

Seals for

off road-trucks, agriculture, earth moving machines, construction equipment

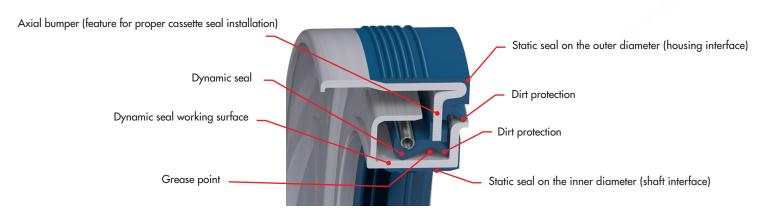




CASSETTE SEALS

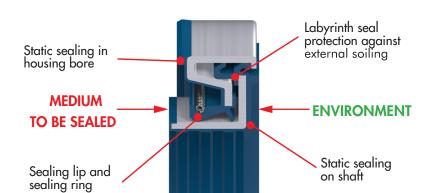
Maxspare cassette seals deliver consistent sealing reliability in demanding applications. These complex seals are used in harsh environments under extreme operating conditions and expected to operate around the clock while exposed to far greater amounts of dust, moisture and general physical debris than on road vehicles. The cassette seals are usually made up of a sleeve, sealing lip with a spring and several anti-dust lips integrated into a labyrinth system to protect against external contamination. This minimizes shaft finish requirements and eliminates shaft grooving.







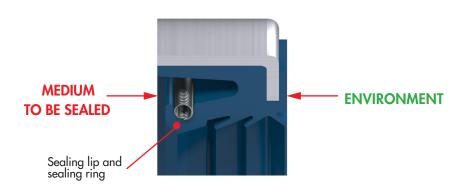
CASSETTE SEALS





Rotavator Multilip seal

Axle Hub Seal







CASSETTE SEALS PROFILES



R78



RF2



RE5



RF1



RG1



RE4



RF4



R60



RH3



RE3



RE8



RF6



RG5



RG8



RG9



R72



RE7



RE9



RF5



RE6



RF3



RF7



RF8



R77

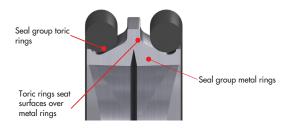


MECHANICAL FACE SEAL (DUO-CONE SEAL)

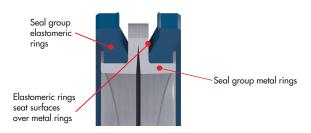
Mechanical face seals are widely used in rotating equipment and applications to seal between rotating shafts and stationary casings and prevent leakage. We use special hard cast iron materials offering performance benefits in harsh application conditions.

These seals are used in heavy technical equipment such as construction machinery, mining machinery, concrete and cement mixers, conveyors, tunnel boring and agricultural equipment. Our face seals ensure lubricant retention within components such as wheel hubs, axles, track rollers, transmissions and more.

With O-Ring energizer (MDO)



With Flat Ring energizer (MDF)



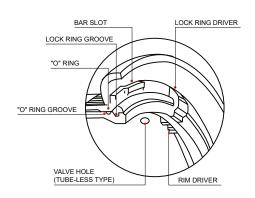


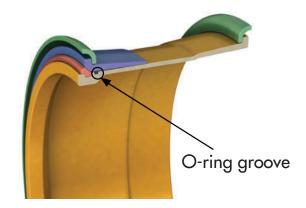




S.No.	O-Ring	Rim Ø
1	OR224T	15.5-25
	UN2241	17.5-25
	OR225T	18.0-25
2		20.5-25
Z		23.5-25
		26.5-25 / 29.5-25
	OR335T	26.5-29
2		29.5-29
3		30.0 / 65.0-29
		33.25-29
	OR345T	18.0-33
4		33.5-33
4		35.0 / 65.0-33
		27.5-33
	5 OR349T	21.0-35
5		24.0-35
		29.5-35
		33.25-35
6	OR351T	24.00-49
U	UN3511	27.00-49

