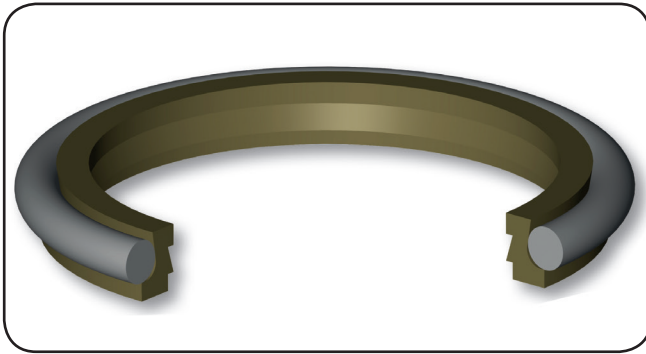
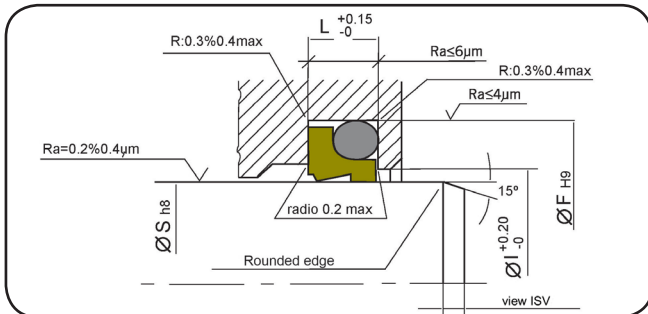




DOUBLE-LIP WIPER



MAIN FEATURES

The SCRAPER 2 rod wiper is designed to prevent dust and dirt from entering the cylinder sealing system. This is achieved by its lip design. This type of seal is used together with seals having hydrodynamic features for leakage recovery, such as ISV seals. It consists of a wiper ring with two different geometric edges and an O-ring that acts as an expansion element.

It is used as a rod and piston wiper with reciprocating motion in hydraulic equipment, machine engineering and in the industrial field.

- ° Excellent wear resistance
- ° High degree of resistance to hydraulic fluids
- ° High operating life
- ° Easy installation
- ° Installation in a small space
- ° Very good wiping effect, even with stubborn dirt.
- ° No stick-slip at the start of motion (jerky movement)

SCRAPER-2

DESCRIPTION

Double-lip wiper.

SEAL MATERIAL

PTFE+NBR

PTFE+FKM

OPERATING CONDITIONS

Speed: < 15 m/sec.

Temperature: - 50 to + 200°C

Fluid: Hydraulic oil (mineral based)

Water and emulsions

Oil-Water

MEDIUM	O - RING MATERIAL
Synthetic Hydraulic Fluids Hydraulic oil Engine oil Grease Other mineral oils Water Air, dry or lubricated	Special Compounds NBR (Bruna N) At temperatures above 120°C, use Viton O-Ring.

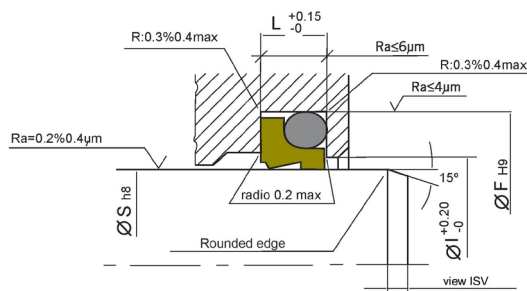
Water Steam

EPDM (Ethylene propylene)

Synthetic Hydraulic Fluids	Special Compounds
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SERIES	
R2	Standard
R2/L	Light
R2/P	Heavy

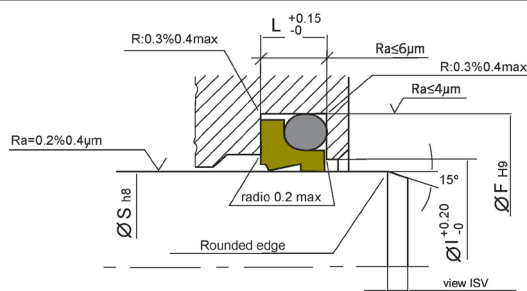
SCRAPER-2



Light R2/L	Ø S rod		Width L + 0.15	External diame- ter Ø F H9		Stepped diame- ter I + 0.20		O-ring Ø Thickness
	Standard R2	Heavy R2/P						
12 ÷ 64.9	6 ÷ 11.9	-----	3.70	s +	4.80	s +	1.50	1.78
65 ÷ 250.9	12 ÷ 64.9	6 ÷ 11.9	5.00	s +	6.80	s +	1.50	2.62
251 ÷ 420.9	65 ÷ 250.9	12 ÷ 64.9	6.00	s +	8.80	s +	1.50	3.53
421 ÷ 650.9	251 ÷ 420.9	65 ÷ 250.9	8.40	s +	12.20	s +	2.00	5.33
651 ÷ 999.9	421 ÷ 650.9	251 ÷ 420.9	11.00	s +	16.00	s +	2.00	6.99
-----	651 ÷ 999.9	421 ÷ 650.9	14.00	s +	20.00	s +	2.50	8.40
-----	>1000	-----	14.00	s +	20.00	s +	2.50	8.40

