K33
Rod Seal



K33 is a single-acting rod seal with a precision-cut sealing lip and an additional secondary lip that promotes the formation of a thin oil film. This design enhances lubrication, reduces friction, and improves the overall service life of the sealing system.

Advantages
- Good sealing effect
- Suitable design for telescopic cylinders

Application
- Presses
- Construction machinery
- Cranes
- Injection moulding machines
- Mobile machinery
- Industrial cylinders

Operating Conditions

MOTION:	Linear		
PRESSURE (bar):	400 bar (max)		
SPEED (m/s)	0.5 m/s (max)		
TEMPERATURE (°C):	-35/+100 °C	+5/+50 °C	-30/+40 °C
AKIŞKAN TİPİ:	Mineral Oils	HFA/HFB	HFC

NOTE: The above values (speed, pressure, temperature) are maximum values, all cannot be used at the same time.

Material Information

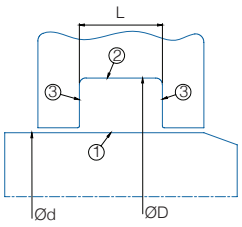
U-ring	Remarks
Polyurethane-PU9401	Standard produced material code
Polyurethane-PU9411	Material code that can be produced upon request.

Not: Özel uygulama şartlarında (sıcaklık, akışkan vb.) farklı malzemelerden üretim yapılabilmektedir. Detaylar için Tablo 2.10'a bakabilir veya satış departmanımız ile iletişime geçebilirsiniz.

Installation Information

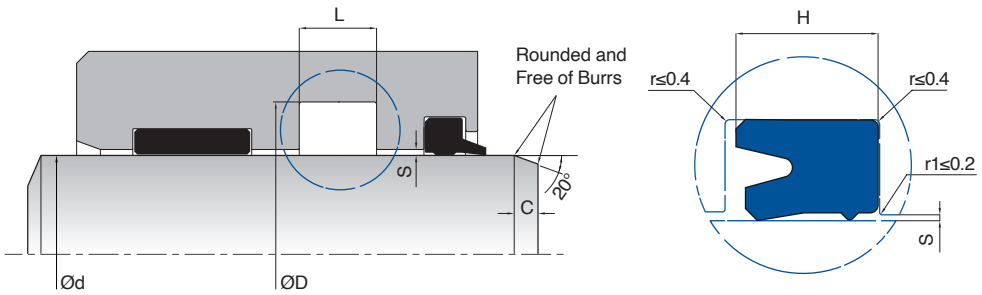
Note: In the special application conditions (temperature, media, etc.) Can be produced from different materials. You can refer to Table 2.10 for details or you can contact our sales department.

Surface Roughness



	1 (rod)	2 (groove base)	3 (groove flanks)
Ra	0.1-0.4 µm	0.2-1.6 µm	0.2-3.2 µm
Rmax	< 3.2 µm	< 6.3 µm	< 16 µm
Rmr	When C=0.25xRz on the dynamic work surface and reference line C_{ref} = 5%, the working surface contact area should be approximately between 50% and 70%.		

K33 Rod Seal



Cross Section (mm)	Max. Permissible Sealing Gap Value "S_{max}" (mm) for K33		
	150 bar	250 bar	400 bar
≤5	0.30	0.20	0.15
5-7.5	0.35	0.25	0.20
7.5-12.5	0.40	0.30	0.25
>12.5	0.45	0.35	0.30

S_{max} values are suitable for operating conditions up to 60°C. The S_{max} value should be calculated according to the formula on page 64 and it is recommended not to exceed the given S_{max} value.

KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-006	6	9	4	3.5	2.5	10016444
K33-012	12	24	9	8	5.5	10016447
K33-012/1	12	22	8	7	5.5	10016448
K33-014	14	24	8.2	7.2	5.5	10016451
K33-015	15.87	22.22	7.14	6.35	3.5	10016453
K33-016	16	22	5	4.5	3.5	10016454
K33-016/1	16	26	9	8	5.5	10016455
K33-016/2	16	24	6	5	4.5	10016456
K33-016/3	16	26	8.3	7.3	5.5	10016458
K33-017	17	23	4.5	4	3.5	10016459
K33-018	18	24	5.9	4.9	3.5	10016460
K33-018/1	18	26	9	8	4.5	10016461
K33-018/2	18	26	6	5	4.5	10016462
K33-018/3	18	24	5	4.2	3.5	10016464
K33-018/5	18	28	8.3	7.3	5.5	10016467
K33-019	19.05	25.4	7.14	6.35	3.5	10016468
K33-020	20	30	7	6	5.5	10016470
K33-020/1	20	30	9	8	5.5	10016472
K33-020/2	20	28	7	6	4.5	10016479
K33-020/3	20	30	11	10	5.5	10016480
K33-020/4	20	26	6.5	5.5	3.5	10016481
K33-020/5	20	26	6	5	3.5	10016482
K33-020/6	20	28	9	8	4.5	10016484
K33-020/7	20	28	6	5	4.5	10016485
K33-020/8	20	26	5	4.5	3.5	10016488
K33-020/9	20	28	6.7	5.7	4.5	10016489
K33-020/10	20	30	8	7	5.5	10016473
K33-020/11	20	26	5.8	4.8	3.5	10016475
K33-020/12	20	28	6.3	5.3	4.5	10016476
K33-020/13	20	30	8.3	7.3	5.5	10016477
K33-022	22	30	8	7	4.5	10016491
K33-022/1	22	32	7	6	5.5	10016492
K33-022/2	22	32	9	8	5.5	10016496
K33-022/3	22	30	9	8	4.5	10016499
K33-022/4	22	32	8	7	5.5	10016500
K33-022/6	22	30	7	6	4.5	10016503
K33-022/7	22.4	30	6	5.5	4.5	10016504
K33-022/8	22	30	6.5	5.5	4.5	10016506



KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-022/9	22	32	8.3	7.3	5.5	10016507
K33-022/11	22.22	28.58	7.14	6.35	3.5	10016494
K33-025	25	35	7	6	5.5	10016508
K33-025/1	25	40	11	10	6	10016510
K33-025/2	25	33	7	6	4.5	10016527
K33-025/3	25	35	8	7	5.5	10016530
K33-025/4	25	33	9	8	4.5	10016532
K33-025/5	25	33	7.8	6.8	4.5	10016533
K33-025/6	25	33	8.3	7.3	4.5	10016534
K33-025/7	25	33	6.5	5.5	4.5	10016535
K33-025/8	25.4	31.5	5.2	4.76	3.5	10016537
K33-025/9	25	33	7.5	6.5	4.5	10016538
K33-025/10	25	35	9	8	5.5	10016511
K33-025/11	25	35	11	10	5.5	10016513
K33-025/12	25	33	11	10	4.5	10016514
K33-025/13	25	33	6	5	4.5	10016515
K33-025/14	25	35	8.3	7.3	5.5	10016518
K33-025/15	25	33	6.7	5.7	4.5	10016519
K33-025/16	25.4	31.75	7.14	6.35	3.5	10016522
K33-025/17	25.4	34.93	8.7	7.94	5.5	10016523
K33-025/19	25	35	6	5	5.5	10016525
K33-025/20	25	32	8	7	4	10016529
K33-028	28	38	11	10	5.5	10016539
K33-028/1	28	38	8	7	5.5	10016541
K33-028/2	28	36	6.8	5.8	4.5	10016542
K33-028/3	28	35.5	6	5	4.5	10016544
K33-028/4	28	38	6.8	5.8	5.5	10016547
K33-028/5	28	36	9	8	4.5	10016548
K33-028/6	28	36	8.3	7.3	4.5	10016550
K33-028/7	28	38	9	8	5.5	10016551
K33-028/8	28	38	8.3	7.3	5.5	10016552
K33-030	30	40	9	8	5.5	10016554
K33-030/1	30	45	11	10	6	10016556
K33-030/2	30	40	8	7	5.5	10016562
K33-030/3	30	40	11	10	5.5	10016563
K33-030/4	30	42	11	10	5.5	10016565
K33-030/5	30	43	10	9	5.5	10016566
K33-030/6	30	38	8	7	4.5	10016567
K33-030/7	30	38	7	6	4.5	10016568
K33-030/8	30	40	7	6	5.5	10016571
K33-030/9	30	38	6.5	5.5	4.5	10016574
K33-030/10	30	38	6.7	5.7	4.5	10016557
K33-030/11	30	37	8	7	4	10016559
K33-030/12	30	40	6.5	5.5	5.5	10016560
K33-030/13	30	40	8.3	7.3	5.5	10016561
K33-031	31.75	38.1	7.14	6.35	3.5	10016575
K33-031/1	31.75	41.28	8.7	7.94	5.5	10016576
K33-031/2	31.75	41.28	5.2	4.76	5.5	10016577
K33-031/3	31.75	44.45	7.14	6.35	5.5	10016578
K33-032	32	40	7	6	4.5	10016580
K33-032/1	32	40	8	7	4.5	10016583
K33-032/2	32	42	11	10	5.5	10016584
K33-032/3	32	42	8.3	7.3	5.5	10016586
K33-032/4	32	40	9	8	4.5	10016587
K33-032/5	32	42	7	6	5.5	10016589
K33-032/7	32	40	6.8	5.8	4.5	10016593



KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-034	34.93	41.28	7.14	6.35	3.5	10016594
K33-035	35	45	9	8	5.5	10016595
K33-035/1	35	50	11	10	6	10016597
K33-035/2	35	43	6.7	5.7	4.5	10016599
K33-035/3	35	45	11	10	5.5	10016600
K33-035/4	35	43	8	7	4.5	10016602
K33-035/5	35	43	7	6	4.5	10016603
K33-035/6	35	45	7	6	5.5	10016606
K33-035/7	35	51	11	10	6	10016609
K33-035/8	35	45	8	7	5.5	10016610
K33-035/9	35	45	8.3	7.3	5.5	10016611
K33-036	36	46	9	8	5.5	10016612
K33-036/1	36	51	11	10	6	10016614
K33-036/2	36	52	11	10	6	10016615
K33-036/3	36	46	8.3	7.3	5.5	10016616
K33-036/4	36	44	7	6	4.5	10016618
K33-036/5	36	46	11	10	5.5	10016620
K33-036/6	36	46	7	6	5.5	10016621
K33-037	37	47	9	8	5.5	10016624
K33-037/1	37	47	11	10	5.5	10016625
K33-038	38	48	10	9	5.5	10016626
K33-038/1	38	50	7	6	5.5	10016627
K33-038/2	38	53	11	10	6	10016629
K33-038/3	38.1	44.45	7.14	6.35	3.5	10016630
K33-038/4	38.1	47.63	10.5	9.52	5.5	10016631
K33-038/5	38	45	7	6	4	10016632
K33-038/6	38.1	50.8	10.5	9.52	5.5	10016633
K33-038/7	38.1	47.63	7.14	6.35	5.5	10016634
K33-038/9	38.1	50.8	7.14	6.35	5.5	10016636
K33-038/10	38.1	47.63	8.7	7.93	5.5	10016628
K33-040	40	50	11	10	5.5	10016637
K33-040/1	40	55	11	10	6	10016640
K33-040/2	40	50	8.3	7.3	5.5	10016645
K33-040/3	40	60	12.5	11.5	6.5	10016647
K33-040/4	40	48	6.7	5.7	4.5	10016648
K33-040/5	40	50	10	9	5.5	10016649
K33-040/6	40	50	8	7	5.5	10016650
K33-040/7	40	55	12.5	11.5	6	10016652
K33-040/8	40	50	7	6	5.5	10016653
K33-040/9	40	48	7	6	4.5	10016656
K33-040/10	40	50	9	8	5.5	10016642
K33-040/11	40	55	10	9	6	10016644
K33-042	42	50	6.7	5.7	4.5	10016658
K33-044	44.45	53.98	10.5	9.52	5.5	10016659
K33-044/1	44.45	57.15	10.5	9.52	5.5	10016660
K33-044/2	44.45	57.15	7.14	6.35	5.5	10016661
K33-044/3	44.45	53.98	8.7	7.93	5.5	10016662
K33-045	45	55	11	10	5.5	10016663
K33-045/1	45	60	11	10	6	10016665
K33-045/2	45	55	8	7	5.5	10016668
K33-045/3	45	55	8.3	7.3	5.5	10016670
K33-045/4	45	60	12.5	11.5	6	10016672
K33-045/5	45	55	7	6	5.5	10016673
K33-045/6	45	55	9	8	5.5	10016676
K33-045/7	45	53	6.6	5.6	4.5	10016679
K33-045/8	45	53	8	7	4.5	10016680



KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-045/9	45	53	9	8	4.5	10016682
K33-048	48	60	11	10	5.5	10016684
K33-050	50	60	11	10	5.5	10016686
K33-050/1	50	65	11	10	6	10016691
K33-050/2	50	60	13	12	5.5	10016698
K33-050/3	50	60	8.5	7.5	5.5	10016699
K33-050/4	50	60	8.3	7.3	5.5	10016700
K33-050/5	50	65	12.5	11.5	6	10016702
K33-050/6	50	60	8	7	5.5	10016703
K33-050/7	50	60	7	6	5.5	10016705
K33-050/8	50	60	9	8	5.5	10016708
K33-050/9	50	65	10	9	6	10016711
K33-050/10	50.8	63.5	10.5	9.52	5.5	10016693
K33-050/11	50	58	9	8	4.5	10016694
K33-050/12	50.8	57.15	7.14	6.35	3.5	10016695
K33-050/13	50	70	13	12	6.5	10016696
K33-050/14	50.8	60.33	8.7	7.93	5.5	10016697
K33-055	55	65	11	10	5.5	10016714
K33-055/1	55	63	12.5	11.5	4.5	10016717
K33-055/2	55	70	12.5	11.5	6	10016718
K33-055/3	55	65	7	6	5.5	10016719
K33-055/4	55	65	9	8	5.5	10016722
K33-055/5	55	68	11	10	5.5	10016724
K33-055/6	55	70	10	9	6	10016726
K33-055/7	55	71	13	12	6	10016728
K33-055/8	55	65	8	7	5.5	10016730
K33-055/9	55	75	13	12	6.5	10016731
K33-056	56	66	9	8	5.5	10016732
K33-056/1	56	66	7.5	6.5	5.5	10016733
K33-056/2	56	71	12.5	11.5	6	10016735
K33-056/3	56	66	11	10	5.5	10016736
K33-057.15	57.15	63.5	10.5	9.52	3.5	10016738
K33-057.15/2	57.15	69.85	10.5	9.52	5.5	10016740
K33-060	60	80	13	12	6.5	10016741
K33-060/1	60	70	12.5	11.5	5.5	10016743
K33-060/2	60	75	13	12	6	10016750
K33-060/3	60	70	11	10	5.5	10016751
K33-060/4	60	70	13	12	5.5	10016753
K33-060/5	60	75	11	10	6	10016755
K33-060/6	60	70	8	7	5.5	10016757
K33-060/7	60	70	7	6	5.5	10016760
K33-060/8	60	73	11	10	5.5	10016763
K33-060/9	60	75	10	9	6	10016765
K33-060/10	60	76	11	10	6	10016744
K33-060/11	60	68	12.5	11.5	4.5	10016746
K33-060/12	60	68	9	8	4.5	10016747
K33-063	63	83	13	12	6.5	10016767
K33-063/1	63	78	12.5	11.5	6	10016769
K33-063/2	63	78	11	10	6	10016771
K33-063/3	63.5	82.55	17.5	15.87	6.5	10016772
K33-063/4	63.5	73.02	10.5	9.52	5.5	10016773
K33-063/5	63	73	13	12	5.5	10016775
K33-063/6	63	73	11	10	5.5	10016777
K33-063/7	63.5	76.2	10.5	9.52	5.5	10016778
K33-063/8	63	71	9	8	4.5	10016779
K33-063/9	63	73	9.6	8.6	5.5	10016781



KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-065	65	75	11	10	5.5	10016782
K33-065/1	65	75	12.5	11.5	5.5	10016784
K33-065/3	65	75	14	13	5.5	10016785
K33-065/4	65	75	7	6	5.5	10016786
K33-065/5	65	80	10	9	6	10016789
K33-065/6	65	78	11	10	5.5	10016791
K33-065/7	65	80	13	12	6	10016793
K33-065/8	65	75	13	12	5.5	10016795
K33-065/9	65	85	13	12	6.5	10016797
K33-068	68	78	13	12	5.5	10016798
K33-069	69.85	82.55	10.5	9.52	5.5	10016799
K33-070	70	80	13	12	5.5	10016800
K33-070/1	70	78	12.5	11.5	4.5	10016803
K33-070/2	70	80	12.5	11.5	5.5	10016811
K33-070/3	70	85	12.5	11.5	6	10016813
K33-070/4	70	85	13	12	6	10016815
K33-070/5	70	90	13	12	6.5	10016817
K33-070/6	70	85	14	13	6	10016819
K33-070/7	70	80	7	6	5.5	10016820
K33-070/8	70	85	10	9	6	10016823
K33-070/9	70	80	11	10	5.5	10016825
K33-070/10	70	78	9	8	4.5	10016804
K33-070/11	70	85	11	10	6	10016806
K33-070/12	70	83	11	10	5.5	10016808
K33-070/13	70	82	9.6	8.6	5.5	10016810
K33-075	75	85	13	12	5.5	10016827
K33-075/1	75	83	12.5	11.5	4.5	10016829
K33-075/2	75	85	12.5	11.5	5.5	10016832
K33-075/3	75	90	13	12	6	10016833
K33-075/4	75	90	12.5	11.5	6	10016835
K33-075/5	75	85	7	6	5.5	10016836
K33-075/6	75	90	10	9	6	10016838
K33-075/7	75	90	11	10	6	10016840
K33-075/8	75	88	11	10	5.5	10016842
K33-075/9	75	87	9.6	8.6	5.5	10016844
K33-075/10	75	83	9	8	4.5	10016830
K33-076	76.2	88.9	10.5	9.52	5.5	10016845
K33-077	77	87	13	12	5.5	10016846
K33-077/1	77	87	8.3	7.3	5.5	10016847
K33-080	80	90	13	12	5.5	10016849
K33-080/1	80	88	12.5	11.5	4.5	10016852
K33-080/2	80	95	12.5	11.5	6	10016859
K33-080/3	80	100	13	12	6.5	10016861
K33-080/4	80	100	16	15	6.5	10016863
K33-080/5	80	95	13	12	6	10016864
K33-080/6	80	100	11	10	6.5	10016866
K33-080/7	80	95	11	10	6	10016868
K33-080/8	80	90	7	6	5.5	10016870
K33-080/9	80	90	10	9	5.5	10016872
K33-080/10	80	95	10	9	6	10016853
K33-080/11	80	93	11	10	5.5	10016855
K33-080/12	80	90	11	10	5.5	10016857
K33-080/13	80	90	8	7	5.5	10016858
K33-085	85	95	13	12	5.5	10016876
K33-085/1	85	93	13	12	4.5	10016877
K33-085/2	85	100	13	12	6	10016878



KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-085/3	85	105	13	12	6.5	10016880
K33-085/4	85	100	10	9	6	10016882
K33-085/5	85	100	11	10	6	10016885
K33-090	90	100	13	12	5.5	10016891
K33-090/1	90	98	12.5	11.5	4.5	10016893
K33-090/2	90	100	11	10	5.5	10016902
K33-090/3	90	110	11	10	6.5	10016904
K33-090/4	90	98	11.9	10.9	4.5	10016905
K33-090/5	90	105	13	12	6	10016906
K33-090/6	90	110	14	13	6.5	10016909
K33-090/7	90	100	12.5	11.5	5.5	10016910
K33-090/8	90	100	8	7	5.5	10016911
K33-090/9	90	110	13	12	6.5	10016912
K33-090/10	90	110	16	15	6.5	10016894
K33-090/11	90	105	12.5	11.5	6	10016895
K33-090/12	90	105	10	9	6	10016896
K33-090/13	90	98	9	8	4.5	10016898
K33-090/14	90	105	11	10	6	10016899
K33-095	95	105	13	12	5.5	10016914
K33-095/1	95	103	12.5	11.5	4.5	10016915
K33-095/2	95	110	11	10	6	10016916
K33-095/3	95	115	13	12	6.5	10016918
K33-095/4	95	110	10	9	6	10016920
K33-095/5	95	110	13	12	6	10016922
K33-100	100	115	13	12	6	10016925
K33-100/1	100	110	12.5	11.5	5.5	10016927
K33-100/2	100	108	12.5	11.5	4.5	10016930
K33-100/3	100	115	12	11	6	10016931
K33-100/4	100	120	13	12	6.5	10016932
K33-100/5	100	130	13	12	9.5	10016934
K33-100/6	100	125	16	15	8	10016935
K33-100/7	100	120	15	14	6.5	10016936
K33-100/8	100	115	10	9	6	10016937
K33-100/9	100	120	16	15	6.5	10016939
K33-100/10	100	115	11	10	6	10016928
K33-105	105	115	13	12	5.5	10016941
K33-105/1	105	120	11	10	6	10016942
K33-105/2	105	113	12.5	11.5	4.5	10016944
K33-105/3	105	115	12.5	11.5	5.5	10016945
K33-105/4	105	125	13	12	6.5	10016946
K33-105/5	105	125	16	15	6.5	10016948
K33-105/6	105	120	10	9	6	10016950
K33-105/7	105	120	13	12	6	10016952
K33-105/8	105	113	9	8	4.5	10016954
K33-106	106	120	9.4	8.4	5.5	10016955
K33-110	110	118	12.5	11.5	4.5	10016957
K33-110/1	110	125	13	12	6	10016958
K33-110/2	110	130	16	15	6.5	10016961
K33-110/3	110	125	12	11	6	10016963
K33-110/4	110	130	13	12	6.5	10016964
K33-110/5	110	125	16	15	6	10016966
K33-110/6	110	125	10	9	6	10016968
K33-113	113	128	13	12	6	10016972
K33-114/1	114.3	127	15.5	14.27	5.5	10016975
K33-115	115	125	13	12	5.5	10016976
K33-115/1	115	135	13	12	6.5	10016977



KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-115/2	115	123	13	12	4.5	10016979
K33-115/3	115	130	10	9	6	10016980
K33-115/4	115	130	13	12	6	10016982
K33-115/5	115	135	16	15	6.5	10016984
K33-117	117	133	10	9	6	10016986
K33-118	118	126	12.5	11.5	4.5	10016987
K33-120	120	140	16	15	6.5	10016988
K33-120/1	120	135	16	15	6	10016990
K33-120/2	120	140	13	12	6.5	10016991
K33-120/3	120	130	12.5	11.5	5.5	10016993
K33-120/4	120	150	16	15	9.5	10016995
K33-120/5	120	140	15.6	14.6	6.5	10016996
K33-120/6	120	135	10	9	6	10016998
K33-120/8	120	130	9	8	5.5	10017001
K33-123	123	132	13	12	5	10017003
K33-125	125	150	15	14	8	10017004
K33-125/1	125	145	16	15	6.5	10017005
K33-125/2	125	133	12.5	11.5	4.5	10017007
K33-125/3	125	145	13	12	6.5	10017008
K33-125/4	125	135	13	12	5.5	10017010
K33-125/5	125	140	10	9	6	10017011
K33-125/6	125	133	11	10	4.5	10017013
K33-130	130	145	10	9	6	10017014
K33-130/1	130	138	12.5	11.5	4.5	10017016
K33-130/2	130	150	16	15	6.5	10017017
K33-130/3	130	145	14	13	6	10017019
K33-130/4	130	145	16	15	6	10017020
K33-135	135	145	13	12	5.5	10017021
K33-135/1	135	150	12.5	11.5	6	10017022
K33-140	140	160	16	15	6.5	10017025
K33-140/1	140	160	15.5	14.5	6.5	10017027
K33-140/2	140	160	13	12	6.5	10017028
K33-140/3	140	150	12.5	11.5	5.5	10017030
K33-140/4	140	170	19	18	9.5	10017031
K33-140/5	140	148	12.5	11.5	4.5	10017032
K33-140/6	140	152	9	8	5.5	10017033
K33-140/8	140	152	15	14	5.5	10017036
K33-140/7	140	155	10	9	6	10017034
K33-142	142	157	13	12	6	10017037
K33-143	143	151	12.5	11.5	4.5	10017038
K33-145	145	155	13	12	5.5	10017039
K33-145/1	145	155	11	10	5.5	10017040
K33-150	150	170	15	14	6.5	10017042
K33-150/1	150	180	19	18	9.5	10017043
K33-150/2	150	170	13	12	6.5	10017044
K33-150/3	150	170	16	15	6.5	10017046
K33-155	155	165	13	12	5.5	10017049
K33-155/1	155	163	12.5	11.5	4.5	10017050
K33-160	160	170	13	12	5.5	10017051
K33-160/1	160	185	16	15	8	10017052
K33-160/2	160	170	12.5	11.5	5.5	10017054
K33-160/3	160	180	16	15	6.5	10017055
K33-163	163	183	16	15	6.5	10017059
K33-165	165.1	177.8	10.5	9.52	5.5	10017060
K33-165/1	165	175	13	12	5.5	10017061
K33-165/2	165	179	9	8	5.5	10017062



KASTAŞ NO	d (f8)	D (H10)	L (+0.2/-0)	H	C	KASTAŞ CODE
K33-170	170	200	16	15	9.5	10017064
K33-170/1	170	190	15	14	6.5	10017065
K33-170/2	170	185	10	9	6	10017066
K33-172	172	187	13	12	6	10017068
K33-172/1	172	197	16	15	8	10017069
K33-175	175	215	21	20	12.5	10017070
K33-175/1	175	185	13	12	5.5	10017071
K33-180	180	200	16	15	6.5	10017073
K33-180/1	180	195	12.5	11.5	6	10017075
K33-180/2	180	205	17	16	8	10017076
K33-185	185	195	13	12	5.5	10017077
K33-190	190	210	16	15	6.5	10017078
K33-190/1	190.5	203.2	10.5	9.52	5.5	10017079
K33-192	192	212	13	12	6.5	10017081
K33-195	195	210	16	15	6	10017082
K33-200	200	212	16	15	5.5	10017083
K33-200/1	200	220	16	15	6.5	10017084
K33-200/2	200	220	13.5	12.5	6.5	10017086
K33-210	210	230	16	15	6.5	10017089
K33-212	212	222	13	12	5.5	10017090
K33-215	215	235	13	12	6.5	10017092
K33-220	220	250	19	18	9.5	10017093
K33-230	230	260	19	18	9.5	10017095
K33-235	235	255	13	12	6.5	10017097
K33-240	240	260	16	15	6.5	10017098
K33-245	245	275	19	18	9.5	10017099
K33-252	252	273	11	10	7	10017100
K33-258	258	278	16	15	6.5	10017101
K33-280	280	310	19	18	9.5	10017103
K33-280/1	280	300	16	15	6.5	10017105
K33-300	300	330	18	17	9.5	10017106