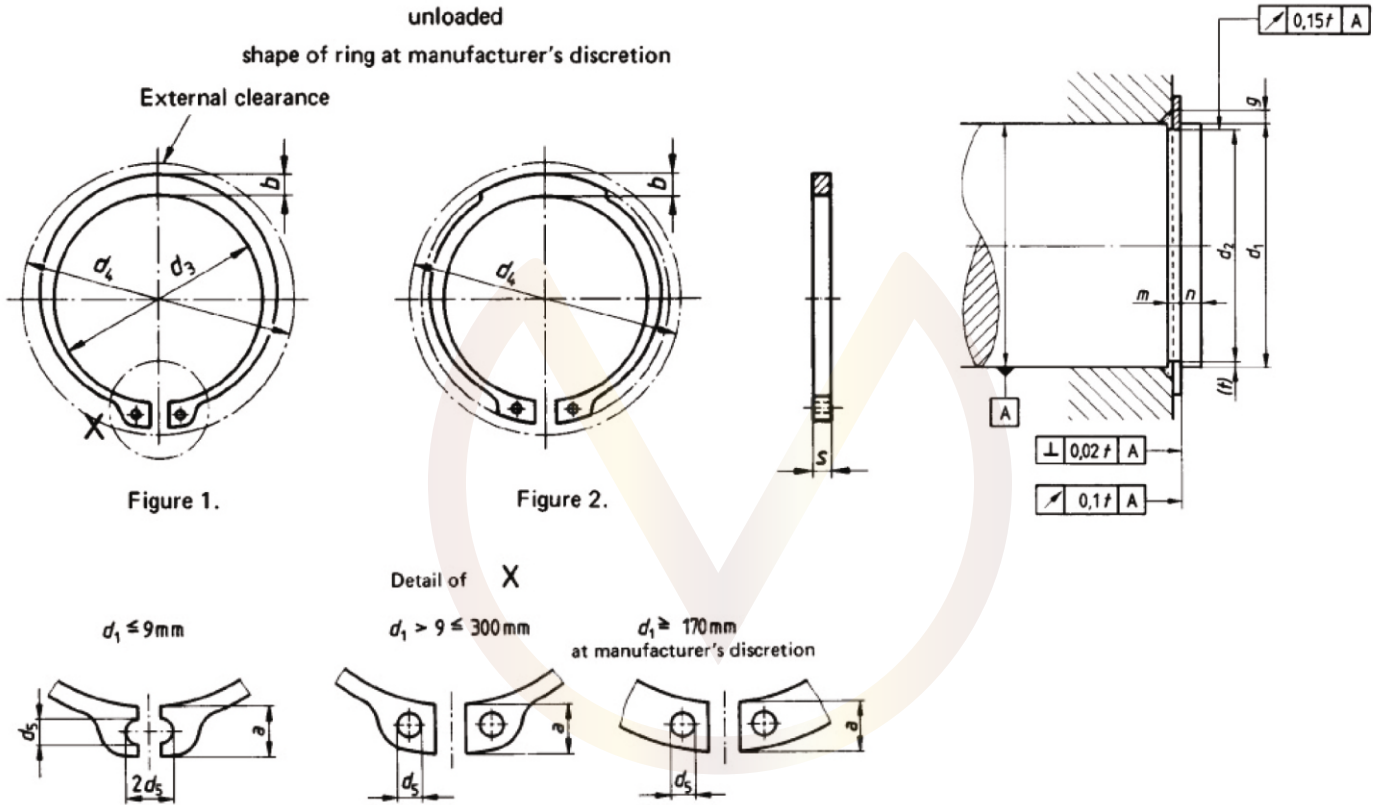




EXTERNAL CIRCLIP

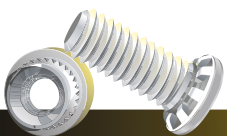


DIN 471

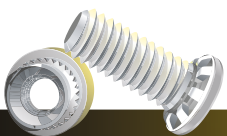
MVD PART NO DESIGNATION

EXTERNAL CIRCLIP

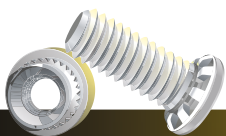
MV	471	MX	XX	S/SS	XX
	↓	↓	↓	↓	↓
	DIN NO	DIMETER	THICKNESS	MATERIAL	FINISH