Max Spare offers OTR-O-Ring in high quality Natural rubber compound having excellent properties of compression set and designed to reduce leaks & long service life





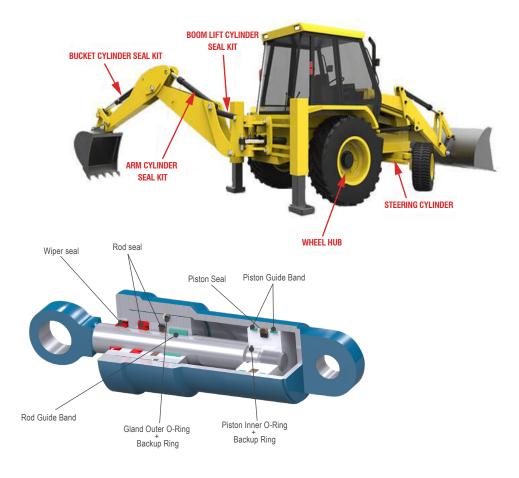


EARTHMOVING MACHINE SEAL KITS

Max Spare holds one of the most commendable position in the global industry for earth moving seals. This precision engineered seal kits are manufactured by our team of trained professionals using the finest quality raw materials from renowned vendors and state-of-the-art technology. Below Seal kits & Cassette seals of JCB Model is readily available

Machine Model	Seal Kit Name	Ref.No.
JCB- SUPER/ 3DXL-2006	6 IN 1 RAM SEALKIT	550/30079
JCB- SUPER/ 3DXL-2006	SLEW SEALKIT	550/41004
JCB- SUPER/ 3DXL-2006	SLEW SEALKIT	550/42261
JCB- SUPER/ 3DXL-2006	STEERING SEALKIT	550/42383
JCB- SUPER/ 3DXL-2006	SHOVEL SEALKIT	550/42835
JCB- SUPER/ 3DXL-2006	LIFT SEALKIT	550/42842
JCB- SUPER/ 3DXL-2006	DIPPER SEALKIT	550/42847
JCB- SUPER/ 3DXL-2006	STABLIZER SEALKIT	550/42849
JCB- SUPER/ 3DXL-2006	BOOM SEALKIT	550/42854
JCB- SUPER/ 3DXL-2006	BUCKET SEALKIT	550/42855
JCB- SUPER/ 3DXL-2006	STEERING 4WD SEALKIT	991/00156
JCB- SUPER/ 3DXL-2006	CASSETTE SEAL	904/M6779







V-BELTS

Max Spare Nirlon V-belts have experienced unrivalled patronage in the domestic and international market. Constant efforts have been made in the research and development of belts to introduce various types of belts suitable for all industrial needs like textiles, steel, cement, sugar, paper, agriculture and engineering industries etc

We use specially designed polyester, cotton fabric and special synthetic rubber for belt construction, our belts are antistatic, oil & heat resistant for superior longevity in all applications.





Steel Mill Paper Mill Cement Plant













Poduct Range

- Classical Section Belts: Z, ZX, A, AX, B, BX, C, CX, D, E.
- Narrow Section Belts: 3V, 3VX, 5V, 5VX, 8V, 8VX.
- Top Profile Belts: PT6B and PT6C
- Poly Belts: PH, PJ, PK, PL, PM

- Wedge Section Belts: SPZ, XPZ, SPA, XPA, SPB, XPB, SPC, XPC.
- Hexagonal Section Belts: AA, AAX, BB, BBX, CC, CCX.
- FHP Section Belts: FHP and FHPX
- Banded Belts: HA, HAX, HB, HBX, HC, HCX, H8V, HXPZ, HXPA
 HXPB, HXPC, HSV, H3VX, H5, H5VX





STORAGE OF SEALS

Storage Conditions:

Most polymers, including vulcanized rubber and other elastomers, tend to change their properties during storage and may become unusable. This may be due to hardening, softening, cracking or other deterioration and may result from exposure to oxygen, ozone, light, heat and / or moisture.

