_Masters in the art and science of Sealing technology



STOCKLIST

(VERSION 8-A)

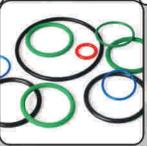
Rotary Shaft Seals



Hydraulic Seals



V Belts



O Rings



Having 7000 Std. sizes

With 30 different profiles



INDEX

PROFILE	STYLE	ТҮРЕ	TEMP °C	PRESSURE BAR (MAX)	SPEED m/sec	MATERIAL	PAGE NO
HYDRAULIC SEALS	- Piston	Seals					
	PCA	Double Acting	-30° to + 100°	400	0.5	NBR, Polyester Elastomer, Thermo-Plastic Polymer	1
	PCI	Double Acting	-30° to + 100°	400	1.0	NBR, Polyester Elastomer, Thermo-Plastic Polymer	2
	PTA	Double Acting	-30° to + 100°	400	10	NBR, Composite PTFE	3
	FIA	Double Acting	-40° to + 220°	400	10	FPM, Composite PTFE	
←	SUA	Single Acting Split Piston	-30° to + 100°	300	0.5	Polyurethane	4
HYDRAULIC SEALS	- Rod Se	als					
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	KIA	Single Acting	-40° to + 220°	400	10	FPM, PTFE Composite	0
 ←	RUB	Single Acting	-30° to + 100°	300	0.5	Polyurethane	7
─	RVA	Single Acting Split Housing	-30° to + 100°	400	0.5	Rubber / Fabric	8
─	RVB	Single Acting Split Housing	-30° to + 100°	400	0.5	Rubber / Fabric	8
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→	WDD	Medium Duty	-30° to + 100°	-	0.5	NBR	10
→	WCA	Heavy Duty	-30° to + 100°	-	0.5	NBR	10
→	WRC	Medium Duty	-30° to + 100°	-	1.0	NBR	11
→	WDA	Heavy Duty	- 30° to + 100°	-	1.0	Polyurethane	12
HYDRAULIC SEALS	- Guide	Rings	'				
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←→	GB	Heavy Duty	- 30° to + 120°	-	2	Thermoplastic	14
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	ATA	Rotary Shaft Seals	-200° to +260°	10.0	30	PTFE Compound Filled Carbon	16

PROFILE	STYLE	ТҮРЕ	TEMP °C	PRESSURE BAR (MAX)	SPEED m / sec	MATERIAL	PAGE NO
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	VRS	Rotary Shaft Seals	-30° to +100°	NA	10	NBR	17
	AIA, AIB, ACA, ACC	Rotary Shaft Seals	-30° to + 100°	0.5	10	NBR	18
O-Rings							
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	OR	O - Ring	-40° to + 220°	200	-	Viton	24
	ORS	O - Ring Kit	-30° to + 100°	160	_	NBR	26
	UKS	O - Ming Mit	-40° to + 220°	100	_	FPM	20
	CD	O - Ring Cord	-30° to + 100°	40	_	NBR	27
			-40° to + 220°			FPM	
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	Classical Fractional Wedge S Profile To	al Horse Power Belts • 3 section • 3	SPB Section •	Narrow Section Wrap Type Belts Harvester Combi		Hexagonal BeltsWet Grinder BeltsLoom Grinder Belts	34

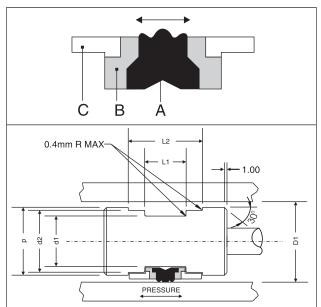
Note:

Spareage is continuously adding new profiles & sizes in it's standard stock range. Hence do not hesitate to contact sales team for your requirements.

Offering all type of seals: • Upto 2000 mm in diameter

- Temperature range from -200°C to + 260°C
- From 10 psi. to 12000 psi
- More than 50 different sealing materials





STYLE : PCA TYPE : Double Acting Compact Seal

MATERIAL:

A) SEAL RING: NT5/a

SPAREAGE NT5/a is a Acrylonitrile Butadine Rubber (NBR) compound with a hardness of 75°/80° shore 'A'.

B) BACK UP RING: PU3

PU3 is a Polyester based hard Polyurethane compound.

C) BEARING RINGS: NY2/b NY/2b is Glass Filled Polyamide.

MAX OPERATING CONDITIONS:

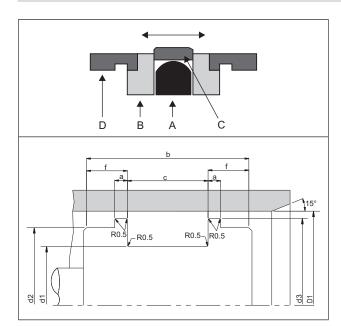
Temp.: -30° C to 100° C Pressure: 400 BAR Speed: 0.5 mtr./sec.

DETAILS:

PCA is a robust compact double acting seal assembly designed specially for one piece pistons. It uses a nitrile sealing element which has proven itself in service to be extremely wear resistant and capable of working most effectively in a wide variety of medium duty applications. The seal is also suitable for two piece piston applications.

Spareage Part No.	D1 (H9)	d1 (h9)	d2 (h9)	L1 (±0.2)	L2 (±0.2)	p (h11)	Spareage Part No.	D1 (H9)	d1 (h9)	d2 (h9)	L1 (±0.2)	L2 (±0.2)	p (h11)
PCA 0110901	20.00	11.00	17.00	13.50	17.70	19.00	PCA 0850901	110.00	85.00	103.10	22.40	35.10	108.00
PCA 0150901	25.00	15.00	21.00	12.00	20.00	23.00	PCA 0920901	110.00	92.00	106.00	22.50	29.70	109.00
PCA 0150902	25.00	15.00	21.45	16.40	29.10	23.50	PCA 0900901	115.00	90.00	108.10	22.40	35.10	113.00
PCA 0210901	30.00	21.00	27.00	13.50	17.70	29.00	PCA 0950901	120.00	95.00	113.10	22.40	35.10	118.00
PCA 0220901	32.00	22.00	28.50	16.40	29.10	30.50	PCA 1000901	125.00	100.00	118.10	25.40	38.10	122.96
PCA 0240901	32.00	24.00	29.00	10.00	18.00	31.00	PCA 1030901	125.00	103.00	121.00	26.50	36.70	124.00
PCA 0250901	35.00	25.00	31.40	16.40	29.10	33.50	PCA 1050901	125.00	105.00	120.00	25.40	38.10	123.00
PCA 0240902	40.00	24.00	35.40	18.40	31.10	38.50	PCA 1080901	125.00	108.00	121.00	26.50	40.90	124.40
PCA 0260901	40.00	26.00	36.00	15.50	20.70	39.00	PCA 1050902	130.00	105.00	122.60	25.40	44.40	127.50
PCA 0170901	30.00	17.00	26.50	15.40	28.10	28.50	PCA 1100901	135.00	110.00	127.60	25.40	44.40	132.50
PCA 0300901	40.00	30.00	35.40	16.40	29.10	38.50	PCA 1100902	135.00	110.00	128.10	25.40	38.10	133.00
PCA 0300902	40.00	30.00	37.00	12.50	20.50	39.00	PCA 1150901	140.00	115.00	132.60	25.40	44.40	137.50
PCA 0320901	40.00	32.00	36.00	15.50	21.90	39.40	PCA 1150903	140.00	115.00	133.00	25.40	38.10	138.00
PCA 0280901	42.00	28.00	38.00	15.50	20.70	41.00	PCA 1180901	140.00	118.00	136.00	26.50	36.70	139.00
PCA 0290901	45.00	29.00	40.40	18.40	31.10	43.70	PCA 1200901	145.00	120.00	137.60	25.40	44.40	142.50
PCA 0350901	45.00	35.00	40.40	16.40	29.10	43.50	PCA 1200902	145.00	120.00	138.30	25.40	38.10	142.95
PCA 0340901	50.00	34.00	45.40	18.40	31.10	48.50	PCA 1250901	150.00	125.00	142.60	25.40	44.40	147.50
PCA 0340902	50.00	34.00	46.00	20.00	26.20	48.00	PCA 1250902	150.00	125.00	143.00	25.40	38.10	148.00
PCA 0350902	50.00	35.00	46.00	20.00	30.00	48.50	PCA 1280901	150.00	128.00	146.00	26.50	36.70	149.00
PCA 0380902	50.00	38.00	46.00	20.50	28.90	49.40	PCA 1300901	155.00	130.00	147.60	25.40	44.40	152.50
PCA 0390901	55.00	39.00	50.36	18.40	31.10	53.50	PCA 1300903	160.00	130.00	152.60	25.40	44.40	157.50
PCA 0440901	60.00	44.00	55.40	18.40	31.10	58.50	PCA 1300902	160.00	130.00	153.00	25.40	38.10	158.00
PCA 0440902	60.00	44.00	56.00	20.50	26.70	59.00	PCA 1350901	160.00	135.00	152.60	25.40	44.40	157.50
PCA 0480901	60.00	48.00	56.00	20.50	28.90	59.40	PCA 1380901	160.00	138.00	156.00	26.50	36.70	159.00
PCA 0470901	63.00	47.00	58.40	18.40	31.10	61.50	PCA 1400901	165.00	140.00	157.60	25.40	44.40	162.50
PCA 0470902	63.00	47.00	59.00	20.50	28.90	62.00	PCA 1450901	170.00	145.00	161.70	25.40	50.80	167.50
PCA 0480902	63.00	48.00	59.00	20.00	30.00	61.50	PCA 1500901	175.00	150.00	166.70	25.40	50.80	172.10
PCA 0510901	63.00	51.00	59.00	20.50	28.90	62.40	PCA 1500903	180.00	150.00	172.95	35.40	48.10	177.87
PCA 0500901	65.00	50.00	60.40	18.40	31.10	65.00	PCA 1550901	180.00	155.00	171.70	25.40	50.80	177.00
PCA 0500902	70.00	50.00	64.20	22.40	35.10	68.34	PCA 1580901	180.00	158.00	176.00	26.50	36.70	179.00
PCA 0540901	70.00	54.00	66.00	20.50	26.70	69.00	PCA 1600901	185.00	160.00	176.70	25.40	50.80	182.00
PCA 0580901	70.00	58.00	66.00	20.50	28.90	68.50	PCA 1650901	190.00	165.00	181.70	25.40	50.80	187.00
PCA 0550901	75.00	55.00	69.20	22.40	35.10	73.32	PCA 1700901	195.00	170.00	186.70	25.40	50.80	192.00
PCA 0600901	80.00	60.00	74.15	22.40	35.10	78.34	PCA 1700902	200.00	170.00	193.00	35.40	48.10	198.00
PCA 0600902	80.00	60.00	75.00	25.40	38.10	78.00	PCA 1750901	200.00	175.00	191.60	25.40	50.80	197.00
PCA 0620901	80.00	62.00	76.00	22.40	29.70	79.00	PCA 1750902	200.00	175.00	196.00	31.50	44.70	199.00
PCA 0650901	80.00	65.00	76.00	20.00	30.00	79.00	PCA 1850901	210.00	185.00	201.60	25.40	50.80	207.00
PCA 0650902	85.00	65.00	79.15	22.40	35.10	83.34	PCA 1900902	220.00	190.00	212.70	35.40	48.10	217.00
PCA 0700901	90.00	70.00	84.15	22.40	35.10	88.30	PCA 1950901	220.00	195.00	211.60	25.40	50.80	217.00
PCA 0750901	95.00	75.00	89.15	22.40	35.10	93.30	PCA 2050901	230.00	205.00	221.60	25.40	50.80	227.00
PCA 0750902	100.00	75.00	93.15	22.40	35.10	98.00	PCA 2150901	240.00	215.00	231.60	25.40	50.80	237.00
PCA 0800901	100.00	80.00	95.00	25.40	38.10	98.00	PCA 2200801	250.00	220.00	242.90	35.40	48.10	247.00
PCA 0820901	100.00	82.00	96.00	22.50	29.70	99.00	PCA 2250901	250.00	225.00	241.60	25.40	50.80	247.00
PCA 0860901	100.00	86.00	96.00	22.50	32.00	98.50	PCA 2750901	300.00	275.00	291.60	25.40	50.80	298.00
PCA 0800902	105.00	80.00	98.10	22.40	35.10	103.00		555.00	5.00	_000	_0.10	00.00	_00.00
. 5/1000002	100.00		00.10	<i></i> .¬∪	00.10	100.00							





STYLE : PCI TYPE : Double Acting Compact Seal

MATERIAL:

A) Energizer - NT5/a (Spareage NT5/a is a Acrylonitrile Butadiene Rubber Compound (NBR) with a hardness of 75°/80° shore 'A')

B) Backup Rings - Thermoplastic Polymer

C) Seal Ring - Composite PTFE

D) Guide Rings - Phenolic Resin Fabric

MAX OPERATING CONDITIONS:

Temp.: -30°C to +100°C (upto 200°C on request)

Pressure: 400 Bar. (upto 700 bar with modified piston grooves, contact Spareage for more details)

Speed: 1.0 mtr./sec.

DETAILS:

The Spareage style PCI is a robust heavy duty double acting piston seal. PCI style seal comprising of a elastomeric energiser ring, Bronze Filled PTFE sealing ring. Two support rings made of Thermoplastic polymers and two guide rings.

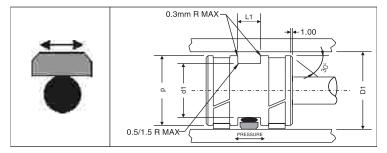
The elastomeric ring energises the sealing ring to force it against cylinder bore, providing a sealing function at low pressure. The two support rings prevent extrusion a sealing ring in high pressure. Two guide ring make contact with cylinder bore thus guide the piston in heavy load condition.

Part No.	D1	d1	b	d2	d3	a	С	f
DOI 0470004	00.0	47.0	00.0	55.0	50.0	0.00	00.50	0.05
PCI 0470901	63.0	47.0	39.0	55.0	59.0	3.00	20.50	9.25
PCI 0620901	80.0	62.0	43.0	72.0	76.0	3.00	22.50	10.25
PCI 0820901	100.0	82.0	43.0	92.0	96.0	3.00	22.50	10.25
PCI 1030901	125.0	103.0	53.0	115.0	121.0	4.00	26.50	13.25
PCI 1080901	130.0	108.0	53.0	120.0	126.0	4.00	26.50	13.25
PCI 1180902	140.0	118.0	53.0	130.0	136.0	4.00	26.50	13.25
PCI 1380901	160.0	138.0	53.0	150.0	156.0	4.00	26.50	13.25
PCI 1580901	180.0	158.0	57.0	170.0	176.0	6.00	26.50	15.25
PCI 1750901	200.0	175.0	64.0	190.0	196.0	4.50	31.50	16.25
PCI 1950902	220.0	195.0	71.0	210.0	216.0	8.00	31.50	19.75
PCI 2250901	250.0	225.0	85.0	240.0	246.0	15.0	31.50	26.75

Piston Seals



STYLE : PTA TYPE : Double Acting



MATERIAL:

INNER O'RING: NT4/b. Spareage NT4/b is a Acrylonitrile Butadine Rubber (NBR) compound with a hardness of 70°/75° shore 'A'.

 $OUTER\,SEAL\,RING: BFT.\ Spare age\,BFT is\,Bronze\,Filled\,with\,PTFE\,compound\,with\,Bronze\,content\,of\,40\%\,(for\,higher\,pressure\,60\%\,BFT\,is\,recommended).$

MAX OPERATING CONDITIONS:

Temp.:-30°C to 100°C (upto +220°C on request)

Pressure: 400 BAR Speed: 1.0 mtr./sec.

DETAILS:

PTA is a double acting piston seal suitable for light to medium duty hydraulic cylinders & suitable for cylinders with small groove diamensions thus enabling a compact piston. The PTA is a combination of a NBR O'Ring energiser & an outer seal ring made of PTFE added with a filler to increase the resistance of seal ring to high pressure. Generally Bronze is the used filler but also Glass/Graphite Filled PTFE PTA compact seal can be made. The PTA seal can be easily mounted on a single piece piston and also suitable for two piece piston application. The Bronze filled PTFE outer seal ring when in contact with the cylinder bore, the PTFE ensures a stick slip free movement & reduces friction to a minimum. Where as the filler increases the strength in the seal ring to prevent it from extruding & to withstand pressures as high as 400 BAR.

Spareage Part No.	D1 (H9)	d1 (h9)	L1 (+0.2)	O'Ring Part No.	Spareage Part No.	D1 (H9)	d1 (h9)	L1 (+0.2)	O'Ring Part No.
PTA 0050801	10.00	5.10	2.20	OR 17800447	PTA 1040801	120.00	104.50	6.30	OR 53310414
PTA 0070801	12.00	7.10	2.20	OR 17800675	PTA 1040802	125.00	104.00	8.10	OR 69910300
PTA 0070802	15.00	7.50	3.20	OR 26200710	PTA 1090801	125.00	109.50	6.30	OR 53310732
PTA 0080801	16.00	8.50	3.20	OR 26200800	PTA 1090803	130.00	109.00	8.10	OR 69910800
PTA 0100801	18.00	10.50	3.20	OR 26200100	PTA 1140801	130.00	114.50	6.30	OR 63311367
PTA 0120801	20.00	12.50	3.20	OR 26201191	PTA 1140802	135.00	114.00	8.10	OR 69911200
PTA 0140801	22.00	14.50	3.20	OR 26201394	PTA 1190801	140.00	119.00	8.10	OR 53311684
PTA 0140802	25.00	14.00	4.20	OR 35301387	PTA 1240802	140.00	124.50	6.30	OR 53312319
PTA 0170801	25.00	17.50	3.20	OR 26201712	PTA 1240801	145.00	124.00	8.10	OR 69912319
PTA 0180801	26.00	18.50	3.20	OR 26201796	PTA 1290803	145.00	129.50	6.30	OR 53312637
PTA 0200801	28.00	20.50	3.20	OR 26202029	PTA 1290801	150.00	129.00	8.10	OR 69912637
PTA 0220801	30.00	22.50	3.20	OR 26202189	PTA 1340802	150.00	134.50	6.30	OR 53313272
PTA 0240801	32.00	24.50	3.20	OR 26202347	PTA 1340801	155.00	134.00	8.10	OR 69913272
PTA 0270801	35.00	27.50	3.20	OR 26202664	PTA 1390801	160.00	139.00	8.10	OR 69913589
PTA 0280801	36.00	28.50	3.20	OR 26202824	PTA 1440802	160.00	144.50	6.30	OR 53314224
PTA 0300801	38.00	30.50	3.20	OR 26202824	PTA 1440801	165.00	144.00	8.10	OR 69914224
PTA 0290801	40.00	29.00	4.20	OR 35302817	PTA 1490801	170.00	149.00	8.10	OR 69914859
PTA 0310802	42.00	31.00	4.20	OR 35302974	PTA 1540801	175.00	154.00	8.10	OR 69915177
PTA 0340801	45.00	34.00	4.20	OR 35303292	PTA 1590801	180.00	159.00	8.10	OR 69915812
PTA 0370801	48.00	37.00	4.20	OR 35303609	PTA 1640802	180.00	164.50	6.30	OR 53316447
PTA 0390801	50.00	39.00	4.20	OR 35303769	PTA 1640801	185.00	164.00	8.10	OR 59916129
PTA 0440801	55.00	44.00	4.20	OR 35304285	PTA 1690801	190.00	169.00	8.10	OR 69916447
PTA 0450801	56.00	45.00	4.20	OR 35304470	PTA 1740801	195.00	174.00	8.10	OR 69917082
PTA 0490801	60.00	49.00	4.20	OR 35304722	PTA 1790801	200.00	179.00	8.10	OR 69917717
PTA 0520801	63.00	52.00	4.20	OR 35305080	PTA 1840801	200.00	184.50	6.30	OR 53318352
PTA0470804	63.00	47.50	6.30	OR 53304699	PTA 1890801	210.00	189.00	8.10	OR 69918644
PTA 0540801	65.00	54.00	4.20	OR 35305357	PTA 1990801	220.00	199.00	8.10	OR 69919622
PTA 0540802	70.00	54.50	6.30	OR 53305334	PTA2040802	225.00	204.00	8.10	OR 70020100
PTA 0590801	70.00	59.00	4.20	OR 35305674	PTA 2090801	230.00	209.00	8.10	OR 69920257
PTA 0640803	75.00	64.00	4.20	OR 35306309	PTA 2190801	240.00	219.00	8.10	OR 69921527
PTA 0640801	80.00	64.50	6.30	OR 53306287	PTA 2290801	250.00	22900	8.10	OR 69922797
PTA0690803	80.00	69.00	4.20	OR 35306627	PTA 2390801	260.00	239.00	8.10	OR 69923600
PTA 0690801	85.00	69.50	6.30	OR 53306922	PTA 2490801	270.00	249.00	8.10	OR 69924067
PTA 0690802	90.00	69.00	8.10	OR 69906800	PTA 2590801	280.00	259.00	8.10	OR 69925337
PTA 0740801	90.00	74.50	6.30	OR 53307239	PTA 2690801	290.00	269.00	8.10	OR 69926607
PTA 0790801	95.00	79.50	6.30	OR 53307874	PTA 2790801	300.00	279.00	8.10	OR 69927750
PTA 0790802	100.00	79.00	8.10	OR 69907800	PTA2990801	320.00	299.00	8.10	OR 69929750
PTA 0840801	100.00	84.50	6.30	OR 53308192	PTA3350801	360.00	335.50	8.10	OR 69932957
PTA 0890801	105.00	89.50	6.30	OR 53308827	PTA3550801	380.00	355.50	8.10	OR 69935000
PTA 0940801	110.00	94.50	6.30	OR 53309144	PTA3750801	400.00	375.50	8.10	OR 69937000
PTA0890802	110.00	89.00	8.10	OR 69908800	PTA4250801	450.00	425.50	8.10	OR 69941796
PTA 0990801	115.00	99.50	6.30	OR 53309779	PTA4750801	500.00	475.50	8.10	OR 69946876
PTA0940803	115.00	94.00	8.10	OR 69909100	PTA5250801	550.00	525.50	8.10	OR 69952100
PTA 0990802	120.00	99.00	8.10	OR 69909800	PTA5750801	600.00	575.50	8.10	OR 69956500

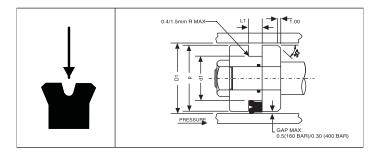
Bold sizes are available with FKM (Viton®) O-Ring also.

Piston Seals



STYLE : SUA

TYPE: Single Acting



MATERIAL:

PUX - is a Polyester based Polyurethane compound of shore 'A' 92°.

MAX OPERATING CONDITIONS:

Temp.:-30° C to 100° C Pressure: 300 BAR Speed: 0.5 mtr./sec.

DETAILS:

The Spareage style SUA seal is a general purpose seal & has good overall performance. It is a seal suited for split piston but also be used with a single piston. The SUA seal is available in 2 varieties of materials - NBR & Polyurethane. Considering the economic factor with our seal performance the SUA seals made out of NBR are most suitable upto a pressure of 160 BAR and extremely economical. Another good factor is the preload pressure applied by the seal ensures good sealing at low pressures & also misalignment in the movement of the Piston Rod. Due to excellent wear resistance properties of polyurethane the life expected is 3 times that of NBR.

Spareage Part No. Polyurethane	D1 (H9)	d1 (h9)	L1 +0.2	Seal Ht.	Spareage Part No. Polyurethane	D1 (H9)	d1 (h9)	L1 +0.2	Seal Ht.	Spareage Part No. Polyurethane	D1 (H9)	d1 (h9)	L1 +0.2	Seal Ht.	Spareage Part No. Polyurethane	D1 (H9)	d1 (h9)	L1 +0.2	Seal Ht.
SUA005L501	12.00	5.00	6.00	5.00	SUA018L504	26.00	18.00	6.50	5.50	SUA030L506	38.00	30.00	8.00	7.00	SUA038L501	45.00	38.00	9.00	8.00
SUA006L501	12.00	6.00	6.50	5.50	SUA021L501	26.00	21.00	6.00	5.00	SUA030L508	39.00	30.00	9.00	8.00	SUA036L503	46.00	36.00	8.00	7.00
SUA008L502	16.00	8.00	6.70	5.70	SUA016L506	26.50	16.00	9.00	8.00	SUA020L507	40.00	20.00	11.00.	10.00	SUA032L503	48.00	32.00	11.00	10.00
SUA012L508	16.00	12.00	6.50	5.50	SUA019L501	27.00	19.00	6.00	5.00	SUA024L501	40.00	24.00	9.00	8.00	SUA035L512	48.00	35.00	10.00	9.00
SUA011L502	17.00	11.00	8.00	7.00	SUA018L502	28.00	18.00	8.00	7.30	SUA025L513	40.00	25.00	9.00	8.00	SUA038L502	48.00	38.00	9.00	8.00
SUA010L501	18.00	10.00	6.00	5.00	SUA019L503	28.00	19.00	6.70	5.70	SUA025L512	40.00	25.00	11.00	10.00	SUA040L507	48.00	40.00	9.00	8.00
SUA010L505	18.00	10.00	8.00	7.00	SUA020L504	28.00	20.00	6.00	5.00	SUA025L510	40.00	25.00	13.00	12.00	SUA030L510	50.00	30.00	11.00	10.00
SUA012L501	18.00	12.00	7.00	6.00	SUA020L501	28.00	20.00	7.00	6.00	SUA027L501	40.00	27.00	11.00	10.00	SUA034L503	50.00	34.00	13.00	12.00
SUA010L508	19.00	10.00	9.00	8.00	SUA015L504	30.00	15.00	8.00	7.00	SUA028L503	40.00	28.00	11.00	10.00	SUA035L508	50.00	35.00	9.00	8.00
SUA012L513	19.00	12.00	6.00	5.00	SUA018L505	30.00	18.00	9.00	8.00	SUA030L504	40.00	30.00	7.00	6.00	SUA035L503	50.00	35.00	11.00	10.00
SUA010L503	20.00	10.00	6.00	5.00	SUA019L502	30.00	19.00	8.00	7.00	SUA030L505	40.00	30.00	8.00	7.00	SUA035L509	50.00	35.00	12.00	11.00
SUA012L503	20.00	12.00	5.40	4.40	SUA020L505	30.00	20.00	9.00	8.00	SUA030L502	40.00	30.00	10.00	9.00	SUA036L504	50.00	36.00	9.00	8.00
SUA012L505	20.00	12.00	6.80	5.80	SUA020L503	30.00	20.00	11.00	10.00	SUA030L503	40.00	30.00	11.00	10.00	SUA040L508	50.00	40.00	6.00	5.00
SUA012L509	20.00	12.00	9.00	8.00	SUA022L501	32.00	22.00	8.00	7.30	SUA032L514	40.00	32.00	6.00	5.00	SUA040L503	50.00	40.00	7.00	6.00
SUA012L504	22.00	12.00	8.00	7.30	SUA022L504	32.00	22.00	9.00	8.00	SUA032L513	40.00	32.00	6.30	5.80	SUA040L505	50.00	40.00	8.00	7.00
SUA012L506	22.00	12.00	9.00	8.00	SUA024L504	32.00	24.00	6.70	5.70	SUA032L501	40.00	32.00	9.00	8.00	SUA040L509	50.00	40.00	9.00	8.00
SUA014L503	22.00	14.00	7.00	6.00	SUA025L507	33.00	25.00	6.00	5.00	SUA032L502	42.00	32.00	6.50	5.50	SUA040L504	50.00	40.00	11.00	10.00
SUA016L505	22.00	16.00	5.00	4.00	SUA025L505	33.00	25.00	6.80	5.80	SUA032L507	42.00	32.00	7.00	6.00	SUA040L510	50.00	40.00	13.00	12.00
SUA016L504	22.00	16.00	6.50	5.50	SUA025L503	33.00	25.00	9.00	8.00	SUA028L507	43.00	28.00	7.00	6.00	SUA042L501	50.00	42.00	6.00	5.00
SUA012L510	23.00	12.00	6.75	5.75	SUA022L506	35.00	22.00	8.00	7.00	SUA035L511	43.00	35.00	7.00	6.00	SUA035L514	52.00	35.00	11.00	10.00
SUA012L511	24.00	12.00	7.00	6.00	SUA025L514	35.00	25.00	7.00	6.00	SUA035L506	43.00	35.00	9.00	8.00	SUA044L503	52.00	44.00	6.50	5.50
SUA014L502	24.00	14.00	7.00	6.00	SUA025L506	35.00	25.00	8.00	7.00	SUA022L505	45.00	22.00	11.00	10.00	SUA045L509	53.00	45.00	10.00	9.30
SUA015L505	24.00	15.00	8.00	7.00	SUA025L504	35.00	25.00	9.00	8.00	SUA030L509	45.00	30.00	9.00	8.00	SUA040L501	55.00	40.00	11.00	10.00
SUA016L511	24.00	16.00	6.00	5.00	SUA028L502	35.50	28.00	6.00	5.00	SUA0305907	45.00	30.00	10.00	9.00	SUA045L503	55.00	45.00	7.00	6.00
SUA016L503	24.00	16.00	6.80	5.80	SUA024L503	36.00	24.00	7.50	6.50	SUA030L514	45.00	30.00	11.00	10.00	SUA045L507	55.00	45.00	8.00	7.00
SUA017L501	24.00	17.00	6.00	5.00	SUA028L508	36.00	28.00	6.40	5.40	SUA032L506	45.00	32.00	9.00	8.00	SUA045L524	55.00	45.00	8.50	7.50
SUA018L503	24.00	18.00	10.00	9.00	SUA028L506	36.00	28.00	9.00	8.00	SUA032L504	45.00	32.00	11.00	10.00	SUA045L501	55.00	45.00	11.00	10.00
SUA014L504	25.00	14.00	7.00	6.00	SUA025L511	38.00	25.00	9.00.	8.00	SUA034L502	45.00	34.00	8.00	7.00	SUA045L504	56.00	45.00	8.00	7.30
SUA015L501	25.00	15.00	8.00	7.30	SUA025L508	38.00	25.00	10.00	9.00	SUA035L502	45.00	35.00	7.00	6.00	SUA045L510	56.00	45.00	11.00	10.00
SUA015L503	25.00	15.00	11.00	10.00	SUA025L501	38.00	25.00	11.00	10.00	SUA035L507	45.00	35.00	8.00	7.00	SUA042L502	57.00	42.00	10.00	9.00
SUA017L502	25.00	17.00	6.70	5.70	SUA025L509	38.00	25.00	13.00	12.00	SUA035L513	45.00	35.00	9.00	8.00	SUA045L521	57.00	45.00	7.00	6.00
SUA016L502	26.00	16.00	6.00	5.00	SUA028L504	38.00	28.00	8.00	7.00	SUA035L504	45.00	35.00	11.00	10.00	SUA048L504	57.00	48.00	11.00	10.00
SUA018L501	26.00	18.00	6.00	5.00	SUA030L507	38.00	30.00	6.70	5.70	SUA035L505	45.00	35.50	7.00	6.00	SUA040L502	60.00	40.00	11.00	10.00