Shaft Dia		Clip						Groove					Supplementary data						Nominal size of pliers per DIN 5254	
d1	s	d3	a	b	d5	weight kg/1000pcs	d2	m	n	d4	FR	FRg	nabl							
Nominal size	per. dev.	per. dev.	max.	approx.	min.		per. dev.	H13	t	min.	kN	FN	kN	g	kN	min-1				
3	0.4	0 -0.05	2.7	0.04 -0.15	1.9	0.8	1	0.017	2.8	0 -0.04	0.5	0.1	0.3	7	0.15	0.47	0.5	0.27	360000	3
4	0.4		3.7		2.2	0.9	1	0.022	3.8	0	0.5	0.1	0.3	8.6	0.2	0.5	0.5	0.3	211000	
5	0.6		4.7		2.5	1.1	1	0.066	4.8	-0.048	0.7	0.1	0.3	10.2	0.26	1	0.5	0.8	154000	
6	0.7		5.6		2.7	1.3	1.2	0.084	5.7	(h10)	0.8	0.15	0.5	11.7	0.46	1.45	0.5	0.9	114000	
7	0.8		6.5	0.06	3.1	1.4	1.2	0.121	6.7	0	0.9	0.15	0.5	13.5	0.54	2.6	0.5	1.4	121000	
8	0.8		7.4	-0.18	3.2	1.5	1.2	0.158	7.6	-0.06	0.9	0.2	0.6	14.7	0.81	3	0.5	2	96000	
9	1	0	8.4		3.3	1.7	1.2	0.3	8.6	(h10)	1.1	0.2	0.6	16	0.92	3.5	0.5	2.4	85000	
10	1	-0.06	9.3	0.1	3.3	1.8	1.5	0.34	9.6		1.1	0.2	0.6	17	1.01	4	1	2.4	84000	10
11	1		10.2	-0.4	3.3	1.8	1.5	0.41	10.5	0	1.1	0.25	0.8	18	1.4	4.5	1	2.4	70000	
12	1		11		3.3	1.8	1.7	0.5	11.5	-0.11	1.1	0.25	0.8	19	1.53	5	1	2.4	75000	
13	1		11.9		3.4	2	1.7	0.53	12.4	(h11)	1.1	0.3	0.9	20.2	2	5.8	1	2.4	66000	
14	1		12.9		3.5	2.1	1.7	0.64	13.4		1.1	0.3	0.9	21.4	2.15	6.35	1	2.4	58000	
15	1		13.8		3.6	2.2	1.7	0.67	14.3		1.1	0.35	1.1	22.6	2.66	6.9	1	2.4	50000	
16	1		14.7		3.7	2.2	1.7	0.7	15.2		1.1	0.4	1.2	23.8	3.26	7.4	1	2.4	45000	
17	1		15.7		3.8	2.3	1.7	0.82	16.2		1.1	0.4	1.2	25	3.46	8	1	2.4	41000	
18	1.2		16.5		3.9	2.4	2	1.11	17		1.3	0.5	1.5	26.2	4.58	17	1.5	3.75	39000	
19	1.2		17.5		3.9	2.5	2	1.22	18		1.3	0.5	1.5	27.2	4.84	17	1.5	3.8	35000	
20	1.2		18.5	0.13	4	2.6	2	1.3	19	0	1.3	0.5	1.5	28.4	5.06	17.1	1.5	3.85	32000	19
21	1.2		19.5	-0.4	4.1	2.7	2	1.42	20	-0.13	1.3	0.5	1.5	29.6	5.36	16.8	1.5	3.75	29000	
22	1.2		20.5		4.2	2.8	2	1.5	21	(h11)	1.3	0.5	1.5	30.8	5.65	16.9	1.5	3.8	27000	
24	1.2		22.2	0.21	4.4	3	2	1.77	22.9	0	1.3	0.55	1.7	33.2	6.75	16.1	1.5	3.65	27000	
25	1.2		23.2	-0.4	4.4	3	2	1.9	23.9	-0.21	1.3	0.55	1.7	34.2	7.05	16.2	1.5	3.7	25000	
26	1.2		24.2		4.5	3.1	2	1.96	24.9	(h12)	1.3	0.55	1.7	35.5	7.34	16.1	1.5	3.7	24000	
28	1.5		25.9		4.7	3.2	2	2.92	26.6		1.6	0.7	2.1	37.9	10	32.1	1.5	7.5	21200	
29	1.5		26.9		7.8	3.4	2	3.2	27.6		1.6	0.7	2.1	39.1	10.4	31.8	1.5	7.45	20000	
30	1.5		27.9		5	3.5	2	3.31	28.6		1.6	0.7	2.1	40.5	10.7	32.1	1.5	7.65	18900	
32	1.5		29.6		5.2	3.6	2.5	3.54	30.3	0	1.6	0.85	2.6	43	13.9	31.2	2	5.55	16900	
34	1.5		31.5	0.25	5.4	3.8	2.5	3.8	32.3	-0.25	1.6	0.85	2.6	45.4	14.7	31.3	2	5.6	16100	
35	1.5		32.2	-0.5	5.6	3.9	2.5	4	33	(h12)	1.6	1	3	46.8	17.8	30.8	2	5.55	15500	
36	1.8		33.2		5.6	4	2.5	5	34		1.85	1	3	47.8	18.3	49.4	2	9	14500	
38	1.8		35.2		5.8	4.2	2.5	5.62	36		1.85	1	3	50.2	19.3	49.5	2	9.1	13600	



