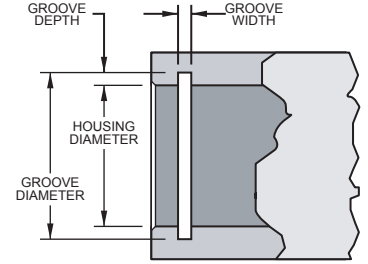
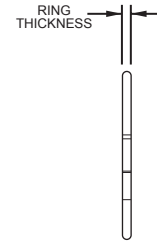
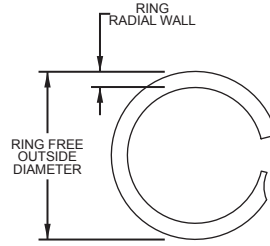


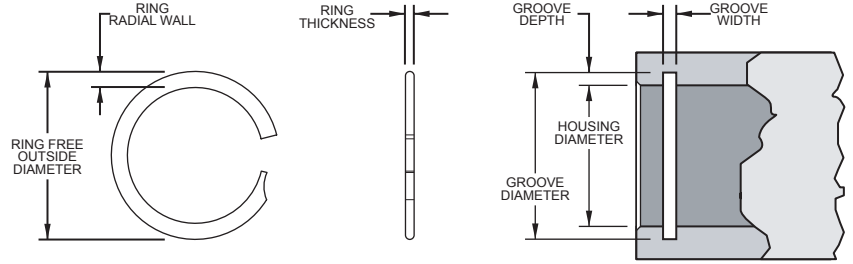


* No removal notch



PART NUMBER (1)	HOUSING DIAMETER (mm)	RING (mm)			GROOVE (mm)		THRUST CAPACITY (kN)		PART WEIGHT (kg) PER 1000
		OUTSIDE DIAMETER	RADIAL WALL	THICKNESS	DIAMETER	WIDTH MIN	RING SHEAR (2)	GROOVE YIELD (3)	
VHM-6*	6	6.35	.51	.30	6.30	.38	1.99	.44	.02
VHM-7*	7	7.38	.51	.30	7.32	.38	2.32	.55	.03
VHM-8*	8	8.44	.64	.38	8.36	.46	3.18	.70	.05
VHM-9*	9	9.54	.76	.38	9.46	.46	3.58	1.00	.06
VHM-10*	10	10.58	.76	.38	10.50	.46	3.98	1.24	.07
VHM-11	11	11.68	.89	.38	11.60	.46	4.39	1.63	.09
VHM-12	12	12.74	.89	.38	12.66	.46	4.77	1.93	.10
VHM-13	13	13.80	1.14	.46	13.72	.56	6.26	2.28	.16
VHM-14	14	14.80	1.14	.46	14.72	.56	6.74	2.46	.18
VHM-15	15	15.80	1.14	.46	15.72	.56	7.22	2.63	.19
VHM-16	16	16.80	1.14	.46	16.72	.56	7.71	2.81	.20
VHM-17	17	17.82	1.14	.46	17.72	.56	8.19	2.98	.22
VHM-18	18	18.82	1.14	.46	18.72	.56	8.67	3.16	.23
VHM-19	19	19.86	1.14	.46	19.76	.56	9.15	3.52	.24
VHM-20	20	21.26	1.65	.53	21.06	.66	11.10	5.17	.42
VHM-21	21	22.27	1.65	.53	22.06	.66	11.65	5.42	.44
VHM-22	22	23.28	1.65	.53	23.06	.66	12.21	5.68	.47
VHM-24	24	25.29	1.65	.53	25.06	.66	13.32	6.20	.51
VHM-25	25	26.30	1.65	.53	26.06	.66	13.87	6.46	.53
VHM-26	26	27.31	1.65	.53	27.06	.66	14.43	6.72	.55
VHM-28	28	29.40	2.24	.64	29.12	.79	16.30	7.64	1.0
VHM-29	29	30.41	2.24	.64	30.12	.79	16.88	7.91	1.0
VHM-30	30	31.42	2.24	.64	31.12	.79	17.47	8.19	1.0
VHM-31	31	32.43	2.24	.64	32.12	.79	18.05	8.46	1.1
VHM-32	32	33.44	2.24	.64	33.12	.79	18.63	8.73	1.1
VHM-34	34	35.45	2.24	.64	35.12	.79	19.80	9.28	1.2
VHM-35	35	36.47	2.24	.64	36.12	.79	20.38	9.55	1.2
VHM-36	36	37.48	2.24	.64	37.12	.79	20.96	9.83	1.2
VHM-37	37	38.49	2.24	.64	38.12	.79	21.54	10.10	1.3
VHM-38	38	39.50	2.24	.64	39.12	.79	22.12	10.37	1.3
VHM-40	40	41.94	3.00	.79	41.48	.99	28.75	14.43	2.3
VHM-42	42	43.96	3.00	.79	43.48	.99	30.19	15.15	2.4
VHM-45	45	46.99	3.00	.79	46.48	.99	32.34	16.23	2.6
VHM-47	47	49.00	3.00	.79	48.48	.99	33.78	16.95	2.7
VHM-48	48	50.01	3.00	.79	49.48	.99	34.50	17.31	2.7
VHM-50	50	52.04	3.00	.79	51.48	.99	35.93	18.03	2.9
VHM-52	52	54.55	4.01	.79	53.94	.99	37.37	24.58	3.9
VHM-55	55	57.57	4.01	.79	56.94	.99	39.53	26.00	4.2
VHM-56	56	58.58	4.01	.79	57.94	.99	40.25	26.47	4.3
VHM-58	58	60.60	4.01	.79	59.94	.99	41.68	27.42	4.4
VHM-60	60	62.64	4.01	.79	61.94	.99	43.12	28.36	4.6
VHM-62	62	64.67	4.01	.79	63.94	.99	44.56	29.31	4.7
VHM-63	63	65.69	4.01	.79	64.94	.99	45.28	29.78	4.8
VHM-65	65	67.70	4.01	.79	66.94	.99	46.72	30.73	5.0
VHM-68	68	70.72	4.01	.79	69.94	.99	48.87	32.15	5.2

