

AXIALLY INSTALLED

HUYETT.COM • 785-392-3017



INTERNAL – HEAVY DUTY METRIC

DIN 472

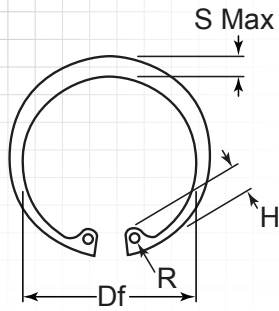


DESCRIPTION

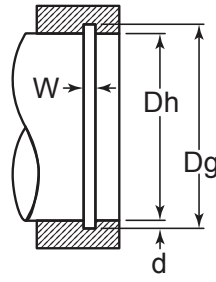
A thicker version of the DHO featuring a larger radial width. Once installed in the groove of a housing/bore, the portion of the ring protruding from the groove (also called a shoulder) holds an assembly in place.

HOW TO IDENTIFY

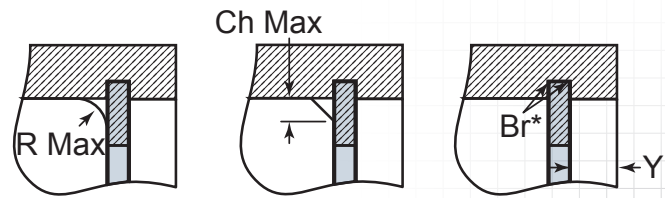
1. Verify internal design and appearance.
2. Measure the housing diameter (Dh).
3. Measure the ring cross section (S Max).
4. Measure the ring thickness (T).
5. Find the part in the chart.



Ring Dimensions



Groove Dimensions



Maximum Corner Radius (R Max) & Chamfer (Ch Max) for Retained Part

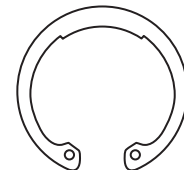
*The radius "Br" on the load side must not exceed 0.1T

