

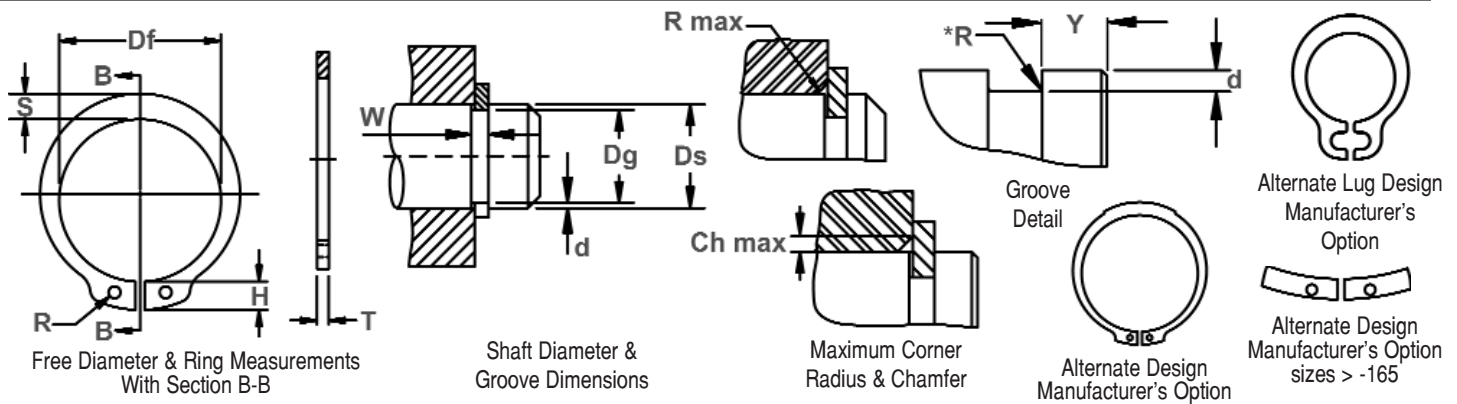


# DSH Shaft Rings

(DIN 471)

## Axially Assembled, External, Metric

Once installed in the groove of a shaft, the portion of the ring protruding from the groove (also called a "shoulder") holds an assembly in place.

