



CR Seals®

Pressure 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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Section of PUB 810-701 · February 2018

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Pressure seals

CRW5 and CRWA5 seals

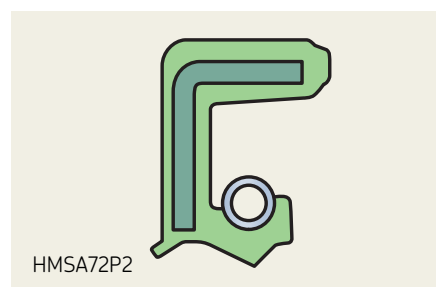
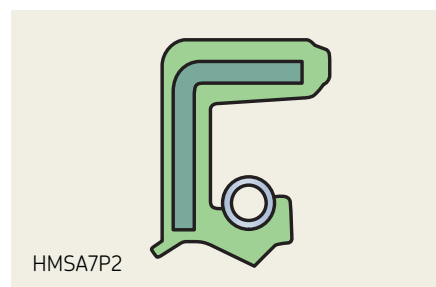
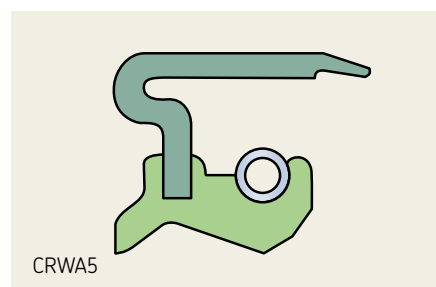
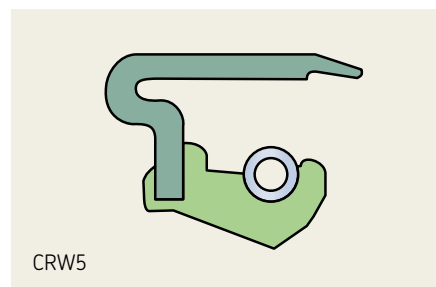
CRW5 and CRWA5 seals are designed to withstand moderate pressure differentials. They have an SKF Wave lip to reduce heat generation and a metal outside diameter for easy installation and a firm and accurate fit in the housing bore; most designs feature SKF Bore Tite Coating on the outside diameter. CRW5 and CRWA5 seals will both operate under a maximum pressure of 50 psi.

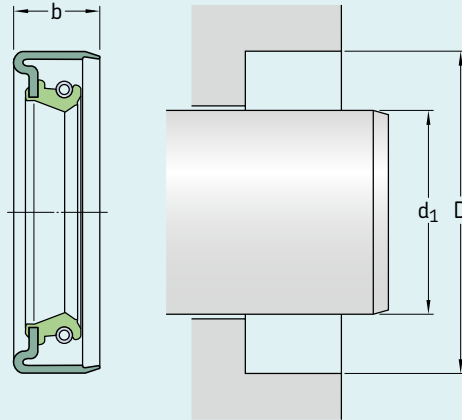
- **CRW5:** Seal with one steel case, SKF Wave lip and a carbon steel garter spring.
- **CRWA5:** Seal with one steel case, SKF Wave lip, a carbon steel garter spring and an auxiliary contacting lip for additional contaminant exclusion ability. A shoulder or retaining ring should be used at the low-pressure side of the seal to prevent it from being pressed out of the housing bore.

CRW5 and CRWA5 seals are available in inch sizes with sealing lips made of either nitrile rubber or the SKF FKM compound SKF Duralife. Other materials are also available on request.

HMSA7P2 and HMSA72P2 seals

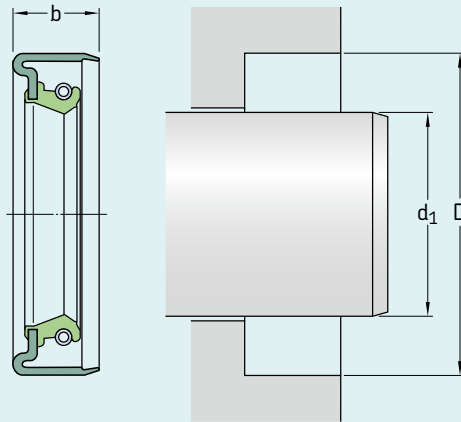
CR Seals also offers a limited number of alternative sizes in HMSA7P2 and HMSA72P2 configurations. These are standard oil seals with a straight lip capable of handling up to 50 psi pressure. A shoulder or retaining ring is required to hold the seals in place.





