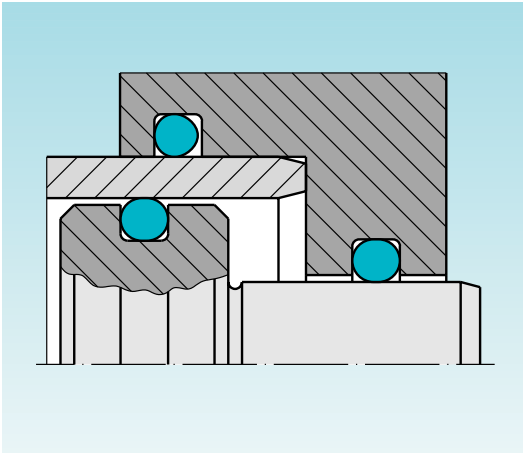
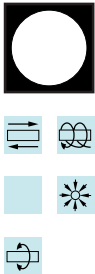


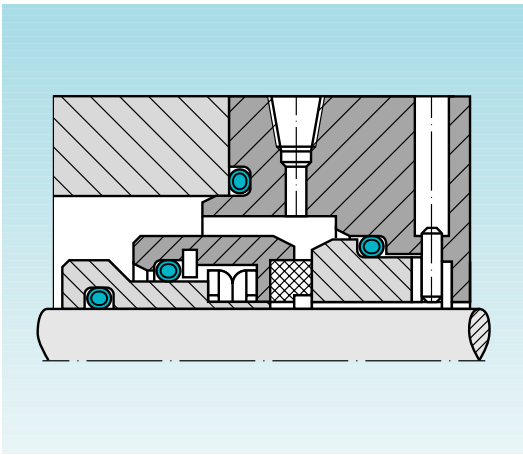


O-Ring

Double acting seal for static and dynamic applications. Available in various materials e.g. nitrile (NBR), fluorocarbon (FKM), ethylene propylene (EPDM), chloroprene, silicon, fluorosilicone, etc. Polyurethane is available in hardness 70 to 90 Shore A for high wear and extrusion resistance with low friction. Available to ISO 3601, AS 568 A, BS 1806, BS 4518 and other recognised standards.



Ø Range	Pressure Range	Temperature Range	Velocity
from 0.5 mm	200 MPa	-60°C +200°C	0.5 m/s

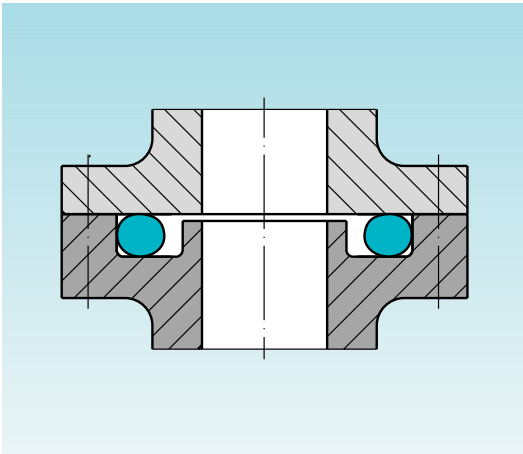


FEP O-Ring

Encapsulated O-ring is produced from silicon or fluorocarbon with a seamless FEP jacket. These seals can solve sealing problems due to their chemical resistance coupled with elastic properties and low friction. Available to ISO 3601, AS 568 A, BS 1806 and BS 4518 and other standards including hollow and square sections. Available in both inch and metric sizes.



Ø Range	Pressure Range	Temperature Range	Velocity
from 7.7 mm	25 MPa	-60°C +200°C	-

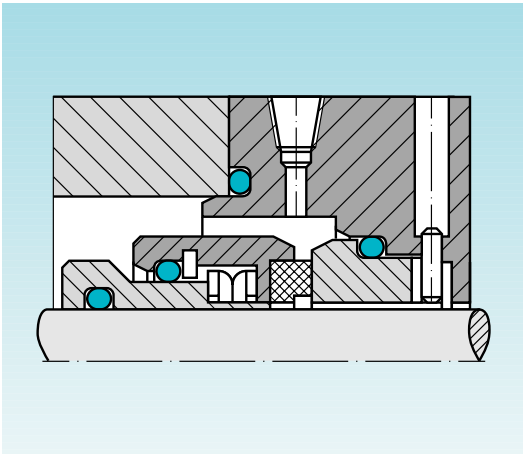


PTFE O-Ring

For axial static face or flange type applications. Resistant to practically all chemicals and to high temperatures. Available in any desired size.



Ø Range	Pressure Range	Temperature Range	Velocity
0.5 - 1000 mm	40 MPa	-200°C +260°C	-

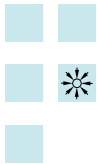


Isolast® Perfluoroelastomer O-Ring

Isolast® is a perfluoroelastomer that combines the elastic properties of fluorocarbon (FKM) with the outstanding chemical resistance and the high temperature stability of PTFE. Isolast® seals can be used for applications in high temperature service up to appr. +325° C. Isolast® O-rings are available in metric and imperial dimensions to ISO 3601, AS 568 A, BS 1806 and BS 4518, cords, foils, moulded slabs and custom moulded parts.

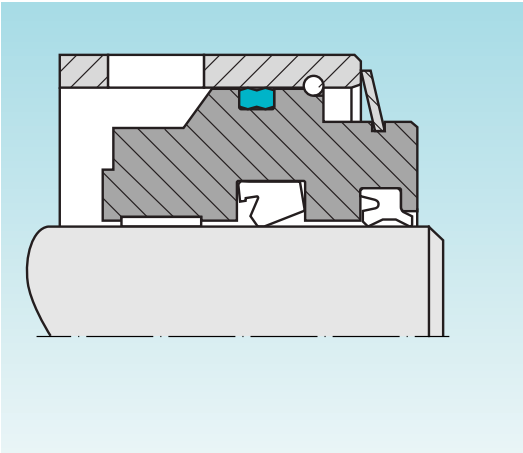


Ø Range	Pressure Range	Temperature Range	Velocity
from 0.8 mm	200 MPa	-25°C +325°C	-



Dualseal

Dualseal is a polyurethane sealing element for static applications and a highly effective alternative to O-ring / back-up ring combinations. The main advantages are resistance to twisting, stability at pulsating pressures and low contamination risk. Dualseal is easy to install and guarantees long service life. Recommended for heavy duty applications in cylinders and valves.



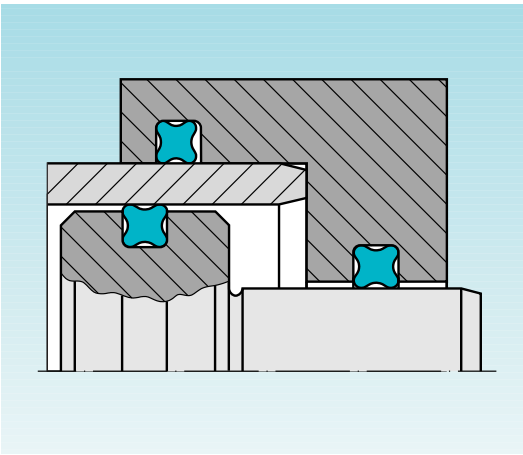
Ø Range	Pressure Range	Temperature Range	Velocity
6 - 280 mm	50 MPa	-30°C +80°C	–



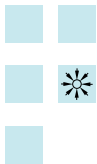
QUAD-RING® Seal

A double acting four lip seal for static and dynamic applications. Available in a wide range of elastomer compounds to AS 568 A and BS 1806 standards. Provides higher seal efficiency and lower friction than conventional O-rings. X-sel® QUAD-RING® Seal is available with further improved friction characteristics.

® Trade Mark of Quadion Corporation

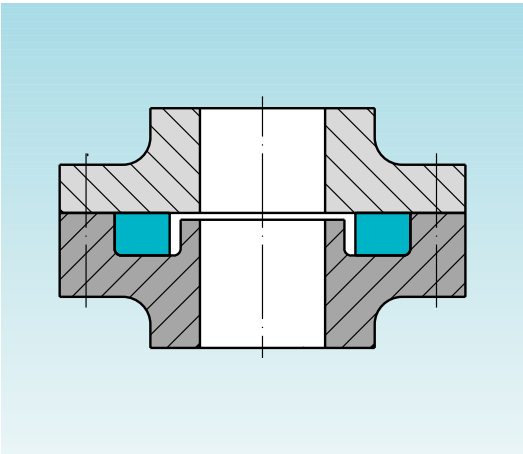


Ø Range	Pressure Range	Temperature Range	Velocity
1 - 660 mm	40 MPa	-60°C +200°C	0.5 m/s
			(2 m/s rotary)

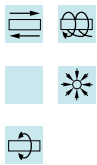


Kantseal

Elastomeric square sectioned ring for static applications. Mostly used on flanges (SAE) and covers. High sealing efficiency and shape stability. Available in nitrile (NBR) and fluorocarbon (FKM).