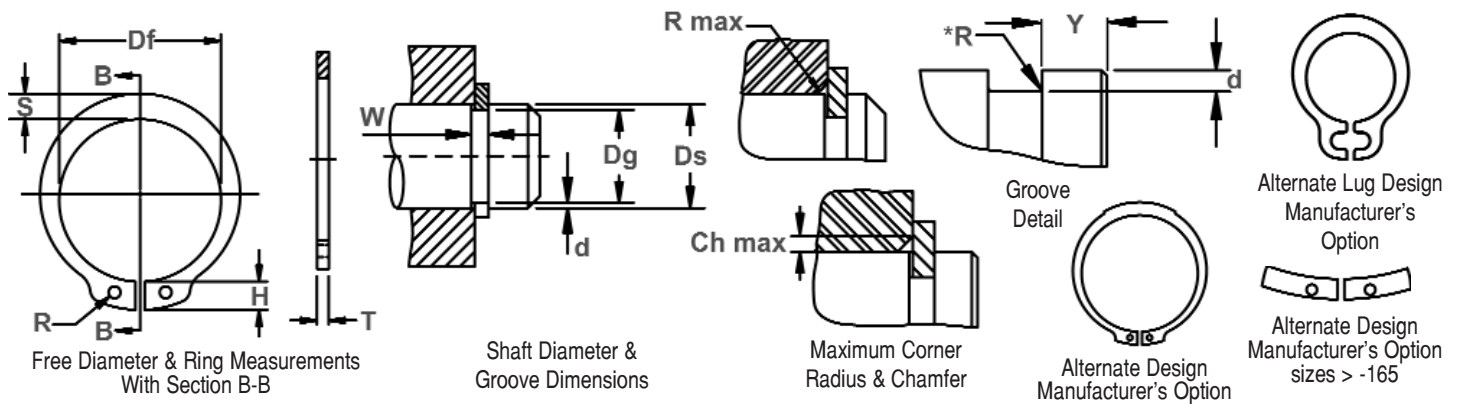


RING NO.	SHAFT DIA. (mm)	GROOVE SIZE					RING SIZE & WEIGHT							SUPPLEMENTARY DATA						
		DIAMETER		WIDTH	DEPTH		THICKNESS ***		FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad/Cham.	Max. Load w/Ch Max.	RPM Limits
		Ds	Dg	TOL.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Ref.	R Min.	kg/1000	Y Min.	Pr kN	Pg kN	R/Ch Max.	P'r kN	
DSH-3	3	2,8	-0,04	0,50	0,10	0,40	-0,05	2,7	+0,04	1,9	0,8	1,0	0,017	0,3	0,47	0,1	0,5	0,27	360000	
DSH-4	4	3,8		0,50	0,10	0,40		3,7		2,2	0,9	1,0	0,022	0,3	0,50	0,2	0,5	0,30	211000	
DSH-5	5	4,8	-0,06	0,70	0,10	0,60	-0,18	4,7	+0,06	2,5	1,1	1,0	0,066	0,3	1,00	0,2	0,5	0,80	154000	
DSH-6	6	5,7		0,80	0,15	0,70		5,6		2,7	1,3	1,2	0,084	0,5	1,45	0,4	0,5	0,90	114000	
DSH-7	7	6,7	-0,11	0,90	0,15	0,80	-0,36	6,5	+0,10	3,1	1,4	1,2	0,121	0,5	2,60	0,5	0,5	1,40	121000	
DSH-8	8	7,6		0,90	0,20	0,80		7,4		3,2	1,5	1,2	0,158	0,6	3,00	0,8	0,5	2,00	96000	
DSH-9	9	8,6	-0,13	1,10	0,20	1,00	-0,42	8,4	+0,13	3,3	1,7	1,2	0,300	0,6	3,50	0,9	0,5	2,40	85000	
DSH-10	10	9,6		1,10	0,20	1,00		9,3		3,3	1,8	1,5	0,340	0,6	4,00	1,0	1,0	2,40	84000	
DSH-11	11	10,5	-0,15	1,10	0,25	1,00	-0,42	10,2	+0,21	3,3	1,8	1,5	0,410	0,8	4,50	1,4	1,0	2,40	70000	
DSH-12	12	11,5		1,10	0,25	1,00		11,0		3,3	1,8	1,7	0,500	0,8	5,00	1,5	1,0	2,40	75000	
DSH-13	13	12,4	-0,21	1,10	0,30	1,00	-0,42	11,9	+0,25	3,4	2,0	1,7	0,530	0,9	5,80	2,0	1,0	2,40	66000	
DSH-14	14	13,4		1,10	0,30	1,00		12,9		3,5	2,1	1,7	0,640	0,9	6,40	2,1	1,0	2,40	58000	
DSH-15	15	14,3	-0,25	1,10	0,35	1,00	-0,50	13,8	+0,25	3,6	2,2	1,7	0,670	1,1	6,90	2,6	1,0	2,40	50000	
DSH-16	16	15,2		1,10	0,40	1,00		14,7		3,7	2,2	1,7	0,700	1,2	7,40	3,2	1,0	2,40	45000	
DSH-17	17	16,2	-0,25	1,10	0,40	1,00	-0,50	15,7	+0,25	3,8	2,3	1,7	0,820	1,2	8,00	3,4	1,0	2,40	41000	
DSH-18	18	17,0		1,30	0,50	1,20		16,5		3,9	2,4	2,0	1,110	1,5	17,00	4,5	1,5	3,75	39000	
DSH-19	19	18,0	-0,25	1,30	0,50	1,20	-0,50	17,5	+0,25	3,9	2,5	2,0	1,220	1,5	17,00	4,8	1,5	3,80	35000	
DSH-20	20	19,0		1,30	0,50	1,20		18,5		4,0	2,6	2,0	1,300	1,5	17,10	5,0	1,5	3,85	32000	
DSH-21	21	20,0	-0,25	1,30	0,50	1,20	-0,50	19,5	+0,25	4,1	2,7	2,0	1,420	1,5	16,80	5,3	1,5	3,75	29000	
DSH-22	22	21,0		1,30	0,50	1,20		20,5		4,2	2,8	2,0	1,500	1,5	16,90	5,6	1,5	3,80	27000	
DSH-23	23	22,0	-0,25	1,30	0,50	1,20	-0,50	21,5	+0,25	4,3	2,9	2,0	1,630	1,5	16,60	5,9	1,5	3,80	25000	
DSH-24	24	22,9		1,30	0,55	1,20		22,2		4,4	3,0	2,0	1,770	1,7	16,10	6,7	1,5	3,65	27000	
DSH-25	25	23,9	-0,25	1,30	0,55	1,20	-0,50	23,2	+0,25	4,4	3,0	2,0	1,900	1,7	16,20	7,0	1,5	3,70	25000	
DSH-26	26	24,9		1,30	0,55	1,20		24,2		4,5	3,1	2,0	1,960	1,7	16,10	7,3	1,5	3,70	24000	
DSH-27	27	25,6	-0,25	1,30	0,70	1,20	-0,50	24,9	+0,25	4,6	3,1	2,0	2,080	2,1	16,40	9,6	1,5	3,80	22500	
DSH-28	28	26,6		1,60	0,70	1,50		25,9		4,7	3,2	2,0	2,920	2,1	32,10	10,0	1,5	7,50	21200	
DSH-29	29	27,6	-0,25	1,60	0,70	1,50	-0,50	26,9	+0,25	4,8	3,4	2,0	3,200	2,1	31,80	10,3	1,5	7,45	20000	
DSH-30	30	28,6		1,60	0,70	1,50		27,9		5,0	3,5	2,0	3,320	2,1	32,10	10,7	1,5	7,65	18900	
DSH-31	31	29,3	-0,25	1,60	0,85	1,50	-0,50	28,6	+0,25	5,1	3,5	2,5	3,450	2,6	31,50	13,4	2,0	5,60	17900	
DSH-32	32	30,3		1,60	0,85	1,50		29,6		5,2	3,6	2,5	3,540	2,6	31,20	13,8	2,0	5,55	16900	
DSH-33	33	31,3	-0,25	1,60	0,85	1,50	-0,50	30,5	+0,25	5,2	3,7	2,5	3,690	2,6	31,60	14,3	2,0	5,65	17400	
DSH-34	34	32,3		1,60	0,85	1,50		31,5		5,4	3,8	2,5	3,800	2,6	31,30	14,7	2,0	5,60	16100	
DSH-35	35	33,0	-0,25	1,60	1,00	1,50	-0,50	32,2	+0,25	5,6	3,9	2,5	4,000	3,0	30,80	17,8	2,0	5,55	15500	

ALL DIMENSIONS IN MILLIMETERS.

\*The radius "R" on the load side must not exceed 0.1T.

\*\*\* 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. FOR HARDNESS SPECIFICATIONS, SEE END OF SECTION.