Bore	Width	Part Number	Seal Type	Lip	Seal	Fea-	Bore	Width	Part Number	Seal Type	Lip	Seal	Fea-
				Mat'l	Mat'l	tures					Mat'l	Mat'l	tures
INCH							0.313 in. Shaft Diameter 7.95 mm						
0.686	0.313	3094	CRWA5	R	W		1.250	0.250	8634	CRWA5	V	W	■
0.686	0.313	3096	CRWA5	V	W		1.375	0.250	8660	CRWA5	R	W	■
0.749	0.250	3103	CRWA5	V	W		1.375	0.250	8665	CRWA5	V	W	■
0.749	0.256	3101	CRWA5	R	W		1.497	0.313	8694	CRWA5	V	W	■◎
0.999	0.313	3171	CRWA5	R	W								
INCH							0.375 in. Shaft Diameter 9.53 mm						
0.749	0.250	3689	CRW5	R	W	■◎	METRIC						
1.124	0.375	3807	CRW5	V	W	■	0.984 in. Shaft Diameter 25 mm						
							40.54	6.35	9700	CRWA5	R	W	■
							44.50	7.95	9805	CRWA5	V	W	■◎
							47	6	25X47X6 HMSA72P2 R	HMSA72P2	R	S	
METRIC							0.472 in. Shaft Diameter 12 mm						
22	6	12X22X6 HMSA72P2 R	HMSA72P2	R	S		INCH						
24	6	12X24X6 HMSA72P2 R	HMSA72P2	R	S		1.000 in. Shaft Diameter 25.40 mm						
							1.375	0.250	9814	CRWA5	R	W	■
							1.499	0.250	9855	CRW5	R	W	◎
							1.499	0.250	9843	CRWA5	R	W	■
							1.499	0.250	9858	CRWA5	V	W	■
							1.499	0.374	544167	CRWA5	P	W	■
							1.500	0.250	9863	CRWA5	R	W	■
							1.752	0.313	9967	CRWA5	R	W	■
							2.000	0.313	10131	CRWA5	R	W	■
INCH							0.500 in. Shaft Diameter 12.70 mm						
0.875	0.313	4940	CRWA5	R	W	■	INCH						
0.875	0.313	4941	CRWA5	V	W	■	1.125 in. Shaft Diameter 28.58 mm						
0.999	0.250	4991	CRWA5	V	W	■◎	1.626	0.250	11139	CRWA5	V	W	■
0.999	0.313	4996	CRWA5	R	W	■	METRIC						
1.124	0.250	5069	CRWA5	R	W	■	1.181 in. Shaft Diameter 30 mm						
1.124	0.250	5072	CRWA5	V	W	■	42	6	30X42X6 HMSA72P2 R	HMSA72P2	R	S	
METRIC							0.591 in. Shaft Diameter 15 mm						
32	7	15X32X7 HMSA72P2 R	HMSA72P2	R	S		INCH						
35	6	15X35X6 HMSA72P2 R	HMSA72P2	R	S		1.250 in. Shaft Diameter 31.75 mm						
							1.687	0.313	12333	CRWA5	R	W	■
							1.750	0.250	12360	CRWA5	R	W	■
							1.750	0.250	12339	CRWA5	V	W	■
							1.937	0.375	12542	CRWA5	V	W	■
							1.997	0.438	12438	CRWA5	V	W	■◎
							2.328	0.500	12609	CRWA5	R	W	■◎
							2.502	0.500	12640	CRWA5	R	W	■◎
METRIC							1.378 in. Shaft Diameter 35 mm						
52	6	35X52X6 HMSA72P2 R	HMSA72P2	R	S		INCH						
52	6	35X52X6 HMSA72P2 V	HMSA72P2	V	S		1.500 in. Shaft Diameter 38.10 mm						
							1.997	0.250	14844	CRWA5	V	W	■◎
							2.064	0.375	14868	CRWA5	V	W	■◎
							2.311	0.500	14979	CRWA5	V	W	■◎
							2.328	0.500	14977	CRWA5	R	W	■◎
METRIC							0.709 in. Shaft Diameter 18 mm						
30	6	18X30X6 HMSA72P2 R	HMSA72P2	R	S		INCH						
35	6	18X35X6 HMSA72P2 R	HMSA72P2	R	S		0.750 in. Shaft Diameter 19.05 mm						
							1.250	0.250	7434	CRWA5	R	W	■
							1.250	0.375	7449	CRWA5	R	W	■
							1.375	0.250	7509	CRWA5	V	W	■





Bore	Width	Part Number	Seal Type	Lip Mat'l	Seal Tech	Fea- tures	Bore	Width	Part Number	Seal Type	Lip Mat'l	Seal Tech	Fea- tures
METRIC							METRIC						
		1.575 in.	Shaft Diameter	40 mm					2.756 in.	Shaft Diameter	70 mm		
62	6	40X62X6	HMSA7P2 R	HMSA7P2	R	S	90	7	70X90X7	HMSA7P2 R	HMSA7P2	R	S
INCH							METRIC						
		1.750 in.	Shaft Diameter	44.45 mm					2.953 in.	Shaft Diameter	75 mm		
2.502	0.500	17374		CRWA5	R	W	95	7	75X95X7	HMSA7P2 V	HMSA7P2	V	S
METRIC							METRIC						
		1.772 in.	Shaft Diameter	45 mm					3.150 in.	Shaft Diameter	80 mm		
65	7	45X65X7	HMSA7P2 R	HMSA7P2	R	S	100	7	80X100X7	HMSA7P2 V	HMSA7P2	V	S
INCH							METRIC						
		1.938 in.	Shaft Diameter	49.23 mm					3.543 in.	Shaft Diameter	90 mm		
2.675	0.250	19213		CRWA5	R	W	100	7	80X100X7	HMSA7P2 R	HMSA7P2	R	S
2.835	0.250	19278		CRWA5	R	W	110	7.50	90X110X7.50	HMSA7P2 R	HMSA7P2	R	S
METRIC							METRIC						
		1.969 in.	Shaft Diameter	50 mm					4.134 in.	Shaft Diameter	105 mm		
68	7	50X68X7	HMSA7P2 R	HMSA7P2	R	S	130	7.50	105X130X7.5	HMSA7P2 R	HMSA7P2	R	S
72	7	50X72X7	HMSA7P2 R	HMSA7P2	R	S	METRIC						
METRIC									5.906 in.	Shaft Diameter	150 mm		
		2.165 in.	Shaft Diameter	55 mm			180	8.50	150X180X8.5	HMSA72P2R	HMSA72P2	R	S
72	7	55X72X7	HMSA72P2 R	HMSA72P2	R	S	METRIC						
INCH									7.835 in.	Shaft Diameter	200 mm		
		2.500 in.	Shaft Diameter	63.50 mm			230	13	200X230X13	HMSA72P2 R	HMSA72P2	R	S
3.250	0.350	24892		CRWA5	R	W							
3.250	0.350	534616		CRWA5	V	W							

