	++
Poor shaft surface finish	+	–	0	–	0	–	0	0
Small operating clearance	–	0	0	++	+	+	0	–
Insensitive to misalignment	+	0	0	–	0	–	0	+
Low price level	0	+	+	++	++	–	++	–
Assortment								
Product series designation	PBM PBMF	PSM PSMF	PRM PRMF	PCMF .. B PCMW .. B PCM .. B PCMS .. B	PCM .. M PCMW .. M PCMS .. M	PI	PPM PPMF	PWM

Excellent (++) Good (+) Suitable (0) Not suitable (–)

SKF Bushings – Technical Data

	Solid Bronze The all-round runner	 **Sintered Bronze** The fast runner	**Wrapped Bronze** The cross country runner	**PTFE Composite** The long runner	 **POM Composite** The up-hill runner	 **Stainless Backed Composite** The smooth & shiny runner	 **PTFE Polyamide** The jogging runner	 **Filament Wound** The heavy duty runner
Temperature range, °C	–40 .. +150	–10 .. +100	–40 .. +150	–200 .. +250	–40 .. +110	–150 .. +150	–30 .. +110	–50 .. +140
Friction coefficient μ	0,08 .. 0,15	0,05 .. 0,10	0,08 .. 0,15	0,03 .. 0,08	0,04 .. 0,12	0,03 .. 0,08	0,06 .. 0,15	0,03 .. 0,08
Permissible load, N/mm^2 – dynamic ($v < 0,01$ m/s) – static ($v = 0$ m/s)	 50 140	 10 50	 40 120	 80 250	 120 250	 80 300	 40 80	 140 200
Permissible sliding velocity, m/s	0,5	0,25 .. 10	1,0	2,0	2,0	1,5	1,0	0,5
Shaft tolerance	e7 – e8	f7 – f8	e7 – f8	f6 – h7	h7 – h8	g6 – f7	h8 – h9	h7 – h8
Housing tolerance	H7	H7	H7	H7	H7	H7	H7	H7
Shaft roughness R_a, μm	0,8 .. 1,6	0,2 .. 0,8	0,4 .. 0,8	0 .. 0,4	0 .. 0,8	0 .. 0,4	0 .. 0,8	0 .. 0,8
Shaft hardness, HB	180 – 400	200 – 300	150 – 400	300 – 600	150 – 600	300 – 600	100 – 300	200 – 600
Assortment								
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The sliding velocity can be calculated using

$v = n \times \pi \times d / (60 \times 1\,000)$

where
v = sliding velocity, m/s
n = rotational speed, r/min
d = bore diameter of bushing, mm

The specific bearing load can be calculated using

$p = F / (d \times B)$

where
p = specific bearing load, N/mm^2
F = bearing load, N
d = bore diameter of bushing, mm
B = width of bushing, mm

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