



SGR-ISO rod seals are composed of bronze-filled PTFE ring manufactured by machining technique combined with an O-ring that is used as an energising ring.

They are suitable for high sliding speeds due to the low friction force which is among one of the essential properties of PTFE material. Moreover, they can be used for different type of fluids by changing O-ring material.

Operating conditions

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s

Materials

Energising element ①	NBR 70 Sh A
Dynamic sealing element ②	PT55

Assembly

O-ring and PTFE-ring may easily be mounted into the grooved housings (above 12 mm)

Advantages

- Optimal sealing in tandem system
- Small sections
- High extrusion resistance and long service life
- Low break-out and running friction
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds

Please contact us for applications approaching maximum values.

d (mm)	L (mm)	D (mm)	O-ring C/S ①
10/GR-ISO			
6 → 14	2,2	d + 5	1,78
12 → 25	3,2	d + 7,5	2,62
20 → 63	4,2	d + 11	3,53
56 → 180	6,3	d + 15,5	5,34
160 → 250	8,1	d + 21	7
280 → 360	8,1	d + 24,5	7

L (mm)	e (mm)		
	0 - 20 MPa	20 - 40 MPa	> 40 MPa
2,2 - 3,2	0,15	0,1	H8/f7
4,2 - 6,3	0,25	0,15	
8,1	0,4	0,2	

ISO 7425 2				
d	D	L	O-ring NBR 70 Sh A	Reference
22	33	4,2	26,57 x 3,53	SGR-ISO-0220
28	39	4,2	32,92 x 3,53	SGR-ISO-0280
36	47	4,2	40,87 x 3,53	SGR-ISO-0360
45	56	4,2	49,2 x 3,53	SGR-ISO-0450
56	71,5	6,3	62,87 x 5,34	SGR-ISO-0560
70	85,5	6,3	75,57 x 5,34	SGR-ISO-0700
90	105,5	6,3	94,62 x 5,34	SGR-ISO-0900
110	125,5	6,3	116,84 x 5,34	SGR-ISO-1100
125	140,5	6,3	129,54 x 5,34	SGR-ISO-1250
140	155,5	6,3	145,42 x 5,34	SGR-ISO-1400
160	175,5	6,3	164,47 x 5,34	SGR-ISO-1600

SGR-ISO seals for housings following ISO 7425/2 are marked with a chamfer **A** on the corner of outside diameter (pressure side). ATTENTION, outside diameter of housing is larger than the standard **SGR**.