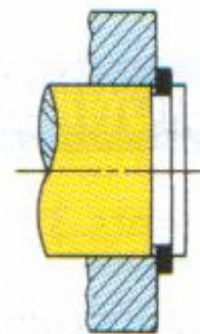
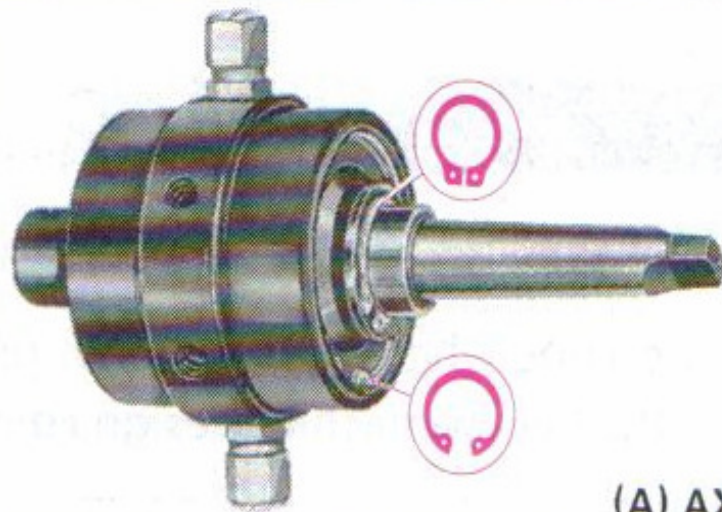


Emniyet Segmanları (Retaining Rings)

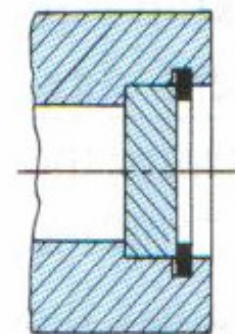


Retaining rings, or snap rings, are used to provide a removable shoulder to accurately locate, retain, or lock components on shafts and in bores of housings

They are easily installed and removed, and since they are usually made of spring steel, retaining rings have a high shear strength and impact capacity.



EXTERNAL



INTERNAL

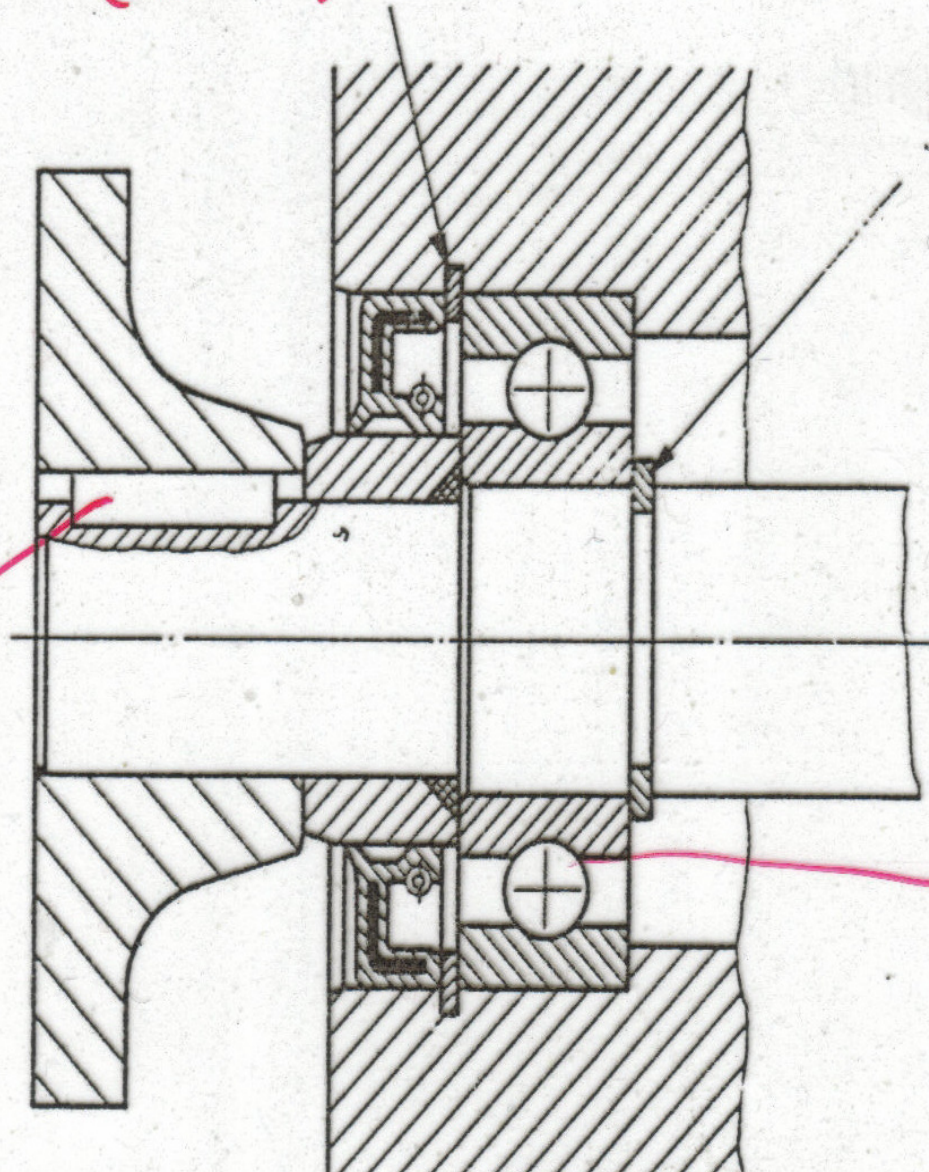
(A) AXIAL AND RADIAL ASSEMBLY (B) AXIAL ASSEMBLY

internal ring
(delic segmanı)

