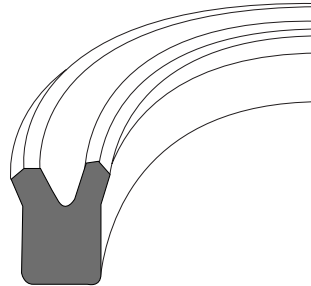


Piston U-Cup

Piston Seals (Single Acting)

UHP

(Metric Size)

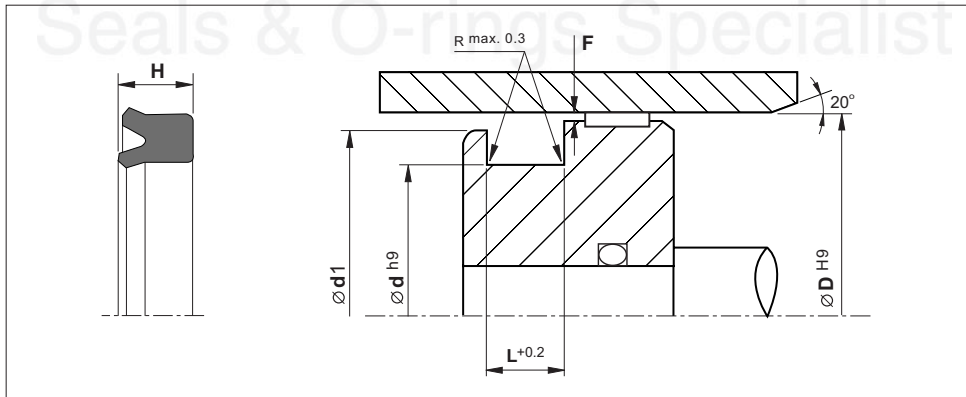


UHP

Material	Pressure (Bar)	Temp. (°C)	Speed (m/s)
PU	400	-40 +95	0.6

- Simple groove design.
- High abrasion resistance.
- Long service life.
- Effective sealing effect even with poor mating surface finish.

Installation Recommendation



Surface roughness	Ra	Rt	Pressure	Clearance F Max	
			Bar	D < 60 mm	D > 60 mm
Sliding surface	≤ 0.3 µm	≤ 4 µm	50	0.40	0.50
Surface of housing	≤ 1.8 µm	≤ 10 µm	100	0.30	0.40
Sides of housing	≤ 3.0 µm	≤ 16 µm	200	0.20	0.30
			300	0.15	0.20
			400	0.10	0.15

Piston U-Cup

(Metric Size)