(1) Add Suffix -S02 for 302 Stainless Steel, (2) Based on a safety factor of 3, (3) Based on a groove material yield strength of 310 N/mm² and a safety factor of 2



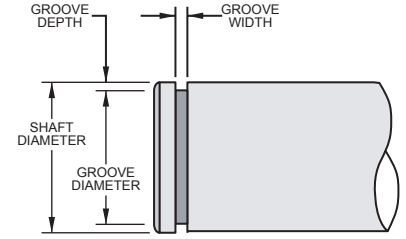
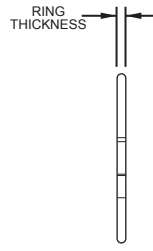
PART NUMBER (1)	HOUSING DIAMETER (mm)	RING (mm)			GROOVE (mm)		THRUST CAPACITY (kN)		PART WEIGHT (kg) PER 1000
		OUTSIDE DIAMETER	RADIAL WALL	THICKNESS	DIAMETER	WIDTH MIN	RING SHEAR (2)	GROOVE YIELD (3)	
VHM-70	70	72.74	4.01	.79	71.94	.99	50.31	33.09	5.4
VHM-72	72	74.77	4.01	.79	73.94	.99	51.75	34.04	5.5
VHM-75	75	77.80	4.01	.79	76.94	.99	53.90	35.46	5.8
VHM-78	78	81.20	4.78	.99	80.34	1.12	70.25	44.48	8.9
VHM-80	80	83.23	4.78	.99	82.34	1.12	72.05	45.62	9.1
VHM-82	82	85.25	4.78	.99	84.34	1.12	73.85	46.76	9.4
VHM-85	85	88.29	4.78	.99	87.34	1.12	76.55	48.47	9.7
VHM-88	88	91.32	4.78	.99	90.34	1.12	79.26	50.18	10.1
VHM-90	90	93.36	4.78	.99	92.34	1.12	81.06	51.32	10.3
VHM-92	92	95.37	4.78	.99	94.34	1.12	82.86	52.46	10.6
VHM-95	95	98.39	4.78	.99	97.34	1.12	85.56	54.17	10.9
VHM-98	98	101.41	4.78	.99	100.34	1.12	88.26	55.88	11.3
VHM-100	100	103.43	4.78	.99	102.34	1.12	90.06	57.02	11.5
VHM-102	102	105.44	4.78	.99	104.34	1.12	91.87	58.16	11.7
VHM-105	105	108.92	5.72	1.17	107.80	1.32	106.44	71.64	17.0
VHM-110	110	113.98	5.72	1.17	112.80	1.32	111.51	75.05	17.8
VHM-112	112	116.01	5.72	1.17	114.80	1.32	113.54	76.42	18.2
VHM-115	115	119.12	5.72	1.17	117.88	1.32	116.58	80.71	18.7
VHM-120	120	124.30	5.72	1.17	123.00	1.32	121.65	87.73	19.6
VHM-125	125	129.47	5.72	1.17	128.12	1.32	126.71	95.04	20.4
VHM-130	130	134.66	5.72	1.17	133.26	1.32	131.78	103.27	21.3
VHM-135	135	139.83	5.72	1.55	138.38	1.70	181.30	111.19	29.3
