



The double-acting rod sealing set profile OC consists of a PTFE piston sealing ring and an elastomer O-ring as pretensioning element.

Profile OC is particularly suitable for sealing rods in pneumatic cylinders, e.g. in control cylinders, servo-assisted equipment and in quick-acting cylinders.

Advantages

- Due to application-optimized geometry and compounds suitable for use in lubricated as well as in oil-free air (after initial lubrication on assembly).
- Good sealing performance in extremely small assembly conditions.
- Can also be used for single-acting applications.
- Minimal break-away and dynamic friction and no stick-slip tendency ensures uniform motion even at low speeds.
- Good energy efficiency due to low friction.
- High temperature resistance assured by suitable O-ring compound selection.
- Adaptable to nearly all media thanks to high chemical resistance of the sealing ring and large O-ring compound selection.
- Short axial assembly length.
- Installation in closed and undercut housings.
- Available in diameters from 4 to 3000 mm.
- Machined small-volume series and samples available with short lead times.

Range of Application

Rod sealing set for pneumatic applications.

Operating pressure	≤ 16 bar
Operating temperature	-30 to +80 °C ¹⁾
Surface speed	≤ 4.0 m/s

¹⁾ For requirements outside of standard temperature range please contact our consultancy service for suitable O-ring compound.

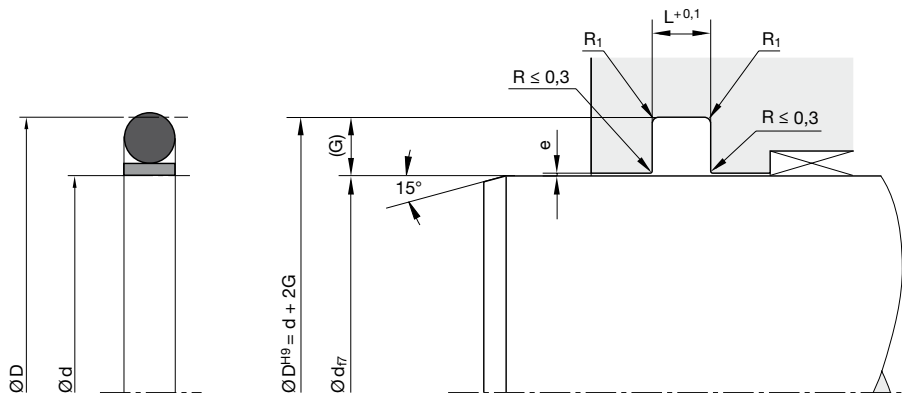
Compounds

Sealing ring: Polon® 033, modified PTFE + 25 % carbon
 O-ring: N0674, NBR elastomer with approx. 70 Shore A

Installation

For diameters < 25 mm open grooves are required.

This seal should only be used in combination with guiding elements (e.g. profile F2).



Housing dimensions

Series No.	Cross-section	O-ring cross-section (mm)	Recommended rod Ø range		Groove width L (mm)	Groove depth G (mm)	Gap max. e (mm)	Radius max. R ₁ (mm)
			≥ d (mm)	< d (mm)				
01700	A	1.78	4	8	2.00	2.00	0.20	0.5
01700	B	2.62	8	19	2.85	3.00	0.25	0.5
01700	C	3.53	19	38	3.80	3.75	0.25	0.5
01700	D	5.33	38	120	5.60	6.25	0.50	0.9
01700	E	6.99	120	165	7.55	7.50	0.50	0.9
01700	F	6.99	165	220	7.55	9.00	0.75	0.9
01700	G	6.99	220	400	7.55	12.00	1.00	0.9