Item #	Housing Dia. (mm)	Groove Size					Ring Size & Weight						Supplementary Data					
		Diameter		Width	Depth	Thickness ²		Free Diameter		Lug Ht.	Max. Sect.	Hole Dia.	Weight	Edge Margin	Thrust Load Ring	Thrust Load Groove	Allowable Rad./ Cham.	Max. Load w/ R Max. or Ch Max.
		Dh	Dg	Tol.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Max.	R Min.	kg/ 1,000	Y Min.	Pr kN	Pg kN	R/Ch Max.
DHOR-020	20	21.0	+0.15	1.60	0.50	1.50	-0.06	21.5	+0.42/ -0.21	4.5	2.4	2.0	1.4	1.5	16.2	5.4	1.0	5.8
DHOR-022	22	23.0	+0.15	1.60	0.50	1.50	-0.06	23.5		4.7	2.8	2.0	1.9	1.5	18.0	5.9	1.0	6.1
DHOR-024	24	25.2	+0.21	1.60	0.60	1.50	-0.06	25.9		4.9	3.0	2.0	2.0	1.8	21.7	7.7	1.0	7.2
DHOR-025	25	26.2	+0.21	1.60	0.60	1.50	-0.06	26.9		5.0	3.1	2.0	2.1	1.8	22.8	8.0	1.0	7.3
DHOR-026	26	27.2	+0.21	1.60	0.60	1.50	-0.06	27.9		5.1	3.1	2.0	2.3	1.8	21.6	8.4	1.0	7.2
DHOR-027	27	28.4	+0.21	1.60	0.70	1.50	-0.06	29.1	+0.50/ -0.25	5.1	3.2	2.0	2.4	2.1	20.8	10.1	1.0	7.0
DHOR-028	28	29.4	+0.21	1.60	0.70	1.50	-0.06	30.1		5.3	3.2	2.0	2.5	2.1	20.8	10.5	1.0	7.0
DHOR-030	30	31.4	+0.25	1.60	0.70	1.50	-0.06	32.1		5.5	3.3	2.0	2.7	2.1	21.4	11.3	1.0	7.2
DHOR-032	32	33.7	+0.25	1.60	0.85	1.50	-0.06	34.4		5.7	3.4	2.0	2.9	2.6	21.4	14.6	1.0	7.3
DHOR-034	34	35.7	+0.25	1.85	0.85	1.75	-0.06	36.5		5.9	3.7	2.5	4.1	2.6	35.6	15.4	1.5	8.6
DHOR-035	35	37.0	+0.25	1.85	1.00	1.75	-0.06	37.8	+0.90/ -0.39	6.0	3.8	2.5	4.5	3.0	36.6	18.8	1.5	8.7
DHOR-037	37	39.0	+0.25	1.85	1.00	1.75	-0.06	39.8		6.2	3.9	2.5	4.7	3.0	36.6	19.8	1.5	8.8
DHOR-038	38	40.0	+0.25	1.85	1.00	1.75	-0.06	40.8		6.3	3.9	2.5	4.8	3.0	38.3	22.5	1.5	9.1
DHOR-040	40	42.5	+0.25	2.15	1.25	2.00	-0.07	43.5		6.5	3.9	2.5	5.1	3.8	58.4	27.0	2.0	10.9
DHOR-042	42	44.5	+0.25	2.15	1.25	2.00	-0.07	45.5		6.7	4.1	2.5	5.6	3.8	58.5	28.4	2.0	11.0
DHOR-045	45	47.5	+0.25	2.15	1.25	2.00	-0.07	48.5	+1.10/ -0.46	7.0	4.3	2.5	6.3	3.8	56.5	30.2	2.0	10.7
DHOR-047	47	49.5	+0.25	2.15	1.25	2.00	-0.07	50.5		7.2	4.4	2.5	6.7	3.8	57.0	31.4	2.0	10.8
DHOR-050	50	53.0	+0.30	2.65	1.50	2.50	-0.07	54.2		7.5	4.6	2.5	8.8	4.5	95.5	40.5	2.0	19.0
DHOR-052	52	55.0	+0.30	2.65	1.50	2.50	-0.07	56.2		7.7	4.7	2.5	9.9	4.5	94.6	42.0	2.0	18.8
DHOR-055	55	58.0	+0.30	2.65	1.50	2.50	-0.07	59.2		8.0	5.0	2.5	10.4	4.5	94.7	44.4	2.0	19.6

TO ORDER DIFFERENT MATERIAL/FINISHES,
APPEND SUFFIX WITH YOUR CHOICE:
"NONE" • -SS • -ZD • -Z3

ALTERNATE DESIGN

(Manufacturer's Option)



DIN 472

INTERNAL – HEAVY DUTY METRIC

SUFFIX MATERIAL/FINISH

- ### = CARBON SPRING STEEL, PHOSPHATE
- ###-66 = STAINLESS STEEL, FLAIN
- ###-ZD = CARBON SPRING STEEL, ZINC YELLOW
- ###-Z3 = CARBON SPRING STEEL, ZINC TRIVALENT

Material/finish combinations may not be available in all sizes.
More finishes available, see page 22 for a complete listing.