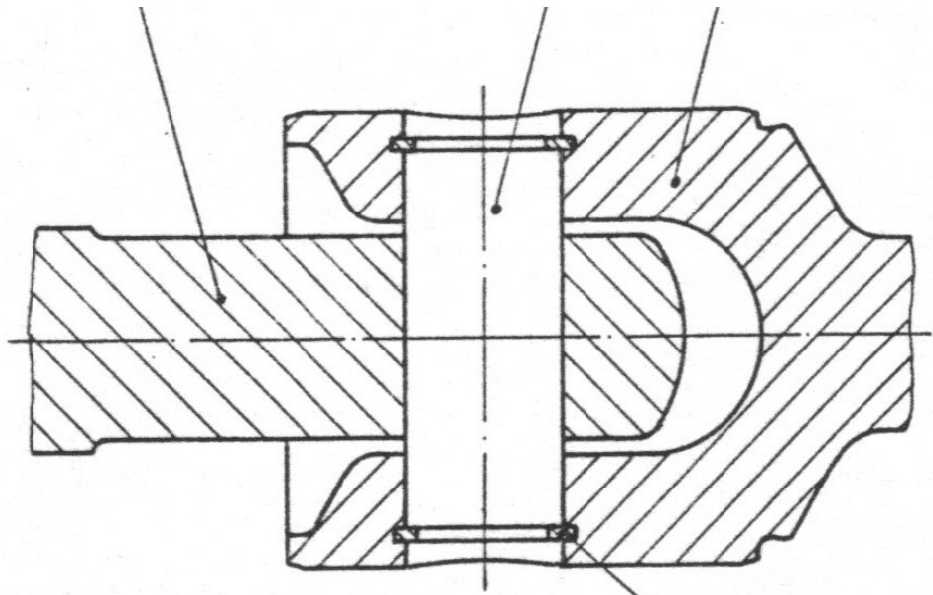
external ring
(mil segmanı)

key

roller bearing



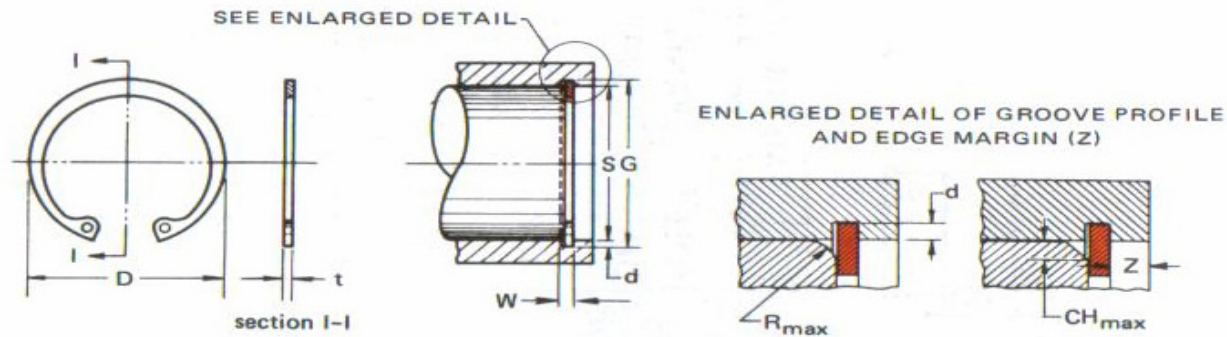
Piston rod (Perno) Pin Piston



Retaining ring

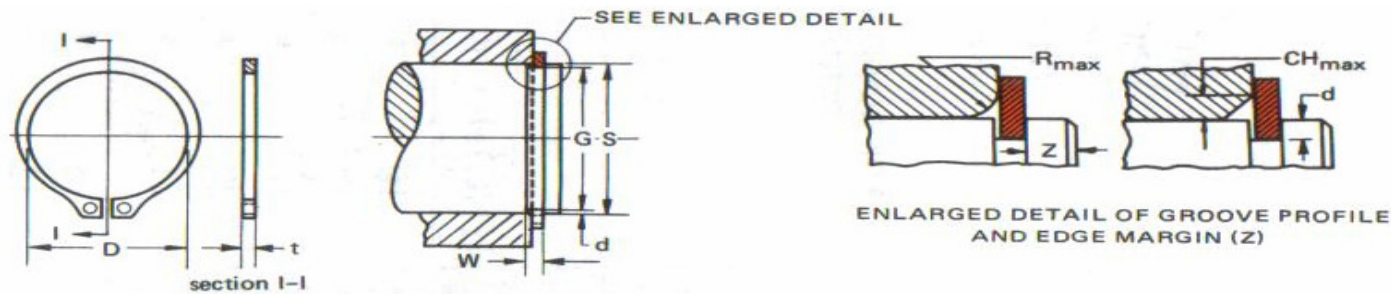
Circlip Pliers





Retaining rings—internal.