RING NO.	SHAFT DIA. (mm)		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/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
DSH-36	36	34,0		1,85	1,00	1,75		33,2		5,6	4,0	2,5	5,000	3,0	49,40	18,3	2,0	9,00	14500	
DSH-37	37	35,0		1,85	1,00	1,75		34,2	+0,25	5,7	4,1	2,5	5,370	3,0	50,00	18,8	2,0	9,15	14100	
DSH-38	38	36,0		1,85	1,00	1,75		35,2	-0,50	5,8	4,2	2,5	5,620	3,0	49,50	19,3	2,0	9,10	13600	
DSH-39	39	37,0		1,85	1,00	1,75		36,0		5,9	4,3	2,5	5,850	3,0	49,80	19,9	2,0	9,25	14500	
DSH-40	40	37,5		1,85	1,25	1,75		36,5		6,0	4,4	2,5	6,030	3,8	51,00	25,3	2,0	9,50	14300	
DSH-41	41	38,5		1,85	1,25	1,75		37,5		6,2	4,5	2,5	6,215	3,8	50,10	26,0	2,0	9,40	13500	
DSH-42	42	39,5	-0,25	1,85	1,25	1,75	-0,06	38,5	+0,39	6,5	4,5	2,5	6,500	3,8	50,00	26,7	2,0	9,45	13000	
DSH-44	44	41,5		1,85	1,25	1,75		40,5	-0,90	6,6	4,6	2,5	7,000	3,8	48,50	28,0	2,0	9,20	11800	
DSH-45	45	42,5		1,85	1,25	1,75		41,5		6,7	4,7	2,5	7,500	3,8	49,0	28,6	2,0	9,35	11400	
DSH-46	46	43,5		1,85	1,25	1,75		42,5		6,7	4,8	2,5	7,600	3,8	48,9	29,4	2,0	9,40	10900	
DSH-47	47	44,5		1,85	1,25	1,75		43,5		6,8	4,9	2,5	7,500	3,8	49,5	30,0	2,0	9,55	11000	
DSH-48	48	45,5		1,85	1,25	1,75		44,5		6,9	5,0	2,5	7,900	3,8	49,4	30,7	2,0	9,55	10000	
DSH-50	50	47,0		2,15	1,50	2,00		45,8		6,9	5,1	2,5	10,20	4,5	73,3	38,0	2,0	14,40	11000	
DSH-52	52	49,0		2,15	1,50	2,00		47,8		7,0	5,2	2,5	11,10	4,5	73,1	39,7	2,5	11,50	10000	
DSH-54	54	51,0		2,15	1,50	2,00		49,8		7,1	5,3	2,5	11,30	4,5	71,2	41,2	2,5	11,30	9000	
DSH-55	55	52,0		2,15	1,50	2,00		50,8		7,2	5,4	2,5	11,40	4,5	71,4	42,0	2,5	11,40	9000	
DSH-56	56	53,0		2,15	1,50	2,00		51,8		7,3	5,5	2,5	11,80	4,5	70,8	42,8	2,5	11,30	9000	
DSH-57	57	54,0		2,15	1,50	2,00		52,8		7,3	5,5	2,5	12,20	4,5	70,9	43,7	2,5	11,40	8000	
DSH-58	58	55,0		2,15	1,50	2,00		53,8		7,3	5,6	2,5	12,60	4,5	71,1	44,3	2,5	11,50	8000	
DSH-60	60	57,0		2,15	1,50	2,00		55,8		7,4	5,8	2,5	12,90	4,5	69,2	46,0	2,5	11,30	8000	
DSH-62	62	59,0		2,15	1,50	2,00	-0,07	57,8		7,5	6,0	2,5	14,30	4,5	69,3	47,5	2,5	11,40	7000	
DSH-63	63	60,0	-0,30	2,15	1,50	2,00		58,8		7,6	6,2	2,5	15,90	4,5	70,2	48,3	2,5	11,60	7000	
DSH-65	65	62,0		2,65	1,50	2,50		60,8		7,8	6,3	3,0	18,20	4,5	135,0	49,8	2,5	22,70	7000	
DSH-67	67	64,0		2,65	1,50	2,50		62,5	+0,46	7,9	6,4	3,0	20,30	4,5	136,0	51,3	2,5	23,00	7000	
DSH-68	68	65,0		2,65	1,50	2,50		63,5	-1,10	8,0	6,5	3,0	21,80	4,5	135,0	52,2	2,5	23,10	7000	
DSH-70	70	67,0		2,65	1,50	2,50		65,5		8,1	6,6	3,0	22,00	4,5	134,0	53,8	2,5	23,00	7000	
DSH-72	72	69,0		2,65	1,50	2,50		67,5		8,2	6,8	3,0	22,50	4,5	131,0	55,3	2,5	22,80	6000	
DSH-75	75	72,0		2,65	1,50	2,50		70,5		8,4	7,0	3,0	24,60	4,5	130,0	57,6	2,5	22,80	6000	
DSH-77	77	74,0		2,65	1,50	2,50		72,5		8,5	7,2	3,0	25,70	4,5	131,0	59,3	3,0	19,70	6000	
DSH-78	78	75,0		2,65	1,50	2,50		73,5		8,6	7,3	3,0	26,20	4,5	131,0	60,0	3,0	19,70	5000	
DSH-80	80	76,5		2,65	1,75	2,50		74,5		8,6	7,4	3,0	27,30	5,3	128,0	71,6	3,0	19,50	6000	
DSH-82	82	78,5		2,65	1,75	2,50		76,5		8,7	8,7	3,0	31,20	5,3	128,0	73,5	3,0	19,60	6000	
DSH-85	85	81,5	-0,35	3,15	1,75	3,00	-0,08	79,5		8,7	7,8	3,5	36,40	5,3	215,0	76,2	3,0	33,40	6000	

ALL DIMENSIONS IN MILLIMETERS.

\*The radius "R" on the load side must not exceed 0.1T.

\*\*\* 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. FOR HARDNESS SPECIFICATIONS, SEE END OF SECTION.

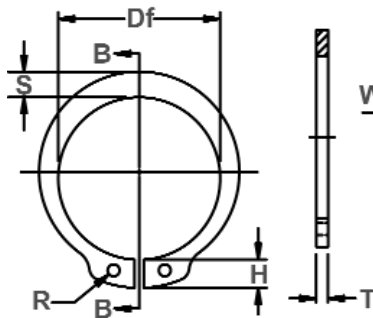


# DSH Shaft Rings

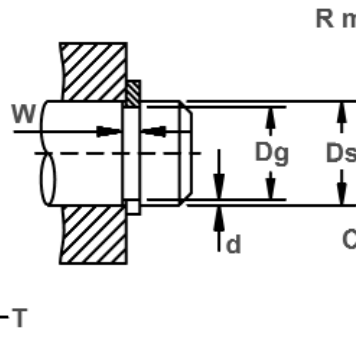
(DIN 471)

## Axially Assembled, External, Metric

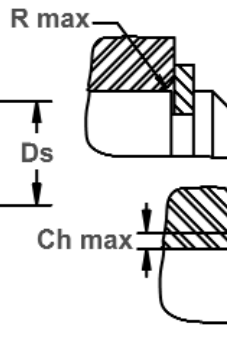
Once installed in the groove of a shaft, the portion of the ring protruding from the groove (also called a "shoulder") holds an assembly in place.