Bore Dia.	Groove Dia.	Seal Height	Groove Width	Fitting Dia.	Reference	Reference	Reference
D	d	H	L	d1			
12.0	5.0	5.5	6.0	8.0	RSE 012-005	UC 005-012-05.5 TTE	
14.0	8.0	6.3	6.8	11.0	RSE 014-008	UC 008-014-06.3 TTE	
16.0	10.0	6.0	6.5	13.0	RSE 016-010/1	UC 010-016-06 TTE	
16.0	10.0	8.0	9.0	13.0	RSE 016-010	UC 010-016-08 TTE	
20.0	12.0	6.5	7.5	15.0	RSE 020-012	UC 012-020-06.5 TTE	
20.0	14.0	5.5	6.0	17.0	RSE 020-014	UC 014-020-05.5 TTE	
22.0	12.0	8.0	9.0	16.0	RSE 022-012	UC 012-022-08 TTE	
25.0	10.0	10.0	11.0	14.0	RSE 025-010	UC 010-025-10 TTE	
25.0	15.0	8.0	9.0	19.0	RSE 025-015	UC 015-025-08 TTE	
30.0	15.0	10.0	11.0	19.0	RSE 030-015	UC 015-030-10 TTE	
30.0	20.0	8.0	9.0	24.0	RSE 030-020	UC 020-030-08 TTE	
30.0	22.0	6.5	7.0	25.0	RSE 030-022	UC 022-030-06.5 TTE	
32.0	22.0	8.0	9.0	26.0	RSE 032-022/1	UC 022-032-08 TTE	
32.0	22.0	10.0	11.0	26.0	RSE 032-022	UC 022-032-010 TTE	
32.0	26.0	5.0	6.0	28.0	RSE 032-026	UC 026-032-05 TTE	
34.0	22.0	8.4	9.4	26.0	RSE 034-022/1		
34.0	22.0	9.0	10.0	26.0	RSE 034-022	UC 022-034-09 TTE	
35.0	20.0	10.0	11.0	25.0	RSE 035-020	UC 020-035-10 TTE	
35.0	25.0	8.0	9.0	29.0	RSE 035-025	UC 025-035-08 TTE	
35.0	27.0	10.0	11.0	30.0	RSE 035-027	UC 027-035-10 TTE	
36.5	24.0	6.2	7.0	28.0	RSE 036.5-024	UC 024-036.5-06.2 TTE	
37.0	21.0	12.0	13.0	25.0	RSE 037-021	UC 021-037-12 TTE	
38.0	31.0	4.7	5.2	34.0	RSE 038-031	UC 031-038-04.7 TTE	
40.0	25.0	10.0	11.0	30.0	RSE 040-025	UC 025-040-10 TTE	
40.0	30.0	6.5	7.0	34.0			UHP-040
40.0	30.0	6.5	7.5	34.0	RSE 040-030/1	UC 030-040-06.5 TTE	
40.0	30.0	10.0	11.0	34.0	RSE 040-030	UC 030-040-10 TTE	
40.0	32.0	8.0	9.0	35.0	RSE 040-032	UC 032-040-08 TTE	
40.0	33.0	8.0	9.0	36.0	RSE 040-033	UC 033-040-08 TTE	
42.0	32.0	10.0	11.0	36.0	RSE 042-032	UC 032-042-10 TTE	
42.0	34.5	4.2	4.7	37.0	RSE 042-034.5	UC 034.5-042-04.2 TTE	
43.0	25.0	9.0	10.0	29.0	RSE 043-025	UC 025-043-09 TTE	
44.0	20.0	11.0	12.0	25.0	RSE 044-020	UC 020-044-11 TTE	
45.0	28.5	12.0	13.0	33.0	RSE 045-028.5	UC 028.5-045-12 TTE	
45.0	30.0	10.0	11.0	35.0	RSE 045-030	UC 030-045-10 TTE	
50.0	30.0	12.0	13.0	35.0	RSE 050-030	UC 030-050-12 TTE	
50.0	32.0	10.0	11.0	35.0	RSE 050-032	UC 032-050-10 TTE	
50.0	35.0	8.5	9.5	40.0	RSE 050-035/1	UC 035-050-08.5 TTE	
50.0	35.0	10.0	11.0	40.0	RSE 050-035	UC 035-050-10 TTE	
50.0	40.0	5.0	5.5	44.0	RSE 050-040/1	UC 040-050-05 TTE	

* For order processing, the computer code will be
e.g. UC 005-012-05.5 RSE, UC 005-012-05.5 TTE

Piston U-Cup

(Metric Size)