The following recommendations indicate the most suitable storage conditions for elastomeric products, whether it is a single item or a composite product.

- 1. **Temperature** Ideal storage temperature should be 25°C (77°F). Low temperatures are not permanently harmful provided the rubber items are handled carefully and not distorted. When taken from low temperatures items should be raised to approximately 30°C (86°F) before they are used.
- 2. **Humidity** Relative humidity is of 40% to 70% in a draft-free atmosphere.
- 3. Light The products should be protected from direct sunlight, ultraviolet and artificial light have a high UV content.
- 4. **Oxygen and Ozone** Wrapping, storage in airtight containers or other suitable means should be used for vulcanised rubber items. Storage in containers that limit exposure to environmental (e.g. sealed plastic bags) should be used for all materials.
- 5. **Radiation** Products should be protected from all sources of ionizing radiation.
- 6. **Deformation** The rubber items should be stored in a relaxed position, without tension or compression. Laying the product on a flat surface and preventing its suspension or crushing keeps it from deforming and minimizes deformation.
- 7. **Contact with liquid or semi-liquid materials** Rubber should not come in to contact with liquid or semi-liquid materials or their vapours at any time during storage, unless these materials are an integral part of the product or the manufacture's packaging.
- 8. Contact with Metals Metals such as manganese, iron and copper, or copper alloys can have a harmful effect on rubber. A layer of paper, polyethylene or cellophane will keep these separated.
- 9. Contact with Non-Metals Contact with other rubbers should be avoided.
- 10. Stock Rotation Elastomers should be stored for as short a period as possible, and practice the First In First Out (FIFO system) stock liquidation.
- 11. Cleaning Organic solvents such as trichloroethylene, carbon tetrachloride and petroleum are the most harmful agents. Soap and water and methylated spirits are the least harmful, and all parts should be dried at room temperature before use.
- 12. **Shelf Life** The table shows the storage life of seal components made from the more common materials under ideal conditions. Storing under less than ideal conditions will reduce the life of the component.

Careful inspection for the following should be made before installation after storage:

· Cracks or Surface crazing

Mechanical damage

· Permanent distortion

Surface softening or hardening

Rubber / Elastomer	Max Code	Primary storage period (Years)	Extension of storage period after visual re-inspection (Years)
Nitrile Butadiene Rubber (NBR)	NT	7	3
Ethylene Propylene (EPDM)	EP	10	5
Fluorocarbon (FKM)	VT	10	5
Vinyl-Methyl-Silicon (VMQ)	SL	10	5
Polyurethane (PU)	PU	5	2
Engineering Thermoplastics:			
Acetal (POM)	ACT		
Polyamide (PA)	NY	Unlimited	-
Polytetrafluoroethylene (PTFE)	PFT		

Guidelines of ISO 2230



Max Spare uses raw materials of global standards procured from well known global companies such as DuPont, Lanxess, Bayer, Japan Synthetic Rubber, Huntsman etc.

Elastomers:

NITRILE Acrylonitrile Butadiene Rubber (NBR) -30°C to + 100°C 40A to 95A NITRILE Low Temp. Resistance Acrylonitrile Butadiene Rubber -50°C to + 100°C 65A to 85A NITRILE High Oil Resistance Acrylonitrile Butadiene Rubber -30°C to + 120°C 65A to 85A XNBR Carboxilated Nitrile Rubber (XNBR) -30°C to + 100°C 60A to 95A HNBR Hydrogenated Acrylonitrile Butadiene (HNBR) -30°C to + 150°C 60A to 90A VITON Fluro Rubber (FKM) -40°C to + 220°C 60A to 95A FFKM Perfluoro Elastomer (FFKM) -10°C to + 300°C 70A to 75A FEPM AFLAS (FEPM) -10°C to + 200°C 70A to 95A SILICONE Silicon Rubber (VMQ) -70°C to + 200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to + 220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A NR Natural Rubber (NR) -30°C to + 80°C 30A to 95A	Materials (Commonly known as)	Material Description	Temp. Range	Hardness (Shore A)
NITRILE High Oil Resistance Acrylonitrile Butadiene Rubber -30°C to + 120°C 65A to 85A XNBR Carboxilated Nitrile Rubber (XNBR) -30°C to + 100°C 60A to 95A HNBR Hydrogenated Acrylonitrile Butadiene (HNBR) -30°C to + 150°C 60A to 90A VITON Fluro Rubber (FKM) -40°C to + 220°C 60A to 95A FFKM Perfluoro Elastomer (FFKM) -10°C to + 300°C 70A to 75A FEPM AFLAS (FEPM) -10°C to + 200°C 70A to 95A SILICONE Silicon Rubber (VMQ) -70°C to + 200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to + 220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	NITRILE	Acrylonitrile Butadiene Rubber (NBR)	-30°C to + 100°C	40A to 95A
XNBR Carboxilated Nitrile Rubber (XNBR) -30°C to + 100°C 60A to 95A HNBR Hydrogenated Acrylonitrile Butadiene (HNBR) -30°C to + 150°C 60A to 90A VITON Fluro Rubber (FKM) -40°C to + 220°C 60A to 95A FFKM Perfluoro Elastomer (FFKM) -10°C to + 300°C 70A to 75A FEPM AFLAS (FEPM) -10°C to + 200°C 70A to 95A SILICONE Silicon Rubber (VMQ) -70°C to + 200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to + 220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	NITRILE	Low Temp. Resistance Acrylonitrile Butadiene Rubber	-50°C to + 100°C	65A to 85A
HNBR Hydrogenated Acrylonitrile Butadiene (HNBR) -30°C to +150°C 60A to 90A VITON Fluro Rubber (FKM) -40°C to +220°C 60A to 95A FFKM Perfluoro Elastomer (FFKM) -10°C to +300°C 70A to 75A FEPM AFLAS (FEPM) -10°C to +200°C 70A to 95A SILICONE Silicon Rubber (VMQ) -70°C to +200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to +220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to +100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to +120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to +120°C 40A to 90A	NITRILE	High Oil Resistance Acrylonitrile Butadiene Rubber	-30°C to + 120°C	65A to 85A
VITON Fluro Rubber (FKM) -40°C to + 220°C 60A to 95A FFKM Perfluoro Elastomer (FFKM) -10°C to + 300°C 70A to 75A FEPM AFLAS (FEPM) -10°C to + 200°C 70A to 95A SILICONE Silicon Rubber (VMQ) -70°C to + 200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to + 220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	XNBR	Carboxilated Nitrile Rubber (XNBR)	-30°C to + 100°C	60A to 95A
FFKM Perfluoro Elastomer (FFKM) -10°C to +300°C 70A to 75A FEPM AFLAS (FEPM) -10°C to +200°C 70A to 95A SILICONE Silicon Rubber (VMQ) -70°C to +200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to +220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to +100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to +120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to +120°C 40A to 90A	HNBR	Hydrogenated Acrylonitrile Butadiene (HNBR)	-30°C to + 150°C	60A to 90A
FEPM AFLAS (FEPM) -10°C to + 200°C 70A to 95A SILICONE Silicon Rubber (VMQ) -70°C to + 200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to + 220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	VITON	Fluro Rubber (FKM)	-40°C to + 220°C	60A to 95A
SILICONE Silicon Rubber (VMQ) -70°C to + 200°C 40A to 95A FVMQ Fluorosilicone Rubber (FVMQ) -70°C to + 220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	FFKM	Perfluoro Elastomer (FFKM)	-10°C to + 300°C	70A to 75A
FVMQ Fluorosilicone Rubber (FVMQ) -70°C to + 220°C 70A to 85A NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	FEPM	AFLAS (FEPM)	-10°C to + 200°C	70A to 95A
NEOPRENE Chlorobutadiene Rubber (CR) -20°C to + 100°C 40A to 95A EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	SILICONE	Silicon Rubber (VMQ)	-70°C to + 200°C	40A to 95A
EPDM Ethylene Propylene Diene Rubber (EPDM) -40°C to + 120°C 40A to 95A BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	FVMQ	Fluorosilicone Rubber (FVMQ)	-70°C to + 220°C	70A to 85A
BUTYL Butyl Rubber (IIR) -40°C to + 120°C 40A to 90A	NEOPRENE	Chlorobutadiene Rubber (CR)	-20°C to + 100°C	40A to 95A
	EPDM	Ethylene Propylene Diene Rubber (EPDM)	-40°C to + 120°C	40A to 95A
NR Natural Rubber (NR) -30°C to + 80°C 30A to 95A	BUTYL	Butyl Rubber (IIR)	-40°C to + 120°C	40A to 90A
	NR NR	Natural Rubber (NR)	-30°C to + 80°C	30A to 95A
SBR Styrene Butadiene Rubber -50°C to + 100°C 40A to 95A	SBR	Styrene Butadiene Rubber	-50°C to + 100°C	40A to 95A
ACM Polyacrylic Rubber (ACM) -10°C to + 170°C 60A to 85A	ACM	Polyacrylic Rubber (ACM)	-10°C to + 170°C	60A to 85A