Ø Range	Pressure Range	Temperature Range	Velocity
5 - 456 mm	50 MPa	-30°C +200°C	–

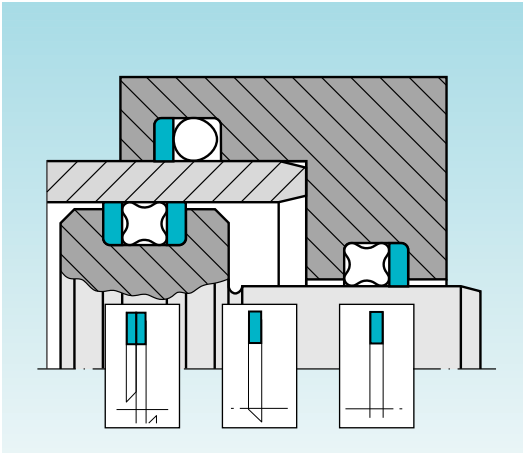


Seal Kits

Seal Kits are available for O-rings. The seal kit range is available sorted according to dimensions and materials, and is delivered clearly arranged in a practical set. It is indispensable for service, maintenance and fast repairs.

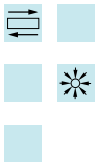


Ø Range	Pressure Range	Temperature Range	Velocity
2.8 - 60 mm	–	-30°C +200°C	–

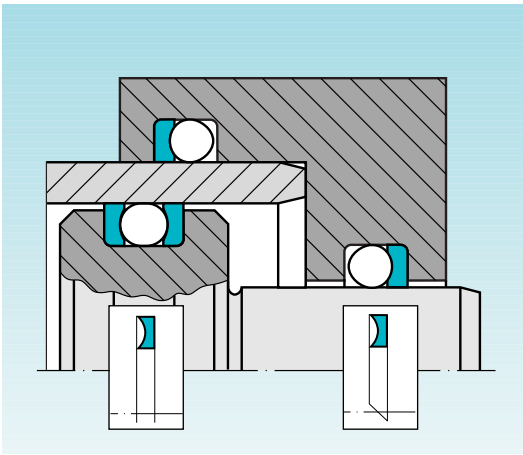


Back-up Ring

Installed together with O-rings and QUAD-RING® Seals to prevent gap extrusion in applications above appr. 5 MPa. Available in spiral, cut or uncut designs in filled or unfilled PTFE, Turcon®, elastomeric and thermoplastics to ISO 3601, AS 568 A, BS 1806 and BS 4518.

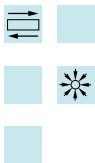


Ø Range	Pressure Range	Temperature Range	Velocity
from 2.9 mm	80 MPa	-200°C +260°C	0.5 m/s

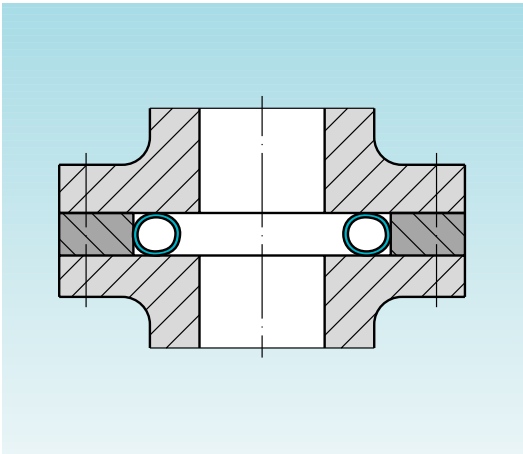


Back-up Ring (concave)

The back-up ring is machined concave on one side to better accommodate the O-ring and retain shape under high pulsating pressure. Available in cut or uncut designs in PTFE, Turcon® and polymeric materials to ISO 3601, AS 568 A, BS 1806 and BS 4518.



Ø Range	Pressure Range	Temperature Range	Velocity
from 2.4 mm	250 MPa	-200°C +260°C	0.5 m/s



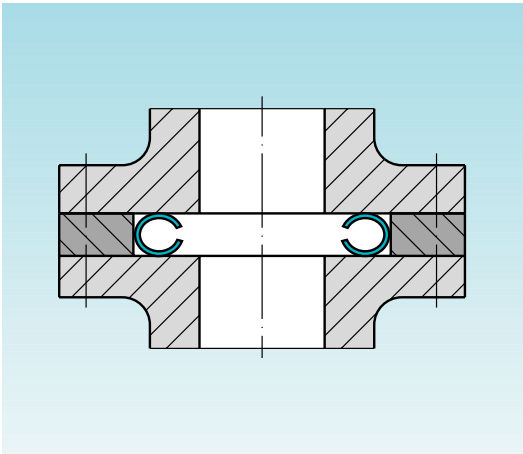
Wills Rings® O

Wills Rings® O are metal O-rings for many static face sealing applications. Reliable performance over a large temperature range for gases and liquids. Extreme high pressures and vacuums can be sealed with Wills Rings® O. Long life and excellent corrosion resistance are also characteristics of the Wills Rings® seals.

Available as pressure filled, pressure actuated, non-pressurised and solid seals, in mild and stainless steel, copper and Inconel® 600 materials. The seals can be plated in silver or nickel, or PTFE coated.



Ø Range	Pressure Range	Temperature Range	Velocity
8 - 3000 mm	to 1000 MPa	Cryogenic to +850°C	–



Wills Rings® C

Wills Rings® C are metal C-rings used for almost any static face sealing application. Reliable performance over a large temperature range for liquids. Extreme high pressures and vacuums can also be sealed. Wills Rings® C exhibits greater springback / elasticity than Wills Rings® O. This characteristic provides more effective sealing where thermal expansions of the seal housing are found. Wills Rings® C is available for internal and external seal housing.

Available in Inconel® 718 and X750. The seals can be plated in silver or nickel, or PTFE coated.

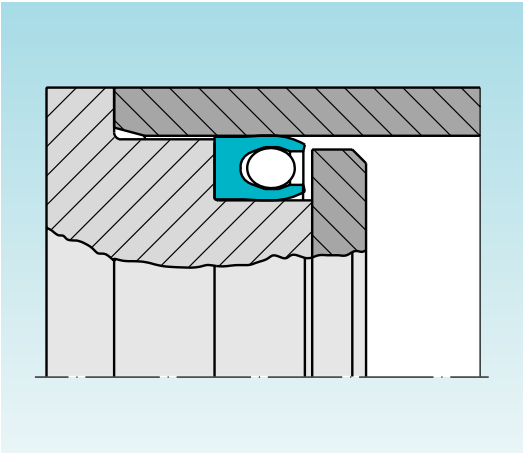
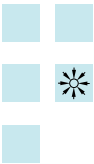


Ø Range	Pressure Range	Temperature Range	Velocity
20 - 500 mm	to 200 MPa	Cryogenic to +750°C	–



Turcon®Variseal®H

Single acting sealing element comprising a U-shaped Turcon® ring and a coiled stainless energising spring. High specific sealing force. Gas tight even at low temperatures. Resistant to most liquids and chemicals. Unlimited shelf life. Used for radially static or slightly dynamic applications. Available in versions for cryogenic service.

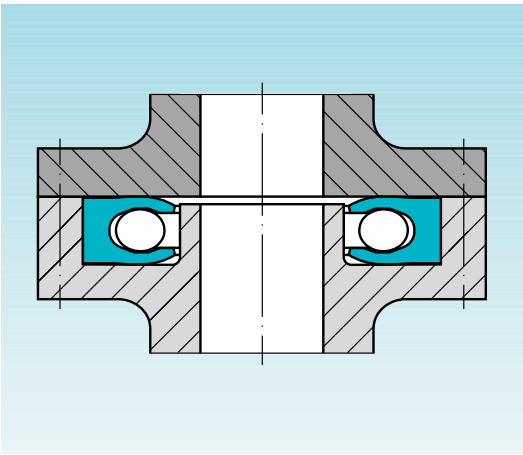
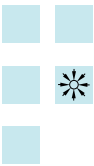


Ø Range	Pressure Range	Temperature Range	Velocity
3 - 2500 mm	80 MPa	-120°C +260°C	–



Turcon®Variseal®HF

Single acting face sealing element comprising a U-shaped Turcon® ring and a coiled stainless energising spring. High specific sealing force. Gas tight even at low temperatures. Resistant to most liquids and chemicals. Unlimited shelf life. Available for inside or outside sealing. Available in versions for cryogenic service.



Ø Range	Pressure Range	Temperature Range	Velocity
3 - 2500 mm	80 MPa	-200°C +260°C	–



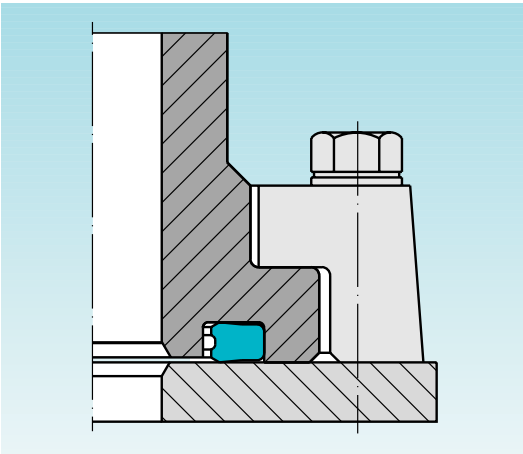
SAE Flange Seal

SAE Flange Seals corresponding to SAE J 518 are available in three different variants:

- O-Rings
- Rectangle Seals series DRV2
- SAE-Seals series DRV3

All SAE Flange Seals provide a high function security and can easily be mounted and dismantled.

