













GBSA STANDARD OIL SEAL DESIGNS

	Outside Surface Symbols	C	B	A
Lip Symbols		Rubber covered O.D. for improved O.D. sealing ability	Metal O.D. with ground surface and front chamfer	Metal O.D. with an inner case
S	Single lip with a garter spring	 SC	 SB	 SA
T	Dual lip with a garter spring	 TC	 TB	 TA
V	Single lip without a garter spring	 VC	 VB	 VA
K	Dual lip without a garter spring	 KC	 KB	 KA

Lip Material

It is very important to take into account the environment in which the seal will operate when you are selecting the sealing element material. The most important factors are temperature, medium being sealed, pressure and shaft speed.

The table and figures to the right provide general information to help select the compound according to physical properties.

Material Characteristics

Compound	Nitrile (code N)	Poly Acrylates (code P)	Silicone (code S)	Fluoro Rubber Viton (code V)
Temperature Range	-40°F to 248° F	-22°F to 302°F	-58°F to 356°F	-22°F to 392°F
Abrasion Resistance	2	3	4	2
Compression Set	2	3	2	2
Cracking Resistance	3	3	1	2
Cut Growth Resistance	2	2	4	4
Flex Cracking Resistance	3	3	2	2
Impact Strength	2	4	3	3
Low Temperature Resistance	2	4	1	2
Oxidation Resistance	2	1	1	1
Sunlight Resistance	3	1	1	1
Tear Resistance	2	4	4	3
Weathering Resistance	2	1	1	1
Note:	1= Excellent	2 = Good	3 = Fair	4 = Poor