

液压密封件

HYDRAULIC SEALS

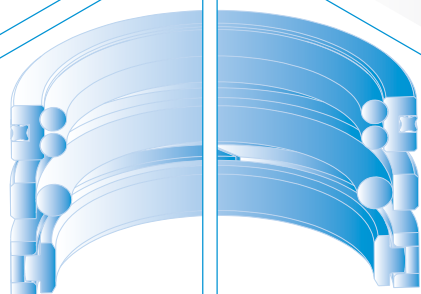
液压密封件

气动密封件

金属端面密封件

泛塞密封件

导向支撑元件



Company Profile

Established in Xiamen in 2001, Xiamen TuoYan Seals Technology Co., Ltd. specializes in the research and development of sealing solutions and sealing components for fluid power systems. The company integrates research and development, production, and sales, and has complete production and testing equipment, including CNC machining centers, CNC lathes, large hydraulic presses, computer-controlled sintering furnaces, flat vulcanizing machines, precision injection molding machines, fully automatic fiber impregnation machines, and laminating machines.

Our company is certified with ISO 9001:2015, and we continually invest in product development and innovation to provide customers with high-quality products and exceptional sealing solutions. We have received high praise from customers both domestically and internationally. We have established three subsidiary companies, each specializing in producing premium sealing components in different sealing domains.

Xiamen TYS Seals Technology Co.,Ltd.

Focuses on the production and development of rubber, polyurethane, and polytetrafluoroethylene (PTFE) seals.

Add.: No.9-5-1, Xingmei Road, Jimei District, Xiamen, Fujian China. 361022
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TYS Seals Technology(WuPing) Co.,Ltd.

Specializes in the production and development of composite material products, including phenolic fabric wear rings, bushings, and bearing cages.

Add.: No.117, Huan Cheng South Road, Wuping County, Longyan City, Fujian China.
Tel: 0597-4802088

Xiamen JingHengYan Sealing Technology Co.,Ltd.

Focuses on the production and development of metal end-face seals, specifically floating seal products.







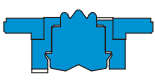








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TYS Seals Technology (Guangzhou) Co.,Ltd.

Sales Center

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Tel: 020-32380255 Fax: 020-3238-0377

Code	Section	Fuction	Limited Condition			Page
			Pressure (MPa)	Speed (m/s)	Temp. (°C)	
SPGO		Piston Seals (Double Acting)	40	5	-45°C +200°C	1 3
SPG		Piston Seals (Double Acting)	35	1.5	-30°C +200°C	4
SPGW		Piston Seals (Double Acting)	50	1.5	-45°C +200°C	5 6
GSD		Piston Seals (Single Acting)	40	5	-30°C +200°C	7 8
DAQ		Piston Seals (Double Acting)	40	2	-30°C +200°C	9 10
AQ5		Piston Seals (Double Acting)	40	2	-30°C +200°C	11 12
DAS		Piston Seals (Double Acting)	40	0.5	-30°C +100°C	13 14
PG		Piston Seals (Double Acting)	35	0.5	-30°C +100°C	15 16
MPA		Rod Seals (Single Acting)	40	0.5	-45°C +120°C	17 20
MPB		Rod Seals (Single Acting)	40	0.5	-45°C +120°C	17 20
MPR		Rod Seals (Single Acting)	40	0.5	-45°C +120°C	17 20
MPS		Rod Seals (Single Acting)	40	0.5	-45°C +120°C	17 20
HBY		Rod Seals (Single Acting)	40	0.5	-30°C +110°C	21
HBYS		Rod Seals (Single Acting)	40	3	-30°C +110°C	22
GSJ		Rod Seals (Single Acting)	40	3	-30°C +110°C	23 25

Code	Section	Function	Limited Condition			Page
			Pressure (MPa)	Speed (m/s)	Temp. (°C)	
GSI		Rod Seals (Double Acting)	40	5	-45°C +200°C	26 28
DH-5		Dust Sels		2	-40°C +110°C	29
DHS		Dust Sels		2	-40°C +110°C	30
GSZ5		Dust Sels		5	-40°C +110°C	31 32
DKBI		Dust Sels		3	-30°C +100°C	33
DKBZ		Dust Sels		3	-30°C +100°C	34
RVA		Rod Vari Seals	45	15	-70°C +260°C	35 36
GRS		Rotary Rod Seals	30	1	-30°C +200°C	37 38
ROI		Rotary Rod Seals	28	0.3	-30°C +100°C	39
BRT		Rod Seal Backup rings		1	-45°C +200°C	40
N4W		Piston Backup rings		1	-45°C +120°C	41
KZT		Dust Rings		5	-45°C +200°C	42
WR		Wear Rings		1	-45°C +120°C	43 45
RYT		Guide Tape		5	-45°C +200°C	46

Sealing Component Storage Guidelines and Recommended Shelf Life

Storage Recommendations :

Stock Control	Follow the First-In-First-Out (FIFO) principle
Optimal Temp.	Seals should be kept away from heat sources like direct sunlight and heat-emitting objects. The maximum storage temperature is +32°C. Low temperatures won't cause permanent damage to the seals but can make them brittle, leading to potential breakage if mishandled. Generally, the storage temperature for seals should not go below +10°C, and they should be brought to room temperature before installation.
Avoid strong light	Surfaces should be shielded from direct sunlight and artificial light sources to prevent exposure to ultraviolet radiation.
Moisture control	Special care should be taken during storage, and the ambient humidity should not exceed 65%. Some specific polyurethane seals that are sensitive to moisture should be stored in sealed containers
Keep away from oxygen and ozone	Ozone and oxygen are harmful to seals. Seals should be stored in sealed containers. Any equipment that generates sparks should be kept away from the storage containers.
Keep away from	For seals to have a longer storage life, they should be kept away from contaminants. The warehouse should be kept clean.
Avoid distortion	Large seals should be stored flat instead of hanging, as prolonged hanging can cause distortion. Seals should not be placed on hooks, nails, or metal plates.

Recommended Shelf Life :

化合物名称	Compounds	Shelf Life
Aflas®	FEPM	7 Years
乙丙橡胶	EP, EPR, EPDM	7 Years
氟橡胶	FKM	7 Years
丁腈橡胶	NBR, HNBR, XNBR	7 Years
聚氨酯	AU or EU	10 Years
聚酯弹性体	TPCE	10 Years
聚四氟乙烯	PTFE	Unlimited



Specification

Name	Bore Dia.	Groove Dia.	Width
	D	d	H
SPGO	8	3.1	2.2
SPGO	10	5.1	2.2
SPGO	12	7.1	2.2
SPGO	14	9.1	2.2
SPGO	16	11.1	2.2
SPGO	17	12.1	2.2
SPGO	18	13.1	2.2
SPGO	19	14.1	2.2
SPGO	20	15.1	2.2
SPGO	21	16.1	2.2
SPGO	22	17.1	2.2
SPGO	24	19.1	2.2
SPGO	15	7.5	3.2
SPGO	16	8.5	3.2
SPGO	18	10.5	3.2
SPGO	20	12.5	3.2
SPGO	21	13.5	3.2
SPGO	22	14.5	3.2
SPGO	24	16.5	3.2
SPGO	25	17.5	3.2
SPGO	28	20.5	3.2
SPGO	30	22.5	3.2
SPGO	32	24.5	3.2
SPGO	35	27.5	3.2
SPGO	36	28.5	3.2
SPGO	38	30.5	3.2
SPGO	40	29	4.2
SPGO	42	31	4.2
SPGO	45	34	4.2
SPGO	48	37	4.2
SPGO	50	39	4.2
SPGO	52	41	4.2
SPGO	55	44	4.2
SPGO	60	49	4.2
SPGO	63	52	4.2
SPGO	65	54	4.2
SPGO	70	59	4.2
SPGO	75	64	4.2
SPGO	80	69	4.2
SPGO	50	34.5	6.3
SPGO	55	39.5	6.3
SPGO	60	44.5	6.3

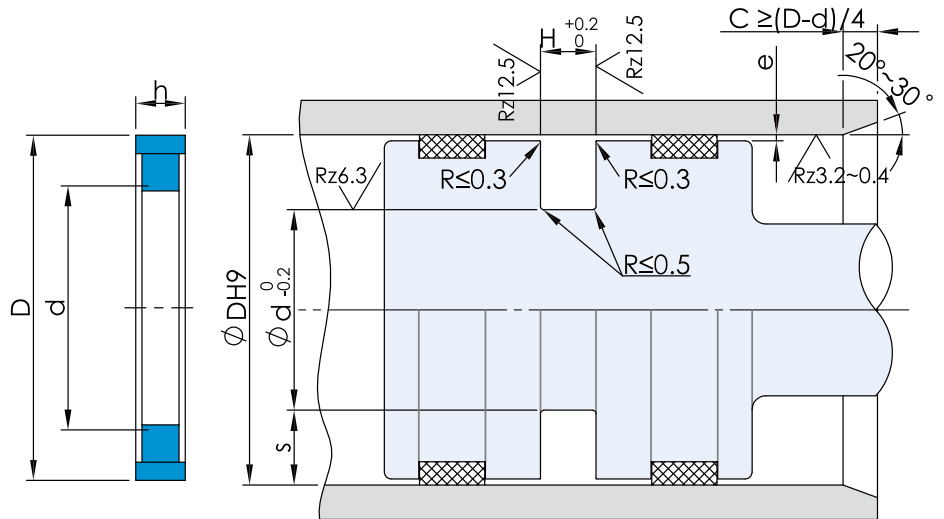
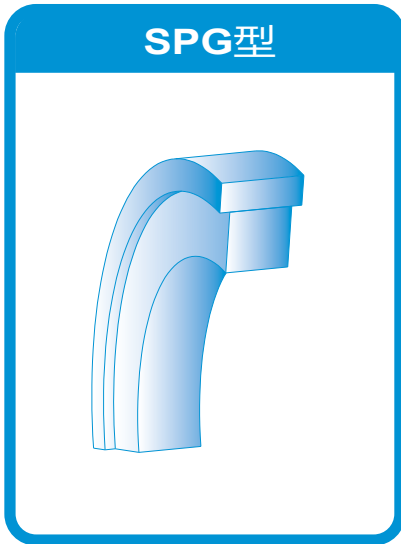
Name	Bore Dia.	Groove Dia.	Width
	D	d	H
SPGO	63	47.5	6.3
SPGO	65	49.5	6.3
SPGO	68	52.5	6.3
SPGO	70	54.5	6.3
SPGO	75	59.5	6.3
SPGO	80	64.5	6.3
SPGO	85	69.5	6.3
SPGO	90	74.5	6.3
SPGO	95	79.5	6.3
SPGO	100	84.5	6.3
SPGO	105	89.5	6.3
SPGO	110	94.5	6.3
SPGO	115	99.5	6.3
SPGO	120	104.5	6.3
SPGO	125	109.5	6.3
SPGO	130	114.5	6.3
SPGO	135	119.5	6.3
SPGO	140	124.5	6.3
SPGO	70	49	8.1
SPGO	75	54	8.1
SPGO	80	59	8.1
SPGO	85	64	8.1
SPGO	90	69	8.1
SPGO	95	74	8.1
SPGO	100	79	8.1
SPGO	105	84	8.1
SPGO	110	89	8.1
SPGO	115	94	8.1
SPGO	120	99	8.1
SPGO	125	104	8.1
SPGO	130	109	8.1
SPGO	135	114	8.1
SPGO	140	119	8.1
SPGO	145	124	8.1
SPGO	150	129	8.1
SPGO	155	134	8.1
SPGO	160	139	8.1
SPGO	165	144	8.1
SPGO	170	149	8.1
SPGO	175	154	8.1
SPGO	180	159	8.1
SPGO	185	164	8.1



SPGO 活塞密封/Piston seals

Name	Bore Dia.	Groove Dia.	Width
	D	d	H
SPGO	190	169	8.1
SPGO	195	174	8.1
SPGO	200	179	8.1
SPGO	205	184	8.1
SPGO	210	189	8.1
SPGO	215	194	8.1
SPGO	220	199	8.1
SPGO	225	204	8.1
SPGO	230	209	8.1
SPGO	240	219	8.1
SPGO	250	229	8.1
SPGO	260	239	8.1
SPGO	270	249	8.1
SPGO	280	259	8.1
SPGO	290	269	8.1
SPGO	300	279	8.1
SPGO	310	289	8.1
SPGO	320	299	8.1
SPGO	300	275.5	8.1
SPGO	310	285.5	8.1
SPGO	320	295.5	8.1
SPGO	330	305.5	8.1
SPGO	340	315.5	8.1
SPGO	350	325.5	8.1
SPGO	360	335.5	8.1
SPGO	370	345.5	8.1
SPGO	380	355.5	8.1
SPGO	390	365.5	8.1
SPGO	400	375.5	8.1
SPGO	410	385.5	8.1
SPGO	420	395.5	8.1
SPGO	430	405.5	8.1
SPGO	440	415.5	8.1
SPGO	450	425.5	8.1
SPGO	460	435.5	8.1
SPGO	470	445.5	8.1
SPGO	480	455.5	8.1
SPGO	490	465.5	8.1

Name	Bore Dia.	Groove Dia.	Width
	D	d	H
SPGO	500	475.5	8.1
SPGO	510	485.5	8.1
SPGO	520	495.5	8.1
SPGO	530	505.5	8.1
SPGO	540	515.5	8.1
SPGO	550	525.5	8.1
SPGO	560	535.5	8.1
SPGO	570	545.5	8.1
SPGO	580	555.5	8.1
SPGO	590	565.5	8.1
SPGO	600	575.5	8.1
SPGO	610	585.5	8.1
SPGO	620	595.5	8.1
SPGO	630	605.5	8.1
SPGO	640	615.5	8.1
SPGO	650	625.5	8.1
SPGO	660	635.5	8.1
SPGO	670	642	9.5
SPGO	680	652	9.5
SPGO	690	662	9.5
SPGO	700	672	9.5
SPGO	710	682	9.5
SPGO	720	692	9.5
SPGO	740	712	9.5
SPGO	750	722	9.5
SPGO	800	772	9.5
SPGO	900	872	9.5
SPGO	1000	962	13.8
SPGO	1050	1012	13.8
SPGO	1065	1027	13.8
SPGO	1070	1032	13.8
SPGO	1100	1062	13.8
SPGO	1200	1162	13.8
SPGO	1230	1192	13.8
SPGO	1250	1212	13.8
SPGO	1500	1462	13.8
SPGO	1800	1762	13.8
SPGO	2000	1962	13.8



Design Description:

The sliding material used is filled with polytetrafluoroethylene (PTFE). This seal exhibits very low friction resistance, eliminates crawling, and ensures high wear resistance. Due to its bi-directional sealing capability, a single seal eliminates the need for installation space. The elastomeric element is designed in a square shape, which enhances the stability of the seal. This is a standard combination seal widely used in various applications, particularly on pistons.

Technical Specification:

- Working Pressure: 0-35MPa
- Speed: 1.5M/S
- Temperature: -30°C~+200°C (depending on the elastomeric material)

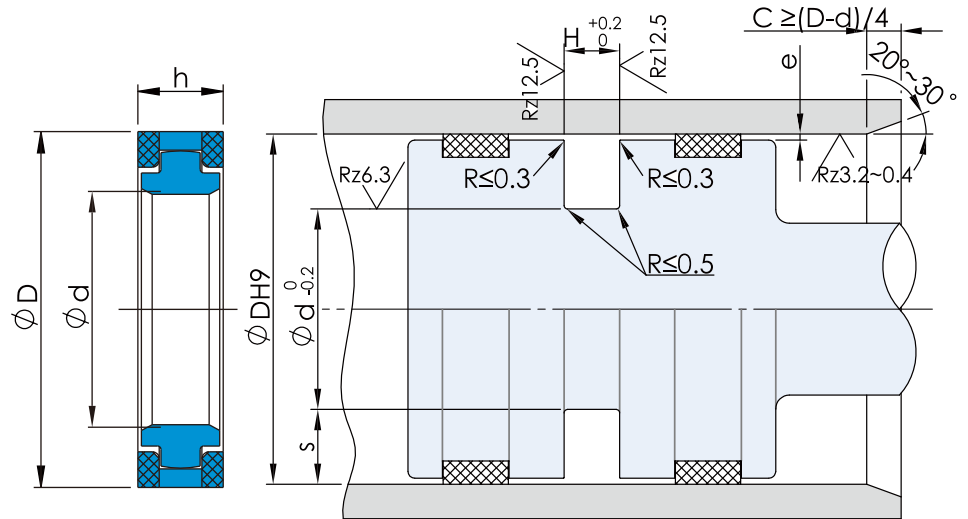
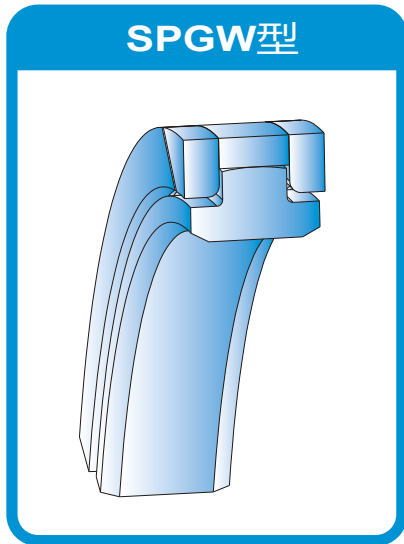
Specification:

Name	D	d	h	H
SPG	40	30	4.3	4.5
SPG	45	35		
SPG	50	40		
SPG	55	45		
SPG	56	46		
SPG	60	50		
SPG	65	55		
SPG	70	60		
SPG	80	70		
SPG	90	80		
SPG	100	90		
SPG	63	48	7.3	7.5
SPG	65	50		
SPG	70	55		
SPG	75	60		
SPG	80	65		
SPG	85	70		
SPG	90	75		
SPG	95	80		
SPG	100	85		
SPG	105	90		

Name	D	d	h	H
SPG	108	92	7.3	7.5
SPG	110	94		
SPG	112	96		
SPG	115	99		
SPG	120	104		
SPG	125	109		
SPG	130	114		
SPG	135	119		
SPG	140	124		
SPG	145	129		
SPG	150	134		
SPG	155	139		
SPG	160	144		
SPG	170	148		
SPG	175	153		
SPG	180	158		
SPG	190	168		
SPG	200	178		
SPG	220	198		
SPG	225	203		
SPG	270	248		



SPGW 活塞密封/Piston seals



Standard Materials:

Sealing ring: filled with polytetrafluoroethylene (F-PTFE)

Elasticity: nitrile rubber (NBR)

Backup ring: modified polyoxymethylene (POM) or modified nylon (PA)

Features:

- Excellent sealing performance in both dynamic and static conditions
- Allows for larger extrusion gaps, reducing processing costs depending on the application
- Can be safely used in media with contaminants due to the larger extrusion gaps
- Low friction and no crawling phenomenon
- Simple groove design, suitable for integral pistons
- If there are special requirements (pressure, temperature, speed, special media, etc.), please contact our consulting service department for recommendations on suitable materials.