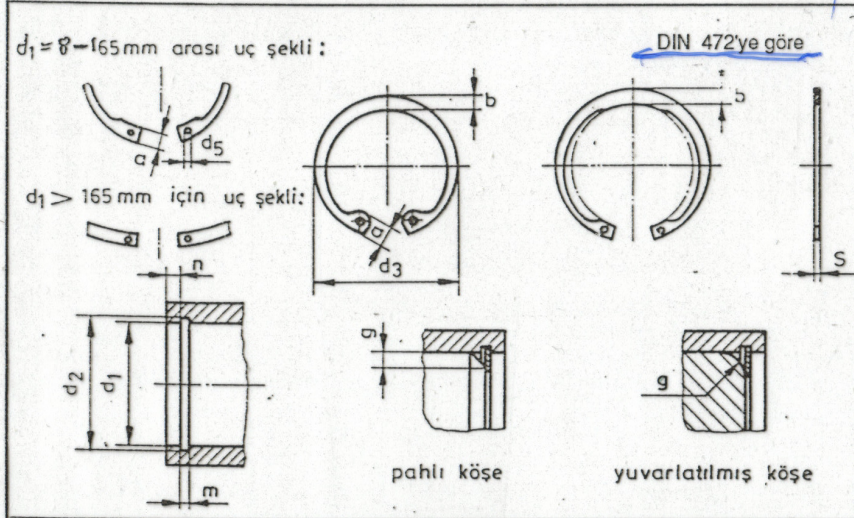
	HOUSING DIA.	INTERNAL SERIES	RETAINING RING DIMENSIONS		GROOVE DIMENSIONS				MAX. CORNER RADII AND CHAMFER OF RETAINED PARTS		EDGE MARGIN	NOMINAL GROOVE DEPTH	
			Size—No.	D	t	DIAMETER		WIDTH		R Max.	Ch. Max.	z	d
						G	Tol.	W	Tol.				
U.S. CUSTOMARY (INCHES)	.250	N5000-25	.280	.015	.268	±.001	.018	+.002	.011	.008	.027	.009	
	.312	N5000-31	.346	.015	.330	±.001	.018	+.002	.016	.013	.027	.009	
	.375	N5000-37	.415	.025	.397	±.002	.029	+.003	.023	.018	.033	.011	
	.500	N5000-50	.548	.035	.530	±.002	.039	+.003	.027	.021	.045	.015	
	.625	N5000-62	.694	.035	.665	±.002	.039	+.003	.027	.021	.060	.020	
	.750	N5000-75	.831	.035	.796	±.002	.039	+.003	.032	.025	.069	.023	
	.875	N5000-87	.971	.042	.931	±.003	.046	+.003	.035	.028	.084	.028	
	1.000	N5000-100	1.111	.042	1.066	±.003	.046	+.003	.042	.034	.099	.033	
	1.125	N5000-112	1.249	.050	1.197	±.004	.056	+.004	.047	.036	.108	.036	
	1.250	N5000-125	1.388	.050	1.330	±.004	.056	+.004	.048	.038	.120	.040	
1.375	N5000-137	1.526	.050	1.461	±.004	.056	+.004	.048	.038	.129	.043		
1.500	N5000-150	1.660	.050	1.594	±.004	.056	+.004	.048	.038	.141	.047		
METRIC (MILLIMETERS)	8	MN5000-8	8.80	0.4	8.40	+0.6	0.5	+0.1	0.4	0.3	0.6	0.2	
	10	MN5000-10	11.10	0.6	10.50	+0.1	0.7	+0.15	0.5	0.35	0.8	0.25	
	12	MN5000-12	13.30	0.6	12.65	+0.1	0.7	+0.15	0.6	0.4	1.0	0.33	
	14	MN5000-14	15.45	0.9	14.80	+0.1	1.0	+0.15	0.7	0.5	1.2	0.40	
	16	MN5000-16	17.70	0.9	16.90	+0.1	1.0	+0.15	0.7	0.5	1.4	0.45	
	18	MN5000-18	20.05	0.9	19.05	+0.1	1.0	+0.15	0.75	0.6	1.6	0.53	
	20	MN5000-20	22.25	0.9	21.15	+0.15	1.0	+0.15	0.9	0.7	1.7	0.57	
	22	MN5000-22	24.40	1.1	23.30	+0.15	1.2	+0.15	0.9	0.7	1.9	0.65	
	24	MN5000-24	26.55	1.1	25.4	+0.15	1.2	+0.15	1.0	0.8	2.1	0.70	
	25	MN5000-25	27.75	1.1	26.6	+0.15	1.2	+0.15	1.0	0.8	2.4	0.80	
	30	MN5000-30	33.40	1.3	31.9	+0.2	1.4	+0.15	1.2	1.0	2.9	0.95	
	35	MN5000-35	38.75	1.3	37.2	+0.2	1.4	+0.15	1.2	1.0	3.3	1.10	
	40	MN5000-40	44.25	1.6	42.4	+0.2	1.75	+0.2	1.7	1.3	3.6	1.20	
	45	MN5000-45	49.95	1.6	47.6	+0.2	1.75	+0.2	1.7	1.3	3.9	1.30	
	50	MN5000-50	55.35	1.6	53.1	+0.2	1.75	+0.2	1.7	1.3	4.6	1.55	



Retaining rings—external.

