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Material		Unit	SO#50SP2*	SO#50SP5	SO#50SP7	SO#50SP8	SO#50SP13	SO#50B	Tin bronze	Sinter bronze	SO#50PB	CuSn8	SO#50S45C	SO#50F	Polyacetal
			Hard brass with graphite Standard material	***Alu-bronze with graphite*** for fresh & salt water	***Alu-bronze with graphite*** harder than SO#50SP2	***Hard brass with graphite*** highest wear resistance	***Bronze with graphite*** for high temperatures	***Red brass with graphite*** for unhardened materials	for unhardened materials	for highest speeds	***Tin Bronze*** for unhardened materials	***acc. to DIN 17662*** universally applicable	***Steel with graphite*** for high impact loads	***Grey cast iron with graphite*** vibration-damping	***Plastic*** resistant to chemicals
Self-lubricating		-	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
Lubricant		-	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	-	Oil	-	-	Graphite	Graphite	Graphite
Max. surface pressure		N/mm^2	100	100	120	130	120	50	80	50	80	40	30	5	25 (with oil 35)
Max. sliding speed		m/min	30	10	10	15	10	50	20	300	50	120	10	10	50 (with oil 200)
Max. pxv-Value		N/mm^2 * m/min	200	150	200	200	200	100	-	96	100	-	80	50	100 (with oil 200)
Operating temperature	Standard	°C	-50 / +150	-50 / +150	-50 / +150	-50 / +150	-50 / +150	-50 / +150	-50 / +200	-12 / +90	-50 / +150	-200 / +200	-50 / +150	-50 / +150	-50 / +80
	max.		+300	+300	+300	+300	+300	+400			+300				
Friction coefficie	initial	-	0,15	0,15	0,15	0,15	0,2	0,15	0,16	0,09	0,15	-	0,01	-	-
	long term		0,07	0,07	0,07	0,07	0,15	0,07			0,07				
Brinell hardeness		HB	>210	>210	>260	220 ~ 260	>280	>60	>80	>25	>80	-	>375	160 ~ 220	115 (HRR)
Further information															
Elongation		%	>12	>18	>2	>3	>0,5	>15	>6	-	>5	-	19	-	73
Density		kg/dm^3	7,9	7,7	7,8	7,8	7,2	8,7	8,7	6,5 ~ 7,0	8,2	8,8	7,8	7,1 ~ 7,3	1,4
Tensile strength		N/mm^2	>755	>686	>833	>700	>550	>195	>295	-	>295	-	>690	>250	69
Yield strength		N/mm^2	>412	>372	>509	-	-	>105	>161	-	>161	-	-	-	-
E-Modul		N/mm^2	97000	108000	123600	108000	145000	96000	108000	-	108000	115000	-	-	-
Thermal expansion		10-5 * grd.-1	1,9	1,6	1,6	1,9	1,71	1,8	1,8	-	1,8	-	1,1	1	7,7

*Material used according to SANKYO OILLESS standards
**against steel, hardened and grinded

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Intertek