Technical Specification:

- Pressure: 50MPa
- Speed: 1.5M/S
- Temperature: $-45^\circ\text{C} \sim +120^\circ\text{C}$
- Medium: Mineral hydraulic oil, fire-resistant hydraulic oil, environmentally friendly hydraulic oil, water, air, and other media, depending on the seal material

Applications:

These seals excel in hydraulic systems and reciprocating motion applications, particularly in heavy-duty, bi-directional piston sealing scenarios under high pressure, low pressure, and high-frequency conditions. They are suitable for both long and short strokes and can accommodate larger piston clearances in situations involving a wide range of fluids and high temperatures. They are primarily used for piston sealing in heavy-duty or construction machinery, offering excellent leak control, extrusion resistance, and durability, such as in excavators and heavy hydraulic cylinders.

Bore Diam.	Groove Diam.	Groove Width	Seal's Width	Radial Clearance Max. e	
D (H9)	d (h9)	H+0.2	h	32Mpa	50Mpa
50-60	D-14	9.0	8.5	0.54	0.39
63-95	D-15	11.0	10.5	0.80	0.42
100-120	D-15	12.5	12.0	0.80	0.42
125-240	D-23	16.0	15.5	0.79	0.44
≥ 250	D-28	17.5	17.0	0.83	0.47



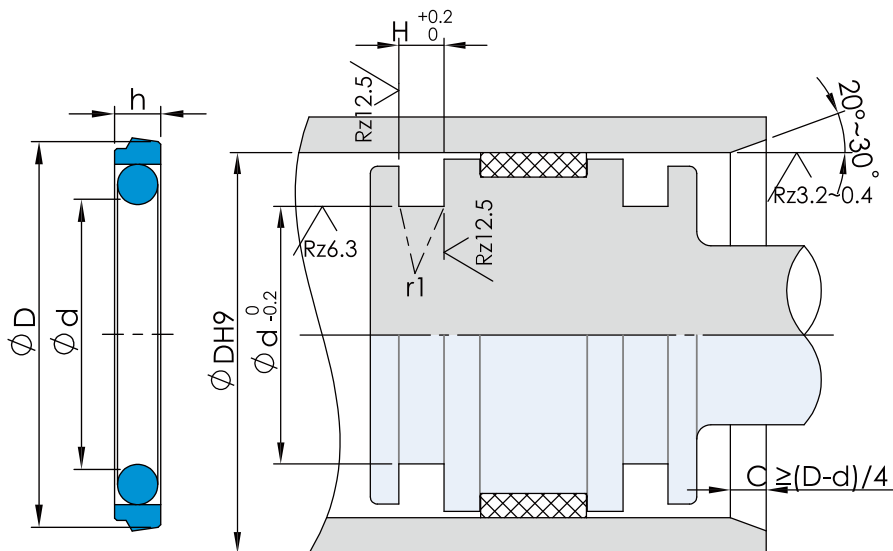
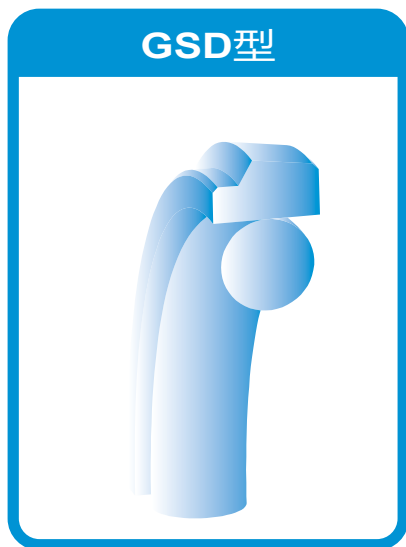
Specification:

Name	Nominal Dimension			H
	D	d	h	
SPGW-50	50	36	8.5	9.0
SPGW-55	55	41	8.5	9.0
SPGW-60	60	46	8.5	9.0
SPGW-63	63	48	10.5	11.0
SPGW-65	65	50	10.5	11.0
SPGW-70	70	55	10.5	11.0
SPGW-75	75	60	10.5	11.0
SPGW-80	80	65	10.5	11.0
SPGW-85	85	70	10.5	11.0
SPGW-90	90	75	10.5	11.0
SPGW-95	95	80	10.5	11.0
SPGW-100	100	85	12.0	12.5
SPGW-105	105	90	12.0	12.5
SPGW-110	110	95	12.0	12.5
SPGW-115	115	100	12.0	12.5
SPGW-120	120	105	12.0	12.5
SPGW-125	125	102	15.5	16.0
SPGW-130	130	107	15.5	16.0
SPGW-135	135	112	15.5	16.0
SPGW-140	140	117	15.5	16.0
SPGW-145	145	122	15.5	16.0
SPGW-150	150	127	15.5	16.0
SPGW-155	155	132	15.5	16.0
SPGW-160	160	137	15.5	16.0
SPGW-165	165	142	15.5	16.0
SPGW-170	170	147	15.5	16.0
SPGW-175	175	152	15.5	16.0
SPGW-180	180	157	15.5	16.0
SPGW-185	185	162	15.5	16.0

Name	Nominal Dimension			H
	D	d	h	
SPGW-190	190	167	15.5	16.0
SPGW-195	195	172	15.5	16.0
SPGW-200	200	177	15.5	16.0
SPGW-205	205	182	15.5	16.0
SPGW-210	210	187	15.5	16.0
SPGW-215	215	192	15.5	16.0
SPGW-220	220	197	15.5	16.0
SPGW-225	225	202	15.5	16.0
SPGW-230	230	207	15.5	16.0
SPGW-240	240	217	15.5	16.0
SPGW-250	250	222	17.0	17.5
SPGW-260	260	232	17.0	17.5
SPGW-270	270	242	17.0	17.5
SPGW-280	280	252	17.0	17.5
SPGW-290	290	262	17.0	17.5
SPGW-300	300	272	17.0	17.5
SPGW-310	310	282	17.0	17.5
SPGW-320	320	292	17.0	17.5
Inch Dimension				
SPGW	3.00	2.52	0.559	0.579
SPGW	3.25	2.77	0.559	0.579
SPGW	3.50	3.02	0.559	0.579
SPGW	4.00	3.52	0.559	0.579
SPGW	4.25	3.77	0.559	0.579
SPGW	4.50	4.02	0.559	0.579
SPGW	4.75	4.27	0.559	0.579
SPGW	5.00	4.52	0.559	0.579
SPGW	5.25	4.77	0.559	0.579
SPGW	5.50	5.02	0.559	0.579



GSD 活塞密封/Piston seals



Design Description:

The GSD piston seal is suitable for use as a unidirectional sealing component due to its excellent sealing performance, making it ideal for applications that require precise positioning and oil-free lubrication. The contact area of the seal is small, resulting in low friction.

Applications:

It is used for unidirectional pistons in hydraulic components, such as injection molding machines, machine tools, and presses. It is particularly recommended to be used as the first seal on the pressure oil side of piston accumulators, in conjunction with DAQ seals or AQ5 seals.

Technical Specification:

- Pressure: 40 MPa
- Speed: 5 m/s
- Temperature: -30°C to +200°C (depending on the elastomeric material)
- Media: All common hydraulic oils, including bio-oils and gases.
- Radial clearance: The maximum allowable radial clearance (e_{max}) depends on the working pressure and functional diameter.

Materials:

Sealing ring: filled polytetrafluoroethylene (F-PTFE)

O-ring: nitrile rubber (NBR) or fluoroelastomer (FKM)

Installation Dimension:

Bore Diameter (D)			Groove Dia.	Groove Width	Radius	Radial Clearance e _{max}			O Ring Section
Standard Usage	Light-duty	Heavy-duty				10 Mpa	20 Mpa	40Mpa	
8-16.9	17-26.9	- -	D-4.9	2.2	0.4	0.30	0.20	0.15	1.78
17-26.9	27-59.9	- -	D-7.3	3.2	0.6	0.40	0.25	0.15	2.62
27-59.9	60-199.9	17-26.9	D-10.7	4.2	1	0.50	0.30	0.20	3.53
60-199.9	200-255.9	27-59.9	D-15.1	6.3	1.3	0.70	0.40	0.25	5.33
200-255.9	256-669.9	60-199.9	D-20.5	8.1	1.8	0.70	0.60	0.35	7.00
256-669.9	670-999.9	200-255.9	D-24	8.1	1.8	0.90	0.70	0.40	7.00
670-999.9	≧1000	256-669.9	D-27.3	9.5	2.5	1.00	0.80	0.50	8.40
≧1000	- -	670-999.9	D-38.0	13.8	3.0	1.20	0.90	0.60	12.00



Specification:

Name	D	d	H
GSD	8	3.1	2.2
GSD	10	5.1	2.2
GSD	12	7.1	2.2
GSD	14	9.1	2.2
GSD	16	11.1	2.2
GSD	17	9.7	3.2
GSD	18	10.7	3.2
GSD	19	11.7	3.2
GSD	20	12.7	3.2
GSD	15	7.7	3.2
GSD	16	8.7	3.2
GSD	18	10.7	3.2
GSD	20	12.7	3.2
GSD	21	13.7	3.2
GSD	22	14.7	3.2
GSD	24	16.7	3.2
GSD	25	17.7	3.2
GSD	28	17.3	4.2
GSD	30	19.3	4.2
GSD	40	29.3	4.2
GSD	42	31.3	4.2
GSD	45	34.3	4.2
GSD	48	37.3	4.2
GSD	50	39.3	4.2
GSD	52	41.3	4.2
GSD	55	44.3	4.2
GSD	60	44.9	6.3
GSD	63	47.9	6.3
GSD	65	49.9	6.3
GSD	70	54.9	6.3
GSD	75	59.9	6.3
GSD	80	64.9	6.3
GSD	50	34.9	6.3
GSD	55	39.9	6.3
GSD	60	44.9	6.3
GSD	63	47.9	6.3
GSD	65	49.9	6.3
GSD	68	52.9	6.3
GSD	70	54.9	6.3
GSD	75	59.9	6.3
GSD	80	64.9	6.3
GSD	85	69.9	6.3
GSD	90	74.9	6.3
GSD	95	79.9	6.3
GSD	100	84.9	6.3

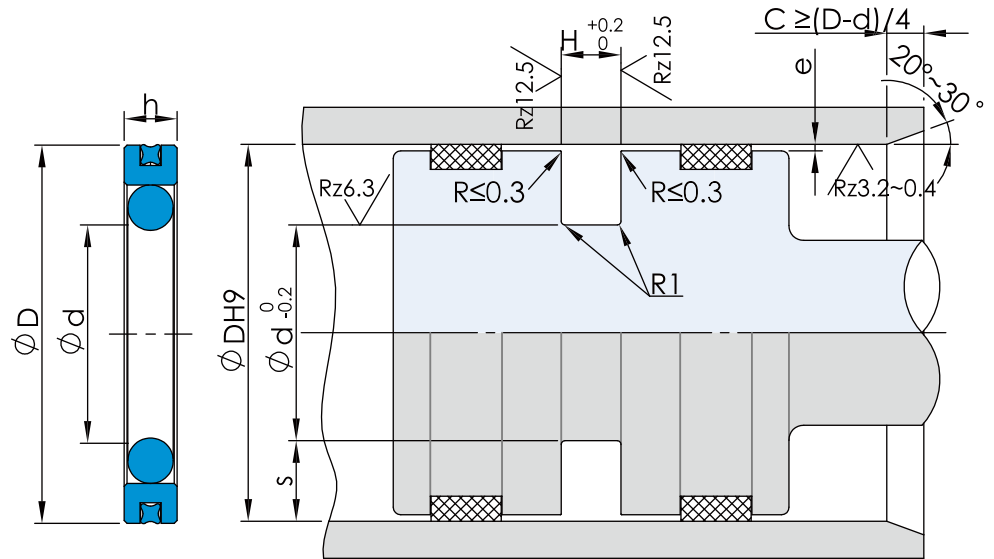
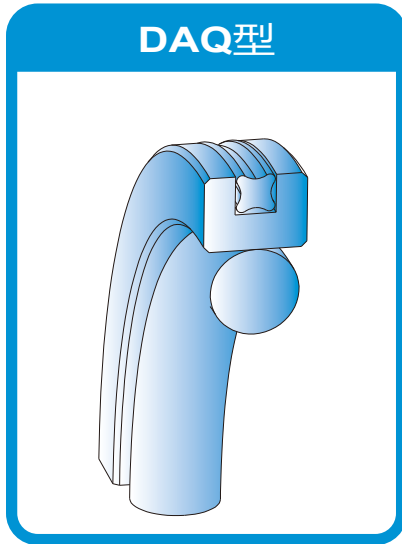
Name	D	d	H
GSD	105	89.9	6.3
GSD	110	94.9	6.3
GSD	120	104.9	6.3
GSD	70	49.5	8.1
GSD	75	54.5	8.1
GSD	80	59.5	8.1
GSD	85	64.5	8.1
GSD	90	69.5	8.1
GSD	95	74.5	8.1
GSD	100	79.5	8.1
GSD	105	84.5	8.1
GSD	110	89.5	8.1
GSD	115	94.5	8.1
GSD	120	99.5	8.1
GSD	125	104.5	8.1
GSD	130	109.5	8.1
GSD	135	114.5	8.1
GSD	140	119.5	8.1
GSD	145	124.5	8.1
GSD	150	129.5	8.1
GSD	155	134.5	8.1
GSD	160	139.5	8.1
GSD	165	144.5	8.1
GSD	170	149.5	8.1
GSD	175	154.5	8.1
GSD	180	159.5	8.1
GSD	185	164.5	8.1
GSD	190	169.5	8.1
GSD	195	174.5	8.1
GSD	200	179.5	8.1
GSD	205	184.5	8.1
GSD	210	189.5	8.1
GSD	215	194.5	8.1
GSD	220	199.5	8.1
GSD	225	204.5	8.1
GSD	230	209.5	8.1
GSD	240	219.5	8.1
GSD	250	229.5	8.1
GSD	260	236	8.1
GSD	270	246	8.1
GSD	280	256	8.1
GSD	290	266	8.1
GSD	300	276	8.1
GSD	310	286	8.1
GSD	320	296	8.1

若客户要求尺寸表内没有记录的尺寸，请另行与我司联系

If your required sizes are not listed in the table, please kindly contact us.



DAQ活塞密封/Piston seals



Design Description:

The DAQ piston seal is a double-acting seal, with a PTFE sealing ring and a star-shaped ring responsible for dynamic sealing, while an O-ring provides static sealing.

Applications :

It is widely used in equipment such as machine tools, presses, accumulators, stabilizers, and heavy-duty suspension cylinders.

Installation Dimension:

Technical Specification:

- Pressure: 40MPa
- Speed: 2M/S
- Temperature: -30°C to +200°C (depending on the elastomeric material)
- Medium: All common hydraulic oils, including bio-oils and gases.
- Clearance: The maximum allowable radial clearance (emax) depends on the working pressure and functional diameter.