	SHAFT DIA.	EXTERNAL SERIES	RETAINING RING DIMENSIONS		GROOVE DIMENSIONS				MAX. CORNER RADII AND CHAMFER OF RETAINED PARTS		EDGE MARGIN	NOMINAL GROOVE DEPTH (REF)
					DIAMETER		WIDTH		R Max.	Ch. Max.		
					G	Tol.	W	Tol.				
U.S. CUSTOMARY (INCHES)	S	Size—No.	D	t	G	Tol.	W	Tol.	R Max.	Ch. Max.	z	d
	.188	5100-18	.168	.015	.175	±.0015	.018	+.002	.014	.008	.018	.006
	.250	5100-25	.225	.025	.230	±.0015	.029	+.003	.018	.011	.030	.010
	.312	5100-31	.281	.025	.290	±.002	.029	+.003	.020	.012	.033	.011
	.375	5100-37	.338	.025	.352	±.002	.029	+.003	.026	.015	.036	.012
	.500	5100-50	.461	.035	.468	±.002	.039	+.003	.034	.020	.048	.016
	.625	5100-62	.579	.035	.588	±.003	.039	+.003	.041	.025	.055	.018
	.750	5100-75	.693	.042	.704	±.003	.046	+.003	.046	.027	.069	.023
	.875	5100-87	.810	.042	.821	±.003	.046	+.003	.051	.031	.081	.027
	1.000	5100-100	.925	.042	.940	±.003	.046	+.003	.057	.034	.090	.030
	1.125	5100-112	1.041	.050	1.059	±.004	.056	+.004	.063	.038	.099	.033
	1.250	5100-125	1.156	.050	1.176	±.004	.056	+.004	.068	.041	.111	.037
	1.375	5100-137	1.272	.050	1.291	±.004	.056	+.004	.072	.043	.126	.042
	1.500	5100-150	1.387	.050	1.406	±.004	.056	+.004	.079	.047	.141	.047
	METRIC (MILLIMETERS)	4	M5100-4	3.6	0.25	3.80	-0.08	0.32	+0.05	0.35	0.25	0.3
6		M5100-6	5.5	0.4	5.70	-0.08	0.5	+0.1	0.35	0.25	0.5	0.15
8		M5100-8	7.2	0.6	7.50	-0.1	0.7	+0.15	0.5	0.35	0.8	0.25
10		M5100-10	9.0	0.6	9.40	-0.1	0.7	+0.15	0.7	0.4	0.9	0.30
12		M5100-12	10.9	0.6	11.35	-0.12	0.7	+0.15	0.8	0.45	1.0	0.33
14		M5100-14	12.9	0.9	13.25	-0.12	1.0	+0.15	0.9	0.5	1.2	0.38
16		M5100-16	14.7	0.9	15.10	-0.15	1.0	+0.15	1.1	0.6	1.4	0.45
18		M5100-18	16.7	1.1	17.00	-0.15	1.2	+0.15	1.2	0.7	1.5	0.50
20		M5100-20	18.4	1.1	18.85	-0.15	1.2	+0.15	1.2	0.7	1.7	0.58
22		M5100-22	20.3	1.1	20.70	-0.15	1.2	+0.15	1.3	0.8	1.9	0.65
24		M5100-24	22.2	1.1	22.60	-0.15	1.2	+0.15	1.4	0.8	2.1	0.70
25		M5100-25	23.1	1.1	23.50	-0.15	1.2	+0.15	1.4	0.8	2.3	0.75
30		M5100-30	27.9	1.3	28.35	-0.2	1.4	+0.15	1.6	1.0	2.5	0.83
35		M5100-35	32.3	1.3	32.9	-0.2	1.4	+0.15	1.8	1.1	3.1	1.05
40		M5100-40	36.8	1.6	37.7	-0.3	1.75	+0.2	2.1	1.2	3.4	1.15
45	M5100-45	41.6	1.6	42.4	-0.3	1.75	+0.2	2.3	1.4	3.9	1.3	
50	M5100-50	46.2	1.6	47.2	-0.3	1.75	+0.2	2.4	1.4	4.2	1.4	

Emniyet Segmanları - Delikler İçin Normal Tip - Metrik



Anma ölçüsü delik çapı d_1	Segman					Delik kanalı				Ek bilgiler 1)			
	S	d_3	a max	b	d_5 min	d_2		m	n	F_N (kN)	F_R (kN)	g	F_{Rg} (kN)
						ölçü	tolerans						
8	0.80	8.7	2.4	1.1	1.0	8.4	+0.09	0.90	0.6	0.86	2.0	0.5	1.5
9	0.80	9.8	2.5	1.3	1.0	9.4	+0.09	0.90	0.6	0.96	2.0	0.5	1.5
10	1.00	10.8	3.2	1.4	1.2	10.4	+0.11	1.10	0.6	1.08	4.0	0.5	2.2
11	1.00	11.8	3.3	1.5	1.2	11.4	+0.11	1.10	0.6	1.17	4.0	0.5	2.3
12	1.00	13.0	3.4	1.7	1.5	12.5	+0.11	1.10	0.9	1.60	4.0	0.5	2.3
13	1.00	14.1	3.6	1.8	1.5	13.6	+0.11	1.10	0.9	2.10	4.2	0.5	2.3
14	1.00	15.1	3.7	1.8	1.7	14.6	+0.11	1.10	0.9	2.25	4.5	0.5	2.3
15	1.00	16.2	3.7	2.0	1.7	15.7	+0.11	1.10	1.1	2.80	5.0	0.5	2.3
16	1.00	17.2	3.8	2.0	1.7	16.8	+0.11	1.10	1.2	3.40	5.5	1.0	2.6
17	1.00	18.3	3.9	2.1	1.7	17.8	+0.11	1.10	1.2	3.60	6.0	1.0	2.5
18	1.00	19.5	4.1	2.2	2.0	19.0	+0.15	1.10	1.5	4.80	6.5	1.0	2.6
19	1.00	20.5	4.1	2.2	2.0	20.0	+0.15	1.10	1.5	5.10	6.8	1.0	2.6
20	1.00	21.5	4.1	2.3	2.0	21.0	+0.15	1.10	1.5	5.40	7.2	1.0	2.6
21	1.00	22.5	4.2	2.4	2.0	22.0	+0.15	1.10	1.5	5.70	7.6	1.0	2.6
22	1.00	23.5	4.2	2.5	2.0	23.0	+0.15	1.10	1.5	5.90	8.0	1.0	2.7
23	1.20	24.6	4.2	2.5	2.0	24.1	+0.15	1.30	1.7	6.80	8.0	1.0	4.6
24	1.20	25.9	4.3	2.6	2.0	25.2	+0.21	1.30	1.8	7.70	13.9	1.0	4.6
25	1.20	26.9	4.5	2.7	2.0	26.2	+0.21	1.30	1.8	8.00	14.6	1.0	4.7
26	1.20	27.9	4.7	2.8	2.0	27.2	+0.21	1.30	1.8	8.40	13.8	1.0	4.6
27	1.20	29.1	4.7	2.9	2.0	28.4	+0.21	1.30	2.1	10.10	13.3	1.0	4.5
28	1.20	30.1	4.8	2.9	2.0	29.4	+0.21	1.30	2.1	10.50	13.3	1.0	4.5
29	1.20	31.1	4.8	3.0	2.0	30.4	+0.25	1.30	2.1	10.90	13.6	1.0	4.6
30	1.20	32.1	4.8	3.0	2.0	31.4	+0.25	1.30	2.1	11.30	12.7	1.0	4.6
31	1.20	33.4	5.2	3.1	2.5	32.7	+0.25	1.30	2.6	14.10	13.8	1.0	4.7
32	1.20	34.4	5.4	3.2	2.5	33.7	+0.25	1.30	2.6	14.60	13.8	1.0	4.7
33	1.20	35.5	5.4	3.3	2.5	34.7	+0.25	1.30	2.6	15.00	14.3	1.0	4.9
34	1.50	36.5	5.4	3.3	2.5	35.7	+0.25	1.60	2.6	15.40	26.2	1.5	6.3
35	1.50	37.8	5.4	3.4	2.5	37.0	+0.25	1.60	3.0	18.80	26.9	1.5	6.4
36	1.50	38.8	5.4	3.5	2.5	38.0	+0.25	1.60	3.0	19.40	26.4	1.5	6.4
37	1.50	39.8	5.5	3.6	2.5	39.0	+0.25	1.60	3.0	19.80	27.1	1.5	6.5

