

LCP profile data

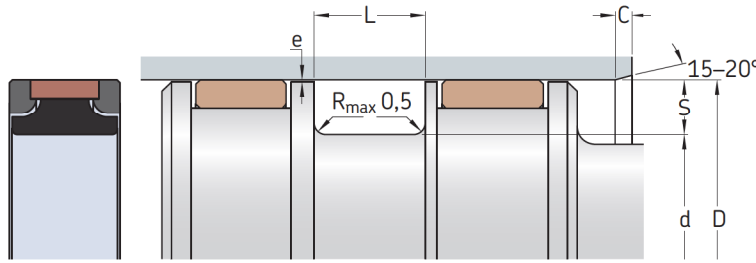


Materials	Slide ring: PTFE 741 (PTFE 702 on request) Energizer: NBR A-8501 Anti-extrusion rings: PA P-2506 For additional information → page 26
Pressure	Up to 690 bar (10 000 psi)
Speed	Up to 1,5 m/s (4.9 ft/s)
Temperature range	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">-60 -50 -40</div> <div style="margin-left: 10px;">110 120 130 [°C]</div> </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="margin-right: 10px;">-75 -60 -40</div> <div style="margin-left: 10px;">230 250 265 [°F]</div> </div> <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 and/or speed ■ Extreme high temperature range: only occasional short term exposure
Dimension standards	Some metric sizes fit seal housings in accordance with ISO 5597.
Counter-surface	→ page 22

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

2.7 LCP profile piston seals, metric sizes

D 25 – 200 mm



Maximum extrusion gap e

Radial depth S	e_{\max} at 80 °C (175 °F) for pressures			
	160 bar	250 bar	400 bar	690 bar
mm	mm			
5	0,7	0,45	0,25	0,15
7,5	1	0,65	0,4	0,2
10	1,4	0,9	0,55	0,25

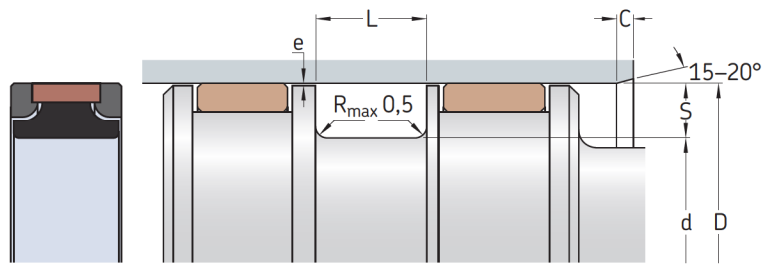
2.7

Cylinder dimensions					Designation
D H9	d h9	L +0,2	S	C min.	
mm					-
25	15	8	5	4	• LCP-25x15x8-ND1
32	22	8	5	4	• LCP-32x22x8-ND1
40	30	8	5	4	• LCP-40x30x8-ND1
50	40	8	5	4	• LCP-50x40x8-ND1
60	50	8	5	4	LCP-60x50x8-ND1
80	65	12,5	7,5	5	• LCP-80x65x12.5-ND1
90	75	12,5	7,5	5	LCP-90x75x12.5-ND1
100	85	12,5	7,5	5	• LCP-100x85x12.5-ND1
110	95	12,5	7,5	5	LCP-110x95x12.5-ND1
	97,7	14,7	6,15	5	LCP-110x97.7x14.7-ND1
120	105	12,5	7,5	6,5	LCP-120x105x12.5-ND1
125	110	12,5	7,5	6,5	LCP-125x110x12.5-ND1
140	121,5	19	9,25	6,5	LCP-140x121.5x19-ND1
	125	12,5	7,5	6,5	LCP-140x125x12.5-ND1
150	135	12,5	7,5	6,5	LCP-150x135x12.5-ND1
160	141,5	19	9,25	6,5	LCP-160x141.5x19-ND1
	145	12,5	7,5	6,5	LCP-160x145x12.5-ND1
170	155	12,5	7,5	6,5	LCP-170x155x12.5-ND1
180	165	12,5	7,5	6,5	LCP-180x165x12.5-ND1
200	180	16	10	6,5	LCP-200x180x16-ND1
	181,5	19	9,25	6,5	LCP-200x181.5x19-ND1

• Seal housing dimensions in accordance with ISO 5597

2.7 LCP profile piston seals, metric sizes

D 250 – 290 mm



Maximum extrusion gap e

Radial depth S	e_{max} at 80 °C (175 °F) for pressures			
	160 bar	250 bar	400 bar	690 bar
mm	mm			
5	0,7	0,45	0,25	0,15
7,5	1	0,65	0,4	0,2
10	1,4	0,9	0,55	0,25

Cylinder dimensions

Designation

D	d	L	S	C
H9	h9	+0,2		min.

mm

250	230	16	10	6,5	LCP-250x230x16-ND1
290	270	16	10	7,5	LCP-290x270x16-ND1

Other sizes are available on request