Materials:

Sealing ring: filled polytetrafluoroethylene (F-PTFE)

O-ring: nitrile rubber (NBR) or fluoroelastomer (FKM)

Quard ring: nitrile rubber (NBR) or fluoroelastomer (FKM)

Bore Diameter (D)		Groove Dia.	Groove Width	Radius	Radial Clearance e max			O Ring Section	Quard Ring Section
Standard	Light-duty	d	H	R1	10Mpa	20Mpa	40Mpa	d0	W
15-39.9	40-79.9	D-11.0	4.2	1.0	0.25	0.15	0.10	3.53	1.78
40-79.9	80-132.9	D-15.5	6.3	1.3	0.30	0.20	0.15	5.33	1.78
80-132.9	133-252.9	D-21.0	8.1	1.8	0.30	0.20	0.15	7.00	2.62
133-252.9	--	D-24.5	8.1	1.8	0.30	0.20	0.15	7.00	2.62
253-462.9	--	D-28	9.5	2.5	0.45	0.30	0.25	8.40	3.53
463-700	--	D-35	11.5	3.0	0.55	0.40	0.35	10.00	5.33



Specification:

Name	Bore Dia.	Groove Dia.	Groove Width
	D	d	H
DAQ	16	5	4.2
DAQ	18	7	4.2
DAQ	20	9	4.2
DAQ	22	11	4.2
DAQ	25	14	4.2
DAQ	28	17	4.2
DAQ	30	19	4.2
DAQ	32	21	4.2
DAQ	35	24	4.2
DAQ	40	24.5	6.3
DAQ	45	29.5	6.3
DAQ	50	34.5	6.3
DAQ	55	39.5	6.3
DAQ	60	44.5	6.3
DAQ	63	47.5	6.3
DAQ	65	49.5	6.3
DAQ	70	54.5	6.3
DAQ	75	59.5	6.3
DAQ	80	59	8.1
DAQ	85	64	8.1
DAQ	90	69	8.1
DAQ	95	74	8.1
DAQ	100	79	8.1
DAQ	105	84	8.1
DAQ	110	89	8.1

Name	Bore Dia.	Groove Dia.	Groove Width
	D	d	H
DAQ	115	94	8.1
DAQ	120	99	8.1
DAQ	125	104	8.1
DAQ	130	109	8.1
DAQ	135	110.5	8.1
DAQ	140	115.5	8.1
DAQ	150	125.5	8.1
DAQ	160	135.5	8.1
DAQ	170	145.5	8.1
DAQ	180	155.5	8.1
DAQ	190	165.5	8.1
DAQ	200	175.5	8.1
DAQ	210	185.5	8.1
DAQ	220	195.5	8.1
DAQ	230	205.5	8.1
DAQ	240	215.5	8.1
DAQ	250	225.5	8.1
DAQ	260	232	9.5
DAQ	270	242	9.5
DAQ	280	252	9.5
DAQ	290	262	9.5
DAQ	300	272	9.5
DAQ	310	282	9.5
DAQ	320	292	9.5

If your required sizes are not listed in the table, please kindly contact us.



Specification:

Name	Bore Dia.	Groove Dia.	Groove Width
	D	d	H
AQ5	40	30	6.3
AQ5	42	32	6.3
AQ5	45	35	6.3
AQ5	48	38	6.3
AQ5	50	40	6.3
AQ5	52	42	6.3
AQ5	55	45	6.3
AQ5	60	50	6.3
AQ5	63	53	6.3
AQ5	65	55	6.3
AQ5	70	60	6.3
AQ5	75	65	6.3
AQ5	80	67	8.3
AQ5	85	72	8.3
AQ5	90	77	8.3
AQ5	95	82	8.3
AQ5	100	87	8.3
AQ5	105	92	8.3
AQ5	110	97	8.3
AQ5	115	102	8.3
AQ5	120	107	8.3
AQ5	125	112	8.3
AQ5	130	117	8.3

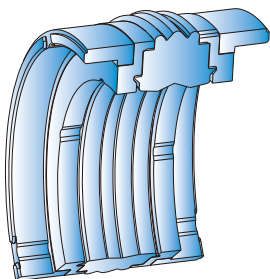
Name	Bore Dia.	Groove Dia.	Groove Width
	D	d	H
AQ5	135	117	12.3
AQ5	140	122	12.3
DAQ	150	132	12.3
DAQ	160	142	12.3
DAQ	170	152	12.3
DAQ	180	162	12.3
DAQ	190	172	12.3
DAQ	200	182	12.3
DAQ	210	192	12.3
DAQ	220	202	12.3
DAQ	230	212	12.3
DAQ	240	222	12.3
DAQ	250	232	12.3
DAQ	260	242	12.3
DAQ	270	252	12.3
DAQ	280	262	12.3
DAQ	290	272	12.3
DAQ	300	282	12.3
DAQ	310	292	12.3
DAQ	320	302	12.3

If your required sizes are not listed in the table, please kindly contact us.



DAS活塞密封/Piston seals

DAS型



Design Description:

The DAS combination seal is a double-acting sealing and guiding component consisting of an elastomeric sealing ring, two backup rings, and two guide rings. The sealing ring provides excellent sealing performance in both static and dynamic conditions, while the backup rings prevent extrusion of the rubber sealing ring. The guide rings serve as effective support elements, and the unique structural design of the elastomeric component ensures distortion-free installation within the groove. The DAS seal is a compact combination of sealing and guiding, suitable for installation in open or closed grooves, enabling applications in extremely tight spaces.

Technical Specification:

- Pressure: 40 MPa
- Speed: 0.5 m/s
- Temperature: -30°C to +100°C

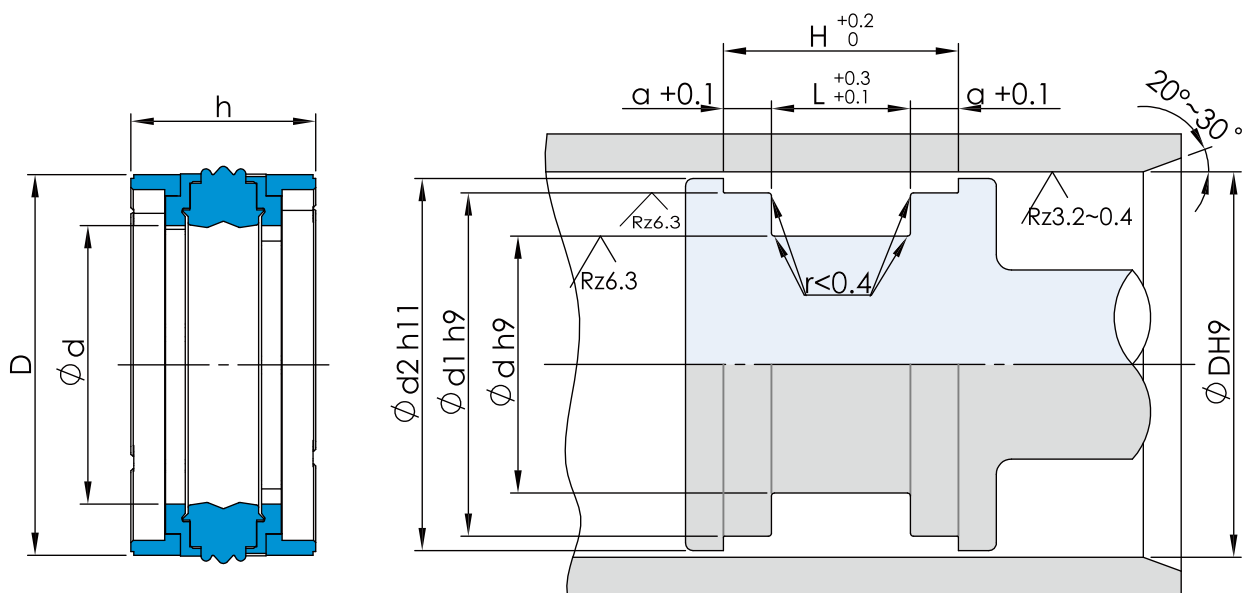
Medium: Compatible with common hydraulic oils.

Materials:

Sealing Ring: Nitrile rubber (NBR)

Backup Rings: High-strength polyester elastomer

Guide Rings: Modified polyoxymethylene (POM)



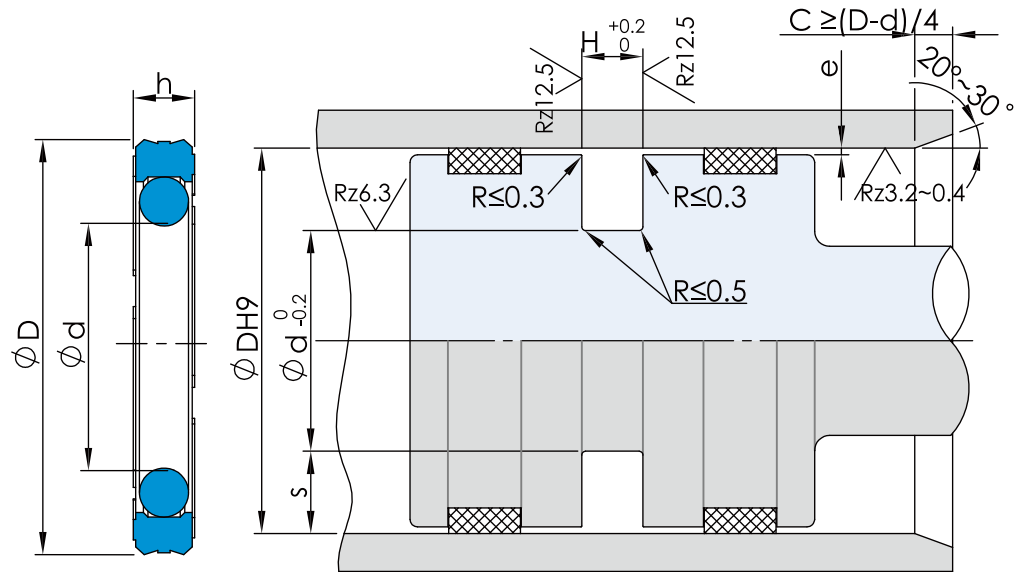
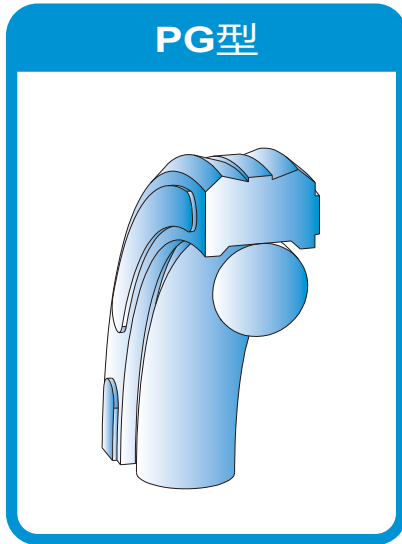
DAS活塞密封/Piston seals



Name	D	d	L	H	d1	d2	a
DAS	30.00	21.00	13.50	17.70	27.00	29.00	2.10
DAS	32.00	22.00	15.50	20.70	28.00	31.00	2.60
DAS	40.00	30.00	16.40	29.10	35.40	38.50	6.35
DAS	40.00	24.00	18.40	31.10	35.40	38.50	6.35
DAS	45.00	35.00	16.40	29.10	40.40	43.50	6.35
DAS	50.00	34.00	18.40	31.10	45.40	48.50	6.35
DAS	50.00	34.00	20.50	26.70	46.00	49.00	3.10
DAS	50.00	38.00	20.50	28.90	46.00	48.50	4.20
DAS	55.00	39.00	18.40	31.10	50.36	53.50	6.35
DAS	60.00	44.00	18.40	31.10	55.40	58.50	6.35
DAS	60.00	44.00	20.50	26.70	56.00	59.00	3.10
DAS	60.00	48.00	20.50	28.90	56.00	58.50	4.20
DAS	63.00	47.00	18.40	31.10	58.40	61.50	6.35
DAS	63.00	47.00	19.40	32.10	58.40	61.50	6.35
DAS	63.00	47.00	20.50	26.70	59.00	62.00	3.10
DAS	65.00	50.00	18.40	31.10	60.40	63.50	6.35
DAS	65.00	49.00	20.50	26.70	61.00	64.00	3.10
DAS	70.00	54.00	20.50	26.70	66.00	69.00	3.10
DAS	70.00	58.00	20.50	28.90	66.00	68.50	4.20
DAS	70.00	50.00	22.40	35.10	64.20	68.30	6.35
DAS	75.00	55.00	22.40	35.10	69.20	73.30	6.35
DAS	80.00	60.00	22.40	35.10	74.15	78.30	6.35
DAS	80.00	62.00	22.50	29.70	76.00	79.00	3.60
DAS	80.00	66.00	22.50	32.90	76.00	78.50	5.20
DAS	85.00	65.00	22.40	35.10	79.30	83.30	6.35
DAS	90.00	70.00	22.40	35.10	84.15	88.30	6.35
DAS	95.00	75.00	22.40	35.10	89.15	93.30	6.35
DAS	100.00	75.00	22.40	35.10	93.15	98.00	6.35
DAS	105.00	80.00	22.40	35.40	98.10	103.00	6.50
DAS	110.00	85.00	22.40	35.10	103.10	108.00	6.35
DAS	115.00	90.00	22.40	35.10	108.10	113.00	6.35
DAS	120.00	95.00	22.40	35.10	113.10	118.00	6.35
DAS	125.00	100.00	25.40	38.10	118.10	123.00	6.35
DAS	130.00	105.00	25.40	44.40	122.60	127.50	9.50
DAS	140.00	115.00	25.40	38.10	133.00	138.00	6.35
DAS	140.00	115.00	25.40	44.40	132.60	137.50	9.50
DAS	145.00	120.00	25.40	44.40	137.60	142.50	9.50
DAS	150.00	125.00	25.40	44.40	142.60	147.50	9.50
DAS	160.00	135.00	25.40	44.40	152.60	157.50	9.50
DAS	165.00	140.00	25.40	44.40	157.60	162.50	9.50
DAS	170.00	145.00	25.40	50.80	161.70	167.10	12.70
DAS	180.00	155.00	25.40	50.80	171.70	177.10	12.70
DAS	180.00	150.00	35.40	48.10	172.95	177.87	6.35
DAS	190.00	165.00	25.40	50.80	181.70	187.00	12.70
DAS	200.00	175.00	25.40	50.80	191.60	197.00	12.70



PG 活塞密封/Piston seals



Design Description:

The PG-type piston seal is a double-acting sealing component consisting of a preloaded elastomeric O-ring and a specially designed polyurethane sealing outer ring. The two outer sealing lips serve as the main seals, effectively containing the pressure of the fluid from both sides while preventing hydraulic pressure buildup across the entire sealing surface. The support ring located in the middle of the sealing surface, along with the raised edges of the sealing lips, enhances the sealing effect by increasing the contact pressure. The advantages of the PG seal include:

- Excellent dynamic and static sealing performance, ensuring reliable position retention under load.
- Allows for a wide range of cylinder bore surface finishes.
- Low wear rate and long service life.
- Simple groove design, allowing for the use of integral pistons without the need for outer ring reset during installation.