NOT: 1 Ek bilgiler, (g) dışında segman hesabında kullanılmaktadır.

rep. ex: EMNİYET SEGMANI 50x2 DIN472

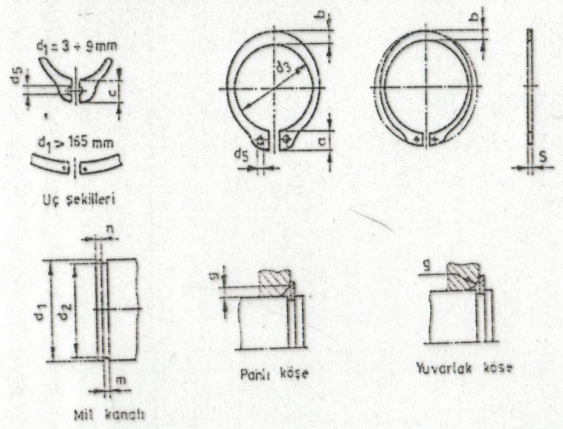
or 471

Emniyet Segmanları Delikler İçin Normal Tip - Metrik (Devamı)

Anma ölçüsü Delik çapı d_1	Segman					Delik kanalı				Ek bilgiler 1)			
	S	d_3	a max	b	d_5 min	d_2		m	n	F_N (kN)	F_R (kN)	g	F_{Rg} (kN)
						ölçü	Tolerans						
38	1.50	40.8	5.5	3.7	2.5	40.0	+0.25	1.60	3.0	22.50	28.2	1.5	6.7
39	1.50	42.0	5.6	3.8	2.5	41.0	+0.25	1.60	3.0	26.00	28.8	1.5	6.9
40	1.75	43.5	5.8	3.9	2.5	42.5	+0.25	1.85	3.8	27.00	44.6	2.0	8.3
41	1.75	44.5	5.9	4.0	2.5	43.5	+0.25	1.85	3.8	27.60	45.0	2.0	8.3
42	1.75	45.5	5.9	4.1	2.5	44.5	+0.25	1.85	3.8	28.40	44.7	2.0	8.4
43	1.75	46.5	5.9	4.2	2.5	45.5	+0.25	1.85	3.8	28.80	44.5	2.0	8.4
44	1.75	47.5	6.0	4.2	2.5	46.5	+0.25	1.85	3.8	29.50	43.3	2.0	8.3
45	1.75	48.5	6.2	4.3	2.5	47.5	+0.25	1.85	3.8	30.20	43.1	2.0	8.2
46	1.75	49.5	6.3	4.4	2.5	48.5	+0.25	1.85	3.8	30.80	42.9	2.0	8.2
47	1.75	50.5	6.4	4.4	2.5	49.5	+0.25	1.85	3.8	31.40	43.5	2.0	8.3
48	1.75	51.5	6.4	4.5	2.5	50.5	+0.30	1.85	3.8	32.00	43.2	2.0	8.4
50	2.00	54.2	6.5	4.6	2.5	53.0	+0.30	2.15	4.5	40.50	60.8	2.0	12.1
51	2.00	55.2	6.5	4.7	2.5	54.0	+0.30	2.15	4.5	41.20	60.2	2.0	12.0
52	2.00	56.2	6.7	4.7	2.5	55.0	+0.30	2.15	4.5	42.00	60.2	2.0	12.0
53	2.00	57.2	6.7	4.9	2.5	56.0	+0.30	2.15	4.5	42.90	60.7	2.0	12.1
54	2.00	58.2	6.7	5.0	2.5	57.0	+0.30	2.15	4.5	43.60	60.4	2.0	12.3
55	2.00	59.2	6.8	5.0	2.5	58.0	+0.30	2.15	4.5	44.40	60.3	2.0	12.5
56	2.00	60.2	6.8	5.1	2.5	59.0	+0.30	2.15	4.5	45.20	60.3	2.0	12.6
57	2.00	61.2	6.8	5.1	2.5	60.0	+0.30	2.15	4.5	46.00	60.8	2.0	12.7
58	2.00	62.2	6.9	5.2	2.5	61.0	+0.30	2.15	4.5	46.70	60.8	2.0	12.7
60	2.00	64.2	7.3	5.4	2.5	63.0	+0.30	2.15	4.5	48.30	61.0	2.0	13.0
62	2.00	66.2	7.3	5.5	2.5	65.0	+0.30	2.15	4.5	49.80	60.9	2.0	13.0
63	2.00	67.2	7.3	5.6	2.5	66.0	+0.30	2.15	4.5	50.60	60.8	2.0	13.0
64	2.00	68.2	7.4	5.7	2.5	67.0	+0.30	2.15	4.5	51.40	60.6	2.0	13.0
65	2.50	69.2	7.6	5.8	3.0	68.0	+0.30	2.65	4.5	51.80	121.0	2.5	20.8
