

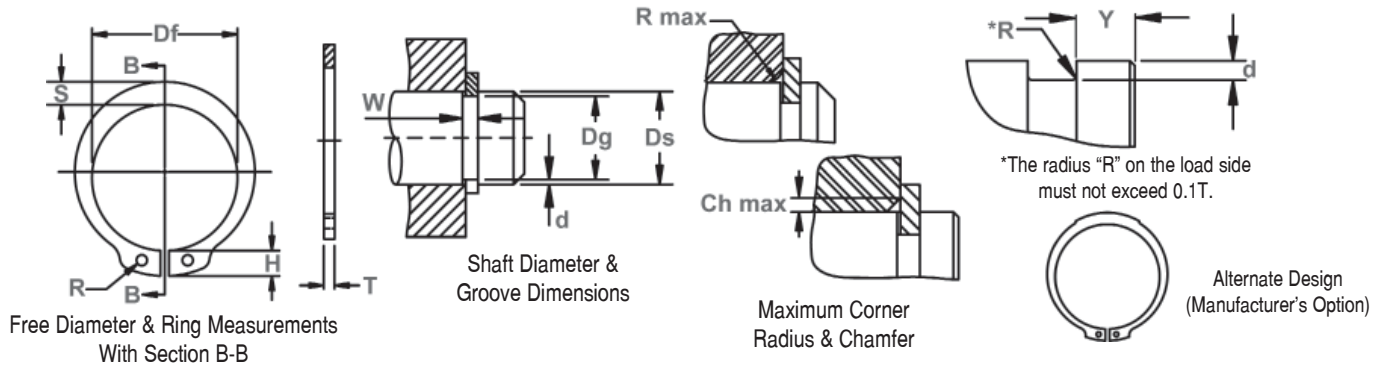
Axially Assembled, External Reinforced, Metric

The DSR is an extra thick version of a regular DSH retaining ring.

As such, it is stronger and can withstand greater thrust loads than its standard counterpart.