Piston Seals

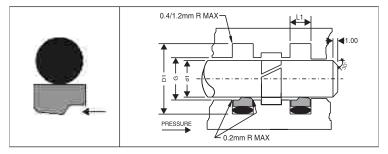


Part No.																			SEALS	
Substitution 190	Part No.					Part No.					Part No.					Part No.				
Summarine Summ	SUA040L511	60.00	40.00	13.00	12.00	SUA060L501	70.00	60.00	11.00	10.00	SUA080L503	100.00	80.00	14.00	13.00	SUA115L502	140.00	115.00	16.00	15.00
Substitution Column Colu	SUA043L501	60.00	43.00	7.00	6.00	SUA060L511	70.00	60.00	13.00	12.00	SUA085L502	100.00	85.00	10.00	9.00	SUA120L514	140.00	120.00	13.00	12.00
Subscription Column Colu	SUA045L505	60.00	45.00	11.00	10.00	SUA063L503	70.00	63.00	6.00	5.00	SUA085L503	100.00	85.00	13.00	12.00	SUA120L501	140.00	120.00	15.50	14.50
SUMPOLINGE	SUA045L519	60.00	45.00	12.00	11.00	SUA056L505	71.00	56.00	11.00	10.00	SUA090L512	100.00	90.00	7.00	6.00	SUA125L501	140.00	125.00	10.00	9.00
SUMPSILES 0.00	SUA045L506	60.00	45.00	13.00	12.00	SUA056L501	71.00	56.00	12.50	11.50	SUA090L503	100.00	90.00	13.00	12.00	SUA125L506	140.00	125.00	16.00	15.00
SUMPRISSING 90,00 90,00 100 100 100 100 100 100 100 100 100	SUA050L502	60.00	50.00	7.00	6.00	SUA062L502	72.00	62.00	9.00	8.00	SUA076L501	101.60	76.20	13.70	12.70	SUA125L507	145.00	125.00	16.00	15.00
SUMPORT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SUA050L506	60.00	50.00	8.00	7.30	SUA053L502	73.00	53.00	13.00	12.00	SUA088L501	101.60	88.90	10.52	9.52	SUA125L502	150.00	125.00	14.00	13.00
Substitution Column Colu	SUA050L508	60.00	50.00	9.00	8.00	SUA063L504	73.00	63.00	9.00	8.00	SUA085L504	105.00	85.00	11.00	10.00	SUA130L502	150.00	130.00	15.50	14.50
SUM-MILLSTI READ SUM-MILLSTI	SUA050L503	60.00	50.00	11.00	10.00	SUA063L505	73.00	63.00	11.00	10.00	SUA085L501	105.00	85.00	12.80	11.80	SUA135L503	155.00	135.00	15.50	14.50
Sumbolisto 10,00	SUA050L509	60.00	50.00	13.00	12.00	SUA055L508	75.00	55.00	11.00	10.00	SUA090L514	105.00	90.00	10.00	9.00	SUA140L507	155.00	140.00	10.00	9.00
SUAPSILISZY	SUA045L511	62.00	45.00	10.50	9.50	SUA055L501	75.00	55.00	13.00	12.00	SUA090L504	105.00	90.00	11.00	10.00	SUA140L503	155.00	140.00	16.00	15.00
SUMMELS 12	SUA050L510	62.00	50.00	9.50	8.50	SUA060L505	75.00	60.00	12.00	11.00	SUA090L505	105.00	90.00	13.00	12.00	SUA130L503	160.00	130.00	17.00	16.00
SUMPHINEN (18 00) 45 00 13 00 12 00 50 50 14 00 00 50 00 15 0 14 00 00 15 0 14 00 00 15 0 14 00 0 15 0 14 0 14	SUA050L523	62.00	50.00	11.00	10.00	SUA063L512	75.00	63.00	9.50	8.50	SUA095L502	105.00	95.00	13.00	12.00	SUA135L502	160.00	135.00	16.00	15.00
SUMPHINES 63,00 45,00 13,00 12,00 13,00 12,00 13	SUA045L512	63.00	45.00	10.00	9.00	SUA063L506	75.00	63.00	11.00	10.00	SUA090L506	106.00	90.00	13.00	12.00	SUA140L502	160.00	140.00	15.00	14.00
SUMPHINES 63,00 45,00 13,00 12,00 13,00 12,00 13	SUA045L502	63.00	45.00	11.00	10.00	SUA065L510	75.00	65.00	7.00	6.00	SUA090L507	106.00	90.00	15.00	14.00	SUA140L501	160.00	140.00	15.50	14.50
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SUA056L502 66.00 56.00 11.00 10.00 SUA075L506 90.00 75.00 13.00 12.00 SUA010L505 125.00 110.00 10.00 9.00 SUA200L502 230.00 200.00 18.00 17.00 SUA045L514 68.00 45.00 13.00 12.00 SUA075L507 90.00 75.00 16.00 15.00 SUA110L503 125.00 110.00 12.00 11.00 SUA210L501 240.00 210.00 19.00 18.00 SUA055L505 68.00 55.00 11.00 10.00 SUA080L502 90.00 80.00 7.00 6.00 SUA110L504 125.00 110.00 13.00 12.00 SUA220L501 250.00 220.00 19.00 18.00 SUA056L504 70.00 50.00 12.00 11.00 SUA080L508 90.00 80.00 12.00 11.00 SUA110L501 125.00 110.00 16.00 15.00 SUA225L501 250.00 225.00 19.20 18.00 SUA056L519 70.00 50.00 13.00 12.00 SUA075L503 91.00 71.00 13.00 12.00 SUA115L501 125.00 110.00 16.00 15.00 SUA230L502 250.00 230.00 18.00 17.00 SUA056L504 70.00 55.00 13.00 12.00 SUA080L508 95.00 80.00 12.00 SUA056L504 70.00 55.00 13.00 12.00 SUA080L508 95.00 80.00 11.00 10.00 SUA056L504 70.00 56.00 11.00 SUA080L508 95.00 80.00 11.00 10.00 SUA056L504 70.00 55.00 13.00 12.00 SUA080L508 95.00 80.00 11.00 10.00 SUA056L504 70.00 55.00 13.00 12.00 SUA080L508 95.00 80.00 11.00 10.00 SUA056L503 130.00 100.00 16.00 15.00 SUA230L502 250.00 230.00 18.00 17.00 SUA056L504 70.00 55.00 13.00 12.00 SUA080L501 95.00 80.00 11.00 10.00 SUA056L503 130.00 105.00 16.00 15.00 SUA240L501 270.00 240.00 18.50 17.50 SUA056L504 70.00 56.00 10.00 80.00 11.00 80.00 11.00 10.00 SUA115L503 130.00 105.00 16.00 15.00 SUA250L501 280.00 250.00 19.00 18.00 SUA056L504 70.00 56.00 11.00 10.00 SUA080L518 100.00 80.00 11.00 10.00 SUA115L503 130.00 110.00 16.00 15.00 SUA250L501 280.00 250.00 19.00 SUA056L504 70.00 56.00 11.00 10.00 SUA080L518 100.00 80.00 11.00 10.00 SUA115L503 130.00 115.00 16.00 15.00 SUA250L501 300.00 270.00 20.00 19.00 SUA056L504 70.00 60.00 70.00 60.00 70.00 60.00 70.00 80.00 11.00 10.00 SUA115L503 130.00 115.00 115.00 10.00 SUA250L501 300.00 270.00 20.00 19.00 SUA056L504 70.00 60.00 70.00 60.00 70.00 60.00 70.00 80.00 11.00 10.00 SUA056L503 130.00 115.00 115.00 115.00 115.00 SUA250L501 300.00 270.00 20.00 110.00 SUA056L504 70.00 60.00 70.00 60.00 70.00 60.00 70.00 80	SUA055L502	65.00	55.00	13.00	12.00	SUA070L506	90.00	70.00	11.00	10.00	SUA105L501	125.00	105.00	13.00	12.00	SUA200L501	220.00			
SUA045L514 68.00 45.00 13.00 12.00 SUA075L507 90.00 75.00 16.00 15.00 SUA110L503 125.00 110.00 12.00 11.00 SUA210L501 240.00 210.00 19.00 18.00 SUA055L505 68.00 55.00 11.00 10.00 SUA080L502 90.00 80.00 7.00 6.00 SUA110L504 125.00 110.00 13.00 12.00 SUA220L501 250.00 220.00 19.00 18.00 SUA050L514 70.00 50.00 11.00 10.00 SUA080L506 90.00 80.00 12.00 11.00 SUA110L501 125.00 110.00 16.00 15.00 SUA220L501 250.00 220.00 19.20 18.20 SUA050L501 70.00 50.00 12.00 11.00 SUA080L508 90.00 80.00 14.00 13.00 SUA110L501 125.00 110.00 16.00 15.00 SUA230L503 250.00 230.00 13.00 12.00 SUA050L519 70.00 50.00 13.00 12.00 SUA071L503 91.00 71.00 13.00 12.00 SUA110L501 125.00 115.00 16.00 15.00 SUA230L503 250.00 230.00 18.00 17.00 SUA050L515 70.00 50.00 15.00 14.00 SUA075L509 95.00 75.00 13.00 12.00 SUA110L501 125.00 115.00 16.00 15.00 SUA230L502 250.00 230.00 18.00 17.00 SUA050L515 70.00 50.00 15.00 15.00 15.00 SUA080L509 95.00 80.00 11.00 10.00 SUA105L503 130.00 100.00 16.00 15.00 SUA240L501 270.00 240.00 18.50 17.50 SUA055L509 70.00 55.00 13.00 12.00 SUA080L511 95.00 80.00 11.00 10.00 SUA110L502 130.00 110.00 16.00 15.00 SUA250L501 280.00 250.00 19.00 18.00 SUA055L509 70.00 56.00 9.00 8.00 SUA075L505 100.00 75.00 16.00 15.00 SUA110L502 130.00 110.00 16.00 15.00 SUA250L501 280.00 250.00 19.00 18.00 SUA056L503 70.00 56.00 9.00 8.00 SUA075L505 100.00 75.00 16.00 15.00 SUA110L502 130.00 110.00 16.00 15.00 SUA250L501 280.00 250.00 21.00 20.00 SUA056L504 70.00 56.00 10.00 70.00 60.00 70.00 SUA080L518 100.00 80.00 11.00 10.00 SUA115L503 135.00 115.00 16.00 15.00 SUA250L501 300.00 270.00 20.00 19.00 SUA056L504 70.00 60.00 70.00 60.00 70.00 60.00 50.00 SUA080L518 100.00 80.00 11.00 10.00 SUA115L503 135.00 115.00 16.00 15.00 SUA250L501 300.00 270.00 20.00 21.00 20.00 SUA056L504 70.00 60.00 70.	SUA050L513	66.00	50.00	11.00	10.00	SUA070L502	90.00	70.00	13.00	12.00	SUA105L502	125.00	105.00	16.00	15.00	SUA200L505	225.00	200.00	16.00	15.00
SUA055L505 68.00 55.00 11.00 10.00 SUA080L502 90.00 80.00 7.00 6.00 SUA110L504 125.00 110.00 13.00 12.00 250.00 220.00 19.00 18.00 SUA050L514 70.00 50.00 11.00 10.00 SUA080L506 90.00 80.00 12.00 11.00 10.00 15.00 250.00 220.00 19.20 18.20 SUA050L501 70.00 50.00 12.00 11.00 SUA080L508 90.00 80.00 14.00 13.00 125.00 110.00 16.00 15.00 SUA230L503 250.00 230.00 13.00 12.00 SUA050L519 70.00 50.00 13.00 12.00 91.00 71.00 13.00 12.00 SUA115L501 125.00 115.00 16.00 15.00 SUA230L502 250.00 230.00 18.00 17.00 SUA050L519 70.00 50.00 15.00 14.00 SUA075L509 95.00 75.00 13.00 </td <td>SUA056L502</td> <td>66.00</td> <td>56.00</td> <td>11.00</td> <td>10.00</td> <td>SUA075L506</td> <td>90.00</td> <td>75.00</td> <td>13.00</td> <td>12.00</td> <td>SUA110L505</td> <td>125.00</td> <td>110.00</td> <td>10.00</td> <td>9.00</td> <td>SUA200L502</td> <td>230.00</td> <td>200.00</td> <td>18.00</td> <td>17.00</td>	SUA056L502	66.00	56.00	11.00	10.00	SUA075L506	90.00	75.00	13.00	12.00	SUA110L505	125.00	110.00	10.00	9.00	SUA200L502	230.00	200.00	18.00	17.00
SUA050L514 70.00 50.00 11.00 10.00 SUA080L506 90.00 80.00 12.00 11.00 SUA110L501 125.00 110.00 15.00 SUA225L501 250.00 225.00 19.20 18.20 SUA050L501 70.00 50.00 12.00 11.00 SUA110L501 125.00 110.00 16.00 15.00 SUA230L503 250.00 230.00 13.00 12.00 SUA050L519 70.00 50.00 13.00 12.00 50.00 13.00 12.00 13.00 12.00 SUA115L501 125.00 115.00 16.00 15.00 SUA230L502 250.00 230.00 18.00 17.00 SUA055L505 70.00 50.00 15.00 14.00 SUA075L509 95.00 75.00 13.00 12.00 SUA105L513 130.00 100.00 16.00 15.00 SUA240L501 270.00 240.00 18.00 SUA055L506 70.00 55.00 8.00 7.00 80.00 11.00 10.00	SUA045L514	68.00	45.00	13.00	12.00	SUA075L507	90.00	75.00	16.00	15.00	SUA110L503	125.00	110.00	12.00	11.00	SUA210L501	240.00	210.00	19.00	18.00
SUA050L501 70.00 50.00 12.00 11.00 SUA080L508 90.00 80.00 14.00 13.00 SUA112L502 125.00 112.00 10.00 9.00 SUA230L503 250.00 230.00 13.00 12.00 SUA050L519 70.00 50.00 13.00 12.00 SUA071L503 91.00 71.00 13.00 12.00 SUA115L501 125.00 115.00 16.00 15.00 SUA230L502 250.00 230.00 18.00 17.00 SUA055L515 70.00 50.00 15.00 14.00 SUA075L509 95.00 75.00 13.00 12.00 SUA100L513 130.00 100.00 16.00 15.00 SUA240L501 270.00 240.00 18.50 17.50 SUA055L506 70.00 55.00 13.00 12.00 SUA100L513 130.00 105.00 16.00 15.00 SUA240L502 270.00 240.00 18.00 SUA055L509 70.00 55.00 13.00 12.00 SUA110L503 130.00<	SUA055L505	68.00	55.00	11.00	10.00	SUA080L502	90.00	80.00	7.00	6.00	SUA110L504	125.00	110.00	13.00	12.00	SUA220L501	250.00	220.00	19.00	18.00
SUA050L519 70.00 50.00 13.00 12.00 SUA071L503 91.00 71.00 13.00 12.00 SUA115L501 125.00 115.00 16.00 15.00 SUA230L502 250.00 230.00 18.00 17.00 SUA050L515 70.00 50.00 15.00 15.00 15.00 16.00 15.00 SUA240L501 270.00 240.00 18.50 17.50 SUA055L506 70.00 55.00 8.00 7.00 SUA055L509 95.00 80.00 11.00 10.00 SUA115L501 125.00 115.00 16.00 15.00 SUA240L501 270.00 240.00 18.50 17.50 SUA055L509 70.00 55.00 13.00 12.00 SUA110L509 130.00 110.00 13.00 12.00 SUA240L502 270.00 240.00 19.00 18.00 SUA056L503 70.00 56.00 9.0 8.00 SUA075L505 100.00 75.00 16.00 15.00 SUA250L502 280.00 250.00	SUA050L514	70.00	50.00	11.00	10.00	SUA080L506	90.00	80.00	12.00	11.00	SUA110L501	125.00	110.00	16.00	15.00	SUA225L501	250.00	225.00	19.20	18.20
SUA050L515 70.00 50.00 15.00 14.00 SUA075L509 95.00 75.00 13.00 12.00 SUA100L513 130.00 100.00 16.00 15.00 SUA240L501 270.00 240.00 18.50 17.50 SUA055L506 70.00 55.00 8.00 7.00 SUA080L509 95.00 80.00 11.00 10.00 SUA105L503 130.00 105.00 16.00 15.00 SUA240L502 270.00 240.00 19.00 18.00 SUA055L509 70.00 56.00 13.00 12.00 SUA110L509 130.00 110.00 13.00 12.00 SUA250L501 280.00 250.00 19.00 18.00 SUA056L503 70.00 56.00 9.00 8.00 SUA075L505 100.00 75.00 16.00 15.00 110.00 15.00 SUA250L501 280.00 250.00 21.00 20.00 SUA056L504 70.00 56.00 11.00 10.00 80.00 11.00 10.00 115.00	SUA050L501	70.00	50.00	12.00	11.00	SUA080L508	90.00	80.00	14.00	13.00	SUA112L502	125.00	112.00	10.00	9.00	SUA230L503	250.00	230.00	13.00	12.00
SUA055L506 70.00 55.00 8.00 7.00 SUA080L509 95.00 80.00 11.00 10.00 SUA105L503 130.00 105.00 16.00 15.00 SUA240L502 270.00 240.00 19.00 18.00 SUA055L509 70.00 55.00 13.00 12.00 SUA110L509 130.00 110.00 13.00 12.00 SUA250L501 280.00 250.00 19.00 18.00 SUA056L503 70.00 56.00 9.00 8.00 SUA075L505 100.00 75.00 16.00 15.00 SUA110L502 130.00 110.00 15.00 SUA250L502 280.00 250.00 21.00 20.00 SUA056L504 70.00 56.00 11.00 10.00 80.00 11.00 10.00 SUA115L506 130.00 115.00 16.00 50.00 SUA270L501 300.00 270.00 20.00 SUA060L506 70.00 60.00 7.00 6.00 SUA080L507 100.00 80.00 11.00 11.00	SUA050L519	70.00	50.00	13.00	12.00	SUA071L503	91.00	71.00	13.00	12.00	SUA115L501	125.00	115.00	16.00	15.00	SUA230L502	250.00	230.00	18.00	17.00
SUA055L509 70.00 55.00 13.00. 12.00 SUA080L511 95.00 80.00 13.00 12.00 SUA110L509 130.00 110.00 13.00 12.00 SUA250L501 280.00 250.00 19.00 18.00 SUA056L503 70.00 56.00 9.00 8.00 SUA075L505 100.00 75.00 16.00 15.00 SUA110L509 130.00 110.00 15.00 SUA250L501 280.00 250.00 21.00 20.00 SUA056L504 70.00 56.00 11.00 10.00 SUA080L518 100.00 80.00 11.00 10.00 SUA115L506 130.00 115.00 115.00 SUA270L501 300.00 270.00 20.00 19.00 SUA060L506 70.00 60.00 7.00 6.00 SUA080L507 100.00 80.00 12.00 11.00 SUA115L503 135.00 115.00 15.00 SUA290L501 320.00 290.00 21.00 20.00	SUA050L515	70.00	50.00	15.00	14.00	SUA075L509	95.00	75.00	13.00	12.00	SUA100L513	130.00	100.00	16.00	15.00	SUA240L501	270.00	240.00	18.50	17.50
SUA056L503 70.00 56.00 9.00 8.00 SUA075L505 100.00 75.00 16.00 15.00 SUA110L502 130.00 110.00 16.00 15.00 SUA250L502 280.00 250.00 21.00 20.00 SUA056L504 70.00 56.00 11.00 10.00 80.00 11.00 10.00 SUA115L506 130.00 115.00 10.00 9.00 SUA270L501 300.00 270.00 20.00 19.00 SUA060L506 70.00 60.00 7.00 6.00 SUA080L507 100.00 80.00 12.00 11.00 SUA115L503 135.00 115.00 15.00 SUA290L501 320.00 290.00 21.00 20.00	SUA055L506	70.00	55.00	8.00	7.00	SUA080L509	95.00	80.00	11.00	10.00	SUA105L503	130.00	105.00	16.00	15.00	SUA240L502	270.00	240.00	19.00	18.00
SUA056L504 70.00 56.00 11.00 10.00 SUA080L518 100.00 80.00 11.00 10.00 SUA015L506 130.00 115.00 10.00 9.00 SUA270L501 300.00 270.00 20.00 19.00 SUA060L506 70.00 60.00 7.00 60.00 7.00 6.00 SUA080L507 100.00 80.00 12.00 11.00 SUA115L503 135.00 115.00 16.00 15.00 SUA290L501 320.00 290.00 21.00 20.00	SUA055L509	70.00	55.00	13.00.	12.00	SUA080L511	95.00	80.00	13.00	12.00	SUA110L509	130.00	110.00	13.00	12.00	SUA250L501	280.00	250.00	19.00	18.00
SUA060L506 70.00 60.00 7.00 6.00 SUA080L507 100.00 80.00 12.00 11.00 SUA115L503 135.00 115.00 16.00 15.00 SUA290L501 320.00 290.00 21.00 20.00	SUA056L503	70.00	56.00	9.00	8.00	SUA075L505	100.00	75.00	16.00	15.00	SUA110L502	130.00	110.00	16.00	15.00	SUA250L502	280.00	250.00	21.00	20.00
	SUA056L504	70.00	56.00	11.00	10.00	SUA080L518	100.00	80.00	11.00	10.00	SUA115L506	130.00	115.00	10.00	9.00	SUA270L501	300.00	270.00	20.00	19.00
SUA060L503 70.00 60.00 8.00 7.20 SUA080L505 100.00 80.00 13.00 12.00 SUA120L502 135.00 120.00 16.00 15.00	SUA060L506	70.00	60.00	7.00	6.00	SUA080L507	100.00	80.00	12.00	11.00	SUA115L503	135.00	115.00	16.00	15.00	SUA290L501	320.00	290.00	21.00	20.00
	SUA060L503	70.00	60.00	8.00	7.20	SUA080L505	100.00	80.00	13.00	12.00	SUA120L502	135.00	120.00	16.00	15.00					

Rod Seals



STYLE: RTA TYPE: Single Acting



MATERIAL:

 $OUTER\ O'RING: NT4/b.\ Spareage\ NT4/b\ is\ a\ Acrylonitrile\ Butadine\ Rubber\ (NBR)\ with\ a\ shore\ 'A'\ hardness\ of\ 70^{\circ}/75^{\circ}.$

INNER SEAL RING: BFT. Spareage BFT is Bronze Filled with PTFE compound with Bronze content of 40% (for higher pressure 60% BFT is recommended).

MAX OPERATING CONDITIONS

Temp.: -30° C to 100° C (upto $+220^{\circ}$ C on request)

Pressure: 400 BAR Speed: 10.0 mtr./sec.

DETAILS:

RTA is a single acting ros seal suitable for light to medium duty hydraulic cylinders & suitable for cylinders with small groove dimensions thus enabling a compact gland. The RTA rod seal is a combination of a NBR O'Ring energiser & an inner seal ring made of PTFE added with a filler to increase the resistance of seal ring to high pressure. Generally Bronze is the used filler but also Glass/Graphite Filled PTFE RTA rod seal can be made. The RTA seal can be easily fitted in a single gland and also suitable for two piece gland application. The Bronze filled PTFE inner seal ring when in contact with the piston rod, the PTFE ensures a stick slip free movement & reduces friction to a minimum. Where as the filler increases the strength in the seal ring to prevent it from extruding & to withstand pressures as high as 400 BAR.

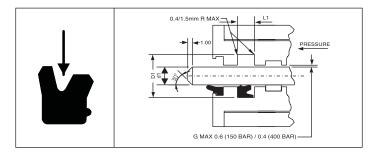
Spareage Part No.	d1 (h9)	D1 (H9)	L1 (+0.2)	O'Ring Part No.	Spareage Part No.	d1 (h9)	D1 (H9)	L1 (+0.2)	O'Ring Part No.
RTA 0060801	6.00	10.90	2.20	OR 17800765	RTA 1050801	105.00	120.10	6.30	OR 53311367
RTA 0100802	10.00	17.30	3.20	OR 26201237	RTA 1100801	110.00	125.10	6.30	OR 53311684
RTA 0120802	12.00	19.30	3.20	OR 26201395	RTA 1100802	110.00	130.50	8.10	OR 70011684
RTA 0140802	14.00	21.30	3.20	OR 26201654	RTA 1150801	115.00	130.10	6.30	OR 53312000
RTA 0150802	15.00	22.30	3.20	OR 26201796	RTA 1200801	120.00	135.10	6.30	OR 53312637
RTA 0160802	16.00	23.30	3.20	OR 26201872	RTA 1250801	125.00	140.10	6.30	OR 53313272
RTA 0180802	18.00	25.30	3.20	OR 26202063	RTA 1250802	125.00	145.50	8.10	OR 70012954
RTA 0200801	20.00	27.30	3.20	OR 26202222	RTA 1300801	130.00	145.10	6.30	OR 53313589
RTA 0200802	20.00	30.70	4.20	OR 35302340	RTA 1300802	130.00	150.50	8.10	OR 70013900
RTA0220801	22.00	29.30	3.20	OR 26202500	RTA 1350801	135.00	150.10	6.30	OR 53314224
RTA 0220802	22.00	32.70	4.20	OR 35302657	RTA 1400801	140.00	155.10	6.30	OR 53314542
RTA0250801	25.00	32.30	3.20	OR 26202824	RTA 1400802	140.00	160.50	8.10	OR 70014859
RTA 0250802	25.00	35.70	4.20	OR 35302974	RTA 1450801	145.00	160.10	6.30	OR 53315177
RTA 0280801	28.00	35.30	3.20	OR 26203142	RTA 1500801	150.00	165.10	6.30	OR 53315812
RTA 0280802	28.00	38.70	4.20	OR 35303292	RTA 1550801	155.00	170.10	6.30	OR 53315812
RTA 0300802	30.00	40.70	4.20	OR 35303452	RTA 1600801	160.00	175.10	6.30	OR 53316447
RTA 0320802	32.00	42.70	4.20	OR 35303609	RTA 1600802	160.00	180.50	8.10	OR 70017082
RTA 0350801	35.00	45.70	4.20	OR 35303970	RTA 1657001	165.00	180.10	6.30	OR 53317082
RTA 0360802	36.00	46.70	4.20	OR 35304128	RTA 1700801	170.00	185.10	6.30	OR 53317717
RTA 0380801	38.00	48.70	4.20	OR 35304286	RTA 1800801	180.00	195.10	6.30	OR 53318352
RTA 0400801	40.00	50.70	4.20	OR 35304400	RTA 1800802	180.00	200.50	8.10	OR 70018987
RTA 0400802	40.00	55.10	6.30	OR 53304548	RTA 1850801	185.00	200.10	6.30	OR 53318987
RTA 0450801	45.00	55.70	4.20	OR 35305039	RTA 1900801	190.00	205.10	6.30	OR 53319622
RTA 0450802	45.00	60.10	6.30	OR 53305017	RTA 2000801	200.00	220.50	8.10	OR 69921024
RTA 0500801	50.00	60.70	4.20	OR 35305400	RTA 2100801	210.00	230.50	8.10	OR 69921527
RTA 0500802	50.00	65.10	6.30	OR 53305652	RTA 2200801	220.00	240.50	8.10	OR 70022797
RTA 0550801	55.00	65.70	4.20	OR 35305900	RTA 2300801	230.00	250.50	8.10	OR 69924067
RTA 0550802	55.00	70.10	6.30	OR 53306150	RTA 2400801	240.00	260.50	8.10	OR 69925337
RTA 0560801	56.00	66.70	4.20	OR 35306124	RTA 2500801	250.00	270.50	8.10	OR 69925607
RTA 0560802	56.00	71.10	6.30	OR 53306250	RTA 2600801	260.00	284.00	8.10	OR 69926607
RTA0600801	60.00	70.70	4.20	OR 35306500	RTA 2700801	270.00	294.00	8.10	OR 69927877
RTA 0600802	60.00	75.10	6.30	OR 53306604	RTA 2800801	280.00	304.00	8.10	OR 69929147
RTA 0630801	63.00	78.10	6.30	OR 53306922	RTA 2900801	290.00	314.00	8.10	OR 69930417
RTA 0650801	65.00	80.10	6.30	OR 53307239	RTA 3000801	300.00	324.00	8.10	OR 69931687
RTA 0700801	70.00	85.10	6.30	OR 53307557	RTA 3200801	320.00	344.00	8.10	OR 69932957
RTA 0750801	75.00	90.10	6.30	OR 53308192	RTA 3300802	330.00	354.00	8.10	OR 69934227
RTA 0800801	80.00	95.10	6.30	OR 53308509	RTA 3500801	350.00	374.00	8.10	OR 69936767
RTA 0850801	85.00	100.10	6.30	OR 53309144	RTA 3600801	360.00	384.00	8.10	OR 69936767
RTA 0900801	90.00	105.10	6.30	OR 53309462	RTA 4500801	450.00	474.00	8.10	OR 69946876
RTA 0950801	95.00	110.10	6.30	OR 53310097	RTA 5000801	500.00	524.00	8.10	OR 69950686
RTA 1000801	100.00	115.10	6.30	OR 53310732	RTA 6000801	600.00	624.00	8.10	OR 69960808

Bold sizes are available with FKM (Viton®) O-Ring also.

Rod Seals



STYLE : RUB TYPE : Single Acting



MATERIAL:

PUX - is a Polyester based Polyurethane compound of shore 'A' 92°.

MAX OPERATING CONDITIONS:

Temp.:-30° C to 100° C Pressure: 300 BAR Speed: 0.5 mtr./sec.

DETAILS:

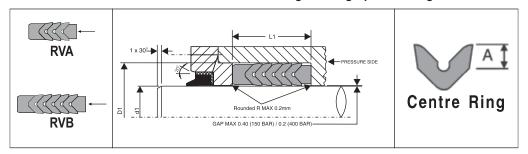
Spareage style RUB seal is a flexible seal suited for sealing piston rod. The additional O'Ring profile at the bottom provides as a back-up to the main sealing lip, providing lubrication, abrasion resistance & remains unaffected with varying pressures available in nitrile (NBR) upto 160 BAR besides polyurethane for 300 BAR. Due to excellent wear resistance properties of polyurethane the life expected is 3 times that of NBR.

Spareage Part No. Polyurethane	d1 (h9)	D1 (H9)	L1 +0.2	Seal Ht.	Spareage Part No. Polyurethane	d1 (h9)	D1 (H9)	L1 +0.2	Seal Ht.	Spareage Part No. Polyurethane	d1 (h9)	D1 (H9)	L1 +0.2	Seal Ht.	Spareage Part No. Polyurethane	d1 (h9)	D1 (H9)	L1 +0.2	Seal Ht.
RUB006L501	6.00	14.00	6.50	5.50	RUB028L501	28.00	38.00	8.00	7.30	RUB050L505	50.00	65.00	12.40	11.40	RUB095L502	95.00	110.00	13.00	12.00
RUB008L502	8.00	16.00	6.70	5.70	RUB030L503	30.00	38.00	9.00	8.00	RUB055L506	55.00	65.00	8.00	7.30	RUB095L501	95.00	115.00	13.00	12.00
RUB010L501	10.00	18.00	6.50	5.50	RUB030L504	30.00	40.00	7.50	6.50	RUB055L501	55.00	68.00	11.00	10.00	RUB100L505	100.00	115.00	11.00	10.00
RUB012L505	12.00	20.00	6.70	5.70	RUB030L501	30.00	40.00	8.00	7.30	RUB055L503	55.00	70.00	12.80	11.80	RUB100L501	100.00	115.00	13.00	12.00
RUB012L503	12.00	22.00	8.30	7.30	RUB030L505	30.00	40.00	9.00	8.00	RUB056L504	56.00	66.00	8.00	7.00	RUB100L504	100.00	120.00	13.00	12.00
RUB014L502	14.00	21.00	5.80	5.00	RUB030L502	30.00	40.00	11.00	10.00	RUB056L502	56.00	66.00	11.00	10.00	RUB100L503	100.00	120.00	15.50	14.50
RUB014L501	14.00	24.00	8.00	7.30	RUB030L509	30.00	45.00	11.00	10.00	RUB056L503	56.00	71.00	11.00	10.00	RUB105L501	105.00	120.00	10.00	9.00
RUB016L501	16.00	22.00	5.50	4.50	RUB032L513	32.00	40.00	6.30	5.70	RUB056L501	56.00	71.00	12.50	11.50	RUB110L505	110.00	125.00	10.60	9.60
RUB016L503	16.00	23.00	6.00	5.00	RUB032L504	32.00	42.00	6.70	5.70	RUB060L501	60.00	70.00	8.00	7.30	RUB110L504	110.00	125.00	12.40	11.40
RUB016L502	16.00	24.00	6.70	5.70	RUB032L502	32.00	42.00	8.00	7.30	RUB060L506	60.00	70.00	11.00	10.00	RUB110L508	110.00	130.00	13.00	12.00
RUB016L504	16.00	26.00	8.00	7.30	RUB032L501	32.00	42.00	11.00	10.00	RUB060L502	60.00	70.00	12.80	11.80	RUB110L502	110.00	130.00	15.50	14.50
RUB018L502	18.00	24.00	5.80	4.80	RUB032L503	32.00	47.00	11.00	10.00	RUB060L508	60.00	75.00	12.80	11.80	RUB115L501	115.00	130.00	11.00	10.00
RUB018L508	18.00	25.00	6.00	5.00	RUB035L502	35.00	45.00	8.00	7.30	RUB063L506	63.00	70.00	13.00	12.00	RUB120L502	120.00	140.00	15.50	14.50
RUB018L506	18.00	26.00	6.70	5.70	RUB035L506	35.00	45.00	11.00	10.00	RUB063L505	63.00	73.00	13.00	12.00	RUB125L501	125.00	145.00	15.50	14.50
RUB018L510	18.00	28.00	8.00	7.30	RUB035L503	35.00	46.00	8.00	7.30	RUB063L502	63.00	75.00	12.80	11.80	RUB125L502	125.00	150.00	14.00	13.00
RUB018L503	18.00	28.00	9.00	8.00	RUB035L507	35.00	50.00	11.00	10.00	RUB063L504	63.00	78.00	12.40	11.40	RUB130L502	130.00	150.00	15.50	14.50
RUB019L503	19.00	25.00	7.00	6.00	RUB036L508	36.00	44.00	6.70	5.70	RUB065L504	65.00	80.00	10.00	9.00	RUB135L503	135.00	143.00	13.50	12.50
RUB019L502	19.00	30.00	8.00	7.00	RUB036L506	36.00	44.00	7.30	6.30	RUB065L503	65.00	85.00	13.00	12.00	RUB135L502	135.00	150.00	12.40	11.40
RUB020L502	20.00	28.00	6.70	5.70	RUB036L502	36.00	46.00	8.00	7.30	RUB070L510	70.00	80.00	8.00	7.30	RUB140L503	140.00	150.00	7.00	6.00
RUB020L506	20.00	28.00	7.30	6.30	RUB036L512	36.00	46.00	11.00	10.00	RUB070L504	70.00	80.00	13.00	12.00	RUB140L504	140.00	155.00	14.00	13.00
RUB020L504	20.00	30.00	6.70	5.70	RUB040L503	40.00	48.00	6.70	5.70	RUB070L511	70.00	85.00	11.00	10.00	RUB140L502	140.00	160.00	15.50	14.50
RUB020L503	20.00	30.00	8.00	7.30	RUB040L501	40.00	50.00	8.00	7.30	RUB070L502	70.00	85.00	12.40	11.40	RUB145L503	145.00	153.00	12.50	11.50
RUB020L507	20.00	30.00	11.00	10.00	RUB040L502	40.00	50.00	11.00	10.00	RUB075L503	75.00	83.00	12.50	11.50	RUB150L501	150.00	170.00	15.50	14.50
RUB022L502	22.00	29.00	6.00	5.00	RUB040L506	40.00	55.00	12.30	11.30	RUB075L501	75.00	85.00	13.00	12.00	RUB160L501	160.00	180.00	15.50	14.50
RUB022L501	22.00	30.00	6.70	5.70	RUB042L501	42.00	50.00	9.00	8.00	RUB075L504	75.00	90.00	13.00	12.00	RUB162L501	162.71	173.01	14.50	13.50
RUB022L504	22.00	32.00	8.00	7.30	RUB045L509	45.00	53.00	6.70	5.70	RUB080L505	80.00	90.00	13.00	12.00	RUB165L501	165.00	190.00	16.00	15.00
RUB025L505	25.00	33.00	6.70	5.70	RUB045L510	45.00	53.00	9.00	8.00	RUB080L502	80.00	95.00	12.70	11.70	RUB170L501	170.00	190.00	15.50	14.50
RUB025L515	25.00	33.00	7.00	6.00	RUB045L504	45.00	55.00	8.00	7.30	RUB080L501	80.00	100.00	13.00	12.00	RUB170L502	170.00	200.00	16.00	15.00
RUB025L506	25.00	33.00	8.00	7.30	RUB045L501	45.00	55.00	11.00	10.00	RUB080L503	80.00	100.00	16.00	15.00	RUB180L503	180.00	200.00	15.50	14.50
RUB025L501	25.00	35.00	6.70	5.70	RUB045L508	45.00	55.00	12.50	11.50	RUB085L501	85.00	100.00	12.80	11.80	RUB180L502	180.00	205.00	16.00	15.00
RUB025L502	25.00	35.00	8.00	7.30	RUB045L506	45.00	60.00	12.40	11.40	RUB085L503	85.00	105.00	13.00	12.00	RUB200L501	200.00	220.00	15.50	14.50
RUB025L504	25.00	35.00	9.00	8.00	RUB050L504	50.00	58.00	12.50	11.50	RUB090L505	90.00	100.00	12.50	11.50	RUB200L502	200.00	225.00	17.00	16.00
RUB025L507	25.00	35.00	11.00	10.00	RUB050L501	50.00	60.00	8.00	7.30	RUB090L509	90.00	105.00	10.00	9.00	RUB220L501	220.00	250.00	24.00	23.00
RUB026L501	26.00	33.00	9.00	8.00	RUB050L503	50.00	60.00	11.00	10.00	RUB090L503	90.00	105.00	12.50	11.50	RUB250L501	250.00	280.00	24.00	23.00
RUB028L503	28.00	36.00	8.00	7.30	RUB050L502	50.00	65.00	11.00	10.00	RUB090L502	90.00	110.00	13.00	12.00					

Rod Seals



STYLE: RVA & RVB TYPE: Single Acting Split Housing



MATERIAL:

Fabric Reinforced Acrylonitrile Butadiene Rubber (NBR).

MAX OPERATING CONDITIONS:

Temp.:-30° C to 100° C Pressure: 400 BAR Speed: 0.5 mtr./sec.

DETAILS:

The Spareage style RVA seal is a robust seal. Though it is suitable for split piston it is extremely suitable for medium duty to heavy duty application. The RVA seal accepts low & high pressure, vigorous conditions & also for any misalignment between sealing gaps.

The seal is combination of a bottom seal, centre ring & pressure ring. The centre ring is the main seal being flexible enough to retain high & low pressures. Whereas the bottom seal support the centre ring from getting extruded against high pressures. The top ring helps in retaining the centre ring profile & distributing pressure equally. In may cases the RVB seals can be also be split to enable easy fitment.

IMPORTANT NOTE:

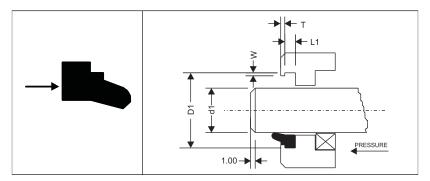
The Vee Packing height can be adjusted by increasing or reducing centre rings. The calculation can be done by noting height "A" as shown in table.