Thermoplastics & Thermosets:

Materials (Commonly known as)	Material Description	Temp. Range	Hardness (Shore A)
PU	Oil Resistance Polyurethane	-30°C to + 100°C	70A to 67D
PU - X	High Oil Resistance Polyurethane	-40°C to + 150°C	92A
PU - W	High Heat + Hydrolysis Resistance	-40°C to + 130°C	92A
CPU - H	Hydrolysis Cast Polyurethane	-30°C to + 100°C	90A
CPU - O	High Oil Resistance Cast Polyurethane	-30°C to + 100°C	95A
PP PP	Polypropylene (PP)	95°C	M80
LLDPE	Linear Low-Density Polyethylene	97°C	M65
UHMWPE	Ultra-High-Molecular-Weight Polyethylene	-270°C to +80°C	62D to 65D
PPS	Polyphenylene Sulphide	200°C	M100
DELRIN	Polyacetal (POM)	-40°C to + 140°C	M84
G.F.PA66	Glass Filled Polyamide (Nylon)	-20°C to + 220°C	M95
PEEK	Polyether Ether Ketone	Up to + 315°C	M99
TEFLON	Polytetrafluoroethylene (PTFE)	-200°C to + 260°C	50D to 65D
HYT	Hytrel	-30°C to + 100°C	46D to 72D
PRW	Polyester Resin Fabric	-20°C to + 120°C	M95
BFT	Bronze Filled Teflon (40% & 60% Bronze Filled PTFE)	-200°C to + 260°C	71D to 73D
GFT	Glass Filled Teflon (15% & 25% Glass filled PTFE)	-200°C to + 260°C	66D to 68D
CFT	Carbon Filled Teflon (15% & 25% Carbon filled PTFE)	-200°C to + 260°C	71D to 73D
GRT	Graphite Filled Teflon (15% & 25% Graphite filled PTFE)	-200°C to + 260°C	62D to 65D
TPE	Polyester Elastomer	-50°C to + 100°C	55D to 63D
PF	Phenolic Resin Bonded Fabric	-20°C to + 120°C	M89

Our Global Suppliers -









Fabrics:

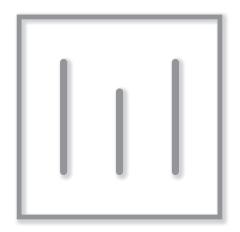
Materials (Commonly known as)	Material Description
Cotton Fabric	Cotton Fabric
Aramide Fabric	Aramide Fabric
Kevlar Fabric	Kevlar Fabric
Nylon Fabric	Nylon Fabric

Notebric listed can be impregnated with above elastomers as per application requirement.





IN TECHNICAL COLLABORATION WITH UKSEALS & POLYMERS LTD. (ENGLAND)



MAX GROUP COMPANIES



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