Bore Dia.	Groove Dia.	Seal Height	Groove Width	Fitting Dia.	Reference	Reference	Reference	
D	d	H	L	d1				
50.0	40.0	6.5	7.0	44.0	RSE 050-040	UC 040-050-06.5 TTE	UHP-050	
50.0	40.0	10.0	11.0	44.0		UC 040-050-10 TTE		
50.0	42.0	5.0	6.0	46.0		UC 042-050-05 TTE		
50.0	42.0	5.7	6.5	45.0		UC 042-050-05.7 TTE		
50.0	42.0	8.0	9.0	45.0		UC 042-050-08 TTE		
50.0	42.0	10.0	11.0	45.0	RSE 050-042	UC 042-050-10 TTE		
50.8	40.8	7.0	8.0	45.0	RSE 050.8-040.8	UC 040.8-050.8-07 TTE		
52.0	42.0	10.0	10.6	46.0	RSE 052-042	UC 042-052-10 TTE		
55.0	40.0	10.0	11.0	45.0	RSE 055-040	UC 040-055-10 TTE		
55.0	47.0	5.7	6.3	50.0	RSE 055-047	UC 047-055-05.7 TTE		
60.0	40.0	12.0	13.0	45.0	RSE 060-040	UC 040-060-12 TTE		
60.0	40.0	13.5	14.5	45.0	RSE 060-040/1	UC 040-060-13.5 TTE		
60.0	45.0	10.0	11.0	50.0	RSE 060-045	UC 045-060-10 TTE		
60.0	50.0	5.0	5.5	54.0	RSE 060-050/1	UC 050-060-05 TTE		
60.0	50.0	7.0	8.0	54.0	RSE 060-050	UC 050-060-07 TTE		
60.0	50.0	10.0	11.0	54.0	RSE 060-050/2	UC 050-060-10 TTE		
60.0	52.0	8.0	9.0	55.0	RSE 060-052	UC 052-060-08 TTE		
63.0	43.0	12.0	13.0	47.0	RSE 063-043	UC 043-063-12 TTE		
63.0	45.0	10.0	11.0	50.0	RSE 063-045	UC 045-063-10 TTE		
63.0	48.0	10.0	11.0	53.0	RSE 063-048/1	UC 048-063-10 TTE		
63.0	48.0	12.0	13.0	53.0	RSE 063-048	UC 048-063-12 TTE	UHP-063	
63.0	53.0	6.5	7.0	57.0	RSE 063-053	UC 053-063-07 TTE		
63.0	53.0	7.0	8.0	57.0				
63.0	53.0	12.0	13.0	57.0				
65.0	45.0	12.0	13.0	50.0				RSE 065-045/1
65.0	45.0	13.5	14.5	50.0	RSE 065-045	UC 045-065-13.5 TTE		
65.0	50.0	10.0	11.0	55.0	RSE 065-050	UC 050-065-10 TTE		
65.0	50.0	12.0	13.0	55.0	RSE 065-050/1	UC 050-065-12 TTE		
65.0	55.0	10.0	11.0	59.0	RSE 065-055/1	UC 055-065-10 TTE		
65.0	55.0	13.5	14.5	59.0	RSE 065-055	UC 055-065-13.5 TTE		
68.0	48.0	10.0	11.0	53.0	RSE 068-048	UC 048-068-10 TTE		
70.0	50.0	12.0	13.0	55.0	RSE 070-050	UC 050-070-12 TTE		
70.0	50.0	13.5	14.5	55.0	RSE 070-050/1	UC 050-070-13.5 TTE		
70.0	50.0	15.0	16.0	55.0	RSE 070-050/2	UC 050-070-15 TTE		
70.0	55.0	9.5	10.5	60.0	RSE 070-055/1	UC 055-070-09.5 TTE		
70.0	55.0	12.0	13.0	60.0	RSE 070-055	UC 055-070-12 TTE		
70.0	60.0	7.2	8.0	64.0	RSE 070-060	UC 060-070-07.2 TTE		
70.0	60.0	12.0	13.0	64.0	RSE 070-060/1	UC 060-070-12 TTE		
70.0	60.0	13.5	14.5	64.0	RSE 070-060/2	UC 060-070-13.5 TTE		
70.0	62.0	7.5	8.5	65.0	RSE 070-062	UC 062-070-07.5 TTE		

* For order processing, the computer code will be
e.g. UC 005-012-05.5 RSE, UC 005-012-05.5 TTE

Piston U-Cup

(Metric Size)