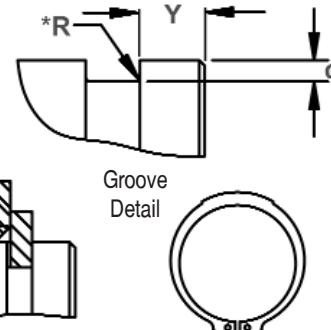
Free Diameter & Ring Measurements With Section B-B



Shaft Diameter & Groove Dimensions



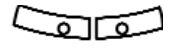
Maximum Corner Radius & Chamfer



Groove Detail



Alternate Lug Design  
Manufacturer's Option



Alternate Design  
Manufacturer's Option  
sizes > -165

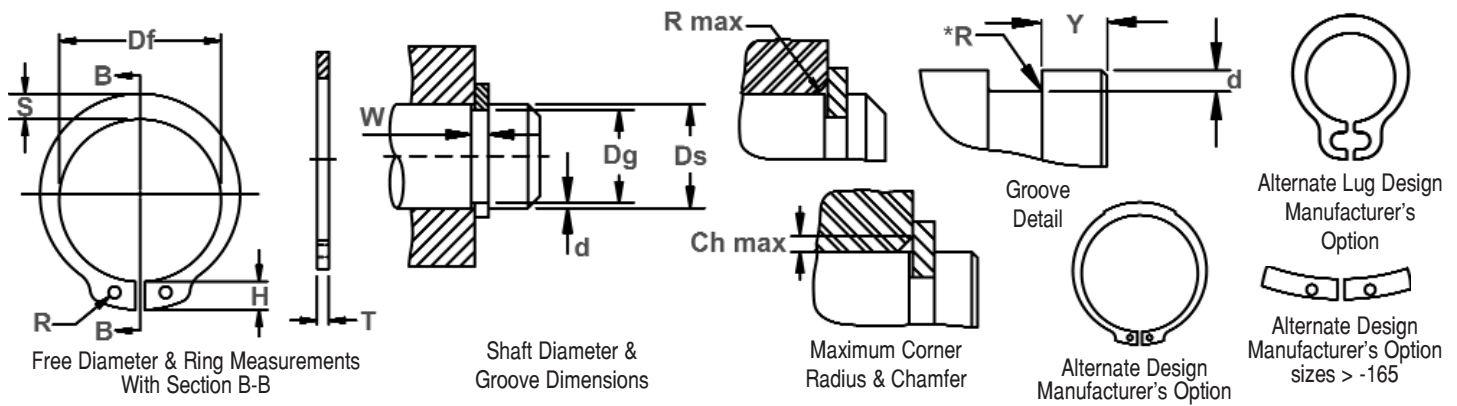
RING NO.	SHAFT DIA. (mm)		GROOVE SIZE				RING SIZE & WEIGHT						SUPPLEMENTARY DATA						
	Ds	Dg	TOL.	W Min.	d	THICKNESS ***		FREE DIAMETER		LUG HT.	MAX. SEC.	HOLE DIA.	WEIGHT	EDGE MARGIN	THRUST LOAD Ring	THRUST LOAD Groove	Allowable Rad/Cham.	Max. Load w/Ch Max.	RPM Limits
						T	Tol.	Df	Tol.										
DSH-87	87	83.5	-0.35	3.15	1.75	3.00	-0.08	81.5	+0.54	8.8	7.9	3.5	39.80	5.3	222.0	78.2	3.0	34.80	5000
DSH-88	88	84.5		3.15	1.75	3.00		82.5		8.8	8.0	3.5	41.20	5.3	221.0	79.0	3.0	34.80	5000
DSH-90	90	86.5		3.15	1.75	3.00		84.5		8.8	8.2	3.5	44.50	5.3	217.0	80.0	3.0	34.40	5000
DSH-92	92	88.5		3.15	1.75	3.00		86.5		9.0	8.4	3.5	46.00	5.3	217.0	82.0	3.5	29.60	5000
DSH-95	95	91.5		3.15	1.75	3.00		89.5		9.4	8.6	3.5	49.00	5.3	212.0	85.0	3.5	29.20	5000
DSH-97	97	93.5		3.15	1.75	3.00		91.5		9.4	8.8	3.5	50.20	5.3	211.0	87.0	3.5	29.40	4000
DSH-97	98	94.5		3.15	1.75	3.00		91.5		9.4	8.8	3.5	50.20	5.3	208.0	88.0	3.5	29.00	4000
DSH-100	100	96.5		3.15	1.75	3.00		94.5		9.6	9.0	3.5	53.70	5.3	206.0	90.0	3.5	29.00	4000
DSH-102	102	98.0		4.15	2.00	4.00		95.0		9.7	9.2	3.5	78.00	6.0	482.0	104.0	3.5	68.50	5000
DSH-105	105	101.0		4.15	2.00	4.00		98.0		9.9	9.9	3.5	80.00	6.0	471.0	107.0	3.5	67.70	5000
DSH-107	107	103.0	4.15	2.00	4.00	100.0	10.0	9.5	3.5	81.00	6.0	465.0	110.0	3.5	67.30	5000			
DSH-107	108	104.0	4.15	2.00	4.00	100.0	10.0	9.5	3.5	81.00	6.0	459.0	111.0	3.5	66.30	4000			
DSH-110	110	106.0	4.15	2.00	4.00	103.0	10.1	9.6	3.5	82.00	6.0	457.0	113.0	3.5	66.90	4000			
DSH-112	112	108.0	4.15	2.00	4.00	105.0	10.3	9.7	3.5	83.00	6.0	451.0	115.0	3.5	66.60	4000			
DSH-115	115	111.0	4.15	2.00	4.00	108.0	10.6	9.8	3.5	84.00	6.0	438.0	118.0	3.5	65.50	4000			
DSH-117	117	113.0	4.15	2.00	4.00	110.0	10.8	10.0	3.5	85.00	6.0	437.0	120.0	3.5	65.60	4000			
DSH-117	118	114.0	4.15	2.00	4.00	110.0	10.8	10.0	3.5	85.00	6.0	430.0	121.0	3.5	64.80	4000			
DSH-120	120	116.0	4.15	2.00	4.00	113.0	11.0	10.2	3.5	86.00	6.0	424.0	123.0	3.5	64.50	4000			
DSH-122	122	118.0	4.15	2.00	4.00	115.0	11.2	10.3	4.0	88.00	6.0	418.0	125.0	4.0	56.60	4000			
DSH-125	125	121.0	4.15	2.00	4.00	118.0	11.4	10.4	4.0	90.00	6.0	411.0	128.0	4.0	56.50	3000			
DSH-127	127	123.0	4.15	2.00	4.00	120.0	11.4	10.5	4.0	95.00	6.0	407.0	130.0	4.0	56.10	3000			
DSH-127	128	124.0	4.15	2.00	4.00	120.0	11.4	10.5	4.0	95.00	6.0	401.0	131.0	4.0	55.60	3000			
DSH-130	130	126.0	4.15	2.00	4.00	123.0	11.6	10.7	4.0	100.0	6.0	395.0	134.0	4.0	55.20	3000			
DSH-132	132	128.0	4.15	2.00	4.00	125.0	11.7	10.8	4.0	103.0	6.0	396.0	136.0	4.0	55.60	3000			
DSH-135	135	131.0	4.15	2.00	4.00	128.0	11.8	11.0	4.0	104.0	6.0	389.0	139.0	4.0	55.40	3000			
DSH-137	137	133.0	4.15	2.00	4.00	130.0	11.9	11.0	4.0	107.0	6.0	380.0	141.0	4.0	54.40	3000			
DSH-137	138	134.0	4.15	2.00	4.00	130.0	11.9	11.0	4.0	107.0	6.0	381.0	142.0	4.0	54.70	3000			
DSH-140	140	136.0	4.15	2.00	4.00	133.0	12.0	11.2	4.0	110.0	6.0	376.0	144.0	4.0	54.40	3000			
DSH-142	142	138.0	4.15	2.00	4.00	135.0	12.1	11.3	4.0	112.0	6.0	370.0	146.0	4.0	54.00	3000			
DSH-145	145	141.0	4.15	2.00	4.00	138.0	12.2	11.5	4.0	115.0	6.0	367.0	149.0	4.0	53.80	3000			
DSH-147	147	143.0	4.15	2.00	4.00	140.0	12.3	11.6	4.0	116.0	6.0	361.0	151.0	4.0	53.50	3000			
DSH-147	148	144.0	4.15	2.00	4.00	140.0	12.3	11.6	4.0	116.0	6.0	357.0	152.0	4.0	53.00	2000			
DSH-150	150	145.0	4.15	2.50	4.00	142.0	13.0	11.8	4.0	120.0	7.5	357.0	193.0	4.0	53.40	2000			