67	2.50	71.5	7.7	6.0	3.0	70.0	+0.30	2.65	4.5	53.80	121.00	2.5	21.1
68	2.50	72.5	7.8	6.1	3.0	71.0	+0.30	2.65	4.5	56.20	119.00	2.5	21.0
70	2.50	74.5	7.8	6.2	3.0	73.0	+0.30	2.65	4.5	56.20	119.00	2.5	21.0
72	2.50	76.5	7.8	6.4	3.0	75.0	+0.30	2.65	4.5	58.00	119.00	2.5	21.0
75	2.50	79.5	7.8	6.6	3.0	78.0	+0.30	2.65	4.5	60.00	118.00	2.5	21.0
77	2.50	82.5	7.9	6.7	3.0	80.0	+0.30	2.65	4.5	61.6	121	2.5	21.5
78	2.50	82.5	8.5	6.8	3.0	81.0	+0.35	2.65	4.5	62.3	122	2.5	21.8
80	2.50	85.5	8.5	7.0	3.0	83.5	+0.35	2.65	5.3	74.6	120	2.5	21.8
81	2.50	86.5	8.5	7.0	3.0	84.5	+0.35	2.65	5.3	75.8	119	2.5	21.6
82	2.50	87.5	8.5	7.0	3.0	85.5	+0.35	2.65	5.3	76.6	119	2.5	21.4
83	2.50	88.5	8.5	7.0	3.0	86.5	+0.35	2.65	5.3	77.5	118	2.5	21.2
85	3.00	90.5	8.6	7.2	3.5	88.5	+0.35	3.15	5.3	79.5	201	3.0	31.2
87	3.00	93.5	8.6	7.3	3.5	90.5	+0.35	3.15	5.3	81.3	204	3.0	31.8
88	3.00	93.5	8.6	7.4	3.5	91.5	+0.35	3.15	5.3	82.0	209	3.0	32.7
90	3.00	95.5	8.6	7.6	3.5	93.5	+0.35	3.15	5.3	84.0	199	3.0	31.4
92	3.00	97.5	8.7	7.8	3.5	95.5	+0.35	3.15	5.3	85.0	201	3.0	32.0
95	3.00	100.5	8.8	8.1	3.5	98.5	+0.35	3.15	5.3	88.0	195	3.0	31.4
97	3.00	103.5	8.8	8.2	3.5	100.5	+0.35	3.15	5.3	90.0	193	3.0	31.2
98	3.00	103.5	9.0	8.3	3.5	101.5	+0.35	3.15	5.3	91.0	191	3.0	31.0
100	3.00	105.5	9.2	8.4	3.5	103.5	+0.35	3.15	5.3	93.0	188	3.0	30.8
102	4.00	108.0	9.5	8.5	3.5	106.0	+0.54	4.15	6.0	108.0	439	3.0	72.6
105	4.00	112.0	9.5	8.7	3.5	109.0	+0.54	4.15	6.0	112.0	436	3.0	73.0
107	4.00	115.0	9.5	8.8	3.5	111.0	+0.54	4.15	6.0	114.0	425	3.0	71.6
108	4.00	115.0	9.5	8.9	3.5	112.0	+0.54	4.15	6.0	115.0	419	3.0	71.0
110	4.00	117.0	10.4	9.0	3.5	114.0	+0.54	4.15	6.0	117.0	415	3.0	71.0
112	4.00	119.0	10.5	9.1	3.5	116.0	+0.54	4.15	6.0	119.0	418	3.0	72.0
115	4.00	122.0	10.5	9.3	3.5	119.0	+0.54	4.15	6.0	122.0	409	3.0	71.2
117	4.00	125.0	10.6	9.5	3.5	121.0	+0.63	4.15	6.0	124.0	399	3.0	70.0
118	4.00	125.0	10.7	9.6	3.5	122.0	+0.63	4.15	6.0	125.0	394	3.0	69.3
120	4.00	127.0	11.0	9.7	3.5	124.0	+0.63	4.15	6.0	127.0	396	3.0	70.0

NOT: 1) Ek bilgiler, (g) dışında segman hesabında kullanılmaktadır.