SAE Flange Seals are especially used in mobile hydraulics, press manufacture and also for materials-handling technology and many more.

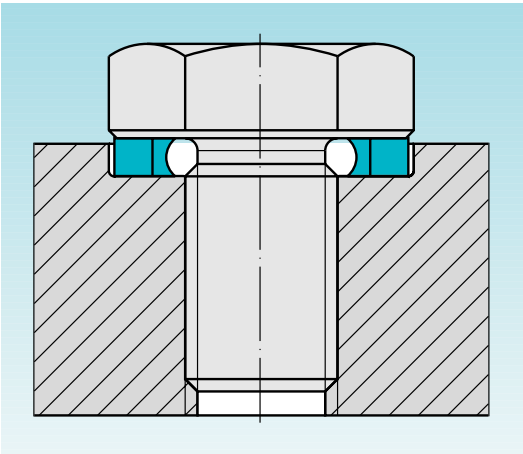
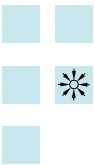


Ø Range	Pressure Range	Temperature Range	Velocity
15 - 50 mm	42 MPa	-45°C +200°C	–

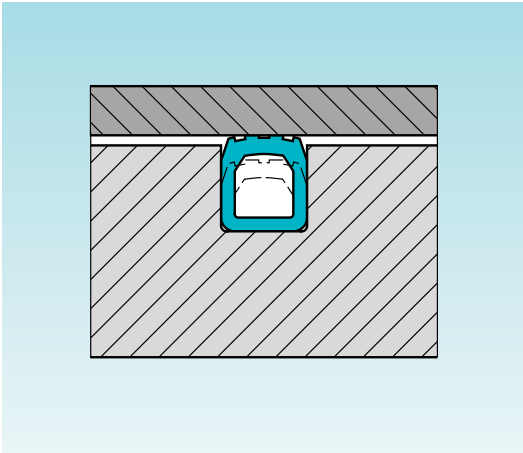


Bonded Seal

Sealing discs to seal threads and flange joints. The discs consist of a metallic ring and a rubber sealing pad. Available in metric and imperial dimensions.



Ø Range	Pressure Range	Temperature Range	Velocity
M2.5 - M125	100 MPa	-30°C +200°C	–

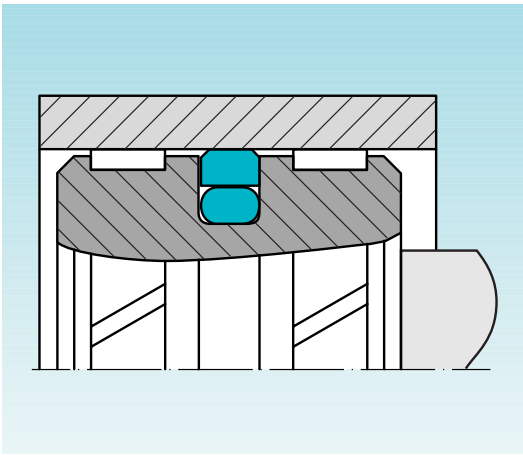


Airseal

Airseal is an inflatable seal, vulcanised to any customer profile. Being activated by air, water or other medium, this seal represents an economic alternative to conventional gaskets. The big range of profiles and compounds allows use in various applications, e.g. for doors, lock of autoclaves, sterilisers, in the chemical and semiconductor industry etc.



Ø Range	Pressure Range	Temperature Range	Velocity
50 - 4000 mm	1 MPa	-50°C +220°C	-

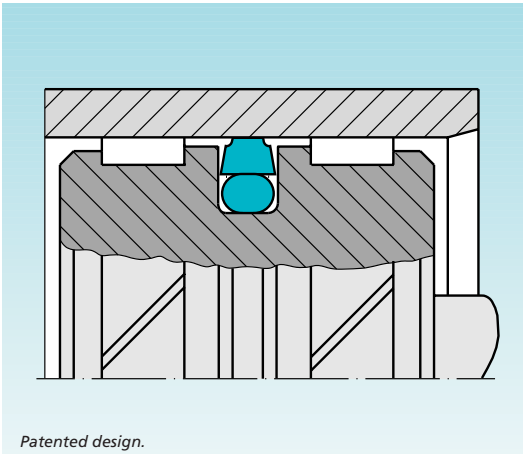


Turcon®Glyd Ring®

Turcon®Glyd Ring® is a double acting O-ring energised piston seal for dynamic applications. Turcon®Glyd Ring® provides low friction with no stick-slip, minimal break out force and high wear resistance. Main application: guiding and positioning cylinders.



Ø Range	Pressure Range	Temperature Range	Velocity
8 - 2700 mm	80 MPa	-45°C +200°C	15 m/s



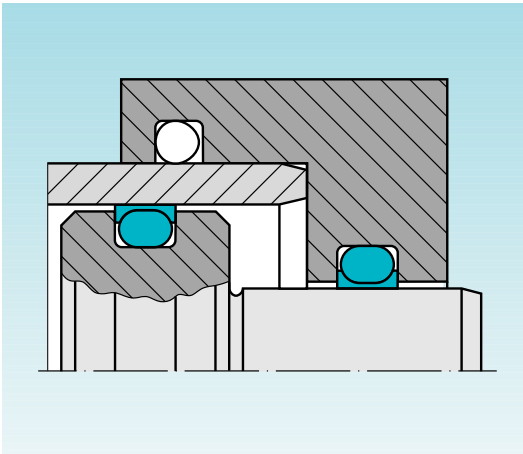
Patented design.

Turcon®Glyd Ring®T

A further development of the Turcon®Glyd Ring® with newly developed profile. It provides improved leakage control and better resistance to extrusion. Double acting O-ring energised piston seal for dynamic applications. Installed in grooves to ISO 7425. Low friction with no stick-slip, minimal break out force and high wear resistance.



Ø Range	Pressure Range	Temperature Range	Velocity
8 - 2700 mm	80 MPa	-45°C +200°C	15 m/s



Turcon®Double Delta®

The Turcon®Double Delta® is a double-acting sealing element which is energised by an elastomer O-ring. The Turcon®Double Delta® seal can be fitted in existing O-ring grooves (US standard AS568 A, MIL-P-5514) and demonstrates good friction properties, stick-slip-free starting and excellent dry-running. The Turcon®Double Delta® is used in light and medium-duty industrial hydraulics.

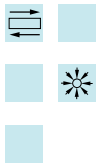


Ø Range	Pressure Range	Temperature Range	Velocity
4 - 2700 mm	35 MPa	-45°C +200°C	15 m/s

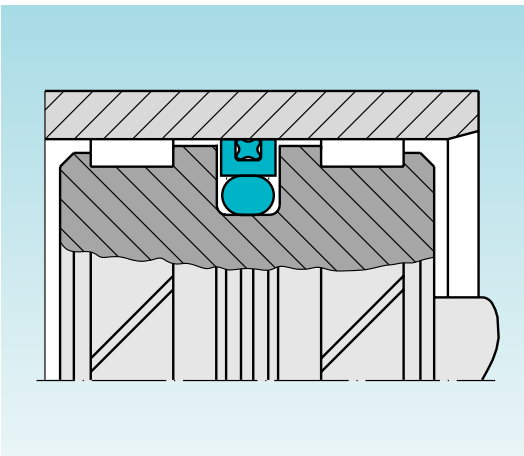


Turcon®AQ-Seal®

A double acting O-ring energised seal developed for sealing between two media, e.g. fluid/gas separation by incorporating a limited footprint QUAD-RING®Seal inset into the dynamic sealing face. Installed in grooves to ISO 7425.

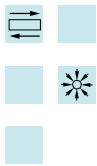


Ø Range	Pressure Range	Temperature Range	Velocity
16 - 700 mm	40 MPa	-45°C +200°C	2 m/s

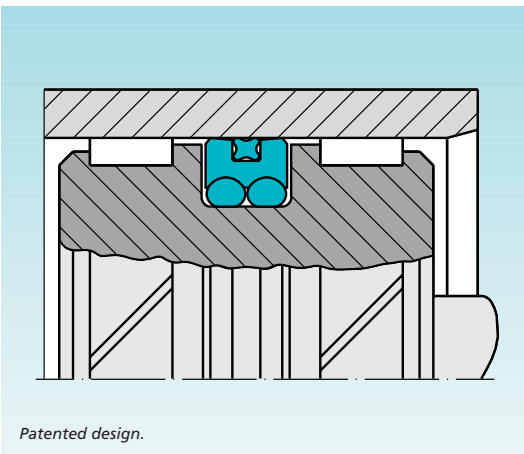


Turcon®AQ-Seal®5

A further development of the standard Turcon®AQ-Seal® double acting seal for sealing between two media, e.g. fluid/gas separation by incorporating a limited footprint QUAD-RING®Seal elastomer in the dynamic sealing face. Energised by two O-rings to improve sealing behaviour.



