



The QQ rotary sealing set consists of a wear-resistant, low-friction PTFE slipper sealing ring and an elastomer o-ring as a preloading element.

It is suitable mainly for applications where the pressure alternates from one side of the seal to the other, such as pivots for rotating track rings, swivel joints, hose reels, and in machine tool hydraulics. If the sealing set is used as an end seal, it is recommended to install a wiper ring at the end of the components.

Based on friction conditions during rotating movements in the application, the sealing set profile OR should generally be preferred. Only if housing limitations are given the profile QQ should be considered.

Depending on the special working conditions, the rotary sealing set OR is equipped with one or two circumferential lubricating grooves.

Advantages

- Excellent wear resistance.
- 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.
- Dimensions according to DIN/ISO 6195, Type D.
- 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

Operating pressure	≤ 300 bar
Operating temperature	-30 to +100 °C ¹⁾
Surface speed	≤ 1.0 m/s

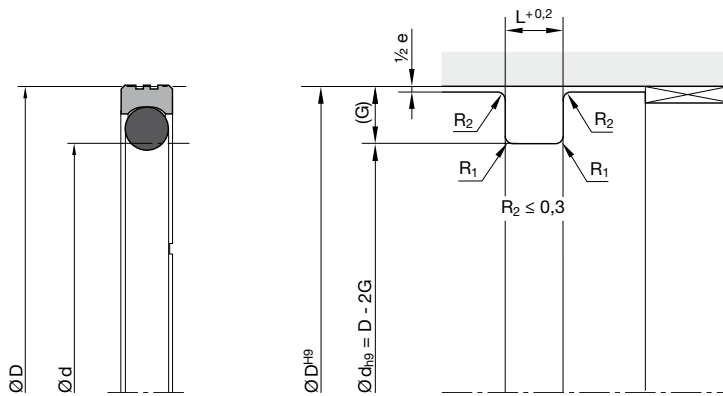
Recommendation for rotary transmissions: $P \cdot v \leq 25$ (40)
(For definition see catalogue “Hydraulic Seals”, chapter “Rotary Seals”, introduction.)

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

This seal should only be used in combination with closed guiding elements.



Housing dimensions

Series No.	Cross-section	O-ring cross-section (mm)	Recommended piston Ø range		Groove width L (mm)	Groove depth G (mm)	Gap max. 0–200 bar e (mm)	Gap max. 200–400 bar e (mm)	Radius max. R ₁ (mm)
			≥ D (mm)	< D (mm)					
00260	A	1.78	8	15	2.2	2.45	0.4 - 0.2	0.2 - 0.1	0.5
00260	B	2.62	15	40	3.2	3.75	0.4 - 0.2	0.2 - 0.1	0.5
00260	C	3.53	40	80	4.2	5.50	0.6 - 0.3	0.3 - 0.2	0.5
00260	D	5.33	80	133	6.3	7.75	0.8 - 0.4	0.4 - 0.2	0.9
00260	E	6.99	133	330	8.1	10.50	1.0 - 0.5	0.5 - 0.3	0.9
00260	F	6.99	330	670	8.1	12.25	1.0 - 0.5	0.5 - 0.3	0.9
00260	G	8.40	670		9.5	14.00	1.0 - 0.5	0.5 - 0.3	0.9

Ordering example

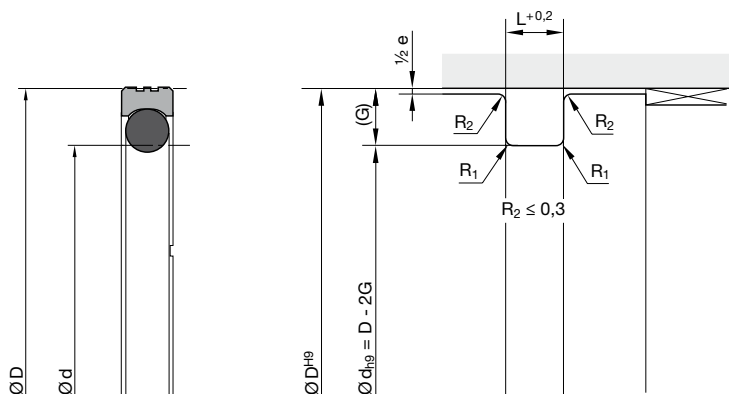
Rotary diameter 80 mm

OQ 0800 033 00261 C (80.0 x 69.0 x 4.2)

- OQ Profile
- 0800 Shaft diameter x 10
- 033 Compound
- 00261 Series no. / Compound code O-ring:
 - 00260 without O-ring
 - 00261 N0674 (NBR) 70±5 Shore A -30 / +110 °C
 - 00262 V0747 (FKM) 75±5 Shore A -25 / +200 °C
 - 00263 N0304 (NBR) 75±5 Shore A -50 / +110 °C
 - 00264 E0540 (EPDM) 80±5 Shore A -40 / +150 °C
 - 00265 N3578 (NBR) 75±5 Shore A -30 / +110 °C
 - 00266 N3588 (NBR) 90±5 Shore A -20 / +110 °C
- C 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: “C”) by the one you require (for example “B” or “D”).