-1	Part No.	d1	D1	RVA L1 +0.2	RVB L1 +0.2	Centre Ht.	Spareage	Part No.	d1	D1	RVA L1 +0.2	RVB L1 +0.2	Centre Ht.
RVA	RVB	(f9)	(H11)	(1+3+1)	(1+5+1)	пі. А	RVA	RVB	(f9)	(H11)	(1+3+1)	(1+5+1)	п. А
RVA 0188303	RVB 0188303	18.00	28.00	16.50	26.50	5.00	RVA 0888304	RVB 0888304	88.90	114.30	35.32	47.08	5.88
RVA 0208306	RVB 0208306	20.00	32.00	17.00	22.50	2.75	RVA 0908307	RVB 0908308	90.00	105.00	16.90	22.50	2.80
RVA 0228301	RVB 0228301	22.00	38.00	26.00	34.66	4.30	RVA 0908310	RVB 0908312	90.00	110.00	30.00	40.00	5.00
RVA 0258306	RVB 0258306	25.00	40.00	26.00	34.00	4.00	RVA 0908305	RVB 0908305	90.00	110.00	25.00	33.00	4.00
RVA 0288301	RVB 0288301	28.00	40.00	17.00	22.66	2.80	RVA 0908302	RVB 0908306	90.00	115.00	27.41	36.53	4.56
RVA 0288302	RVB 0288309	28.00	43.00	22.00	30.00	4.00	RVA 0958306	RVB 0958307	95.00	115.00	30.00	40.00	5.00
RVA 0308304	RVB 0308301	30.00	40.00	21.80	29.06	3.63	RVA 0958303	RVB 0958302	95.00	120.00	41.00	54.00	6.80
RVA 0308302	RVB 0308303	30.00	45.00	22.20	29.60	3.70	RVA 1008324	RVB 1008308	100.00	115.00	22.50	30.00	3.75
RVA 0308303	RVB 0308304	30.00	50.00	29.37	39.15	4.89	RVA 1008325	RVB 1008309	100.00	120.00	30.00	40.00	5.00
RVA 0318301	RVB 0318301	31.75	44.45	19.05	25.39	3.17	RVA 1008307	RVB 1008307	100.00	125.00	38.50	51.50	6.50
RVA 0348302	RVB 0348302	34.90	50.80	24.21	32.27	4.03	RVA 1018301	RVB 1018301	101.60	127.00	32.15	42.85	5.35
RVA 0358322	RVB 0358317	35.00	47.00	17.20	22.80	3.00	RVA 1108313	RVB 1108315	110.00	125.00	22.50	30.00	3.75
RVA 0358305	RVB 0358303	35.00	50.00	27.00	33.00	3.00	RVA 1108301	RVB 1108301	110.00	130.00	30.00	40.00	5.00
RVA 0368305	RVB 0368305	36.00	48.00	17.00	22.50	2.70	RVA 1108305	RVB 1108305	110.00	135.00	42.50	57.00	7.25
RVA 0368303	RVB 0368303	36.00	50.00	22.50	29.50	3.50	RVA 1108304	RVB 1108304	110.00	135.00	41.50	55.32	6.91
RVA 0388302	RVB 0388302	38.10	50.80	19.45	25.93	3.24	RVA 1108322	RVB 1108323	110.00	140.00	47.00	60.00	6.50
RVA 0408323	RVB 0408308	40.00	52.00	17.00	22.50	2.70	RVA 1158301	RVB 1158301	115.00	140.00	37.13	49.48	6.18
RVA 0408303	RVB 0408302	40.00	55.00	26.19	30.16	4.36	RVA 1208304	RVB 1208304	120.00	145.00	36.50	48.50	6.00
RVA 0408304	RVB 0408304	40.00	56.00	17.63	23.43	2.90	RVA 1208305	RVB 1208309	120.00	150.00	38.50	51.00	6.25
RVA 0408305	RVB 0408305	40.00	60.00	30.00	40.00	5.00	RVA 1258304	RVB 1258305	125.00	140.00	22.75	30.25	3.75
RVA 0458301	RVB 0458302	45.00	60.00	22.20	29.70	3.75	RVA 1258323	RVB 1258311	125.00	145.00	33.00	45.00	6.00
RVA 0488306	RVB 0488303	48.00	63.00	28.50	38.00	4.70	RVA 1258303	RVB 1258303	125.00	150.00	27.40	36.52	4.56
RVA 0508306	RVB 0508319	50.00	65.00	24.60	33.60	4.50	RVA 1278301	RVB 1278301	127.00	152.40	38.63	51.49	6.43
RVA 0508311	RVB 0508310	50.00	70.00	35.00	45.00	5.00	RVA 1308301	RVB 1308304	130.00	150.00	30.00	40.00	5.00
RVA 0508309	RVB 0508308	50.85	69.85	33.50	44.66	5.58	RVA 1308302	RVB 1308302	130.00	155.00	40.00	53.32	6.66
RVA 0538302	RVB 0538303	53.97	69.85	25.27	33.69	3.97	RVA 1308303	RVB 1308303	130.00	160.00	43.50	58.00	7.25
RVA 0558304	RVB 0558304	55.00	75.00	38.50	51.32	6.41	RVA 1358303	RVB 1358307	135.00	160.00	42.00	56.00	7.00
RVA 0568302	RVB 0568302	56.00	76.00	33.40	44.40	5.50	RVA 1408315	RVB 1408305	140.00	155.00	25.50	34.00	4.25
RVA 0608304	RVB 0608304	60.00	80.00	32.15	42.15	5.00	RVA 1408304	RVB 1408304	140.00	160.00	30.00	40.00	5.00
RVA 0638336	RVB 0698327	63.00	78.00	24.00	32.00	4.00	RVA 1408303	RVB 1408303	140.00	170.00	32.97	43.95	5.49
RVA 0638309	RVB 0638308	63.00	80.00	28.00	36.00	4.00	RVA 1458301	RVB 1458301	145.00	170.00	38.10	50.80	6.35
RVA 0658304	RVB 0658302	65.00	80.00	26.00	34.66	4.33	RVA 1508304	RVB 1508303	150.00	180.00	43.00	58.00	7.50
RVA 0658302	RVB 0658303	65.00	85.00	29.00	38.66	4.83	RVA 1528301	RVB 1528301	152.40	177.80	33.34	44.44	5.55
RVA 0708321	RVB 0708307	70.00	85.00	16.70	22.50	2.90	RVA 1608301	RVB 1608301	160.00	180.00	30.00	40.00	5.00
RVA 0708306	RVB 0708305	70.00	90.00	27.00	36.00	4.50	RVA 1608302	RVB 1608302	160.00	190.00	32.97	43.95	5.49
RVA 0758302	RVB 0758301	75.00	95.00	30.00	40.00	5.00	RVA 1708303	RVB 1708303	170.00	200.00	49.50	65.50	8.00
RVA 0758304	RVB 0758304	75.00	100.00	30.00	40.00	5.00	RVA 1718306	RVB 1718302	171.45	203.20	30.00	40.00	5.00
RVA 0808302	RVB 0808302	80.00	95.00	17.50	23.29	2.91	RVA 1808308	RVB 1808304	180.00	200.00	30.00	40.00	5.00
RVA 0808301	RVB 0808301	80.00	100.00	30.00	40.00	5.00	RVA 1808303	RVB 1808303	180.00	210.00	45.00	61.00	8.00
RVA 0828301	RVB 0828310	82.55	101.60	28.97	38.61	4.82	RVA 2008304	RVB 2008303	200.00	230.00	33.00	45.00	6.00
RVA 0858302	RVB 0858303	85.00	105.00	30.00	40.00	5.00	RVA 2508303	RVB 2508303	250.00	280.00	60.50	80.50	10.00



STYLE: WRB

TYPE: Medium Duty



MATERIAL:

NT6/a is an Acrylonitrile Butadiene Rubber (NBR) Compound of Hardness Shore "A" 88º approximately.

MAX OPERATING CONDITIONS: Temp.:-30°C to 100°C Speed: 0.5 mtr./sec.

The Spareage type WRB wiper has a lip designed to remove dirt, mud, dust, moisture, etc. accumulating on the rod. The wiper is a manufactured from a high hardness NBR compound suitable for installing in a groove housing. To prevent dirt passing the outside of wiper and to reduce the pumping action, the outside diameter has an interference fit with the housing.

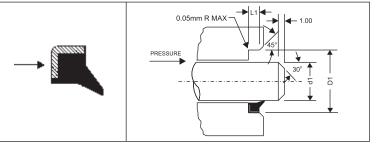
Spareage Part No. Nitrile	d1 (f8)	D1 (H9)	Seal Ht.	L1 ±0.15	T ±0.2	W ±0.10	Spareage Part No.	d1 (f8)	D1 (H9)	Seal Ht.	L1 ±0.15	T ±0.2	W ±0.10
WRB 0161101	16.00	24.00	7.00	4.00	1.00	1.00	WRB 0951101	95.00	103.00	7.00	4.00	1.00	1.00
WRB 0181102	18.00	26.00	7.00	4.00	1.00	1.00	WRB 1001101	100.00	108.00	7.00	4.00	1.00	1.00
WRB 0201101	20.00	28.00	7.00	4.00	1.00	1.00	WRB 1051101	105.00	117.00	10.00	5.50	1.50	1.50
WRB 0221101	22.00	30.00	7.00	4.00	1.00	1.00	WRB 1101103	110.00	117.00	11.00	8.20	1.50	1.50
	25.00	33.00	7.00	4.00	1.00								
WRB 0251101						1.00	WRB 1101101	110.00	118.00	7.00	4.00	1.00	1.00
WRB 0281101	28.00	36.00	7.00	4.00	1.00	1.00	WRB 1101102	110.00	122.00	10.00	5.50	1.50	1.50
WRB 0301101	30.00	38.00	7.00	4.00	1.00	1.00	WRB 1151101	115.00	127.00	10.00	5.50	1.50	1.50
WRB 0321101	32.00	40.00	7.00	4.00	1.00	1.00	WRB 1201101	120.00	132.00	10.00	5.50	1.50	1.50
WRB 0351101	35.00	43.00	7.00	4.00	1.00	1.00	WRB 1251101	125.00	137.00	10.00	5.50	1.50	1.50
WRB 0361101	36.00	44.00	7.00	4.00	1.00	1.00	WRB 1301101	130.00	142.00	10.00	5.50	1.50	1.50
WRB 0381101	38.00	46.00	7.00	4.00	1.00	1.00	WRB 1351101	135.00	147.00	10.00	5.50	1.50	1.50
WRB 0401101	40.00	48.00	7.00	4.00	1.00	1.00	WRB 1401101	140.00	152.00	10.00	5.50	1.50	1.50
WRB 0421101	42.00	50.00	7.00	4.00	1.00	1.00	WRB 1501101	150.00	162.00	10.00	5.50	1.50	1.50
WRB 0451102	45.00	53.00	7.00	4.00	1.00	1.00	WRB 1601101	160.00	172.00	10.00	5.50	1.50	1.50
WRB 0451101	45.00	57.00	10.00	5.50	1.50	1.50	WRB 1701101	170.00	182.00	10.00	5.50	1.50	1.50
WRB 0501101	50.00	58.00	7.00	4.00	1.00	1.00	WRB 1801101	180.00	192.00	10.00	5.50	1.50	1.50
WRB 0551101	55.00	63.00	7.00	4.00	1.00	1.00	WRB 1901101	190.00	202.00	10.00	5.50	1.50	1.50
WRB 0561101	56.00	64.00	7.00	4.00	1.00	1.00	WRB 2001101	200.00	212.00	10.00	5.50	1.50	1.50
WRB 0601101	60.00	68.00	7.00	4.00	1.00	1.00	WRB 2101102	210.00	225.00	13.00	6.50	2.00	2.00
WRB 0631101	63.00	71.00	7.00	4.00	1.00	1.00	WRB 2201101	220.00	235.00	13.00	6.50	2.00	2.00
WRB 0651101	65.00	73.00	7.00	4.00	1.00	1.00	WRB 2301101	230.00	245.00	13.00	6.50	2.00	2.00
WRB 0701102	70.00	78.00	7.00	4.00	1.00	1.00	WRB 2401101	240.00	255.00	13.00	6.50	2.00	2.00
WRB 0751101	75.00	83.00	7.00	4.00	1.00	1.00	WRB 2501101	250.00	265.00	13.00	6.50	2.00	2.00
WRB 0801101	80.00	88.00	7.00	4.00	1.00	1.00	WRB 2601101	260.00	275.00	13.00	6.50	2.00	2.00
WRB 0851101	85.00	93.00	7.00	4.00	1.00	1.00	WRB 3001101	300.00	315.00	13.00	6.50	2.00	2.00
WRB 0901101	90.00	98.00	7.00	4.00	1.00	1.00	WRB 4001101	400.00	415.00	13.00	6.50	2.00	2.00



STYLE: WDD TYPE: Medium Duty

0.4mm R MAX

STYLE : WCA TYPE : Heavy Duty



MATERIAL:

NT6/a is an Acrylonitrile Butadiene Rubber (NBR) Compound of Hardness Shore "A" 88° approx.

MAX OPERATING CONDITIONS:

Temp.: -30° C to 100° C Speed: 0.5 mtr./sec.

DETAILS:

The Spareage style WDD wiper is a double function seal. The wiper is designed to exclude dirt and moisture from entering the cylinder and to collect traces of fluid passing the rod seal. Opposite the wiper lip are two sealing lips to collect fluid passing the rod seal. Providing a simple groove design and dual function, the type WDD wiper offers excellent scraping action, even with high accumulating dirt, dust and moisture conditions.

MATERIAL:

NT6/a is an Acrylonitrile Butadiene Rubber (NBR) Compound of Hardness Shore "A" 88° approx.

MAX OPERATING CONDITIONS:

Temp.:- 30° C to 100° C Speed: 0.5 mtr./sec.

DETAILS:

The Spareage style WCA wiper is designed to be press fitted in the housing and is suitable for heavy duty application. A corrosion resistant metal ring houses a NBR wiping element.

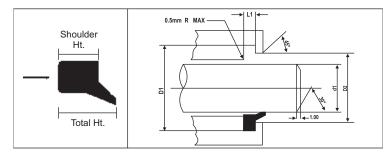
The proportion of the wiping lip allows it to follow the side movement on the rod and to clear away

The proportion of the wiping lip allows it to follow the side movement on the rod and to clear away heavily deposited dirt.

Spareage Part No.	d1	D1	L1	L2	D2	D3	Seal	Spareage Part No.	d1	D1	L1	Se
Nitrile	(f8)	(H10)	+0.2	+0.2	(H11)	(JS10)	Thk.	Nitrile	(f8)	(H8)	+0.1	ŀ
WDD 0101101	10.00	18.00	6.00	4.00	13.50	16.00	8.00	WCA 0101101	10.00	16.00	3.00	4.
WDD 0121101	12.00	20.00	6.00	4.00	15.50	18.00	8.00	WCA 0161101	16.00	22.00	3.00	4.0
WDD 0141104	14.00	22.00	6.00	4.00	17.50	20.00	8.00	WCA 0161103	16.00	26.00	5.00	8.
WDD 0151101	15.00	23.00	6.00	4.00	18.50	21.00	8.00	WCA 0181102	18.00	28.00	7.00	10.
WDD 0161101	16.00	24.00	6.00	4.00	19.50	22.00	8.00	WCA 0201103	20.00	28.00	5.00	8.
WDD 0181101	18.00	26.00	6.00	4.00	21.50	24.00	8.00					
WDD 0201101	20.00	28.00	6.00	4.00	23.50	26.00	8.00	WCA 0201105	20.00	30.00	7.00	10.
WDD 0221101	22.00	30.00	6.00	4.00	25.50	28.00	8.00	WCA 0221102	22.00	32.00	7.00	10.
WDD 0251101	25.00	33.00	6.00	4.00	28.50	31.00	8.00	WCA 0251101	25.00	35.00	7.00	10.0
WDD 0281101	28.00	36.00	6.00	4.00	31.50	34.00	8.00	WCA 0301101	30.00	40.00	7.00	10.
WDD 0301101	30.00	38.00	6.00	4.00	33.50	36.00	8.00	WCA 0351102	35.00	45.00	7.00	10.
WDD 0321101	32.00	40.00	6.00	4.00	35.50	38.00	6.00	WCA 0361101	36.00	45.00	7.00	10.0
WDD 0351101	35.00	43.00	6.00	4.00	38.50	41.00	8.00	WCA 0361106	36.00	48.00	5.00	8.0
WDD 0361101	36.00	44.00	6.00	4.00	39.50	42.00	8.00	WCA 0401103	40.00	50.00	7.00	10.0
WDD 0381101	38.00	46.00	6.00	4.00	41.50	44.00	8.00					
WDD 0401101	40.00	48.00	6.00	4.00	43.50	46.00	8.00	WCA 0451101	45.00	55.00	7.00	10.0
WDD 0421101	42.00	50.00	6.00	4.00	45.50	48.00	8.00	WCA 0501103	50.00	60.00	7.00	10.0
WDD 0451101	45.00	53.00	6.00	4.00	48.50	51.00	8.00	WCA 0551102	55.00	65.00	7.00	10.0
WDD 0501101	50.00	58.00	6.00	4.00	53.50	56.00	8.00	WCA 0561102	56.00	66.00	7.00	10.0
WDD 0551101	55.00	63.00	6.00	4.00	58.50	61.00	8.00	WCA 0601102	60.00	70.00	7.00	10.0
WDD 0561101	56.00	64.00	6.00	4.00	59.50	62.00	8.00	WCA 0631105	63.00	73.00	7.00	10.0
WDD 0601101	60.00	68.00	6.00	4.00	63.50	66.00	8.00	WCA 0631101	63.00	75.00	7.00	10.0
WDD 0631101	63.00	71.00	6.00	4.00	66.50	69.00	8.00	WCA 0651101	65.00	75.00	7.00	10.
WDD 0651101	65.00	73.00	6.00	4.00	68.50	71.00	8.00	WCA 0701101	70.00	80.00	7.00	10.
WDD 0701101	70.00	78.00	6.00	4.00	73.50	76.00	8.00					
WDD 0751101	75.00	83.00	6.00	4.00	78.50	81.00	8.00	WCA 0751101	75.00	85.00	7.00	10.
WDD 0801101	80.00	88.00	6.00	4.00	83.50	86.00	8.00	WCA 0801101	80.00	90.00	7.00	10.0
WDD 0851101	85.00	93.00	6.00	4.00	88.50	91.00	8.00	WCA 0851101	85.00	95.00	7.00	10.0
WDD 0901101	90.00	98.00	6.00	4.00	93.50	96.00	8.00	WCA 0901101	90.00	100.00	7.00	10.0
WDD 0951101	95.00	103.00	6.00	4.00	98.50	101.00	8.00	WCA 0901102	90.00	110.00	7.00	10.
WDD 1001101	100.00	108.00	6.00	4.00	103.50	106.00	8.00	WCA 0951101	95.00	105.00	7.00	10.0
WDD 1051101	105.00	117.00	8.20	5.50	110.00	114.00	11.00	WCA 1001101	100.00	110.00	7.00	10.0
WDD 1101101	110.00	122.00	8.20	5.50	115.00	119.00	11.00	WCA 1101101	110.00	120.00	7.00	10.0
WDD 1151101	115.00	127.00	8.20	5.50	120.00	124.00	11.00	WCA 1201101	120.00	130.00	7.00	10.0
WDD 1201101	120.00	132.00	8.20	5.50	125.00	129.00	11.00					
WDD 1251101	125.00	137.00	8.20	5.50	130.00	134.00	11.00	WCA 1251101	125.00	140.00	9.00	12.0
WDD 1301101	130.00	142.00	8.20	5.50	135.00	139.00	11.00	WCA 1301101	130.00	145.00	9.00	12.0
WDD 1351101	135.00	147.00	8.20	5.50	140.00	144.00	11.00	WCA 1401101	140.00	155.00	9.00	12.0
WDD 1401101	140.00	152.00	8.20	5.50	145.00	149.00	11.00	WCA 1501101	150.00	165.00	9.00	12.0
WDD 1501101		162.00	8.20	5.50	155.00	159.00	11.00	WCA 1601101	160.00	175.00	9.00	12.
WDD 1601101	160.00	172.00	8.20	5.50	165.00	169.00	11.00	WCA 1701102	170.00	185.00	10.00	14.
WDD 1701101	170.00	182.00	8.20	5.50	175.00	179.00	11.00	WCA 1781002	178.61	193.50	5.00	8.
WDD 1801101	180.00	192.00	8.20	5.50	185.00	189.00	11.00	WCA 1801101	180.00	195.00	10.00	14.
WDD 1901101	190.00	202.00	8.20	5.50	195.00	199.00	11.00					
WDD 2001101	200.00	212.00	8.20	5.50	205.00	209.00	11.00	WCA 2001102	200.00	220.00	12.00	16.
WDD 2201101	220.00	235.00	9.50	6.70	227.00	232.60	13.00	WCA 2401101	240.00	260.00	12.00	16.



STYLE : WRC TYPE : Medium Duty



MATERIAL:

 $NT6/a is an Acrylonitrile \ Butadiene \ Rubber \ (NBR) \ Compound \ of \ Hardness \ Shore \ 'A' 88^0 \ approximately.$

MAX OPERATING CONDITIONS:

Temp.:-30° C to 100° C Speed: 1.0 mtr./sec.

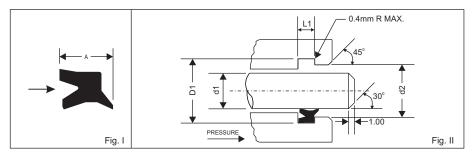
DETAILS:

The Spareage type WRC has a lip designed to remove dirt, mud, dust, moisture, etc. accumulating on the rod. The wiper is manufactured from a high hardness NBR compound suitable for installing in a simple groove design. The lip of this wiper does not project beyond the cylinder cover so that it is protected from damage.

Spareage Part No. Nitrile	d1 (f8)	D1 (H10)	L1 (+0.2)	D2 (H11)	Seal Ht.	Spareage Part No. Nitrile	d1 (f8)	D1 (H10)	L1 (+0.2)	D2 (H11)	Seal Ht.
WRC 0161103	16.00	24.60	5.30	19.00	7.00	WRC 0631107	63.00	73.00	6.30	68.00	10.00
WRC 0181102	18.00	26.60	5.30	21.00	7.00	WRC 0651101	65.00	75.00	5.30	68.00	7.00
WRC 0201109	20.00	28.00	5.30	24.00	7.50	WRC 0701103	70.00	80.00	5.30	75.00	7.00
WRC 0201102	20.00	28.60	5.30	23.00	7.00	WRC 0801104	70.00	80.60	5.30	73.00	7.00
WRC 0221108	22.00	30.60	5.30	25.00	7.00	WRC 0701104	75.00	83.60	5.30	78.00	7.00
WRC 0221106	22.00	32.00	5.30	25.00	7.00	WRC 0751101	75.00	87.20	7.10	81.00	12.00
WRC 0221107	22.00	33.00	4.70	25.00	6.00	WRC 0801110	80.00	90.00	7.30	85.00	10.00
WRC 0251101	25.00	33.00	4.30	26.00	6.00	WRC 0801108	80.00	92.20	7.20	86.00	12.00
WRC 0251104	25.00	33.60	5.30	29.00	7.00	WRC 0851105	85.00	95.60	7.20	91.00	12.00
WRC 0281105	28.00	36.00	5.30	31.00	7.00	WRC 0901104	90.00	100.20	7.10	94.00	12.00
WRC 0301112	30.00	38.00	5.30	33.00	7.00	WRC 0901115	90.00	107.00	7.10	96.00	12.20
WRC 0321101	32.00	40.00	5.30	36.00	7.00	WRC 0901101	90.00	102.20	7.20	96.00	12.00
WRC 0351103	35.00	43.00	5.30	38.00	7.00	WRC 0901113	90.00	105.00	7.00	97.00	10.00
WRC 0351108	35.00	45.00	5.30	40.00	7.00	WRC 0951104	95.00	108.00	5.30	101.50	10.00
WRC 0351109	35.00	44.00	5.30	39.60	8.00	WRC 1001101	100.00	112.50	7.20	106.00	12.00
WRC 0361111	36.00	43.00	4.20	39.60	7.00	WRC 1101101	110.00	122.20	7.20	116.00	12.00
WRC 0361103	36.00	44.00	5.30	40.00	7.00	WRC 1201103	120.00	130.60	5.30	125.00	7.00
WRC 0361105	36.00	45.00	5.30	39.00	7.00	WRC 1201101	120.00	132.20	7.10	126.00	12.00
WRC 0361109	36.00	46.00	7.30	41.00	10.00	WRC 1251106	125.00	137.00	7.10	131.00	12.00
WRC 0401110	40.00	48.00	5.30	44.00	7.00	WRC 1251103	125.00	140.00	10.20	132.50	16.00
WRC 0401104	40.00	48.60	5.30	43.00	7.00	WRC 1301101	130.00	142.00	7.00	136.20	10.00
WRC 0421104	42.00	50.00	5.30	46.00	7.00	WRC 1401106	140.00	150.00	5.30	144.00	7.00
WRC 0451004	45.00	55.00	5.30	48.00	7.00	WRC 1501107	150.00	162.00	7.10	156.00	8.20
WRC 0501104	50.00	58.00	5.30	54.00	7.00	WRC 1501101	150.00	165.00	10.20	157.60	16.00
WRC 0501107	50.00	58.60	5.30	53.00	7.00	WRC 1551103	155.00	169.20	7.10	156.00	12.00
WRC 0501113	50.00	60.00	5.30	55.00	8.00	WRC 1601108	160.00	175.00	10.10	168.00	12.00
WRC 0551103	55.00	65.00	5.30	60.00	7.00	WRC 1601105	160.00	175.00	10.20	167.60	16.00
WRC 0561103	56.00	66.00	5.30	61.00	7.00	WRC 1701101	170.00	182.00	7.00	176.00	12.00
WRC 0561107	56.00	66.60	5.30	59.00	7.00	WRC 1801103	180.00	200.00	10.20	190.00	18.00
WRC 0601103	60.00	68.00	5.30	63.00	7.00	WRC 1901102	190.00	210.00	10.30	200.00	18.00
WRC 0601114	60.00	70.00	5.30	65.00	7.00	WRC 2001101	200.00	220.00	10.20	210.00	18.00
WRC 0631102	63.00	73.00	5.30	66.00	7.00						



STYLE: WDA **TYPE: Heavy Duty**



MATERIAL:

PUX - is a polyurethane compound of 92° shore 'A' hardness.

MAX. OPERATING CONDITIONS:

Temp. range: -30°C to +100°C Speed: 1.0 m/s.

DETAILS:

The Spareage type WDA wiper is a double function seal.

The function of the double lip wiper WDA is to prevent dust, dirt and moisture from entering in cylinder. This is achieved by a special design which largely prevents scoring, protects the guiding parts and extends the service life of the seal. In addition, the sealing lip facing the media reduces the residual oil film. Providing a simple grove design this wiper is supplied as a continuos ring for easy installation into the groove. Spareage type WDA wiper is also available in NBR. Due to excellent wear resistance properties of polyurethane, the life expected is three times that of NBR.

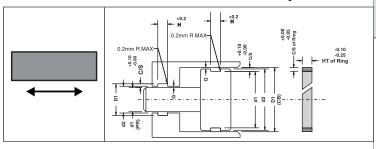
Spareage Part No. Polyurethane	d1 (f8)	D1 (H8)	L1 +0.1	Seal Ht. A
WDA 010L501	10.00	16.00	3.60	4.80
WDA 012L502	12.00	18.00	4.50	7.00
WDA 016L501	16.00	24.00	4.50	6.00
WDA 018L501	18.00	26.00	4.50	6.00
WDA 020L503	20.00	28.00	5.00	7.00
WDA 025L501	25.00	33.00	5.00	7.00
WDA 028L501	28.00	35.00	4.50	6.00
WDA 028L503	28.00	36.00	5.00	7.00
WDA 030L501	30.00	38.00	5.00	6.50
WDA 032L505	32.00	40.00	4.50	5.80
WDA 035L501	35.00	43.00	5.00	6.50
WDA 040L502	40.00	48.00	5.00	6.50
WDA 045L505	45.00	53.00	5.00	7.00
WDA 050L501	50.00	58.00	5.00	6.50
WDA 056L501	56.00	66.00	5.00	7.00

Spareage Part No. Polyurethane	d1 (f8)	D1 (H8)	L1 +0.1	Seal Ht. A
WDA 063L501	63.00	71.00	5.00	6.50
WDA 070L501	70.00	80.00	6.00	8.00
WDA 085L501	85.00	95.00	6.00	8.00
WDA 090L503	90.00	100.00	6.00	8.00
WDA 100L503	100.00	110.00	6.00	8.00
WDA 110L501	110.00	125.00	8.00	11.00
WDA 120L502	120.00	135.00	8.00	11.00
WDA 136L501	136.00	146.00	5.50	8.35
WDA 140L502	140.00	155.00	8.50	9.50
WDA 150L503	150.00	165.00	8.00	11.00
WDA 155L501	155.00	165.00	5.50	8.35
WDA 160L502	160.00	175.00	8.00	11.00
WDA 176L501	176.00	186.00	5.50	8.35
WDA 180L501	180.00	195.00	8.00	11.00
WDA 200L502	200.00	214.00	7.00	9.50

Wear Rings



STYLE : GA TYPE : Medium Duty



MATERIAL:

BFT : Bronze filled PTFE compound with Bronze content of 40% (for higher load bearing 60% BFT is recommended).

MAX OPERATING CONDITIONS:

Temp.:-50° C to 200° C

Speed: 6.0 mtr./sec. (+80° C) 15.0 mtr./sec. (20° C) Compressive Strength Yield: 20 N/m² (23° C) 9.0 N/m² (80° C)

DETAIL C

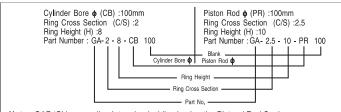
The GA wear ring are supplied usually available is split form. (The split is oblique for Reciprocating / Oscilatting application & straight for rotary). If required running length's are also readily available. The GA wear ring is the most widely used general purpose wear ring.

The material used is PTFE with a Bronze content of 40%, for further improvement in performance a Bronze content 60% can be made available on request.

The GA wear ring can be cut to length to suit your specific requirements. Length not only has to be calculated depending on the Rod / Cylinder bore diameter also considering thermal expansion in the GA wear ring in operation.

CALCULATION OF LENGTH::

The centre line diameter multiplied by p (3.14) give us the circumference length of wear ring. But allowance for thermal expansion is to be provided. Therefore we reduce the p i.e. 3.14 to 3.13 but to a minimum gap of 1.5 mm for small diameters.



Note: GAP 'G' is normally determined while chosing the Piston / Rod Seal. The Wear Ring performance depends largely on the selection of the gap chosen.

Spareage Part No.	Ring C/S	Ring Ht. H +0.00 -0.20	GAP Min. /Max. ' G '	Cylinder Bore ф CB (H11)	Piston Rod ф PR (F9)
GA-1.5-04.0 CB φ mm PR φ mm	1.5	4.0	0.65/1.0	10 to 25	8 to 20
GA-1.5-05.6 CB φ mm PR φ mm	1.5	5.6	0.65/1.0	10 to 25	8 to 20
GA-2.0-08.0 CB φ mm PR φ mm	2.0	8.0	0.75/1.10	40 to 320	35 to 300
GA-2.0-10.0 CB φ mm PR φ mm	2.0	10.0	0.75/1.10	40 to 320	35 to 300
GA-2.0-15.0 CB ϕ mm PR ϕ mm	2.0	15.0	0.75/1.10	125 to 900	125 to 900
GA-2.0-20.0 CB ϕ mm PR ϕ mm	2.0	20.0	0.75/1.10	200 to 900	200 to 900
GA-2.5-05.6 CB ϕ mm PR ϕ mm	2.5	5.6	0.85/1.60	25 to 80	20 to 75
GA-2.5-06.0 CB ϕ mm PR ϕ mm	2.5	6.0	0.85/1.60	25 to 80	20 to 75
GA-2.5-09.7 CB φ mm PR φ mm	2.5	9.7	0.85/1.60	40 to 320	35 to 300
GA-2.5-10.0 CB ϕ mm PR ϕ mm	2.5	10.0	0.85/1.60	40 to 320	35 to 300
GA-2.5-15.0 CB ϕ mm PR ϕ mm	2.5	15.0	0.85/1.60	125 to 900	120 to 900
GA-2.5-25.0 CB ϕ mm PR ϕ mm	2.5	25.0	0.85/1.60	300 to 900	300 to 900
GA-3.0-20.0 CB ϕ mm PR ϕ mm	3.0	20.0	0.85/1.60	300 to 900	300 to 900
GA-3.17-9.5 CB ϕ mm PR ϕ mm	3.17	9.5	0.85/1.60	300 to 900	300 to 900
GA-3.17-15.8 CB ϕ mm PR ϕ mm	3.17	15.8	0.85/1.60	300 to 900	300 to 900
GA-3.17-25.4 CB ϕ mm PR ϕ mm	3.17	25.40	0.85/1.60	300 to 900	300 to 900
GA-2.5-8.0 CB ϕ mm PR ϕ mm	2.5	8.0	0.85/1.60	40 to 320	35 to 300
GA-2.5-12.0 CB φ mm	2.5	12.0	0.85/1.60	40 to 320	35 to 300

Wear Rings - PRW

MAX. OPERATING CONDITIONS:

Speed: 5 m/s

Temp. Range: -40°C to +130°C Compression Strength: 105 N/mm²

DETAILS:

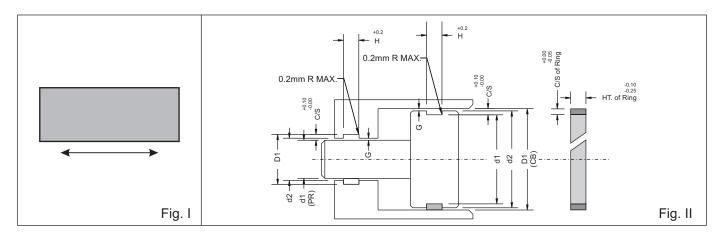
The wear strip is manufactured using a polyester fabric reinforced polyester resin material addictive PTFE or graphite and is proven to be compatible with a wide range of fluids, including mineral oils, water based fluids and phosphate esters, to produce wear strip is available in a wide range metric sizes. Manufactured to very tight tolerance and providing bearing solutions for reciprocating, oscillating and slow rotary movement applications.

Spareage Part No.	C/S (mm)	Thk (mm)
GB0028103	2.5	5.6
GB002N601	2.5	9.7
Gb0028105	2.5	15.0
GB0028105	2.5	20.0
GB002N603	2.5	25.0

Wear Rings



STYLE : GB TYPE : Heavy Duty Bearing Rings



MATERIAL:

As per below chart.

MAX. OPERATING CONDITIONS:

Temp. range: -30°C to +120°C.

 $\label{eq:composite Strength Yield: 90 N/mm² (80°C).} Composite Strength Yield: 90 N/mm² (80°C). Speed: 2 m/s. (+20°C) 0.5 m/s. (+80°C).$

MAX. SURFACE ROUGHNESS:

Static: 1.0μmRa.

COMPATIBILITY:

Mineral oils, bio oils, water soluble & water glycol fluids.

APPLICATION

Heavy duty operation, preferably in conjuction with type GA wear rings.