Emniyet Segmanları, Miller İçin Normal Tip - Metrik



DIN 471

Anma Ölçüsü Mil çapı d_1	Segman				Mil kanalı				Ek bilgiler 1)				
	S	d_3	a max	b =	d_5 min	d_2		m min	n	F_N (kN)	F_R (kN)	g	F_{Pg} (kN)
						Ölçü	Tolerans						
3	0.40	2.7	1.9	0.9	1.0	2.8	-0.04	0.50	0.3	0.1	0.47	0.5	0.27
4	0.40	3.7	2.2	0.9	1.0	3.8	-0.04	0.50	0.3	0.2	0.50	0.5	0.30
5	0.60	4.7	2.5	1.1	1.0	4.8	-0.04	0.70	0.3	0.2	1.00	0.5	0.90
6	0.70	5.6	2.7	1.3	1.2	5.7	-0.04	0.80	0.5	0.4	1.45	0.5	0.90
7	0.80	6.5	3.1	1.4	1.2	6.7	-0.06	0.90	0.5	0.5	2.60	0.5	1.40
8	0.80	7.4	3.2	1.5	1.2	7.6	-0.06	0.90	0.6	0.8	3.00	0.5	2.00
9	1.00	8.4	3.3	1.7	1.2	8.6	-0.06	1.10	0.6	0.9	3.50	0.5	2.40
10	1.00	9.3	3.3	1.8	1.3	9.6	-0.11	1.10	0.6	1.0	4.00	1.0	2.40
11	1.00	10.2	3.3	1.8	1.5	10.5	-0.11	1.10	0.8	1.4	4.50	1.0	2.40
12	1.00	11.0	3.3	1.8	1.7	11.5	-0.11	1.10	0.8	1.5	5.00	1.0	2.40
13	1.00	11.9	3.4	2.0	1.7	12.4	-0.11	1.10	0.9	2.0	5.80	1.0	2.40
14	1.00	12.9	3.5	2.1	1.7	13.4	-0.11	1.10	0.9	2.1	6.40	1.0	2.40
15	1.00	13.8	3.6	2.2	1.7	14.3	-0.11	1.10	1.1	2.6	6.90	1.0	2.40
16	1.00	14.7	3.7	2.2	1.7	15.2	-0.11	1.10	1.2	3.2	7.40	1.0	2.40
17	1.00	15.7	3.8	2.3	1.7	16.2	-0.11	1.10	1.2	3.4	8.00	1.0	2.40
18	1.20	16.5	3.9	2.4	2.0	17.0	-0.11	1.30	1.5	4.5	17.00	1.5	3.75
19	1.20	17.5	3.9	2.5	2.0	18.0	-0.11	1.30	1.5	4.8	17.00	1.5	3.80
20	1.20	18.5	4.0	2.6	2.0	19.0	-0.13	1.30	1.5	5.0	17.10	1.5	3.85
21	1.20	19.5	4.1	2.7	2.0	20.0	-0.13	1.30	1.5	5.3	16.90	1.5	3.75
22	1.20	20.5	4.2	2.8	2.0	21.0	-0.13	1.30	1.5	5.6	16.90	1.5	3.80
23	1.20	21.5	4.3	2.9	2.0	22.0	-0.15	1.30	1.5	5.9	16.60	1.5	3.80
24	1.20	22.2	4.4	3.0	2.0	22.9	-0.21	1.30	1.7	6.7	16.10	1.5	3.65
25	1.20	23.2	4.4	3.0	2.0	23.9	-0.21	1.30	1.7	7.0	16.20	1.5	3.70
26	1.20	24.2	4.5	3.1	2.0	24.9	-0.21	1.30	1.7	7.3	16.10	1.5	3.70
27	1.20	24.9	4.6	3.1	2.0	25.6	-0.21	1.30	2.1	9.6	16.40	1.5	3.80
28	1.50	25.9	4.7	3.2	2.0	26.6	-0.21	1.60	2.1	10.0	32.10	1.5	7.50
29	1.50	26.9	4.8	3.4	2.0	27.6	-0.21	1.60	2.1	10.3	31.80	1.5	7.45
30	1.50	27.9	5.0	3.5	2.0	28.6	-0.21	1.60	2.1	10.7	32.10	1.5	7.65
31	1.50	28.6	5.1	3.5	2.5	29.3	-0.21	1.60	2.6	13.4	31.50	2.0	5.60
32	1.50	29.6	5.2	3.6	2.5	30.3	-0.25	1.60	2.6	13.8	31.20	2.0	5.55

NOT: 1) Ek bilgiler, (g) dışında segman hesabında kullanılmaktadır.

Emniyet Segmanları, Miller İçin Normal Tip - Metrik (Devamı)

