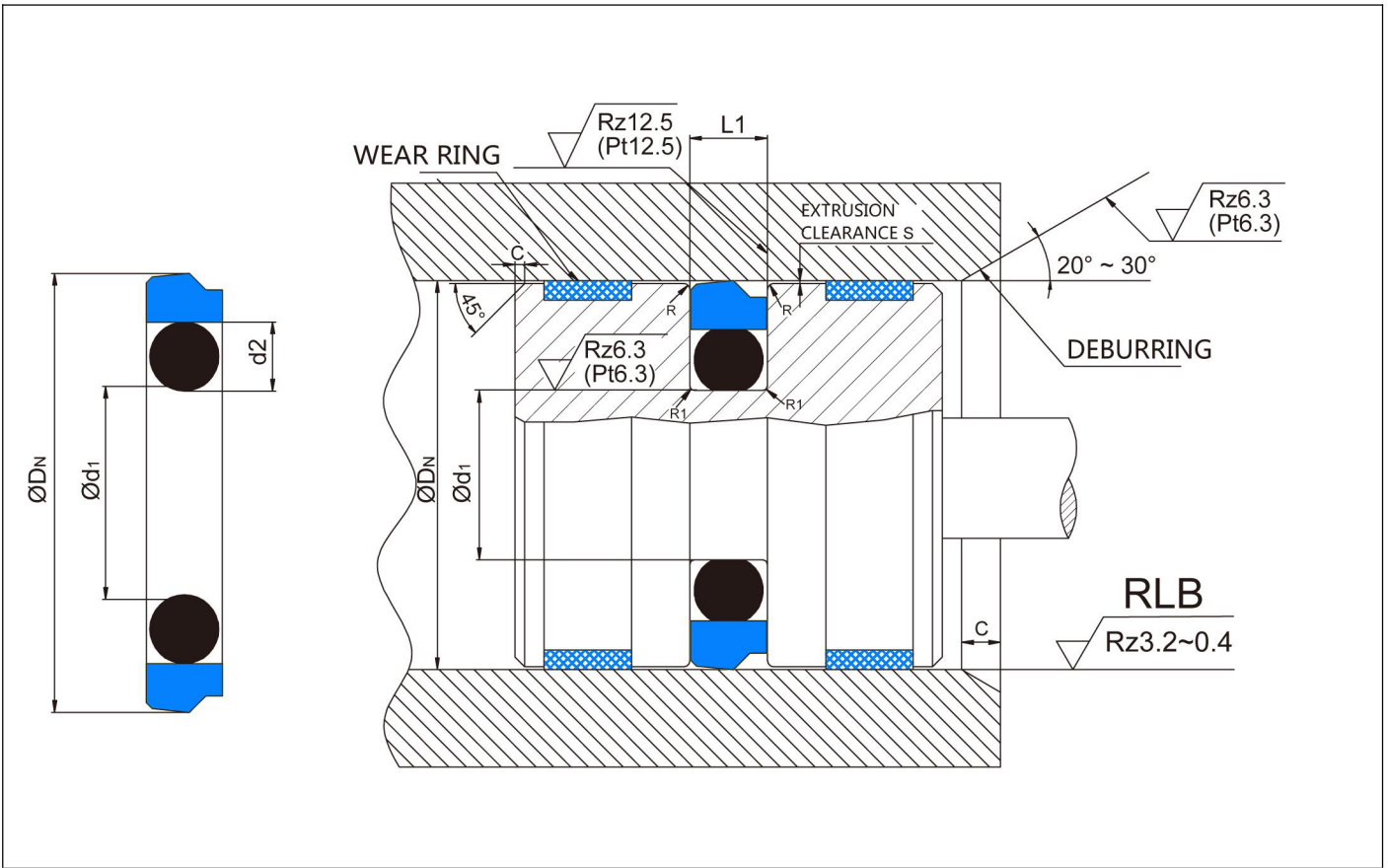


## 1. Installation Recommendation



## 2. Installation Sizes

Bore Diameter $D_N$ H9			Groove Diameter $r$	Groove Width	Radius	Radial Clearance $S$ max.			O-Ring Cross-Section
Standard Application	Light Application	Heavy Duty Application	$d_1$ h9	$L_1+0.2$	$R_1$	10MPa	20MPa	40MPa	$d_2$
8-16.9	17-26.9	--	$D_N-4.9$	2.2	0.4	0.30	0.20	0.15	1.78
17-26.9	27-59.9	--	$D_N-7.3$	3.2	0.6	0.40	0.25	0.15	2.62
27-59.9	60-199.9	17-26.9	$D_N-10.7$	4.2	1.0	0.50	0.30	0.20	3.53
60-199.9	200-255.9	27-59.9	$D_N-15.1$	6.3	1.3	0.70	0.40	0.25	5.33
200-255.9	256-669.9	60-199.9	$D_N-20.5$	8.1	1.8	0.80	0.60	0.35	7.00
256-669.9	670-999.9	200-669.9	$D_N-24.0$	8.1	1.8	0.90	0.70	0.40	7.00
670-999.9	--	256-669.9	$D_N-28.0$	9.5	2.5	1.00	0.80	0.60	8.40
--	1000-2000	--	$D_N-28.0$	9.5	2.5	1.00	0.80	0.60	8.40
--	--	670-999.9	$D_N-38.0$	13.8	3.0	1.20	0.90	0.60	12.00
1000-2700	--	--	$D_N-38.0$	13.8	3.0	1.20	0.90	0.60	12.00

# GSD

## 3. Application and properties

Standard single acting sealing. Suitable for reciprocating environment, allowing larger extrusion clearances, has wide application. Dynamic and static sealing property are good, be able to work in dusty condition. Low friction, simple groove, strong adaptability to work conditions.