VHM-140	140	145.00	5.72	1.55	143.50	1.70	188.01	119.40	30.4
VHM-150	150	155.30	6.73	1.55	153.76	1.70	201.44	137.44	38.2
VHM-155	155	160.46	6.73	1.55	158.88	1.70	208.16	146.36	39.5
VHM-160	160	165.64	6.73	1.55	164.00	1.70	214.87	155.96	40.8
VHM-165	165	170.82	6.73	1.55	169.13	1.70	221.59	165.86	42.2
VHM-170	170	175.99	6.73	1.55	174.25	1.70	228.30	176.06	43.5
VHM-175	175	181.17	6.73	1.55	179.38	1.70	235.02	186.57	44.8
VHM-180	180	186.35	6.73	1.55	184.50	1.70	241.73	197.38	46.2
VHM-185	185	191.52	6.73	1.55	189.63	1.70	248.45	208.50	47.5
VHM-190	190	196.70	6.73	1.55	194.75	1.70	255.16	219.92	48.8
VHM-195	195	201.87	7.62	1.55	199.88	1.70	261.88	231.65	56.5
VHM-200	200	207.05	7.62	1.55	205.00	1.70	268.59	243.68	58.0
VHM-210	210	217.40	7.62	1.55	215.25	1.70	282.02	268.66	61.0
VHM-220	220	227.76	8.76	1.93	225.50	2.08	367.88	294.85	91.2
VHM-230	230	238.11	8.76	1.93	235.75	2.08	384.60	322.27	95.5
VHM-240	240	248.46	8.76	1.93	246.00	2.08	401.33	350.90	100
VHM-250	250	258.81	8.76	1.93	256.25	2.08	418.05	380.75	104
VHM-260	260	269.17	9.65	1.93	266.50	2.08	434.77	411.82	119
VHM-270	270	279.52	9.65	1.93	276.75	2.08	451.49	444.11	124
VHM-280	280	289.87	9.65	1.93	287.00	2.08	468.21	477.61	129
VHM-290	290	300.22	9.65	1.93	297.25	2.08	484.94	512.34	133
VHM-300	300	310.58	9.65	1.93	307.50	2.08	501.66	548.28	138

(1) Add Suffix -S02 for 302 Stainless Steel, (2) Based on a safety factor of 3, (3) Based on a groove material yield strength of 310 N/mm² and a safety factor of 2



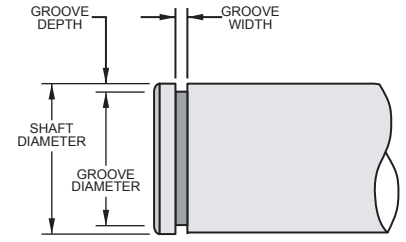
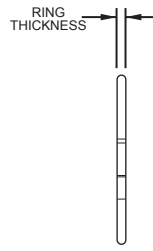
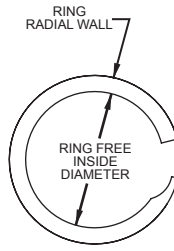
**LIGHT DUTY
METRIC SERIES**