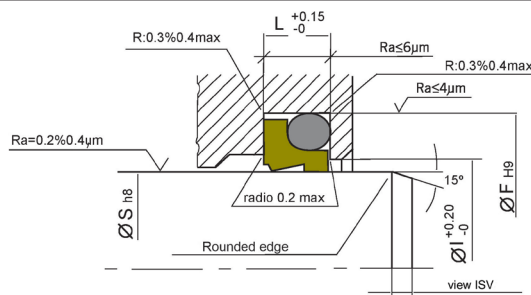
Ø Internal rod S h 8	Ø External housing F H 9	Gap width L + 0.15	Stepped diameter I + 0.20	Radius R	REFERENCE		O-RING	
6.00	10.80	3.70	7.50	0.40	R2	0060-55	7.65 x	1.78
8.00	12.80	3.70	9.50	0.40	R2	0080-55	9.25 x	1.78
10.00	14.80	3.70	11.50	0.40	R2	0100-55	11.20 x	1.78
12.00	18.80	5.00	13.50	0.70	R2	0120-55	13.94 x	2.62
14.00	20.80	5.00	15.50	0.70	R2	0140-55	15.54 x	2.62
15.00	21.80	5.00	16.50	0.70	R2	0150-55	17.12 x	2.62
16.00	20.80	3.70	17.50	0.40	R2/L	0160-55	17.17 x	1.78
16.00	22.80	5.00	17.50	0.70	R2	0160-55	18.72 x	2.62
18.00	22.80	3.70	19.50	0.40	R2/L	0180-55	19.00 x	1.80
18.00	24.80	5.00	19.50	0.70	R2	0180-55	20.29 x	2.62
20.00	26.80	5.00	21.50	0.70	R2	0200-55	21.89 x	2.62
22.00	28.80	5.00	23.50	0.70	R2	0220-55	23.47 x	2.62
25.00	31.80	5.00	26.50	0.70	R2	0250-55	26.64 x	2.62
30.00	34.80	3.70	31.50	0.40	R2/L	0300-55	31.47 x	1.78

SCRAPER-2



Ø Internal rod S h 8	Ø External housing F H 9	Gap width L + 0.15	Stepped diameter I + 0.20	Radius R	REFERENCE		O-RING		
30.00	36.80	5.00	31.50	0.70	R2	0300-55	31.42	x	2.62
32.00	38.80	5.00	33.50	0.70	R2	0320-55	34.59	x	2.62
35.00	41.80	5.00	36.50	0.70	R2	0350-55	36.17	x	2.62
36.00	42.80	5.00	37.50	0.70	R2	0360-55	37.77	x	2.62
37.00	43.80	5.00	38.50	0.70	R2	0370-55	39.34	x	2.62
40.00	46.80	5.00	41.50	0.70	R2	0400-55	39.34	x	2.62
42.00	48.80	5.00	43.50	0.70	R2	0420-55	42.52	x	2.62
45.00	51.80	5.00	46.50	0.70	R2	0450-55	47.29	x	2.62
49.00	55.80	5.00	50.50	0.70	R2	0490-55	50.47	x	2.62
50.00	56.80	5.00	51.50	0.70	R2	0500-55	52.07	x	2.62
54.00	60.80	5.00	55.50	0.70	R2	0540-55	55.25	x	2.62
55.00	61.80	5.00	56.50	0.70	R2	0550-55	56.82	x	2.62
56.00	62.80	5.00	57.50	0.70	R2	0560-55	58.42	x	2.62
60.00	66.80	5.00	61.50	0.70	R2	0600-55	61.60	x	2.62
63.00	69.80	5.00	64.50	0.70	R2	0630-55	64.77	x	2.62
65.00	73.80	6.00	66.50	1.00	R2	0650-55	69.44	x	3.53
70.00	78.80	6.00	71.50	1.00	R2	0700-55	72.62	x	3.53
75.00	83.80	6.00	76.50	1.00	R2	0750-55	78.97	x	3.53
80.00	88.80	6.00	81.50	1.00	R2	0800-55	82.14	x	3.53
85.00	93.80	6.00	86.50	1.00	R2	0850-55	88.49	x	3.53
90.00	98.80	6.00	91.50	1.00	R2	0900-55	94.84	x	3.53
95.00	103.80	6.00	96.50	1.00	R2	0950-55	98.02	x	3.53
100.00	108.80	6.00	101.50	1.00	R2	1000-55	104.37	x	3.53
105.00	113.80	6.00	106.50	1.00	R2	1050-55	107.54	x	3.53
110.00	118.80	6.00	111.50	1.00	R2	1100-55	113.89	x	3.53
115.00	123.80	6.00	116.50	1.00	R2	1150-55	117.07	x	3.53
120.00	128.80	6.00	121.50	1.00	R2	1200-55	123.42	x	3.53
125.00	133.80	6.00	126.50	1.00	R2	1250-55	129.77	x	3.53
130.00	138.80	6.00	131.50	1.00	R2	1300-55	132.94	x	3.53
135.00	143.80	6.00	136.50	1.00	R2	1350-55	139.29	x	3.53
137.00	145.80	6.00	138.50	1.00	R2	1370-55	139.29	x	3.53
140.00	148.80	6.00	141.50	1.00	R2	1400-55	142.47	x	3.53