ALL DIMENSIONS IN MILLIMETERS.

\*The radius "R" on the load side must not exceed 0.1T.

\*\*\* 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. FOR HARDNESS SPECIFICATIONS, SEE END OF SECTION.





RING NO.	SHAFT DIA. (mm)		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/Ch Max.
	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.	P'r kN	
DSH-152	152	147.0		4,15	2,50	4,00		143,0		13,0	11,9	4,0	128,0	7,5	356,0	195,0	4,0	53,10	3000
DSH-155	155	150,0		4,15	2,50	4,00		146,0		13,0	12,0	4,0	135,0	7,5	352,0	199,0	4,0	52,60	3000
DSH-157	157	152,0		4,15	2,50	4,00		148,0		13,1	12,0	4,0	140,0	7,5	352,0	202,0	4,0	52,50	3000
DSH-157	158	153,0		4,15	2,50	4,00		148,0		13,1	12,0	4,0	140,0	7,5	353,0	203,0	4,0	52,70	3000
DSH-160	160	155,0		4,15	2,50	4,00		151,0		13,3	12,2	4,0	150,0	7,5	349,0	206,0	4,0	52,20	3000
DSH-162	162	157,0		4,15	2,50	4,00		152,5		13,3	12,3	4,0	155,0	7,5	348,0	208,0	5,0	41,70	3000
DSH-165	165	160,0		4,15	2,50	4,00		155,5		13,5	12,5	4,0	160,0	7,5	345,0	212,0	5,0	41,40	3000
DSH-167	167	162,0		4,15	2,50	4,00		157,5		13,5	12,9	4,0	163,0	7,5	354,0	215,0	5,0	42,50	3000
DSH-167	168	163,0	-0,63	4,15	2,50	4,00	-0,10	157,5	+0,63	13,5	12,9	4,0	163,0	7,5	353,0	216,0	5,0	42,40	2000
DSH-170	170	165,0		4,15	2,50	4,00		160,5	-1,50	13,5	12,9	4,0	170,0	7,5	349,0	219,0	5,0	41,90	2000
DSH-170	172	167,0		4,15	2,50	4,00		160,5		13,5	12,9	4,0	170,0	7,5	344,0	221,0	5,0	41,30	2000
DSH-175	175	170,0		4,15	2,50	4,00		165,5		13,5	12,9	4,0	180,0	7,5	340,0	225,0	5,0	40,70	2000
DSH-177	177	172,0		4,15	2,50	4,00		167,5		14,2	13,5	4,0	183,0	7,5	335,0	228,0	5,0	40,20	2000
DSH-177	178	173,0		4,15	2,50	4,00		167,5		14,2	13,5	4,0	183,0	7,5	349,0	229,0	5,0	42,00	2000
DSH-180	180	175,0		4,15	2,50	4,00		170,5		14,2	13,5	4,0	190,0	7,5	345,0	232,0	5,0	41,40	2000
DSH-180	182	177,0		4,15	2,50	4,00		170,5		14,2	13,5	4,0	190,0	7,5	341,0	235,0	5,0	41,00	2000
DSH-185	185	180,0		4,15	2,50	4,00		175,5		14,2	13,5	4,0	200,0	7,5	336,0	238,0	5,0	40,40	2000
DSH-187	187	182,0		4,15	2,50	4,00		177,5		14,2	14,0	4,0	203,0	7,5	338,0	241,0	5,0	40,50	2000
DSH-187	188	183,0		4,15	2,50	4,00		177,5		14,2	14,0	4,0	203,0	7,5	337,0	242,0	5,0	40,60	2000
DSH-190	190	185,0		4,15	2,50	4,00		180,5		14,2	14,0	4,0	210,0	7,5	333,0	245,0	5,0	40,00	2000
DSH-190	192	187,0		4,15	2,50	4,00		180,5		14,2	14,0	4,0	210,0	7,5	330,0	248,0	5,0	39,60	2000
DSH-195	195	190,0		4,15	2,50	4,00		185,5		14,2	14,0	4,0	220,0	7,5	325,0	251,0	5,0	39,00	2000
DSH-197	197	192,0		4,15	2,50	4,00		187,5		14,2	14,0	4,0	223,0	7,5	322,0	254,0	5,0	38,60	2000
DSH-197	198	193,0		4,15	2,50	4,00		187,5		14,2	14,0	4,0	223,0	7,5	322,0	255,0	5,0	38,70	2000
DSH-200	200	195,0		4,15	2,50	4,00		190,5	+0,72	14,2	14,0	4,0	230,0	7,5	319,0	258,0	5,0	38,30	2000
DSH-202	202	196,0	-0,72	5,15	3,00	5,00		190,0	-1,70	14,2	14,0	4,0	235,0	9,0	624,0	312,0	6,0	62,50	2000
DSH-205	205	199,0		5,15	3,00	5,00		193,0		14,2	14,0	4,0	243,0	9,0	611,0	317,0	6,0	61,30	2000
DSH-205	207	201,0		5,15	3,00	5,00		193,0		14,2	14,0	4,0	243,0	9,0	608,0	320,0	6,0	60,90	2000
DSH-205	208	202,0		5,15	3,00	5,00		193,0		14,2	14,0	4,0	243,0	9,0	605,0	321,0	6,0	60,50	2000
DSH-210	210	204,0		5,15	3,00	5,00		198,0		14,2	14,0	4,0	248,0	9,0	598,0	325,0	6,0	59,90	2000
DSH-210	212	206,0		5,15	3,00	5,00	-0,12	198,0		14,2	14,0	4,0	248,0	9,0	593,0	328,0	6,0	59,50	2000
DSH-215	215	209,0		5,15	3,00	5,00		203,0		14,2	14,0	4,0	260,0	9,0	585,0	332,0	6,0	58,50	2000
DSH-215	217	211,0		5,15	3,00	5,00		203,0		14,2	14,0	4,0	260,0	9,0	580,0	336,0	6,0	58,10	2000
DSH-215	218	212,0		5,15	3,00	5,00		203,0		14,2	14,0	4,0	260,0	9,0	577,0	337,0	6,0	57,80	2000