Ordering example

Rod diameter 40 mm

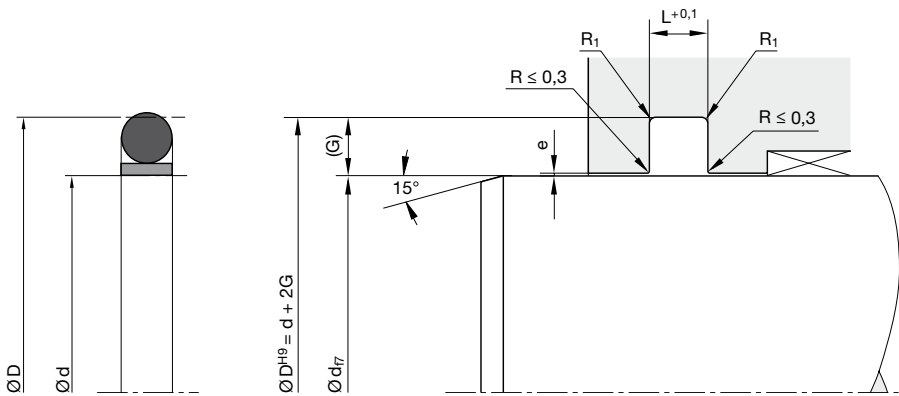
OC 0400 03 01701 C (40.0 x 52.5 x 5.6)

- OC Profile
- 0400 Rod diameter x 10
- 033 Compound
- 01700 Series no. / Compound code O-ring:
 - 01700 without O-ring
 - 01701 N0674 (NBR) 70±5 Shore A -30 / +110 °C
 - 01702 V0747 (FKM) 75±5 Shore A -25 / +200 °C
 - 01703 N0304 (NBR) 75±5 Shore A -50 / +110 °C
 - 01704 E0540 (EPDM) 80±5 Shore A -40 / +150 °C
 - 01705 N3578 (NBR) 75±5 Shore A -30 / +110 °C
 - 01706 N3588 (NBR) 90±5 Shore A -20 / +110 °C
- D Cross-section

Please note

For certain applications, it may be appropriate to use a non-standard cross-section - reduced or heavier. In these cases, please replace the standard cross-section code (in above example: "D") by the one you require (for example "C" or "E").

Slipper seals



Standard range

Size	Groove			No.	O-ring	
	Ø d mm	Ø D mm	L mm		CS mm	ID mm
0070	7	11.0	2.00	2-011	1.78	7.65
0090	9	13.0	2.00	2-012	1.78	9.25
0100	10	14.0	2.00	2-013	1.78	10.82
0120	12	16.0	2.00	2-014	1.78	12.42
0140	14	18.0	2.00	2-015	1.78	14.00
0160	16	22.0	2.85	2-115	2.62	17.12
0180	18	24.0	2.85	2-116	2.62	18.72
0200	20	26.0	2.85	2-117	2.62	20.29
0220	22	28.0	2.85	2-119	2.62	23.47
0250	25	31.0	2.85	2-121	2.62	26.64
0280	28	35.5	3.80	2-216	3.53	28.17
0300	30	37.5	3.80	2-218	3.53	31.34
0320	32	39.5	3.80	2-219	3.53	32.92
0350	35	42.5	3.80	2-221	3.53	36.09
0360	36	43.5	3.80	2-222	3.53	37.69
0400	40	47.5	3.80	2-223	3.53	40.87
0420	42	49.5	3.80	2-224	3.53	44.04
0450	45	52.5	3.80	2-225	3.53	47.22
0500	50	62.5	5.60	2-330	5.33	53.34
0550	55	67.5	5.60	2-331	5.33	56.52
0600	60	72.5	5.60	2-333	5.33	62.87
0630	63	75.5	5.60	2-334	5.33	66.04
0650	65	77.5	5.60	2-335	5.33	69.22
0700	70	82.5	5.60	2-336	5.33	72.39
0750	75	87.5	5.60	2-337	5.33	75.57
0800	80	92.5	5.60	2-339	5.33	81.92
0850	85	97.5	5.60	2-341	5.33	88.27
0900	90	102.5	5.60	2-342	5.33	91.44
0920	92	104.5	5.60	2-343	5.33	94.62
1000	100	112.5	5.60	2-345	5.33	100.97
1050	105	117.5	5.60	2-347	5.33	107.32
1100	110	122.5	5.60	2-349	5.33	113.67
1150	115	127.5	5.60	2-350	5.33	116.85
1200	120	132.5	5.60	2-351	5.33	120.02
1250	125	137.5	5.60	2-353	5.33	126.37
1300	130	145.0	7.55	2-431	6.99	132.72
1400	140	155.0	7.55	2-434	6.99	142.24
1500	150	165.0	7.55	2-437	6.99	151.77
1600	160	175.0	7.55	2-438	6.99	158.12
2000	200	215.0	7.55	2-445	6.99	202.57

Further sizes on request.