Item #	Housing Dia. (mm)	Groove Size			Ring Size & Weight						Supplementary Data							
		Diameter		Width	Depth	Thickness ²		Free Diameter		Lug Ht.	Max. Sect.	Hole Dia.	Weight	Edge Margin	Thrust Load Ring	Thrust Load Groove	Allowable Rad./ Cham.	Max. Load w/ R Max. or Ch Max.
		Dh	Dg	Tol.	W Min.	d	T	Tol.	Df	Tol.	H Max.	S Max.	R Min.	kg/ 1,000	Y Min.	Pr kN	Pg kN	R/Ch Max.
DHOR-060	60	63.0	+0.30	3.15	1.50	3.00	-0.08	64.2	+1.10/ -0.46	8.5	5.4	2.5	15.9	4.5	137	48.3	2.0	29.2
DHOR-062	62	65.0	+0.30	3.15	1.50	3.00	-0.08	66.2		8.6	5.5	2.5	16.1	4.5	137	49.8	2.0	29.2
DHOR-064	64	67.0	+0.30	3.15	1.50	3.00	-0.08	68.2		8.7	5.6	3.0	16.5	4.5	137	51.4	2.0	30.0
DHOR-065	65	68.0	+0.30	3.15	1.50	3.00	-0.08	69.2		8.7	5.8	3.0	16.6	4.5	174	51.8	2.5	30.0
DHOR-068	68	71.0	+0.30	3.15	1.50	3.00	-0.08	72.5		8.8	6.1	3.0	17.2	4.5	174	54.5	2.5	30.6
DHOR-070	70	73.0	+0.30	3.15	1.50	3.00	-0.08	74.5		9.0	6.2	3.0	18.0	4.5	171	56.2	2.5	30.3
DHOR-072	72	75.0	+0.30	3.15	1.50	3.00	-0.08	76.5		9.2	6.4	3.0	21.7	4.5	172	58.0	2.5	30.3
DHOR-075	75	78.0	+0.30	3.15	1.50	3.00	-0.08	79.5		9.3	6.6	3.0	22.6	4.5	170	60.0	2.5	30.3
DHOR-080	80	83.5	+0.35	4.15	1.75	4.00	-0.10	85.5	+1.30/ -0.54	9.5	7.0	3.0	33.2	5.3	308	74.6	2.5	56.0
DHOR-085	85	88.5	+0.35	4.15	1.75	4.00	-0.10	90.5		9.7	7.2	3.5	33.8	5.3	358	79.5	3.0	55.0
DHOR-090	90	93.5	+0.35	4.15	1.75	4.00	-0.10	95.5		10.0	7.6	3.5	41.3	5.3	354	84.0	3.0	56.0
DHOR-095	95	98.5	+0.35	4.15	1.75	4.00	-0.10	100.5		10.3	8.1	3.5	46.7	5.3	347	88.6	3.0	56.0
DHOR-100	100	103.5	+0.35	4.15	1.75	4.00	-0.10	105.5		10.5	8.4	3.5	50.7	5.3	335	93.1	3.0	55.0

All dimensions in millimeters.

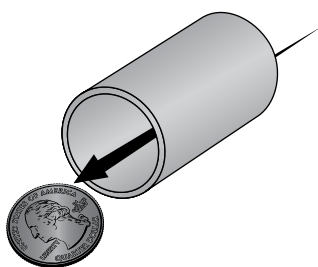
² For plated rings add 0.05 mm to the listed maximum thickness. Maximum ring thickness will be a minimum of 0.005 mm less than the listed groove width (W) minimum.

HARDNESS RANGES: DHOR RINGS						
Material		Size Range	Hardness			
			HV	HRC	15N	30N
(blank)	Carbon Steel, (SAE 1060-1090)	20 – 48	470 – 580	47 – 54	–	–
		50 – 100	435 – 530	44 – 51	–	–
-SS	Stainless Steel, (DIN 1.4122 X39CrMo17)	All	470 – 580	47 – 54	84 – 87.5	66 – 72

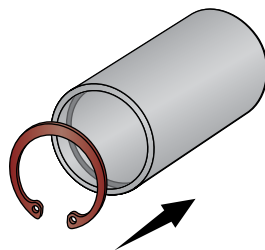


INSTALLATION TOOLS AVAILABLE, SEE PAGE 248

APPLICATIONS



Without anything to stop it, this coin will pass through this housing and out the other end.



By machining a groove into the housing, and installing an HO basic internal retaining ring into it...



...the coin is prevented from falling out.