## 4. Standard materials

Sealing ring: filled PTFE

O-Ring: NBR / FKM

## 5. Working Conditions

Working Conditions				
Diameter Range	Pressure Range	Temperature Range	Speed	Medium
3 - 1600mm	0 - 60MPa	-45°C +200°C	15 m/s	hydraulic oil, flame retardant liquid, water and others

## 6. Installation Dimensions

Bore Dia.	Groove Dia.	Width	Order No.	O-Ring Dimension
D H9	d <sub>1</sub> h9	L <sub>1</sub> +0.2		
9	4.1	2.2	GSD9*4.1*2.2	3.68*1.78
10	5.1	2.2	GSD10*5.1*2.2	4.80*1.8
12	7.1	2.2	GSD12*7.1*2.2	6.70*1.8
15	10.1	2.2	GSD15*10.1*2.2	9.25*1.78
18	10.7	3.2	GSD18*10.7*3.2	9.19*2.62
20	15.1	2.2	GSD20*15.1*2.2	14.0*1.78
20	12.7	3.2	GSD20*12.7*3.2	12.37*2.62
22	14.7	3.2	GSD22*14.7*3.2	13.94*2.62
25	17.7	3.2	GSD25*17.7*3.2	17.12*2.62
27	16.3	4.2	GSD27*16.3*4.2	15.47*3.53
28	17.3	4.2	GSD28*17.3*4.2	16.4*3.53
30	19.3	4.2	GSD30*19.3*4.2	18.66*3.53
32	24.7	3.2	GSD32*24.7*3.2	23.47*2.62
32	21.3	4.2	GSD32*21.3*4.2	20.22*3.53
35	24.3	4.2	GSD35*24.3*4.2	23.40*3.53
36	25.3	4.2	GSD36*25.3*4.2	24*3.53
38	27.3	4.2	GSD38*27.3*4.2	26*3.53
40	32.7	3.2	GSD40*32.7*3.2	31.42*2.62
40	29.9	4.2	GSD40*29.3*4.2	28.17*3.53
45	34.3	4.2	GSD45*34.3*4.2	32.92*3.53
48	37.3	4.2	GSD48*37.3*4.2	36.09*3.53