SCRAPER-2



Ø Internal rod S h 8	Ø External housing F H 9	Gap width L + 0.15	Stepped diameter I + 0.20	Radius R	REFERENCE	O-RING
145.00	153.80	6.00	146.50	1.00 R2	1450-55	148.82 x 3.53
150.00	158.80	6.00	151.50	1.00 R2	1500-55	158.34 x 3.53
160.00	168.80	6.00	161.50	1.00 R2	1600-55	164.69 x 3.53
170.00	178.80	6.00	171.50	1.00 R2	1700-55	177.39 x 3.53
180.00	188.80	6.00	181.50	1.00 R2	1800-55	183.74 x 3.53
190.00	198.80	6.00	191.50	1.00 R2	1900-55	196.44 x 3.53
200.00	208.80	6.00	201.50	1.00 R2	2000-55	202.79 x 3.53
210.00	218.80	6.00	211.50	1.00 R2	2100-55	215.49 x 3.53
220.00	228.80	6.00	221.50	1.00 R2	2200-55	228.19 x 3.53
230.00	238.80	6.00	231.50	1.00 R2	2300-55	234.54 x 3.53
240.00	248.80	6.00	241.50	1.00 R2	2400-55	247.24 x 3.53
250.00	258.80	6.00	251.50	1.00 R2	2500-55	253.58 x 3.53
260.00	272.20	8.40	262.00	1.50 R2	2600-55	266.07 x 5.33
280.00	292.20	8.40	282.00	1.50 R2	2800-55	291.47 x 5.33
300.00	312.20	8.40	302.00	1.50 R2	3000-55	304.17 x 5.33
320.00	332.20	8.40	322.00	1.50 R2	3200-55	329.57 x 5.33
350.00	362.20	8.40	352.00	1.50 R2	3500-55	354.97 x 5.33
360.00	372.20	8.40	362.00	1.50 R2	3600-55	354.97 x 5.33
370.00	382.20	8.40	372.00	1.50 R2	3700-55	380.37 x 5.33
400.00	412.20	8.40	402.00	1.50 R2	4000-55	405.26 x 5.33
440.00	456.00	11.00	442.00	1.50 R2	4400-55	456.06 x 6.99
480.00	496.00	11.00	482.00	1.50 R2	4800-55	494.16 x 6.99
600.00	616.00	11.00	602.00	1.50 R2	6000-55	608.08 x 6.99
630.00	646.00	11.00	632.00	1.50 R2	6300-55	633.48 x 6.99
680.00	700.00	14.00	682.50	2.00 R2	6800-55	680.00 x 8.40
700.00	720.00	14.00	702.50	2.00 R2	7000-55	715.00 x 8.40
770.00	790.00	14.00	772.50	2.00 R2	7700-55	790.00 x 8.40
828.00	848.00	14.00	830.50	2.00 R2	8280-55	845.00 x 8.40
880.00	900.00	14.00	882.50	2.00 R2	8800-55	888.00 x 8.40
900.00	920.00	14.00	902.50	2.00 R2	9000-55	888.00 x 8.40
1030.00	1050.00	14.00	1032.50	2.00 R2	10300-55	1035.00 x 8.40