Ø Range	Pressure Range	Temperature Range	Velocity
40 - 700 mm	60 MPa	-45°C +200°C	3 m/s

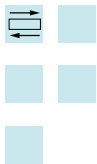


Patented design.



Turcon®Stepseal®K

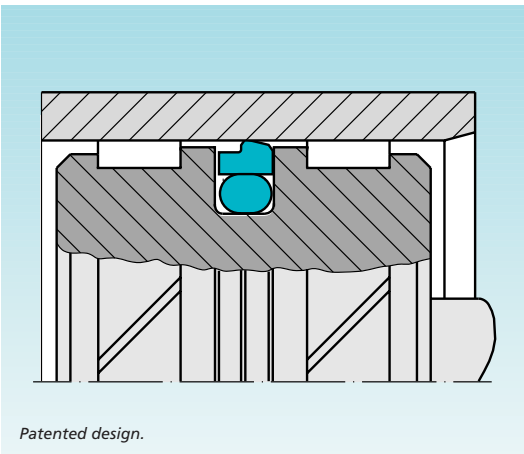
Single acting O-ring energised piston seal for dynamic applications. Installed in closed grooves including grooves to ISO 7425. High sealing efficiency, low friction with no stick-slip, minimal break out force and high wear resistance.



Turcon®Stepseal®2K

Further improvement of Turcon®Stepseal®K. Preferred solution for new constructions.

Ø Range	Pressure Range	Temperature Range	Velocity
8 - 2700 mm	80 MPa	-45°C +200°C	15 m/s

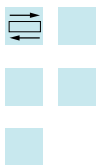


Patented design.

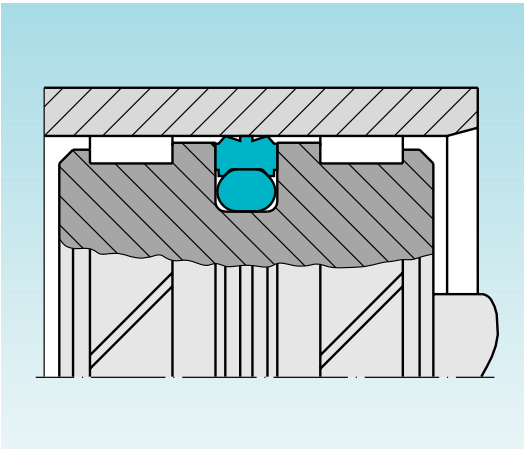


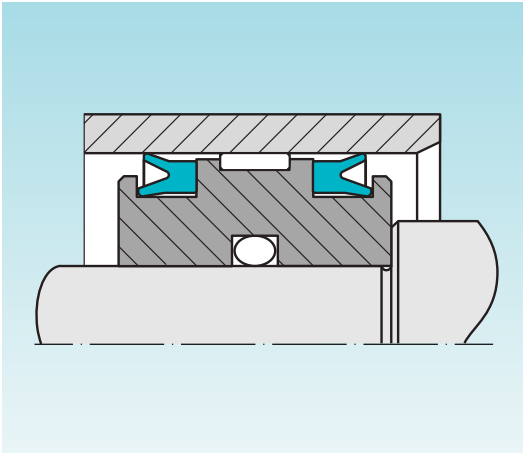
Zurcon®Wynseal

A double acting O-ring energised piston seal in injection moulded polyurethane for dynamic applications. Installed in grooves to ISO 7425. High sealing efficiency, tear and abrasion resistant.



Ø Range	Pressure Range	Temperature Range	Velocity
16 - 250 mm	40 MPa	-30°C +80°C	0.8 m/s



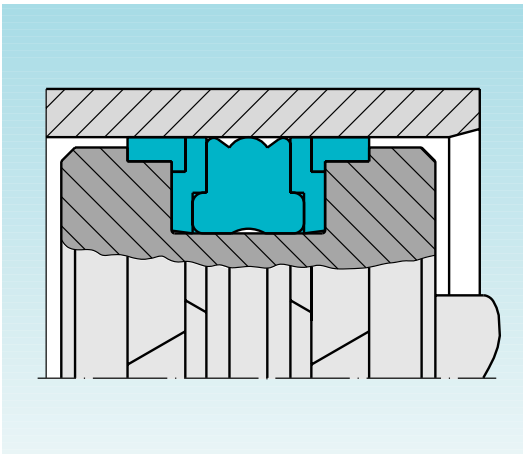


Piston U-Cup

Piston U-cups are single acting polyurethane piston seals available in a wide range of sizes. Piston U-cups are assembled into closed grooves and mainly used in light duty cylinder applications for mobile equipment.



Ø Range	Pressure Range	Temperature Range	Velocity
5 - 390 mm	40 MPa	-30°C +80°C	0.5 m/s

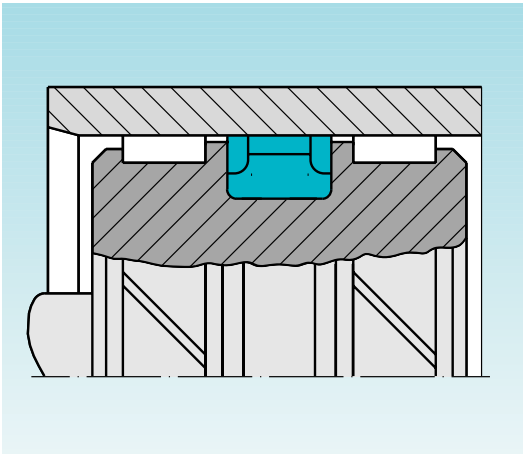


D-A-S Compact Seal®
DBM Compact Seal

Double acting compact piston seal assemblies consisting of an elastomeric piston seal, two thermoelastomeric back-up rings and two thermoplastic wear rings. Installed in closed grooves including grooves to ISO 6547.



Ø Range	Pressure Range	Temperature Range	Velocity
20 - 250 mm	35 MPa	-35°C +100°C	0.5 m/s

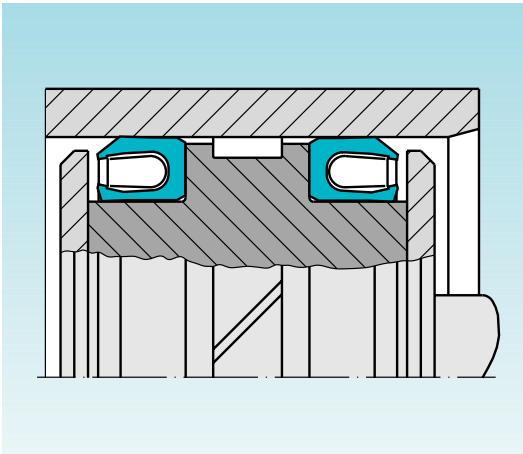


PHD Seal

Heavy duty compact double acting piston seal, the PHD Seal is an elastomer energised PTFE assembly affording overall stability, wear resistance, sealability, low friction and maintenance-free long life. HiMod® back-up rings are specially designed to protect the seal ring from extrusion, even in the most demanding applications. Available in metric and imperial sizes.



Ø Range	Pressure Range	Temperature Range	Velocity
50 - 180 mm	40 MPa	-45°C +135°C	1.5 m/s



Turcon®Variseal®M2

Single acting sealing element comprising a U-shaped Turcon® ring and stainless energising finger spring. Low friction with no stick-slip, minimal break out force and high wear resistance. Resistant to most liquids and chemicals. Unlimited shelf life.



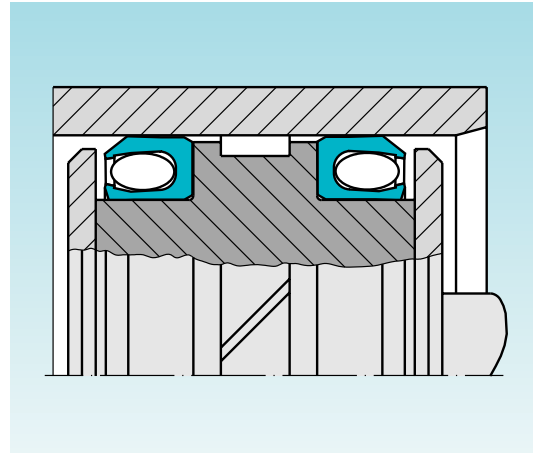
Ø Range	Pressure Range	Temperature Range	Velocity
6 - 2700 mm	45 MPa	-70°C +260°C	15 m/s



Turcon®Variseal®W

The Turcon®Variseal®W is a single acting piston seal energized by a special helical spring.

The advantage of the Turcon®Variseal®W lies in its low friction and relatively constant preloading force over a relatively large deformation range. The Turcon®Variseal®W is used wherever friction has to be kept within a narrow tolerance zone, e.g. in pressure switches.