DSR Shaft Rings

DIN 471 - Heavy Type



RING NO.	SHAFT DIA.	GROOVE SIZE				RING SIZE & WEIGHT										SUPPLEMENTARY DATA				
		DIAMETER		WIDTH	DEPTH	THICKNESS ***		FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad/Cham.	Max. load w/ R/Ch. Max.	RPM Limits	
		Ds	Dg	Tol.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Ref.	R Min.	kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.	Pr kN	
DSR-12	12	11.5		1.60	0.25	1.50		11.0		3.4	1.8	1.7	0.75	0.7	11.30	1.53	1.0	4.5	75000	
DSR-15	15	14.3		1.60	0.35	1.50		13.8	+0.10	4.8	2.4	2.0	1.20	0.7	15.50	3.20	1.0	4.5	50000	
DSR-16	16	15.2	-0.11	1.60	0.40	1.50		14.7	-0.36	5.0	2.5	2.0	1.20	1.2	16.70	3.26	1.0	4.5	48000	
DSR-17	17	16.2		1.60	0.40	1.50		15.7		5.0	2.6	2.0	1.24	1.2	18.00	4.32	1.0	4.5	46000	
DSR-18	18	17.0		1.60	0.50	1.50		16.5		5.1	2.7	2.0	1.54	1.5	26.60	5.50	1.5	5.8	43000	
DSR-19	19	18.0		1.60	0.50	1.50	-0.06	17.5		5.1	2.7	2.0	1.45	1.5	26.60	5.78	1.5	5.9	28000	
DSR-20	20	19.0	-0.13	1.85	0.50	1.75		18.5		5.5	3.0	2.0	2.25	1.5	36.30	5.60	1.5	8.2	32000	
DSR-22	22	21.0		1.85	0.50	1.75		20.5		6.0	3.1	2.0	2.30	1.5	36.00	5.60	1.5	8.1	29000	
DSR-24	24	22.9		1.85	0.55	1.75		22.2		6.3	3.2	2.0	2.70	1.7	34.20	7.95	1.5	7.6	29000	
DSR-25	25	23.9		2.15	0.55	2.00		23.2	+0.21	6.4	3.4	2.0	3.35	1.7	45.00	8.30	1.5	10.3	25000	
DSR-26	26	24.4		2.15	0.80	2.00		23.6	-0.42	6.6	3.3	2.0	3.65	2.4	44.00	10.70	1.5	10.0	27000	
DSR-27	27	25.5	-0.21	2.15	0.75	2.00		24.7		6.6	3.4	2.0	3.85	2.3	45.50	10.30	1.5	10.6	25000	
DSR-28	28	26.6		2.15	0.70	2.00		25.9		6.5	3.5	2.0	3.90	2.1	57.00	10.00	1.5	13.4	22000	
DSR-29	29	27.6		2.15	0.70	2.00		26.9		6.5	3.8	2.0	4.30	2.1	56.50	10.40	1.5	13.3	22000	
DSR-30	30	28.6		2.15	0.70	2.00		27.9		6.5	4.1	2.0	5.00	2.1	57.00	10.70	1.5	13.6	21000	
DSR-32	32	30.3		2.15	0.85	2.00		29.6		6.5	4.1	2.5	5.40	2.5	57.00	12.90	1.5	13.6	20000	
DSR-34	34	32.3		2.65	0.85	2.50	-0.07	31.5	+0.25	6.6	4.2	2.5	6.80	2.5	87.00	16.40	1.5	15.6	18000	
DSR-35	35	33.0		2.65	1.00	2.50		32.2	-0.50	6.7	4.2	2.5	7.10	3.0	86.00	17.80	1.5	15.4	17000	
DSR-36	36	34.0		2.65	1.00	2.50		33.2		6.7	4.2	2.5	7.50	3.0	101.50	20.10	2.0	18.3	16000	
DSR-38	38	36.0		2.65	1.00	2.50		35.2		6.8	4.3	2.5	8.00	3.0	101.00	21.20	2.0	18.6	15000	
DSR-40	40	37.5		2.65	1.25	2.50		36.5		7.0	4.4	2.5	8.20	3.8	104.00	25.30	2.0	19.3	14000	
DSR-42	42	39.5	-0.25	2.65	1.25	2.50		38.5		7.2	4.5	2.5	9.60	3.8	102.00	26.70	2.0	19.2	13000	
DSR-44	44	41.5		2.65	1.25	2.50		40.5	+0.39	7.2	4.5	2.5	10.40	3.8	101.00	27.90	2.0	19.1	12000	
DSR-45	45	42.5		2.65	1.25	2.50		41.5	-0.90	7.5	4.7	2.5	10.80	3.8	100.00	28.60	2.0	19.1	11000	
DSR-48	48	45.5		2.65	1.25	2.50		44.5		7.8	5.0	2.5	12.20	3.8	101.00	30.70	2.0	19.5	10000	
DSR-50	50	47.0		3.15	1.50	3.00		45.8		8.0	5.1	2.5	14.80	4.5	165.00	38.20	2.0	32.4	11000	
DSR-52	52	49.0		3.15	1.50	3.00		47.8		8.2	5.2	2.5	15.40	4.5	165.00	39.70	2.5	26.0	10000	
DSR-55	55	52.0		3.15	1.50	3.00	-0.08	50.8		8.5	5.4	2.5	17.00	4.5	161.00	42.00	2.5	25.6	9000	
DSR-58	58	55.0		3.15	1.50	3.00		53.8		8.8	5.6	2.5	19.40	4.5	160.00	44.30	2.5	26.0	8000	
DSR-60	60	57.0		3.15	1.50	3.00		55.8		9.0	5.8	2.5	20.00	4.5	156.00	46.00	2.5	25.4	8000	
DSR-65	65	62.0	-0.30	4.15	1.50	4.00		60.8	+0.46	9.3	6.3	3.0	31.00	4.5	346.00	49.80	2.5	58.0	7000	
DSR-70	70	67.0		4.15	1.50	4.00		65.5	-1.10	9.5	6.6	3.0	32.20	4.5	343.00	53.80	2.5	59.0	7000	
DSR-75	75	72.0		4.15	1.50	4.00		70.5		9.7	7.0	3.0	39.80	4.5	333.00	57.60	2.5	58.0	6000	
DSR-80	80	76.5		4.15	1.75	4.00	-0.10	74.5		9.8	7.4	3.0	42.40	5.3	328.00	71.60	3.0	50.0	6000	
DSR-85	85	81.5		4.15	1.75	4.00		79.5		10.0	7.8	3.5	47.00	5.3	383.00	76.30	3.0	59.4	6000	
DSR-90	90	86.5	-0.35	4.15	1.75	4.00		84.5	+0.54	10.2	10.2	3.5	55.60	5.3	386.00	80.80	3.0	61.0	5000	
DSR-95	95	91.5		4.15	1.75	4.00		89.5	-1.30	10.2	8.6	3.5	61.20	5.3	378.00	85.50	3.5	52.0	5000	
DSR-100	100	96.5		4.15	1.75	4.00		94.5		10.5	9.0	3.5	72.00	5.3	368.00	90.00	3.5	51.6	4000	

*** FOR PLATED RINGS, ADD 0.05 TO THE LISTED MAXIMUM THICKNESS. MAXIMUM RING THICKNESS WILL BE A MINIMUM OF 0.005 LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM. ALL DIMENSIONS IN MILLIMETERS.

HARDNESS RANGES: CARBON STEEL RINGS (SAE 1060-1090)

RING TYPE	SIZE RANGE	HV	HRC
DSR	12-48	470-580	47-54
	50-100	435-530	44-51

HARDNESS RANGES: STAINLESS STEEL RINGS (DIN 1.4122 X39CrMo17)

RING TYPE	SIZE RANGE	HARDNESS			
		HV	HRC	15N	30N
DSR	ALL	470-580	47-54	84-87.5	66-72

