



Grease lubricated seals product listings

Understanding key table elements

Designed to be user-friendly, CR Seals and product listings convey a good deal of information on every line. As you familiarize yourself with the tables, keep these need-to-know basics in mind:

Seal and product sizes

All size listings for all CR Seals products are arranged by ascending shaft diameters, segregated as inch sizes (green bars) and metric sizes (blue bars). All bore and width sizes listed under the green bars are in inches, while all sizes listed under blue bars are in mm.

Bore / width

Once you have selected the right shaft size, you will need to identify the seals with a matching bore size. The recommended tolerance ranges for shaft and bore can be found on **pages 46-49**. While it is important to choose a seal with a close match to shaft and bore, it is less important to choose a seal with a predetermined width. As long as the seal is short enough not to protrude out of the bore, it will work just fine.

Preferred designs

Highlighted in bold in the “Part Number” and “Seal Type” columns, preferred seal design listings represent the highest performing or otherwise best suited sealing solution for a given shaft diameter.

Lip Material

- R = NBR** (nitrile rubber)
- RG = NBR** with advanced oil resistance and pumping ability
- D = XNBR** (carboxylated nitrile)
- H = HNBR** (hydrogenated nitrile)
- V = FKM** (fluorocarbon rubber)
- P = ACM** (polyacrylate elastomer)
- T = PTFE** (polytetrafluoroethylene)

Seal technologies

W = SKF Wave: Featuring the patented SKF Wave lip design, these are the most robust standard seals ever made.

E = SKF Edge: SKF Edge shaft seals HMS5 and HMSA10 combine an SKF-developed NBR compound with a rubber outside diameter according to ISO/DIN global design standards – primarily available in metric sizes.

F = SKF Flex: SKF Flex seals deliver heavy-duty performance in fully customizable sizes and features to fit and perform in the application.

S = Standard oil seal: SKF carries some older designs that do not have the modern advancements of the SKF Edge or SKF Wave lips, but may be adequate for some applications. Use these when SKF Edge or SKF Wave seals are not available in the size needed.

G = Grease seal: Oil seals can handle oil or grease applications, but grease seals do not have the garter spring needed for oil retention, so they are for grease only. Normally you point the lip away from grease if the main concern is water/dirt ingress, which also allows the grease to purge if needed.

Key features

- ▲ **WasteWatcher:** Indicates that the product is most likely to be in stock at our distributors and our own SKF warehouses. The CR Seals Waste-Watcher program helps distributors optimize seal inventories.
- **Bore-Tite:** Indicates the seal uses SKF Bore-Tite, a green, water-based acrylic sealant used as a coating on the outside diameter of the seal.
- ▣ **SS Case:** Indicates the seal has a stainless steel seal case.
- ◎ **SS Spring:** Indicates the seal has a stainless steel seal lip spring.
- ◆ **Pressure seal up to 50 psi:** Suitable for higher-pressure sealing applications; typical industrial shaft seals can handle only up to 5 or 10 psi.
- ◇ **Cover plate required:** Proper seal installation and operation requires a cover plate, which clamps down axially on an all-rubber seal to hold it in place in many large diameter seal applications.

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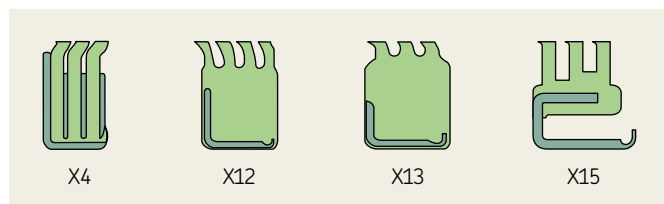
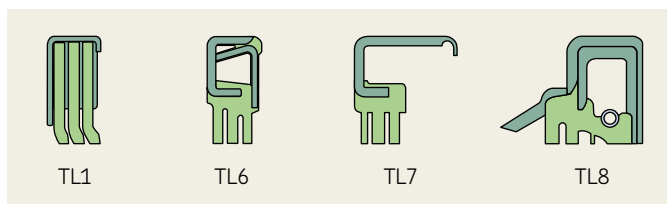
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Seals for grease-lubricated applications

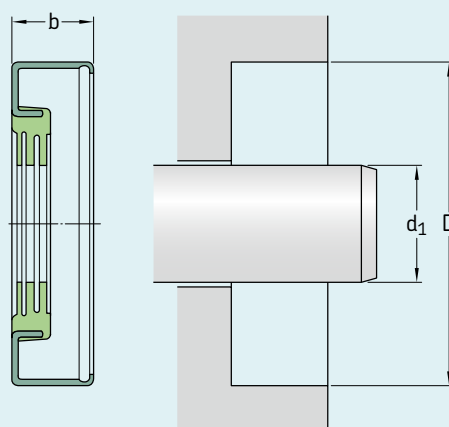


TL seals

CR Seals include an extensive assortment of rotary shaft seals for less demanding grease-lubricated applications operating at moderate speeds. The majority of these seals are designed without a spring. The seals are generally installed with the sealing lip facing outward to provide maximum exclusion ability. Typical applications are grease-lubricated agriculture machinery.