ALL DIMENSIONS IN MILLIMETERS.

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\*\*\* 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.

FOR HARDNESS SPECIFICATIONS, SEE END OF SECTION.

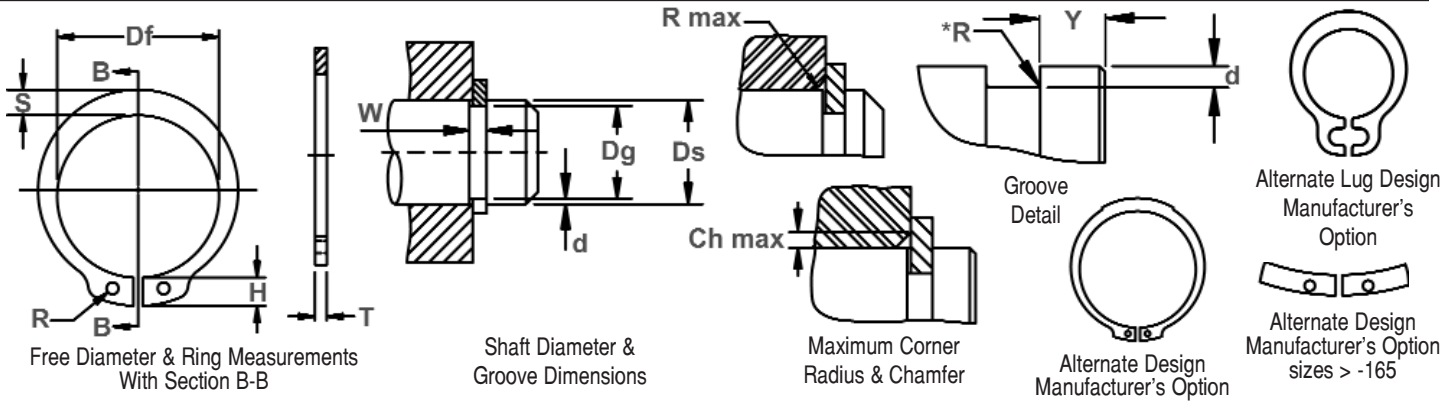


# DSH Shaft Rings

(DIN 471)

## Axially Assembled, External, Metric

Once installed in the groove of a shaft, the portion of the ring protruding from the groove (also called a "shoulder") holds an assembly in place.