# GSD

Bore Dia.	Groove Dia.	Width	Order No.	O-Ring Dimension
D H9	d <sub>1</sub> h9	L <sub>1</sub> +0.2		
50	39.3	4.2	GSD50*39.3*4.2	37.70*3.53
50	34.9	6.3	GSD50*34.9*6.3	32.69*5.33
52	41.3	4.2	GSD52*41.3*4.2	40.87*3.53
55	44.3	4.2	GSD55*44.3*4.2	44.04*3.53
60	44.9	6.3	GSD60*44.9*6.3	43.82*5.33
63	52.3	4.2	GSD63*52.3*4.2	50.39*3.53
63	47.9	6.3	GSD63*47.9*6.3	46.99*5.33
64	48.9	6.3	GSD64*48.9*6.3	46.99*5.33
65	49.9	6.3	GSD65*49.9*6.3	46.99*5.33
70	59.3	4.2	GSD70*59.3*4.2	56.74*3.53
70	54.9	6.3	GSD70*54.9*6.3	53.34*5.33
75	59.9	6.3	GSD75*59.9*6.3	56.52*5.33
80	64.9	6.3	GSD80*64.9*6.3	62.87*5.33
80	59.5	8.1	GSD80*59.5*8.1	58*7.0
85	69.9	6.3	GSD85*69.9*6.3	69.22*5.33
90	74.9	6.3	GSD90*74.9*6.3	72.39*5.33
90	69.5	8.1	GSD90*69.5*8.1	68*7.0
95	79.9	6.3	GSD95*79.9*6.3	78.74*5.33
95	74.5	8.1	GSD95*74.5*8.1	73*7.0
100	84.9	6.3	GSD100*84.9*6.3	81.92*5.33
100	79.5	8.1	GSD100*79.5*8.1	78*7.0
110	94.9	6.3	GSD110*94.9*6.3	91.44*5.33
120	104.9	6.3	GSD120*104.9*6.3	104.14*5.33
125	104.5	6.3	GSD125*109.9*6.3	107.32*5.33
125	104.9	8.1	GSD125*104.5*8.1	103*7.0
130	114.9	6.3	GSD130*114.9*6.3	113.67*5.33
135	119.9	6.3	GSD135*119.9*6.3	113.67*7.0
140	124.9	6.3	GSD140*124.9*6.3	116.84*7.0
145	129.9	6.3	GSD145*129.9*6.3	123.19*7.0
150	134.9	6.3	GSD150*134.9*6.3	126.37*7.0
155	139.9	6.3	GSD155*139.9*6.3	135.89*5.33
160	144.9	6.3	GSD160*144.9*6.3	142.24*5.33
160	139.5	8.1	GSD160*139.5*8.1	135.89*7.0
165	149.9	6.3	GSD165*149.9*6.3	148.49*5.33
170	154.9	6.3	GSD170*154.9*6.3	145.42*7.0
175	159.9	6.3	GSD175*159.9*6.3	158.12*5.33
180	164.9	6.3	GSD180*164.9*6.3	164.47*5.33
180	159.9	8.1	GSD180*159.5*8.1	158.12*7.0
190	174.9	6.3	GSD190*174.9*6.3	170.82*5.33