Bore Dia.	Groove Dia.	Seal Height	Groove Width	Fitting Dia.	Reference	Reference	Reference
D	d	H	L	d1			
72.0	58.0	12.0	13.0	62.0	RSE 072-058	UC 058-072-12 TTE	
75.0	50.0	14.0	15.0	55.0	RSE 075-050		
75.0	55.0	13.5	14.5	60.0	RSE 075-055		
75.0	65.0	5.0	5.5	69.0	RSE 075-065/1		
75.0	65.0	6.7	7.5	69.0	RSE 075-065/3	UC 065-075-06.7 TTE	
75.0	65.0	7.0	8.0	69.0	RSE 075-065/4	UC 065-075-07 TTE	
75.0	65.0	10.0	11.0	69.0	RSE 075-065/2	UC 065-075-10 TTE	
75.0	65.0	13.5	14.5	69.0	RSE 075-065	UC 065-075-13.5 TTE	
80.0	60.0	12.0	13.0	65.0	RSE 080-060	UC 060-080-12 TTE	
80.0	60.0	13.5	14.5	65.0	RSE 080-060/1	UC 060-080-13.5 TTE	
80.0	65.0	12.0	13.0	70.0	RSE 080-065	UC 065-080-12 TTE	
80.0	70.0	7.0	8.0	74.0	RSE 080-070	UC 070-080-07 TTE	
80.0	70.0	12.0	13.0	74.0	RSE 080-070/1	UC 070-080-12 TTE	
80.0	71.0	6.5	7.0	74.0			UHP-080
80.0	72.0	12.0	13.0	75.0	RSE 080-072	UC 072-080-12 TTE	
85.0	65.0	13.5	14.5	70.0	RSE 085-065	UC 065-085-13.5 TTE	
85.0	75.0	10.0	11.0	79.0	RSE 085-075/1	UC 075-085-10 TTE	
85.0	75.0	12.0	13.0	79.0	RSE 085-075	UC 075-085-12 TTE	
90.0	70.0	12.0	13.0	75.0	RSE 090-070	UC 070-090-12 TTE	
90.0	70.0	13.5	14.5	75.0	RSE 090-070/1	UC 070-090-13.5 TTE	
90.0	75.0	12.0	13.0	80.0	RSE 090-075	UC 075-090-12 TTE	
90.0	80.0	5.0	5.5	84.0	RSE 090-080/2	UC 080-090-05 TTE	
90.0	80.0	6.5	7.0	84.0			UHP-090
90.0	80.0	10.0	11.0	84.0	RSE 090-080/1	UC 080-090-10 TTE	
90.0	80.0	13.0	14.0	84.0	RSE 090-080	UC 080-090-13 TTE	
95.0	75.0	13.5	14.5	80.0	RSE 095-075	UC 075-095-13.5 TTE	
95.0	85.0	6.7	7.5	89.0	RSE 095-085/2	UC 085-095-06.7 TTE	
95.0	85.0	7.0	8.0	89.0	RSE 095-085	UC 085-095-07 TTE	
95.0	85.0	8.5	9.5	89.0	RSE 095-085/1	UC 085-095-08.5 TTE	
95.0	85.0	13.5	14.5	89.0	RSE 095-085/3	UC 085-095-13.5 TTE	
100.0	80.0	10.0	11.0	85.0	RSE 100-080/2	UC 080-100-10 TTE	
100.0	80.0	12.0	13.0	85.0	RSE 100-080	UC 080-100-12 TTE	
100.0	80.0	13.5	14.5	85.0	RSE 100-080/1	UC 080-100-13.5 TTE	
100.0	85.0	9.5	10.0	90.0			UHP-100
100.0	85.0	12.0	13.0	90.0	RSE 100-085	UC 085-100-12 TTE	
100.0	86.0	12.0	13.0	90.0	RSE 100-086	UC 086-100-12 TTE	
100.0	90.0	7.0	8.0	94.0	RSE 100-090	UC 090-100-07 TTE	
100.0	90.0	10.5	11.5	94.0	RSE 100-090/1	UC 090-100-10.5 TTE	
101.6	80.0	12.0	13.0	85.0	RSE 101.6-080	UC 080-101.6-12 TTE	
105.0	90.0	12.0	13.0	95.0	RSE 105-090	UC 090-105-12 TTE	

* For order processing, the computer code will be
e.g. UC 005-012-05.5 RSE, UC 005-012-05.5 TTE

Piston U-Cup

(Metric Size)

