

Elastomers	SSI Code	Temp Range		Strengths	Weakness	Cost	Wear Resistance	Extrusion Resistance	Minimum Recommended Surface Hardness (HRc)	Coefficient of Friction
		Min	Max							
NBR 85A	MN01	-31F	+248F	Popular for standard applications	Not as compatible with fluids when compared to HNBR	\$\$	3	3	45-60	0.50-0.70
Low Temp NBR 80A	MN12	-58F	+230F	Low temperature ability	Not as compatible with fluids when compared to HNBR	\$\$	3	2	45-60	0.50-0.70
HNBR 85A	MN03	-4F	+302F	Good Abrasion & Chemical Resistance	Limited low temperature range	\$\$\$	4	3	45-60	0.50-0.70
EPDM 85A	ME01	-40F	+248F	Good for Brake Fluids	Not recommended for Hydraulic Oils	\$\$	3	3	45-60	0.50-0.70
FKM (Viton) 85A	MF01	-4F	+428F	High Temp, Premium Chemical Resistance	Poor Abrasion Resistance	\$\$\$\$	2	3	45-60	0.50-0.70
VMQ (Silicone) 85A	MS01	-76F	+428F	High Temp, Food Applications	Very Poor Abrasion Resistance	\$\$	1	3	45-60	0.50-0.70
H-Polyurethane 95A	MP03	-4F	+239F	Premium Abrasion Resistance	Limited low temperature range	\$\$	5	4	45-60	0.28-0.35
Polyurethane 72D	MP07	-31F	+230F	High Modulus	High Temperature water exposure	\$\$	5	5	45-60	0.15-0.20
Polyurethane 58D	MP08	-31F	+230F	High Modulus	High Temperature water exposure	\$\$	5	5	45-60	0.15-0.20
Thermoplastics										
Polyacetal (Delrin/POM)	ML01	-49F	+230F	High Modulus, Stable in Water	Limited availability in large diameter	\$\$\$	4	5	45-60	0.11-0.15
Polyamide (Nylon)	ML02	-31F	+212F	High Modulus, Large diameter availability	High Swell from Moisture	\$\$	4	5	45-60	0.25-0.35
UHMW Polyethylene	ML10	-220F	+176F	Low friction, FDA compliant	Thermal expansion issues	\$	5	4	45-60	0.06-0.10
PEEK	MK11	-76F	+480F	Chemical Resistant, High Modulus	Raw Material is Very Expensive	\$\$\$\$\$\$				0.19-0.29
PTFE Virgin	MT01	-425F	+450F	Low friction, FDA compliant	Poor extrusion resistance when used as a dynamic seal	\$	1	1	25	0.05-0.08
PTFE/Bronze 40%	MT02	-425F	+575F	Resistance to extrusion due to high bronze fill	Not recommended for Short Stroke applications	\$\$\$\$\$\$	5	5	45	0.10-0.17
PTFE/Carbon 23%/Graphite 2%	MT06	-425F	+575F	Excellent for corrosive service and hot water	Black wear residue can discolor the operating fluid	\$\$	4	4	50	0.08-0.12
PTFE/Glass 15%/Moly 5%	MT08	-400F	+575F	Good for Short Stroke Applications	Not recommended for Soft Sealing surfaces	\$\$\$\$	5	4	60	0.08-0.12
PTFE/Carbon 25%	MT44	-425F	+575F	Carbon fibers add strength	Higher fill materials can be brittle	\$\$\$\$	4	4	50	0.08-0.12
PTFE/Carbon 10%	MT90	-425F	+575F	Friendly to Soft Metal Surfaces	Black wear residue can discolor the operating fluid	\$\$\$\$	4	4	50	0.08-0.12
PTFE/Graphite 15%	MT69	-425F	+575F	Friendly to Soft Metal Surfaces	Electrical conductivity can vary with graphite content	\$\$\$	2	3	25	0.06-0.10
Thermosets										
Polyester Resin/Fabric (machined)	MTC1	-31F	+240F	High Load Carrying Ability	High Temperature exposure w/water-based fluids	\$\$	N/A	N/A	45-60	0.18-0.25
Polyester Resin/Fabric High Temp	MTC10	-20F	+482F	High Load Carrying Ability	High Temperature exposure w/water-based fluids	\$\$\$\$			45-60	0.18-0.25
Polyester Resin/Fabric (guide strip)	MTC20	-31F	+240F	High Load Carrying Ability	High Temperature exposure w/water-based fluids	\$			45-60	0.18-0.25
O-rings										
Static sealing										
NBR 70A	MN61	-22F	+212F	Popular for standard applications	Requires a back-up ring for static sealing	\$	4	2	30-45	N/A
NBR 90A	MN64	-13F	+212F	Can be used by itself w/out b-up ring	Not as compatible with fluids when compared to HNBR	\$	4	4	30-45	
HNBR 70A	MN71	-22F	+302F	Increased temperature and chemical resistance	Requires a back-up ring for static sealing	\$\$	5	2	30-45	
HNBR 90A	MN74	-13F	+302F	Can be used by itself w/out b-up ring	Limited low temperature range	\$\$	5	4	30-45	
EPDM 70A	ME61	-49F	+266F	Good for Brake Fluids	Not recommended for Hydraulic Oils	\$	4	2	30-45	
EPDM 80A	ME64	-49F	+266F	Good for Brake Fluids	Not recommended for Hydraulic Oils	\$	4	3	30-45	
FPM 70A	MF61	+5F	+392F	Very Good Chemical Resistance	Requires a back-up ring for static sealing	\$\$	3	2	30-45	
FPM 80A	MF63	+5F	+392F	Very Good Chemical Resistance	Limited compatibility with water/glycol at high temp	\$\$	3	3	30-45	
FPM 90A	MF64	+5F	+392F	Can be used by itself w/out b-up ring	Limited compatibility with water/glycol at high temp	\$\$	3	4	30-45	

Chart for reference and comparison purposes only. Values can change based on application and operating parameters. For more detailed information please consult engineering.