Standard range

Groove				O-ring			Groove				O-ring		
Size	Ø d mm	Ø D mm	L mm	No.	CS mm	ID mm	Size	Ø d mm	Ø D mm	L mm	No.	CS mm	ID mm
0080	8	3.1	2.2	2-006	1.78	2.90	1600	160	144.5	6.3	2-358	5.33	142.24
0100	10	5.1	2.2	2-008	1.78	4.47	1650	165	149.5	6.3	2-360	5.33	148.59
0120	12	7.1	2.2	2-010	1.78	6.07	1700	170	154.5	6.3	2-361	5.33	151.77
0160	16	11.1	2.2	2-012	1.78	9.25	1750	175	159.5	6.3	2-362	5.33	158.12
0180	18	13.1	2.2	2-014	1.78	12.42	1800	180	164.5	6.3	2-363	5.33	164.47
0200	20	15.1	2.2	2-015	1.78	14.00	1900	190	174.5	6.3	2-364	5.33	170.82
0220	22	17.1	2.2	2-017	1.78	17.17	1950	195	179.5	6.3	2-365	5.33	177.17
0250	25	20.1	2.2	2-018	1.78	18.77	2000	200	184.5	6.3	2-366	5.33	183.52
0280	28	23.1	2.2	2-020	1.78	21.95	2100	210	194.5	6.3	2-367	5.33	189.87
0300	30	25.1	2.2	2-022	1.78	25.12	2200	220	204.5	6.3	2-369	5.33	202.57
0320	32	27.1	2.2	2-023	1.78	26.70	2300	230	214.5	6.3	2-370	5.33	208.92
0340	34	29.1	2.2	2-024	1.78	28.30	2400	240	224.5	6.3	2-372	5.33	221.62
0360	36	31.1	2.2	2-025	1.78	29.87	2500	250	234.5	6.3	2-374	5.33	234.32
0400	40	32.5	3.2	2-124	2.62	31.42	2600	260	244.5	6.3	2-375	5.33	240.67
0420	42	34.5	3.2	2-125	2.62	32.99	2700	270	254.5	6.3	2-377	5.33	253.37
0450	45	37.5	3.2	2-127	2.62	36.17	2800	280	264.5	6.3	2-378	5.33	266.07
0480	48	40.5	3.2	2-129	2.62	39.34	3000	300	284.5	6.3	2-379	5.33	278.77
0500	50	42.5	3.2	2-130	2.62	40.94	3100	310	294.5	6.3	2-380	5.33	291.47
0520	52	44.5	3.2	2-132	2.62	44.12	3200	320	304.5	6.3	2-381	5.33	304.17
0550	55	47.5	3.2	2-133	2.62	45.69	3300	330	309.0	8.1	2-453	6.99	304.17
0600	60	52.5	3.2	2-137	2.62	52.07	3400	340	319.0	8.1	2-454	6.99	316.87
0630	63	55.5	3.2	2-138	2.62	53.64	3500	350	329.0	8.1	2-455	6.99	329.57
0650	65	57.5	3.2	2-140	2.62	56.82	3700	370	349.0	8.1	2-456	6.99	342.27
0700	70	62.5	3.2	2-143	2.62	61.60	3800	380	359.0	8.1	2-457	6.99	354.97
0750	75	67.5	3.2	2-146	2.62	66.34	3900	390	369.0	8.1	2-458	6.99	367.67
0800	80	69.0	4.2	2-231	3.53	66.27	4100	410	389.0	8.1	2-459	6.99	380.37
0850	85	74.0	4.2	2-233	3.53	72.62	4200	420	399.0	8.1	2-460	6.99	393.07
0900	90	79.0	4.2	2-235	3.53	78.97	4300	430	409.0	8.1	2-461	6.99	405.26
0950	95	84.0	4.2	2-236	3.53	82.14	4400	440	419.0	8.1	2-462	6.99	417.96
1000	100	89.0	4.2	2-238	3.53	88.49	4600	460	439.0	8.1	2-463	6.99	430.66
1050	105	94.0	4.2	2-239	3.53	91.67	4700	470	449.0	8.1	2-464	6.99	443.36
1100	110	99.0	4.2	2-241	3.53	98.02	4800	480	459.0	8.1	2-465	6.99	456.06
1150	115	104.0	4.2	2-242	3.53	101.19	5000	500	479.0	8.1	2-466	6.99	468.76
1200	120	109.0	4.2	2-244	3.53	107.54	5500	550	529.0	8.1	2-470	6.99	532.26
1250	125	114.0	4.2	2-246	3.53	113.89	6000	600	579.0	8.1	2-472	6.99	582.68
1300	130	119.0	4.2	2-247	3.53	117.07	6500	650	629.0	8.1	2-474	6.99	633.48
1330	133	117.5	6.3	2-349	5.33	113.67	6600	690	669.0	8.1	2-475	6.99	658.88
1350	135	119.5	6.3	2-350	5.33	116.84	3300	330	305.5	8.1	2-453	6.99	304.17
1400	140	124.5	6.3	2-352	5.33	123.19	4500	450	425.5	8.1	2-462	6.99	417.96
1450	145	129.5	6.3	2-354	5.33	129.54	5000	500	475.5	8.1	2-466	6.99	468.76
1500	150	134.5	6.3	2-355	5.33	132.72	5500	550	525.5	8.1	2-470	6.99	532.22
1550	155	139.5	6.3	2-357	5.33	139.07	6000	600	575.5	8.1	2-471	6.99	557.66

Further sizes on request.

Slipper seals