RING NO.	SHAFT DIA. (mm)	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/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.	P'r kN		
DSH-220	220	214.0		5,15	3,00	5,00		208,0		14,2	14,0	4,0	265,0	9,0	572,0	340,0	6,0	57,30	2000		
DSH-220	222	216,0		5,15	3,00	5,00		208,0		14,2	14,0	4,0	265,0	9,0	567,0	343,0	6,0	56,80	2000		
DSH-225	225	219,0		5,15	3,00	5,00		213,0		14,2	14,0	4,0	280,0	9,0	559,0	349,0	6,0	56,00	2000		
DSH-225	227	221,0		5,15	3,00	5,00		213,0		14,2	14,0	4,0	280,0	9,0	555,0	351,0	6,0	55,50	1000		
DSH-225	228	222,0		5,15	3,00	5,00		213,0		14,2	14,0	4,0	280,0	9,0	552,0	353,0	6,0	55,40	1000		
DSH-230	230	224,0		5,15	3,00	5,00		218,0		14,2	14,0	4,0	290,0	9,0	548,0	356,0	6,0	55,00	1000		
DSH-230	232	226,0		5,15	3,00	5,00		218,0		14,2	14,0	4,0	290,0	9,0	543,0	359,0	6,0	54,50	1000		
DSH-235	235	229,0		5,15	3,00	5,00		223,0		14,2	14,0	4,0	305,0	9,0	537,0	364,0	6,0	53,80	1000		
DSH-235	237	231,0	-0,72	5,15	3,00	5,00		223,0		14,2	14,0	4,0	305,0	9,0	532,0	367,0	6,0	53,40	1000		
DSH-235	238	232,0		5,15	3,00	5,00		223,0		14,2	14,0	4,0	305,0	9,0	530,0	369,0	6,0	53,00	1000		
DSH-240	240	234,0		5,15	3,00	5,00		228,0	+0,72	14,2	14,0	4,0	310,0	9,0	530,0	372,0	6,0	53,00	1000		
DSH-240	242	236,0		5,15	3,00	5,00		228,0	-1,70	14,2	14,0	4,0	310,0	9,0	520,0	375,0	6,0	52,20	1000		
DSH-245	245	239,0		5,15	3,00	5,00		233,0		14,2	14,0	4,0	325,0	9,0	515,0	380,0	6,0	51,50	1000		
DSH-245	247	241,0		5,15	3,00	5,00	-0,12	233,0		14,2	14,0	4,0	325,0	9,0	511,0	383,0	6,0	51,20	1000		
DSH-245	248	242,0		5,15	3,00	5,00		233,0		14,2	14,0	4,0	325,0	9,0	508,0	385,0	6,0	50,90	1000		
DSH-250	250	244,0		5,15	3,00	5,00		238,0		14,2	14,0	4,0	335,0	9,0	504,0	388,0	6,0	50,50	1000		
DSH-250	252	244,0		5,15	4,00	5,00		238,0		16,2	16,0	5,0	335,0	12,0	563,0	519,0	6,0	56,40	1000		
DSH-255	255	247,0		5,15	4,00	5,00		240,0		16,2	16,0	5,0	348,0	12,0	557,0	525,0	6,0	55,70	1000		
DSH-255	257	249,0		5,15	4,00	5,00		240,0		16,2	16,0	5,0	348,0	12,0	551,0	529,0	6,0	55,20	1000		
DSH-255	258	250,0		5,15	4,00	5,00		240,0		16,2	16,0	5,0	348,0	12,0	550,0	531,0	6,0	55,10	1000		
DSH-260	260	252,0		5,15	4,00	5,00		245,0		16,2	16,0	5,0	355,0	12,0	540,0	535,0	6,0	54,60	1000		
DSH-260	262	254,0		5,15	4,00	5,00		245,0		16,2	16,0	5,0	355,0	12,0	542,0	540,0	6,0	54,40	1000		
DSH-265	265	257,0		5,15	4,00	5,00		250,0		16,2	16,0	5,0	370,0	12,0	536,0	546,0	6,0	53,70	1000		
DSH-265	267	259,0		5,15	4,00	5,00		250,0		16,2	16,0	5,0	370,0	12,0	532,0	550,0	6,0	53,30	1000		
DSH-265	268	260,0		5,15	4,00	5,00		250,0		16,2	16,0	5,0	370,0	12,0	529,0	553,0	6,0	53,00	1000		
DSH-270	270	262,0	-0,81	5,15	4,00	5,00		255,0		16,2	16,0	5,0	375,0	12,0	525,0	556,0	6,0	52,50	1000		
DSH-270	272	264,0		5,15	4,00	5,00		255,0		16,2	16,0	5,0	375,0	12,0	522,0	560,0	6,0	52,00	1000		
DSH-275	275	267,0		5,15	4,00	5,00		260,0	+0,81	16,2	16,0	5,0	390,0	12,0	516,0	566,0	6,0	51,00	1000		
DSH-275	277	269,0		5,15	4,00	5,00		260,0	-2,00	16,2	16,0	5,0	390,0	12,0	513,0	571,0	6,0	51,00	1000		
DSH-275	278	270,0		5,15	4,00	5,00		260,0		16,2	16,0	5,0	390,0	12,0	510,0	574,0	6,0	51,00	1000		
DSH-280	280	272,0		5,15	4,00	5,00		265,0		16,2	16,0	5,0	398,0	12,0	508,0	576,0	6,0	50,00	1000		
DSH-280	282	274,0		5,15	4,00	5,00		265,0		16,2	16,0	5,0	398,0	12,0	503,0	580,0	6,0	50,00	1000		

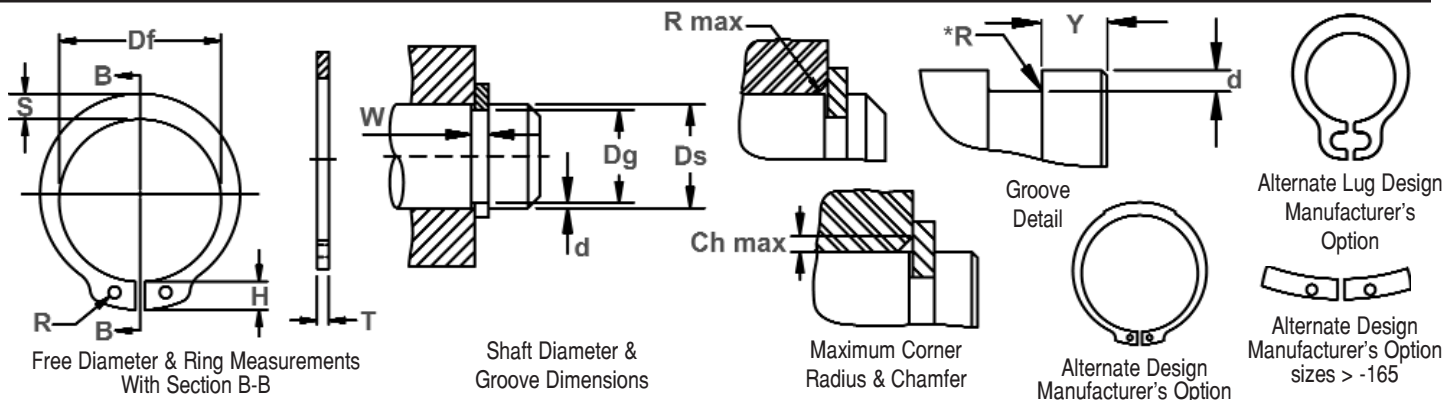
ALL DIMENSIONS IN MILLIMETERS.

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\*\*\* 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.

FOR HARDNESS SPECIFICATIONS, SEE END OF SECTION.



