ROD SEALS

Profile	Type	Description	Standard Material	Pressure (Bar)	Temp. (°C)	Surface Speed (m/sec)
	RS01	Asymmetrical single acting seal with interference fit on the OD. Sealing lip shorter than static lip to avoid drag pressure. Excellent static and dynamic sealing. For lower speeds the sealing lips should be shorter/stiffer.	PU NBR FPM	400 160 160	-30 to 105 -25 to 100 -20 to 210	0.5
	RS01A	Same as profile RS01 but with a wider groove. This wider grooves give the seal softer lips compared with the RS01.	PU NBR FPM	160 160 160	-30 to 105 -25 to 100 -20 to 210	0.5
	RS01B	Asymmetrical single acting seal with interference fit on the OD. Sealing lip shorter than static lip to avoid drag pressure. Sharp lips on ID and OD. Good static and dynamic sealing. Good in low pressure applications. Out of date profile only used in old machinery.	PU NBR FPM	400 160 160	-30 to 105 -25 to 100 -20 to 210	0.5
	RS02	Same as profile RS01 but with added angled back-up ring to prevent/resist extrusion.	PU/POM NBR/POM FPM/PTFE	700 250 250	-30 to 100 -25 to 100 -20 to 210	0.5
	RS02A	Same as profile RS02 but utilises an added back-up ring instead. Used in short housings.	PU/POM NBR/POM FPM/PTFE	700 250 250	-30 to 100 -25 to 100 -20 to 210	0.5
	RS02B	Same as profile RS01 but with added glide ring on ID. Glide ring prevents/resists extrusion.	PU/PTFE	700	-30 to 105	0.5
	RS03	O-Ring activated asymmetrical rod seal. Interference fit on OD. Especially suitable for short stroke applications.	PU/NBR	400	-25 to 100	0.5
	RS04	Same profile as RS03 but with the added benefit of a back-up ring to prevent/resist extrusion. Suitable for higher extrusion gaps or higher pressure range.	PU/NBR/POM	700	-25 to 100	0.5
	RS05	Asymmetrical single acting rod seal for pneumatic applications with interference fit on the OD. Special design lip to retain lubrication film and prevent dry running.	PU NBR	25	-30 to 105 -25 to 100	1
	RS08	Asymmetrical single acting seal with interference fit on the OD. Especially used for small cross sections where the lips would be too thin. Used for short pulsating strokes.	PU NBR	400 160	-30 to 105 -25 to 100	0.3
	RS09	O-Ring activated asymmetrical rod seal. Single acting. Low friction. Good resistance to pressure shocks.	PU-D57/NBR PTFE/NBR	250 400	-25 to 100	1 10
	RS09A	Symmetrical double acting rod seal. Low friction.	PU-D57/NBR PTFE/NBR	250 400	-25 to 100	1 10
	RS09B	O-Ring activated asymmetrical rod seal. Single acting. Low friction. Good resistance to pressure shocks.	PU-D57/NBR PTFE/NBR	250 400	-25 to 100	1 10
	RS91	Rubber energised asymmetrical rod seal. Higher pressure force due to the special preload profile. Less relative movement of the rubber element helps provide greater wear resistance.	PU-D57/NBR PTFE/NBR	250 400	-25 to 100	1 10
	RS91B	Rubber energised asymmetrical rod seal. Higher pressure force due to the special preload profile. Less relative movement of the rubber element helps provide greater wear resistance.	PU-D57/NBR PTFE/NBR	250 400	-25 to 100	1 10
	RS16	Known commonly as a 'hat seal' this profile utilises a long sealing lip which compensates for radial inaccuracy or eccentricity.	NBR	160	-25 to 100	0.5
	RS17	Same as profile RS01 but with the added support beam/secondary lip on the ID. This is used for stabilising the seal and so helps to extend the life of the seal.	PU	400	-30 to 105	0.5
	RS17A	Same as profile RS17 but with the added back up ring to prevent/resist extrusion.	PU/POM	700	-30 to 100	0.5
	RS17B	Same as profile. RS17 but with the added O-ring energiser.	PU/NBR	400	-25 to 100	0.5

Profile	Type	Description	Standard Material	Pressure (Bar)	Temp. (°C)	Surface Speed (m/sec)
	RS17C	RS17C utilises a secondary lip, back-up ring and an o-ring energiser. Excellent static and dynamic sealing performance. Excellent performance in all pressure ranges.	PU/NBR/POM	700	-25 to 100	0.5
	RS17D	Same as profile RS08 but with the added support beam/secondary sealing lip on the ID. Used to stabilise the seal and to extend the seal life.	PU NBR	400 160	-30 to 105 -25 to 100	0.3
	RS17E	Same as profile RS17D but also utilises a back-up ring to resist/prevent extrusion.	PU/POM	700	-30 to 100	0.3
	RS19	Asymmetrical single acting rod seal with low interference on the static lip. Preloaded via V-Spring. Excellent static and dynamic sealing. Low friction in dry running or low lubrication applications.	PTFE-virgin / V-Spring PTFE-filled / V-Spring	200 400	-200 to 260	15
	RS19A	Same as profile. RS19 but with added clamping flange.	PTFE-virgin / V-Spring PTFE-filled / V-Spring	200 400	-200 to 260	15
	RS20	Space saving double acting rod seal suitable for standard O-Ring grooves. Comprises 1 rubber sealing element with 2 integrated back up rings to resist/ prevent extrusion. Interference fit on OD prevents twisting.	NBR/POM	700	-25 to 100	0.5
	RS31-33	Asymmetrical single acting rod seal with combined pressure and support rings. The friction and leakage characteristics can be influenced by adjusting the number of intermediate rings.	PU/POM	500	-30 to 100	0.5
	RS35	Asymmetrical double acting compact rod seal. Excellent performance in low pressure conditions. For Rotary application the OD interference must be increased to prevent seal rotation and the preload has to be reduced.	PU	400	-30 to 105	0.4