Anma Ölçüsü Mil çapı d_1	Segman				Mil kanalı				Ek bilgiler 1)				
	S	d_3	a max	b =	d_5 min	d_2		m min	n	F_N (kN)	F_R (kN)	g	F_{Pg} (kN)
						Ölçü	Tolerans						
33	1.50	30.5	5.2	3.7	2.5	31.3	-0.25	1.60	2.6	14.3	31.60	2.0	5.65
34	1.50	31.5	5.4	3.8	2.5	32.3	-0.25	1.60	2.6	14.7	31.30	2.0	5.60
35	1.50	32.2	5.6	3.9	2.5	33.0	-0.25	1.60	3.0	17.8	30.80	2.0	5.55
36	1.75	33.2	5.6	4.0	2.5	34.0	-0.25	1.85	3.0	18.3	49.40	2.0	9.00
37	1.75	34.2	5.7	4.1	2.5	35.0	-0.25	1.85	3.0	18.8	50.00	2.0	9.15
38	1.75	35.2	5.8	4.2	2.5	36.0	-0.25	1.85	3.0	19.3	49.50	2.0	9.10
39	1.75	36.0	5.9	4.3	2.5	37.0	-0.25	1.85	3.0	19.9	49.80	2.0	9.25
40	1.75	36.5	6.0	4.4	2.5	37.5	-0.25	1.85	3.8	25.3	51.00	2.0	9.50
41	1.75	37.5	6.2	4.5	2.5	38.5	-0.25	1.85	3.8	26.0	50.10	2.0	9.40
42	1.75	38.5	6.5	4.5	2.5	39.5	-0.25	1.85	3.8	26.7	50.00	2.0	9.45
44	1.75	40.5	6.6	4.6	2.5	41.5	-0.25	1.85	3.8	28.0	48.50	2.0	9.20
45	1.75	41.5	6.7	4.7	2.5	42.5	-0.25	1.85	3.8	28.6	49.00	2.0	9.35
46	1.75	42.5	6.7	4.8	2.5	43.5	-0.25	1.85	3.8	29.4	48.90	2.0	9.40
47	1.75	43.5	6.8	4.9	2.5	44.5	-0.25	1.85	3.8	30.0	49.50	2.0	9.55
48	1.75	44.5	6.9	5.0	2.5	45.5	-0.25	1.85	3.8	30.7	49.40	2.0	9.55
50	2.00	45.8	6.9	5.1	2.5	47.0	-0.25	2.15	4.5	39.0	73.30	2.0	14.40
52	2.00	47.8	7.0	5.2	2.5	49.0	-0.25	2.15	4.5	39.7	73.10	2.0	14.40
54	2.00	49.8	7.1	5.3	2.5	51.0	-0.30	2.15	4.5	41.2	71.20	2.5	11.50
55	2.00	50.8	7.2	5.4	2.5	52.0	-0.30	2.15	4.5	42.0	71.40	2.5	11.40
56	2.00	51.8	7.3	5.5	2.5	53.0	-0.30	2.15	4.5	42.8	70.90	2.5	11.30
57	2.00	52.8	7.3	5.5	2.5	54.0	-0.30	2.15	4.5	43.7	70.90	2.5	11.40
58	2.00	53.8	7.3	5.6	2.5	55.0	-0.30	2.15	4.5	44.3	71.10	2.5	11.50
60	2.00	55.8	7.4	5.8	2.5	57.0	-0.30	2.15	4.5	46.0	69.20	2.5	11.30
62	2.00	57.8	7.5	6.0	2.5	59.0	-0.30	2.15	4.5	47.5	69.30	2.5	11.40
63	2.00	58.8	7.6	6.2	2.5	60.0	-0.30	2.15	4.5	48.3	70.20	2.5	11.60
65	2.50	60.8	7.8	6.3	3.0	62.0	-0.30	2.65	4.5	49.8	135.00	2.5	22.70
67	2.50	62.5	7.9	6.4	3.0	64.0	-0.30	2.65	4.5	51.3	136.00	2.5	23.00
68	2.50	63.5	8.0	6.5	3.0	65.0	-0.30	2.65	4.5	52.2	135.00	2.5	23.10
70	2.50	65.5	8.1	6.6	3.0	67.0	-0.30	2.65	4.5	53.8	134.00	2.5	23.00
72	2.50	67.5	8.2	6.8	3.0	69.0	-0.30	2.65	4.5	55.3	131.00	2.5	22.90
75	2.50	70.5	8.4	7.0	3.0	72.0	-0.30	2.65	4.5	57.6	130	2.5	22.90
77	2.50	72.5	8.5	7.2	3.0	74.0	-0.30	2.65	4.5	59.3	131	3.0	19.70
78	2.50	73.5	8.6	7.3	3.0	75.0	-0.30	2.65	4.5	60.0	131	3.0	19.70
80	2.50	74.5	8.6	7.4	3.0	76.5	-0.30	2.65	5.3	71.6	129	3.0	19.50
82	2.50	76.5	8.7	7.6	3.0	78.5	-0.30	2.65	5.3	73.5	129	3.0	19.60
85	3.00	79.5	8.7	7.8	3.5	81.5	-0.35	3.15	5.3	76.2	215	3.0	33.40
87	3.00	81.5	8.8	7.9	3.5	83.5	-0.35	3.15	5.3	78.2	222	3.0	34.80
88	3.00	82.5	8.8	8.0	3.5	84.5	-0.35	3.15	5.3	79.0	221	3.0	34.60
90	3.00	84.5	8.8	8.2	3.5	86.5	-0.35	3.15	5.3	80.0	217	3.0	34.40
92	3.00	86.5	9.0	8.4	3.5	88.5	-0.35	3.15	5.3	82.0	217	3.5	29.60
95	3.00	89.5	9.4	8.6	3.5	91.5	-0.35	3.15	5.3	85.0	212	3.5	29.20
97	3.00	91.5	9.4	8.8	3.5	93.5	-0.35	3.15	5.3	87.0	211	3.5	29.40
98	3.00	91.5	9.5	9.0	3.5	94.5	-0.35	3.15	5.3	88.0	208	3.5	29.00
100	3.00	94.5	9.6	9.0	3.5	96.5	-0.35	3.15	5.3	90.0	206	3.5	29.00
102	4.00	95.0	9.7	9.2	3.5	98.0	-0.54	4.15	6.0	104.0	462	3.5	68.50
105	4.00	98.0	9.9	9.3	3.5	101.0	-0.54	4.15	6.0	107.0	471	3.5	67.70
107	4.00	100.0	10.0	9.5	3.5	103.0	-0.54	4.15	6.0	110.0	465	3.5	67.30
108	4.00	100.0	10.0	9.5	3.5	104.0	-0.54	4.15	6.0	111.0	459	3.5	66.30
110	4.00	103.0	10.1	9.6	3.5	106.0	-0.54	4.15	6.0	113.0	457	3.5	66.90
112	4.00	105.0	10.3	9.7	3.5	108.0	-0.54	4.15	6.0	115.0	451	3.5	66.60
115	4.00	108.0	10.6	9.8	3.5	111.0	-0.54	4.15	6.0	118.0	438	3.5	65.50
117	4.00	110.0	10.8	10.0	3.5	113.0	-0.54	4.15	6.0	120.0	437	3.5	65.60
118	4.00	110.0	10.9	10.1	3.5	114.0	-0.54	4.15	6.0	121.0	430	3.5	64.80
120	4.00	113.0	11.0	10.2	3.5	116.0	-0.54	4.15	6.0	123.0	424	3.5	64.50
122	4.00	115.0	11.2	10.3	4.0	118.0	-0.54	4.15	6.0	125.0	418	4.0	56.60

NOT: 1) Ek bilgiler, (g) dışında segman hesabında kullanılmaktadır.