ID	OD	Materials			Spareage	
		Nylon (GB)	BFT (GA)	Phenolic (GB)	PRW (GB)	Part No.
20.00	23.00	✓	✓			20023
20.00	24.00	✓	✓			20024
20.00	25.00	✓	✓			20025
20.00	26.00	\checkmark	✓			20026
22.00	25.00	\checkmark	✓			22025
22.00	26.00	✓	✓			22026
22.00	27.00	✓	✓			22027
22.00	28.00	\checkmark	✓			22028
25.00	28.00	✓	✓	✓		25028
25.00	29.00	\checkmark	✓	\checkmark		25029
25.00	30.00	\checkmark	\checkmark	\checkmark		25030
25.00	31.00	\checkmark	\checkmark	\checkmark		25031
28.00	31.00	\checkmark	✓	✓		28031
28.00	32.00	\checkmark	✓	✓		28032
28.00	33.00	✓	✓	✓		28033
28.00	34.00	\checkmark	\checkmark	\checkmark		28034
30.00	33.00	\checkmark	\checkmark	\checkmark		30033
30.00	34.00	\checkmark	✓	✓		30034
30.00	35.00	✓	✓	✓		30035
30.00	36.00	\checkmark	✓	✓		30036
35.00	38.00	✓	✓	✓		35038
35.00	39.00	\checkmark	\checkmark	\checkmark		35039
35.00	40.00	\checkmark	\checkmark	\checkmark		35040
35.00	41.00	✓	✓	✓		35041

ID	OD	Materials				Spareage
		Nylon (GB)	BFT (GA)	Phenolic (GB)	PRW (GB)	Part No.
36.00	39.00	✓	✓	✓		36039
36.00	40.00	✓	✓	✓		36040
36.00	41.00	✓	✓	✓		36041
36.00	42.00	\checkmark	\checkmark	✓		36042
40.00	43.00	✓	\checkmark	✓		40043
40.00	44.00	\checkmark	\checkmark	✓		40044
40.00	45.00	✓	✓	✓		40045
40.00	46.00	\checkmark	✓	✓		40046
45.00	48.00	✓	✓	✓		45048
45.00	49.00	\checkmark	\checkmark	\checkmark		45049
45.00	50.00	\checkmark	\checkmark	\checkmark		45050
45.00	51.00	\checkmark	\checkmark	\checkmark		45051
50.00	54.00	✓	✓	✓		50054
50.00	55.00	\checkmark	✓	✓		50055
50.00	56.00	✓	✓	✓		50056
55.00	59.00	\checkmark	\checkmark	\checkmark		55059
55.00	60.00	\checkmark	✓	\checkmark		55060
55.00	61.00	\checkmark	✓	\checkmark		55061
60.00	64.00	\checkmark	✓	✓		60064
60.00	65.00	✓	✓	\checkmark		60065
60.00	66.00	✓	✓	✓		60066
63.00	67.00	\checkmark	\checkmark	✓		63067
63.00	68.00	\checkmark	✓	✓		63068
63.00	69.00	✓	✓	✓		63069

Wear Rings



STYLE : GB TYPE : Heavy Duty Bearing Rings

ID	OD		Ma	aterials		Spareage
		Nylon (GB)	BFT (GA)	Phenolic (GB)	PRW (GB)	Part No.
65.00	69.00	✓	✓	✓		65069
65.00	70.00	✓	✓	✓		65070
65.00	71.00	✓	✓	✓		65071
70.00	75.00	✓	✓	✓		70075
70.00	76.00	✓	✓	✓		70076
70.00	78.00	\checkmark	✓	✓		70078
75.00	80.00	✓	✓	✓		75080
75.00	81.00	✓	✓	✓		75081
75.00	83.00	✓	✓	✓		75083
80.00	85.00	✓	✓	✓		80085
80.00	86.00	\checkmark	✓	\checkmark		80086
80.00	88.00	\checkmark	✓	\checkmark		80088
85.00	90.0.	✓	✓	✓		85090
85.00	91.00	\checkmark	✓	✓		85091
85.00	93.00	\checkmark	✓	✓		85093
90.00	95.00	\checkmark	✓	\checkmark		90095
90.00	96.00	\checkmark	\checkmark	\checkmark		90096
90.00	98.00	\checkmark	\checkmark	\checkmark		90098
95.00	100.00	✓	✓	✓	✓	95100
95.00	101.00	✓	✓	✓		95101
95.00	103.00	\checkmark	\checkmark	✓		95103
100.00	105.00	✓	✓	✓	✓	100105
100.00	106.00	\checkmark	\checkmark	\checkmark		100106
100.00	108.00	\checkmark	\checkmark	\checkmark		100108
105.00	110.00	✓	✓	✓	✓	105110
105.00	111.00	✓	✓	✓		105111
105.00	113.00	✓	✓	✓		105113
110.00	115.00	\checkmark	\checkmark	\checkmark	\checkmark	110115
110.00	116.00	\checkmark	\checkmark	\checkmark		110116
110.00	118.00	\checkmark	\checkmark	✓		110118
115.00	120.00	✓	✓	✓	✓	115120
115.00	121.00	✓	✓	✓		115121
115.00	123.00	✓	✓	✓		115123
120.00	125.00	\checkmark	✓	✓	✓	120125
120.00	126.00	\checkmark	\checkmark	\checkmark		120126
120.00	128.00	✓	✓	✓		120128
125.00	130.00	✓	✓	✓	✓	125130
125.00	131.00	✓	✓	✓		125131
125.00	133.00	✓	✓	✓		125133
130.00	135.00	\checkmark	✓	✓	✓	130135
130.00	136.00	\checkmark	✓	✓		130136
130.00	138.00	✓	✓	✓		130138
140.00	145.00	✓	✓	✓	✓	140145
140.00	146.00	✓	✓	✓		140146
140.00	148.00	✓	✓	✓		140148
150.00	155.00	\checkmark	✓	✓	✓	150155
150.00	156.00	\checkmark	✓	✓		150156
150.00	158.00	✓	✓	✓		150158

Nylon (GB) BFT (GA) PRW (GB) PRW (GB) PRW (GB)	ID	OD		Materials			Spareage
160.00 166.00 ✓ ✓ 160166 160.00 168.00 ✓ ✓ ✓ 160168 170.00 175.00 ✓ ✓ ✓ 170175 170.00 176.00 ✓ ✓ ✓ 170176 170.00 178.00 ✓ ✓ ✓ 180185 180.00 185.00 ✓ ✓ ✓ 180185 180.00 186.00 ✓ ✓ ✓ 180186 180.00 188.00 ✓ ✓ ✓ 180188 200.00 205.00 ✓ ✓ ✓ 200205 200.00 206.00 ✓ ✓ ✓ 200206 220.00 225.00 ✓ ✓ ✓ 200208 220.00 226.00 ✓ ✓ ✓ 220225 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ ✓ 250258 280.00 285.00 ✓ ✓ ✓ 280286 280.00 <th></th> <th></th> <th>Nylon (GB)</th> <th></th> <th></th> <th></th> <th>Part No.</th>			Nylon (GB)				Part No.
160.00 168.00 ✓ ✓ 160168 170.00 175.00 ✓ ✓ ✓ 170175 170.00 176.00 ✓ ✓ ✓ 170176 170.00 178.00 ✓ ✓ ✓ 180185 180.00 185.00 ✓ ✓ ✓ 180185 180.00 186.00 ✓ ✓ ✓ 180186 180.00 188.00 ✓ ✓ ✓ 180188 200.00 205.00 ✓ ✓ ✓ 200205 200.00 206.00 ✓ ✓ ✓ 200206 200.00 226.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ ✓ 220225 220.00 226.00 ✓ ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ ✓ 250258 280.00 285.00 ✓ ✓ ✓ 280286 280.00 <td>160.00</td> <td>165.00</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>160165</td>	160.00	165.00	✓	✓	✓	✓	160165
170.00 175.00 ✓ ✓ ✓ 170175 170.00 176.00 ✓ ✓ ✓ 170176 170.00 178.00 ✓ ✓ ✓ 180185 180.00 185.00 ✓ ✓ ✓ 180185 180.00 186.00 ✓ ✓ ✓ 180186 180.00 188.00 ✓ ✓ ✓ 200205 200.00 205.00 ✓ ✓ ✓ 200205 200.00 206.00 ✓ ✓ ✓ 200206 220.00 225.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ ✓ 200208 220.00 226.00 ✓ ✓ 220225 220.00 225.00 ✓ ✓ 220228 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 280.00 286.00 ✓ ✓ 280288 300.00 305.00 ✓ <td< td=""><td>160.00</td><td>166.00</td><td>\checkmark</td><td>✓</td><td>✓</td><td></td><td>160166</td></td<>	160.00	166.00	\checkmark	✓	✓		160166
170.00 176.00 ✓ ✓ 170176 170.00 178.00 ✓ ✓ ✓ 170178 180.00 185.00 ✓ ✓ ✓ 180185 180.00 186.00 ✓ ✓ ✓ 180186 180.00 188.00 ✓ ✓ ✓ 200205 200.00 205.00 ✓ ✓ ✓ 200206 200.00 206.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ ✓ 220225 220.00 226.00 ✓ ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250256 250.00 256.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280288 300.00 305.00 ✓ ✓ 300306 300.00 325.00 ✓ ✓ 320325	160.00	168.00	✓	✓	✓		160168
170.00 178.00 ✓ ✓ 170178 180.00 185.00 ✓ ✓ ✓ 180185 180.00 186.00 ✓ ✓ ✓ 180186 180.00 188.00 ✓ ✓ ✓ 200205 200.00 205.00 ✓ ✓ ✓ 200206 200.00 206.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300306 300.00 306.00 ✓ ✓ 303036 320.00 325.00 ✓ ✓ ✓ 320325	170.00	175.00	\checkmark	✓	✓	✓	170175
180.00 185.00 ✓ ✓ ✓ 180185 180.00 186.00 ✓ ✓ ✓ 180186 180.00 188.00 ✓ ✓ ✓ 180188 200.00 205.00 ✓ ✓ ✓ 200205 200.00 206.00 ✓ ✓ ✓ 200206 220.00 225.00 ✓ ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300306 300.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320328 350.00 <td>170.00</td> <td>176.00</td> <td>\checkmark</td> <td>✓</td> <td>✓</td> <td></td> <td>170176</td>	170.00	176.00	\checkmark	✓	✓		170176
180.00 186.00 ✓ ✓ 180186 180.00 188.00 ✓ ✓ ✓ 180188 200.00 205.00 ✓ ✓ ✓ 200205 200.00 206.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280286 280.00 286.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300306 300.00 306.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ <td< td=""><td>170.00</td><td>178.00</td><td>\checkmark</td><td>✓</td><td>✓</td><td></td><td>170178</td></td<>	170.00	178.00	\checkmark	✓	✓		170178
180.00 188.00 ✓ ✓ ✓ 180188 200.00 205.00 ✓ ✓ ✓ 200205 200.00 206.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280286 280.00 286.00 ✓ ✓ 280286 280.00 286.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 3030306 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 356.00 ✓ ✓ 350355 350.00 356.00 ✓ <t< td=""><td>180.00</td><td>185.00</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>180185</td></t<>	180.00	185.00	✓	✓	✓	✓	180185
200.00 205.00 ✓ ✓ ✓ 200205 200.00 206.00 ✓ ✓ ✓ 200206 200.00 208.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 3030305 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 356.00 ✓ ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350355	180.00	186.00	✓	✓	✓		180186
200.00 206.00 ✓ ✓ ✓ 200206 200.00 208.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250256 250.00 256.00 ✓ ✓ 250258 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 286.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300306 300.00 306.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	180.00	188.00	✓	✓	✓		180188
200.00 208.00 ✓ ✓ ✓ 200208 220.00 225.00 ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220228 250.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ ✓ 300306 300.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	200.00	205.00	✓	✓	✓	✓	200205
220.00 225.00 ✓ ✓ 220225 220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 250255 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 300.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	200.00	206.00	\checkmark	\checkmark	✓		200206
220.00 226.00 ✓ ✓ 220226 220.00 228.00 ✓ ✓ 220228 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280286 280.00 286.00 ✓ ✓ 280288 300.00 305.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	200.00	208.00	✓	✓	✓		200208
220.00 228.00 ✓ 220228 250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280286 280.00 286.00 ✓ ✓ 280288 300.00 305.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 300.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	220.00	225.00	✓	✓		✓	220225
250.00 255.00 ✓ ✓ 250255 250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	220.00	226.00	✓	✓			220226
250.00 256.00 ✓ ✓ 250256 250.00 258.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	220.00	228.00	✓				220228
250.00 258.00 ✓ 250258 280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300306 300.00 306.00 ✓ ✓ 300308 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	250.00	255.00	✓	✓		✓	250255
280.00 285.00 ✓ ✓ 280285 280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300306 300.00 306.00 ✓ ✓ 300306 300.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	250.00	256.00	✓	✓			250256
280.00 286.00 ✓ ✓ 280286 280.00 288.00 ✓ ✓ 300305 300.00 305.00 ✓ ✓ 300306 300.00 306.00 ✓ ✓ 300308 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	250.00	258.00	✓				250258
280.00 288.00 ✓ 280288 300.00 305.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 300.00 308.00 ✓ ✓ 320325 320.00 325.00 ✓ ✓ 320326 320.00 328.00 ✓ 320328 350.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356	280.00	285.00	✓	✓		✓	280285
300.00 305.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 300.00 308.00 ✓ ✓ 300308 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356			✓	✓			280286
300.00 305.00 ✓ ✓ 300305 300.00 306.00 ✓ ✓ 300306 300.00 308.00 ✓ ✓ 300308 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356			✓				
300.00 306.00 ✓ ✓ 300306 300.00 308.00 ✓ 300308 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356			✓	✓		✓	
300.00 308.00 ✓ 300308 320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ ✓ 320328 350.00 355.00 ✓ ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356			✓	✓			
320.00 325.00 ✓ ✓ 320325 320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ ✓ 320328 350.00 355.00 ✓ ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356			✓				
320.00 326.00 ✓ ✓ 320326 320.00 328.00 ✓ 320328 350.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356			✓	✓		✓	
320.00 328.00 ✓ 320328 350.00 355.00 ✓ ✓ 350355 350.00 356.00 ✓ ✓ 350356			✓	✓			
350.00 355.00 ✓ ✓ ✓ 350355 350.00 356.00 ✓ ✓ ✓ 350356			✓				320328
350.00 356.00 ✓ ✓ 350356			✓	✓		✓	350355
			✓	✓			
	350.00	358.00	✓				350358
380.00 385.00 ✓ ✓ ✓ 380358	380.00	385.00	✓	✓		✓	380358
380.00 386.00 ✓ ✓ 380386	380.00	386.00	✓	✓			380386
380.00 388.00 ✓ 380388	380.00	388.00	✓				380388
400.00 405.00 🗸 🗸 400405		405.00	✓	✓		✓	
400.00 406.00 ✓ ✓ 400406	400.00		✓	✓			
400.00 408.00 ✓ 400408	400.00		✓				
420.00 425.00 🗸 🗸 420425	420.00	425.00	✓	✓		✓	
420.00 426.00	420.00	426.00	✓	✓			420426
420.00 428.00 ✓ 420428			✓				420428
450.00 455.00 ✓ ✓ 450455			✓	✓		✓	
450.00 456.00 ✓ ✓ 450456	450.00	456.00	✓	✓			450456
450.00 458.00 ✓ 450458	450.00		✓				
480.00 485.00 ✓ ✓ 480485	480.00	485.00	✓	✓		✓	480485
480.00 486.00 ✓ ✓ 480486	480.00	486.00	✓	✓			480486
480.00 488.00 ✓ 480488	480.00	488.00	✓				480488
500.00 505.00 🗸 🗸 500505	500.00	505.00	✓	✓		✓	500505
500.00 506.00 🗸 🗸 500506	500.00		✓	✓			500506
500.00 508.00 🗸 500508	500.00	508.00	✓				500508

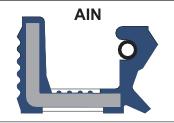
NOTE:

- 1) For PRW, the width will be standard i.e. 5.6, 9.7, 15, 20, 25.
- 2) For Nylon, BFT, Phenolic Guide the width of the Ring is as per requirement. (Open Size).

Rotary Shaft Seals - AIK & AIN







Spareage introduce AIK & AIN seal profiles in its wide industrial range seals by enhancing rubber compound properties and additional features in these seal profiles. The upgraded design and newly developed nitrile rubber compound enable the seals perform well even under severe application conditions.

Material Features:-

- Improved resistance to wear and ageing.
- Increased pumping ability.
- Excellent compatibility with synthetic oil.

General Applications:-

- Gear Boxes.
- Pumps.
- Motors.

User Benefits:-

- Easy Installation.
- Improved sealing performances.
- Extended service life.
- Secure retention in housing.
- Withstand considerable dynamic runout and shaft-to-housing misalignment.

Spareage Part No.	Shaft Dia.	Hsg. Dia	Seal Thk.
AIN 016Q701	16.00	24.00	5.00
AIN 020Q701	20.00	35.00	7.00
AIN 022Q701	22.00	35.00	7.00
AIN 025Q701	25.00	35.00	7.00
AIN 030Q701	30.00	52.00	10.00
AIN 035Q701	35.00	52.00	7.00
AIN 040Q701	40.00	52.00	7.00
AIN 045Q701	45.00	65.00	10.00
AIN 050Q701	50.00	72.00	10.00
AIN 055Q701	55.00	75.00	10.00
AIN 060Q701	60.00	85.00	10.00
AIN 05Q701	65.00	90.00	10.00
AIN 070Q701	70.00	90.00	13.00
AIN 080Q701	80.00	100.00	10.00
AIN 090Q701	90.00	110.00	12.00

Note:

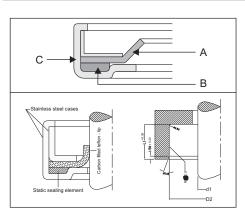
Spareage standard AIA profile is going to be replaced by AIN profile in stock, due to the additional design features of AIN over AIA.

Day to day the demand of AIN is increasing and hence may be Part No. remains the same of AIA but seal will supply in AIN style.

Request you to please take a note.

Rotary Shaft Seals - ATA





MATERIAL:

A) Sealing Lip: PTFE compound filled carbon.

3) Spacer: Rubber

C) Metal Case: SS 304 (SS 316 on request).

MAX OPERATING CONDITIONS:

Temp.: -200°C to +260°C Pressure: 10 Bar. Speed: upto 30.0 mtr./sec.

DETAILS:

Spareage ATA type oil seal with outer metal case and accurately centered filled PTFE compound sealing lip use in special applications, particularly in chemical industry, dry running and poor lubrication & high chemical resistance.

Because of its stick-slip free behavior it use in extreme dynamic sealing. Can be use in high pressure hydraulic pumps. High speed compressors and in high temperature corrosive area.

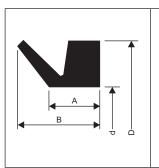
Spareage Part No.	d1 (mm)	D2 (mm)	L1 (mm)
ATA0207311	20.00	30.00	7.00
ATA0207315	20.00	32.00	7.00
ATA0257305	20.00	35.00	7.00
ATA0287301	28.00	40.00	7.00
ATA0327302	32.00	55.00	8.00
ATA0357301	35.00	55.00	8.00
ATA0377301	37.00	47.00	5.00
ATA0407308	40.00	55.00	8.00
ATA0407301	40.00	55.00	10.00
ATA0407312	40.00	62.00	8.00
ATA0427301	42.00	55.00	8.00
ATA0457303	45.00	65.00	10.00
ATA0487306	48.00	65.00	8.00

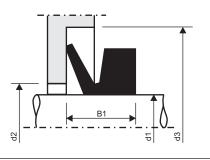
Spareage Part No.	d1 (mm)	D2 (mm)	L1 (mm)
ATA0507315	50.00	62.00	8.00
ATA0507314	50.00	65.00	10.00
ATA0507316	50.00	68.00	8.00
ATA0507313	50.00	70.00	10.00
ATA0557302	55.00	72.00	8.00
ATA0557309	55.00	72.00	10.00
ATA0557307	55.00	80.00	8.00
ATA0607303	60.00	75.00	8.00
ATA0607301	60.00	80.00	10.00
ATA0627301	62.00	80.00	10.00
ATA0657301	65.00	85.00	10.00
ATA0657313	65.00	90.00	10.00
ATA0707301	70.00	90.00	10.00

Spareage Part No.	d1 (mm)	D2 (mm)	L1 (mm)
ATA0757302	75.00	95.00	10.00
ATA0807302	80.00	100.00	10.00
ATA0907302	90.00	110.00	10.00
ATA0907303	90.00	110.00	12.00
ATA0997302	99.00	130.00	12.00
ATA1007302	100.00	130.00	12.00
ATA1107301	110.00	130.00	12.00
ATA1107303	110.00	140.00	12.00
ATA1207302	120.00	150.00	12.00
ATA1507303	150.00	180.00	12.00
ATA1507302	150.00	180.00	15.00

Rotary Shaft Seals - VRA







Spareage Part No.	V Ring Type	d (mm)	D (mm)	Width A/B
VRA0180701	V-20 A	18.00	26.00	4.7/7.5
VRA0220701	V-25 A	22.00	30.00	4.7/7.5
VRA0290701	V-32 A	29.00	37.00	4.7/7.5
VRA0310701	V-35 A	31.00	39.00	4.7/7.5
VRA0360701	V-40 A	36.00	46.00	5.5/9
VRA0400701	V-45 A	40.00	50.00	5.5/9
VRA0450701	V-50 A	45.00	55.00	5.5/9
VRA0490701	V-55 A	49.00	59.00	5.5/9
VRA0540701	V-60 A	54.00	64.00	5.5/9
VRA0580701	V-65 A	58.00	68.00	5.5/9
VRA0630701	V-70 A	63.00	75.00	6.8/11
VRA0670701	V-75 A	67.00	79.00	6.8/11
VRA0720701	V-80 A	72.00	84.00	6.8/11
VRA0760601	V-85 A	76.00	88.00	6.8/11
VRA0810701	V-90 A	81.00	93.00	6.8/11
VRA0850701	V-95 A	85.00	97.00	6.8/11
VRA0900701	V-100 A	90.00	102.00	6.8/11
VRA0990701	V-110 A	99.00	113.00	7.9/12.8
VRA1080701	V-120 A	108.00	122.00	7.9/12.8

MATERIAL:

NT4/a is an Acrylonitrile Butadine Rubber (NBR) compound of Hardness $65^{\circ}/70^{\circ}$ Shore 'A'. MAX OPERATING CONDITIONS:

Temp.:-30°C to +100°C

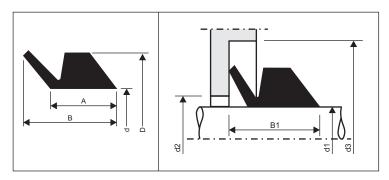
Pressure: Speed: 10 m/s DETAILS:

The standard V-Ring is an axial face seal manufactured from pure elastomer without any metal and fabric reinforcement. The V-Ring is used as a single seal against dirt, dust, water, grease, oil etc. It is also used as a secondary seal to protect main rotary sealing element which protects the bearings of heavy duty machines.

Spareage Part No.	V Ring Type	d (mm)	D (mm)	Width A/B
VRA1170701	V-130 A	117.00	131.00	7.9/12.8
VRA1260701	V-140 A	126.00	140.00	7.9/12.8
VRA1350701	V-150 A	135.00	149.00	7.9/12.8
VRA1440701	V-160 A	144.00	160.00	9/14.5
VRA1530701	V-170 A	153.00	169.00	9/14.5
VRA1620701	V-180 A	162.00	178.00	9/14.5
VRA1710701	V-190 A	171.00	187.00	9/14.5
VRA1800701	V-199 A	180.00	196.00	9/14.5
VRA1980701	V-220 A	198.00	228.00	14.3/25
VRA2250701	V-250 A	225.00	255.00	14.3/25
VRA2470701	V-275 A	247.00	277.00	14.3/25
VRA2700701	V-300 A	270.00	300.00	14.3/25
VRA2920701	V-325 A	292.00	322.00	14.3/25
VRA3150701	V-350 A	315.00	345.00	14.3/25
VRA3370701	V-375 A	337.00	367.00	14.3/25
VRA3600701	V-400 A	360.00	390.00	14.3/25
VRA4050701	V-450 A	405.00	435.00	14.3/25
VRA4500701	V-500 A	450.00	480.00	14.3/25

Rotary Shaft Seals - VRS





Spareage Part No.	V Ring Type	d (mm)	D (mm)	Width A / B
VRS0290701	V-32 S	29	37	7.90/10.50
VRS0360701	V-40 S	36	46	9.50/13.00
VRS0400701	V-45 S	40	50	9.50/13.00
VRS0490701	V-55 S	49	59	9.50/13.00
VRS0580701	V-65 S	58	68	9.50/13.00
VRS0670701	V-75 S	67	79	11.30/15.50
VRS0810701	V-90 S	81	93	11.30/15.50

MATERIAL:

NT4/a is an Acrylonitrile Butadine Rubber (NBR) compound of Hardness $65^{\circ}/70^{\circ}$ Shore 'A'. MAX OPERATING CONDITIONS:

Temp.:-30°C to +100°C

Pressure: Speed:10 m/s DETAILS:

The standard V-Ring is an axial face seal manufactured from pure elastomer without any metal and fabric reinforcement. The V-Ring is used as a single seal against dirt, dust, water, grease, oil etc. It is also used as a secondary seal to protect main rotary sealing element which protects the bearings of heavy duty machines.

Spareage Part No.	V Ring Type	d (mm)	D (mm)	Width A/B
VRS0850701	V-95 S	85	97	11.30/15.50
VRS0990701	V-110 S	99	113	13.10/18.00
VRS1080701	V-120 S	108	122	13.10/18.00
VRS1170701	V-130 S	117	131	13.10/18.00
VRS1440701	V-160 S	144	160	15.55/20.50
VRS1530701	V-170 S	153	169	15.55/20.50

Rotary Shaft Seals





AIA

ACA



dust and dirt.

The **AIB** type rotary shaft seal is similar to AIA

type but with a additional dust lip which is

provided to avoid ingress of light to medium

AIB



The **ACC** type rotary shaft seal is similar to ACA type but with a additional dust lip which is provided to avoid ingress of light to medium dust and dirt.

The **AIA** type rotary shaft seal has a metal inserts (Bonded) encased in rubber.

The **ACA** type rotary shaft seal has a metal encased on the outer diameter.

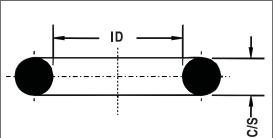
Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.
AIA0060813	6.00	16.00	6.00	AIA0130828	13.00	30.00	7.00	AIA0170871	17.00	30.00	6.00	AIA0200872	20.00	32.00	8.00	AIA0220814	22.00	47.00	7.00
AIA0060801	6.00	16.00	7.00	AIA0130834	13.00	32.00	8.00	AIA0170819	17.00	30.00	7.00	AIA0200863	20.00	32.00	10.00	AIA0220803	22.00	47.00	10.00
AIA0060806	6.00	19.00	7.00	AIA0140805 AIA0140814	14.00	22.00	4.00	AIA0170882	17.00	30.00	10.00	AIA0200862	20.00	33.00	7.00	AIA0220812	22.00 22.00	48.00	10.00
AIA0060805 AIA0070814	6.00 7.00	22.00 16.00	7.00 6.00	AIB0140805	14.00 14.00	22.00 22.00	7.00 7.00	AIA0170883 AIA0170846	17.00 17.00	31.00 32.00	7.00 7.00	AIA0200823 ACA0200801	20.00	35.00 35.00	6.00 7.00	AIA0220827 AIA0220899	22.00	50.00 52.00	10.00 10.00
AIA0070807	7.00	16.00	7.00	AIA0140851	14.00	24.00	5.00	AIA0170860	17.00	32.00	8.00	AIA0200806	20.00	35.00	7.00	AIA022080H	22.22	38.10	9.52
AIA0070803	7.00	22.00	7.00	AIA0140822	14.00	24.00	7.00	AIA0170823	17.00	32.00	10.00	AIB0200803	20.00	35.00	7.00	AIA0230832	23.00	40.00	8.00
AIA0080825 AIA0080803	8.00 8.00	16.00 18.00	7.00 7.00	AIA0140817 AIA0140829	14.00 14.00	25.00 26.00	7.00 7.00	AIA0170835 AIA0170861	17.00 17.00	35.00 35.00	7.00 8.00	AIA0200847 AIA0200836	20.00 20.00	35.00 35.00	8.00 10.00	AIA0230835 AIA0230844	23.00 23.75	40.00 34.92	10.00 6.35
AIA0080813	8.00	19.00	8.00	AIA0140820	14.00	27.00	7.00	AIA0170820	17.00	35.00	10.00	AIA02008A3	20.00	36.00	7.00	AIA0230830	23.81	38.10	9.52
AIA0080821	8.00	20.00	7.00	AIA0140802	14.00	28.00	7.00	AIA0170815	17.00	38.00	8.00	AIA02008B3	20.00	36.00	10.00	AIA0240870	24.00	35.00	6.00
AIA0080812	8.00	22.00	7.00	AIA0140810	14.00	28.00	8.00	AIA0170863	17.00	40.00	6.00	AIA0200856	20.00	37.00	7.00	AIA0240808	24.00	35.00	7.00
AIA0080801 AIA0080824	8.00 8.00	22.00 24.00	8.00 7.00	AIA0140818 AIA0140815	14.00 14.00	30.00 30.00	7.00 10.00	AIA0170813 AIA0170841	17.00 17.00	40.00 40.00	7.00 10.00	AIA0200886 AIA02008A8	20.00	37.00 37.00	8.00 10.00	AIA0240803 AIA0240834	24.00 24.00	35.00 35.00	8.00 10.00
AIA0000024	9.00	16.00	6.00	AIA0140816	14.00	32.00	7.00	AIA0170866	17.00	42.00	10.00	AIA0200837	20.00	38.00	7.00	AIA0240826	24.00	36.00	8.00
AIA0090844	9.00	19.00	6.00	AIA0140852	14.00	32.00	10.00	AIA0170868	17.00	45.00	10.00	AIA0200887	20.00	38.00	8.00	AIA0240805	24.00	37.00	7.00
AIA0090832	9.00	20.00	7.00	AIA0140837	14.00	35.00	7.00	AIA0170870	17.00	47.00	10.00	AIA0200892	20.00	38.00	10.00	AIA0240866	24.00	38.00	6.00
AIA0090806 AIA0090833	9.00	22.00 22.00	7.00	AIA01508A4 AIA0150876	15.00 15.00	22.00 22.00	5.00 7.00	AIA0180838 AIA0180811	18.00 18.00	24.00 25.00	7.00 5.00	AIA0200808 AIA0200891	20.00	40.00 40.00	7.00 8.00	AIA0240804 AIA0240832	24.00 24.00	38.00 38.00	8.00
AIA0090834	9.00	24.00	7.00	AIA0150814	15.00	24.00	5.00	AIA0180809	18.00	28.00	7.00	AIA02008A7	20.00	40.00	9.00	AIA0240840	24.00	40.00	7.00
AIA0090835	9.00	26.00	7.00	AIA0150804	15.00	24.00	6.00	AIA0180858	18.00	30.00	5.00	AIA0200882	20.00	40.00	10.00	AIA0240843	24.00	40.00	8.00
AIA0100832	10.00	16.00	6.00	ACA0150803 AIA0150815	15.00	24.00	7.00	AIA0180808	18.00	30.00	6.0	AIA0200804	20.00	42.00	7.00	AIA0240842	24.00	40.00	10.00
AIA0100838 AIA0100824	10.00 10.00	18.00 19.00	7.00 7.00	AIA0150865	15.00 15.00	24.00 25.00	7.00 5.00	AIA0180834 AIA0180803	18.00 18.00	30.00 30.00	7.00 8.00	AIA0200896 AIB0200821	20.00 20.00	42.00 42.00	8.00 8.00	AIA0240853 AIA0240838	24.00 24.00	42.00 42.00	7.00 8.00
AIA0100812	10.00	20.00	6.00	AIA0150817	15.00	25.00	7.00	AIA0180819	18.00	30.00	10.00	AIA0200822	20.00	42.00	10.00	AIA0240854	24.00	42.00	10.00
AIA0100805	10.00	20.00	7.00	AIA01508A2	15.00	25.00	8.00	AIA0180820	18.00	32.00	7.00	AIA0200834	20.00	45.00	8.00	AIA0240855	24.00	45.00	7.00
AIA0100816	10.00	22.00	7.00	AIA0150811	15.00	26.00	7.00	AIA0180859	18.00	33.00	6.00	AIA0200865	20.00	45.00	10.00	AIA0240801	24.00	45.00	8.00
AIA0100815 AIA0100840	10.00 10.00	22.00 24.00	8.00 6.00	AIA0150819 AIA0150882	15.00 15.00	27.00 28.00	7.00 6.00	AIA0180836 AIA0180832	18.00 18.00	35.00 35.00	7.00 8.00	AIA0200897 AIA0200805	20.00 20.00	47.00 47.00	6.00 7.00	AIA0240856 AIA0240806	24.00 24.00	45.00 47.00	10.00 7.00
AIA0100813	10.00	24.00	7.00	AIA0150820	15.00	28.00	7.00	AIA0180842	18.00	35.00	10.00	AIB0200834	20.00	47.00	7.00	AIA0240802	24.00	47.00	10.00
AIA0100849	10.00	25.00	6.00	AIA0150821	15.00	30.00	6.00	AIA0180860	18.00	37.00	8.00	AIA0200871	20.00	47.00	8.00	AIA0240859	24.00	48.00	8.00
AIA0100850 AIA0100814	10.00 10.00	25.00 26.00	7.00 7.00	AIA0150802 AIB0150804	15.00 15.00	30.00 30.00	7.00 7.00	AIA0180844 AIA0180833	18.00 18.00	38.00 40.00	10.00 7.00	AIB0200802 ACC0200801	20.00	47.00 47.00	8.00 10.00	AIA0240861 AIA0240865	24.00 24.00	50.00 52.00	8.00 8.00
AIB0100814	10.00	26.00	7.00	AIA0150822	15.00	30.00	8.00	AIA0180847	18.00	40.00	10.00	AIA0200873	20.00	47.00	10.00	AIA0240803	24.00	52.00	10.00
AIA0100823	10.00	28.00	8.00	AIA0150823	15.00	30.00	10.00	AIA0180850	18.00	42.00	10.00	AIA0200860	20.00	48.00	10.00	AIA0240876	24.00	62.00	10.00
AIA0100843	10.00	30.00	7.00	AIA0150824	15.00	32.00	7.00	AIA0180861	18.00	47.00	7.00	AIA0200899	20.00	50.00	7.00	AIA0250823	25.00	32.00	7.00
AIA0100845 AIA0100846	10.00 10.00	30.00 32.00	10.00	AIA0150890 AIA0150813	15.00 15.00	32.00 35.00	10.00 7.00	AIA0180855 AIA0190802	18.00 19.00	47.00 26.00	10.00 5.00	AIA02008A5 AIA0200845	20.00	50.00 50.00	8.00 10.00	AIA02508C3 AIA0250818	25.00 25.00	33.00 33.00	4.00 5.00
AIA0110803	11.00	22.00	7.00	AIA0150812	15.00	35.00	8.00	AIA0190812	19.00	27.00	6.00	AIA0200841	20.00	52.00	7.00	AIA025082R	25.00	33.00	6.00
AIA0110827	11.00	26.00	7.00	AIA0150860	15.00	35.00	10.00	AIA01908B2	19.00	30.00	5.00	AIA0200833	20.00	52.00	8.00	AIA02508F1	25.00	33.00	7.00
AIA0120814	12.00 12.00	18.00 19.00	5.00 5.00	AIA01508A3 AIA01508B5	15.00 15.00	38.00 42.00	8.00 8.00	AIA0190885 AIA0190829	19.00 19.00	30.00 30.00	7.00 8.00	AIA0200840 AIA0210816	20.00 21.00	52.00 33.00	10.00 7.00	AIA0250871 AIA0250829	25.00 25.00	35.00 35.00	5.00 6.00
AIA0120809 AIA0120801	12.00	20.00	5.00	AIA01508B3	15.00	42.00	10.00	AIA0190829	19.00	32.00	7.00	AIA0210810	21.00	35.00	7.00	ACA0250829	25.00	35.00	7.00
AIA0120817	12.00	20.00	7.00	AIA0150841	15.87	28.57	6.35	AIA0190822	19.00	32.00	10.00	AIA0210805	21.00	37.00	7.00	AIA0250803	25.00	35.00	7.00
AIA01208B2	12.00	20.00	8.00	AIA0150891	15.87	28.57	8.00	AIA01908B3	19.00	33.00	7.00	AIA0210817	21.00	37.00	10.00	AIB0250804	25.00	35.00	7.00
AIA0120898 AIA0120813	12.00 12.00	22.00 22.00	5.00 6.00	AIA0150892 AID0160807	15.87 16.00	28.57 22.00	9.52 4.00	AIA0190809 AIA0190804	19.00 19.00	35.00 35.00	7.00 8.00	AIA0210818 AIA0210819	21.00 21.00	41.00 42.00	10.00	AIA0250831 AIA02508B6	25.00 25.00	35.00 35.00	8.00 9.00
AIA0120838	12.00	22.00	7.00	AIA0160873	16.00	24.00	5.00	AIA0190815	19.00	35.00	10.00	AIA0210820	21.00	42.00	7.00	AIA0250866	25.00	35.00	10.00
AIA01208B3	12.00	22.00	9.00	AIA0160882	16.00	24.00	5.00	AIA0190893	19.00		7.00	AIA0220837	22.00	30.00	7.00	AIB0250834	25.00	35.00	10.00
AIA0120818	12.00	24.00	6.00	AIA0160856	16.00	24.00	7.00	AIA0190826	19.00	38.00		AIA02208A5	22.00	32.00	4.00	AIA0250837	25.00	36.00	7.00
AIA0120832 AIA01208A7	12.00 12.00	24.00 25.00	7.00 6.00	AIA0160825 AIA0160874	16.00 16.00	25.00 26.00	7.00 5.00	AIA0190823 AIA01908B4	19.00 19.00	40.00 41.00	10.00	AIA0220820 AIA0220855	22.00 22.00	32.00 32.00	5.00 5.50	AIA02508A3 AIA0250863	25.00 25.00	36.00 37.00	10.00
AIA0120836	12.00	25.00	8.00	AIA0160821	16.00	26.00	7.00	AIA0190899	19.00	47.00	10.00	AIA0220817	22.00	32.00	6.00	AIA02508C4	25.00	37.00	6.00
AIA0120815	12.00	26.00	7.00	AIA0160829	16.00	26.00	8.00	AIA01908B5	19.05	28.57	6.35	AIA0220810	22.00	32.00	7.00	AIA0250804	25.00	37.00	7.00
AIA0120808 AIA01208B5	12.00 12.00	26.00 27.00	8.00 7.00	ACC0160802 AIA0160836	16.00 16.00	28.00 28.00	7.00 7.00	AIA0190845 AIA01908B6	19.05 19.05	31.75 31.75	6.35 9.40	AIA0220866 AIA0220818	22.00 22.00	32.00 32.00	8.00 10.00	AIA0250842 AIA02508C5	25.00 25.00	37.00 37.00	8.00 10.00
AIA01208B3	12.00	28.00	7.00	AIA0160838	16.00	28.00	10.00	AIA01908A2	19.05	33.40	6.35	AIA0220818	22.00	33.00	6.00	AIA02508C5	25.00	38.00	6.00
AIA01208B6	12.00	28.00	8.00	AIA0160869	16.00	29.00	10.00	AIA01908A3	19.05	34.92	6.35	AIA0220823	22.00	33.00	7.00	AIA025080B	25.00	38.00	7.00
AIA0120888	12.00	30.00	7.00	AIA0160868	16.00	30.00	4.50	AIA01908A4	19.05	34.92	9.52	AIA0220808	22.00	35.00	6.00	AIA0250835	25.00	38.00	8.00
AIA01208A8 AIA0120821	12.00 12.00	30.00 32.00	10.00 7.00	AIA0160804 AIA0160853	16.00 16.00	30.00	5.00 6.00	AIA0190880 AIA01908A5	19.05 19.05	38.10 41.27	9.52 9.52	AIA0220801 AIA0220828	22.00 22.00	35.00 35.00	7.00 8.00	AIA0250876 AIA02508C6	25.00 25.00	38.00 40.00	10.00
AIA01208B7	12.00	32.00	8.00	AIA0160802	16.00	30.00	7.00	AIA01908A1	19.94	31.75	6.35	AIA0220839	22.00	35.00	10.00	AIA0250809	25.00	40.00	6.00
AIA01208A2	12.00	35.00	7.00	AIA0160817	16.00	30.00	10.00	AIA0200830	20.00	28.00	5.00	AIA0220850	22.00	37.00	8.00	AIA02508F2	25.00	40.00	6.80
AIA0120881	12.70	25.40	6.35	AIA0160841	16.00	32.00	7.00	AIA02008A6	20.00	28.00	6.00	AIA0220824	22.00	38.00	7.00	ACC0250802		40.00	7.00
AIA01208B9 AIA0120869	12.70 12.70	25.40 25.40	7.87 9.52	AIA0160842 AIA0160812	16.00 16.00	32.00 35.00	10.00 7.00	AIA0200850 AIA02008A1	20.00 20.00	28.00 30.00	8.00 5.00	AIA0220858 AIA0220802	22.00 22.00	38.00 40.00	10.00 7.00	AIA0250812 AIB0250818	25.00 25.00	40.00 40.00	7.00 7.00
AIA0120854	12.70	28.57	6.35	AIA0160801	16.00	35.00	10.00	ACC0200802	20.00	30.00	6.00	AIB0220805	22.00	40.00	7.00	AIA0250888	25.00	40.00	8.00
AIA01208C1	12.70	28.57	7.87	AIA0160859	16.00	40.00	10.00	AIA0200890	20.00	30.00	6.00	AIA0220852	22.00	40.00	8.00	AIA0250843	25.00	40.00	9.00
AIA01208C2	12.70	28.57	9.52	AIA0170877	17.00	25.00	4.00	AIA0200838	20.00	30.00	7.00	AIA0220847	22.00	40.00	10.00	AIB02508A9	25.00	40.00	9.00
AIA0130826 AIA0130816	13.00 13.00	22.00 22.00	5.00 7.00	AIA0170822 AIA0170829	17.00 17.00	25.00 26.00	7.00 7.00	AIB0200813 AIA0200820	20.00 20.00	30.00 30.00	7.00 10.00	AIA0220841 AIA0220842	22.00 22.00	42.00 42.00	7.00 10.00	AIA0250811 AIA02508C7	25.00 25.00	40.00 41.00	10.00 7.00
AIA0130831	13.00	24.00	7.00	AIA0170823	17.00	27.00	7.00	AIA0200810	20.00	32.00	5.00	AIA0220877	22.00	44.00	10.00	AIA02508F3	25.00	41.00	9.50
AIA0130827	13.00	25.00	7.00	AIA0170803	17.00	28.00	6.00	AIA0200878	20.00	32.00	6.00	AIA0220861	22.00	45.00	8.00	AIA0250806	25.00	42.00	6.00
AIA0130813	13.00	26.00	7.00	AIA0170810	17.00 17.00	28.00	7.00 5.00	AIA0200807	20.00	32.00	7.00	AIA0220892	22.00	45.00 47.00	10.00	AIA0250852	25.00	42.00	7.00
AIA0130817	13.00	28.00	7.00	AIA0170806	17.00	30.00	5.00	AIB0200801	20.00	32.00	7.00	ACC0220801	22.00	47.00	7.00	AIB0250807	25.00	42.00	7.00