Bore Dia.	Groove Dia.	Seal Height	Groove Width	Fitting Dia.	Reference	Reference	Reference
D	d	H	L	d1			
110.0	90.0	12.0	13.0	95.0	RSE 110-090	UC 090-110-12 TTE	
110.0	95.0	12.0	13.0	100.0	RSE 110-095	UC 095-110-12 TTE	
110.0	100.0	7.0	8.0	104.0	RSE 110-100	UC 100-110-07 TTE	
110.0	100.0	13.5	14.5	104.0	RSE 110-100/1	UC 100-110-13.5 TTE	
115.0	100.0	10.5	11.5	105.0	RSE 115-100	UC 100-115-10.5 TTE	
115.0	105.0	13.5	14.5	109.0	RSE 115-105	UC 105-115-13.5 TTE	
120.0	95.0	12.0	13.0	100.0	RSE 120-095	UC 095-120-12 TTE	
120.0	100.0	12.0	13.0	105.0	RSE 120-100	UC 100-120-12 TTE	
120.0	100.0	13.5	14.5	105.0	RSE 120-100/1	UC 100-120-13.5 TTE	
120.0	103.0	16.0	17.0	108.0	RSE 120-103	UC 103-120-16 TTE	
125.0	105.0	12.0	13.0	110.0	RSE 125-105	UC 105-125-12 TTE	
125.0	105.0	15.0	16.0	110.0	RSE 125-105/1	UC 105-125-15 TTE	
125.0	112.0	9.0	9.5	116.0			UHP-125
125.0	115.0	7.0	8.0	119.0	RSE 125-115	UC 115-125-07 TTE	
125.0	115.0	15.0	16.0	119.0	RSE 125-115/1	UC 115-125-15 TTE	
130.0	110.0	12.0	13.0	115.0	RSE 130-110	UC 110-130-12 TTE	
130.0	110.0	15.0	16.0	115.0	RSE 130-110/1	UC 110-130-15 TTE	
130.0	120.0	13.5	14.5	124.0	RSE 130-120	UC 120-130-13.5 TTE	
140.0	114.0	12.0	13.0	119.0	RSE 140-114	UC 114-140-12 TTE	
140.0	120.0	12.0	13.0	125.0	RSE 140-120	UC 120-140-12 TTE	
140.0	125.0	9.5	10.0	130.0			UHP-140
150.0	125.0	13.5	14.5	130.0	RSE 150-125	UC 125-150-13.5 TTE	
150.0	130.0	15.0	16.0	135.0	RSE 150-130	UC 130-150-15 TTE	
150.0	136.0	9.0	9.5	140.0			UHP-150
150.0	140.0	7.0	8.0	144.0	RSE 150-140	UC 140-150-07 TTE	
160.0	140.0	13.5	14.5	145.0	RSE 160-140	UC 140-160-13.5 TTE	
160.0	145.0	9.5	10.0	150.0			UHP-160
160.0	148.0	7.1	7.5	153.0	RSE 160-148	UC 148-160-07.1 TTE	
170.0	150.0	15.0	16.0	155.0	RSE 170-150	UC 150-170-15 TTE	
174.8	165.2	7.3	7.5	170.0	RSE 174.8-165.2	UC 165.2-174.8-07.3 TTE	
180.0	155.0	16.0	17.0	160.0			UNP-180
180.0	160.0	13.5	14.5	165.0	RSE 180-160	UC 160-180-13.5 TTE	
180.0	165.0	9.5	10.0	170.0			UHP-180
180.0	166.0	15.5	16.5	170.0	RSE 180-166	UC 166-180-15.5 TTE	
190.0	165.0	16.0	17.0	170.0			UNP-190
190.0	170.0	15.0	16.0	175.0	RSE 190-170	UC 170-190-15 TTE	
200.0	175.0	16.0	17.0	180.0			UNP-200
200.0	180.0	12.5	13.0	185.0			UHP-200
205.0	180.0	16.0	17.0	185.0			UNP-205
215.0	190.0	16.0	17.0	195.0			UNP-215

* For order processing, the computer code will be
e.g. UC 005-012-05.5 RSE, UC 005-012-05.5 TTE

Piston U-Cup

(Metric Size)

Bore Dia.	Groove Dia.	Seal Height	Groove Width	Fitting Dia.	Reference	Reference	Reference
D	d	H	L	d1			
220.0	200.0	12.5	13.0	205.0			UHP-220
224.0	199.0	16.0	17.0	204.0			UNP-224
224.0	204.0	12.5	13.0	209.0			UHP-224
237.0	212.0	19.0	20.0	217.0			UNP-237
250.0	225.0	19.0	20.0	230.0			UNP-250
250.0	230.0	12.5	13.0	235.0			UHP-250
261.0	236.0	19.0	20.0	241.0			UNP-261
275.0	250.0	19.0	20.0	255.0			UNP-275
280.0	250.0	18.0	19.0	256.0	RSE 280-250	UC 250-280-18 TTE	
280.0	255.0	19.0	20.0	261.0			UNP-280
295.0	265.0	19.0	20.0	271.0			UNP-295
300.0	270.0	19.0	20.0	276.0			UNP-300
310.0	280.0	19.0	20.0	286.0			UNP-310
320.0	285.0	20.0	21.0	290.0	RSE 320-285	UC 285-320-20 TTE	
330.0	300.0	19.0	20.0	306.0			UNP-330

* For order processing, the computer code will be
e.g. UC 005-012-05.5 RSE, UC 005-012-05.5 TTE

Seals & O-rings Specialist