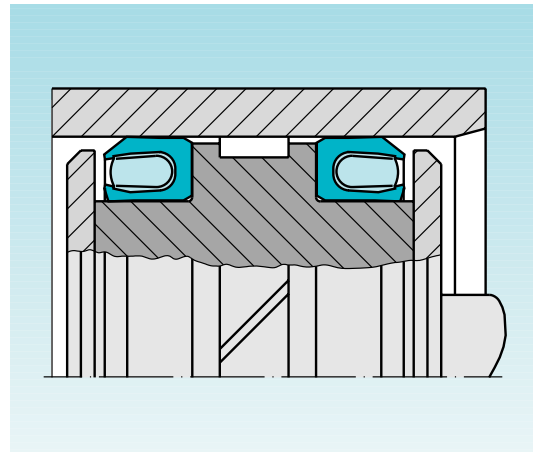


Ø Range	Pressure Range	Temperature Range	Velocity
6 - 2700 mm	40 MPa	-70°C +260°C	15 m/s



Turcon®Variseal®Hi-Clean

An optional addition to the Variseal®M2 and Roto Variseal® range for use primarily in the food, pharmaceutical and offshore industries. The spring cavity is filled with silicone to eliminate bacteria growth and facilitate easy cleaning of the system.

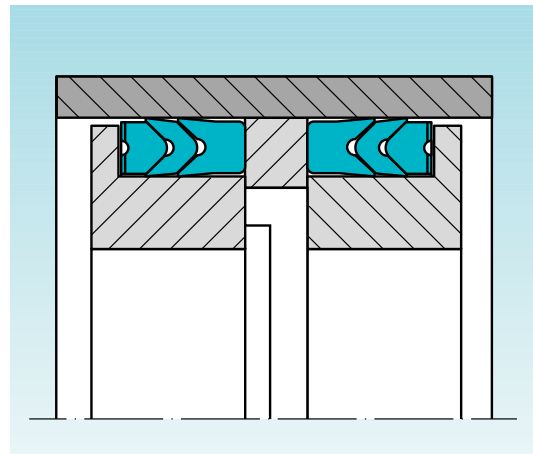


Ø Range	Pressure Range	Temperature Range	Velocity
6 - 2700 mm	45 MPa	-70°C +260°C	15 m/s



VEEPAC

VEEPAC is an assembly of fabric re-enforced, highly wear resistant, chevron sealing rings with a support ring and a pressure energising ring. VEEPAC seals are designed with preloaded radial lips to provide good sealing results. They are very robust, insensitive to sealing surface finish and dimensionally adjustable. VEEPAC seals are especially suited to applications where there is a risk of damage and contamination.



Ø Range	Pressure Range	Temperature Range	Velocity
20 - 1000 mm	40 MPa	-30°C +200°C	0.5 m/s

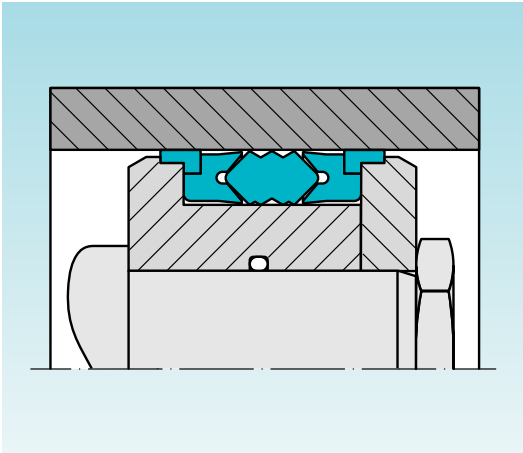


Turcon®Skirted Piston

The Skirted Piston is a continuous PTFE sleeve, bonded around the piston and acting as seal and guide. The Skirted Piston has an integrated unidirectional sealing lip to minimise piston length. A special design with two sealing lips is also available. Minimum order quantity: 10,000 pieces. Recommended for fast moving, low friction applications, i.e. shock absorbers or small cylinders without positioning function requirement.



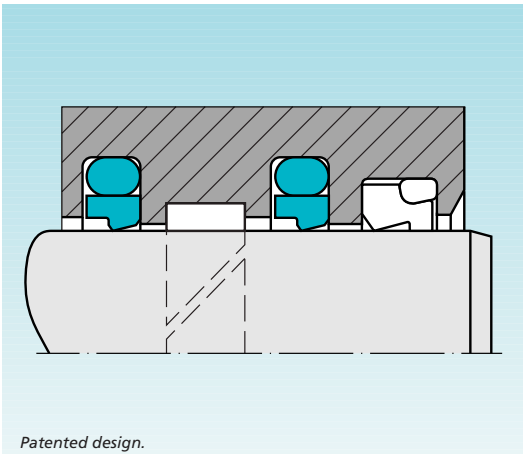
Ø Range	Pressure Range	Temperature Range	Velocity
-	15 MPa	-40°C +150°C	4 m/s



Selemaster DSM

Double acting compact piston seal with integrated back-up and guide rings. The multi-lip elastomer seal element is backed on both sides with fibre re-enforced profile rings. Recommended for high pressure applications and where vibration occurs.

Ø Range	Pressure Range	Temperature Range	Velocity
45 - 360 mm	70 MPa	-40°C +130°C	0.5 m/s



Patented design.

Turcon® Stepseal® K

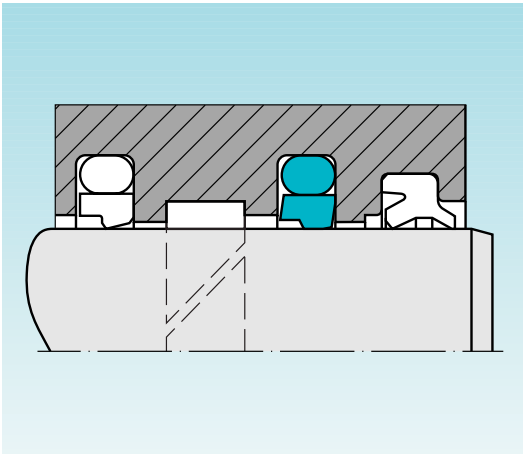
Single acting O-ring energised rod seal for dynamic applications. Installed in closed grooves including grooves to ISO 7425. High sealing efficiency, low friction with no stick-slip, minimal break out force and high wear resistance. Optimum sealing characteristics are achieved by installing in a tandem Stepseal or Rimseal arrangement together with a double acting scraper.

Available in Turcon® or Zurcon® materials.

Turcon® Stepseal® 2K

Further improvement of Turcon® Stepseal® K. Preferred solution for new constructions.

Ø Range	Pressure Range	Temperature Range	Velocity
3 - 2600 mm	80 MPa	-45°C +200°C	15 m/s

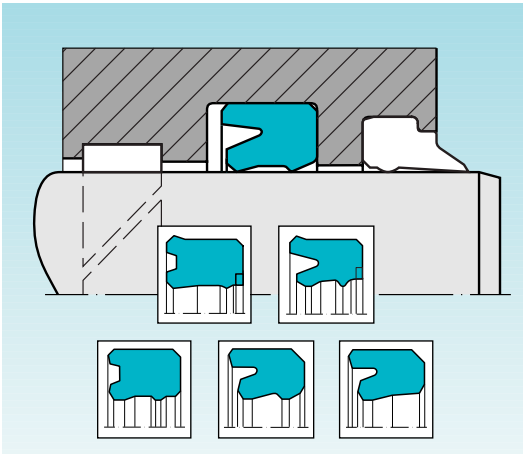


Zurcon® Rimseal

Zurcon® Rimseal is a single acting rod seal energised by an elastomeric O-ring. The geometry produces a pressure characteristic similar to that of the Turcon® Stepseal® K and thus high static and dynamic tightness. The installation spaces are identical to those used for the Turcon® Stepseal® K, making the Zurcon® Rimseal an ideal secondary system element. The main application fields are rod seals with redundant sealing systems and double wipers, i.e. in mobile hydraulics, in machine tools and injection moulding machines and in general machine construction.

* in tandem

Ø Range	Pressure Range*	Temperature Range	Velocity*
8 - 1700 mm	25 MPa	-30°C +100°C	5 m/s



U-Cup

Single acting sealing element. Available with or without secondary sealing lip for sealing dynamically loaded rods and plungers. Installed in closed grooves including grooves to ISO 5597. High sealing effect, abrasion resistant.

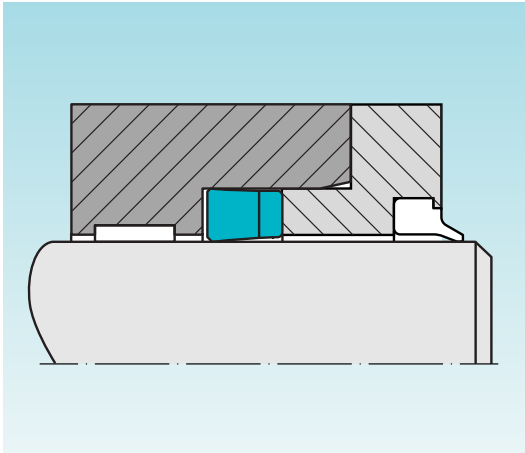
Ø Range	Pressure Range	Temperature Range	Velocity
6 - 300 mm	40 MPa	-30°C +80°C	0.5 m/s





Balsele

Single acting compact seal comprising an elastomer sealing lip, supported by a fibre re-enforced back with optional integrated plastic back-up ring for high pressure applications. Recommended for use in standard hydraulic cylinders, presses and mobile hydraulics.

