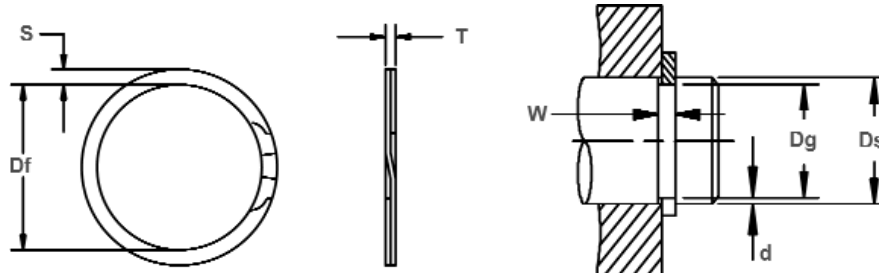


DCR Spiral Shaft Rings

DIN 471

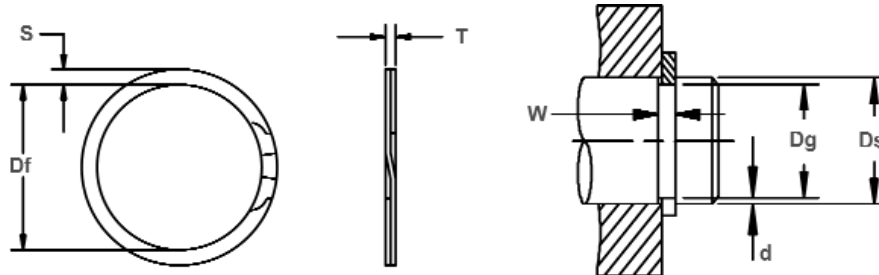
External, Heavy Duty DIN
 For applications where European DIN standards need to be met, these rings are designed to fit into the grooves established by DIN specifications.



Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING NO.	SHAFT DIAMETER (mm)	GROOVE SIZE					RING SIZE						THRUST LOAD (N)		
		DIAMETER		WIDTH		DEPTH	FREE DIAMETER			THICKNESS		SECTION		RING Safety factor of 3	GROOVE Safety factor of 2
		Ds	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S	Tol.		
DCR-13	13	12.4		1.10		0.3	12.27		0.99		1.4		13474	1901	
DCR-14	14	13.4		1.10		0.3	13.26		0.99		1.4		14510	2047	
DCR-15	15	14.3	+0,00	1.10		0.4	14.15		0.99		1.4		15547	2559	
DCR-16	16	15.2	-0,11	1.10		0.4	15.04		0.99		1.65		16583	3119	
DCR-17	17	16.2		1.10		0.4	16.04		0.99		1.65		17620	3314	
DCR-18	18	17.0		1.30		0.5	16.83		1.14		1.91		18668	4386	
DCR-19	19	18.0		1.30		0.5	17.83	+0,00	1.14		1.91		19705	4630	
DCR-20	20	19.0		1.30		0.5	18.82	-0,33	1.14		1.91		20742	4874	
DCR-21	21	20.0	+0,00	1.30		0.5	19.79		1.14		1.91		21779	5117	
DCR-22	22	21.0	-0,13	1.30		0.5	20.78		1.14		1.91		22816	5361	
DCR-23	23	22.0		1.30		0.5	21.77		1.14		1.91		23853	5605	
DCR-24	24	22.9		1.30		0.6	22.66		1.14		2.18		24891	6433	
DCR-25	25	23.9		1.30		0.6	23.65		1.14		2.18		25928	6701	
DCR-26	26	24.9	+0,00	1.30		0.6	24.64		1.14		2.18		26965	6969	
DCR-27	27	25.6	-0,21	1.30		0.7	25.34		1.14	±0,05	2.18	±0,10	28002	9211	
DCR-28	28	26.6		1.60		0.7	26.34		1.44		2.39		36681	9552	
DCR-29	29	27.6		1.60		0.7	27.33		1.44		2.39		37991	9893	
DCR-30	30	28.6		1.60		0.7	28.32		1.44		2.39		39301	10235	
DCR-32	32	30.3		1.60		0.9	30.00	+0,00	1.44		3.25		41921	13256	
DCR-33	33	31.3		1.60	+0,14	0.9	30.99	-0,38	1.44		3.25		43231	13670	
DCR-34	34	32.3		1.60	-0,00	0.9	31.98		1.44		3.25		44541	14085	
DCR-35	35	33.0		1.60		1.0	32.66		1.44		3.25		45851	17058	
DCR-36	36	34.0		1.85		1.0	33.65		1.69		4.01		55349	17545	
DCR-38	38	36.0		1.85		1.0	35.64		1.69		4.01		58424	18520	
DCR-40	40	37.5	+0,00	1.85		1.3	37.11		1.69		4.01		61498	24368	
DCR-42	42	39.5	-0,25	1.85		1.3	39.09		1.69		4.01		64573	25586	
DCR-45	45	42.5		1.85		1.3	42.06	+0,00	1.69		4.01		69186	27414	
DCR-46	46	43.5		1.85		1.3	43.05	-0,51	1.69		4.01		70723	28023	
DCR-47	47	44.5		1.85		1.3	44.04		1.69		4.01		72261	28633	
DCR-48	48	45.5		1.85		1.3	45.03		1.69		4.01		73798	29242	
DCR-50	50	47.0		2.15		1.5	46.53		1.93		5.08		87790	36552	
DCR-52	52	49.0		2.15		1.5	48.51		1.93		5.08		91302	38014	
DCR-54	54	51.0		2.15		1.5	50.50		1.93		5.08		94813	39476	
DCR-55	55	52.0		2.15		1.5	51.49		1.93		5.08		96569	40207	
DCR-56	56	53.0		2.15		1.5	52.48	+0,00	1.93		5.08		98325	40938	
DCR-58	58	55.0		2.15		1.5	54.43	-0,63	1.93		5.08		101836	42400	
DCR-60	60	57.0		2.15		1.5	56.42		1.93		5.08		105348	43863	
DCR-62	62	59.0		2.15		1.5	58.42		1.93		5.08	±0,12	108860	45325	
DCR-63	63	60.0		2.15		1.5	59.39		1.93		5.08		110615	46056	
DCR-65	65	62.0	+0,00	2.65		1.5	61.39		2.41	±0,08	5.08		135725	47518	
DCR-67	67	64.0	-0,30	2.65		1.5	63.37		2.41		5.08		139901	48980	
DCR-68	68	65.0		2.65		1.5	64.34		2.41		5.08		141989	49711	
DCR-70	70	67.0		2.65		1.5	66.34		2.41		5.08		146165	51173	
DCR-72	72	69.0		2.65		1.5	68.33		2.41		5.08		150341	52635	
DCR-75	75	72.0		2.65		1.5	71.33	+0,00	2.41		5.08		156605	54828	
DCR-77	77	74.0		2.65		1.5	73.33	-0,76	2.41		5.08		160782	56290	
DCR-78	78	75.0		2.65		1.5	74.33		2.41		5.08		162870	57021	
DCR-80	80	76.5		2.65		1.8	75.81		2.41		6.05	±0,13	167046	68231	
DCR-82	82	78.5		2.65		1.8	77.81		2.41		6.05		171222	69936	



Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING NO.	SHAFT DIAMETER (mm)	GROOVE SIZE					RING SIZE						THRUST LOAD (N)		
		DIAMETER		WIDTH		DEPTH	FREE DIAMETER			THICKNESS		SECTION		RING Safety factor of 3	GROOVE Safety factor of 2
		Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S	tol.			
DCR-85	85	81,5		3,15		1,8	80,80	+0,00 -0,76	2,91		6,35		214309	72495	
DCR-88	88	84,5		3,15		1,8	83,80		2,91		6,35		221873	75054	
DCR-90	90	86,5	+0,00	3,15		1,8	85,80	+0,00	2,91	±0,08	6,35		226915	76759	
DCR-95	95	91,5	-0,35	3,15		1,8	90,80	-0,89	2,91		6,35		239522	81024	
DCR-98	98	94,5		3,15		1,8	93,79		2,91		6,35		247086	83583	
DCR-100	100	96,5		3,15		1,8	95,79		2,91		6,35		252128	85288	
DCR-102	102	98,0		4,15		2,0	97,29		3,89		6,73		343778	99422	
DCR-105	105	101,0		4,15		2,0	100,28		3,89		6,73	±0,13	353889	102346	
DCR-108	108	104,0	+0,00	4,15		2,0	103,25		3,89		6,73		364000	105270	
DCR-110	110	106,0	-0,54	4,15		2,0	105,23		3,89		6,73		370741	107220	
DCR-115	115	111,0		4,15		2,0	110,19		3,89		6,73		387593	112093	
DCR-120	120	116,0		4,15		2,0	115,16	+0,00	3,89		6,73		404445	116967	
DCR-125	125	121,0		4,15		2,0	120,12	-1,30	3,89		6,73		421297	121840	
DCR-130	130	126,0		4,15		2,0	125,07		3,89		6,73		438149	126714	
DCR-135	135	131,0		4,15		2,0	130,02		3,89		6,73		455001	131588	
DCR-140	140	136,0		4,15		2,0	134,98		3,89		6,73		471852	136461	
DCR-145	145	141,0		4,15		2,0	139,93		3,89	±0,10	6,73		488704	141335	
DCR-150	150	145,0	+0,00	4,15	+0,18	2,5	143,91		3,89		7,92		505556	182761	
DCR-155	155	150,0	-0,63	4,15	-0,00	2,5	148,89		3,89		7,92		522408	188853	
DCR-160	160	155,0		4,15		2,5	153,85		3,89		7,92		539260	194945	
DCR-165	165	160,0		4,15		2,5	158,80	+0,00	3,89		7,92		556112	201037	
DCR-170	170	165,0		4,15		2,5	163,75	-1,52	3,89		7,92		572964	207129	
DCR-175	175	170,0		4,15		2,5	168,73		3,89		7,92		589815	213221	
DCR-180	180	175,0		4,15		2,5	173,69		3,89		7,92		606667	219313	
DCR-185	185	180,0		4,15		2,5	178,66		3,89		7,92	±0,15	623519	225405	
DCR-190	190	185,0		4,15		2,5	183,59		3,89		7,92		640371	231497	
DCR-195	195	190,0		4,15		2,5	188,54		3,89		7,92		657223	237589	
DCR-200	200	195,0		4,15		2,5	193,54		3,89		7,92		674075	243681	
DCR-205	205	199,0	+0,00	5,15		3,0	197,54	+0,00	4,86		11,18		863214	299727	
DCR-210	210	204,0	-0,72	5,15		3,0	202,54	-1,78	4,86		11,18		884268	307038	
DCR-220	220	214,0		5,15		3,0	212,47		4,86		11,18		926376	321659	
DCR-230	230	224,0		5,15		3,0	222,40		4,86		11,18		968484	336280	
DCR-240	240	234,0		5,15		3,0	232,33		4,86		11,18		1010592	350900	
DCR-250	250	244,0		5,15		3,0	242,24		4,86		11,18		1052700	365521	
DCR-260	260	252,0		5,15		4,0	250,19		4,86		12,70		1094808	506856	
DCR-270	270	262,0		5,15		4,0	260,15	+0,00	4,86		12,70		1136916	526351	
DCR-280	280	272,0	+0,00	5,15		4,0	270,08	-2,30	4,86		12,70		1179024	545845	
DCR-290	290	282,0	-0,81	5,15		4,0	279,98		4,86	±0,13	12,70		1221132	565340	
DCR-300	300	292,0		5,15		4,0	289,92		4,86		12,70		1263241	584834	
DCR-310	310	300,0		6,20		5,0	297,84		5,87		15,88		576625	755411	
DCR-320	320	310,0		6,20		5,0	307,84		5,87		15,88		627484	779779	
DCR-330	330	320,0		6,20		5,0	317,75		5,87		15,88	±0,19	1678342	804147	
DCR-340	340	330,0		6,20		5,0	327,69		5,87		15,88		729201	828515	
DCR-350	350	340,0	+0,00	6,20	+0,22	5,0	337,64	+0,00	5,87		15,88		1780060	852883	
DCR-360	360	350,0	-0,89	6,20	-0,00	5,0	347,57	-2,80	5,87		15,88		1830919	877251	
DCR-370	370	360,0		6,20		5,0	357,48		5,87		15,88		1881778	901619	
DCR-380	380	370,0		6,20		5,0	367,41		5,87		15,88		1932637	925987	
DCR-390	390	380,0		6,20		5,0	377,34		5,87		15,88		1983496	950355	
DCR-400	400	390,0		6,20		5,0	387,25		5,87		15,88		2034354	974723	