Technical Specification:

- Maximum Speed: 0.5 m/s
- Outer Ring Materials and Maximum Pressure:
- High-strength polyurethane elastomer: 60D, maximum pressure 35 MPa
- Standard polyurethane elastomer: 93A, maximum pressure 25 MPa
- Temperature Range: -35°C to +100°C

Max. Clearance e (mm) :

Pressure Mpa	16	25	35	40
Max. Extrusion ($H > 6$) mm	0.9	0.8	0.5	0.4
Max. Extrusion ($H < 6$) mm	0.7	0.5	0.3	0.2



Specification:

Name	D	d	H
PG	40	29	4.2
PG	45	34	4.2
PG	50	39	4.2
PG	60	49	4.2
PG	63	52	4.2
PG	70	59	4.2
PG	50	34.5	6.3
PG	55	39.5	6.3
PG	60	44.5	6.3
PG	65	49.5	6.3
PG	70	54.5	6.3
PG	75	59.5	6.3
PG	80	64.5	6.3
PG	85	69.5	6.3
PG	90	74.5	6.3
PG	95	79.5	6.3
PG	100	84.5	6.3
PG	105	89.5	6.3
PG	110	94.5	6.3
PG	115	99.5	6.3
PG	120	104.5	6.3
PG	125	109.5	6.3
PG	130	114.5	6.3

Name	D	d	H
PG	85	64	8.1
PG	90	69	8.1
PG	95	74	8.1
PG	100	79	8.1
PG	105	84	8.1
PG	110	89	8.1
PG	115	94	8.1
PG	120	99	8.1
PG	125	104	8.1
PG	130	109	8.1
PG	135	114	8.1
PG	140	119	8.1
PG	145	124	8.1
PG	150	129	8.1
PG	155	134	8.1
PG	160	139	8.1
PG	165	144	8.1
PG	170	149	8.1
PG	180	159	8.1
PG	190	169	8.1
PG	200	179	8.1
PG	210	189	8.1
PG	220	199	8.1



活塞杆主油封/Rod seals

MPA型

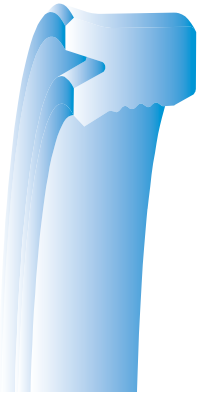


Design Description:

The MPA type is an asymmetric lip seal with a tight-fitting outer diameter and a recessed inner lip. It exhibits excellent static and dynamic sealing performance, along with the ability to effectively draw back residual oil. Its advantages include:

- Excellent static and dynamic sealing performance
- Good oil back-draw capability
- Minimal deformation
- Easy installation

MPB型

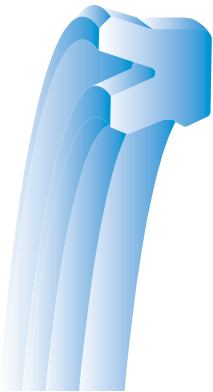


Design Description:

The MPB type is a tight-fitting, polyurethane lip seal with multiple oil grooves on the inner lip. Its design ensures excellent lubrication, preventing dry friction and wear, while offering good oil back-draw capability. Its advantages include:

- Excellent static and dynamic sealing performance
- Low friction and smooth sliding performance at high and low speeds
- Good oil back-draw capability
- Minimal deformation

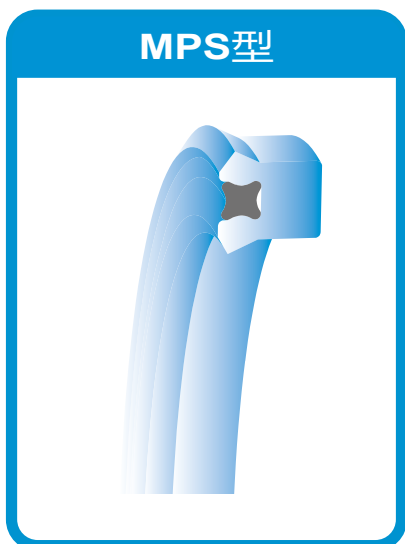
MPR型



Design Description:

The MPR type is a double-lip seal for piston rods, featuring two sealing lips tightly fitted on the outer diameter. The additional lubricant between the two lips effectively prevents dry friction and wear. Its advantages include:

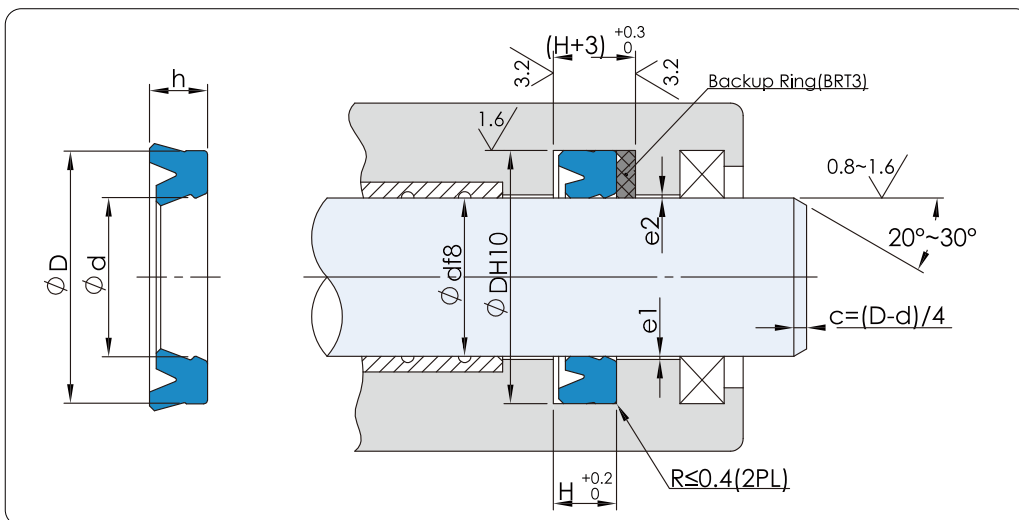
- Excellent static and dynamic sealing performance
- Ample lubrication provided by the pressure medium between the inner sealing lips
- Improved sealing under zero pressure
- Exceptional prevention of external air and contaminants infiltration



The MPS type is the result of advancements in lip seal technology. It combines the advantages of a highly elastic Quard ring and a lip sealing material with excellent wear resistance.

This specialized sealing component, primarily used in mobile equipment, incorporates the unique structure of the Quard ring. The Quard ring ensures a preloading effect on the sealing lips under low pressure or vacuum conditions. It exhibits minimal sensitivity to temperature variations, and even with some degree of wear, it maintains the necessary preloading effect. The lips are loaded as the system pressure increases, with the pressure transmitted to the lips through the compressed deformation of the Quard ring. The advantages of the MPS seal include:

- Insensitivity to vibration loads and pressure spikes.
- High resistance to extrusion.
- Ideal sealing performance under no-load and low-temperature conditions.
- Suitable for the most demanding operating conditions.



Max extrusion gap (e1mm)

截面宽 Depth S	16MPa	25MPa	40MPa
4	0.4	0.3	0.15
5	0.5	0.4	0.2
7.5	0.55	0.45	0.25
10	0.6	0.5	0.3

最大工作压力 (for pressures)	14MPa	21MPa	35MPa
垫片材料 (Backup Ring Material)	聚四氟乙烯 (PTFE)		
e2	e1+0.5	e1+0.25	e1+0.1
最大工作压力 (for pressures)	35MPa	42MPa	70MPa
垫片材料 (Backup Ring Material)	尼龙 (NYLON)		
e2	e1+0.4	e1+0.2	e1+0.1

Technical Specification:

压力/Pressure	40MPa			
速度/Speed	0.5m/s			
材料/Material (PU)	U3091	U4031	U2051	U2041
温度/Temperature(°C)	-45+100	-35+100	-25+120	-30+120
介质/Media	矿物基液压油/MineralBaseHydraulicOil			

Order Method:
MPR-D*d*h U2041



活塞杆主油封/Rod seals

Specification:

d	D	h	H
14	22	5	5.7
16	24	5	5.7
16	24	5.7	6.3
18	26	5	5.7
18	26	5.7	6.3
20	28	5	5.7
20	28	5.7	6.3
20	28	6.3	7
22	30	5	5.7
22	30	5.7	6.3
22	30	6.3	7
25	33	5	5.7
25	33	5.7	6.3
25	33	6.3	7
25	35	6	7
28	36	5	5.7
28	36	5.7	6.3
28	36	6.3	7
28	38	6	7
28	38	7	8
30	38	5	5.7
30	38	5.7	6.3
30	38	6.3	7
30	40	6	7
30	40	7	8
30	40	8	9
32	40	6.3	7
32	42	6	7
32	42	7	8
32	42	8	9
35	43	6.3	7
35	45	6	7
35	45	7	8
35	45	8	9
36	46	6	7
36	46	7	8
36	46	8	9
38	48	6	7
38	48	7	8
38	48	8	9
40	50	6	7

d	D	h	H
40	50	7	8
40	50	8	9
40	55	9	10
40	53	10	11
45	55	6	7
45	55	7	8
45	55	8	9
45	60	9	10
45	58	10	11
45	60	11.4	12.5
50	60	6	7
50	60	7	8
50	60	8	9
50	65	9	10
50	63	10	11
50	65	11.4	12.5
53	63	6	7
53	63	7	8
53	63	8	9
55	65	6	7
55	65	7	8
55	65	8	9
55	70	9	10
55	68	10	11
55	70	11.4	12.5
56	71	11.4	12.5
60	70	6	7
60	70	7	8
60	70	8	9
60	75	9	10
60	73	10	11
60	75	11.4	12.5
63	73	6	7
63	73	7	8
63	73	8	9
63	78	9	10
63	78	11.4	12.5
65	75	6	7
65	75	7	8
65	75	8	9
65	80	9	10

d	D	h	H
65	78	10	11
65	80	11.4	12.5
70	80	6	7
70	80	7	8
70	80	8	9
70	85	9	10
70	83	10	11
70	85	11.4	12.5
71	81	6	7
71	81	7	8
71	81	8	9
75	85	6	7
75	85	7	8
75	85	8	9
75	90	9	10
75	88	10	11
75	90	11.4	12.5
80	90	6	7
80	90	7	8
80	90	8	9
80	95	9	10
80	93	10	11
80	95	10	11
80	95	11.4	12.5
80	100	12	13
85	100	9	10
85	98	10	11
85	100	10	11
85	100	11.4	12.5
85	105	12	13
90	105	9	10
90	105	10	11
90	105	11.4	12.5
90	110	12	13
95	110	9	10
95	110	10	11
95	110	11.4	12.5
95	115	12	13
100	115	9	10
100	115	10	11
100	115	11.4	12.5

活塞杆主油封/Rod seals



d	D	h	H
100	120	12	13
100	120	15	16
105	120	9	10
105	120	10	11
105	125	12	13
105	125	15	16
110	125	9	10
110	125	10	11
110	130	10	11
110	130	12	13
110	130	15	16
115	130	9	10
115	130	10	11
115	135	12	13
115	135	15	16

d	D	h	H
120	135	9	10
120	135	10	11
120	140	10	11
120	140	12	13
120	140	15	16
120	140	15	16
125	140	9	10
130	145	9	10
130	150	12	13
130	150	15	16
135	150	9	10
140	155	9	10
140	160	12	13
140	160	15	16
145	160	9	10

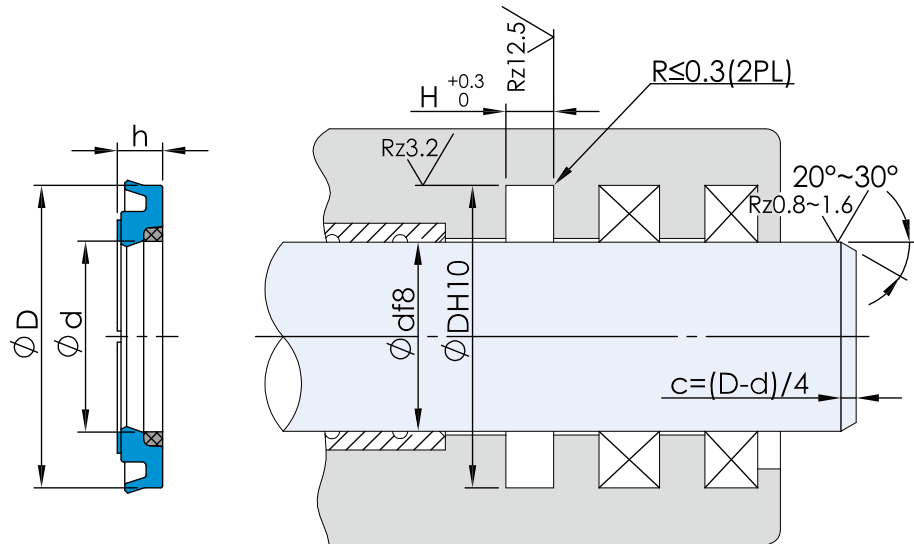
d	D	h	H
150	165	9	10
150	170	12	13
150	170	15	16
155	170	9	10
160	175	9	10
160	180	12	13
160	180	15	16
170	190	12	13
170	190	15	16
180	200	12	13
180	200	15	16
190	210	12	13
190	210	15	16
200	220	12	13
200	220	15	16

Inch Dimension:

mm				inch			
d	D	h	H	d	D	h	H
38.1	47.62	9.53	10.3	1.500	1.875	0.375	0.413
44.45	53.97	9.53	10.3	1.750	2.125	0.375	0.413
50.8	60.32	9.53	10.3	2.000	2.375	0.375	0.413
57.15	66.67	9.53	10.3	2.250	2.625	0.375	0.413
38.1	50.8	9.53	10.5	1.500	2.000	0.375	0.413
44.45	57.15	9.53	10.5	1.750	2.250	0.375	0.413
50.8	63.5	9.53	10.5	2.000	2.500	0.375	0.413
57.15	69.85	9.53	10.5	2.250	2.750	0.375	0.413
63.5	76.2	9.53	10.5	2.500	3.000	0.375	0.413
69.85	82.55	9.53	10.5	2.750	3.250	0.375	0.413
76.2	88.9	9.53	10.5	3.000	3.500	0.375	0.413
82.55	95.25	9.53	10.5	3.250	3.750	0.375	0.413
88.9	101.6	9.53	10.5	3.500	4.000	0.375	0.413
95.25	107.95	9.53	10.5	3.750	4.250	0.375	0.413
101.6	114.3	9.53	10.5	4.000	4.500	0.375	0.413



HBY型活塞杆密封/Rod seals



Design Description:

HBY combined with rod seals, to absorb impact and surge pressure under heavy load in order to separate high temperature fluids and improve the service life of the seal element.

Technical specification:

- Max speed: 0.5m/s
- Max pressure: 40Mpa
- Temperature range: $-30\sim110^\circ\text{C}$
- MAT: NY+PU

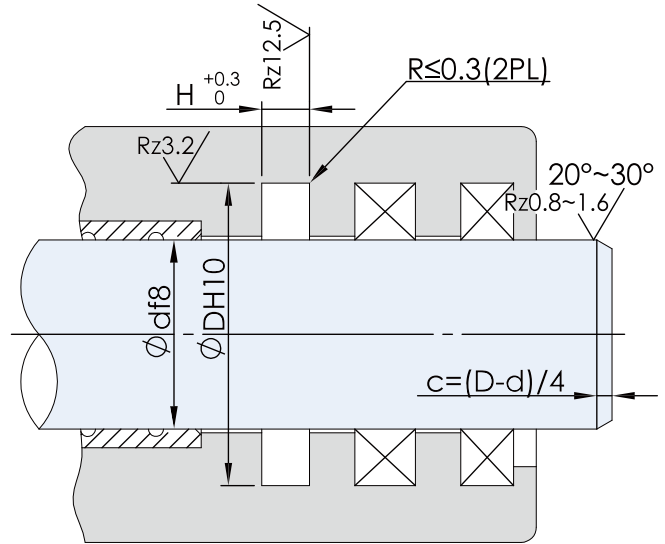
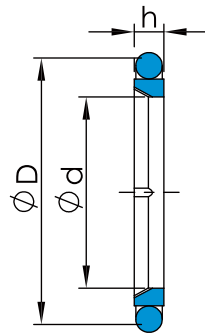
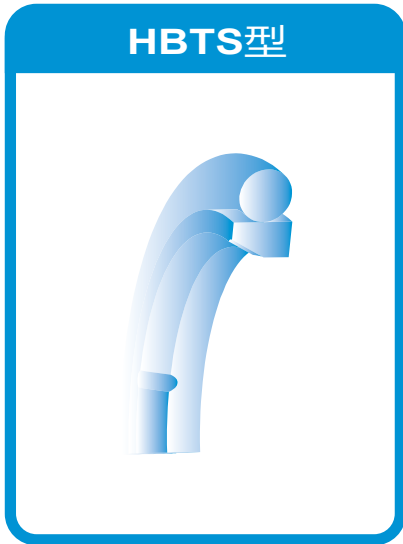
Specification:

d	D	h	H
40	55.5	6	6.3
45	60.5	6	6.3
50	65.5	6	6.3
55	70.5	6	6.3
60	75.5	6	6.3
65	80.5	6	6.3
70	85.5	6	6.3
75	90.5	6	6.3
80	95.5	6	6.3
85	100.5	6	6.3
90	105.5	6	6.3
95	110.5	6	6.3
100	115.5	6	6.3

d	D	h	H
105	120.5	6	6.3
110	125.5	6	6.3
115	130.5	6	6.3
120	135.5	6	6.3
125	140.5	6	6.3
130	145.5	6	6.3
135	150.5	6	6.3
140	155.5	6	6.3
145	160.5	6	6.3
150	165.5	6	6.3
160	175.5	6	6.3
170	185.5	6	6.3
180	195.5	6	6.3

Order Method HBY d*D*H (HBY 40*55.5*6.3)

If your required sizes are not listed in the table, please kindly contact us.



Design Description:

HBTS and HBY have the same functionality and offer lower friction resistance in applications that require high speed or extremely short strokes. They feature a conical surface with relief grooves to release back pressure.