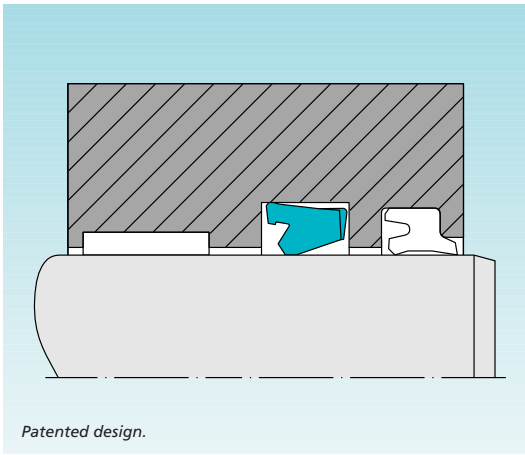


Ø Range	Pressure Range	Temperature Range	Velocity
10 - 1200 mm	40 MPa	-30°C +130°C	0.5 m/s



Zurcon®L-Cup®

New single acting rod seal. The Zurcon®L-Cup® is both an alternative to the U-cup and a highly effective new sealing system component offering optimised sealing performance and extended service life. Exceptionally low friction. High wear resistance. Backpumping ability. High static and dynamic tightness.



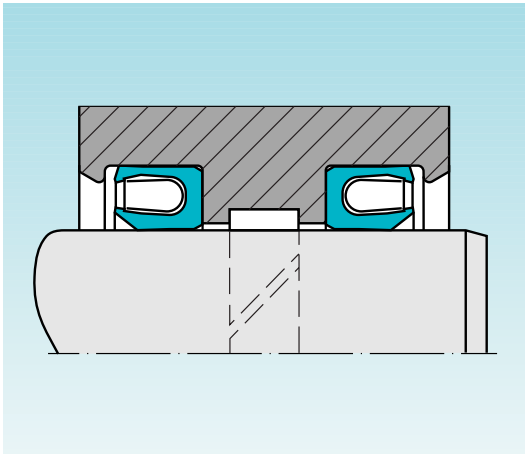
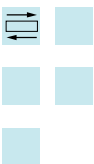
Patented design.

Ø Range	Pressure Range	Temperature Range	Velocity
8 - 270 mm	40 MPa	-30°C +80°C	0.5 m/s



Turcon®Variseal®M2

Single acting sealing element comprising a U-shaped Turcon® ring and stainless energising finger spring. Low friction with no stick-slip, minimal break out force and high wear resistance. Resistant to most liquids and chemicals. Unlimited shelf life.



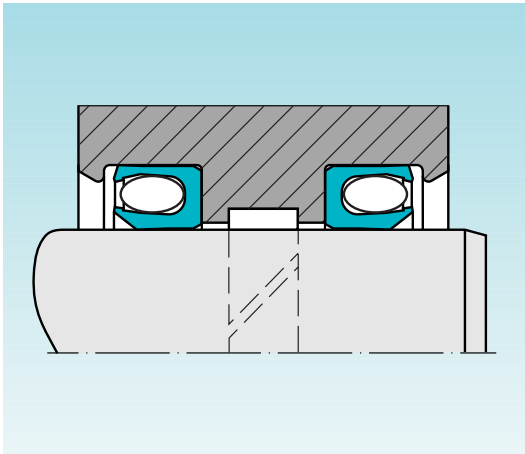
Ø Range	Pressure Range	Temperature Range	Velocity
6 - 2600 mm	45 MPa	-70°C +260°C	15 m/s



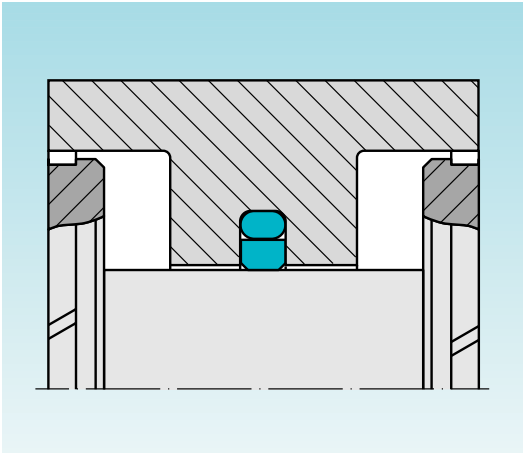
Turcon®Variseal®W

The Turcon®Variseal®W is a single acting rod seal energised by a special helical spring.

The advantage of the Variseal®W lies in its low friction and relatively constant preloading force over a relatively large deformation range. The Variseal®W is used wherever friction has to be kept within a narrow tolerance zone, e.g. in pressure switches.



Ø Range	Pressure Range	Temperature Range	Velocity
6 - 2600 mm	45 MPa	-70°C +260°C	15 m/s

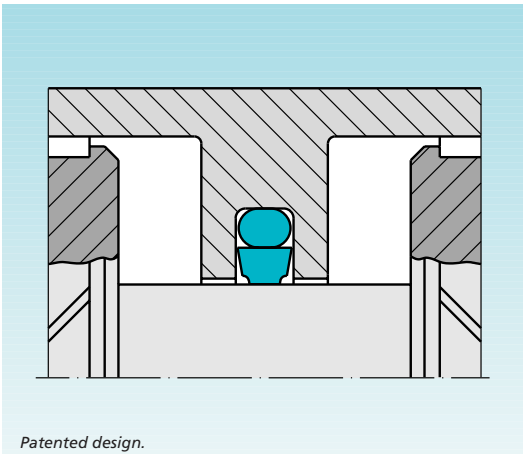


Turcon®Glyd Ring®

Turcon®Glyd Ring® is a double acting O-ring energised rod seal for dynamic applications. Turcon®Glyd Ring® provides low friction with no stick-slip, minimal break out force and high wear resistance.



Ø Range	Pressure Range	Temperature Range	Velocity
8 - 2700 mm	80 MPa	-45°C +200°C	15 m/s



Patented design.

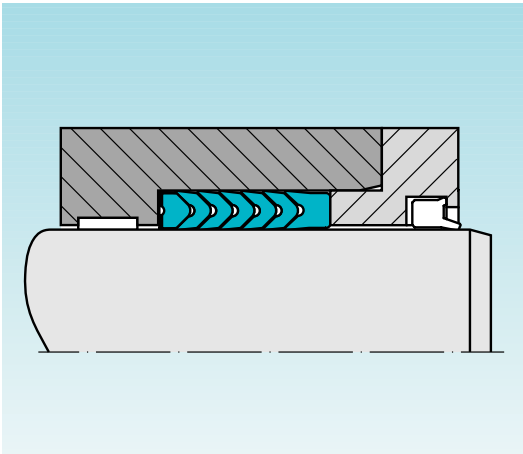
Turcon®Glyd Ring®T

A further development of the Turcon®Glyd Ring® with newly developed profile. It provides improved leakage control and better resistance to extrusion.

Double acting O-ring energised rod seal for dynamic applications. Installed in grooves to ISO 7425. Low friction with no stick-slip, minimal break out force and high wear resistance.



Ø Range	Pressure Range	Temperature Range	Velocity
3 - 2000 mm	80 MPa	-45°C +200°C	15 m/s

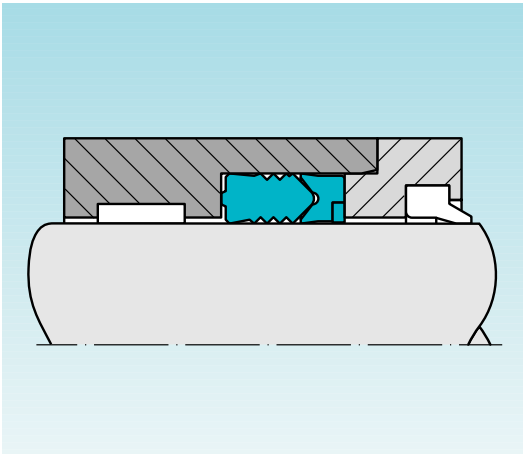


VEEPAC

VEEPAC is an assembly of fabric re-enforced, highly wear resistant, chevron sealing rings with a support ring and a pressure energising ring. VEEPAC seals are designed with preloaded radial lips to provide good sealing results. They are very robust, insensitive to sealing surface finish and dimensionally adjustable. VEEPAC seals are especially suited to applications where there is a risk of damage and contamination.



Ø Range	Pressure Range	Temperature Range	Velocity
20 - 1000 mm	40 MPa	-30°C +200°C	0.5 m/s



Selemaster SM

Compact rod seal designed for VEEPAC grooves and high pressure applications. The multi-lip elastomer sealing element is supported by a fibre re-enforced back with an integrated back-up ring.