# G S D

Bore Dia.	Groove Dia.	Width	Order No.	O-Ring Dimension
D H9	d <sub>1</sub> h9	L <sub>1</sub> +0.2		
190	169.5	8.1	GSD190*169.5*8.1	164.47*7.0
200	184.9	6.3	GSD200*184.9*6.3	183.52*5.33
200	179.5	8.1	GSD200*179.5*8.1	177.17*7.0
210	189.5	8.1	GSD210*189.5*8.1	183.52*7.0
220	204.9	6.3	GSD220*204.9*6.3	202.57*5.33
220	199.5	8.1	GSD220*199.5*8.1	196.22*7.0
230	209.5	8.1	GSD230*209.5*8.1	208.92*7.0
240	219.5	8.1	GSD240*219.5*8.1	215.27*7.0
250	229.5	8.1	GSD250*229.5*8.1	227.97*7.0
250	226.0	8.1	GSD250*226*8.1	227.97*7.0
256	232.0	8.1	GSD256*232*8.1	227.97*7.0
260	236.0	8.1	GSD260*236*8.1	227.97*7.0
270	246.0	8.1	GSD270*246*8.1	240.67*7.0
280	256.0	8.1	GSD280*256*8.1	253.37*7.0
290	266.0	8.1	GSD290*266*8.1	263*7.0
300	276.0	8.1	GSD300*276*8.1	266.07*7.0
310	286.0	8.1	GSD310*286*8.1	278.77*7.0
320	299.0	8.1	GSD320*299.5*8.1	291.47*7.0
320	296.0	8.1	GSD320*296*8.1	291.47*7.0
330	306.0	8.1	GSD330*306*8.1	304.17*7.0
340	316.0	8.1	GSD340*316*8.1	316.87*7.0
350	326.0	8.1	GSD350*326*8.1	316.87*7.0
360	336.0	8.1	GSD360*336*8.1	329.57*7.0
370	346.0	8.1	GSD370*346*8.1	342.27*7.0
380	356.0	8.1	GSD380*356*8.1	354.97*7.0
390	366.0	8.1	GSD390*366*8.1	365*7.0
400	376.0	8.1	GSD400*376*8.1	367.67*7.0
410	386.0	8.1	GSD410*386*8.1	385*7.0
420	396.0	8.1	GSD420*396*8.1	393.07*7.0
430	406.0	8.1	GSD430*406*8.1	405.25*7.0
440	416.0	8.1	GSD440*416*8.1	405.25*7.0
450	426.0	8.1	GSD450*426*8.1	417.95*7.0
460	436.0	8.1	GSD460*436*8.1	430*7.0
470	446.0	8.1	GSD470*446*8.1	445*7.0
480	456.0	8.1	GSD480*456*8.1	456.06*7.0
490	466.0	8.1	GSD490*466*8.1	465*7.0
500	476.0	8.1	GSD500*476*8.1	468.76*7.0
510	486.0	8.1	GSD510*486*8.1	478*7.0
520	496.0	8.1	GSD520*496*8.1	494.15*7.0

# G S D

Bore Dia.	Groove Dia.	Width	Order No.	O-Ring Dimension
D H9	d <sub>1</sub> h9	L <sub>1</sub> +0.2		
530	506.0	8.1	GSD530*506*8.1	500*7.0
540	516.0	8.1	GSD540*516*8.1	506.85*7.0
550	526.0	8.1	GSD550*526*8.1	516*7.0
560	536.0	8.1	GSD560*536*8.1	526*7.0
570	546.0	8.1	GSD570*546*8.1	535*7.0
580	556.0	8.1	GSD580*556*8.1	545*7.0
590	566.0	8.1	GSD590*566*8.1	554*7.0
600	576.0	8.1	GSD600*576*8.1	557.65*7.0
610	586.0	8.1	GSD610*586*8.1	568*7.0
620	596.0	8.1	GSD620*596*8.1	578*7.0
630	606.0	8.1	GSD630*606*8.1	590*7.0
640	616.0	8.1	GSD640*616*8.1	600*7.0
650	626.0	8.1	GSD650*626*8.1	608.08*7.0
660	636.0	8.1	GSD660*636*8.1	618*7.0
670	642.7	9.5	GSD670*642.7*9.5	640*8.4
680	652.7	9.5	GSD680*652.7*9.5	650*8.4
690	662.7	9.5	GSD690*662.7*9.5	660*8.4
700	672.7	9.5	GSD700*672.7*9.5	670*8.4
710	682.7	9.5	GSD710*682.7*9.5	680*8.4
720	692.7	9.5	GSD720*692.7*9.5	690*8.4
730	702.7	9.5	GSD730*702.7*9.5	700*8.4
740	712.7	9.5	GSD740*712.7*9.5	710*8.4
750	722.7	9.5	GSD750*722.7*9.5	720*8.4
760	732.7	9.5	GSD760*732.7*9.5	730*8.4
770	742.7	9.5	GSD770*742.7*9.5	740*8.4
780	752.7	9.5	GSD780*752.7*9.5	750*8.4
790	762.7	9.5	GSD790*762.7*9.5	760*8.4
800	772.7	9.5	GSD800*772.7*9.5	770*8.4
900	872.7	9.5	GSD900*872.7*9.5	870*8.4
920	892.7	9.5	GSD920*892.7*9.5	890*8.4
1000	972.7	9.5	GSD1000*972.7*9.5	970*8.4