

UNP profile data

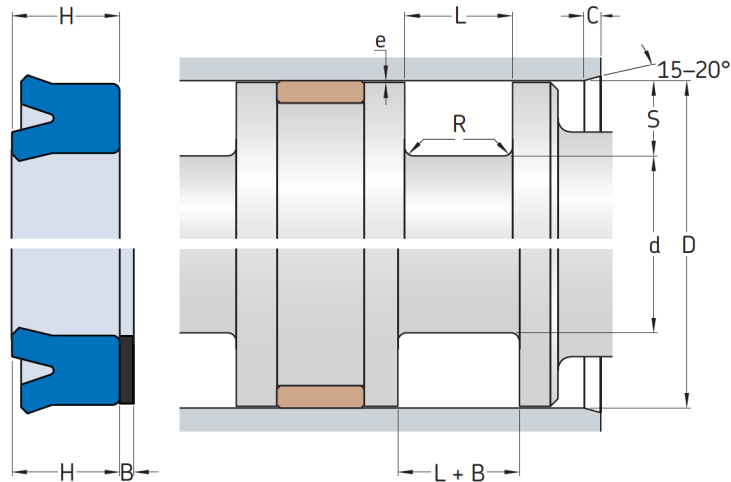


Materials	Metric sizes → TPU U-1029 Inch size → TPU U-1023 For additional information → page 26
Pressure	Up to 350 bar (5 075 psi)
Speed	Pressure ≤ 250 bar (3 625 psi) → up to 1 m/s (3.2 ft/s) Pressure ≤ 350 bar (5 075 psi) → up to 0,5 m/s (1.6 ft/s)
Temperature range	<p>For temperature limits depending on fluid compatibility → table 8, page 32</p> <ul style="list-style-type: none"> ■ Extreme low temperature range: may be intermittently exposed (e.g. cold start-up) without seal damage, but seal performance may be compromised while in this range ■ Temperatures below the recommended operating range: seal performance depends on system design (precision guiding arrangement recommended) ■ Recommended operating temperature range for this profile and material ■ Temperatures above the recommended operating range: acceptable only with reduced pressure, speed, e-gap and/or with the use of a full-face anti-extrusion ring ■ Extreme high temperature range: only occasional short term exposure (e.g. cylinder in curing oven of a powder coating process)
Counter-surface	→ page 22

Maximum values of application parameters (e.g. pressure, speed, temperature, e-gap) should not be applied continuously nor simultaneously.

2.12 UNP profile piston seals, metric sizes

D 45 – 250 mm



Maximum extrusion gap e			
Radial depth S	e _{max} at 80 °C (175 °F) for pressures		
	160 bar	250bar	350 bar
mm	mm		
5	0,45	0,25	0,1
7,5	0,5	0,3	0,15
10	0,55	0,3	0,15
12,5	0,6	0,3	0,2

2.12

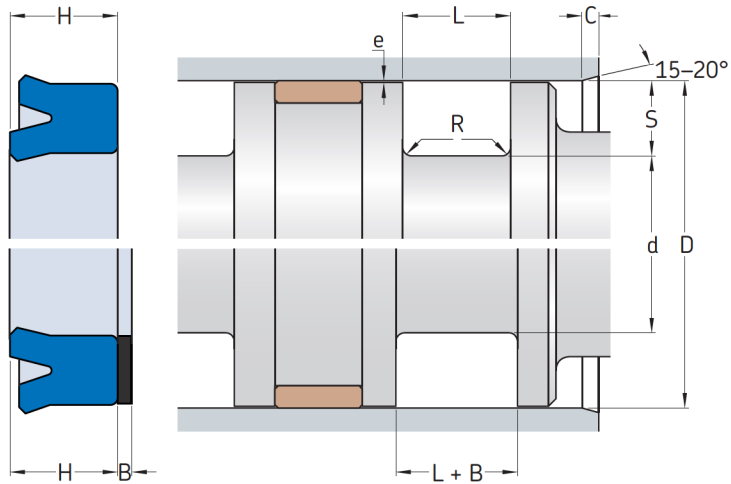
With and without full-face anti-extrusion ring¹⁾

Cylinder dimensions								Designation
D	d	L	L+B	H	S	R	C	
H9	h9	+0,2	+0,2	nom.		max.	min.	
mm								-
45	35	7	9	6	5	0,4	5	UNP-45x35x7-E6W
50	40	7	9	6	5	0,4	5	UNP-50x40x7-E6W
	40	8,3	10,3	7,3	5	0,4	5	UNP-50x40x8.3-E6W
63	48	11	13	10	7,5	0,5	7	UNP-63x48x11-E6W
	53	7	9	6	5	0,4	5	UNP-63x53x7-E6W
	53	8,3	10,3	7,3	5	0,4	5	UNP-63x53x8.3-E6W
75	65	7	9	6	5	0,4	5	UNP-75x65x7-E6W
130	115	10	12	9	7,5	0,5	7	UNP-130x115x10-E6W
140	120	16,5	18,5	15	10	0,75	7	UNP-140x120x16.5-E6W
150	135	10	12	9	7,5	0,6	7	UNP-150x135x10-E6W
160	140	16	18	14,5	10	0,75	7	UNP-160x140x15.5-E6W
170	150	13,2	15,2	12	10	0,75	7	UNP-170x150x13-E6W
	155	10	12	9	7,5	0,5	7	UNP-170x155x10-E6W
180	150	20	22	18	15	0,75	7	UNP-180x150x19.5-E6W
	165	10	12	9	7,5	0,5	7	UNP-180x165x10-E6W
190	175	10	12	9	7,5	0,5	7	UNP-190x175x10-E6W
200	175	20,2	22,2	18,2	12,5	0,75	12	UNP-200x175x19.7-E6W
210	190	13,2	15,2	12	10	0,75	7	UNP-210x190x13-E6W
220	200	16,5	18,5	15	10	0,75	7	UNP-220x200x16.5-E6W
230	205	22	24	20	12,5	0,75	12	UNP-230x205x22-E6W
240	220	13,2	15,2	12	10	0,75	7	UNP-240x220x13-E6W
250	230	16,5	18,5	15	10	0,75	7	UNP-250x230x16.5-E6W

¹⁾ Appropriate full-face anti-extrusion rings, e.g. BUS profile, are not covered in this catalogue but available on request. For additional information, contact SKF.

2.12 UNP profile piston seals, metric sizes

D 280 – 300 mm



Maximum extrusion gap e

Radial depth S	e _{max} at 80 °C (175 °F) for pressures		
	160 bar	250bar	350 bar
mm	mm		
5	0,45	0,25	0,1
7,5	0,5	0,3	0,15
10	0,55	0,3	0,15
12,5	0,6	0,3	0,2

With and without full-face anti-extrusion ring¹⁾

Cylinder dimensions								Designation
D	d	L	L+B	H	S	R	C	
H9	h9	+0,2	+0,2	nom.		max.	min.	
mm								-
280	255	21	23	19	12,5	0,75	12	UNP-280x255x20.5-E6W
290	265	21	23	19	12,5	0,75	12	UNP-290x265x20.5-E6W
300	275	17,6	19,6	16	12,5	0,75	12	UNP-300x275x17.5-E6W

Other sizes are available on request

¹⁾ Appropriate full-face anti-extrusion rings, e.g. BUS profile, are not covered in this catalogue but available on request. For additional information, contact SKF.