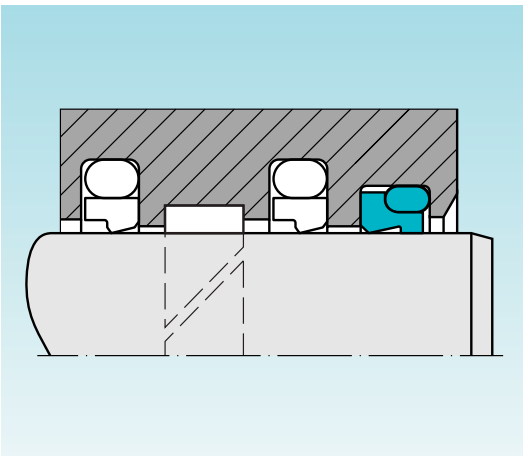
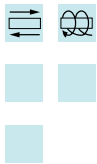


Ø Range	Pressure Range	Temperature Range	Velocity
15 - 335 mm	70 MPa	-40°C +130°C	0.5 m/s



Turcon®Excluder®2

Double acting O-ring energised scraper which also prevents the ingress of mud or other contaminants to increase effective system service life. Secondary sealing capability for use with back pumping performance seals e.g.Turcon®Stepseal®K and Zurcon®Rimseal.

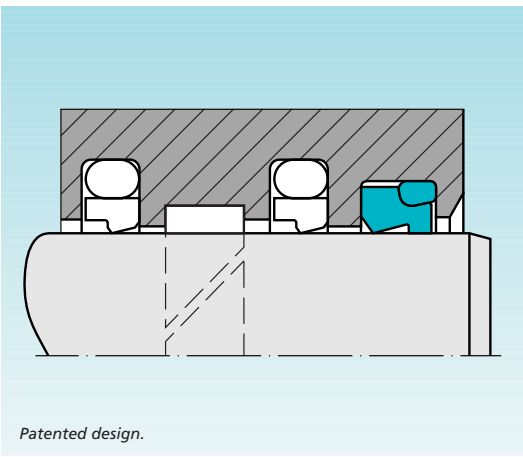
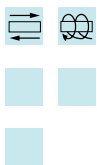


Ø Range	Temperature Range	Velocity
6 - 2600 mm	-45°C +200°C	15 m/s



Turcon®Excluder®5

Double acting O-ring energised scraper which also prevents the ingress of mud or other contaminants to increase effective system service life. Secondary sealing capability for use with back pumping performance seals e.g. Turcon®Stepseal®K and Zurcon®Rimseal. Ideal for heavy duty mobile hydraulics applications. Primarily available in Turcon® or Zurcon® materials.



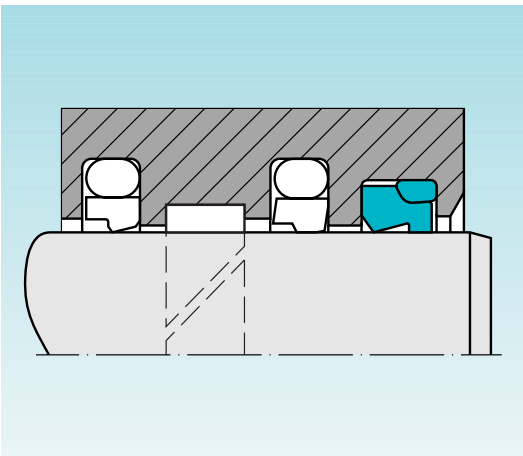
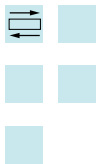
Patented design.

Ø Range	Temperature Range	Velocity
20 - 2600 mm	-45°C +200°C	15 m/s



Zurcon®Excluder®500

Double acting O-ring energised scraper which prevents the ingress of mud or other contaminants to increase effective seal service life. Secondary sealing capability for use with back pumping performance seals e.g. Turcon®Stepseal®K and Zurcon®Rimseal. Cost effectively produced for the same gland dimensions as Turcon®Excluder®5 in injection moulded polyurethane Zurcon®Z05.

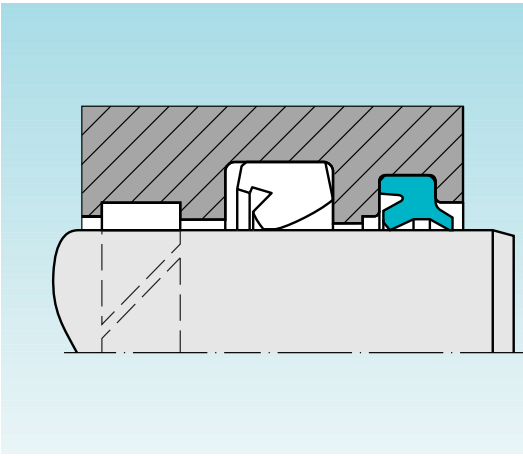


Ø Range	Temperature Range	Velocity
12 - 130 mm	-30°C +80°C	1 m/s

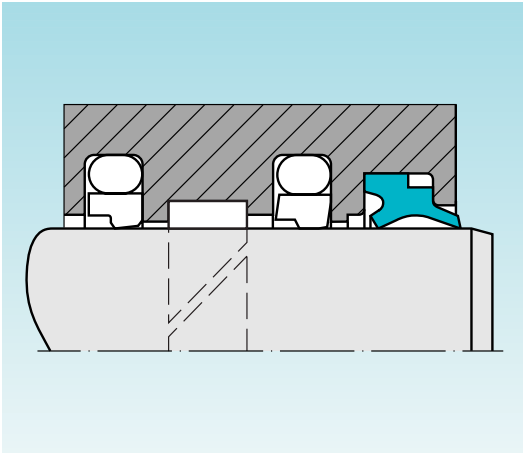


Scraper DA22/RSW

Double acting scraper with a sealing and a scraping lip in injection moulded polyurethane. Installed in grooves to ISO 6195 type C. For application in conjunction with seals with a back pumping performance, e.g. Turcon®Stepseal®K and Zurcon®Rimseal.



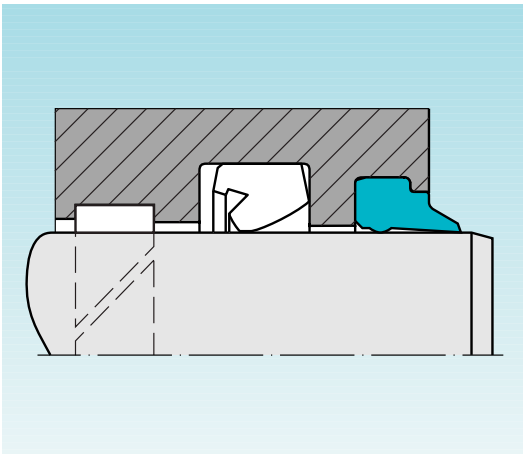
Ø Range	Temperature Range	Velocity
5 - 180 mm	-30°C +80°C	1 m/s



Scraper DA17

Double acting scraper with both a sealing and a scraping lip in nitrile (NBR). For application in conjunction with seals with back pumping performance, e.g. Turcon®Stepseal®K and Zurcon®Rimseal.

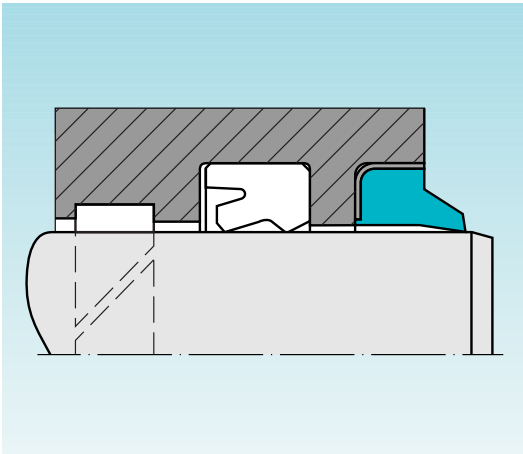
Ø Range	Temperature Range	Velocity
10 - 440 mm	-30°C +110°C	1 m/s



Scraper ASW

Injection moulded polyurethane design with one scraping lip and inner support bead to improve seating in the groove. Good abrasion and tear resistance.

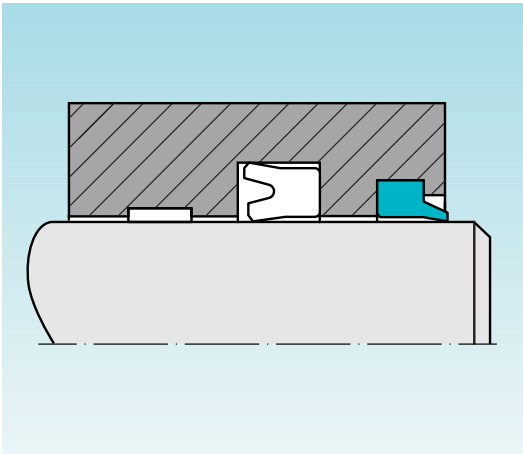
Ø Range	Temperature Range	Velocity
8 - 125 mm	-30°C +80°C	1 m/s



Scraper SA

Metal caged scraper with nitrile (NBR) lip. Installed in open grooves including grooves to ISO 6195 Type B.

Ø Range	Temperature Range	Velocity
6 - 270 mm	-30°C +110°C	1 m/s



Scraper WRM

Scraper WRM is a single-acting, heat-moulded elastomer scraper. It possesses a comb-profile sealing surface on its outer diameter which guarantees a firm seat in the groove. It is easy to install in closed grooves.