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AAD2068025 26.00 48.00 10.00 AAD30080P3 30.00 42.00 7.00 AAD32080F3 32.00 52.00 5.00 AAD3208081 38.00 72.00 5.00 AAD320803 26.00 5.00 AAD320803 36.00 52.00 7.00 AAD320803 36.00 42.00 7.00 AAD320803 32.00 52.00 6.00 AAD320803 36.00 6.00 0.00 AAD320803 36.00 42.00 7.00 AAD320803 32.00 52.00 6.00 AAD320803 36.00 6.00 0.00 AAD320803 36.00 42.00 7.00 AAD320803 32.00 52.00 6.00 AAD320803 36.00 6.00 0.00 AAD320803 36.00 6.00 0.00 AAD320803 36.00 36.00 6.00 AAD320803 36.00 36.00 42.0																				
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AIA0280802 28.00 40.00 7.00 AIA0300877 30.00 50.00 8.00 AIA0330808 33.00 52.00 10.00 AIA035080R 35.00 72.00 12.00 AIA0400821 40.00 52.00 10.00 AIA0280851 28.00 40.00 10.00 AIA0300846 30.00 50.00 11.00 AIA0330848 33.00 54.00 10.00 AIA0350816 35.00 75.00 10.00 AIA0400834 40.00 54.00 10.00 AIA0280871 28.00 40.00 7.00 AIA0300848 30.00 50.00 11.00 AIA0330859 33.00 68.00 10.00 AIA0350812 35.00 80.00 10.00 AIA0400801 40.00 55.00 5.00 AIA0280821 28.00 41.00 7.00 AIA0300882 30.00 50.00 12.00 AIA03408D3 34.00 41.00 4.00 AIA0360810 36.00 47.00 7.00 AIA0400803 40.00 55.00 7.00 AIA028080G 28.00 42.00 7.00 AIA03008BQ 30.00 51.00 7.00 AIA03408D3 34.00 46.00 11.00 AIA0360832 36.00 48.00 10.00 AIB0400803 40.00 55.00 7.00																				
AIA0280871 28.00 40.00 10.00 AIA0300848 30.00 50.00 11.00 AIA0330859 33.00 68.00 10.00 AIA0350812 35.00 80.00 10.00 AIA0400801 40.00 55.00 5.00 AIA0280821 28.00 41.00 7.00 AIA0300835 30.00 50.00 12.00 AIA03408D3 34.00 41.00 4.00 AIA0360810 36.00 47.00 7.00 AIA0400803 40.00 55.00 7.00 AIA028080G 28.00 42.00 7.00 AIA03008BQ 30.00 51.00 7.00 AIA03408D4 34.00 46.00 11.00 AIA0360832 36.00 48.00 10.00 AIB0400803 40.00 55.00 7.00	AIA0280802	28.00	40.00	7.00	AIA0300877	30.00	50.00	8.00	AIA0330808	33.00	52.00	10.00	AIA035080R	35.00	72.00	12.00	AIA0400821	40.00	52.00	10.00
AIA028082I 28.00 41.00 7.00 AIA0300835 30.00 50.00 12.00 AIA03408D3 34.00 41.00 4.00 AIA0360810 36.00 47.00 7.00 AIA0400803 40.00 55.00 7.00 AIA028080G 28.00 42.00 7.00 AIA03008BQ 30.00 51.00 7.00 AIA03408D4 34.00 46.00 11.00 AIA0360832 36.00 48.00 10.00 AIB0400803 40.00 55.00 7.00																				
	AIA028082I	28.00	41.00	7.00	AIA0300835	30.00	50.00	12.00	AIA03408D3	34.00	41.00	4.00	AIA0360810	36.00	47.00	7.00	AIA0400803	40.00	55.00	7.00

Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.
AIB0400814	40.00	55.00	8.00	AIA0420827	42.00	80.00	10.00	AIA0470830	47.00	67.00	10.00	AIA05008A2	50.80	68.26	12.70	AIA0580819	58.00	70.00	10.00
AIA0400836 AIB0400825	40.00 40.00	55.00 55.00	10.00 10.00	AIA0420870 AIA0420890	42.00 42.67	85.00 63.50	10.00 9.52	AIA0470893 AIA0470877	47.00 47.00	70.00 70.00	7.00 10.00	AIA0500860 AIA050080U	50.80 50.80	69.85 69.85	9.52 12.70	AIA0580823 AIA0580822	58.00 58.00	72.00 72.00	8.00 10.00
AIA0400857	40.00	56.00	8.00	AIA0420875	42.67	63.50	12.70	AIA0470894	47.00	70.00	12.00	AIA05008E6	50.80	76.20	7.92	AIA0580852	58.00	74.00	8.00
AIA0400801 AIA0400892	40.00 40.00	56.00 57.00	10.00 10.00	AIA0420880 AIA0430823	42.80 43.00	63.50 58.00	9.52 7.00	AIA0470895 AIA0470885	47.50 47.62	76.20 63.50	4.06 9.20	AIA050080X AIA0500826	50.80 50.80	76.20 76.20	9.52 12.70	AIA0580830 AIA0580808	58.00 58.00	75.00 78.00	10.00 10.00
AIA0400818	40.00	58.00	8.00	AIA0430807	43.00	64.00	10.00	AIA0470859	47.62	66.67	9.52	AIA0520854	52.00	63.00	10.00	AIA0580814	58.00	80.00	8.00
AIA0400833 AIA0400871	40.00 40.00	58.00 58.00	10.00 12.00	AIA0430827 AIA0430828	43.00 43.00	65.00 68.00	10.00 12.00	AIA0470886 AIA0470839	47.62 47.62	73.02 76.20	12.70 12.70	AIA0520828 AIA0520844	52.00 52.00	65.00 68.00	10.00 7.00	AIA0580828 AIA0580806	58.00 58.00	80.00 80.00	10.00 12.00
AIA04008D2	40.00	59.00	10.00	AIA0440822	44.00	54.00	7.00	AIA04808B2	48.00	58.00	4.00	AIA0520802	52.00	68.00	8.00	AIA0580804	58.00	80.00	13.00
AIA040080C AIB0400811	40.00 40.00	60.00 60.00	8.00 8.00	AIA0440831 AIA04408B8	44.00 44.00	60.00 62.00	10.00	AIA0480899 AIA0480847	48.00 48.00	60.00 60.00	8.00 10.00	AIA0520818 AIA0520830	52.00 52.00	68.00 70.00	10.00	AIA0580843 AIA0580807	58.00 58.00	85.00 86.00	10.00 13.00
AIA0400808	40.00	60.00	10.00	AIA0440801	44.00	62.00	10.00	AIA0480802	48.00	62.00	8.00	AIA0520822	52.00	70.00	10.00	AIA0580840	58.00	90.00	10.00
AIB0400802 AIA0400813	40.00 40.00	60.00 60.00	10.00 12.00	AIA04408D5 AIA0440845	44.00 44.00	62.00 63.00	12.00 10.00	AIA0480828 AIA0480836	48.00 48.00	62.00 65.00	10.00	AIA0520832 AIA0520811	52.00 52.00	70.00 72.00	12.00 8.00	AIA0600839 AIA06008C6	60.00 60.00	70.00 70.00	5.00 7.00
AIA0400867	40.00	60.00	13.00	AIA0440807	44.00	64.00	8.00	AIA04808B3	48.00	65.00	9.00	AIA0520813	52.00	72.00	10.00	AIA0600838	60.00	70.00 72.00	10.00
AIA0400830 AIA0400897	40.00 40.00	62.00 62.00	5.00 7.00	AIA0440826 AIA0440895	44.00 44.00	64.00 65.00	10.00 10.00	ACC0480801 AIA0480831	48.00 48.00	65.00 65.00	10.00 10.00	AIA0520821 AIA0520833	52.00 52.00	72.00 75.00	12.00 10.00	AIA0600801 AIA06008C9	60.00 60.00	74.00	8.00 10.00
AIB0400829	40.00	62.00	7.00 8.00	AIA04408B7	44.45	57.15	6.35 9.52	AIB0480811 AIA0480857	48.00	65.00	10.00	AIA0520801 AIA0520810	52.00	75.00	12.00	AIA0600887	60.00	75.00 75.00	5.00
AIA0400891 AIA0400840	40.00 40.00	62.00 62.00	9.00	AIA0440883 AIA04408B9	44.45 44.45	57.15 63.50	8.00	AIA0480815	48.00 48.00	65.00 68.00	12.00 10.00	AIA0520815	52.00 52.00	78.00 80.00	10.00 10.00	ACC0600809 AIA0600807	60.00 60.00	75.00	8.00 8.00
AIA0400809 AIB0400808	40.00 40.00	62.00 62.00	10.00 10.00	AIA0440854 AIA0440866	44.45 44.45	63.50 63.50	9.52 12.70	AIA0480846 AIA0480819	48.00 48.00	70.00 70.00	10.00 12.00	AIA0520809 AIA0520840	52.00 52.00	85.00 90.00	10.00 10.00	AIB0600815 AIA0600841	60.00 60.00	75.00 75.00	8.00 10.00
AIA0400898	40.00	62.00	11.50	AIA0440886	44.45	69.85	9.52	ACC0480804	48.00	72.00	8.00	AIA0520040 AIA0520855	52.00	92.00	10.00	AIA0600831	60.00	75.00	12.00
ACB0400805 AIA0400865	40.00 40.00	62.00 62.00	12.00 12.00	AIA0440887 AIA0440861	44.45 44.45	69.85 76.20	12.70 9.52	AIA0480804 AIA0480834	48.00 48.00	72.00 72.00	8.00	AIA0530843 AIA0530833	53.00 53.97	92.00 76.20	11.50 9.52	AIA0600834 AIA0600851	60.00 60.00	76.00 78.00	10.00 10.00
AIA04008D3	40.00	63.00	5.00	AIA04508C9	45.00	54.00	5.00	AIA0480850	48.00	72.00	12.00	AIA0530820	53.97	76.20	12.70	AIA0600811	60.00	80.00	6.00
AIA0400896 AIA0400876	40.00 40.00	63.00 64.00	10.00 10.00	AIA0450866 AIA04508A4	45.00 45.00	55.00 55.00	5.00 6.00	AIA04808A1 AIA04808B4	48.00 48.00	75.00 75.00	10.00 12.00	AIA0530834 AIA0540848	53.97 54.00	79.37 72.00	12.70 8.00	AIA06008B2 ACC0600803	60.00 60.00	80.00 80.00	7.00 8.00
AIA0400807	40.00	65.00	7.00	AIA0450815	45.00	55.00	7.00	AIA04808A2	48.00	78.00	10.00	AIA0540812	54.00	76.00	8.00	AIA0600802	60.00	80.00	8.00
AIA0400847 ACC0400806	40.00 40.00	65.00 65.00	8.00	AIB0450824 AIA0450894	45.00 45.00	55.00 55.00	7.00 8.00	AIA0480818 AIA04808B5	48.00 48.00	80.00 85.00	10.00 12.00	AIA0540805 AIA0540849	54.00 54.00	80.00 81.00	13.00 10.00	AIB0600801 ACA0600832	60.00 60.00	80.00 80.00	8.00 10.00
AIA0400810	40.00	65.00	10.00	AIA0450864	45.00	55.00	10.00	AIA0490825	49.00	70.00	10.00	AIA0550857	55.00	65.00	6.00	AIA0600804	60.00	80.00	10.00
AIB0400822 AIA0400882	40.00 40.00	65.00 65.00	10.00 12.00	AIA04508D7 AIA04508A1	45.00 45.00	57.00 57.00	8.00 10.00	AIA0490835 AIA05008A7	49.15 50.00	69.85 60.00	9.52 5.00	AIA0550827 AIA0550875	55.00 55.00	65.00 65.00	8.00 10.00	AIB0600819 AIA0600855	60.00 60.00	80.00 80.00	10.00 12.00
AIA0400884	40.00	66.00	10.00	AIA0450863	45.00	58.00	10.00	AIA0500838	50.00	60.00	8.00	AIA0550856	55.00	68.00	8.00	AIA0600857	60.00	80.00	13.00
AIA040080L AIA0400848	40.00 40.00	68.00 68.00	10.00 12.00	ACC0450804 AIA0450803	45.00 45.00	60.00 60.00	6.00 7.00	AIA0500862 AIA0500863	50.00 50.00	60.00 62.00	10.00 5.00	AIA0550829 AIA0550802	55.00 55.00	68.00 70.00	10.00	AIA0600819 AIA0600845	60.00 60.00	82.00 82.00	7.00 10.00
AIA0400811	40.00	70.00	10.00	AIA0450805	45.00	60.00	8.00	AIA0500805	50.00	62.00	7.00	AIA0550845	55.00	70.00	10.00	AIA0600822	60.00	82.00	12.00
AIA0400899 AIA040080R	40.00 40.00	70.00 72.00	12.00 7.00	AIB0450838 AIA0450802	45.00 45.00	60.00 60.00	8.00 10.00	AIB0500819 AIA0500828	50.00 50.00	62.00 62.00	7.00 8.00	AIB0550810 AIA0550864	55.00 55.00	70.00 70.00	10.00 12.00	AIB0600804 AIA0600823	60.00 60.00	82.00 85.00	12.00 8.00
AIA0400883	40.00	72.00	10.00	AIA0450853	45.00	60.00	12.00	AIB0500807	50.00	62.00	8.00	ACA0550802	55.00	72.00	8.00	AIA0600803	60.00	85.00	10.00
AIA0400829 AIA040080W	40.00 40.00	72.00 75.00	12.00 8.00	AIA0450881 AIA0450850	45.00 45.00	62.00 62.00	7.00 8.00	AIA050081N AIA0500832	50.00 50.00	62.00 64.00	10.00 10.00	AIA0550806 AIA0550808	55.00 55.00	72.00 72.00	8.00 10.00	AIA0600808 AIB0600803	60.00 60.00	85.00 85.00	12.00 12.00
AIA04008C6	40.00	75.00	12.00	AIB0450801	45.00	62.00	8.00	AIA0500873	50.00	65.00	6.00	AIB0550809	55.00	72.00	10.00	AIA0600809	60.00	85.00	13.00
AIA040080U AIA04008B2	40.00 40.00	78.00 80.00	10.00 7.00	AIA04508B6 AIB0450818	45.00 45.00	62.00 62.00	9.00 9.00	AIA0500801 AIB0500829	50.00 50.00	65.00 65.00	8.00 8.00	AIA0550844 ACC0550802	55.00 55.00	72.00 75.00	12.00 8.00	AIA0600810 ACA0600831	60.00 60.00	90.00 90.00	8.00 10.00
AIA0400805	40.00	80.00	10.00	AIA0450879	45.00	62.00	10.00	AIA0500809	50.00	65.00	10.00	AIA0550816	55.00	75.00	8.00	AIA0600826	60.00	90.00	10.00
AIB0400826 AIA0400856	40.00 40.00	80.00 85.00	10.00 10.00	AIA0450843 AIA04508A7	45.00 45.00	62.00 63.00	12.00 10.00	AIA05008E7 AIA0500888	50.00 50.00	66.00 68.00	6.00 7.00	AIA0550848 AIA0550846	55.00 55.00	75.00 75.00	9.00 10.00	AIA0600889 AIA0600890	60.00 60.00		11.00 13.00
AIA0400855 AIA0410858	40.00	90.00	10.00	AIA0450887	45.00	64.00	8.00	ACC0500805	50.00	68.00	8.00	AIA0550867	55.00	75.00 78.00	12.00	AIA0600805 AIA0600821	60.00	95.00 95.00	10.00
AIA0410818	41.00 41.00	51.00 64.00	5.00 10.00	AIA0450801 AIA0450861	45.00 45.00	65.00 65.00	7.00 8.00	AIA0500802 AIB0500828	50.00 50.00	68.00 68.00	8.00 8.00	AIA0550868 AIA0550873	55.00 55.00	78.00	10.00 12.00	AIA0600821	60.00 60.00	100.00	13.00 10.00
AIA0410836 AIA0410840	41.27 41.27	63.50 63.50	9.52 12.70	AIB0450807 AIA0450804	45.00 45.00	65.00 65.00	8.00	AIA0500846 AIA0500813	50.00 50.00	68.00 68.00	9.00	AIA0550819 ACC0550812	55.00 55.00	80.00	6.00 8.00	AIA0600898 AIA06008A1		100.00	13.00 10.00
AIA0410821	41.27	73.02	12.70	AIB0450825	45.00	65.00	10.00	AIA0500813	50.00	68.00	12.00	AIA0550805	55.00	80.00	8.00	AIA06008E1		110.00	12.00
AIA0420821 AIA0420810	42.00 42.00	50.00 52.00	8.00 7.00	AIA0450831 AIA04508D1	45.00 45.00	65.00 66.00	12.00 7.00	AIA0500848 AIA0500804	50.00 50.00	70.00 70.00	8.00	AIB0550805 AIA0550803	55.00 55.00	80.00	8.00	AIA0600813 AIA0600888		110.00 130.00	13.00 13.00
AIA0420806	42.00	52.00	10.00	AIA0450816	45.00	67.00	10.00	AIB0500803	50.00	70.00	10.00	AIA0550811	55.00	80.00	12.00	AIA06008B6	60.32	85.72	12.70
AIA0420835 AIA0420802	42.00 42.00	55.00 55.00	7.00	AIA04508D2 AIA0450880	45.00 45.00	68.00 68.00	9.00	ACA0500809 AIA0500884	50.00 50.00	70.00 70.00	12.00 12.00	AIA0550801 AIA0550831	55.00 55.00	80.00 85.00	13.00	AIA0620841 AIA0620806	62.00 62.00	80.00	8.00 10.00
AIB0420818	42.00	55.00	8.00	AIA0450889	45.00	68.00	12.00	AIA050080D	50.00	72.00	5.00	AIA0550842	55.00	85.00	10.00	AIA0620803	62.00	82.00	10.00
AIA0420814 AIA0420889	42.00 42.00	55.00 55.00	10.00	AIA04508D3 AIA04508B4	45.00 45.00	70.00 70.00	5.00 7.00	AIA0500841 AIA0500803	50.00 50.00	72.00 72.00	7.00 8.00	AIA0550826 AIA05508A6	55.00 55.00	85.00 85.00	12.00 13.00	AIA0620844 AIA0620811	62.00 62.00	83.00 85.00	9.50 10.00
AIA0420844	42.00	56.00	7.00	AIA0450869	45.00	70.00	10.00	AIA0500830	50.00	72.00	10.00	AIA0550877	55.00	90.00	8.00	AIA0620833	62.00	85.00	12.00
AIA0420818 AIA0420879	42.00 42.00	56.00 58.00	10.00 7.00	AIA0450892 AIA0450813	45.00 45.00	70.00 72.00	12.00 8.00	AIB0500804 AIA050080E	50.00 50.00	72.00 72.00	10.00	AIA0550810 AIB0550813	55.00 55.00	90.00	10.00	AIA0620804 AIA0620821	62.00 62.00	90.00	10.00 12.00
AIA0420871	42.00	58.00	10.00	AIA0450867	45.00	72.00	10.00	AIB0500805	50.00	72.00	12.00	AIA0550878	55.00	90.00	13.00	AIA0620801	62.00	90.00	13.00
AIA0420812 AIA0420838	42.00 42.00	60.00 60.00	7.00 8.00	AIA04508A3 AIA0450814	45.00 45.00		12.00 10.00	AIA05008E8 AIA05008E9	50.00 50.00	72.00 73.00	15.00	AIA0550879 AIA0550809	55.00 55.00	95.00 100.00	10.00	AIA0620836 AIA0620846		100.00 120.00	10.00 12.00
AIA0420846	42.00	60.00	10.00	AIB0450827	45.00	75.00	10.00	AIA05008F1	50.00	75.00	5.00	AIA0560811	56.00	70.00	12.00	AIA0630815	63.00	80.00	10.00
AIA0420874 ACC0420803	42.00 42.00	62.00 62.00	7.00 8.00	AIA0450852 AIA04508A2	45.00 45.00	78.00	12.00 10.00	AIA0500843 AIA0500882	50.00 50.00	75.00 75.00	8.00	AIA0560806 AIA0560822	56.00 56.00	72.00 75.00	8.00	AIA0630867 AIA0630820	63.00 63.00	85.00 90.00	10.00 10.00
AIA0420832	42.00	62.00	8.00	AIA0450830	45.00		10.00	AIA0500836	50.00		12.00	AIA0560807	56.00	76.00	10.00	AIA0630808	63.00	90.00	12.00
AIA0420803 AIA0420858	42.00 42.00	62.00 62.00	10.00	AIB0450829 AIA0450842	45.00 45.00	80.00	10.00	AIA0500854 AIA0500856	50.00 50.00	76.00	10.00 12.00	AIA0560824 AIA0560826	56.00 56.00	78.00 80.00	10.00	AIA06308A9 AIA0630849	63.50 63.50	76.20 76.20	9.52 12.70
AIA0420856 AIA0420819	42.00 42.00	63.00 63.00	8.00 9.00	AIA04508D4 AIA0450828	45.00 45.00	81.00 85.00	13.00 10.00	AIA0500853 AIA0500834	50.00 50.00	78.00 78.00	10.00 12.00	AIA0560827 AIA0570806	56.00 57.00	85.00 76.00	8.00 10.00	AIA06308C1 AIA06308C2	63.50 63.50	79.25 79.25	9.52 12.70
AIA0420815	42.00	63.00	10.00	AIA0450839	45.00	85.00	12.00	AIA0500811	50.00	80.00	8.00	AIA0570805	57.00	85.00	12.00	AIA0630886	63.50	82.55	9.52
AIA0420822 AIA0420857	42.00 42.00	64.00 65.00	10.00 7.00	AIA04508A9 AIA0450833	45.00 45.00	90.00 90.00	7.00 10.00	AIA0500812 AIB0500814	50.00 50.00		10.00 10.00	AIA0570842 AIA0570877	57.15 57.15	69.85 73.02	9.52 12.70	AIA0630873 AIA06308B1	63.50 63.50	82.55 85.72	12.70 12.70
AIA0420837	42.00	65.00	10.00	AIA0460820	46.00	64.00	7.00	AIA0500858	50.00	80.00	12.00	AIA0570801	57.15	76.20	9.52	AIA06308B2	63.50	88.90	9.52
AIA0420813 AIA0420848	42.00 42.00	65.00 68.00	12.00 10.00	AIA0460823 AIA0460824	46.00 46.00	67.00 73.00	10.00 12.00	AIA0500807 AIA0500839	50.00 50.00	80.00 85.00	13.00 10.00	AIB0570803 AIA0570850	57.15 57.15	76.20 76.20	9.52 12.70	AIA0630895 AIA0630851	63.50 63.50	88.90 89.91	12.70 12.70
AIA0420840	42.00	70.00	10.00	AIA0470890	47.00	58.00	7.00	AIA0500806	50.00	90.00	10.00	AIA0570878	57.15	82.55	9.52	AIA06308C3	63.50	89.92	10.92
AIA0420824 AIA0420801	42.00 42.00	72.00 72.00	8.00 10.00	AIA0470891 AIA0470892	47.00 47.00	60.00 60.00	7.00 10.00	AIA050080A AIA05008A4	50.00 50.00	90.00 95.00	13.00 10.00	AIA0570854 AIA0570851	57.15 57.15	82.55 85.72	12.70 9.52	AIA0630801 AIA06308B3	63.50 63.50	89.92 90.04	11.94 12.06
AIA0420829	42.00	72.00	12.00	AIA0470823	47.00	62.00	8.00	AIA05008C5	50.80	63.50	9.52	AIA0570831	57.15	85.72	12.70	AIA06308C4	63.50	91.95	14.22
AIA0420842	42.00	75.00	10.00	AIA0470870	47.00	65.00	10.00	AIA0500878	50.80	66.68	9.52	AIA0570852	57.15	88.90	12.70	AIA06308B4	63.50	95.25	9.52

Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.	Spareage Part No.	Shaft Dia.	Hsg. Dia.	Seal Thk.
AIA06308B5 AIA0640807	63.50 64.00	95.25 80.00	12.70 8.00	AIA0750802 AIA0750807	75.00 75.00	90.00 95.00	10.00	AIA0890811 AIA0890812		114.30 114.30	9.52 10.92	AIA1100806 AIA1100855	110.00 110.00		13.00 10.00	AIA1500804 ACC1500801			14.00 15.00
AIA0640802	64.00	88.00	12.00	AIA0750835	75.00	95.00	10.00	AIA0890813	89.90	120.65	15.75	AIA1100801	110.00	140.00	12.00	AIA1500801	150.00	180.00	15.00
AIA0640803 AIA0650840	64.00 65.00	90.00 75.00	13.00 5.00	AIB0750812 AIA0750804	75.00 75.00	95.00 95.00	10.00 12.00	AIA0900819 AIA0900858		105.00 105.00	10.00 13.00	AIB1100807 AIA1100808		140.00 140.00	12.00 13.00	AIA1520812 AIA1520806			11.94 12.70
AIA0650857 ACC0650804	65.00 65.00	75.00 80.00	7.00	AIA0750805 AIB0750810	75.00 75.00		13.00	AIA0900804 AIA0900814		110.00	8.00			140.00	13.00 14.00	ACC1550804 ACC1550801			15.00 15.00
AIA0650855	65.00	80.00	8.00	ACC0750801	75.00	100.00	10.00	AIA0900803	90.00	110.00	12.00	AIB1100804	110.00	140.00	14.00	AIA1560801	156.00	186.00	15.00
AIB0650812 AIA0650803	65.00 65.00	80.00	8.00	AIA0750806 AIB0750809		100.00	10.00	AIB0900801 AIA0900827			12.00 13.00	AIA1100832 AIA1100821	110.00	140.00 150.00	15.00 13.00		159.00 160.00	183.00 180.00	13.00
AIA0650825 AIA0650816	65.00 65.00	82.00 85.00	10.00	AIA0750829 AIA0750803			12.00 13.00	AIA0900822 AIA0900801		115.00 115.00	9.00 10.00	1	110.00 110.00	150.00	15.00 15.00	AIA1600806		180.00 180.00	13.00 15.00
AIA0650804	65.00	85.00	10.00	AIB0750823	75.00	100.00	13.00	AIA0900846	90.00	115.00	12.00	AIA1140841	114.00	140.00	13.00	AIA1600812	160.00	185.00	10.00
AIB0650805 AIA0650805	65.00 65.00	85.00 85.00	10.00 12.00	AIA0750813 AIA0750851			10.00 13.00	AIB0900816 AIA0900802			13.00 13.00	AIA1150801 ACA1150802		140.00	12.00 13.00	AIA1600807 AIA1600811		190.00 190.00	10.00 13.00
AIA0650843	65.00	85.00	13.00	AIA0750808	75.00	110.00	10.00	AIA0900831	90.00	120.00	10.00	AIA1150802	115.00	140.00	13.00	AIB1600804	160.00	190.00	13.00
AIA0650862 AIB0650816	65.00 65.00	86.00 88.00	12.00 12.00	AIA0750819 AIA0750811		110.00 115.00	12.00 10.00	AIA0900809 AIA0900805		120.00 120.00	12.00 13.00	AIA1150817 AIA1150822		140.00 140.00	15.00 16.00	AIA1600801 AIB1600801	160.00 160.00	190.00 190.00	15.00 15.00
AIA0650879 AIA0650844	65.00 65.00	89.00 90.00	8.00	AIB0750811 AIA0750899			10.00 13.00	AIB0900802 ACB0900802			13.00 15.00		115.00 115.00		12.00 13.00	AIA1600814 AIA1650820			12.00 13.00
ACC0650805	65.00	90.00	10.00	AIA0760851	76.00	102.00	13.00	AIA0900824	90.00	120.00	15.00	AIA1150804	115.00	150.00	15.00	AIA1650823	165.00	190.00	15.00
AIA0650802 AIB0650825	65.00 65.00	90.00	10.00 10.00	AIA0760802 AIA0760834	76.20 76.20	95.25 95.25	9.52 12.70	AIA0900828 AIA0900807			12.00 13.00	AIA1150830 AIB1180803	115.00 118.00	152.00 150.00	12.00 14.00	AIA1700815 AIA1700809	170.00 170.00		12.00 15.00
AIA0650827 AIA0650801	65.00 65.00	90.00	12.00 13.00	AIA0760823 AIA0760830		101.60 101.60	9.52 12.70	AIB0900805 AIA0920822			13.00 12.00	AIA1200831 AIA1200839		140.00	10.00 12.00	AIB1700801 AIA1700813			15.00 15.00
AIB0650801	65.00	90.00	13.00	AIA0760852	76.20	114.30	10.92	AIA0920819	92.00	120.00	13.00	AIA1200802	120.00	140.00	13.00	AIA1700821	170.00	220.00	15.00
AIA0650830 AIA0650828	65.00 65.00	95.00 95.00	10.00	AIA0760832 AIA0780813			12.70	ACC0950802 AIA0950801		110.00	7.00	AIA1200855 AIA1200853		140.00	15.00 13.00	AIA1750810 AIA1750807			13.00 15.00
AIA0650807	65.00	100.00	10.00	AIA0780807	78.00	100.00	12.00	AIA0950822	95.00	110.00	12.00	AIA1200850	120.00	150.00	7.00	AIA1750809	175.00	205.00	13.00
AIB0650807 AIA0650812		100.00	10.00	AIA0780809 AIA0780820			13.00 12.00	AIA0950824 AIA0950833			13.00	ACA1200802 ACC1200807		150.00 150.00	12.00 12.00	AIA1750804 AIA1800812			15.00 12.00
AIA0650811 AIA0650826		100.00 110.00	13.00 10.00	AIA0780821 AIA0800830	78.00 80.00	110.00 95.00	12.00	AIA0950813 AIA0950849			12.00 13.00	AIA1200804 AIB1200807		150.00 150.00	12.00 12.00	AIA1800829 AIA1800803	180.00 180.00		14.00 15.00
AIA0650865	65.00	110.00	13.00	AIA0800838	80.00	95.00	10.00	AIA0950832	95.00	120.00	10.00	AIA1200803	120.00	150.00	13.00	AIB1800817	180.00	210.00	15.00
AIA0650880 AIA0680821	65.00 68.00	120.00 80.00	13.00 10.00	ACC0800803 ACA0800804		100.00 100.00	7.50 10.00	AIA0950802 AIA0950803			12.00 13.00	AIB1200802 AIA1200848		150.00 150.00	13.00 14.00	AIA1800817 AIB1800818	180.00 180.00		16.00 16.00
AIA0680803 AIA0680801	68.00 68.00	85.00 90.00	10.00 10.00	AIA0800801 AIB0800801		100.00 100.00	10.00 10.00	AIA0950829 ACC0950801			15.00 12.00	AIA1200801 ACC1200806		150.00 160.00	15.00 10.00	AIA1800826 AIA1800811	180.00 180.00		15.00 16.00
AIA0680809	68.00	90.00	12.00	AIA0800803	80.00	100.00	12.00	AIA0950837	95.00	125.00	12.00	AIA1200832	120.00		12.00	AIA1900826	190.00	215.00	16.00
AIA0680805 AIA0680823	68.00 68.00	90.00 95.00	13.00 10.00	AIA0800811 AIA0800812		100.00 100.00	13.00 15.00	AIA0950814 AIA0950835			13.00 13.00	AIA1200822 AIB1200806	120.00 120.00	160.00 160.00	13.00 13.00		190.00 190.00		12.00 15.00
AIA0680807		100.00	10.00	AIA0800822			10.00 12.00	AIA0950863			10.00	AIA1300804	120.00	160.00	14.00	AIA1900810			15.00
AIA0680825 AIA0680833	68.00	100.00 100.00	12.00 13.00	AIA0800815 AIA0800802	80.00	105.00	13.00	AIB0950809 AIA0950847	95.25	120.65	10.00 12.70	AIA1200840 AIB1200809	120.00	160.00 170.00	15.00 13.00	AIA1900814 AIA1900801	190.00	225.00	16.00 16.00
AIA0690856 AIA0690857	69.82 69.85	79.75 88.39	9.52	ACA0800801 AIA0800820		110.00 110.00	10.00	AIA0980807 AIA1000836		120.00 115.00	13.00 9.00		125.00 125.00	145.00 150.00	13.00 12.00	AIA1900819 AIA2000803	190.00		15.00 13.00
AIA0690840	69.85	88.90	9.52	AIA0800821	80.00	110.00	12.00	AIA1000820	100.00	120.00	10.00	AIA1250825	125.00	150.00	13.00	AIA2000806	200.00	230.00	15.00
AIA0690832 AIA0690845	69.85 69.85	88.90 95.25	12.70 9.52	AIB0800816 ACC0800801	80.00	110.00		AIA1000805	100.00	120.00		AIA1250802 AIA1250836	125.00			AIB2000802 AIB2100803	210.00	240.00	
AIA0690858 AIA0690846	69.85 69.85	95.25 95.85	12.70 12.70	AIA0800805 AIA0800823		110.00 115.00		AIA1000829 AIA1000862				AIA1250835 AIA1250821				AIA2100801 AIA2100803			
AIA0700848	70.00	80.00	10.00	AIA0800825	80.00	120.00	13.00	AIA1000801	100.00	125.00	12.00	AIA1250818	125.00	160.00	13.00	AIA2200814	220.00	250.00	13.00
AIA0700802 AIB0700806	70.00 70.00	85.00 85.00	8.00 8.00	AIA0800842 AIA0800814	80.00	130.00	13.00 13.00	AIA1000803 AIB1000811			13.00 13.00	AIB1250803 AIA1250814	125.00	160.00	13.00 15.00	AIA2200805 AIB2200802	220.00	250.00	15.00
AIA0700835 AIA0700877	70.00 70.00	85.00 86.00	10.00	AIA0810801 AIA0820840		105.00 105.00		AIA1000897 AIA1000840				AIA1270833 AIA1300821				AIA2200827 AIB2250801			
AIA0700878	70.00	88.00	8.00	AIA0820802	82.00	110.00	12.00	AIA1000804	100.00	130.00	12.00	AIA1300845	130.00	152.00	14.00	AIA2300806	230.00	260.00	15.00
AIA0700866 ACC0700802	70.00 70.00	90.00 90.00	8.00 10.00	AIA0820850 AIA0820851		110.00 120.00	13.00	AIA1000831 AIB1000807				ACC1300802 AIA1300801				AIA2400814 AIB2400802			7.00 13.00
AIA0700803 AIB0700818	70.00 70.00	90.00	10.00	AIA0820827 ACC0820802		101.60 107.92	12.70 9.52	AIA10008A4 AIA1000812				AIB1300813 AIA1300813				AIA2400802 AIA2400809			
AIA0700801	70.00	90.00	12.00	AIA0820828	82.55	107.95	12.70	AIA1000842	100.00	150.00	12.00	AIB1300805	130.00	160.00	13.00	AIA2500805	250.00	280.00	15.00
AIA0700804 AIB0700807	70.00 70.00		13.00 13.00	AIA0820852 AIA0820853		110.99 114.30	10.92	AIA1000859 AIA1010808				AIA1300803 AIA1300846				AIA2500815 AIA2500802			
AIA0700850 AIA0700829	70.00 70.00	92.00 95.00	13.00 10.00	AIA0820830 AIB0850808		114.30 100.00	12.70 7.00	AIA1010801 AIA1020808			12.70	AIA1300830 AIA1300822			12.00 15.00	AIA2600810 AIA2600807			
AIA0700826	70.00	95.00	12.00	AIA0850802	85.00	100.00	10.00	ACC1050803	105.00	120.00	8.00	AIA1330820	133.35	158.75	14.35	AIB2600803	260.00	300.00	15.00
AIA0700844 AIA0700837	70.00 70.00		13.00 10.00	AIA0850840 AIA0850801		100.00 105.00		AIA1050811 AIA1050819				AIA1350818 AIA1350814				AIA2600801 AIA2800804			
AIA0700839 AIA0700864	70.00 70.00	100.00	12.00 13.00	AIA0850836 AIA0850803		105.00 105.00	12.00	ACC1050802 AIA1050801				ACC1350801 AIA1350807			10.00	AIA2800808 AIA2900805			
AIB0700813	70.00	100.00	13.00	AIA0850853	85.00	110.00	10.00	AIB1050801	105.00	130.00	12.00	AIA1400806	140.00	160.00	10.00	AIB2800801	280.00	320.00	20.00
AIA0700879 AIA0700846	70.00 70.00		10.00 13.00	AIA0850889 AIB0850801		110.00 110.00		AIA1050803 AIA1050804				AIA1400823 AIA1400822				AIA3000816 AIA3000801			
AIA0700820 AIA0700865		110.00		ACC0850802 AIA0850815		110.00		AIA1050807				AIA1400807 AIA1400817			13.00 12.00	AIA3200807	320.00 320.00		
AIA0700814	70.00	110.00	12.00	AIB0850806	85.00	110.00	12.00	AIA1050810 AIA1050805	105.00	140.00	12.00	AIA1400820	140.00	170.00	13.00	AIA3600802	360.00	400.00	18.00
AIB0700831 AIA0720815	70.00 72.00		12.00 10.00	AIA0850831 AIB0850803		110.00 110.00		AIA1050814 AIA1050808				AIB1400812 AIA1400801				AIA3600801 AIA3800801	360.00 380.00		
AIA0720813	72.00	95.00	10.00	AIA0850856	85.00	110.00	15.00	AIA1050825	105.00	150.00	15.00	AIB1400805	140.00	170.00	15.00	AIA4000801	400.00	440.00	20.00
AIA0720820 AIA0720826		100.00	12.00 10.00	AIA0850827 AIA0850817	85.00	115.00 120.00	12.00	AIA1100837 AIA1100831	110.00	130.00		AIA1400803 AIA1450819	145.00	175.00	12.00	AIA4200801 AIA4500807	450.00	490.00	20.00
AIA0720821 AIA0720817	72.00 72.00		12.00 13.00	AIA0850847 AIB0850810		120.00 120.00		AIB1100820 ACC1100801				AIA1450812 AIA1450805			15.00 13.00	AIA4600802 AIA4800801			
AIA0720805	72.00	105.00	13.00	AIA0850811	85.00	130.00	12.00	AIA1100826	110.00	130.00	12.00	AIA1450802	145.00	180.00	15.00	7.17.17000001	100.00	J_U.UU	20.00
AIA0720832 AIA0750841	72.00 75.00		13.00 10.00	AIA0850891 AIA0880822		130.00 114.30		AIB1100809 AIA1100803				AIA1500813 AIA1500836							
AIA0750801 AIB0750804	75.00 75.00	90.00 90.00	8.00 8.00	AIA0880801 AIA0890810	88.90	127.00 127.00	12.70	AIA1100802 AIA1100811	110.00	130.00	15.00	AIA1500803 AIA1500817	150.00	180.00	12.00				
1 (1501 00004	10.00	55.00	0.00	, 11/10000010	00.00	121.00	10.00	1,100011	110.00	100.00	12.00	/ 1000017	100.00	100.00	10.00	L			





MATERIAL: NT4/b Acrylonitrile Butadiene Rubber (NBR)

MAX. OPERATING CONDITIONS: Temp.: -30°C to +100°C, Pressure: 100 BAR

MAX. SURFACE ROUGHNESS: Static: 0.8 µmRa, Dynamic: 0.4 µmRa

 ${\color{blue} \textbf{COMPATIBILITY: NT4/b standard O-Ring compound is compatabile with mineral oils, biooils, soluble water \& water glycol fluids.} \\$

The O-Ring seal is basically a device for closing (sealing) a gap or making a joint fluid tight. (The fluid in this case being either a gas or liquid). Spareage offers O-Rings of hydraulic, pneumatic & rotary application. O-Rings are normally suitable for static & slow reciprocating application (upto a speed of 20m/sec). For rotary applications O-Rings may be used where peripheral speeds are expectionally low.

