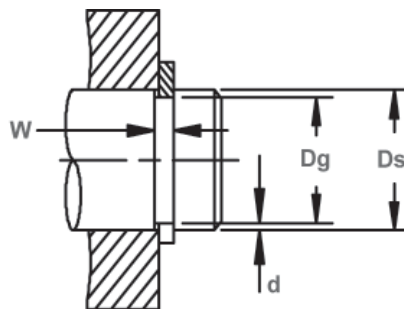
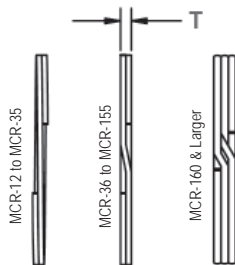
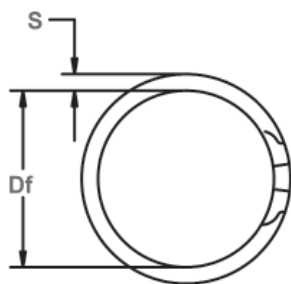


MCR Spiral Shaft Rings

External, Medium-Heavy Duty, Metric

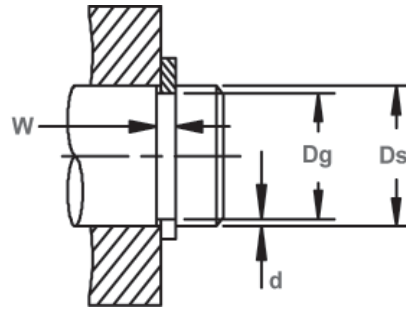
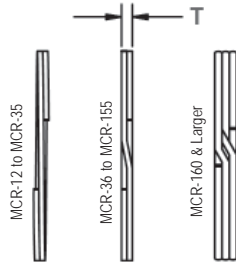
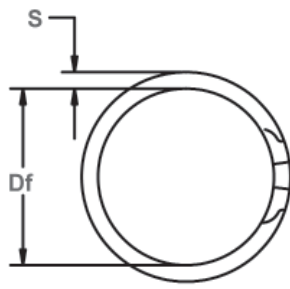
These 2-turn and multi-turn rings provide 360° groove contact and are designed for applications with medium-high thrust loads.



Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING NO.	SHAFT DIAMETER (mm)	GROOVE SIZE				RING SIZE				THRUST LOAD (N)			
		DIAMETER		WIDTH		FREE DIAMETER		THICKNESS		SECTION		RING Safety factor of 3	GROOVE Safety factor of 2
		Dg	Tol.	W	Tol.	Df	Tol.	T	Tol.	S	Tol.		
MCR-12	12	11.34		1.00		11.21		0.89		1.14		10641	1384
MCR-13	13	12.34		1.00		12.21		0.89		1.14		11528	1678
MCR-14	14	13.30		1.00		13.15		0.89		1.14		12415	2069
MCR-15	15	14.28		1.00		14.13		0.89		1.14		13302	2499
MCR-16	16	15.28		1.00		15.13		0.89		1.40		14188	2837
MCR-17	17	16.20		1.00		16.05		0.89		1.40		15075	3609
MCR-18	18	17.14		1.17		16.96		1.07		1.65		19190	3571
MCR-19	19	18.12	+0.08	1.17	+0.08	17.94	+0.00	1.07		1.65		20256	4148
MCR-20	20	19.08	-0.08	1.17	-0.00	18.90	-0.33	1.07		1.65		21323	4878
MCR-21	21	20.08		1.17		19.88		1.07		1.65		22389	5397
MCR-22	22	20.94		1.17		20.74		1.07		1.90		23455	6765
MCR-23	23	21.94		1.17		21.74		1.07		1.90		24521	7511
MCR-24	24	22.94		1.17		22.74		1.07	+0.05	1.90		25587	8297
MCR-25	25	23.88		1.17		23.68		1.07	-0.05	1.90		26653	9608
MCR-26	26	24.84		1.17		24.69		1.07		1.90		27719	10412
MCR-27	27	25.80		1.42		25.55		1.27		2.24		31195	8706
MCR-28	28	26.80		1.42		26.55		1.27		2.24		32350	9487
MCR-29	29	27.74		1.42		27.46		1.27		2.24		33506	10629
MCR-30	30	28.68		1.42		28.40		1.27		2.24		34661	12032
MCR-32	32	30.60		1.42		30.32		1.27		2.50		36972	14621
MCR-33	33	31.50	+0.10	1.42		31.22	+0.00	1.27		2.50	+0.08	38127	16774
MCR-34	34	32.40	-0.10	1.42		32.12	-0.40	1.27		2.50	-0.13	39283	18781
MCR-35	35	33.36		1.42		33.06		1.27		2.75		40438	19917
MCR-36	36	34.28		1.42		33.98		1.27		2.75		41953	21377
MCR-37	37	35.28		1.42	+0.10	34.88		1.27		2.75		42749	21971
MCR-38	38	36.20		1.42	-0.00	35.90		1.27		2.75		43904	23614
MCR-39	39	37.70		1.73		37.40		1.58		3.00		56058	22989
MCR-40	40	38.12		1.73		37.76		1.58		3.00		57496	24462
MCR-42	42	40.08		1.73		39.72		1.58		3.00		60370	27840
MCR-43	43	41.08		1.73		40.69	+0.00	1.58		3.00		61808	28503
MCR-44	44	41.96	+0.13	1.73		41.60	-0.50	1.58		3.25		63245	29166
MCR-45	45	42.90	-0.13	1.73		42.54		1.58		3.25		64683	32625
MCR-47	47	44.80		1.73		44.39		1.58		3.25		67557	35698
MCR-48	48	45.80		1.73		45.39		1.58	+0.08	3.25		68995	36457
MCR-50	50	47.70		1.73		47.29		1.58	-0.08	3.25		71870	39703
MCR-52	52	49.66		2.18		49.28		1.98		3.58		93667	42009
MCR-53	53	50.60		2.18		50.25		1.98		3.58		95468	43914
MCR-54	54	51.50		2.18		51.11		1.98		3.58		97270	46607
MCR-55	55	52.46		2.18		52.05		1.98		3.58		99071	48230
MCR-56	56	53.46	+0.15	2.18	+0.13	53.06	+0.00	1.98		3.58		100872	49107
MCR-58	58	55.26	-0.15	2.18	-0.00	54.83	-0.63	1.98		3.58		104475	54865
MCR-59	59	56.26		2.18		55.75		1.98		3.58		106276	55811
MCR-60	60	57.20		2.18		56.77		1.98		3.58		108077	58000
MCR-61	61	58.20		2.18		57.73		1.98		3.58		109879	58967
MCR-62	62	59.16		2.18		58.70		1.98		3.58		111680	60790



Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING NO.	SHAFT DIAMETER (mm)	GROOVE SIZE				RING SIZE				THRUST LOAD (N)			
		DIAMETER		WIDTH		FREE DIAMETER		THICKNESS		SECTION	RING Safety factor of 3	GROOVE Safety factor of 2	
		Ds	Dg	Tol.	W	Tol.	Df	Tol.	T				Tol.
MCR-63	63	60.10		2.18		59.62		1.98		4.77		113481	63075
MCR-64	64	61.10		2.18		60.62		1.98		4.77		115282	64076
MCR-65	65	62.10		2.18		61.62	+0.00	1.98		4.77		117084	65078
MCR-66	66	63.04		2.18		62.58	-0.63	1.98		4.77		118885	67446
MCR-67	67	63.90		2.18		64.38		1.98		4.77		120686	71706
MCR-68	68	64.90		2.18		64.40		1.98		4.77		122488	72777
MCR-69	69	65.90		2.18		65.38		1.98		4.77		124289	73847
MCR-70	70	66.86		2.62		66.33		2.36		4.77		143133	75884
MCR-71	71	67.70		2.62		67.15		2.36		4.77		145177	80890
MCR-72	72	68.70		2.62		68.20		2.36		4.77		147222	82029
MCR-75	75	71.54	+0.15	2.62	+0.13	71.00	+0.00	2.36	+0.08	4.77	+0.10	153356	89590
MCR-78	78	74.40	-0.15	2.62	-0.00	73.82	-0.75	2.36	-0.08	4.77	-0.15	159491	96943
MCR-80	80	76.30		2.62		75.69		2.36		4.77		163580	102191
MCR-82	82	78.20		2.62		77.57		2.36		4.77		167670	107577
MCR-85	85	81.10		2.62		80.44		2.36		4.77		173804	114447
MCR-88	88	84.00		2.62		83.34		2.36		4.77		179938	121524
MCR-90	90	85.90		3.05		85.27		2.82		6.35		219897	127393
MCR-95	95	90.60		3.05		89.91		2.82		6.35		232114	144310
MCR-100	100	95.40		3.05		94.70		2.82		6.35		244330	158810
MCR-105	105	100.32		3.05		99.61	+0.00	2.82		6.35		256547	169651
MCR-110	110	105.32		3.05		104.60	-1.00	2.82		6.35		268763	177729
MCR-115	115	110.16		3.05		109.40		2.82		6.35		280980	192160
MCR-120	120	114.92		3.05		114.03		2.82		6.35		293197	210458
MCR-125	125	119.70		3.05		118.81		2.82		6.35		305413	228721
MCR-130	130	124.56		3.05		123.65		2.82		6.35		317630	244153
MCR-135	135	129.40		3.53		128.50		3.23		9.52		377802	261001
MCR-140	140	134.06	+0.18	3.53	+0.15	133.15	+0.00	3.23	+0.10	9.52		391795	287101
MCR-145	145	138.80	-0.18	3.53	-0.00	137.80	-1.27	3.23	-0.10	9.52		405788	310370
MCR-150	150	143.64		3.53		142.60		3.23		9.52		419780	329359
MCR-155	155	148.50		3.53		147.43		3.23		9.52		433773	347829
MCR-160	160	153.30		4.42		152.11		4.20		7.92		582234	370097
MCR-165	165	158.00		4.42		156.81		4.20		7.92		600429	398752
MCR-170	170	162.80		4.42		161.61	+0.00	4.20		7.92		618624	422573
MCR-175	175	167.60		4.42		166.41	-1.52	4.20		7.92		636819	447085
MCR-180	180	172.40		4.42		171.20		4.20		7.92	+0.10	655014	472288
MCR-185	185	177.40		4.42		176.18		4.20		7.92	-0.20	673208	485407
MCR-190	190	182.40	+0.20	5.30	+0.20	181.13		4.80	+0.13	9.52		790175	498526
MCR-195	195	186.60	-0.20	5.30	-0.00	185.33		4.80	-0.13	9.52		810969	565503
MCR-200	200	191.52		5.30		190.14		4.80		9.52		831763	585526
MCR-210	210	201.20		5.30		199.80		4.80		9.52		873351	638003
MCR-220	220	210.80		5.30		209.30	+0.00	4.80		9.52		914940	698765
MCR-230	230	220.36		5.30		218.74	-1.78	4.80		9.52		956528	765465
MCR-240	240	230.00		5.30		228.30		4.80		9.52		998116	828575
MCR-250	250	239.40		5.30		237.70		4.80		9.52		1039704	914885
MCR-260	260	249.20		5.30		247.50		4.80		9.52		1081292	969433
MCR-270	270	259.10		5.30		257.33		4.80		9.52		1122880	1016040
MCR-280	280	269.00		5.30		267.17		4.80		9.52		1164468	1063338