

Properties	Norm	Unit	PEEK SN-4000	PEEK BG-4330	PEEK BG-4130	PEEK MG-4130	PEEK LY-4110	PEEK LB-4125	PEEK LG-4140	PEEK LC-4221	PEEK CG-4132
Fillers	-	-	-	10% Carb fiber 10% Graph 10% PTFE	30% Carbon fiber	30% Glass- fiber	10%PTFE	25%PTFE	40%PTFE	14% Graph 7%PTFE	32% Graph
Standard color	-	-	Tan	Black	Black	Tan	Yellow	Blue	Green	Grey	Black
Density	ISO 1183	g/cm ³	1,32	1,47	1,44	1,51	1,37	1,47	1,58	1,42	1,59
Tensile modulus	ISO 527	MPa	3.600	3.660	6.750	5.900	3.300	2.850	2.640	3.200	3.930
Tensile strength	ISO 527	MPa	75	82	134	92	70	55	40	60	33
Elongation @ max. stress / @ break	ISO 527	%	5 / 8	4 / 4	4 / 4	3 / 3	8 / 11	7 / 10	6 / 9	6 / 6	5 / 6
Compr. Strength at 1% def. (23°C)	DIN 53453	MPa	130	150	240	215	110	102	88	107	96
Shore D hardness	-	-	86	86	89	89	87	85	80	86	85
Max. operating temperature	-	°C	300	320	320	320	300	300	300	300	320
Max. continuous operating temperature	20.000hrs	°C	260	260	260	260	260	260	260	260	260
Min. continuous operating temperature	-	°C	-60	-30	-30	-30	-60	-60	-60	-60	-60
Water absorption in air (RH 50%)	ISO 62	%	0,2	0,06	0,06	0,12	0,16	0,14	0,1	0,07	0,05
Water absorption in water (23°C)	ISO 62	%	0,45	0,06	0,06	0,12	0,4	0,3	0,2	0,07	0,05
Coëfficiënt of friction at steel (Dynamic)	23°C	-	0,35	0,28	0,32	0,3	0,2	0,18	0,16	0,19	0,25
Coëfficiënt of friction at steel (Dynamic)	200°C	-	0,78	0,36	0,58	0,62	0,24	0,22	0,2	0,22	0,3
Thermal exp. Coëfficiënt up to 150°C	-	1/K10-5	5	2,5	1,5	2,2	6	7	8	5	4
Dielectric strength	DIN 53481	KV/mm	24	-	-	175	30	35	40	-	-
Electrical conductive	-	<10 ⁵ Ohm	0	0	0	0	0	0	0	0	0
FDA compliance	-	-	Ü	0	0	Ü	Ü	Ü	Ü	0	0

Properties	Norm	Unit	PPS	PPS	UHMWPE	PVDF	ETFE	ECTFE	PCTFE	FEP	PFA
Fillers	-	-	40% Glass- fiber	Bearing grade	(9,2 · 10 ⁶ g/mol)	-	-	-	-	-	-
Standard color	-	-	Tan	Blue	Yellow						
Density	ISO 1183	g/cm ³	1,64	1,43	0,93	1,75	1,78	1,7	2,16	2,16	2,16
Tensile modulus	ISO 527	MPa	9.800	3.700	680	1.200	800	1.600	1.500	600	650
Tensile strength	ISO 527	MPa	120	75	17	44	43	49	36	23	28
Elongation @ max. stress / @ break	ISO 527	%	1,5 / 1,5	2 / 3	20 / 50	60	250	250	175	300	300
Compr. Strength at 1% def. (23°C)	DIN 53453	MPa	160	110	-	-	-	-	-	-	-
Shore D hardness	-	-	-	-	61	80	67	75	76	58	63
Max. operating temperature	-	°C	260	260	90	160	160	160	180	215	270
Max. continuous operating temperature	20.000hrs	°C	240	230	80	150	150	150	170	205	260
Min. continuous operating temperature	-	°C	-20	-20	-200	-60	-100	-75	-273	-100	-150
Water absorption in air (RH 50%)	ISO 62	%	0,02	0,02	0,02	0,03	0,02	0,01	0	0,03	0,02
Water absorption in water (23°C)	ISO 62	%	0,02	0,02	0,03	0,03	0,02	0,01	0	0,03	0,02
Coëfficiënt of friction at steel (Dynamic)	23°C	-	0,32	0,24	0,22	0,45	0,4	0,65	0,35	0,35	0,25
Coëfficiënt of friction at steel (Dynamic)	200°C	-	0,68	0,52	-	-	-	-	-	-	-
Thermal exp. Coëfficiënt up to 150°C	-	1/K10-5	2,5	6	20	10	13	8	5	12	13
Dielectric strength	DIN 53481	KV/mm	20	24	45	65	75	65	60	65	65
Electrical conductive	-	<10 ⁵ Ohm	0	0	0	0	0	0	0	0	0
FDA compliance	-	-	Ü	0	Ü	Ü	Ü	Ü	Ü	Ü	Ü