DETAILS: Ordering Information (Dimensions in mm)

Spareage	ID	C/S	Spareage	ID	C/S	Spareage	ID	C/S	Spareage	ID	C/S	Spareage	ID	C/S	Spareage	ID	C/S
Part No.	mm	mm	Part No.	mm	mm	Part No.	mm	mm	Part No.	mm	mm	Part No.	mm	mm	Part No.	mm	mm
OR15200142-08	1.42	1.52	OR15000750-08	7.50		OR19801189-08	11.89	1.98	OR35001600-08	16.00	3.50	OR50002100-08	21.00	5.00	OR40002600-08	26.00	4.00
OR17800178-08	1.78	1.78	OR17500750-08	7.50		OR26201191-08	11.91	2.62	OR40001600-08	16.00	4.00	OR20002140-08	21.40	2.00	OR45002600-08	26.00	4.50
OR26200206-08	2.06	2.62	OR20000750-08	7.50		OR15001200-08	12.00		OR50001600-08	16.00	5.00	OR30002150-08	21.50	3.00	OR50002600-08	26.00	5.00
OR17000240-08	2.40	1.70	OR35300752-08	7.52		OR17501200-08	12.00		OR25001650-08	16.50	2.50	OR53302160-08	21.60	5.33	OR53302634-08	26.34	
OR20000250-08	2.50		OR26200759-08	7.59		OR18001200-08	12.00		OR30001650-08	16.50	3.00	OR35302182-08	21.82	3.53	OR35002640-08	26.40	
OR17800257-08	2.57		OR25000760-08	7.60		OR20001200-08	12.00		OR53301682-08	16.82		OR26202189-08	21.89	2.62	OR30002650-08	26.50	
OR26200284-08	2.84		OR15000765-08	7.65		OR25001200-08	12.00		OR15001700-08	17.00	1.50	OR17802195-08	21.95	1.78	OR35302657-08	26.57	
OR17800290-08	2.90		OR17800765-08	7.65		OR30001200-08	12.00		OR20001700-08	17.00	2.00	OR15002200-08	22.00	1.50	OR26202664-08	26.64	
OR15000300-08	3.00	1.50	OR19000780-08	7.80		OR35001200-08	12.00		OR25001700-08	17.00	2.50	OR18002200-08	22.00	1.80	OR17802670-08	26.70	
OR17500300-08	3.00		OR10000800-08	8.00		OR40001200-08	12.00		OR30001700-08	17.00	3.00	OR20002200-08	22.00	2.00	OR20002700-08	27.00	
OR20000300-08	3.00	2.00	OR15000800-08	8.00		OR35301229-08	12.29		OR35001700-08	17.00	3.50	OR24002200-08	22.00	2.40	OR25002700-08	27.00	
OR25000300-08	3.00	2.50	OR18000800-08	8.00		OR24001230-08	12.30		OR50001700-08	17.00	5.00	OR30002200-08	22.00	3.00	OR30002700-08	27.00	
OR16000310-08	3.10	1.60	OR20000800-08	8.00		OR26201237-08	12.37		OR35301704-08	17.04	3.53	OR35002200-08	22.00	3.50	OR35002700-08	27.00	
OR10000350-08	3.50	1.00	OR22000800-08	8.00		OR17801242-08	12.42		OR26201712-08	17.12		OR40002200-08	22.00	4.00	OR40002700-08	27.00	
OR20000350-08	3.50	2.00	OR25000800-08	8.00		OR20001250-08	12.50		OR17801717-08	17.17		OR50002200-08	22.00	5.00	OR50002700-08	27.00	
OR25000350-08	3.50	2.50	OR30000800-08	8.00		OR25001250-08	12.50		OR24001730-08	17.30	2.40	OR26202223-08	22.23	2.62	OR35002770-08	27.70	
OR26200363-08	3.63		OR40000800-08	8.00		OR35001250-08	12.50		OR20001750-08	17.50	2.00	OR24002230-08	22.30	2.40	OR53302794-08	27.94	
OR17800368-08	3.68		OR17000830-08	8.30		OR24001260-08	12.60		OR25001750-08	17.50	2.50	OR15002300-08	23.00	1.50	OR20002800-08	28.00	
OR17000370-08	3.70	1.70	OR18000840-08	8.40		OR16001270-08	12.70		OR30001750-08	17.50	3.00	OR20002300-08	23.00	2.00	OR25002800-08	28.00	
OR10000400-08	4.00	1.00	OR20000850-08	8.50		OR31001270-08	12.70		OR22501755-08	17.55	2.25	OR25002300-08	23.00	2.50	OR30002800-08	28.00	
OR15000400-08	4.00	1.50	OR25000850-08	8.50		OR15001300-08	13.00		OR24001780-08	17.80	2.40	OR30002300-08	23.00	3.00	OR35002800-08	28.00	
OR17000400-08	4.00	1.70	OR27000850-08	8.50		OR20001300-08	13.00		OR15001800-08	18.00	1.50	OR35002300-08	23.00	3.50	OR40002800-08	28.00	
OR20000400-08	4.00	2.00	OR32000850-08	8.50		OR25001300-08	13.00		OR20001800-08	18.00	2.00	OR40002300-08	23.00	4.00	OR50002800-08	28.00	
OR50000400-08	4.00	5.00	OR24000860-08	8.60		OR30001300-08	13.00		OR25001800-08	18.00	2.50	OR50002300-08	23.00	5.00	OR35302817-08	28.17	
OR35300434-08	4.34		OR17800873-08	8.73		OR35001300-08	13.00		OR30001800-08	18.00	3.00	OR53302316-08	23.16		OR26202824-08	28.24	
OR26200442-08	4.42		OR10000900-08	9.00		OR40001300-08	13.00		OR35001800-08	18.00	3.50	OR35302339-08	23.39	3.53	OR17802830-08	28.30	
OR17800447-08	4.47		OR15000900-08	9.00		OR26201310-08	13.10		OR40001800-08	18.00	4.00	OR26202347-08	23.47		OR20002900-08	29.00	
OR20000450-08	4.50		OR17000900-08	9.00		OR15001350-08	13.50		OR50001800-08	18.00	5.00	OR17502350-08	23.50	1.75	OR25002900-08	29.00	
OR15000470-08	4.70	1.50	OR19000900-08	9.00		OR20001350-08	13.50		OR53301842-08	18.42		OR35002350-08	23.50	3.50	OR30002900-08	29.00	
OR17000470-08	4.70	1.70	OR20000900-08	9.00		OR25001350-08	13.50		OR25001850-08	18.50	2.50	OR17802352-08	23.52	1.78	OR35002900-08	29.00	
OR10000500-08	5.00	1.00	OR25000900-08	9.00		OR40001350-08	13.50		OR35001850-08	18.50	3.50	OR25002360-08	23.60	2.50	OR40002900-08	29.00	
OR15000500-08	5.00	1.50	OR30000900-08	9.00		OR53301364-08	13.64		OR24001860-08	18.60	2.40	OR31002380-08	23.80	3.10	OR50002900-08	29.00	
OR20000500-08	5.00		OR35000900-08	9.00		OR24001380-08	13.80		OR35301864-08	18.64		OR20002400-08	24.00	2.00	OR25002940-08	29.40	
OR25000500-08	5.00	2.50	OR16000910-08	9.10		OR35301387-08	13.87		OR26201872-08	18.72	2.62	OR25002400-08	24.00	2.50	OR31002940-08	29.40	
OR30000500-08	5.00	3.00	OR35300912-08	9.12		OR26201394-08	13.94		OR17801877-08	18.77		OR30002400-08	24.00	3.00	OR30002950-08	29.50	
OR26200523-08	5.23	2.62	OR26200919-08	9.19		OR17001400-08	14.00		OR15001900-08	19.00	1.50	OR35002400-08	24.00	3.50	OR53302951-08	29.51	5.33
OR17800528-08	5.28	1.78	OR17800925-08	9.25		OR17801400-08	14.00		OR20001900-08	19.00	2.00	OR40002400-08	24.00	4.00	OR29402974-08	29.74	
OR22500530-08	5.30	2.25	OR24000930-08	9.30		OR18001400-08	14.00		OR24001900-08	19.00	2.40	OR45002400-08	24.00	4.50	OR35302974-08	29.74	
OR24000530-08	5.30		OR18000950-08	9.50		OR20001400-08	14.00		OR25001900-08	19.00	2.50	OR50002400-08	24.00	5.00	OR26202982-08	29.82	
OR15000550-08	5.50	1.50	OR30000950-08	9.50		OR25001400-08	14.00		OR30001900-08	19.00	3.00	OR25002440-08	24.40	2.50	OR17802987-08	29.87	
OR18000550-08	5.50	1.80	OR24000980-08	9.80		OR30001400-08	14.00		OR35001900-08	19.00	3.50	OR30002450-08	24.50	3.00	OR18003000-08	30.00	
OR20000550-08	5.50		OR15001000-08	10.00		OR40001400-08	14.00		OR40001900-08	19.00	4.00	OR35002450-08	24.50	3.50	OR20003000-08	30.00	
OR12000560-08		12.00	OR20001000-08	10.00		OR24001430-08	14.30		OR50001900-08	19.00	5.00	OR40002450-08	24.50	4.00	OR25003000-08	30.00	
OR19000580-08	5.80		OR25001000-08	10.00		OR25001450-08	14.50		OR31701905-08	19.05	3.17	OR53302477-08	24.77	5.33	OR30003000-08	30.00	
OR35300594-08	5.94		OR30001000-08	10.00		OR30001450-08	14.50		OR25001950-08	19.50	2.50	OR35302499-08	24.99	3.53	OR35003000-08	30.00	
OR12500600-08	6.00		OR40001000-08			OR35001450-08		3.50	OR30001950-08			OR15002500-08	25.00	1.50	OR40003000-08		
OR15000600-08	6.00		OR18001050-08		1.80	OR15001500-08		1.50	OR24001980-08	19.80		OR17502500-08	25.00		OR50003000-08	30.00	
OR17500600-08	6.00		OR23001050-08			OR20001500-08	15.00		OR53301999-08			OR20002500-08	25.00		OR60003000-08	30.00	
OR20000600-08	6.00		OR35301069-08		3.53	OR25001500-08	15.00		OR15002000-08			OR25002500-08	25.00		OR40003050-08	30.50	
OR25000600-08		2.50	OR26201077-08		2.62	OR30001500-08			OR20002000-08			OR30002500-08	25.00		OR20003100-08	31.00	
OR30000600-08		3.00	OR17801082-08		1.78	OR40001500-08	15.00		OR25002000-08			OR32002500-08	25.00		OR25003100-08		
OR40000600-08	6.00		OR15001100-08		1.50	OR26201508-08			OR30002000-08			OR35002500-08	25.00		OR30003100-08	31.00	
OR26200602-08	6.02	2.62	OR17501100-08	11.00	1.75	OR24001530-08	15.30	2.40	OR35002000-08	20.00	3.50	OR40002500-08	25.00		OR40003100-08	31.00	4.00
OR17800607-08	6.07		OR18001100-08	11.00		OR35301547-08		3.53	OR40002000-08			OR50002500-08	25.00		OR50003100-08	31.00	
OR15000650-08	6.50		OR20001100-08		2.00	OR20001550-08	15.50		OR50002000-08			OR55002500-08	25.00		OR53303112-08		5.33
OR20000650-08		2.00	OR25001100-08		2.50	OR30001550-08	15.50		OR35302022-08			OR26202507-08	25.07		OR35303134-08		3.53
OR17800675-08	6.75		OR30001100-08		3.00	OR35001550-08	15.50		OR26202029-08			OR17802512-08	25.12		OR26203142-08		2.62
OR19000680-08	6.80		OR35001100-08		3.50	OR26201554-08		2.62	OR24002030-08			OR24002530-08	25.30		OR17803147-08		1.78
OR15000700-08	7.00	1.50	OR40001100-08	11.00	4.00	OR17801560-08	15.60		OR17802035-08			OR30002550-08	25.50		OR25003150-08	31.50	2.50
OR20000700-08	7.00	2.00	OR24001130-08	11.30	2.40	OR23001560-08	15.60		OR23002060-08			OR35002570-08	25.70		OR30003150-08	31.50	3.00
OR25000700-08	7.00	2.50	OR20001150-08	11.50	2.00	OR24001580-08	15.80	2.40	OR18002100-08	21.00	1.80	OR35302580-08	25.80	3.53	OR35003170-08	31.70	3.50
OR30000700-08	7.00	3.00	OR25001150-08	11.50	2.50	OR15001600-08	16.00	1.50	OR20002100-08	21.00	2.00	OR15002600-08	26.00		OR20003200-08	32.00	2.00
OR14000720-08	7.20	1.40	OR30001150-08	11.50	3.00	OR17001600-08	16.00	1.70	OR25002100-08	21.00	2.50	OR20002600-08	26.00	2.00	OR25003200-08	32.00	2.50
OR20000720-08	7.20		OR43001150-08	11.50		OR20001600-08	16.00		OR30002100-08			OR25002600-08	26.00		OR30003200-08	32.00	
	7.20		OR23001160-08	11.60		OR25001600-08	16.00		OR35002100-08			OR30002600-08	26.00		OR35003200-08	32.00	
OR32000720-08																	
OR32000720-08 OR23000740-08		2.30	OR24001180-08	11.80	2.40	OR30001600-08	16.00	3.00	OR40002100-08	21.00	4.00	OR35002600-08	26.00	3.50	OR40003200-08	32.00	4.00

O - Rings (NBR)



Spareage Part No.	ID mm	C/S mm	Spareage Part No.	ID mm	C/S mm												
OR50003200-08	32.00	5.00	OR35004050-08	40.50	3.50	OR31004940-08	49.40	3.10	OR30005850-08	58.50	3.00	OR40006800-08	68.00	4.00	OR20008000-08	80.00	2.00
OR53303269-08	32.69	5.33	OR53304064-08	40.64	5.33	OR30004950-08	49.50	3.00	OR35305874-08	58.74	3.53	OR50006800-08	68.00	5.00	OR25008000-08	80.00	2.50
OR35303292-08	32.92	3.53	OR35304087-08	40.87	3.53	OR20005000-08	50.00	2.00	OR20005900-08	59.00	2.00	OR25006900-08	69.00	2.50	OR30008000-08	80.00	3.00
OR26203299-08	32.99	2.62	OR26204094-08	40.94	2.62	OR25005000-08	50.00	2.50	OR30005900-08	59.00	3.00	OR30006900-08	69.00	3.00	OR35008000-08	80.00	
OR20003300-08	33.00	2.00	OR17804100-08	41.00	1.78	OR30005000-08	50.00	3.00	OR35005900-08	59.00	3.50	OR40006900-08	69.00	4.00	OR40008000-08	80.00	
OR25003300-08	33.00	2.50	OR20004100-08	41.00	2.00	OR35005000-08	50.00	3.50	OR40005900-08	59.00	4.00	OR45006900-08	69.00	4.50	OR45008000-08	80.00	
OR30003300-08	33.00	3.00	OR25004100-08	41.00	2.50	OR40005000-08	50.00	4.00	OR30005950-08	59.50	3.00	OR55006900-08	69.00	5.50	OR50008000-08	80.00	
OR35003300-08	33.00 33.00	3.50	OR30004100-08	41.00	3.00	OR50005000-08	50.00	5.00	OR53305969-08 OR35305992-08	59.69	5.33	OR53306922-08	69.22	5.33	OR55008000-08	80.00	
OR40003300-08 OR50003300-08	33.00	4.00 5.00	OR40004100-08 OR45004100-08	41.00 41.00	4.00	OR60005000-08 OR53305017-08	50.00 50.17	6.00 5.33	OR26205999-08	59.92 59.99	3.53 2.62	OR35306944-08 OR30006950-08	69.44 69.50	3.53	OR26208060-08 OR20508100-08	80.60 81.00	
OR17803305-08	33.05	1.78	OR55004100-08	41.00	5.50	OR35305017-08	50.17	3.53	OR20203999-08	60.00	2.02	OR26206952-08	69.52	2.62	OR53308192-08	81.92	
OR35003370-08	33.70	3.50	OR35304128-08	41.28	3.53	OR26205047-08	50.47	2.62	OR25006000-08	60.00	2.50	OR17806957-08	69.57	1.78	OR20008200-08	82.00	
OR20003400-08	34.00	2.00	OR30004150-08	41.50	3.00	OR17805052-08	50.52	1.78	OR30006000-08	60.00	3.00	OR20007000-08	70.00	2.00	OR30008200-08	82.00	
OR25003400-08	34.00	2.50	OR20004200-08	42.00	2.00	OR30005100-08	51.00	3.00	OR35006000-08	60.00	3.50	OR25007000-08	70.00	2.50	OR40008200-08	82.00	
OR30003400-08	34.00	3.00	OR25004200-08	42.00	2.50	OR35005100-08	51.00	3.50	OR40006000-08	60.00	4.00	OR30007000-08	70.00	3.00	OR50008200-08	82.00	
OR35003400-08	34.00	3.50	OR30004200-08	42.00	3.00	OR40005100-08	51.00	4.00	OR50006000-08	60.00	5.00	OR35007000-08	70.00	3.50	OR35308214-08	82.14	3.53
OR40003400-08	34.00	4.00	OR35004200-08	42.00	3.50	OR50005100-08	51.00	5.00	OR17806005-08	60.05	1.78	OR40007000-08	70.00	4.00	OR26208222-08	82.22	2.62
OR50003400-08	34.00	5.00	OR40004200-08	42.00	4.00	OR20005150-08	51.50	2.00	OR17506032-08	60.32	1.75	OR50007000-08	70.00	5.00	OR17808227-08	82.27	1.78
OR53303429-08	34.29	5.33	OR50004200-08	42.00	5.00	OR35005150-08	51.50	3.50	OR30006100-08	61.00	3.00	OR55007000-08	70.00	5.50	OR20008300-08	83.00	
OR31003410-08	34.40	3.10	OR60004200-08	42.00	6.00	OR24005160-08	51.60	2.40	OR35006100-08	61.00	3.50	OR25007100-08	71.00	2.50	OR30008300-08	83.00	
OR30003450-08	34.50	3.00	OR26204252-08	42.52	2.62	OR20005200-08	52.00	2.00	OR40006100-08	61.00	4.00	OR40007100-08	71.00	4.00	OR35008300-08	83.00	
OR35303452-08	34.52	3.53	OR35304286-08	42.86	3.53	OR30005200-08	52.00	3.00	OR50006100-08	61.00	5.00	OR50007100-08	71.00	5.00	OR26208380-08	83.80	
OR26203459-08	34.59	2.62	OR20004300-08	43.00	2.00	OR35005200-08	52.00	3.50	OR55006150-08	61.50	5.50	OR26207118-08	71.18	2.62	OR30008400-08	84.00	
OR17803465-08	34.65	1.78	OR25004300-08 OR30004300-08	43.00	2.50	OR40005200-08	52.00	4.00	OR26206160-08	61.60	2.62	OR31007120-08	71.20	3.10	OR35008400-08	84.00	
OR20003500-08	35.00	2.00		43.00	3.00 4.00	OR50005200-08 OR26205207-08	52.00	5.00 2.62	OR35306190-08 OR20006200-08	61.90	3.53	OR25007160-08	71.60 72.00	2.50	OR40008400-08	84.00	
OR25003500-08 OR30003500-08	35.00 35.00	3.00	OR40004300-08 OR35004380-08	43.00 43.80	3.50	OR20005300-08	52.07 53.00	2.02	OR25006200-08	62.00 62.00	2.00	OR20007200-08 OR30007200-08	72.00	2.00	OR50008400-08 OR30008450-08	84.00 84.50	
OR35003500-08	35.00	3.50	OR53304382-08	43.82	5.33	OR25005300-08	53.00	2.50	OR30006200-08	62.00	3.00	OR35007200-08	72.00	3.50	OR20008500-08	85.00	
OR40003500-08	35.00	4.00	OR20004400-08	44.00	2.00	OR30005300-08	53.00	3.00	OR40006200-08	62.00	4.00	OR40007200-08	72.00	4.00	OR25008500-08	85.00	
OR50003500-08	35.00	5.00	OR24004400-08	44.00	2.40	OR35005300-08	53.00	3.50	OR60006200-08	62.00	6.00	OR50007200-08	72.00	5.00	OR30008500-08	85.00	
OR30003550-08	35.50	3.00	OR30004400-08	44.00	3.00	OR40005300-08	53.00	4.00	OR53306287-08	62.87	5.33	OR53307239-08	72.39	5.33	OR40008500-08	85.00	
OR26203576-08	35.76	2.62	OR40004400-08	44.00	4.00	OR50005300-08	53.00	5.00	OR20006300-08	63.00	2.00	OR35307262-08	72.62	3.53	OR50008500-08	85.00	
OR20003600-08	36.00	2.00	OR50004400-08	44.00	5.00	OR55005300-08	53.00	5.50	OR25006300-08	63.00	2.50	OR26207269-08	72.69	2.62	OR53308509-08	85.09	
OR25003600-08	36.00	2.50	OR35304404-08	44.04	3.53	OR53305334-08	53.34	5.33	OR30006300-08	63.00	3.00	OR17807275-08	72.75	1.78	OR35308532-08	85.32	3.53
OR30003600-08	36.00	3.00	OR26204412-08	44.12	2.62	OR35305357-08	53.57	3.53	OR35006300-08	63.00	3.50	OR30007300-08	73.00	3.00	OR17808534-08	85.34	1.78
OR35003600-08	36.00	3.50	OR17804417-08	44.17	1.78	OR26205364-08	53.64	2.62	OR40006300-08	63.00	4.00	OR35007300-08	73.00	3.50	OR20008600-08	86.00	2.00
OR40003600-08	36.00	4.00	OR31004440-08	44.40	3.10	OR17805370-08	53.70	1.78	OR50006300-08	63.00	5.00	OR40007300-08	73.00	4.00	OR30008600-08	86.00	3.00
OR50003600-08	36.00	5.00	OR18004450-08	44.50	1.80	OR35305397-08	53.97	3.53	OR60006300-08	63.00	6.00	OR50007300-08	73.00	5.00	OR35008600-08	86.00	3.50
OR35303609-08	36.09	3.53	OR30004450-08	44.50	3.00	OR20005400-08	54.00	2.00	OR35306309-08	63.09	3.53	OR20007400-08	74.00	2.00	OR40008600-08	86.00	
OR26203617-08	36.17	2.62	OR35004470-08	44.70	3.50	OR30005400-08	54.00	3.00	OR26206317-08	63.17	2.62	OR25007400-08	74.00	2.50	OR30008700-08	87.00	
OR17803627-08	36.27	1.78	OR18004500-08	45.00	1.80	OR33005400-08	54.00	3.30	OR17806322-08	63.22	1.78	OR30007400-08	74.00	3.00	OR40008700-08	87.00	
OR25003650-08	36.50	2.50	OR20004500-08	45.00	2.00	OR40005400-08	54.00	4.00	OR31706350-08	63.50	3.17	OR35007400-08	74.00	3.50	OR50008750-08	87.50	
OR30003650-08	36.50	3.00	OR25004500-08	45.00	2.50	OR50005400-08	54.00	5.00	OR50006350-08	63.50	5.00	OR40007400-08	74.00	4.00	OR20008800-08	88.00	
OR25003700-08 OR30003700-08	37.00 37.00	2.50	OR30004500-08 OR35004500-08	45.00 45.00	3.00	OR20005443-08 OR30005450-08	54.43 54.50	2.00	OR18006380-08 OR25006400-08	63.80 64.00	1.80	OR50007400-08 OR26207430-08	74.00 74.30	5.00 2.62	OR25008800-08 OR30008800-08	88.00 88.00	
OR35003700-08			OR40004500-08		4.00	OR20005500-08	55.00		OR30006400-08	64.00	3.00	OR30007450-08	74.50	3.00	OR40008800-08	88.00	
OR40003700-08			OR45004500-08	45.00		OR25005500-08	55.00		OR35006400-08	64.00		OR31707470-08	74.70		OR35308827-08	88.27	
OR50003700-08			OR50004500-08	45.00		OR30005500-08	55.00		OR40006400-08	64.00		OR25007500-08	75.00		OR53308827-08	88.27	
OR35003740-08			OR55004500-08	45.00		OR35005500-08	55.00		OR50006400-08	64.00		OR30007500-08	75.00		OR35308849-08	88.49	
OR53303747-08			OR50004550-08	45.50		OR40005500-08	55.00		OR30006450-08	64.50		OR35007500-08	75.00		OR26208857-08	88.57	
OR25003750-08			OR26204569-08	45.69	2.62	OR50005500-08	55.00		OR20006477-08	64.77	2.00	OR40007500-08	75.00		OR17808862-08	88.62	1.78
OR35303769-08			OR18004600-08	46.00		OR26205525-08	55.25		OR26206477-08	64.77		OR50007500-08	75.00		OR20508900-08	89.00	
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OR17803782-08	37.82		OR30004600-08	46.00		OR20005600-08	56.00		OR25006500-08	65.00		OR53307557-08	75.57		OR50008900-08	89.00	
OR20003800-08			OR35004600-08	46.00		OR25005600-08	56.00		OR30006500-08	65.00		OR35307579-08	75.79		OR57008920-08	89.20	
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OR30003800-08			OR26204678-08	46.78		OR35005600-08	56.00		OR40006500-08	65.00		OR17807592-08	75.92		OR20009000-08	90.00	
OR35003800-08 OR40003800-08	38.00 38.00	3.50 4.00	OR53304699-08 OR20004700-08	46.99 47.00		OR40005600-08 OR60005600-08	56.00 56.00		OR45006500-08 OR50006500-08	65.00 65.00		OR20007600-08 OR30007600-08	76.00 76.00	2.00 3.00	OR25009000-08 OR30009000-08	90.00 90.00	
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OR55003800-08			OR30004700-08	47.00		OR35305674-08	56.74		OR17806540-08	65.40		OR40007600-08	76.00	4.00	OR40009000-08	90.00	
OR30003870-08			OR35004700-08	47.00		OR26205682-08	56.82		OR25006600-08	66.00		OR50007600-08	76.00		OR50009000-08	90.00	
OR20003970-08			OR40004700-08	47.00		OR17805687-08	56.87		OR30006600-08	66.00		OR35007700-08	77.00		OR55009000-08	90.00	
OR25003900-08	39.00		OR35304722-08	47.22		OR20005700-08	57.00		OR40006600-08	66.00		OR40007700-08	77.00	4.00	OR40009100-08	91.00	
OR30003900-08	39.00		OR26204729-08		2.62	OR25005700-08	57.00		OR53306604-08		5.33	OR26207750-08	77.50		OR53309144-08	91.44	
OR35003900-08			OR17804735-08	47.35		OR30005700-08	57.00		OR35306627-08	66.27		OR20007800-08	78.00		OR35309167-08	91.67	
OR40003900-08	39.00		OR20004800-08	48.00		OR35005700-08	57.00		OR26206634-08	66.34		OR35007800-08	78.00		OR17809170-08	91.70	
OR26203934-08			OR25004800-08	48.00		OR40005700-08	57.00		OR17806640-08	66.40		OR40007800-08	78.00		OR20009200-08	92.00	
OR17803945-08	39.45	1.78	OR30004800-08	48.00	3.00	OR50005700-08	57.00		OR50006650-08	66.50	5.00	OR50007800-08	78.00	5.00	OR25009200-08	92.00	2.50
OR30003950-08			OR35004800-08	48.00		OR31005750-08	57.50		OR20006700-08	67.00		OR30007850-08	78.50		OR30009200-08	92.00	
OR35303970-08	39.70		OR40004800-08	48.00		OR20005800-08	58.00		OR25006700-08	67.00		OR53307874-08	78.74		OR40009200-08	92.00	
OR20004000-08	40.00		OR50004800-08	48.00		OR25005800-08	58.00		OR30006700-08	67.00		OR35307897-08	78.97		OR50009200-08	92.00	
OR25004000-08	40.00		OR26204890-08		2.62	OR30005800-08	58.00		OR35006700-08	67.00		OR17807900-08	79.00		OR60009200-08	92.00	
OR30004000-08			OR20004900-08	49.00		OR35005800-08	58.00		OR40006700-08	67.00		OR30007900-08	79.00		OR30009300-08	93.00	
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OR40004000-08			OR30004900-08	49.00		OR50005800-08	58.00		OR20006800-08	68.00		OR50007900-08	79.00		OR40009300-08	93.00	
OR50004000-08	40.00		OR35004900-08	49.00		OR20005815-08	58.15		OR30006800-08	68.00		OR30007950-08	79.50		OR20009400-08	94.00	
OR15004050-08	40 50	1.50	OR40004900-08	40 00	4.00	OR26205842-08	58 42	2.62	OR35006800-08	68.00	3 50	OR53307973-08	79.73	5.33	OR30009400-08	94.00	2 0

O - Rings (NBR)

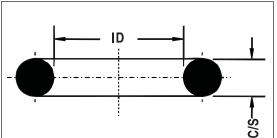
SPAREAGE SEALS

DETAILS: Ordering Information (Dimensions in mm)