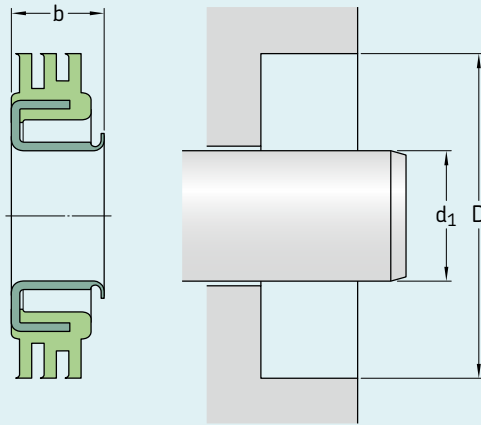
X seals

X seals include an assortment of rotary shaft seals that operate with a press fit on the shaft and with sealing lip(s) that contact the housing bore. These seals are generally installed with the sealing lip(s) facing outward to provide optimum exclusion. Primary applications are grease-lubricated agriculture machinery.



SKF Part Number	Seal type	Lip mat'l	Presses on shaft	Inch			Metric (mm)		
				Shaft dia. d1	Bore dia. B	Width b	Shaft dia. d1	Bore dia. B	Width b
13916	TL8	R		1.375	2.835	0.594	34.93	72.01	15.1
16064	TL7	R		1.625	2.328	0.438	41.28	59.13	11.1
17618	TL7	R		1.750	2.718	0.359	44.45	69.04	9.1
17674	TL7	R		1.750	2.875	0.500	44.45	73.03	12.7
17724	TL6	R		1.750	3.149	0.290	44.45	79.98	7.4
18127	TL7	R		1.813	2.719	0.270	46.05	69.06	6.9
19251	TL8	R		1.938	2.686	0.594	49.23	68.22	15.1
19510	TL6	R		1.945	2.892	0.294	49.40	73.46	7.5
20674	TL7	R		2.063	3.150	0.266	52.40	80.01	6.8
24670	TL1	R		2.474	3.543	0.290	62.84	89.99	7.4
29852	TL1	R		2.953	4.724	0.320	75	120	8.1





SKF Part Number	Lip Seal type	mat'l	Presses on shaft	Inch			Metric (mm)		
				Shaft dia. d1	Bore dia. B	Width b	Shaft dia. d1	Bore dia. B	Width b
538266	X15	R	✓	1.000	2.356	0.270	25.40	59.84	6.9
13807	X15	R	✓	1.375	2.438	0.250	34.93	61.93	6.4
14970	X15	R	✓	1.500	2.286	0.270	38.10	58.06	6.9
15174	X13	R	✓	1.500	2.462	0.290	38.10	62.53	7.4
15530	X4	R	✓	1.563	2.237	0.290	39.70	56.82	7.4
15660	X15	R	✓	1.563	2.531	0.285	39.70	64.29	7.2
15702	X	R	✓	1.563	2.750	0.250	39.70	69.85	6.4
16286	X15	R	✓	1.625	2.462	0.250	41.28	62.53	6.4
16818	X4	R	✓	1.688	2.650	0.290	42.88	67.31	7.4
17485	X4	R	✓	1.750	2.718	0.294	44.45	69.04	7.5
17620	X15	R	✓	1.750	2.786	0.294	44.45	70.76	7.5
18030	X15	R	✓	1.813	2.408	0.300	46.05	61.16	7.6
18510	X13	R	✓	1.872	2.684	0.544	47.55	68.17	13.8
18630	X13	R	✓	1.873	2.716	0.281	47.57	68.99	7.1
19720	X4	R	✓	1.991	2.900	0.290	50.57	73.66	7.4
19844	X15	D	✓	2.000	2.802	0.250	50.80	71.17	6.4
20560	X15	R	✓	2.063	2.938	0.344	52.40	74.63	8.7
20735	X15	R	✓	2.063	3.250	0.294	52.40	82.55	7.5
21298	X15	R	✓	2.125	3.250	0.270	53.98	82.55	6.9
22430	X15	R	✓	2.250	3.250	0.270	57.15	82.55	6.9
22563	X15	R	✓	2.250	3.400	0.294	57.15	86.36	7.5
23744	X15	R	✓	2.375	3.471	0.250	60.33	88.16	6.4
25078	X15	R	✓	2.496	3.672	0.313	63.40	93.27	8.0
30108	X12	R	✓	3.000	4.525	0.375	76.20	114.94	9.5
31514	X15	R	✓	3.150	3.994	0.591	80	101.45	15
32437	X4	R	✓	3.250	4.468	0.315	82.55	113.49	8.0
32441	X15	R	✓	3.250	4.500	0.313	82.55	114.30	8.0
36172	X15	R	✓	3.625	4.500	0.294	92.08	114.30	7.5
36221	X13	R	✓	3.625	4.695	0.395	92.08	119.25	10.0
38590	X12	R	✓	3.875	5.390	0.375	98.43	136.91	9.5
40510	X12	R	✓	4.063	5.390	0.375	103.20	136.91	9.5
44892	X12	R	✓	4.500	6.015	0.550	114.30	152.78	14.0
45161	X12	D	✓	4.500	6.409	0.415	114.30	162.79	10.5
47455	X15	R	✓	4.750	6.002	0.300	120.65	152.45	7.6
49060	X12	R	✓	4.902	7.085	0.475	124.51	179.96	12.1