RING NO.	SHAFT DIA. (mm)	GROOVE SIZE			RING SIZE & WEIGHT						SUPPLEMENTARY DATA								
		DIAMETER		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/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.	P'r kN
DSH-285	285	277.0		5.15	4.00	5.00		270.0		16.2	16.0	5.0	410.0	12.0	499.0	587.0	6.0	50.00	1000
DSH-285	287	279.0		5.15	4.00	5.00		270.0		16.2	16.0	5.0	410.0	12.0	494.0	591.0	6.0	49.00	1000
DSH-285	288	280.0		5.15	4.00	5.00		270.0		16.2	16.0	5.0	410.0	12.0	493.0	594.0	6.0	49.00	1000
DSH-290	290	282.0		5.15	4.00	5.00	-0.12	275.0		16.2	16.0	5.0	418.0	12.0	490.0	599.0	6.0	49.00	1000
DSH-290	292	284.0		5.15	4.00	5.00		275.0		16.2	16.0	5.0	418.0	12.0	487.0	603.0	6.0	48.00	1000
DSH-295	295	287.0	-0.81	5.15	4.00	5.00		280.0	+0.81	16.2	16.0	5.0	430.0	12.0	481.0	609.0	6.0	48.00	1000
DSH-295	297	289.0		5.15	4.00	5.00		280.0	-2.00	16.2	16.0	5.0	430.0	12.0	479.0	613.0	6.0	48.00	1000
DSH-295	298	290.0		5.15	4.00	5.00		280.0		16.2	16.0	5.0	430.0	12.0	476.0	615.0	6.0	47.00	1000
DSH-300	300	292.0		5.15	4.00	5.00		285.0		16.2	16.0	5.0	440.0	12.0	475.0	619.0	6.0	47.00	1000
DSH-305	305	295.0		6.20	5.00	6.00		288.0		20.2	20.0	6.0	738.0	15.0	1036.0	785.0	7.0	89.00	1000
DSH-310	310	300.0		6.20	5.00	6.00		293.0		20.2	20.0	6.0	750.0	15.0	1016.0	796.0	7.0	87.00	1000
DSH-315	315	305.0		6.20	5.00	6.00		298.0		20.2	20.0	6.0	760.0	15.0	1007.0	811.0	7.0	86.00	1000
DSH-320	320	310.0		6.20	5.00	6.00		303.0		20.2	20.0	6.0	770.0	15.0	988.0	825.0	7.0	85.00	1000
DSH-325	325	315.0		6.20	5.00	6.00		308.0		20.2	20.0	6.0	787.0	15.0	975.0	837.0	7.0	83.00	1000
DSH-330	330	320.0		6.20	5.00	6.00		313.0		20.2	20.0	6.0	800.0	15.0	958.0	850.0	7.0	82.00	1000
DSH-335	335	325.0		6.20	5.00	6.00		318.0		20.2	20.0	6.0	826.0	15.0	945.0	864.0	7.0	81.00	1000
DSH-340	340	330.0		6.20	5.00	6.00		323.0		20.2	20.0	6.0	840.0	15.0	932.0	876.0	7.0	80.00	1000
DSH-345	345	335.0		6.20	5.00	6.00		328.0		20.2	20.0	6.0	845.0	15.0	917.0	890.0	7.0	79.00	1000
DSH-350	350	340.0		6.20	5.00	6.00	-0.15	333.0		20.2	20.0	6.0	850.0	15.0	906.0	903.0	7.0	77.00	1000
DSH-355	355	345.0		6.20	5.00	6.00		338.0		20.2	20.0	6.0	865.0	15.0	894.0	916.0	7.0	76.00	1000
DSH-360	360	350.0	-0.89	6.20	5.00	6.00		343.0	+0.90	20.2	20.0	6.0	880.0	15.0	880.0	928.0	7.0	75.00	1000
DSH-365	365	355.0		6.20	5.00	6.00		348.0	-2.00	20.2	20.0	6.0	885.0	15.0	868.0	942.0	7.0	74.00	1000
DSH-370	370	360.0		6.20	5.00	6.00		353.0		20.2	20.0	6.0	890.0	15.0	856.0	955.0	7.0	73.00	1000
DSH-375	375	365.0		6.20	5.00	6.00		358.0		20.2	20.0	6.0	910.0	15.0	847.0	968.0	7.0	72.00	1000
DSH-380	380	370.0		6.20	5.00	6.00		363.0		20.2	20.0	6.0	930.0	15.0	833.0	980.0	7.0	71.00	1000
DSH-385	385	375.0		6.20	5.00	6.00		368.0		20.2	20.0	6.0	940.0	15.0	823.0	994.0	7.0	70.00	1000
DSH-390	390	380.0		6.20	5.00	6.00		373.0		20.2	20.0	6.0	950.0	15.0	814.0	1008.0	7.0	70.00	1000
DSH-395	395	385.0		6.20	5.00	6.00		378.0		20.2	20.0	6.0	990.0	15.0	803.0	1021.0	7.0	69.00	1000
DSH-400	400	390.0		6.20	5.00	6.00		383.0		20.2	20.0	6.0	1040.0	15.0	793.0	1033.0	7.0	69.00	1000

\*\*\* 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.

\*The radius "R" on the load side must not exceed 0.1T.

HARDNESS RANGES: STAINLESS STEEL RINGS (PH 15-7MO)

RING TYPE	SIZE RANGE	HARDNESS		
		VICKERS	ROCKWELL	
DSH	3 & 4	435-530	HRC	82.5-86 HR30N**
			LOWER SCALE*	63-69.5 HR30N
	5-17	435-530	HRC	44-51
			LOWER SCALE*	44-51
18-400	435-530	HRC	44-51	

\*WHERE APPLICABLE

\*\* HARDNESS CAN NOT BE CHECKED WITH ANY DEGREE OF ACCURACY DIRECTLY ON THESE RINGS.

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

RING TYPE	SIZE RANGE	HARDNESS		
		VICKERS	ROCKWELL	
			HRC	LOWER SCALE*
DSH	3 & 4	470-580	47-54	84-87.5 HR30N**
	5-17	470-580	47-54	66-72 HR30N
	18-48	470-580	47-54	-
	50-200	435-530	44-51	-
	202-300	390-470	40-47	-
	305-400	370-415	38-43	-

\*WHERE APPLICABLE

\*\*HARDNESS CAN NOT BE CHECKED WITH ANY DEGREE OF ACCURACY DIRECTLY ON THESE RINGS.