Shaft Dia d1	Clip							Groove					Supplementary data					Nominal size of pliers per DIN 5254		
	s	d3		a	b	d5	weight kg/1000pcs	d2	m		n	d4	FR		FRg	nabl				
Nominal size	per. dev.	per. dev.	max.	approx.	min.			per. dev.	H13	t	min.	kN	FN	kN	g	kN	min-1			
40	1.8		36.5	0.39	6	4.4	2.5	6.03	37.5		1.85	1.25	3.8	52.6	25.3	51	2	9.5	14300	40
42	1.8		38.5	-0.9	6.5	4.5	2.5	6.5	39.5		1.85	1.25	3.8	55.7	26.7	50	2	9.45	13000	
45	1.8		41.5		6.7	4.7	2.5	7.5	42.5		1.85	1.25	3.8	59.1	28.6	49	2	9.35	11400	
48	2		44.5		6.9	5	2.5	7.9	45.5		1.85	1.25	3.8	62.5	30.7	49.4	2	9.55	10300	
50	2	0	45.8		6.9	5.1	2.5	10.2	47		2.15	1.5	4.5	64.5	38	73.3	2	14.4	10500	
52	2	-0.07	47.8		7	5.2	2.5	11.1	49		2.15	1.5	4.5	66.7	39.7	73.1	2.5	11.5	9850	
55	2		50.8	0.46	7.2	5.4	2.5	11.4	52	0	2.15	1.5	4.5	70.2	42	71.4	2.5	11.4	8960	
56	2		51.8	-1.1	7.3	5.5	2.5	11.8	53	-0.3	2.15	1.5	4.5	71.6	42.8	70.8	2.5	11.4	8670	
58	2		53.8		7.3	5.6	2.5	12.6	55	(h12)	2.15	1.5	4.5	73.6	44.3	71.1	2.5	11.5	8200	
60	2		55.8		7.4	5.8	2.5	12.9	57		2.15	1.5	4.5	75.6	46	69.2	2.5	11.3	7620	
62	2		57.8		7.5	6	2.5	1.3	59		2.15	1.5	4.5	77.8	47.5	69.3	2.5	11.5	7240	
63	2		58.8		7.6	6.2	2.5	15.9	60		2.15	1.5	4.5	79	48.3	70.2	2.5	11.6	7050	
65	2.5		60.8		7.8	6.3	3	18.2	62		2.65	1.5	4.5	81.4	49.8	136	2.5	22.7	6640	
68	2.5		63.5		8	6.2	3	21.8	65		2.65	1.5	4.5	84.8	52.2	136	2.5	23.1	6910	
70	2.5		65.5		8.1	6.6	3	22	67		2.65	1.5	4.5	87	53.8	134	2.5	23	6530	
72	2.5		67.5		8.2	6.8	3	22.5	69		2.65	1.5	4.5	89.2	55.3	132	2.5	22.8	6190	
75	2.5		70.5		8.4	7	3	24.6	72		2.65	1.5	4.5	92.7	57.6	130	2.5	22.8	5740	
78	2.5		73.5		8.6	7.3	3	26.2	75		2.65	1.5	4.5	96.1	60	131	3	19.8	5450	
80	2.5		74.5		8.6	7.4	3	27.3	76.5		2.65	1.75	5.3	98.1	71.6	128	3	19.5	6100	
82	2.5		76.5		8.7	7.6	3	31.2	78.5		2.65	1.75	5.3	100	73.5	128	3	19.6	5860	
85	3	0	79.5		8.7	7.8	3.5	36.4	81.5	0	3.15	1.75	5.3	103	76.2	215	3	33.4	5710	
88	3	-0.08	82.5	0.54	8.8	8	3.5	41.2	84.5	-0.35	3.15	1.75	5.3	107	79	222	3	34.9	5200	
90	3		84.5	-1.3	8.8	8.2	3.5	44.5	86.5	(h12)	3.15	1.75	5.3	109	80.8	217	3	34.4	4980	
95	3		89.5		9.4	8.6	3.5	49	91.5		3.15	1.75	5.3	115	85.5	212	3.5	29.3	4550	
100	3	0	94.5		9.6	9	3.5	53.7	96.5		3.15	1.75	5.3	120	90	206	3.5	29	4180	
105	4	-0.1	98		9.9	9.3	3.5	80	101	0	4.15	2	6	126	108	472	3.5	67.7	4740	
110	4		103		10	9.6	3.5	82	106	-0.54	4.15	2	6	131	113	457	3.5	66.9	4340	
115	4		108		11	9.8	3.5	84	111	(h13)	4.15	2	6	137	118	439	3.5	65.5	3970	
120	4		113		11	10.2	3.5	86	116		4.15	2	6	143	124	427	3.5	64.5	3685	