Spareage Part No.	ID mm	C/S mm															
OR35009400-08	94.00	3.50	OR35310437-08	104.37	3.53	OR35311707-08	117.07	3.53	OR35312977-08		3.53	OR35014700-08	147.00	3.50	OR35318374-08	183.74	3.53
OR40009400-08	94.00	4.00	OR32010440-08	104.40	3.20	OR17811710-08	117.10	1.78	OR30013000-08	130.00	3.00	OR53314859-08	148.59	5.33	OR30018500-08	185.00	3.00
OR53309462-08	94.62	5.33	OR30010450-08	104.50	3.00	OR30011800-08	118.00	3.00	OR35013000-08	130.00	3.50	OR69914859-08	148.59	6.99	OR40018500-08	185.00	4.00
OR35309484-08	94.84	3.53	OR30010500-08	105.00	3.00	OR40011800-08	118.00	4.00	OR40013000-08	130.00	4.00	OR35314882-08	148.82	3.53	OR50018500-08	185.00	5.00
OR26209492-08	94.92	2.62	OR40010500-08	105.00	4.00	OR50011800-08	118.00	5.00	OR50013000-08	130.00	5.00	OR25015000-08	150.00	2.50	OR53318987-08	189.87	5.33
OR17809497-08	94.97	1.78	OR50010500-08	105.00	5.00	OR35011850-08	118.50	3.50	OR60013000-08	130.00	6.00	OR30015000-08	150.00	3.00	OR69918987-08	189.87	6.99
OR20009500-08	95.00	2.00	OR60010600-08	106.00	6.00	OR20012000-08	120.00	2.00	OR70013000-08	130.00	7.00	OR40015000-08	150.00	4.00	OR30019000-08	190.00	3.00
OR25009500-08	95.00	2.50	OR20010700-08	107.00	2.00	OR30012000-08	120.00	3.00	OR40013200-08	132.00	4.00	OR50015000-08	150.00	5.00	OR50019000-08	190.00	5.00
OR30009500-08	95.00	3.00	OR35010700-08	107.00	3.50	OR40012000-08		4.00	OR50013200-08		5.00	OR60015000-08			OR70019000-08		
OR35009500-08	95.00		OR40010700-08			OR50012000-08		5.00	OR53313272-08			OR70015000-08		7.00	OR35319009-08		
OR40009500-08	95.00		OR50010700-08			OR60012000-08			OR69913272-08			OR80015000-08		8.00	OR30019200-08		
OR45009500-08	95.00		OR53310732-08			OR53312002-08			OR35313294-08			OR53315177-08			OR40019200-08		
OR50009500-08	95.00		OR35310754-08			OR69912019-08			OR26213302-08			OR69915177-08			OR53319622-08		
OR30009600-08	96.00		OR26210762-08			OR35312024-08			OR17813307-08			OR35315199-08		3.53	OR69919622-08		
OR35009600-08	96.00		OR17810767-08			OR26212032-08			OR40013400-08		4.00	OR40015200-08			OR35319644-08		
OR25009700-08	97.00		OR30010800-08			OR17812037-08		1.78	OR30013450-08			OR26215207-08			OR35020000-08		
OR40009700-08	97.00		OR50010800-08			OR45012050-08		4.50	OR25013500-08			OR30015500-08			OR53320257-08		
DR50009700-08	97.00		OR40010900-08			OR25012200-08			OR40013500-08		4.00	OR40015500-08		4.00	OR69920257-08		
DR53309779-08	97.79		OR20011000-08			OR30012200-08		3.00	OR50013500-08		5.00	OR50015500-08			OR35320279-08		
)R20009800-08	98.00		OR25011000-08			OR35012200-08			OR60013500-08		6.00	OR53315812-08			OR53320892-08		
DR30009800-08	98.00		OR30011000-08			OR40012200-08		4.00	OR17813576-08		1.78	OR69915812-08			OR35320914-08		
DR50009800-08	98.00		OR35011000-08			OR40012300-08		4.00	OR53313589-08		5.33	OR35315834-08			OR53321527-08		
DR35309802-08	98.02		OR40011000-08			OR50012300-08		5.00	OR69913589-08		6.99	OR26215842-08			OR69921527-08		
OR17809805-08	98.05	1.78	OR50011000-08	110.00	5.00	OR53312319-08	123.19	5.33	OR35313612-08	136.12	3.53	OR30016000-08	160.00	3.00	OR35321549-08		
DR35009850-08	98.50	3.50	OR60011000-08	110.00	6.00	OR69912319-08	123.19	6.99	OR30013800-08	138.00	3.00	OR40001600-08	160.00	4.00	OR53322162-08	221.62	5.33
OR30009900-08	99.00	3.00	OR53311049-08	110.49	5.33	OR35312342-08	123.42	3.53	OR53313907-08	139.07	5.33	OR50016000-08	160.00	5.00	OR35322184-08	221.84	3.5
OR30009950-08	99.50	3.00	OR35311072-08	110.72	3.53	OR17812344-08	123.44	1.78	OR69913907-08	139.07	6.99	OR53316447-08	164.47	5.33	OR50022500-08	225.00	5.00
OR20010000-08	100.00	2.00	OR17811074-08	110.74	1.78	OR32012400-08	124.00	3.20	OR35313929-08	139.29	3.53	OR69916447-08	164.47	6.99	OR53322797-08	227.97	5.3
OR25010000-08	100.00	2.50	OR40011200-08	112.00	4.00	OR30012450-08	124.50	3.00	OR26213937-08	139.37	2.62	OR30016450-08	164.50	3.00	OR69922797-08	227.97	6.9
DR30010000-08	100.00	3.00	OR35011300-08	113.00	3.50	OR30012500-08	125.00	3.00	OR25014000-08	140.00	2.50	OR35316469-08	164.69	3.53	OR35322819-08	228.19	3.5
DR32010000-08	100.00	3.20	OR50011300-08	113.00	5.00	OR35012500-08	125.00	3.50	OR30014000-08	140.00	3.00	OR26216477-08	164.77	2.62	OR53323432-08		
DR35010000-08	100.00	3.50	OR53311367-08	113.67	5.33	OR50012500-08	125.00	5.00	OR35014000-08	140.00	3.50	OR50016500-08	165.00	5.00	OR35323454-08	234.54	3.5
DR40010000-08			OR69911367-08			OR53312637-08			OR40014000-08		4.00	OR40017000-08			OR30024000-08		
DR50010000-08			OR35311389-08			OR69912637-08			OR50014000-08		5.00	OR50017000-08		5.00	OR53324067-08		
DR53310097-08			OR53311389-08			OR35312659-08		3.53	OR60014000-08		6.00	OR53317082-08		5.33	OR69924067-08		
R35310119-08		3.53	OR26211397-08			OR26212667-08		2.62	OR53314224-08		5.33	OR69917082-08			OR35324089-08		
R26210127-08			OR30011400-08			OR17812672-08			OR69914224-08		6.99	OR35317104-08			OR53324702-08		
DR17810132-08		1.78	OR40011400-08			OR25012700-08			OR35314247-08		3.53	OR26217112-08			OR35324724-08		
R25010200-08			OR17811402-08			OR35012700-08			OR30014300-08		3.00	OR40017500-08			OR30025000-08		
0R30010200-08			OR30011450-08			OR40012700-08		4.00	OR35014300-08		3.50	OR50017500-08		5.00	OR50025000-08		
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DR17810400-08		1.78	OR40011500-08			OR45012800-08		4.50	OR55014500-08		5.50	OR35317739-08		3.53	OR50027000-08		
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DR40010400-08		4.00	OR55011500-08			OR17812940-08		1.78	OR69914542-08		6.99	OR50018000-08			OR69927877-08		
DR50010400-08			OR53311684-08		5.33	OR53312954-08		5.33	OR35314564-08		3.53	OR53318352-08			OR50029000-08		
DR53310414-08	104.14	5.33	OR69911684-08	116.84	6.99	OR69912954-08	129.54	6.99	OR26214572-08	145.72	2.62	OR69918352-08	183.52	6.99	OR35329169-08	291.69	3.5

O - Rings (FKM - Viton®)





MATERIAL: FKM (Viton®)

MAX. OPERATING CONDITIONS: Temp.: -40 $^{\circ}$ C to +220 $^{\circ}$ C , Pressure: 160 BAR

MAX. SURFACE ROUGHNESS: Static: 0.8 μmRa , Dynamic: 0.4 μmRa

COMPATIBILITY: VT2/b standard O-Ring compound is compatible to fire resistant Hydraulic fluids, hot oils, greases, hydrocarbon, chlorinated hydrocarbons & most organic acids

DETAILS:

The O-Ring seal is basically a device for closing (sealing) a gap or making a joint fluid tight. (The fluid in this case being either a gas or liquid). Spareage offers O-Rings of hydraulic, pneumatic & rotary application. O-Rings are normally suitable for static & slow reciprocating application (upto a speed of 20m/sec). For rotary applications O-Rings may be used where peripheral speeds are expectionally low.

DETAILS: Ordering Information (Dimensions in mm)

Spareage Part No.	ID mm	C/S mm															
OR17800257-64	2.57	1.78	OR20000500-64	5.00	2.00	OR17800765-64	7.65	1.78	OR35300912-64	9.12	3.53	OR35301069-64	10.69	3.53	OR15001200-64	12.00	1.50
OR17800290-64	2.90	1.78	OR17800528-64	5.28	1.78	OR15000800-64	8.00	1.50	OR26200919-64	9.19	2.62	OR26201077-64	10.77	2.62	OR20001200-64	12.00	2.00
OR15000300-64	3.00	1.50	OR35300594-64	5.94	3.53	OR20000800-64	8.00	2.00	OR17800925-64	9.25	1.78	OR18001080-64	10.80	1.80	OR25001200-64	12.00	2.50
OR17800368-64	3.68	1.78	OR15000600-64	6.00	1.50	OR25000800-64	8.00	2.50	OR15000950-64	9.50	1.50	OR17801082-64	10.82	1.78	OR30001200-64	12.00	3.00
OR15000400-64	4.00	1.50	OR20000600-64	6.00	2.00	OR24000830-64	8.30	2.40	OR15001000-64	10.00	1.50	OR15001100-64	11.00	1.50	OR53301207-64	12.07	5.33
OR20000400-64	4.00	2.00	OR17800607-64	6.07	1.78	OR15000840-64	8.40	1.50	OR20001000-64	10.00	2.00	OR20001100-64	11.00	2.00	OR35301229-64	12.29	3.53
OR15000430-64	4.30	1.50	OR15000700-64	7.00	1.50	OR17800873-64	8.73	1.78	OR25001000-64	10.00	2.50	OR25001100-64	11.00	2.50	OR24001230-64	12.30	2.40
OR35300434-64	4.34	3.53	OR20000700-64	7.00	2.00	OR10000900-64	9.00	1.00	OR30001000-64	10.00	3.00	OR17801111-64	11.11	1.78	OR26201237-64	12.37	2.62
OR17800447-64	4.47	1.78	OR15000750-64	7.50	1.50	OR15000900-64	9.00	1.50	OR53301046-64	10.46	5.33	OR20001140-64	11.40	2.00	OR17801242-64	12.42	1.78
OR15000500-64	5.00	1.50	OR35300752-64	7.52	3.53	OR20000900-64	9.00	2.00	OR18001060-64	10.60	1.80	OR20001140-64	11.40	2.00	OR25001250-64	12.50	2.50

O - Rings (FKM - Viton®)



DETAILS: Ordering Information (Dimensions in mm)

Spareage Part No.	ID mm	C/S mm	Spareage Part No.	ID mm	C/S mm	Spareage Part No.	ID mm	C/S mm	Spareage Part No.	ID mm	C/S mm	Spareage Part No.	ID mm	C/S mm	Spareage Part No.	ID mm	C/S mm
OR15001300-64	13.00	1.50	OR25002400-64	24.00	2.50	OR35003500-64	35.00	3.50	OR35005100-64	51.00	3.50	OR26207269-64	72.69	2.62	OR35312024-64	120.24	3.53
OR20001300-64	13.00	2.00	OR30002400-64	24.00	3.00	OR20003600-64	36.00	2.00	OR20005200-64	52.00	2.00	OR17807275-64	72.75	1.78	OR40012200-64		
OR25001300-64	13.00	2.50	OR53302477-64	24.77	5.33	OR25003600-64	36.00	2.50	OR30005200-64	52.00	3.00	OR30007300-64	73.00	3.00	OR53312319-64	123.19	5.33
DR53301364-64	13.64	5.33	OR35302499-64	24.99	3.53	OR30003600-64	36.00	3.00	OR40005200-64	52.00	4.00	OR30007400-64	74.00	3.00	OR69912319-64	123.19	6.99
DR35301387-64	13.87	3.53	OR20002500-64	25.00	2.00	OR35303609-64	36.09	3.53	OR26205207-64	52.07	2.62	OR40007400-64	74.00	4.00	OR35312342-64		
DR26201394-64	13.94	2.62	OR25002500-64	25.00	2.50	OR26203617-64	36.17		OR35005300-64	53.00	3.50	OR25007500-64	75.00	2.50	OR50012500-64		
DR17801400-64 DR20001400-64	14.00	1.78	OR30002500-64	25.00 25.00	3.00	OR53303746-64 OR35303769-64	37.46	5.33 3.53	OR35505300-64 OR53305334-64	53.00 53.34	3.55	OR30007500-64 OR40007500-64	75.00 75.00	3.00	OR53312637-64		
DR25001400-64	14.00 14.00	2.50	OR35002500-64 OR50002500-64	25.00	5.00	OR26203777-64	37.69 37.77	2.62	OR35305354-64	53.57	5.33 3.53	OR50007500-64	75.00	4.00 5.00	OR69912637-64 OR35312659-64		
DR30001400-64	14.00	3.00	OR26202507-64	25.07	2.62	OR17803782-64	37.82	1.78	OR26205364-64	53.64	2.62	OR53307557-64	75.57	5.33	OR26212667-64		
R20001500-64	15.00	2.00	OR17802512-64	25.12	1.78	OR25003800-64	38.00	2.50	OR17805370-64	53.70	1.78	OR35307579-64	75.79	3.53	OR53312954-64		
DR25001500-64	15.00	2.50	OR24002530-64	25.30	2.40	OR30003800-64	38.00	3.00	OR30005400-64	54.00	3.00	OR26207587-64	75.87	2.62	OR69912954-64		
DR26201508-64	15.08	2.62	OR20002600-64	26.00	2.00	OR35003800-64	38.00	3.50	OR40005400-64	54.00	4.00	OR17807592-64	75.92	1.78	OR35312977-64	129.77	3.53
R53301524-64	15.24	5.33	OR30002600-64	26.00	3.00	OR20003900-64	39.00	2.00	OR25005500-64	55.00	2.50	OR20007600-64	76.00	2.00	OR50013000-64	130.00	
DR35301547-64	15.47	3.53	OR35002600-64	26.00	3.50	OR30003900-64	39.00	3.00	OR30005500-64	55.00	3.00	OR30007600-64	76.00	3.00	OR53313272-64		
R26201554-64	15.54	2.62	OR53302634-64	26.34	5.33	OR35003900-64	39.00	3.50	OR40005500-64	55.00	4.00	OR53307874-64	78.74	5.33	OR69913272-64		
DR17801560-64	15.60	1.78	OR35302657-64	26.57	3.53	OR26203934-64	39.34	2.62	OR50005500-64	55.00	5.00	OR35307897-64	78.97	3.53	OR35313294-64		
DR20001600-64	16.00	2.00	OR26202664-64	26.64	2.62	OR30003950-64	39.50	3.00	OR26205525-64	55.25	2.62	OR30008000-64	80.00	3.00	OR50013500-64		
)R25001600-64)R30001600-64	16.00 16.00	2.50	OR17802670-64 OR20002700-64	26.70 27.00	1.78	OR20004000-64 OR25004000-64	40.00 40.00	2.00	OR30005600-64 OR53305652-64	56.00 56.52	3.00 5.33	OR50008000-64 OR53308192-64	80.00 81.92	5.00 5.33	OR53313589-64 OR69913589-64		
R24001630-64	16.30	2.40	OR25002700-64	27.00	2.50	OR30004000-64	40.00	3.00	OR35305674-64	56.74	3.53	OR35308192-04 OR35308214-64	82.14	3.53	OR35313612-64		
DR53301681-64	16.81	5.33	OR30002700-64	27.00	3.00	OR35004000-64	40.00	3.50	OR26205682-64	56.82	2.62	OR26208222-64	82.22	2.62	OR53313907-64		
DR15001700-64	17.00	1.50	OR24002730-64	27.30	2.40	OR50004000-64	40.00	5.00	OR17805687-64	56.87	1.78	OR30008400-64	84.00	3.00	OR35313929-64		
R20001700-64	17.00	2.00	OR53302794-64	27.94	5.33	OR53304064-64	40.64	5.33	OR30005700-64	57.00	3.00	OR30008450-64	84.50	3.00	OR50014000-64		
DR25001700-64	17.00	2.50	OR20002800-64	28.00	2.00	OR35304087-64	40.87	3.53	OR35005700-64	57.00	3.50	OR30008500-64	85.00	3.00	OR70014000-64	140.00	7.00
DR35301704-64	17.04	3.53	OR25002800-64	28.00	2.50	OR26204094-64	40.94	2.62	OR30005800-64	58.00	3.00	OR53308509-64	85.09	5.33	OR53314224-64	142.24	5.33
R26201712-64	17.12	2.62	OR30002800-64	28.00	3.00	OR17804100-64	41.00	1.78	OR26205842-64	58.42	2.62	OR35308532-64	85.32	3.53			
R17801717-64	17.17	1.78	OR35302817-64	28.17		OR20004200-64	42.00	2.00	OR35305874-64	58.74	3.53	OR53308827-64	88.27	5.33	OR35314247-64		
DR24001730-64	17.30	2.40	OR26202824-64	28.24	2.62	OR25004200-64	42.00	2.50	OR30005900-64	59.00	3.00	OR35308849-64	88.49	3.53	OR70014400-64		
DR15001800-64	18.00	1.50	OR17802830-64	28.30	1.78	OR30004200-64	42.00	3.00	OR53305969-64	59.69	5.33	OR26208857-64	88.57	2.62	OR53314542-64		
DR20001800-64	18.00	2.00	OR30002900-64	29.00	3.00	OR50004200-64	42.00	5.00	OR35305992-64	59.92	3.53	OR50008900-64	89.00	5.00	OR35314564-64		
)R25001800-64)R30001800-64	18.00 18.00	2.50	OR31002940-64 OR53302951-64	29.40 29.51	3.10 5.33	OR30004220-64 OR26204252-64	42.20 42.52	3.00	OR26205999-64 OR30006000-64	59.99 60.00	2.62 3.00	OR20009000-64 OR30009000-64	90.00	2.00	OR53314859-64 OR69914859-64		
DR50001800-64	18.00	5.00	OR35302974-64	29.74	3.53	OR30004300-64	43.00	3.00	OR35506000-64	60.00	3.55	OR50009000-64	90.00	5.00	OR35314882-64		
DR53301842-64	18.42	5.33	OR26202982-64	29.82	2.62	OR53304382-64	43.82	5.33	OR40006000-64	60.00	4.00	OR53309144-64	91.44	5.33	OR40015000-64		
R35301864-64	18.64	3.53	OR17802987-64	29.87	1.78	OR20004400-64	44.00	2.00	OR17806005-64	60.05	1.78	OR35309167-64	91.67	3.53	OR50015000-64		
DR26201872-64	18.72	2.62	OR20003000-64	30.00	2.00	OR25004400-64	44.00	2.50	OR26206160-64	61.60	2.62	OR40009200-64	92.00	4.00	OR60015000-64		
DR17801877-64	18.77	1.78	OR25003000-64	30.00	2.50	OR30004400-64	44.00	3.00	OR30006200-64	62.00	3.00	OR30009400-64	94.00	3.00	OR53315177-64	151.77	5.33
DR25001900-64	19.00	2.50	OR30003000-64	30.00	3.00	OR35004400-64	44.00	3.50	OR53306287-64	62.87	5.33	OR53309462-64	94.62	5.33	OR35315199-64	151.99	3.53
R30001900-64	19.00	3.00	OR20003100-64	31.00	2.00	OR35304404-64	44.04	3.53	OR35306309-64	63.09	3.53	OR35309484-64	94.84	3.53	OR50015200-64	152.00	5.00
R53301999-64	19.99	5.33	OR30003100-64	31.00	3.00	OR26204412-64	44.12	2.62	OR26206317-64	63.17	2.62	OR30009500-64	95.00	3.00	OR53315812-64		
DR15002000-64	20.00	1.50	OR35003100-64	31.00	3.50	OR17804417-64	44.17	1.78	OR17806322-64	63.22	1.78	OR53309779-64	97.79	5.33	OR50016000-64		
DR20002000-64	20.00	2.00	OR53303112-64	31.12		OR20004480-64	44.80	2.00	OR30006400-64	64.00	3.00	OR35309802-64	98.02	3.53	OR53316447-64		
DR25002000-64 DR30002000-64	20.00	2.50	OR35303134-64 OR26203142-64	31.34 31.42	3.53 2.62	OR20004500-64	45.00	2.00	OR35006400-64 OR26206477-64	64.00	3.50	OR30010000-64 OR50010000-64	100.00	3.00	OR50016500-64		
R35302022-64	20.00	3.53	OR17803147-64	31.42	1.78	OR25004500-64 OR30004500-64	45.00 45.00	2.50	OR30006500-64	64.77 65.00	2.62 3.00		100.00	5.00	OR50017000-64 OR53317082-64		
DR26202029-64			OR20003200-64			OR35004500-64	45.00		OR50006500-64	65.00		OR35310097-04 OR35310119-64			OR53317717-64		
R24002030-64			OR25003200-64	32.00		OR50004500-64	45.00			66.00		OR53310414-64			OR50018000-64		
R17802035-64			OR30003200-64	32.00		OR26204569-64	45.69		OR53306604-64	66.04		OR35310437-64			OR53318352-64		
R15002100-64			OR35003200-64	32.00		OR25004600-64	46.00		OR35306627-64	66.27		OR30010500-64			OR53318987-64		
R20002100-64	21.00	2.00	OR40003200-64	32.00	4.00	OR53304699-64	46.99	5.33	OR26206634-64	66.34	2.62	OR53310732-64	107.32	5.33	OR50019000-64	190.00	5.00
R25002100-64	21.00	2.50	OR53303269-64	32.69	5.33	OR30004700-64	47.00	3.00	OR17806640-64	66.40	1.78	OR35310754-64	107.54	3.53	OR50019500-64	195.00	5.00
R24002130-64			OR35303292-64	32.92		OR35304722-64	47.22		OR30006700-64	67.00		OR35011000-64			OR53319622-64		
R53302159-64			OR26203299-64	32.99		OR26204729-64	47.29		OR26206795-64	67.95		OR50011000-64			OR50020000-64		
R35302182-64			OR20003300-64	33.00		OR17804735-64	47.35		OR35006900-64	69.00		OR53311049-64			OR53320257-64		
R26202189-64			OR25003300-64	33.00		OR30004800-64	48.00		OR53306922-64	69.22		OR35311072-64			OR35320279-64		
R17802195-64			OR30003300-64	33.00		OR35004800-64	48.00		OR35306944-64	69.44		OR30011200-64			OR50020500-64		
R20002200-64 R25002200-64			OR17803305-64 OR24003330-64	33.05 33.30		OR26204890-64 OR30004900-64	48.90 49.00		OR26206952-64 OR17806957-64	69.52 69.57		OR53311367-64 OR69911367-64			OR53320892-64 OR53321527-64		
R30002200-64			OR20003400-64	34.00		OR25005000-64	50.00		OR30007000-64	70.00		OR09911307-04 OR35311389-64			OR53321527-64 OR53322162-64		
R20002300-64			OR30003400-64	34.00		OR30005000-64	50.00		OR35007000-64	70.00		OR50011500-64			OR53322797-64		
R25002300-64			OR53303429-64	34.29		OR35005000-64	50.00		OR40007000-64	70.00		OR53311684-64			OR50023000-64		
R30002300-64			OR26003450-64	34.50		OR40005000-64	50.00		OR50007000-64	70.00		OR69911684-64			OR53323432-64		
R53302316-64			OR35303452-64	34.52		OR50005000-64	50.00		OR26207112-64	71.12		OR35311707-64			OR50024000-64		
R35302339-64			OR26203459-64	34.59		OR53305017-64	50.17		OR30007200-64	72.00		OR30012000-64			OR53324067-64		
DR26202347-64			OR17803465-64	34.65		OR35305039-64	50.39		OR40007200-64	72.00		OR50012000-64			OR35324089-64		
DR17802352-64			OR25003500-64	35.00	2.5	OR26205047-64	50.47		OR53307239-64	72.39		OR53312002-64			OR53324702-64		
R20002400-64	24.00	2.00	OR30003500-64	35.00	3.00	OR17805052-64	50.52	1.78	OR35307262-64	72.62	3.53	OR69912002-64	120.02	6.99			





Kits are readily available in Imperial & Metric sizes, easy to use specially during breakdown. Oring sizes are according to BS Standards widely used in all applications.

Technical Details:

Material: NBR Compound of hardness 75° shore A **Temp**: -30° C to $+100^{\circ}$ C Pressure: Upto 100 Bar Compatibility: Mineral Oils, Bio Oils, Water Soluble

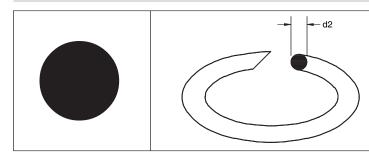
& Water Glycol Fluids

Imperial O-Ring Seal Kit No. ORS.KIT.201		Metric O-Ring Seal Kit No. ORS.KIT.202			Imperia Seal Kit No	al O-Ring . ORS.KIT.2	204	Metric Seal Kit No	O-Ring ORS.KIT.	206
Spareage Part No.	Dimensions Qty./ Kit	Spareage Part No.	Dimensions	Qty./ Kit	Spareage Part No.	Dimensions	Qty./ Kit	Spareage Part No.	Dimensions	Qty./ Kit
OR 178 00290	2.90 X 1.78 20	OR 200 00300	3.00 X 2.00	20	OR 178 00290	2.90 X 1.78	20	OR 200 00300	3.00 X 2.00	18
OR 178 00447	4.47 X 1.78 20	OR 200 00500	5.00 X 2.00	20	OR 178 00368	3.68 X 1.78	20	OR 200 00400	4.00 X 2.00	18
OR 178 00670	6.07 X 1.78 20	OR 200 00600	6.00 X 2.00	18	OR 178 00447	4.47 X 1.78	20	OR 200 00500	5.00 X 2.00	18
OR 178 00765	7.65 X 1.78 20	OR 200 00800	8.00 X 2.00	18	OR 178 00528	5.28 X 1.78	20	OR 200 00600	6.00 X 2.00	18
OR 178 00925	9.25 X 1.78 20	OR 200 01000	10.00 X 2.00	18	OR 178 00607	6.07 X 1.78	20	OR 200 00700	7.00 X 2.00	18
OR 178 01242	12.42 X1.78 20	OR 200 01300	13.00 X 2.00	18	OR 178 00765	7.65 X 1.78	20	OR 200 00800	8.00 X 2.00	18
OR 262 00919	9.19 X 2.62 13	OR 250 01000	10.00 X 2.50	14	OR 178 00925		20	OR 200 01000	10.00 X 2.00	18
OR 262 01077	10.77 X 2.62 13	OR 250 01200	12.00 X 2.50	14	OR 262 00919		13	OR 250 01000	10.00 X 2.50	18
OR 262 01237	12.37 X 2.62 13	OR 250 01400	14.00 X 2.50	14	OR 262 01077		13	OR 250 01100	11.00 X 2.50	14
OR 262 01394	13.94 X 2.62 13	OR 250 01500	15.00 X 2.50	14	OR 262 01237		13	OR 250 01200	12.00 X 2.50	14
OR 262 01554	15.54 X 2.62 13	OR 250 01600	16.00 X 2.50	14	OR 262 01394		13	OR 250 01400	14.00 X 2.50	14
OR 262 01712	17.12 X 2.62 13	OR 250 01800	18.00 X 2.50	14	OR 262 01554		13	OR 250 01600	16.00 X 2.50	14
OR 262 01876	18.76 X 2.62 13	OR 250 02000	20.00 X 2.50	14	OR 262 01712		13	OR 250 01700	17.00 X 2.50	14
OR 262 02029	20.29 X 2.62 13	OR 250 02100	21.00 X 2.50	14	OR 262 01876	18.76 X 2.62	13	OR 250 01900	19.00 X 2.50	14
OR 262 02189	21.89 X 2.62 13	OR 250 02200	22.00 X 2.50	14	OR 353 01864	18.64 X 3.53	10	OR 300 01900	19.00 X 3.00	12
OR 353 01864	18.64 X 3.53 10	OR 350 01800	18.00 X 3.50	10	OR 353 02022	20.22 X 3.53	10	OR 300 02000	20.00 X 3.00	12
OR 353 02022	20.22 X 3.53 10	OR 350 02000	20.00 X 3.50	10	OR 353 02182	21.82 X 3.53	10	OR 300 02200	22.00 X 3.00	12
OR 353 02182	21.82 X 3.53 10	OR 350 02200	22.00 X 3.50	10	OR 353 02339	23.39 X 3.53	10	OR 300 02400	24.00 X 3.00	12
OR 353 02339	23.39 X 3.53 10	OR 350 02300	23.00 X 3.50	10	OR 353 02499	24.99 X 3.53	10	OR 300 02500	25.00 X 3.00	12
OR 353 02499	24.99 X 3.53 10	OR 350 02500	25.00 X 3.50	10	OR 353 02657	26.57 X 3.53	10	OR 300 02700	27.00 X 3.00	12
OR 353 02657	26.57 X 3.53 10	OR 350 02700	27.00 X 3.50	10	OR 353 02817	28.17 X 3.53	10	OR 300 02800	28.00 X 3.00	12
OR 353 02817	28.17 X 3.53 10	OR 350 02800	28.00 X 3.50	10	OR 353 02974	29.74 X 3.53	10	OR 300 03000	30.00 X 3.00	12
OR 353 02974	29.74 X 3.53 10	OR 350 03000	30.00 X 3.50	10	OR 353 03134	31.34 X 3.53	10	OR 300 03200	32.00 X 3.00	12
OR 353 03134	31.34 X 3.53 10	OR 350 03100	31.00 X 3.50	10	OR 353 03292	32.92 X 3.53	10	OR 300 03300	33.00 X 3.00	12
OR 353 03292	32.92 X 3.53 10	OR 350 03200	32.00 X 3.50	10	OR 353 03452	34.52 X 3.53	10	OR 300 03500	35.00 X 3.00	12
OR 353 03452	34.52 X 3.53 10	OR 350 03400	34.00 X 3.50	10	OR 353 03609	36.09 X 3.53	10	OR 300 03600	36.00 X 3.00	12
OR 353 03609	36.09 X 3.53 10	OR 350 03600	36.00 X 3.50	10	OR 353 03769	37.69 X 3.53	10	OR 300 03800	38.00 X 3.00	12
OR 353 03769	37.69 X 3.53 10	OR 350 03800	38.00 X 3.50	10	OR 533 03747	37.47 X 5.33	7	OR 400 03800	38.00 X 4.00	9
OR 353 04087	40.87 X 3.53 10	OR 350 04100	41.00 X 3.50	10	OR 533 04064	40.64 X 5.33	7	OR 400 04200	42.00 X 4.00	9
OR 353 04404	44.04 X 3.53 10	OR 350 04400	44.00 X 3.50	10	OR 533 04382	43.82 X 5.33	7	OR 400 04500	45.00 X 4.00	9
OR 353 04722	47.22 X 3.53 10	OR 350 04600	46.00 X 3.50	10						
OR 353 05039	50.39 X 3.53 10	OR 350 05000	50.00 X 3.50	10						
	Total 407 Nos.		Total 408 N	los.		Total 382 N	los.		Total 407 N	Nos.

^{*}Above Kit Boxes are available in both NBR & FPM materials.

O - Ring Cord





TYPE: O-Ring Profile, Extruded in Running length. MATERIAL: NT4/b - Acronitrile rubber compound

VT2/b - Viton rubber compound

MAX. OPERATING CONDITIONS:

NT 4/b: -30°c to +100°C VT 2/b: -40°c to +220°C

Pressure: 40 BAR (Depending on the Joint).

COMPATIBILITY

Mineral oils, bio oils, soluble water & water glycol fluids.

APPLICATION:

Medium Precision Seal requirement. Large diametre Axial Sealing. Low pressure equipment.

DETAILS:

O-Ring Cord is an O-Ring Profile available in running lengths & in various cord diametres. The cord can be profile cut to required angle & both ends joint with the help of an adhesive to form a circular ring. O-Ring Cords form a very useful substitute to sudden break down Jobs & helps in saving time to get expensive assemblies executed, instead of waiting for an endless O-Ring ordered or to be procured. It is must to have a SpareAge O-Ring Cord Kit with adhesive in your premises.

TOLERANCES:

The general tolerances permissible on O-Ring Cords are as follows :-

O-Ring Cord Dia C/S	Tolerance
1 - 5 mm	± 0.30
Above 5 - 10 mm	± 0.40
Above 10 - 15 mm	± 0.50

O-Ring Cord Dia C/S	Tolerance
Above 15 - 20 mm	± 0.70
Above 20 mm	± 5%

	O-Ring Cord Dia. (d2)										
Imperial Sizes	ORC-KIT-101	1.78	2.62	3.53	5.33	7.00	8.50				
Metric Sizes	ORC-KIT-102	1.00	1.50	2.50	3.53	5.00	7.00				
Other Metric Sizes		2.00	3.00	4.00	4.50	5.50	6.00	8.00	10.00	12.00	

Product Code	C/S	N	//aterial Code
CD0010803	1.00	O-RING CORD	NT4/b
CD0010801	1.78	O-RING CORD	NT4/b
CD0020806	2.00	O-RING CORD	NT4/b
CD0020802	2.50	O-RING CORD	NT4/b
CD0020813	2.62	O-RING CORD	NT4/b
CD0030801	3.00	O-RING CORD	NT4/b
CD0030803	3.53	O-RING CORD	NT4/b
CD0040801	4.00	O-RING CORD	NT4/b
CD0040802	4.50	O-RING CORD	NT4/b
CD0050801	5.00	O-RING CORD	NT4/b
CD0050805	5.33	O-RING CORD	NT4/b
CD0050803	5.50	O-RING CORD	NT4/b
CD0060801	6.00	O-RING CORD	NT4/b
CD0060802	6.50	O-RING CORD	NT4/b
CD0070801	7.00	O-RING CORD	NT4/b
CD0070802	7.50	O-RING CORD	NT4/b
CD0080801	8.00	O-RING CORD	NT4/b
CD0080803	8.50	O-RING CORD	NT4/b
CD0090801	9.00	O-RING CORD	NT4/b
CD0100801	10.00	O-RING CORD	NT4/b
CD0120801	12.00	O-RING CORD	NT4/b

Product Code	C/S	N	/laterial Code
CD0016402	1.00	O-RING CORD	VT2/b
CD0016403	1.78	O-RING CORD	VT2/b
CD0026402	2.00	O-RING CORD	VT2/b
CD0026401	2.50	O-RING CORD	VT2/b
CD0026403	2.62	O-RING CORD	VT2/b
CD0036401	3.00	O-RING CORD	VT2/b
CD0036403	3.53	O-RING CORD	VT2/b
CD0046401	4.00	O-RING CORD	VT2/b
CD0046402	4.50	O-RING CORD	VT2/b
CD0056402	5.00	O-RING CORD	VT2/b
CD0056404	5.33	O-RING CORD	VT2/b
CD0056401	5.50	O-RING CORD	VT2/b
CD0066401	6.00	O-RING CORD	VT2/b
CD0066403	6.50	O-RING CORD	VT2/b
CD0076401	7.00	O-RING CORD	VT2/b
CD0076402	7.50	O-RING CORD	VT2/b
CD0086401	8.00	O-RING CORD	VT2/b
CD0086402	8.50	O-RING CORD	VT2/b
CD0076401	9.00	O-RING CORD	VT2/b
CD0106401	10.00	O-RING CORD	VT2/b
CD0126402	12.00	O-RING CORD	VT2/b

QUAD RING - NBR

Spareage Part No.	ID	OD	C/S
C	/S = 1.7	8	
QR17800607-08	6.07	9.63	1.78
QR17800765-08	7.65	11.21	1.78
QR17800820-08	8.20	11.76	1.78
QR17800925-08	9.25	12.81	1.78
QR17801082-08	10.82	14.38	1.78
QR17801242-08	12.42	15.98	1.78
QR17801400-08	14.00	17.56	1.78
QR17801560-08	15.60	19.16	1.78
QR17801717-08	17.17	20.73	1.78
QR17801877-08	18.77	22.33	1.78
QR17802035-08	20.35	23.91	1.78
QR17802195-08	21.95	25.51	1.78
QR17802352-08	23.52	27.08	1.78
QR17802512-08	25.12	28.68	1.78
QR17802670-08	26.70	30.26	1.78
QR17802830-08	28.30	31.86	1.78
QR17802987-08	29.87	33.43	1.78
QR17803147-08	31.47	35.03	1.78
QR17803305-08	33.05	36.61	1.78
QR17803465-08	34.65	38.21	1.78
QR17804100-08	41.00	44.56	1.78
QR17804417-08	44.17	47.73	1.78
QR17804735-08	47.35	50.91	1.78
QR17805052-08	50.52	54.08	1.78
C	/S = 2.0	0	
QR20000700-08	7.00	11.00	2.00

Spareage Part No.	ID	OD	C/S
C	/S = 2.6	2	
QR26201002-08	10.02	15.26	2.62
QR26201077-08	10.77	16.01	2.62
QR26201237-08	12.37		2.62
QR26201470-08	14.70	19.94	2.62
QR26201555-08	15.55	20.79	2.62
QR26201620-08	16.20	21.44	2.62
QR26201712-08	17.12	22.36	2.62
QR26202029-08	20.29	25.53	2.62
QR26202189-08	21.89	27.13	2.62
QR26202507-08	25.07	30.31	2.62
QR26202664-08	26.64	31.88	2.62
QR26202824-08	28.24	33.48	2.62
QR26202982-08	29.82	35.06	2.62
QR26203142-08	31.42	36.66	2.62
QR26203299-08	32.99	38.23	2.62
QR26203459-08	34.59	39.83	2.62
QR26203617-08	36.17	41.41	2.62
QR26203777-08	37.77	43.01	2.62
QR26203934-08	39.34	44.58	2.62
QR26204095-08	40.95	46.19	2.62
QR26204252-08	42.52	47.76	2.62
QR26204412-08	44.12	49.36	2.62
QR26204729-08	47.29	52.53	2.62
QR26204890-08	48.90	54.14	2.62
QR26205047-08	50.47	55.71	2.62
QR26205207-08	52.07	57.31	2.62
QR26205384-08	53.84	59.08	2.62
QR26205525-08	55.25	60.49	2.62
QR26205682-08	56.82	62.06	2.62
QR26205842-08	58.42	63.66	2.62
QR26205999-08	59.99	65.23	2.62
QR26206160-08	61.60	66.84	2.62
QR26206317-08	63.17	68.41	2.62
QR26206477-08	64.77	70.01	2.62
QR26206794-08	67.94	73.18	2.62

Spareage Part No.	ID	OD	C/S
C	/S = 3.5	3	
QR35302022-08	20.22	27.28	3.53
QR35302182-08	21.82	28.88	3.53
QR35302340-08	23.40	30.46	3.53
QR35302500-08	25.00	32.06	3.53
QR35302657-08	26.57	33.63	3.53
QR35302817-08	28.17	35.23	3.53
QR35302974-08	29.74	36.80	3.53
QR35303134-08	31.34	38.40	3.53
QR35303292-08	32.92	39.98	3.53
QR35303452-08	34.52	41.58	3.53
QR35303609-08	36.09	43.15	3.53
QR35303769-08	37.69	44.75	3.53
QR35304087-08	40.87	47.93	3.53
QR35305040-08	50.40	57.46	3.53
QR35305357-08	53.57	60.63	3.53
QR35305675-08	56.75	63.81	3.53
QR35305992-08	59.92	66.98	3.53
QR35306627-08	66.27	73.33	3.53
C	/S = 5.3	3	
QR53304064-08	40.64	51.30	5.33
QR53304380-08	43.80	50.86	5.33
QR53304520-08	45.20	55.86	5.33
QR53304700-08	47.00	57.66	5.33
QR53305016-08	50.16	60.82	5.33
QR53305334-08	53.34	64.00	5.33

56.50

59.70

62.86

66.00

72.40

75.56

81 90

85.09

88.26

91.45

110.49

116.85

117.17

67.16

70.36

73.52

76.66

83.06

86.22

92.56

95.75

98.92

102.11

121.15

127.51

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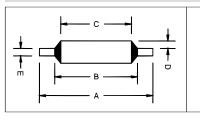
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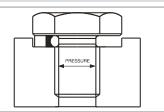
5.33

5.33

Spareage Part No.	ID	OD	C/S
С	/S = 7.0	0	
QR70011366-08	113.66	127.66	7.00
QR70012000-08	120.00	134.00	7.00
QR70012320-08	123.20	137.20	7.00
QR70012636-08	126.36	140.36	7.00
QR70012955-08	129.55	143.55	7.00
QR70013590-08	135.90	149.90	7.00
QR70013906-08	139.06	153.06	7.00
QR70014225-08	142.25	156.25	7.00
QR70014540-08	145.40	159.40	7.00
QR70014860-08	148.60	162.60	7.00
QR70015176-08	151.76	165.76	7.00
QR70015810-08	158.10	172.10	7.00
QR70016050-08	160.50	174.50	7.00
QR70016446-08	164.46	178.46	7.00
QR70017716-08	177.16	191.16	7.00

Bonded Seals





69.52

74.76

2.62

QR26206952-08

STYLE: BA

QR53305650-08

QR53305970-08

QR53306286-08

QR53306600-08

QR53307240-08

QR53307556-08

QR53308190-08

QR53308509-08

QR53308826-08

QR53309145-08

QR53311049-08

QR53311685-08

QR53317717-08

MATERIAL: NT5/b with metal ring. Spareage NT5/b is a Acrylonitrile Butadiene Compound (NBR) of shore 'A' hardness 85°. (The standard material is NT5/b but Fluro Rubber +200°C with stainless steel is also available on request).