Technical specification:

- Max speed: 3m/ s
- Max pressure: 40MPa
- Temperature range: -30~110°C
(Choosing the appropriate rubber elastomer allows for different temperature ranges to be accommodated.)
- MAT : NBR+Filled PTFE

d	D	h	H
40	55.5	6	6.3
45	60.5	6	6.3
50	65.5	6	6.3
55	70.5	6	6.3
60	75.5	6	6.3
65	80.5	6	6.3
70	85.5	6	6.3
75	90.5	6	6.3
80	95.5	6	6.3
85	100.5	6	6.3
90	105.5	6	6.3
95	110.5	6	6.3
100	115.5	6	6.3
105	120.5	6	6.3
110	125.5	6	6.3
115	130.5	6	6.3
120	135.5	6	6.3
120	141	7.9	8.1
125	140.5	6	6.3

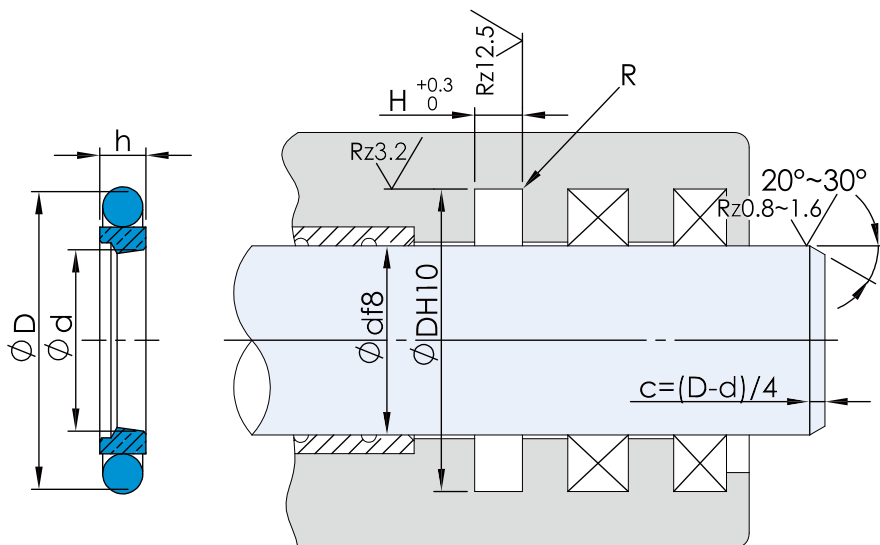
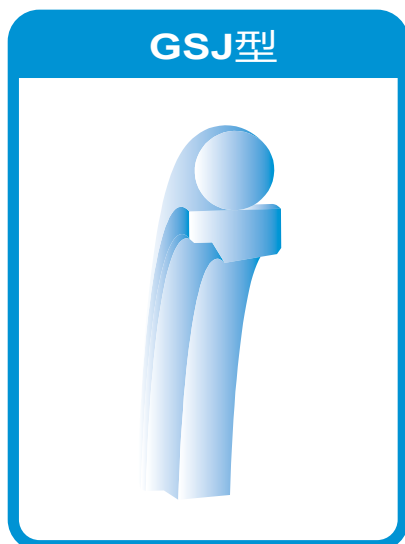
d	D	h	H
125	146	7.9	8.1
130	145.5	6	6.3
130	151	7.9	8.1
135	150.5	6	6.3
135	156	7.9	8.1
140	155.5	6	6.3
140	161	7.9	8.1
145	160.5	6	6.3
150	165.5	6	6.3
150	171	7.9	8.1
160	175.5	6	6.3
160	181	7.9	8.1
170	185.5	6	6.3
170	191	7.9	8.1
180	195.5	6	6.3
180	201	7.9	8.1
190	211	7.9	8.1
200	221	7.9	8.1

Order Method HBTS d*D*H (HBTS 40*55.5*6.3)

If your required sizes are not listed in the table, please kindly contact us.



GSJ活塞杆密封/Rod seals



Design Description:

GJS is an excellent sealing solution for hydraulic reciprocating motion systems, performing well in high, medium, and low-pressure environments, as well as under heavy loads and high-frequency conditions. It is suitable for a wide range of fluid and high-temperature applications, accommodating various stroke lengths and larger piston rod clearances.

Technical specification:

- Max speed: 3m/ s
- Max pressure: 40MPa
- Temperature range: -30~110°C
(Choosing the appropriate rubber elastomer allows for different temperature ranges to be accommodated.)
- MAT : NBR+Filled PTFE

Installation Dimension:

Rod Dia. d h9			Groove Dia.	Groove Width	Radius	Radial Clearance			O Ring Section
Standard Usage	Light-duty	Heavy-duty	D H9	H+0.2	R	10 Mpa	20 Mpa	40 Mpa	d0
3-7.9	8-18.9	-	d+4.9	2.2	0.4	0.30	0.20	0.15	1.78
8-18.9	19-37.9	-	d+7.3	3.2	0.6	0.40	0.25	0.15	2.62
19-37.9	38-199.9	8-18.9	d+10.7	4.2	1	0.50	0.30	0.20	3.53
38-199.9	200-255.9	19-37.9	d+15.1	6.3	1.3	0.70	0.40	0.25	5.33
200-255.9	256-649.9	38-199.9	d+20.5	8.1	1.8	0.80	0.60	0.35	7.00
256-649.9	650-999.9	200-255.9	d+24	8.1	1.8	0.90	0.70	0.40	7.00
650-999.9	≥1000	256-649.9	d+27.3	9.5	2.5	1.00	0.80	0.50	8.40
≥1000	-	650-999.9	d+38	13.8	3.0	1.20	0.90	0.60	12.00



Specification:

Name	Rod Dia.	Bore Dia.	Width
	d h9	D H9	L+0.2
GSJ	3	7.9	2.2
GSJ	4	8.9	2.2
GSJ	5	9.9	2.2
GSJ	6	10.9	2.2
GSJ	8	12.9	2.2
GSJ	10	14.9	2.2
GSJ	12	16.9	2.2
GSJ	14	18.9	2.2
GSJ	15	19.9	2.2
GSJ	16	20.9	2.2
GSJ	17	21.9	2.2
GSJ	18	22.9	2.2
GSJ	8	15.3	3.2
GSJ	9	16.3	3.2
GSJ	10	17.3	3.2
GSJ	12	19.3	3.2
GSJ	14	21.3	3.2
GSJ	15	22.3	3.2
GSJ	16	23.3	3.2
GSJ	18	25.3	3.2
GSJ	20	27.3	3.2
GSJ	22	29.3	3.2
GSJ	24	31.3	3.2
GSJ	25	32.3	3.2
GSJ	26	33.3	3.2
GSJ	28	35.3	3.2
GSJ	30	37.3	3.2
GSJ	32	39.3	3.2
GSJ	35	42.3	3.2
GSJ	36	43.3	3.2
GSJ	38	45.3	3.2
GSJ	40	47.3	3.2
GSJ	19	29.7	4.2
GSJ	20	30.7	4.2
GSJ	22	32.7	4.2
GSJ	25	35.7	4.2
GSJ	26	36.7	4.2
GSJ	28	38.7	4.2

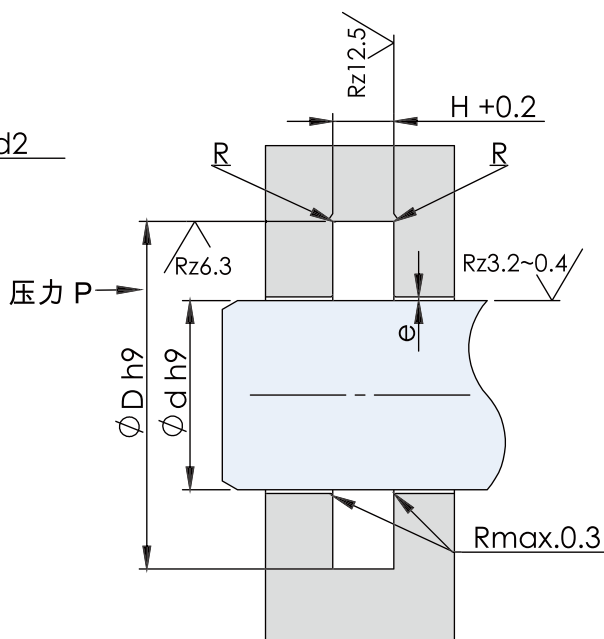
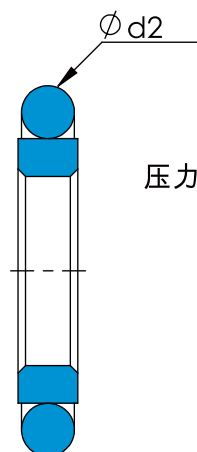
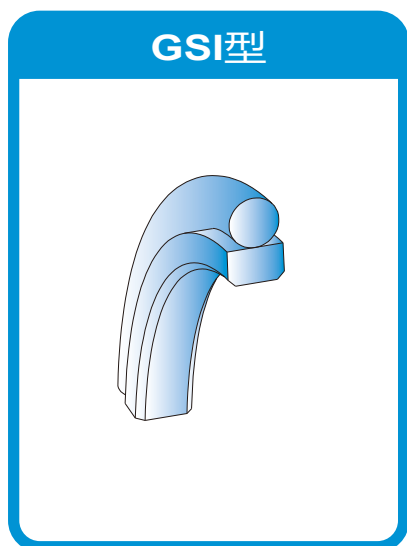
Name	Rod Dia.	Bore Dia.	Width
	d h9	D H9	L+0.2
GSJ	30	40.7	4.2
GSJ	32	42.7	4.2
GSJ	35	45.7	4.2
GSJ	36	46.7	4.2
GSJ	37	47.7	4.2
GSJ	38	48.7	4.2
GSJ	40	50.7	4.2
GSJ	42	52.7	4.2
GSJ	45	55.7	4.2
GSJ	50	60.7	4.2
GSJ	52	62.7	4.2
GSJ	55	65.7	4.2
GSJ	60	70.7	4.2
GSJ	65	75.7	4.2
GSJ	70	80.7	4.2
GSJ	75	85.7	4.2
GSJ	80	90.7	4.2
GSJ	35	50.1	6.3
GSJ	38	53.1	6.3
GSJ	40	55.1	6.3
GSJ	45	60.1	6.3
GSJ	50	65.1	6.3
GSJ	55	70.1	6.3
GSJ	56	71.1	6.3
GSJ	60	75.1	6.3
GSJ	63	78.1	6.3
GSJ	65	80.1	6.3
GSJ	66	81.1	6.3
GSJ	67	82.1	6.3
GSJ	68	83.1	6.3
GSJ	70	85.1	6.3
GSJ	73	88.1	6.3
GSJ	75	90.1	6.3
GSJ	80	95.1	6.3
GSJ	83	98.1	6.3
GSJ	85	100.1	6.3
GSJ	90	105.1	6.3
GSJ	95	110.1	6.3



GSJ活塞杆密封/Rod seals

Name	Rod Dia.	Bore Dia.	Width
	d h9	D H9	L+0.2
GSJ	98	113.1	6.3
GSJ	100	115.1	6.3
GSJ	105	120.1	6.3
GSJ	110	125.1	6.3
GSJ	115	130.1	6.3
GSJ	120	135.1	6.3
GSJ	125	140.1	6.3
GSJ	130	145.1	6.3
GSJ	135	150.1	6.3
GSJ	140	155.1	6.3
GSJ	150	165.1	6.3
GSJ	160	175.1	6.3
GSJ	170	185.1	6.3
GSJ	180	195.1	6.3
GSJ	190	205.1	6.3
GSJ	200	215.1	6.3
GSJ	80	100.5	8.1
GSJ	85	105.5	8.1
GSJ	90	110.5	8.1
GSJ	95	115.5	8.1
GSJ	100	120.5	8.1
GSJ	105	125.5	8.1
GSJ	110	130.5	8.1

Name	Rod Dia.	Bore Dia.	Width
	d h9	D H9	L+0.2
GSJ	115	135.5	8.1
GSJ	120	140.5	8.1
GSJ	125	145.5	8.1
GSJ	130	150.5	8.1
GSJ	135	155.5	8.1
GSJ	140	160.5	8.1
GSJ	150	170.5	8.1
GSJ	160	180.5	8.1
GSJ	170	190.5	8.1
GSJ	180	200.5	8.1
GSJ	190	210.5	8.1
GSJ	200	220.5	8.1
GSJ	210	230.5	8.1
GSJ	220	240.5	8.1
GSJ	230	250.5	8.1
GSJ	240	260.5	8.1
GSJ	250	270.5	8.1
GSJ	260	284	8.1
GSJ	270	294	8.1
GSJ	280	304	8.1
GSJ	290	314	8.1
GSJ	300	324	8.1



Design Description:

The GSI seal consists of an O-ring and a polytetrafluoroethylene (PTFE) sealing ring. Its advantages include:

- Excellent dynamic and static sealing performance.
- Allows for larger extrusion gaps, reducing machining costs depending on the application.
- Can be used in Medium with contaminants due to the larger extrusion gaps.
- Low friction and no crawling phenomenon.
- Simple groove design, suitable for integral pistons.
- Strong adaptability to working conditions due to the availability of multiple material options.

Applications:

It excels in double-sided sealing applications for hydraulic systems and reciprocating motion under high pressure, low pressure, and high-frequency conditions. It is suitable for long strokes and can be used in a wide range of fluid and high-temperature applications, accommodating larger piston clearances.

Technical Specification:

- Pressure: 40MPa
- Speed: 5m/s
- Temperature: -45°C to $+200^{\circ}\text{C}$ (depending on the O-ring material)
- Medium: Mineral hydraulic oil, fire-resistant hydraulic oil, environmentally friendly hydraulic oil, water, air, and other Medium (depending on the O-ring material)

Clearance: The maximum allowable radial clearance e_{max} is determined by the working pressure and the functional diameter, as indicated in the table.

Materials:

Sealing ring: Filled polytetrafluoroethylene (F-PTFE)

Rod Dia. d			Groove Dia. D	Groove Width H	Radius R	Radial Gap e_{max}			O Ring Section d_2
Standard Usage	Light-Duty	Heavy-Duty	D	H	R	10 Mpa	20 Mpa	40 Mpa	d_2
3-7.9	8-18.9	-	d+4.9	2.2	0.4	0.30	0.20	0.15	1.78
8-18.9	19-37.9	-	d+7.5	3.2	0.6	0.40	0.25	0.15	2.62
19-37.9	38-199.9	8-18.9	d+11	4.2	1	0.40	0.25	0.20	3.53
38-199.9	200-255.9	19-37.9	d+15.5	6.3	1.3	0.50	0.30	0.20	5.33
200-255.9	256-649.9	38-199.9	d+21	8.1	1.8	0.60	0.35	0.25	7.00
256-649.9	650-999.9	200-255.9	d+24.5	8.1	1.8	0.60	0.35	0.25	7.00
650-999.9	≥ 1000	256-649.9	d+28	9.5	2.5	0.70	0.50	0.30	8.40
≥ 1000	-	650-999.9	d+38	13.8	3.0	1.00	0.70	0.60	12.00



GSI活塞杆密封/Rod seals

Specification:

Name	d	D	H+0.2
GSI	3	7.9	2.2
GSI	4	8.9	2.2
GSI	5	9.9	2.2
GSI	6	10.9	2.2
GSI	8	12.9	2.2
GSI	10	14.9	2.2
GSI	12	16.9	2.2
GSI	14	18.9	2.2
GSI	15	19.9	2.2
GSI	8	15.5	3.2
GSI	9	16.5	3.2
GSI	10	17.5	3.2
GSI	12	19.5	3.2
GSI	14	21.5	3.2
GSI	15	22.5	3.2
GSI	16	23.5	3.2
GSI	18	25.5	3.2
GSI	19	30	4.2
GSI	20	31	4.2
GSI	22	33	4.2
GSI	25	36	4.2
GSI	26	37	4.2
GSI	28	39	4.2
GSI	30	41	4.2
GSI	32	43	4.2
GSI	35	46	4.2
GSI	36	47	4.2
GSI	37	48	4.2
GSI	38	49	4.2
GSI	38	53.5	6.3

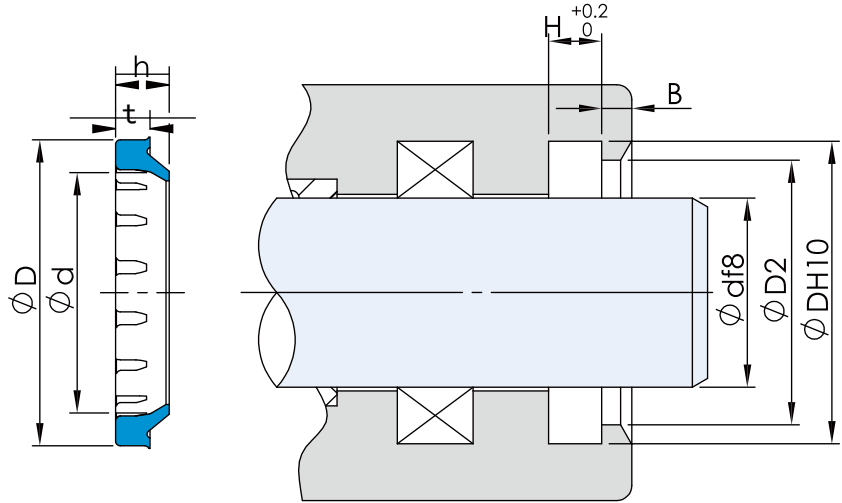
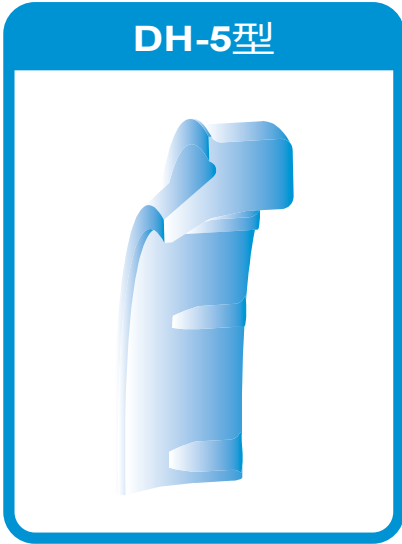
名称	d	D	H+0.2
GSI	40	55.5	6.3
GSI	45	60.5	6.3
GSI	50	65.5	6.3
GSI	55	70.5	6.3
GSI	56	71.5	6.3
GSI	60	75.5	6.3
GSI	63	78.5	6.3
GSI	65	80.5	6.3
GSI	66	81.5	6.3
GSI	67	82.5	6.3
GSI	68	83.5	6.3
GSI	70	85.5	6.3
GSI	73	88.5	6.3
GSI	75	90.5	6.3
GSI	80	95.5	6.3
GSI	83	98.5	6.3
GSI	85	100.5	6.3
GSI	90	105.5	6.3
GSI	95	110.5	6.3
GSI	98	113.5	6.3
GSI	100	115.5	6.3
GSI	105	120.5	6.3
GSI	110	125.5	6.3
GSI	115	130.5	6.3
GSI	120	135.5	6.3
GSI	125	140.5	6.3
GSI	130	145.5	6.3
GSI	135	150.5	6.3
GSI	140	155.5	6.3
GSI	150	165.5	6.3