No removal notch



PART NUMBER (1)	SHAFT DIAMETER (mm)	RING (mm)			GROOVE (mm)		THRUST CAPACITY (kN)		PART WEIGHT (kg) PER 1000
		INSIDE DIAMETER	RADIAL WALL	THICKNESS	DIAMETER	WIDTH MIN	RING SHEAR (2)	GROOVE YIELD (3)	
VSM-6*	6	5.65	.51	.30	5.70	.38	1.99	.44	.02
VSM-7*	7	6.58	.51	.30	6.64	.38	2.23	.61	.03
VSM-8*	8	7.52	.64	.38	7.60	.46	3.18	.78	.05
VSM-9*	9	8.42	.76	.38	8.50	.46	3.58	1.11	.07
VSM-10*	10	9.32	.89	.38	9.40	.46	3.98	1.46	.09
VSM-11	11	10.32	.89	.38	10.40	.46	4.38	1.61	.09
VSM-12	12	11.22	1.14	.46	11.34	.56	5.78	1.93	.16
VSM-13	13	12.15	1.14	.46	12.28	.56	6.26	2.28	.17
VSM-14	14	13.15	1.14	.46	13.28	.56	6.74	2.46	.18
VSM-15	15	14.14	1.14	.46	14.28	.56	7.22	2.63	.20
VSM-16	16	15.13	1.14	.46	15.28	.56	7.71	2.81	.21
VSM-17	17	16.13	1.14	.46	16.28	.56	8.19	2.98	.22
VSM-18	18	17.12	1.14	.46	17.28	.56	8.67	3.16	.24
VSM-19	19	18.11	1.14	.46	18.28	.56	9.15	3.33	.25
VSM-20	20	19.10	1.14	.46	19.28	.56	9.63	3.51	.26
VSM-21	21	19.74	1.65	.53	19.94	.66	11.65	5.42	.46
VSM-22	22	20.73	1.65	.53	20.94	.66	12.21	5.68	.48
VSM-24	24	22.72	1.65	.53	22.94	.66	13.32	6.20	.53
VSM-25	25	23.71	1.65	.53	23.94	.66	13.87	6.46	.55
VSM-26	26	24.63	2.24	.64	24.88	.79	15.14	7.10	.95
VSM-28	28	26.62	2.24	.64	26.88	.79	16.30	7.64	1.0
VSM-29	29	27.61	2.24	.64	27.88	.79	16.88	7.91	1.1
VSM-30	30	28.59	2.24	.64	28.88	.79	17.47	8.19	1.1
VSM-32	32	30.57	2.24	.64	30.88	.79	18.63	8.73	1.2
VSM-34	34	32.56	2.24	.64	32.88	.79	19.80	9.28	1.2
VSM-35	35	33.55	2.24	.64	33.88	.79	20.38	9.55	1.3
VSM-36	36	34.54	2.24	.64	34.88	.79	20.96	9.83	1.3
VSM-38	38	36.52	2.24	.64	36.88	.79	22.12	10.37	1.4
VSM-40	40	38.09	3.00	.79	38.52	.99	28.75	14.43	2.4
VSM-42	42	40.07	3.00	.79	40.52	.99	30.19	15.15	2.5
VSM-45	45	43.04	3.00	.79	43.52	.99	32.34	16.23	2.7
VSM-48	48	46.01	3.00	.79	46.52	.99	34.50	17.31	2.9
VSM-50	50	47.99	3.00	.79	48.52	.99	35.93	18.03	3.0
VSM-52	52	49.48	4.01	.79	50.06	.99	37.37	24.58	4.2
VSM-55	55	52.46	4.01	.79	53.06	.99	39.53	26.00	4.4
VSM-56	56	53.44	4.01	.79	54.06	.99	40.25	26.47	4.5
VSM-58	58	55.42	4.01	.79	56.06	.99	41.68	27.42	4.6
VSM-60	60	57.40	4.01	.79	58.06	.99	43.12	28.36	4.8
VSM-62	62	59.37	4.01	.79	60.06	.99	44.56	29.31	4.9
VSM-63	63	60.35	4.01	.79	61.06	.99	45.28	29.78	5.0
VSM-65	65	62.33	4.01	.79	63.06	.99	46.72	30.73	5.2
VSM-68	68	65.31	4.01	.79	66.06	.99	48.87	32.15	5.4
VSM-70	70	67.29	4.01	.79	68.06	.99	50.31	33.09	5.6
VSM-72	72	69.27	4.01	.79	70.06	.99	51.75	34.04	5.7
VSM-75	75	72.25	4.01	.79	73.06	.99	53.90	35.46	6.0

(1) Add Suffix -S02 for 302 Stainless Steel, (2) Based on a safety factor of 3, (3) Based on a groove material yield strength of 310 N/mm² and a safety factor of 2