MAX. OPERATING CONDITIONS:

Temp: -30° C to $+100^{\circ}$ C Pressure: 1000 BAR

DETAILS: The Spareage style BA seal is a bonded seal combination of NBR seal ring and a metal back up ring. The NBR seal ring is bonded perfectly to the inner portion of the metal back up ring. When a bolt is tightened with BA seal the NBR seal ring having a Trapezoidal cross section gets compressed to an extent where the bolt cannot be further tightened due to the metal back up ring. Undersuch a state the NBR seal ring not only has a preload pressure on the mating surface higher than the pressure being sealed but also forms the profile of a U'ring to withstand higher pressures.

Spareage Part No.	ALT.	SIZ	E	A .0.12	B	C .0.10	D	E . 0.15	MIN. BURST
Spareage Fait No.	REF	BSP	BOLT	+0.13 -0.00	+0.10 -0.10	+0.10 -0.10		+0.15 -0.15	PRE. (BAR)
BA 0061002	IM-005	-	1/4	13.34	9.53	6.99	0.20/0.45	1.22	1700
BA 0101001	IM-008	1/8	3/8	15.88	11.84	10.37	0.25/0.51	20.3	1500
BA 0101005	-	-	-	16.00	12.40	10.70	0.4	1.5	1350
BA 0131001	IM-011	1/4	1/2	20.57	15.21	13.74	0.25/0.51	2.03	1550
BA 0171001	IM-015	3/8		23.80	18.75	17.28	0.25/0.51	2.03	1260
BA 0211001	IM-018	1/2	13/16	28.58	23.01	21.54	0.25/0.51	2.49	1150
BA 0231001	IM-019	5/8	7/8	31.75	24.97	23.49	0.25/0.51	2.49	1250
BA 0271001	IM-021	3/4	1.0	34.93	28.53	27.05	0.25/0.51	2.49	1060
BA 0301001	IM-025	7/8	1.3/16	38.10	32.29	30.81	0.25/0.51	3.38	900
BA 0331002	IM-027	1.0	1.5/16	42.80	36.88	33.89	0.25/0.51	3.38	810
BA 0421001	IM-030	1.1/4	1.5/8	52.38	45.93	42.93	0.25/0.51	3.38	690
BA 0481001	IM-032	1.1/2	1.7/8	58.60	51.39	48.44	0.25/0.51	3.38	690
BA 0541001	IM-034	1.3/4	2.1/8	69.85	58.30	54.89	0.25/0.51	3.38	950
BA 0661001	IM-037	2.1/4		79.50	69.98	66.68	0.25/0.51	3.38	670
BA 0761001	IM-038	2.1/2		90.17	79.38	76.08	0.25/0.51	3.38	680
BA 0891001	IM-039	3.0		101.47	92.84	89.09	0.25/0.51	3.38	550

Tools for Installation & Maintenance of Seals



DEPTH CALIPER



5 Easy steps to groove measurement -

- 1) Choose the suitable pin to put in the upper of the lower hole.
- 2) Push the pin to reset the graduation to zero.
- 3) Down to gland hole to measure the depth of groove.
- 4) Measure the order side of the pin.
- 5) Depth = Length of pin measurement.

It is generally difficult to measure that seal groove depth. With the inside calipers the measurement is not precise. Spareage has introduced depth calipers, a specially designed instrument that can grove depth easily and accurately.

O-RING HOOK



Removing 'O' Rings from the seal with steel implements poses the real danger of damaging the 'O' Ring seat. With Spareages 'O' Ring Hooks the removal of 'O' rings is simple, and safe. The 'O' Ring hooks come in a set of 4, with different profiles. The design of the hooks is such that it does not damage the seat. Knurled handle provides firm grip.

Avoid Metal Part Damage, when Picking Seals & O-Rings.



SPARE-O-LUBE

Spare-O-Lube is a stiff non-melting silicone lubricant developed specially for use with various rubber polymers. Spare-O-Lube can also be used over a wider temperature range and in most cases will provide improved environmental protection to the elastomer.

- Can be used in both High Pressure and Vacuum Systems.
- Non-toxic and non-irritating.
- Suitable for temperature range of -40° C to +225° C
- Can be used with a variety of fluid media as it is inert.

it is recommended that Spare-O-Lube be used sparingly as only a thin film on seals is sufficient for optimum results.

PISTON SEAL CONSTRICTOR

Correct Method of Installing Teflon Ring

Spareage has introduced Piston Seal Constrictors for use with Teflon Combination Seals. This easy to use device eliminates chances of seal . seat damage.

For combination seals, correct the Teflon ring after installing the ring in the fitting groove. Seal constrictor can be used upto 400 mm diameter.

To re-size the expanded Teflon ring, use piston constrictor, following the steps as shown in figure 1, 2 & 3 below.

Step 1



Prepare a twist bar and adapter as shown in the figure. Set the twist bar and adapter as shown. Then set the Teflon ring in the center of the band.

Step 2



Hold for 10 seconds or more.

Step 3



Installation is completed by the above steps. The internal and external circumstances faces of the Teflon ring affect sealing performance. So be careful to scratch the ring.



Tools for Installation & Maintenance of Seals



SEAL TWISTOR

Most failure of quality seals are caused by bad installations. Complicated groove design adds to the problem, invariably damaging either the seals or the seat. It is therefore necessary to use the right installation technique, with the right set of tools.

Spareage has introduced SEAL TWISTOR, a special tool that helps you to install rod seals easily and efficiently. SEAL TWISTOR turns seal to an omega shape without an acute angle (not suitable for fragile materials). It makes the size of the smaller than the gland hole diameter. Seal can cross over the chamfers safely and then rebounds in the groove.



SIZE RANGE

SPECIFICATION		S	N	Л	I	-	Х	L
Ø GLAND HOLE	22 to 30mm	0.7" to 1.187"	30 to 50mm	1.187" to 2"			70 to 165mm	
Cross Section Max.	5mm	0.187"	6mm	0.234"	10mm	0.375"	17.5mm	0.187"

4 Easy steps to install Rod Seals with Seal Twistor:



Fix the handle in the stand hole.
 Then put two arms inside the seal.



2. Twist the seal with guiding hand to prevent it from popping out.



3. Hold the handles, then put the seal into the gland hold carefully.



 Turn handles back, then pull TWISTOR out to rebound the seal in the groove.

Introductory Seal Set Key Chain



Description:

Introducing Seal set Key chain to identify about the seal profile with specific colour indicating its material. The Key Chain consist of a bunch of 12 Seals with an identification Tag.



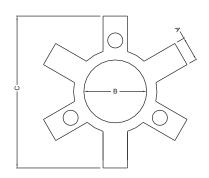
Keychain Packing Tin







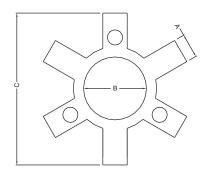
N - Series



Material - NBR

Code	A (mm)	B (mm)	C (mm)
N-50	9.8	-	27.0
N-70	7.0	-	34.0
N-75	7.0	-	44.0
N-95	9.2	18.8	54.0
N-99/100	10.9	26.6	64.5
N-110	11.5	34.2	84.0
N-150	15.0	34.2	95.5
N-190	15.5	44.5	113.8
N-225	19.0	45.0	126.0

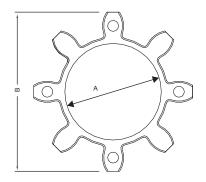
P - Series



Material - PU

Code	A (mm)	B (mm)	C (mm)
P-50	9.8	-	27.0
P-70	7.0	-	34.0
P-75	7.0	-	44.0
P-95	9.2	18.8	54.0
P-99/100	10.9	26.6	64.5
P-110	11.5	34.2	84.0
P-150	15.0	34.2	95.5
P-190	15.5	44.5	113.8
P-225	19.0	45.0	126.0

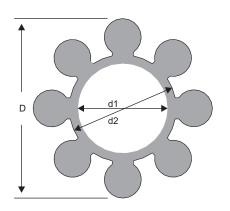
K - Series



Material - PU

Code	A (mm)	B (mm)	C (mm)	Fin Nos.
K-19	18	40	12	6
K-24	26	54	14	8
K-28	30	65	15	8
K-38	38	80	18	8
K-42	46	95	20	8
K-48	51	104	21	8
K-55	60	120	22	8
K-65	68	135	26	8
K-75	81	161	30	10

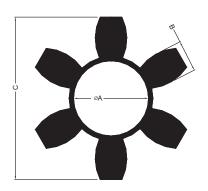
M - Series



Material - PU

			wate	Hai	0
Code	D	d1	d2	h	Fin No.
M-2	68	28	36	18	6
M-3	82	34	44	18	6
M-4	100	42	54	20	6
M-5	122	52	65	25	6
M-6	140	64	78	30	6
M-7	166	90	105	30	8
M-8	196	100	117	35	8
M-9	220	115	135	35	10

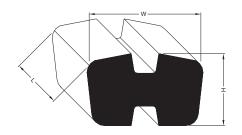
T - Series



Material - NBR

		Materia	II - NDK
Code	A (mm)	B (mm)	C (mm)
T-70	29.6	12.0	58.3
T-90	31.2	15.4	72.4
T-110	44.0	19.6	96.0
T-130	49.4	22.0	115.3
T-150	62.0	28.0	133.0
T-180	76.0	32.0	160.0
T-230	98.0	42.2	201.0
T-280	119.0	50.4	252.0

H - Series

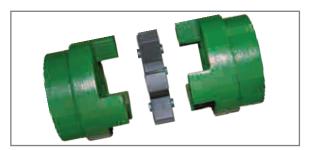


Material - NBR

Code	L (mm)	W (mm)	H (mm)
H-80	9.0	21.0	11.0
H-95	12.2	25.0	13.2
H-110	16.0	29.0	13.5
H-125	18.2	32.0	15.0
H-140	21.5	35.0	16.0
H-160	24.5	36.5	20.3
H-180	35.0	44.0	31.5
H-200	43.5	48.0	35.5
H-240	48.0	61.0	40.0
H-280	40.0	51.0	34.5
H-315	41.0	48.0	35.6









Introduction

Spareage introduces C.I. Couplings in its wide range of products. These couplings are stocks bore and used in different industries for light, medium & heavy duty electrical motor and internal combustive power transmission application. Please refer below dimensional table for more details.

Features

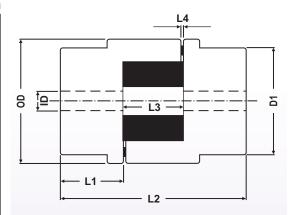
- Easy and Fast Installation, Easy Alignment
- Best Quality cast iron body.
- Extra strength and durability

- Safety Still perform if elastomer fails.
- Prevent metal to metal contact
- Most types available in stock within 24 hrs.

Dimensional Information

I.	lato	rial		Cast	Iron
IΝ	iaie	паі	1.5	Casi	11()11

Model No.	L1	L2	L3	L4	D1	ID	OD	Spider		
CN-50	15.0	42.0	12.0	1.0	27.0	5.0	27.0	RUBBER		
CP-50	13.0	42.0	12.0	1.0	27.0	5.0	27.0	PU		
CN-70	19.0	51.0	13.0	2.0	36.0	9.0	36.0	RUBBER		
CP-70	19.0	31.0	13.0	2.0	30.0	9.0	30.0	PU		
CN-75	21.0	56.0	14.0	2.0	39.0	9.0	44.5	RUBBER		
CP-75	21.0	30.0	14.0	2.0	39.0	9.0	44.5	PU		
CN-95	25.0	63.0	13.0	2.0	49.0	10.0	54.0	RUBBER		
CP-95	23.0	03.0	13.0	2.0	49.0	10.0	54.0	PU		
CN-99	27.0	72.0	17.0	3.0	50.0	10.0	65.0	RUBBER		
CP-99	27.0	27.0	21.0	12.0	17.0	3.0	50.0	10.0	05.0	PU
CN-100	35.0	88.0	17.0	3.0	56.0	10.0	65 O	RUBBER		
CP-100		00.0	17.0	3.0	30.0	10.0	65.0	PU		
CN-110	43.0	108.0	22.0	3.0	76.0	15.0	85.0	RUBBER		
CP-110	43.0	100.0	22.0	3.0	70.0	15.0	05.0	PU		
CN-150	45.0	115.0	25.0	3.0	80.0	15.0	96.0	RUBBER		
CP-150	45.0	113.0	25.0	3.0	3.0 80.0	80.0 15.0	90.0	PU		
CN-190	54.0	133.0	25.0	3.0	102.0	20.0	115.0	RUBBER		
CP-190	54.0	133.0	25.0	3.0	102.0	20.0	115.0	PU		
CN-225	64.0	153.0	25.0	2.0	100.0	20.0	127.0	RUBBER		
CP-225	64.0	155.0	25.0	3.0	108.0	20.0	127.0	PU		



- Applications include power transmission to industrial equipment such as pumps, gear boxes, compressors, blowers, mixers and conveyors.
- Standard CP & CN couplings hub is made of cast iron.
- Readily available in stock.

Above couplings sizes are available with / without spiders.







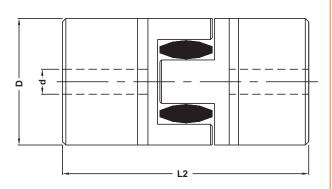


Introduction

Spareage introduces CK type couplings with Polyurethane Spiders. This curved type couplings offered in steel & casting. These couplings are used in different industries for light, medium & heavy duty electrical motor and internal combustive power transmission application.

Dimensional Information

Model No.	Bore (d)	Outer Dia (D)	Length (L)	Spider
CK 19	6-19	41	66	PU
CK 24	9-24	56	78	PU
CK-28	10-28	66	90	PU
CK-38	12-40	80	114	PU
CK-38/45	12-48	80	164	PU
CK-42	14-45	95	126	PU
CK-42/55	14-55	95	176	PU
CK-48	15-52	105	140	PU
CK-48/60	15-62	105	188	PU
CK-55	20-60	120	160	PU
CK-55/70	20-74	120	210	PU
CK-65	22-70	135	185	PU
CK-65/70	22-80	135	235	PU
CK-75	30-80	160	210	PU



- Applications include power transmission to industrial equipment such as pumps, gear boxes, compressors, blowers, mixers and conveyors.
- · Readily available in stock.

Above couplings sizes are available with / without spiders

Nirlon V-Belt





Classical V-Belts (IS 2494)



Hexagonal V-Belts



Profile Top V-Belts (PT-6 Type)



Wedge V-Belts (IS 14261, BS - 3790)



Wrapped Belts (DIN 7753, BSAU 1506)



Fractional Horse **Power Belts**



Harvestor Combine Belts & Flat Belts

CLASSICA A-Section (
A -16	A -73

A -53

A -54

A-55

A- 56

A-57

A-58

A -59

A-60

A-61

A-62

A-63

A-64

A -65

A-66

A-67

A-68

A-69

A-70

A-71

A -72

A -114

A-115

A-116

A -118

A -120

A -124

A -127

A -128

A -136

A -138

A -140

A-142

A -144

A -158

A-159

A-164

A -168

A -173

A-180

A -182

B-56

B-57

B-58

B-59

B-60

B-61

B-62

B-63

B-64

B-65

B-66

B-67

B-68

B-69

B-70

B-71

B-72

B-73

B-74

B-75

B-113

B-114

B-115

B-116

B-117

B-118

B-119

B-120

B-121

B-122

B-123

B-124

B-125

B-126

B-128

B-130

B-132

B-134

B-135

B-136

B-265

B-270

B-275

B-300

B-360

B-550

B-598

(10	2-10-1)		Поладо	ilai v Doi	10	//
LASSICAL SECTION -Section (13 x 8 mm)				SSICAL SEC		
A -16	A -73		B-19	B-76		B-138
A -17	A -74		B-20	B-77		B-140
A -18	A -75		B-21	B-78		B-142
A -19	A -76		B-22	B-79		B-144
A -20	A -77		B-23	B-80		B-146
A -21	A -78		B-24	B-81		B-148
A -22	A -79		B-25	B-82		B-150
A -23	A -80		B-26	B-83		B-152
A -24	A -81		B-27	B-84		B-154
A -25	A -82		B-28	B-85		B-156
A -26	A -83		B-29	B-86		B-158
A -27	A -84		B-30	B-87		B-160
A -28	A -85		B-31	B-88		B-162
A -29	A -86		B-32	B-89		B-164
A -30	A -87		B-33	B-90		B-165
A -31	A -88		B-34	B-91		B-166
A -32	A -89		B-35	B-92		B-168
A -33	A -90		B-36	B-93		B-170
A -34	A -91		B-37	B-94		B-172
A -35	A -92		B-38	B-95		B-173
A -36	A -93		B-39	B-96		B-174
A -37	A -94		B-40	B-97		B-175
A -38	A -95		B-41	B-98		B-176
A -39	A -96		B-42	B-99		B-180
A -40	A -97		B-43	B-100		B-182
A -41	A -98		B-44	B-101		B-184
A -42	A -99		B-45	B-102		B-185
A -43	A -100		B-46	B-103		B-188
A -44	A -101		B-47	B-104		B-190
A -45	A -102		B-48	B-105		B-195
A -46	A -103		B-49	B-106		B-204
A -47	A -104		B-50	B-107		B-205
A -48	A -105		B-51	B-108		B-210
A -49	A -106		B-52	B-109		B-220
A -50	A -108		B-53	B-110		B-225
A -51	A -110		B-54	B-111		B-230
A -52	A -112		B-55	B-112		B-238

CLASSICAL SECTION C-Section (22 x 14 mm) C-94 C-166

CLASSICAL SECTION D-Section (32 x 19 mm)

D-75	D-220
D-80	D-225
D-88	D-228
D-90	D-230
D-95	D-238
D-98	D-240
D-100	D-248
D-110	D-250
D-116	D-255
D-118	D-258
D-120	D-260
D-128	D-265
D-130	D-268
D-134	D-270
D-136	D-276
D-144	D-280
D-150	D-285
D-152	D-286
D-154	D-290
D-155	D-292
D-158	D-298
D-160	D-314
D-162	D-328
D-168	D-338
D-173	D-340
D-175	D-358
D-178	D-368
D-180	D-390
D-185	D-396
D-190	D-418
D-192	D-450
D-195	D-478
D-200	D-490

CLASSICAL SECTION F-Section (38 x 23 mm)

D-500

D-538

D-598

D-204

D-210

D-215

D-216

=-Section (38 x 23 mm)			
E-180	E-360		
E-195	E-368		
E-210	E-375		
E-220	E-394		
E-225	E-398		
E-230	E-418		
E-238	E-478		
E-250	E-496		
E-268	E-538		
E-278	E-598		
E-290	E-658		
E-298			
E-318			
E-328			
E-330			
E-344			
E-358			

FRACTIONAL HORSE **POWER BELTS**

FHP Section	(10 x 6 mm)
FHP-2160	FHP-2390
FHP-2170	FHP-2400
FHP-2180	FHP-2410
FHP-2190	FHP-2420
FHP-2200	FHP-2430
FHP-2210	FHP-2440
FHP-2220	FHP-2450
FHP-2230	FHP-2460
FHP-2240	FHP-2475
FHP-2250	FHP-2480
FHP-2260	FHP-2490
FHP-2270	FHP-2500
FHP-2290	FHP-2510
FHP-2300	FHP-2520
FHP-2310	FHP-2530
FHP-2320	FHP-2540
FHP-2340	FHP-2549
FHP-2350	FHP-2560
FHP-2360	FHP-2580
FHP-2370	FHP-2594
FHP-2380	

WEDGE SECTION

SPZ Section (10 x 8 mm) SPZ-710 SPZ-1560 SPZ-750 | SPZ-1600 SPZ-800 | SPZ-1650 SPZ-812 SPZ-1700 SPZ-850 SPZ-1800 SPZ-900 | SPZ-1850 SPZ-950 SPZ-1900 SPZ-975 SPZ-2000 SPZ-1000 SPZ-2030 SPZ-1010 SPZ-2120

SPZ-1050 SPZ-2160 SPZ-1060 SPZ-2240 SPZ-2280 SPZ-1070 SPZ-1080 SPZ-2360 SPZ-1100 SPZ-2410 SPZ-1120 SPZ-2500 SPZ-1140 SPZ-2540 SPZ-1187 SPZ-2650 SPZ-1200 SPZ-2680 SPZ-1250 SPZ-1280

SPZ-2800 SPZ-2840 SPZ-1300 SPZ-3000 SPZ-1320 SPZ-3150 SPZ-1340 SPZ-3170 SPZ-1348 SPZ-3350 SPZ-1358 SPZ-3550 SPZ-1400 SPZ-3960 SPZ-1420 SPZ-4060 SPZ-1470 SPZ-4250 SPZ-1500 SPZ-4953

SPZ-1520

SPA SECTION (13 x 10 mm)

	,
SPA-710	SPA-1750
SPA-725	SPA-1800
SPA-800	SPA-1850
SPA-825	SPA-1900
SPA-850	SPA-1925
SPA-900	SPA-1950
SPA-925	SPA-2000
SPA-950	SPA-2060
SPA-975	SPA-2120
SPA-1000	SPA-2132
SPA-1050	SPA-2180
SPA-1060	SPA-2240
SPA-1080	SPA-2280
SPA-1100	SPA-2300
SPA-1120	SPA-2360
SPA-1140	SPA-2430
SPA-1150	SPA-2500
SPA-1180	SPA-2580
SPA-1200	SPA-2650
SPA-1220	SPA-2720
SPA-1250	SPA-2800
SPA-1280	SPA-2900
SPA-1300	SPA-3000
SPA-1320	SPA-3150
SPA-1360	SPA-3350
SPA-1400	SPA-3550
SPA-1450	SPA-3750
SPA-1475	SPA-4040
SPA-1500	SPA-4250
SPA-1550	SPA-4500
SPA-1600	SPA-8760
SPA-1650	SPA-8763
SPA-1700	SPA-9144

SPB SECTION

(17 x 14 mm)

(17 × 14 11111)				
SPB-1320	SPB-2800			
SPB-1340	SPB-2840			
SPB-1400	SPB-3000			
SPB-1500	SPB-3150			
SPB-1550	SPB-3170			
SPB-1600	SPB-3350			
SPB-1700	SPB-3550			
SPB-1800	SPB-3750			
SPB-1900	SPB-3800			
SPB-2000	SPB-4000			
SPB-2020	SPB-4060			
SPB-2120	SPB-4250			
SPB-2150	SPB-4310			
SPB-2240	SPB-4500			
SPB-2280	SPB-4560			
SPB-2360	SPB-4750			
SPB-2410	SPB-4820			
SPB-2500	SPB-5000			
SPB-2530	SPB-5070			
SPB-2650	SPB-5300			
SPB-2680	SPB-5380			

Nirlon V-Belt



SPB-5600	SPB-7500
SPB-5880	SPB-8000
SPB-6000	SPB-9000
SPB-6300	SPB-9500
SPB-6340	SPB-12500
SPB-6700	SPB-13000
SPB-7100	

SPC SECTION (22 x 18 mm)

SPC-1700	SPC-5000
SPC-2000	SPC-5300
SPC-2150	SPC-5600
SPC-2240	SPC-6000
SPC-2350	SPC-6300
SPC-2360	SPC-6700
SPC-2500	SPC-7100
SPC-2650	SPC-7500
SPC-2800	SPC-8000
SPC-3000	SPC-8500
SPC-3150	SPC-9000
SPC-3350	SPC-9500
SPC-3550	SPC-10000
SPC-3750	SPC-10600
SPC-4000	SPC-11200
SPC-4250	SPC-11800
SPC-4500	SPC-12500
SPC-4750	

NARROW SECTION 3V Section (9.7 x 8 mm)

3V Section (9.7 x 8 mm)			
3V-250	3V-560		
3V-270	3V-575		
3V-280	3V-600		
3V-300	3V-630		
3V-315	3V-670		
3V-320	3V-710		
3V-330	3V-750		
3V-350	3V-770		
3V-360	3V-800		
3V-370	3V-850		
3V-380	3V-900		
3V-400	3V-950		
3V-420	3V-1000		
3V-450	3V-1060		
3V-470	3V-1120		
3V-480	3V-1180		
3V-500	3V-1200		
3V-510	3V-1320		
3V-530			

NARROW SECTION 5V Section (15.8 x 14 mm

5V Section (15.8 x 14 mm)			
5V-1800			
5V-1900			
5V-2000			
5V-2120			
5V-2240			
5V-2360			
5V-2500			
5V-2650			
5V-2800			
5V-3000			
5V-3150			
5V-3350			
5V-3450			
5V-3750			

NARROW SECTION

8V Section (25.4 x 23 mm			
	8V-900	8V-2240	
	8V-1000	8V-2360	
	8\/-1060	8\/-2500	

0 V-1000	07-2000
8V-1120	8V-2550
8V-1180	8V-2650
8V-1200	8V-2800
8V-1250	8V-3000
8V-1320	8V-3150
8V-1400	8V-3350
8V-1500	8V-3550
8V-1600	8V-3750
8V-1700	8V-4000
8V-1800	8V-4500
8V-1900	8V-4750
8V-2000	8V-5000

HARVESTER COMBINE BELTS - WRAP TYPE

8V-6640

8V-2120

BELTS - WRAP TYPE		
25 X 1100	50 X 2920	
50 X 2020	50 X 3000	
50 X 2150	50 X 3125	
50 X 2170	50 X 3150	
50 X 2350	50 X 3175	
50 X 2850	50 X 3200	

HARVESTER COMBINE BELTS - FLAT TYPE

114FX3325
114FX3350
114FX3400
114FX3450
137.5FX3925
137.5FX3950
125FX3360
125FX3350
125FX3400
125FX3450
125FX3500
115FX3895

HEXAGONAL BELTS AA Section (13 x 10 mm)

, a . e e e e e e e e e e e e e e e e e e		
AA-80	AA-118	
AA-90	AA-120	
AA-96	AA-130	
AA-112	AA-136	
AA-115		

HEXAGONAL BELTS BB Section (17 x 14 mm

DD Section (17 X 14 IIIII)
BB-75	BB-90
BB-78	BB-92
BB-80	BB-94
BB-81	BB-96
BB-82	BB-98
BB-83	BB-100
BB-84	BB-115
BB-85	BB-120
BB-86	BB-136
BB-88	BB-200

HEXAGONAL BELTS

CC Section (22 X 17 111111)
CC-73	CC-174
CC-75	CC-176
CC-112	CC-180
CC-114	CC-254
CC-124	CC-258
CC-149	CC-270
CC-166	CC-658
CC-170	

WET GRINDER BELTS WGA Section

WGA-26	WGA-44
WGA-28	WGA-45
WGA-30	WGA-46
WGA-31	WGA-47
WGA-32	WGA-48
WGA-33	WGA-49
WGA-34	WGA-50
WGA-35	WGA-51
WGA-36	WGA-52
WGA-37	WGA-53
WGA-38	WGA-54
WGA-39	WGA-55
WGA-40	WGA-56
WGA-41	WGA-57
WGA-42	WGA-58
WGA-43	WGA-59

WET GRINDER BELTS WGB Section

WGD Section		
WGB-24	WGB-41	
WGB-25	WGB-42	
WGB-26	WGB-43	
WGB-29	WGB-44	
WGB-30	WGB-45	
WGB-31	WGB-47	
WGB-32	WGB-48	
WGB-33	WGB-50	
WGB-34	WGB-52	
WGB-35	WGB-53	
WGB-36	WGB-54	
WGB-37	WGB-56	
WGB-38	WGB-57	
WGB-39	WGB-59	
WGB-40		

LOOM SPECIAL BELTS LSA Section

LSA-60	LSA-82
LSA-61	LSA-83
LSA-62	LSA-84
LSA-63	LSA-85
LSA-64	LSA-86
LSA-65	LSA-87
LSA-66	LSA-88
LSA-67	LSA-90
LSA-68	LSA-92
LSA-69	LSA-94
LSA-70	LSA-96
LSA-71	LSA-98
LSA-72	LSA-100
LSA-73	LSA-102
LSA-74	LSA-104
LSA-75	LSA-106
LSA-76	LSA-108
LSA-77	LSA-110
LSA-78	LSA-112
LSA-79	LSA-128
LSA-80	LSA-144
LSA-81	

PROFILE TOP BELTS PT6B Type

,,
PT6B-85
PT6B-105
PT6B-110
PT6B-120
PT6B-150
PT6B-160
PT6B-170
PT6B-200
PT6B-210

PROFILE TOP BELTS PT6C Type

r roc rype	
PT6C85	
PT6C90	
PT6C105	
PT6C110	
PT6C120	
PT6C150	
PT6C160	
PT6C170	
PT6C200	
PT6C210	

LOOM SPECIAL BELTS LSB Section

LSB-51	LSB-85
LSB-53	LSB-86
LSB-58	LSB-87
LSB-60	LSB-88
LSB-62	LSB-89
LSB-64	LSB-90
LSB-66	LSB-92
LSB-68	LSB-93
LSB-70	LSB-94
LSB-71	LSB-95
LSB-72	LSB-96
LSB-73	LSB-98
LSB-74	LSB-100
LSB-75	LSB-102
LSB-76	LSB-104
LSB-78	LSB-110
LSB-80	LSB-112
LSB-82	LSB-120
LSB-84	LSB-124



Spareage Seals uses raw materials of global standards procured from well known global companies such as DuPont, LanXess, Bayer, Japan Synthetic Rubber, Huntsman etc.



Elastomers:

Materials (Commonly known as)	Material Description	Temp. Range	Hardness (Shore A)
Nitrile	Acrylonitrile Butadiene Rubber (NBR)	-30° C to +100°C	36A to 95A
Viton	Fluro Rubber (FKM)	-40° C to +220°C	56A to 95A
Silicon	Silicon Rubber (VMQ)	-70° C to +200°C	40A to 95A
EPDM	Ethylene Propylene Diene Rubber	-40° C to +120°C	36A to 95A
Neoprene	Chlorobutadiene Rubber (CR)	-20° C to +100°C	36A to 95A
VAMAC	Polyacrylic Rubber (ACM)	-10° C to +125°C	36A to 95A
Butyl	Butyl Rubber (IIR)	-40° C to +120°C	36A to 95A
SBR	Styrene Butadiene Rubber	-50° C to +100°C	36A to 95A
NR	Natural Rubber	-30° C to +100°C	26A to 95A
XNBR	Carboxilated Nitrile Rubber	-30° C to +100°C	56A to 95A
HNBR	Hydrogenated Acrylonitrile Butadiene Rubber	-30° C to +140°C	60A to 95A

Thermoplastics & Thermosets

Materials (Commonly known as)	Material Description	Temp. Range	Hardness (Shore A)
PU	Polyurethane	-30° C to +100°C	46A to 95A
PU	Cast Polyurethane	-30° C to +100°C	90A
Teflon	Polytetrafluorethylene (PTFE)	-200° C to +260°C	50D to 65D
BFT	Bronze Filled Teflon	-200° C to +260°C	71D to 73D
GLT	Glass Filled Teflon	-200° C to +260°C	66D to 68D
CFT	Carbon Filled Teflon	-200° C to +260°C	71D to 73D
GRT	Graphite Filled Teflon	-200° C to +260°C	62D to 65D
PE	UHMWPE	-270° C to +80°C	62D to 65D
TPE	Polyester Elastomer	-50° C to +100°C	55D to 63D
PF PF	Phenolic Resin Bonded Fabric	-20° C to +120°C	M89
UP	Ployester Resin Bonded Fabric	-40° C to +120°C	M82
Delrin	Polyacetal (POM)	-40° C to +140°C	M84
G.F. PA66	Glass Filled Polyamide (Nylon)	-20° C to +220°C	M95
PPS	Polyphenylene Sulphide	Upto +270°C	M101
PEEK	Polytherether Ketone	Upto +315°C	M99

Installation & Assembly Instructions



Sealing performance of a seal is determined to a great extent by the method of assembling a cylinder. Make sure that the following guidelines are adhered to.

- 1. Ensure that the cylinder and piston rod are chamfered. Sharp edges should be deburred and filleted or champhered.
- 2. Make sure to flush clean the internal face of cylinder and the interior of pipes. Use compressed air wherever possible.
- 3. Before assembling the cylinder, apply hydraulic oil (the same oil used in the machine) to the seal, gland, rod, surface and the internal face of the cylinder.
- 4. When the lip of the seal passes through a port, push the seal lip lightly with an edge free metal/plastic rod guided from the port on the top of seal to prevent any possible damage of the seal by the mating edge between the port and the cylinder bore.
- 5. Do not use tools with sharp edges.
- 6. If grease is used for lubrication, it must not contain any solid additives (e.g. zinc sulphide or molydbdenum disulphide). The grease should be compatible with the seal material.
- 7. We recommend that customers adhere to the tolerance and surface finishes stated in this catalog. Only by working to these values, the fitting of seals will be made easy and assembly damage avoided.

STORAGE AND CLEANING

The following guidelines apply to rubber products such as vulcanized materials made of natural rubber or synthetic rubber. The properties of a correctly handled product remains virtually unchanged over a long period of time (several years).

- 1. Keep the seals protected from effects of oxygen, ozone, heat, humidity and solvents.
- 2. The storage room should be cool, dry, free of dust and well ventilated.
- 3. Seals should be stored within a temperature range of -10°C to +25°C. The service life may be shortened considerably if these limits are exceeded. Sudden changes in temperature can also be damaging.
- 4. When heating the storage room, a minimum distance of 1m should be maintained between the radiator and stored material. The radiators and piping surfaces should preferably be covered.
- 5. The preferable humidity is approximately 65%. The lighting should be dimmed. For this reason, windows should be covered with a red or orange colour (never blue) protective coating.
- 6. Seals should be protected from Ultraviolet light sources.
- 7. Solvents, fuels, lubricants or cleaning agents etc. must be stored in a separate room.
- 8. Do not store seals in a deformed state, or with lateral loads, or bending, as this could cause permanent deformation and or damage.
- 9. Contact with rubber, brass and iron also causes damage.
- 10. Never open a seal package unless required since dust may enter the packing or it may be damaged. Once a packing is opened, always repack carefully to avoid entry of foreign material.
- 11. Never place seals near electric motors, etc. where ozone is generated.
- 12. Never hang seals on nails or wire or thread strings, to avoid deformation of the seal and damage to the seal lip.
- 13. Discolouring or generation of white powder on seal faces (blooming phenomenon) may occur but neither will affect the seal's function.
- 14. Where the cleaning of rubber/fabric, rubber products is required, a clean cloth and lukewarm water is recommended.
- 15. Do not dry products over a source of heat, or use sharp instruments, abrasive paper, gasolene, benzene, turpentine or similar products.

 Guidelines for storing of rubber products are standardized in DIN 7716 and ISO 2230.