Shaft Dia		Clip						Groove						Supplementary data						Nominal size of pliers per DIN 5254
d1	s	d3		a	b	d5	d2	m	n		d4	FR		FRg	nabl					
Nominal size	per. dev.	per. dev.	max.	approx.	min.	weight kg/1000pcs	per. dev.	H13	t	min.	kN	FN	kN	g	kN	min-1				
125	4		118	11	10.4	4	90	121	0	4.15	2	6	149	129	412	4	56.5	3420	125	
130	4		123	0.63	12	10.7	4	100	-0.63	4.15	2	6	154	134	2396	4	55.2	3180		
135	4		128	-1.5	12	11	4	104	(h13)	4.15	2	6	160	139	390	4	55.4	2950		
140	4		133		12	11.2	4	110		4.15	2	6	165	145	377	4	54.4	2760		
145	4		138		12	11.5	4	115		4.15	2	6	171	150	367	4	53.8	2600		
150	4		142		13	11.8	4	120		4.15	2.5	7.5	177	193	358	4	53.4	2480		
155	4		146		13	12	4	135		4.15	2.5	7.5	182	200	353	4	52.6	2710		
160	4		151		13	12.2	4	150		4.15	2.5	7.5	188	206	349	4	52.2	2540		
165	4		156		14	12.5	4	160		4.15	2.5	7.5	193	213	345	4	41.4	2520		
170	4		161		14	12.9	4	170		4.15	2.5	7.5	198	219	349	4	41.9	2440		
175	4		166		14	12.9	4	180		4.15	2.5	7.5	203	226	340	5	40.7	2300		
180	4		171		14	13.5	4	190		4.15	2.5	7.5	210	232	345	5	41.4	2790		
185	4		176		14	13.5	4	200		4.15	2.5	7.5	215	239	337	5	40.4	2070		
190	4		181	0.72	14	14	4	210	185	0	4.15	2.5	7.5	220	245	334	5	40		1970
195	4		186	-1.7	14	14	4	220	190	-0.72	4.15	2.5	7.5	225	252	325	5	39		1835
200	4		191		14	14	4	230	195	(h13)	4.15	2.5	7.5	230	258	319	5	38.3		1770
210	5	0	198		14	14	4	248	204		5.15	3	9	240	325	598	6	59.9		1835
220	5	0.12	208		14	14	4	265	214		5.15	3	9	250	341	572	6	57.3		1620
230	5		218		14	14	4	290	224		5.15	3	9	260	357	549	6	55		1445
240	5		228		14	14	4	310	234		5.15	3	9	270	373	530	6	53		1305
250	5		238		14	14	4	335	244		5.15	3	9	280	388	504	6	50.5		1180
260	5		245		16	16	5	355	252	0	5.15	4	12	294	536	541	6	54.6		1320
270	5		255	0.81	16	16	5	375	262	-0.81	5.15	4	12	304	557	525	6	52.5		1215
280	5		265	-2	16	16	5	398	272	(h13)	5.15	4	12	314	577	508	6	50.9		1100
290	5		275		16	16	5	418	282		5.15	4	12	324	599	491	6	49.2		1005
300	5		285		16	16	5	440	292		5.15	4	12	334	619	475	6	47.5		930

SPECIFICATIONS & DETAILS

MVD PART CODE	MV471AXXXX	MVD DESCRIPTION	EXTERNAL CIRCLIP XX
DRAWN BY	ABHISHEK	APPROVED BY	MAGESH
DRAWING REV. NO	00	MATERIAL	CARBON STEEL
DATE		FINISH	ZINC PLATED

ALL DIMENSIONS ARE IN MM, UNLESS SPECIFIED