Name	d	D	H+0.2
GSI	160	175.5	6.3
GSI	170	185.5	6.3
GSI	180	195.5	6.3
GSI	190	205.5	6.3
GSI	200	221	8.1
GSI	210	231	8.1
GSI	220	241	8.1
GSI	230	251	8.1
GSI	240	261	8.1
GSI	250	271	8.1
GSI	260	284.5	8.1
GSI	270	294.5	8.1
GSI	280	304.5	8.1
GSI	290	314.5	8.1



DH-5 防尘密封件/Dust seals



Design Description:

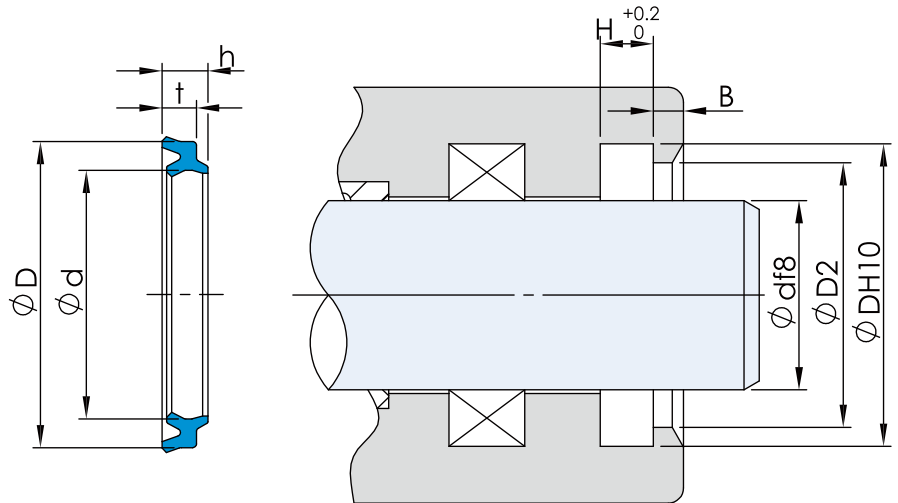
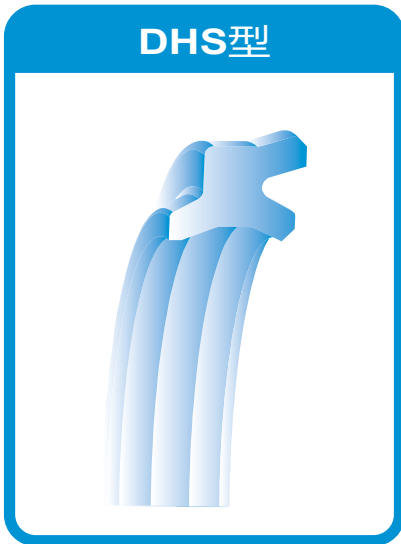
The DH-5 dust seal is a type of double-lip dust seal with a sealing lip on the outer diameter, which prevents contaminants from entering the sealing system. The inner ring has reinforcing ribs that provide stability and prevent the seal from being extruded from the groove due to back pressure. It effectively functions as a dust seal even in extremely harsh working conditions.

Technical Specification:

- Speed: 2m/s
- Temperature: -40°C to +110°C
- Standard material: Polyurethane (PU)

d	D	t	h	H	D2	B	ISO	JIS
18	26	4.5	6	5	22	2	•	•
20	28	4.5	6	5	24	2	•	•
22	30	4.5	6	5	26	2	•	•
25	33	4.5	6	5	27	2	•	•
28	36	4.5	6	5	32	2	•	•
30	38	4.5	6	5	34	2	•	•
30	38	5	6.5	6	34	2		•
32	40	4.5	6	5	36	2	•	•
32	40	5	6.5	6	36	2		•
35	43	4.5	6	5	39	2	•	•
35	43	5	6.5	6	39	2		•
36	44	4.5	6	5	40	2	•	•
36	44	5	6.5	6	40	2		•
38	46	4.5	6	5	42	2	•	•
38	46	5	6.5	6	42	2		•
40	48	4.5	6	5	44	2	•	•
40	48	5	6.5	6	44	2		•
45	53	4.5	6	5	49	2	•	•
45	53	5	6.5	6	49	2		•
50	58	4.5	6	5	54	2	•	•
50	58	5	6.5	6	54	2		•
53	61	5	6.5	6	57	2		•
55	63	5	6.5	6	59	2		•
55	65	5.3	6.8	6	60	2	•	
56	66	5.3	6.8	6	61	2	•	
60	68	5	6.5	6	64	2		•
60	70	5.3	6.8	6	65	2	•	
63	71	5	6.5	6	67	2		•
63	73	5.3	6.8	6	68	2	•	
65	73	5	6.5	6	69	2		•

d	D	t	h	H	D2	B	ISO	JIS
65	75	5.3	6.8	6	70	2	•	
70	80	5.3	6.8	6	75	3	•	
70	80	6	8	7	75	3		•
75	85	5.3	6.8	6	80	3	•	
75	85	6	8	7	80	3		•
80	90	5.3	6.8	6	85	3	•	
80	90	6	8	7	85	3		•
85	95	5.3	6.8	6	90	3	•	
85	95	6	8	7	90	3		•
90	100	5.3	6.8	6	95	3	•	
90	100	6	8	7	95	3		•
95	105	5.3	6.8	6	100	3	•	
95	105	6	8	7	100	3		•
100	110	5.3	6.8	6	105	3	•	
100	110	6	8	7	105	3		•
105	115	6	8	7	110	3		•
110	120	6	8	7	115	3		•
115	125	6	8	7	120	4		•
120	130	6	8	7	125	4		•
125	138	7	9.5	8	132	4		•
130	143	7	9.5	8	137	4		•
135	148	7	9.5	8	142	4		•
140	153	7	9.5	8	147	4		•
145	158	7	9.5	8	152	4		•
150	163	7	9.5	8	157	4		•
160	173	7	9.5	8	167	4		•
170	183	7	9.5	8	177	4		•
180	193	7	9.5	8	187	4		•
190	203	7	9.5	8	197	5		•
200	213	7	9.5	8	207	5		•



Design Description:

The DHS dust seal is a double-lip dust seal designed to protect against contaminants. The sealing lips facing the Medium reduce the residual oil film. The use of polyurethane material ensures excellent characteristics during dry friction, increasing wear resistance. It also has good resistance to ozone and radiation caused by climatic conditions, extending its service life. When using PTFE piston rod seals, it is recommended to use the DHS double-lip dust seal.

Technical Specification:

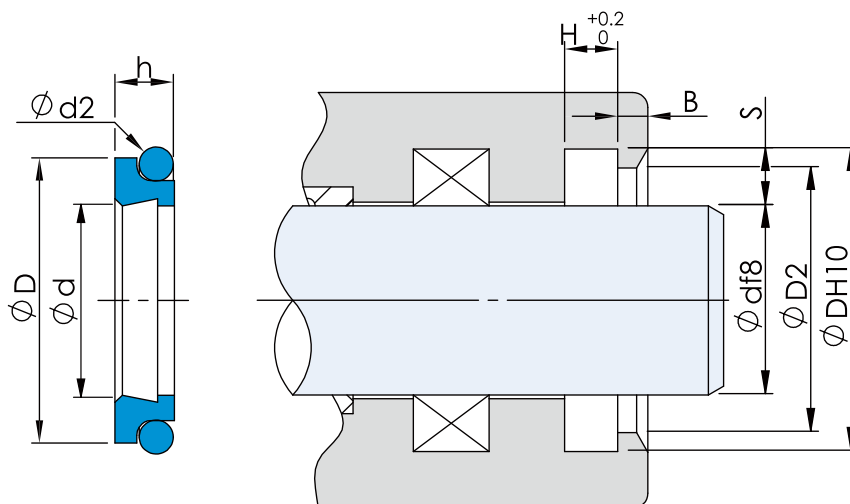
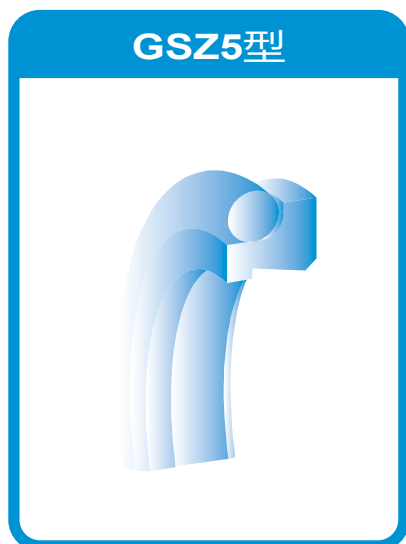
- Speed: 2m/s
- Temperature: -40°C to +110°C
- Standard material: Polyurethane (PU)

d	D	t	h	H	D2	B	ISO	JIS
18	26	4.5	6	5	22	2	•	•
20	28	4.5	6	5	24	2	•	•
22	30	4.5	6	5	26	2	•	•
25	33	4.5	6	5	27	2	•	•
28	36	4.5	6	5	32	2	•	•
30	38	4.5	6	5	34	2	•	•
30	38	5	6.5	6	34	2		•
32	40	4.5	6	5	36	2	•	•
32	40	5	6.5	6	36	2		•
35	43	4.5	6	5	39	2	•	•
35	43	5	6.5	6	39	2		•
36	44	4.5	6	5	40	2	•	•
36	44	5	6.5	6	40	2		•
38	46	4.5	6	5	42	2	•	•
38	46	5	6.5	6	42	2		•
40	48	4.5	6	5	44	2	•	•
40	48	5	6.5	6	44	2		•
45	53	4.5	6	5	49	2	•	•
45	53	5	6.5	6	49	2		•
50	58	4.5	6	5	54	2	•	•
50	58	5	6.5	6	54	2		•
53	61	5	6.5	6	57	2		•
55	63	5	6.5	6	59	2		•
55	65	5.3	6.8	6	60	2	•	
56	66	5.3	6.8	6	61	2	•	
60	68	5	6.5	6	64	2		•
60	70	5.3	6.8	6	65	2	•	
63	71	5	6.5	6	67	2		•
63	73	5.3	6.8	6	68	2	•	
65	73	5	6.5	6	69	2		•

d	D	t	h	H	D2	B	ISO	JIS
65	75	5.3	6.8	6	70	2	•	
70	80	5.3	6.8	6	75	3	•	
70	80	6	8	7	75	3		•
75	85	5.3	6.8	6	80	3	•	
75	85	6	8	7	80	3		•
80	90	5.3	6.8	6	85	3	•	
80	90	6	8	7	85	3		•
85	95	5.3	6.8	6	90	3	•	
85	95	6	8	7	90	3		•
90	100	5.3	6.8	6	95	3	•	
90	100	6	8	7	95	3		•
95	105	5.3	6.8	6	100	3	•	
95	105	6	8	7	100	3		•
100	110	5.3	6.8	6	105	3	•	
100	110	6	8	7	105	3		•
105	115	6	8	7	110	3		•
110	120	6	8	7	115	3		•
115	125	6	8	7	120	4		•
120	130	6	8	7	125	4		•
125	138	7	9.5	8	132	4		•
130	143	7	9.5	8	137	4		•
135	148	7	9.5	8	142	4		•
140	153	7	9.5	8	147	4		•
145	158	7	9.5	8	152	4		•
150	163	7	9.5	8	157	4		•
160	173	7	9.5	8	167	4		•
170	183	7	9.5	8	177	4		•
180	193	7	9.5	8	187	4		•
190	203	7	9.5	8	197	5		•
200	213	7	9.5	8	207	5		•



GSZ5 防尘密封件/Dust seals



Design Description:

The GSZ5 is a double-lip dust seal composed of a wearing ring with sealing and dust-proof cutting edges and an O-ring acting as a pre-tightening element. It is specifically designed for applications in environments with severe dust or intense cold, as well as high-frequency reciprocating motion.

The advantages of the GSZ5 dust seal include:

- Minimal starting and operating friction, ensuring smooth movement even at low speeds without crawling phenomena.
- Excellent sliding characteristics.
- Wear-resistant with a long service life.
- Wide temperature range (dependent on the O-ring material used).
- Excellent resistance to chemical Medium (with appropriate O-ring material).

Technical Specification:

- Speed: 5m/s
- Temperature: -40°C to +110°C (temperature depends on the O-ring material)
- Standard material: Filled PTFE + elastomer

Section	O Ring Section (mm)	Recommended Rod Dia. Range d (mm)		Groove Width L+0.2(mm)	Groove Depth S(mm)	Diameter D2 (mm)
		≥	<			
A	2.62	19	39.9	4.2	3.80	$\phi d + 1.5$
B	2.62	40	69.9	6.3	4.40	$\phi d + 1.5$
C	3.53	70	139.9	8.1	6.10	$\phi d + 2.0$
D	5.33	140	399.9	9.5	8.00	$\phi d + 2.5$
E	6.99	400	649.9	14.0	12.00	$\phi d + 2.5$
G	8.40	650	Above	16.0	13.65	$\phi d + 2.5$



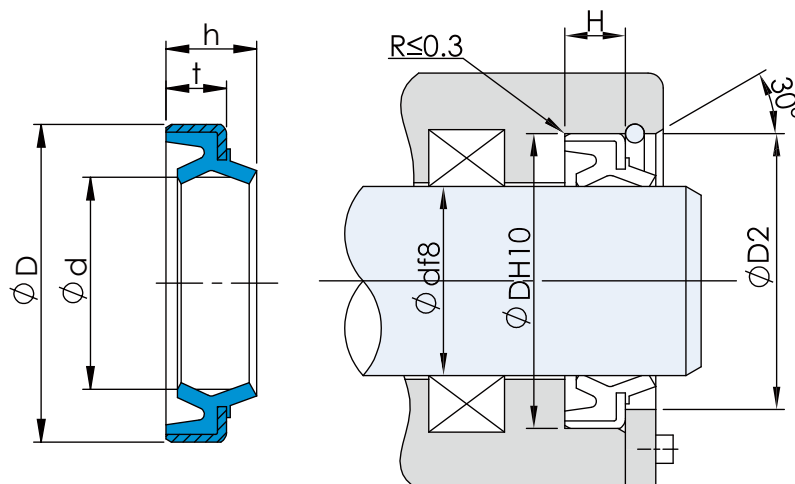
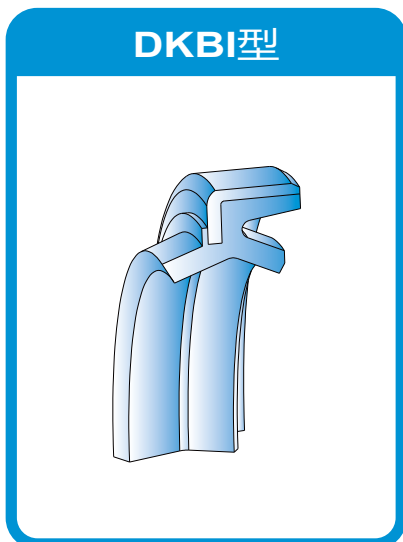
Specification:

d	D	H	D2(小台阶)
18	25.6	4.2	19.5
20	27.6	4.2	21.5
22	29.6	4.2	23.5
25	32.6	4.2	26.5
28	35.6	4.2	29.5
30	37.6	4.2	31.5
32	39.6	4.2	33.5
35	42.6	4.2	36.5
36	43.6	4.2	37.5
38	45.6	4.2	39.5
40	48.8	6.3	41.5
45	53.8	6.3	46.5
50	58.8	6.3	51.5
55	63.8	6.3	56.5
56	64.8	6.3	57.5
60	68.8	6.3	61.5
63	71.8	6.3	64.5
65	73.8	6.3	66.5
70	82.2	8.1	72
75	87.2	8.1	77
80	92.2	8.1	82
85	97.2	8.1	87
90	102.2	8.1	92
95	107.2	8.1	97
100	112.2	8.1	102
105	117.2	8.1	107
110	122.2	8.1	112
115	127.2	8.1	117
120	132.2	8.1	122
125	137.2	8.1	127
130	142.2	8.1	132
135	147.2	8.1	137
140	156	9.5	142.5
145	161	9.5	147.5
150	166	9.5	152.5
160	176	9.5	162.5
170	186	9.5	172.5
180	196	9.5	182.5
190	206	9.5	192.5
200	216	9.5	202.5

If your required sizes are not listed in the table,
please kindly contact us.