PART NUMBER (1)	SHAFT DIAMETER (mm)	RING (mm)			GROOVE (mm)		THRUST CAPACITY (kN)		PART WEIGHT (kg) PER 1000
		INSIDE DIAMETER	RADIAL WALL	THICKNESS	DIAMETER	WIDTH MIN	RING SHEAR (2)	GROOVE YIELD (3)	
VSM-78	78	74.85	4.78	.99	75.66	1.12	70.25	44.48	9.3
VSM-80	80	76.82	4.78	.99	77.66	1.12	72.05	45.62	9.5
VSM-82	82	78.79	4.78	.99	79.66	1.12	73.85	46.76	9.7
VSM-85	85	81.76	4.78	.99	82.66	1.12	76.55	48.47	10.1
VSM-88	88	84.73	4.78	.99	85.66	1.12	79.26	50.18	10.4
VSM-90	90	86.69	4.78	.99	87.66	1.12	81.06	51.32	10.7
VSM-95	95	91.66	4.78	.99	92.66	1.12	85.56	54.17	11.2
VSM-100	100	96.62	4.78	.99	97.66	1.12	90.06	57.02	11.8
VSM-105	105	101.13	5.72	1.17	102.20	1.32	106.44	71.64	17.6
VSM-110	110	106.08	5.72	1.17	107.20	1.32	111.51	75.05	18.4
VSM-115	115	111.03	5.72	1.17	112.20	1.32	116.58	78.47	19.2
VSM-120	120	115.98	5.72	1.17	117.20	1.32	121.65	81.88	20.1
VSM-125	125	120.93	5.72	1.17	122.20	1.32	126.71	85.29	20.9
VSM-130	130	125.88	5.72	1.17	127.20	1.32	131.78	88.70	21.7
VSM-135	135	130.31	5.72	1.55	131.63	1.70	181.30	111.03	29.7
VSM-140	140	135.13	5.72	1.55	136.50	1.70	188.01	119.40	30.8
VSM-150	150	144.83	5.72	1.55	146.25	1.70	201.44	137.07	32.9
VSM-155	155	149.66	5.72	1.55	151.13	1.70	208.16	146.36	33.9
VSM-160	160	154.44	6.73	1.55	156.00	1.70	214.87	155.96	41.4
VSM-165	165	159.27	6.73	1.55	160.88	1.70	221.59	165.86	42.7
VSM-170	170	164.09	6.73	1.55	165.75	1.70	228.30	176.06	43.9
VSM-175	175	168.92	6.73	1.55	170.63	1.70	235.02	186.57	45.1
VSM-180	180	173.75	6.73	1.55	175.50	1.70	241.73	197.38	46.4
VSM-185	185	178.57	7.62	1.55	180.38	1.70	248.45	208.50	54.2
VSM-190	190	183.40	7.62	1.55	185.25	1.70	255.16	219.92	55.6
VSM-195	195	188.22	7.62	1.55	190.13	1.70	261.88	231.65	57.0
VSM-200	200	193.05	7.62	1.55	195.00	1.70	268.59	243.68	58.4
VSM-210	210	202.70	8.76	1.93	204.75	2.08	351.16	268.66	88.1
VSM-220	220	212.36	8.76	1.93	214.50	2.08	367.88	294.85	92.1
VSM-230	230	222.01	8.76	1.93	224.25	2.08	384.60	322.27	96.1
VSM-240	240	231.66	8.76	1.93	234.00	2.08	401.33	350.90	100
VSM-250	250	241.31	8.76	1.93	243.75	2.08	418.05	380.75	104
VSM-260	260	250.97	9.65	1.93	253.50	2.08	434.77	411.82	120
VSM-270	270	260.62	9.65	1.93	263.25	2.08	451.49	444.11	124
VSM-280	280	270.27	9.65	1.93	273.00	2.08	468.21	477.61	128
VSM-290	290	279.92	9.65	1.93	282.75	2.08	484.94	512.34	133
VSM-300	300	289.58	9.65	1.93	292.50	2.08	501.66	548.28	137

(1) Add Suffix -S02 for 302 Stainless Steel, (2) Based on a safety factor of 3, (3) Based on a groove material yield strength of 310 N/mm² and a safety factor of 2