DKBI 防尘密封件/Dust seals



Design Description:

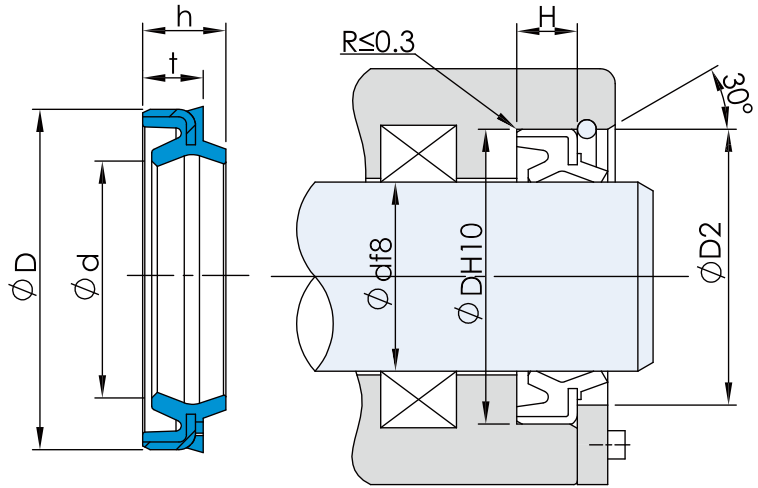
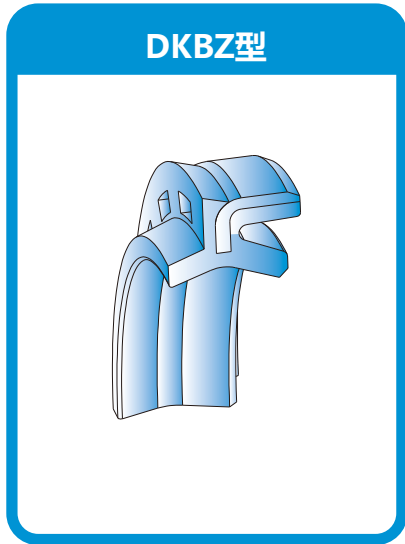
DKBI is suitable for reciprocating, oscillating, or rotary motion systems and exhibits excellent dust scraping capability, wear resistance, and long service life.

Specification:

Technical Specification:

- Maximum Speed: 3 m/s
- Temperature Range: -30 to 100°C
- Materials: Iron + Polyurethane/Nitrile

Name	d	D	t	h	H	D2
DKBI	30	42	6	9	6.4	37
DKBI	35	47	7	10	7.5	42
DKBI	40	52	7	10	7.5	47
DKBI	45	57	7	10	7.5	52
DKBI	50	62	7	10	7.5	57
DKBI	55	69	8	11	8.6	62
DKBI	60	74	8	11	8.6	67
DKBI	65	79	8	11	8.6	72
DKBI	70	84	8	11	8.6	77
DKBI	75	89	8	11	8.6	82
DKBI	80	94	8	11	8.6	87
DKBI	85	99	8	11	8.6	92
DKBI	90	104	8	11	8.6	97
DKBI	95	109	8	11	8.6	102
DKBI	100	114	8	11	8.6	107
DKBI	105	121	9	12	9.6	113
DKBI	110	126	9	12	9.6	118
DKBI	115	131	9	12	9.6	123
DKBI	120	136	9	12	9.6	128
DKBI	125	141	9	12	9.6	133
DKBI	130	146	9	12	9.6	138
DKBI	140	160	10	14	10.5	150



Design Description:

The DKBZ is suitable for reciprocating, oscillating, or rotary motion systems and offers excellent dust scraping capability, wear resistance, and long service life. Additionally, it features an outer lip design that effectively prevents water ingress, thereby extending the lifespan of the cylinder.

Technical Specification:

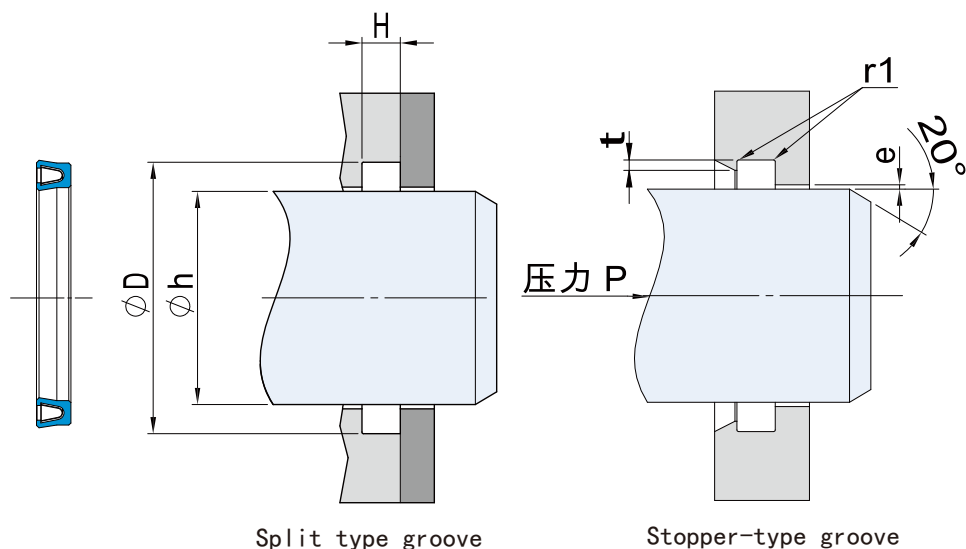
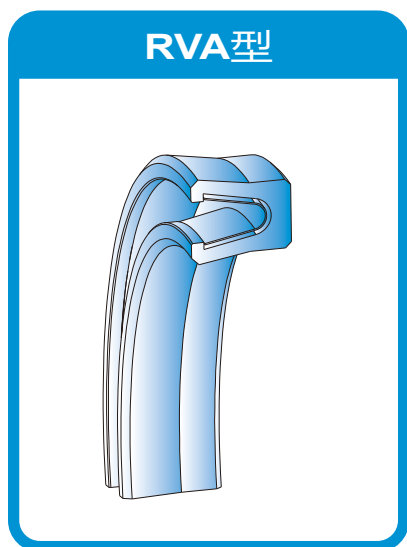
- Maximum Speed: 3 m/s
- Temperature Range: -30 to 100°C
- Materials: Iron + Polyurethane/Nitrile Rubber

Specification:

Name	d	D	t	h	H	D2
DKBZ	30	42	6	9	6.4	37
DKBZ	35	47	7	10	7.5	42
DKBZ	40	52	7	10	7.5	47
DKBZ	45	57	7	10	7.5	52
DKBZ	50	62	7	10	7.5	57
DKBZ	55	69	8	11	8.6	62
DKBZ	60	74	8	11	8.6	67
DKBZ	65	79	8	11	8.6	72
DKBZ	70	84	8	11	8.6	77
DKBZ	75	89	8	11	8.6	82
DKBZ	80	94	8	11	8.6	87
DKBZ	85	99	8	11	8.6	92
DKBZ	90	104	8	11	8.6	97
DKBZ	95	109	8	11	8.6	102
DKBZ	100	114	8	11	8.6	107
DKBZ	105	121	9	12	9.6	113
DKBZ	110	126	9	12	9.6	118
DKBZ	115	131	9	12	9.6	123
DKBZ	120	136	9	12	9.6	128
DKBZ	125	141	9	12	9.6	133
DKBZ	130	146	9	12	9.6	138
DKBZ	140	160	10	14	10.5	150



Rod Vari Seals -RVA



Characteristics of RVA Vari Seal:

- Suitable for both reciprocating and rotary motion.
- Can adapt to a wide range of fluids and chemicals.
- Low friction coefficient.
- Does not crawl even during precise control.
- Strong corrosion resistance and good dimensional stability.
- Can withstand rapid temperature changes.
- Does not contaminate food and pharmaceutical liquids.
- Can be sterilized.
- Unlimited storage life.

Application Range:

Vari Seal is used for sealing in reciprocating motion. This type of seal is suitable for harsh operating conditions and can meet the requirements of certain special Medium. It is recommended for applications that require no crawling, chemical resistance, and compatibility with most Medium, such as valves, pumps, separators, brakes, dosing devices, etc.

Technical Specification:

- Pressure: ≤ 45 MPa
- Speed: ≤ 15 m/s (reciprocating motion)
- Temperature: 70°C to $+260^\circ\text{C}$
- Medium: All liquids, chemicals, and gases
- Note: When used at high temperatures, pressure and speed should be reduced.

Materials:

- Outer Ring: PTFE or filled polytetrafluoroethylene (FPTFE)
- Spring: Stainless steel (available in V-shape, O-shape, and H-shape structures)

Installation Dimension:

Rod Dia.	Groove Dia.	Groove Width	Radius	Stopper Height	Radius Gap e max			
d h9	D H9	H+0.2	r1	t	2Mpa	10Mpa	20Mpa	40Mpa
3-9.9	d+2.9	2.4	0.4	0.4	0.20	0.10	0.08	0.05
10-19.9	d+4.5	3.6	0.4	0.6	0.25	0.15	0.10	0.07
20-39.9	d+6.2	4.8	0.6	0.7	0.35	0.20	0.15	0.08
40-119.9	d+9.4	7.1	0.8	0.8	0.50	0.25	0.20	0.10
120-630	d+12.2	9.5	0.8	0.9	0.60	0.30	0.25	0.12



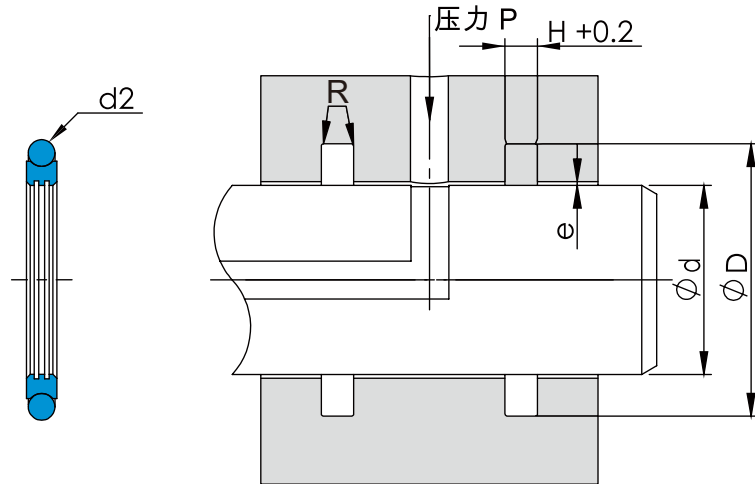
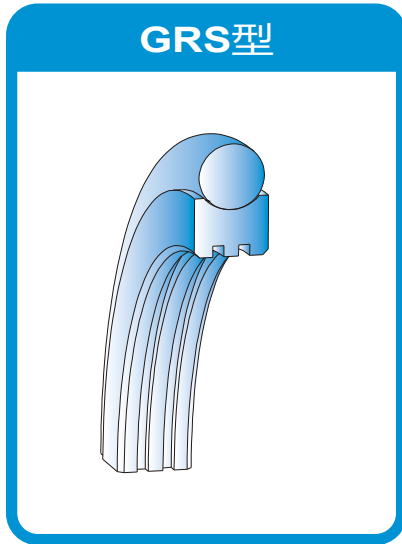
Specification:

Name	Rod Dia.	Groove Dia.	Width
	d h9	D H9	H+0.2
RVA	3	5.9	2.4
RVA	4	6.9	2.4
RVA	5	7.9	2.4
RVA	6	8.9	2.4
RVA	8	10.9	2.4
RVA	10	14.5	3.6
RVA	12	16.5	3.6
RVA	14	18.5	3.6
RVA	15	19.5	3.6
RVA	16	20.5	3.6
RVA	18	22.5	3.6
RVA	20	26.2	4.8
RVA	22	28.2	4.8
RVA	25	31.2	4.8
RVA	28	34.2	4.8
RVA	30	36.2	4.8
RVA	32	38.2	4.8
RVA	35	41.2	4.8
RVA	36	42.2	4.8
RVA	40	49.4	7.1
RVA	42	51.4	7.1
RVA	45	54.4	7.1
RVA	50	59.4	7.1

Name	Rod Dia.	Groove Dia.	Width
	d h9	D H9	H+0.2
RVA	60	69.4	7.1
RVA	70	79.4	7.1
RVA	80	89.4	7.1
RVA	85	94.4	7.1
RVA	90	99.4	7.1
RVA	95	104.4	7.1
RVA	100	109.4	7.1
RVA	110	119.4	7.1
RVA	120	132.2	9.5
RVA	130	142.2	9.5
RVA	140	152.2	9.5
RVA	150	162.2	9.5
RVA	160	172.2	9.5
RVA	170	182.2	9.5
RVA	180	192.2	9.5
RVA	190	202.2	9.5
RVA	200	212.2	9.5
RVA	210	222.2	9.5
RVA	220	232.2	9.5
RVA	230	242.2	9.5
RVA	240	252.2	9.5
RVA	250	262.2	9.5
RVA	280	292.2	9.5



GRS旋转轴用密封/Rotary Rod Seals



Design Description:

The GRS piston seal consists of a filled polytetrafluoroethylene (F-PTFE) sealing ring and an O-ring. It offers the following advantages:

- Very low friction resistance
- Simple and compact groove design with lubrication cavity
- No crawling or sticking during startup
- Excellent wear resistance and dimensional stability

Technical Specification:

- Pressure: 30 MPa
- Speed: 1 m/s
- Temperature: -30°C to +200°C (dependent on O-ring material)
- Medium: Mineral hydraulic oil, fire-resistant hydraulic oil, environmentally friendly hydraulic oil, water, air, and other Medium (dependent on O-ring material)

Materials:

Sealing Ring: Filled polytetrafluoroethylene (F-PTFE)
O-ring: Nitrile rubber (NBR) or Fluoroelastomer (FKM)

Rod Dia. d h9		Groove Dia.	Groove Width	Max. Radial Gap e_{max}		Raidus	O Ring Section	Grooves of Sealing face
Standard Range	Usable Range	D H9	H	32Mpa	50Mpa	R	d2	
6-18.9	6-130	d+4.9	2.2	0.15	0.10	0.40	1.78	0
19-37.9	10-245	d+7.5	3.2	0.20	0.15	0.60	2.62	1
38-199.9	19-455	d+11.0	4.2	0.25	0.20	1.00	3.53	1
200-255.9	38-655	d+15.5	6.3	0.30	0.25	1.30	5.33	2
256-649.9	120-655	d+21.0	8.1	0.30	0.25	1.80	7.00	2
650-999.9	650-999.9	d+28.0	9.5	0.45	0.30	2.50	8.40	2

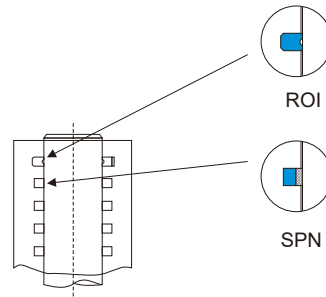


Specification:

Name	Rod Dia.	Groove Dia.	Width
	d h9	D H9	L+0.2
GRS	6	10.9	2.2
GRS	8	12.9	2.2
GRS	10	14.9	2.2
GRS	12	16.9	2.2
GRS	14	18.9	2.2
GRS	15	19.9	2.2
GRS	16	20.9	2.2
GRS	18	22.9	2.2
GRS	20	27.5	3.2
GRS	22	29.5	3.2
GRS	25	32.5	3.2
GRS	26	33.5	3.2
GRS	28	35.5	3.2
GRS	30	37.5	3.2
GRS	32	39.5	3.2
GRS	35	42.5	3.2
GRS	40	51	4.2
GRS	45	56	4.2
GRS	50	61	4.2
GRS	55	66	4.2
GRS	60	71	4.2
GRS	63	74	4.2
GRS	65	76	4.2
GRS	70	81	4.2
GRS	75	86	4.2
GRS	78	89	4.2
GRS	80	91	4.2

Name	Rod Dia.	Groove Dia.	Width
	d h9	D H9	L+0.2
GRS	85	96	4.2
GRS	90	101	4.2
GRS	95	106	4.2
GRS	100	111	4.2
GRS	105	116	4.2
GRS	110	121	4.2
GRS	115	126	4.2
GRS	120	131	4.2
GRS	125	136	4.2
GRS	130	141	4.2
GRS	135	146	4.2
GRS	140	151	4.2
GRS	145	156	4.2
GRS	150	161	4.2
GRS	155	166	4.2
GRS	160	171	4.2
GRS	170	181	4.2
GRS	180	191	4.2
GRS	190	201	4.2
GRS	200	215.5	6.3
GRS	210	225.5	6.3
GRS	220	235.5	6.3
GRS	240	255.5	6.3
GRS	250	265.5	6.3
GRS	260	281	8.1
GRS	270	291	8.1
GRS	280	301	8.1

ROI 旋转密封/Rotary seals



Features:

- Designed for rotary motion applications
- Provides reliable sealing performance in high-speed rotations
- Prevents leakage of fluids or gases
- Can withstand a wide range of operating temperatures and pressures
- Excellent resistance to wear and abrasion
- Low friction coefficient
- Long service life
- Can be used in various industries, including automotive, manufacturing, and industrial machinery

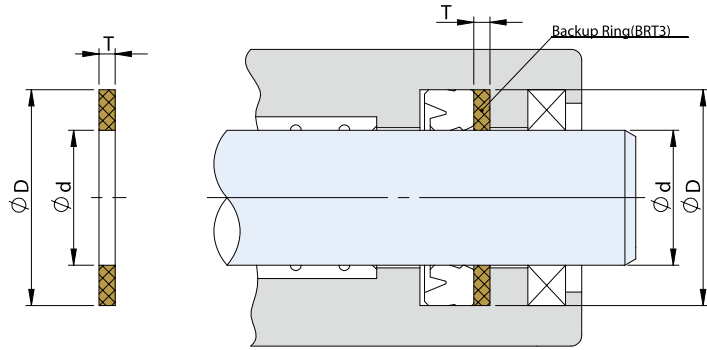
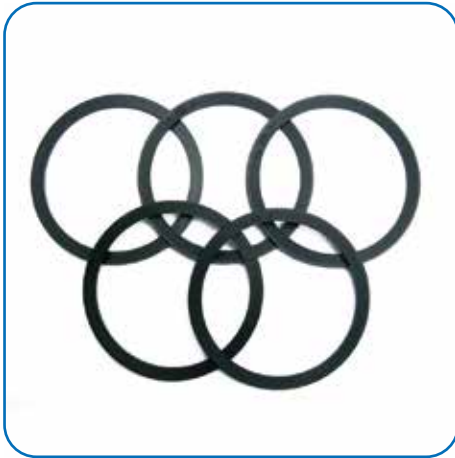
Technical Specification:

- Max speed: 0.3 m/ s
- Max pressure: 28Mpa
- Temperature range: -30~100°C
- MAT: PU

Name	Specification		
	D	d	H
ROI	70.5	60.5	5
ROI	80.5	70.5	5
ROI	85.5	75.5	5
ROI	90.5	80.5	5
ROI	100.5	90.5	5
ROI	105.5	95.5	5
ROI	110.5	100.5	5
ROI	120.5	110.5	5
ROI	125.5	115.5	4.5
ROI	125.5	115.5	5
ROI	130.5	120.5	5
ROI	140.5	130.5	4.5
ROI	140.5	130.5	5

If your required sizes are not listed in the table, please kindly contact us.

BRT -Backup rings



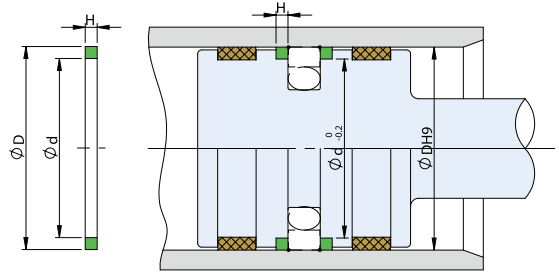
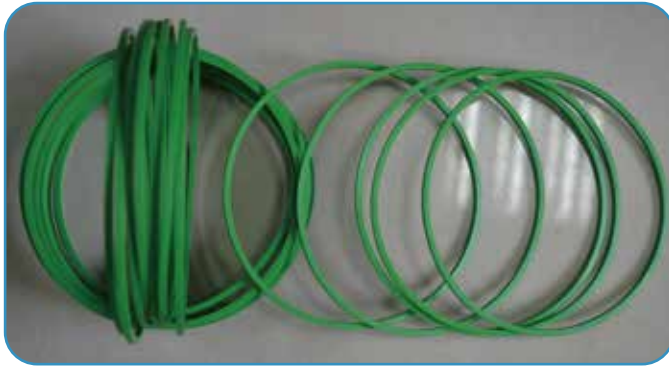
MAT:NY/Filled PTFE

Name	Specification		
	D	d	T
BRT	60	50	3
BRT	63	50	3
BRT	65	50	3
BRT	70	50	3
BRT	70	60	3
BRT	73	60	3
BRT	75	60	3
BRT	80	60	3
BRT	75	65	3
BRT	78	65	3
BRT	80	65	3
BRT	80	70	3
BRT	83	70	3
BRT	85	70	3
BRT	90	70	3
BRT	85	75	3
BRT	88	75	3
BRT	90	75	3
BRT	95	75	3
BRT	93	80	3

Name	Specification		
	D	d	T
BRT	80	95	3
BRT	80	100	3
BRT	85	100	3
BRT	85	105	3
BRT	90	105	3
BRT	90	110	3
BRT	95	110	3
BRT	95	115	3
BRT	100	115	3
BRT	100	120	3
BRT	105	120	3
BRT	105	125	3
BRT	110	125	3
BRT	110	130	3
BRT	115	130	3
BRT	115	135	3
BRT	120	135	3
BRT	120	140	3
BRT	130	145	3
BRT	130	150	3

If your required sizes are not listed in the table, please kindly contact us.

N4W -Backup rings



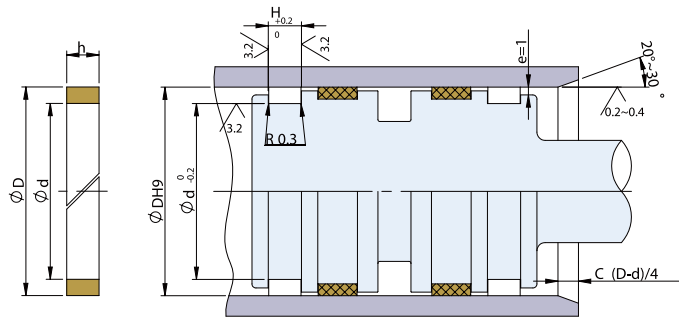
Desin Description:

N4W is a gasket specifically designed for the SPGO scraper ring, aimed at minimizing the risk of seal ring damage and failure due to excessive clearance.

Name	D	d	H
N4W-80	80	75	2.5
N4W-85	85	80	2.5
N4W-90	90	85	2.5
N4W-95	95	90	2.5
N4W-100	100	95	2.5
N4W-105	105	100	2.5
N4W-110	110	105	2.5
N4W-110	110	104	3
N4W-115	115	109	3
N4W-120	120	114	3
N4W-125	125	119	3
N4W-130	130	124	3
N4W-135	135	129	3
N4W-140	140	134	3
N4W-145	145	139	3
N4W-150	150	144	3
N4W-160	160	154	3
N4W-170	170	164	3

If your required sizes are not listed in the table, please kindly contact us.

KZT -Dust rings



Design Description:

KZT is combined with piston seal ring and anti-wear ring. This product with the anti-wear and piston ring seals used in combination to prevent the cylinder oil mixed with foreign particles and cause damage to the seals and to ensure that the seals have a long service life. The piston rod seals, used in combine with the metal bushing, prevent damage to the rods as a result of PTFE's impurity submerge function.

Technical Specification:

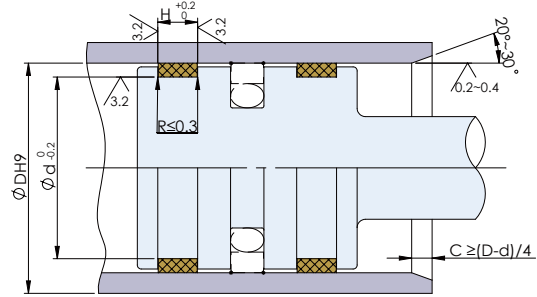
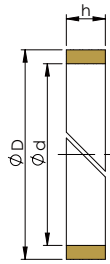
- Max speed: 5 m/ s
- MAT:Filled PTFE

Name	Specification			
	D	d	h	H
KZT	80	74	4	4.1
KZT	80	72	4	4.1
KZT	85	79	4	4.1
KZT	85	77	4	4.1
KZT	90	84	4	4.1
KZT	90	82	4	4.1
KZT	95	87	4	4.1
KZT	100	94	4	4.1
KZT	100	92	4	4.1
KZT	80	72	6.1	6.2
KZT	85	77	6.1	6.2
KZT	90	82	6.1	6.2
KZT	95	87	6.1	6.2
KZT	100	92	6.1	6.2
KZT	105	97	6.1	6.2
KZT	110	102	6.1	6.2
KZT	115	107	6.1	6.2
KZT	120	112	6.1	6.2
KZT	125	117	6.1	6.2
KZT	130	122	6.1	6.2
KZT	135	127	6.1	6.2
KZT	140	132	6.1	6.2
KZT	145	137	6.1	6.2
KZT	150	142	6.1	6.2
KZT	160	152	6.1	6.2
KZT	165	157	6.1	6.2
KZT	170	162	6.1	6.2
KZT	175	167	6.1	6.2
KZT	100	92	9.5	9.7

Name	Specification			
	D	d	h	H
KZT	105	97	9.5	9.7
KZT	110	102	9.5	9.7
KZT	115	107	9.5	9.7
KZT	120	112	9.5	9.7
KZT	125	117	9.5	9.7
KZT	130	122	9.5	9.7
KZT	135	127	9.5	9.7
KZT	140	132	9.5	9.7
KZT	145	137	9.5	9.7
KZT	150	142	9.5	9.7
KZT	160	152	9.5	9.7
KZT	165	157	9.5	9.7
KZT	170	162	9.5	9.7
KZT	175	167	9.5	9.7
KZT	180	172	9.5	9.7
KZT	190	182	9.5	9.7
KZT	200	192	9.5	9.7
KZT	210	202	9.5	9.7
KZT	215	207	9.5	9.7
KZT	225	217	9.5	9.7
KZT	80	72	14.8	15
KZT	85	77	14.8	15
KZT	90	82	14.8	15
KZT	95	87	14.8	15
KZT	100	92	14.8	15
KZT	105	97	14.8	15
KZT	110	102	14.8	15
KZT	115	107	14.8	15
KZT	120	112	14.8	15

If your required sizes are not listed in the table, please kindly contact us.

WR-Wear rings



Design Description:

WR wear ring is nonmetallic guiding and positioning element. Excellent compression resistance and wear resistance, high load performance and still flexible before it reaches its brittleness temperature. Also easy in installation.

Technical specification:

- Max speed: 1 m/ s
- Temperature range: -45 ~ 120 °C
- MAT: Phenolic resin

Name	Specification		
	D	d	H
WR	40	35	10
WR	40	35	15
WR	45	39	12
WR	45	40	8
WR	45	40	10
WR	50	45	10
WR	50	45	15
WR	55	50	6
WR	55	50	8
WR	55	50	10
WR	55	50	15
WR	60	55	10
WR	60	55	15
WR	60	55	25
WR	60	54	15
WR	60	54	20
WR	65	60	10
WR	65	60	15
WR	65	60	20
WR	68	63	25
WR	70	65	10
WR	70	65	15
WR	70	65	20

Name	Specification		
	D	d	H
WR	70	64	15
WR	75	70	8
WR	75	70	10
WR	75	69	15
WR	75	70	15
WR	75	70	20
WR	75	70	25
WR	80	75	8
WR	80	75	10
WR	80	75	15
WR	80	75	20
WR	80	74	20
WR	80	74	30
WR	85	80	6
WR	85	80	10
WR	85	80	15
WR	85	80	20
WR	85	79	12
WR	85	79	15
WR	85	79	20
WR	85	79	25
WR	85	77	15
WR	90	85	6

WR-Wear rings

Name	Specification		
	D	d	H
WR	90	85	8
WR	90	85	10
WR	90	81	10
WR	90	81	12
WR	90	82	15
WR	90	85	15
WR	90	84	12
WR	90	84	20
WR	90	84	25
WR	90	84	30
WR	95	90	6
WR	95	90	10
WR	95	86	10
WR	95	86	12
WR	95	87	15
WR	95	90	15
WR	95	89	20
WR	95	89	25
WR	100	95	6
WR	100	94	6
WR	100	95	8
WR	100	95	10
WR	100	94	12
WR	100	91	10
WR	100	91	12
WR	100	92	15
WR	100	95	15
WR	100	95	20
WR	100	94	22
WR	100	94	25
WR	100	94	30
WR	105	100	6
WR	105	100	10
WR	105	96	10
WR	105	96	12
WR	105	97	15
WR	105	99	15
WR	105	99	25
WR	105	100	15
WR	105	100	25
WR	110	105	6
WR	110	104	6
WR	110	105	8
WR	110	105	10
WR	110	104	12
WR	110	101	12
WR	110	102	15
WR	110	105	15
WR	110	104	15
WR	110	104	22
WR	110	104	25

Name	Specification		
	D	d	H
WR	110	104	30
WR	115	110	6
WR	115	110	8
WR	115	110	10
WR	115	106	10
WR	115	110	15
WR	115	106	15
WR	115	107	15
WR	115	109	15
WR	120	115	8
WR	120	115	10
WR	120	111	10
WR	120	114	6
WR	120	114	12
WR	120	115	15
WR	120	115	20
WR	120	114	15
WR	120	114	22
WR	120	111	15
WR	120	114	30
WR	120	112	15
WR	125	120	8
WR	125	120	10
WR	125	119	10
WR	125	120	15
WR	125	120	20
WR	125	120	25
WR	125	117	15
WR	125	119	15
WR	125	115	15
WR	130	125	8
WR	130	125	10
WR	130	123	10
WR	130	120	10
WR	130	125	15
WR	130	125	25
WR	130	123	15
WR	130	120	15
WR	130	123	30
WR	130	123	35
WR	130	123	40
WR	135	130	8
WR	135	130	10
WR	135	128	10
WR	135	125	10
WR	135	130	15
WR	135	128	15
WR	135	125	15
WR	135	128	25
WR	140	135	8
WR	140	135	10

If your required sizes are not listed in the table, please kindly contact us.

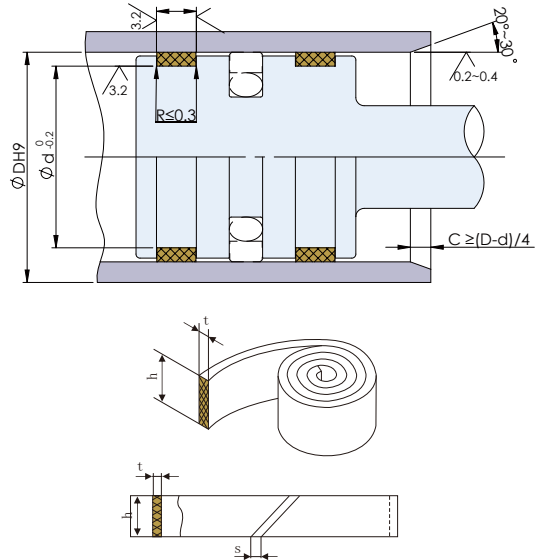
WR-Wear rings

Name	Specification		
	D	d	H
WR	140	133	10
WR	140	128	12
WR	140	135	15
WR	140	133	15
WR	140	128	15
WR	140	128	18
WR	140	133	20
WR	140	133	25
WR	140	133	30
WR	140	133	35
WR	140	133	40
WR	145	140	8
WR	145	140	10
WR	145	133	12
WR	145	138	15
WR	145	138	20
WR	150	145	8
WR	150	145	10
WR	150	138	12
WR	150	145	15
WR	150	143	15
WR	150	143	20
WR	150	143	35
WR	150	143	40
WR	150	143	45
WR	160	155	10
WR	160	155	15
WR	160	155	20
WR	160	148	15
WR	160	153	20
WR	160	148	20
WR	160	153	25
WR	160	153	40
WR	160	153	45
WR	160	152	50
WR	165	160	10
WR	165	160	15
WR	165	157	15
WR	165	159	30
WR	170	165	10
WR	170	165	15
WR	170	162	15
WR	170	162	20
WR	170	162	22
WR	170	162	25
WR	170	162	45
WR	170	162	50
WR	175	170	20
WR	175	169	25
WR	180	175	15

Name	Specification		
	D	d	H
WR	180	172	22
WR	180	172	40
WR	180	172	45
WR	180	172	55
WR	180	173	22
WR	185	180	15
WR	185	173	22
WR	185	173	25
WR	190	185	15
WR	190	182	22
WR	190	182	25
WR	190	182	45
WR	190	182	50
WR	200	192	50
WR	200	188	22
WR	200	188	25
WR	210	205	25
WR	215	205	20
WR	220	212	50
WR	220	210	55
WR	225	217	25
WR	225	217	45
WR	225	217	50
WR	230	222	50
WR	250	238	25
WR	250	242	30
WR	250	242	55
WR	260	248	25
WR	280	268	25
WR	280	272	60
WR	290	285	30
WR	300	292	70
WR	340	332	40
WR	360	352	40

If your required sizes are not listed in the table, please kindly contact us.

RYT- Guide tape



Design Description:

Bearing rings of piston, prevent the piston from scratching, improve durability of seals. PTFE can eliminate crawling. It can be cut according to the cylinder Dia.

Technical specification:

- Max speed: 5 m/ s
- Temperature range: -45-200 ℃
- MAT:Filled PTFE

Note:

$$L=L \pi \cdot (D-t)-s$$

Specification						
Name	Seal size			Cylinder size		
	t	h	s	D	d	H
RYT 8	2	8	1-1.5	18-63	D-4	8
RYT 10	2.5	10	1-2	33-80		10
RYT 15		15	1.5-3	41-130	15	
RYT 20		20	2-4	65-160	20	
RYT 25		25	2-6	85-225	25	
RYT 30		30	3-6.5	112-250	D-5	30
RYT 35		35	3.5-8	132-300		35
RYT 40		40	4-9	150-350		40
RYT 45		45	4-10	165-400		45
RYT 50	3	50	5-11	205-450	D-6	50
RYT 55		55	6-13	230-500		55
RYT 60		60	7-15	260-600		60
RYT 70		70	8-28	290-1000		70

If your required sizes are not listed in the table, please kindly contact us.



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