Ø Range	Temperature Range	Velocity
12 - 260 mm	-30°C +110°C	1 m/s



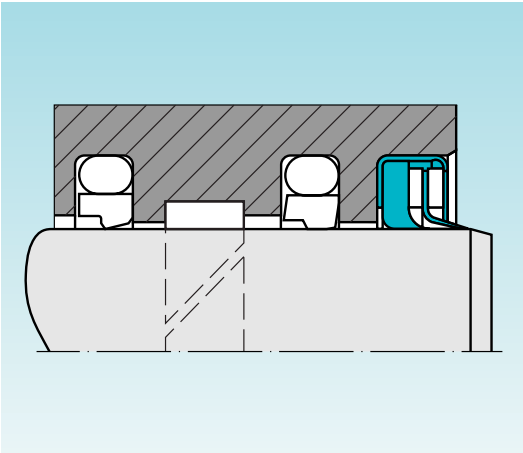


Metal Scraper

Metal scraper consists of a thin spring brass scraper lip in tandem with a nitrile (NBR) wiping lip encased in a steel shell. Capable of removing dried or frozen mud, tar, ice and other contaminants from the rod. Also available in stainless steel with FKM wiper lip.



Ø Range	Temperature Range	Velocity
12 - 220 mm	-40°C +120°C	1 m/s

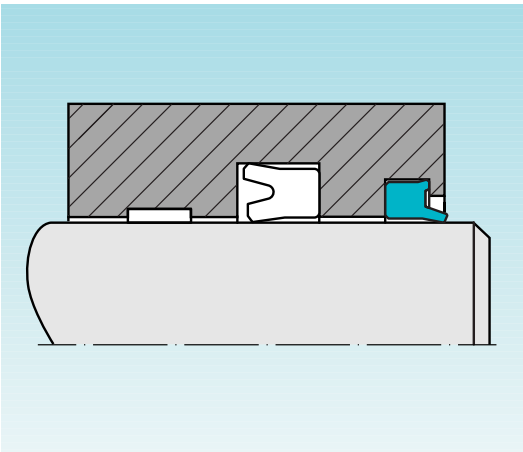


Scraper PW/WNE

Single acting polyurethane scraper with a static sealing lip to prevent any water or dirt ingress to the grooves. Recommended for applications in mobile hydraulics and agricultural machinery.



Ø Range	Temperature Range	Velocity
4 - 280 mm	-30°C +80°C	1 m/s

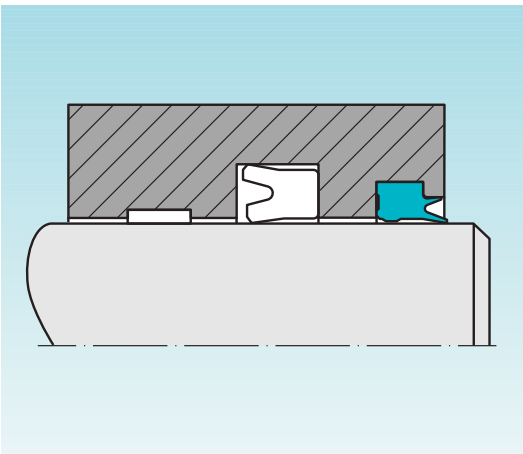


Scraper WNW

Single acting polyurethane scraper with a second flexible sealing lip at the base / recess of the groove to seal the static side effectively. For installation into ISO grooves with the added feature of a second flexible sealing lip for static sealing. Main application: mobile hydraulics.



Ø Range	Temperature Range	Velocity
16 - 80 mm	-30°C +80°C	1 m/s

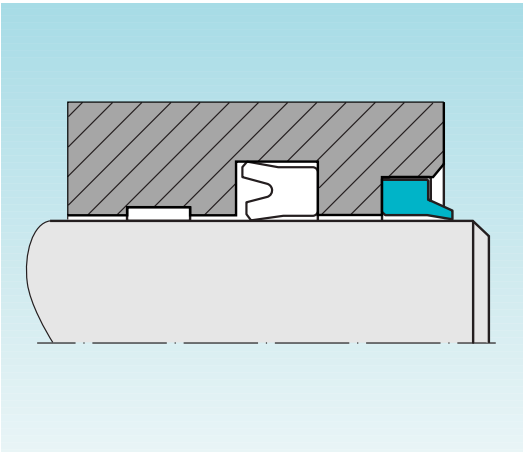


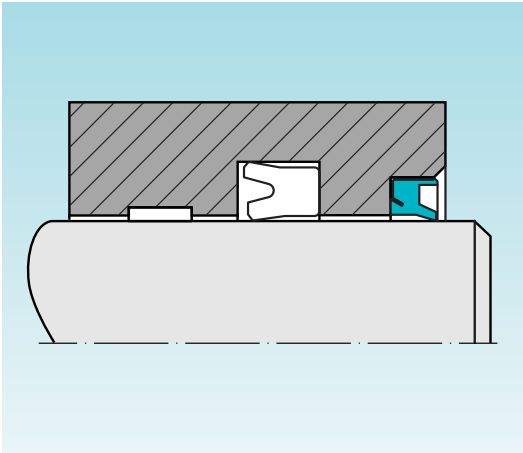
Scraper WRM/C, WRM/PC

A metal caged elastomer scraper (WRM/C) for easy installation in open grooves. WRM/PC comprises the same design but with a polyurethane scraper element, providing high abrasive resistance and effective scraping performance. Applications for both designs: standard hydraulic cylinders in mobile hydraulics and agricultural machinery.



Ø Range	Temperature Range	Velocity
6-270 mm	-30°C +110°C	1 m/s



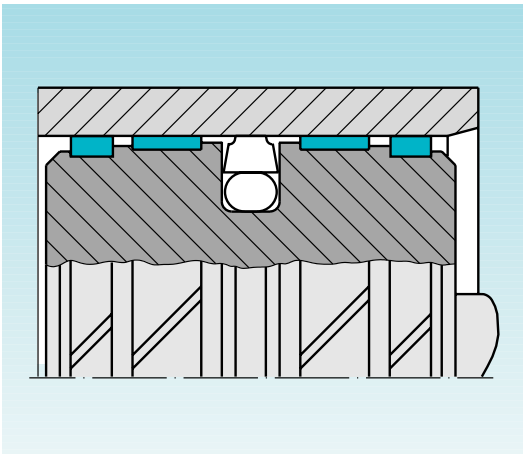


Scraper SWP

A single acting polyurethane scraper encased in a steel carrier. Excellent wear resistance and easy installation into open grooves. Recommended for mobile hydraulic applications and as a rotary link pin seal.

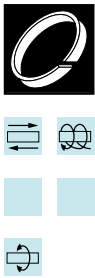


Ø Range	Temperature Range	Velocity
25 – 190 mm	–30°C +80°C	1 m/s

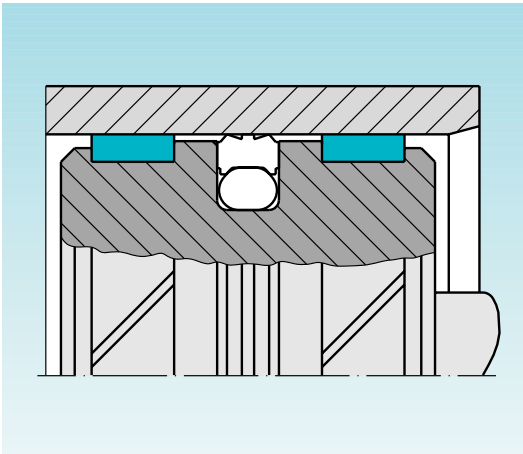


Turcite®Slydring®

Prevents metal to metal contact between piston/rod and bore/gland and absorbs transverse loads. Turcite® material gives good load capacity with low friction and stick-slip-free operation. Protects critical sealing lips from contamination and dieseling effects. Cost effective, allows designers freedom in hardware material selection. Higher static loads are permissible.

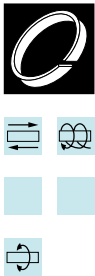


Ø Range	Dynamic Load	Temperature Range	Velocity
8 - 4000 mm	15 N/mm²	–60°C +200°C	15 m/s

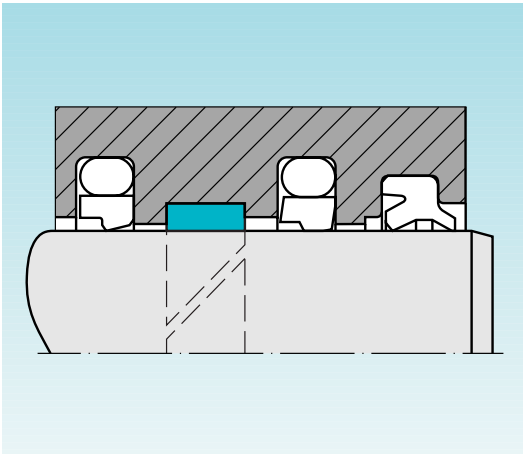


HiMod®Slydring®

Prevents metal to metal contact between piston/rod and bore/gland and absorbs transverse loads. The modified polymeric material provides an economic solution for applications with medium transverse loads, while giving good wear and compression properties. Provides easy snap-fitting, good dry running and wiping performance. Higher static loads are permissible.

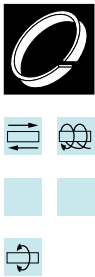


Ø Range	Dynamic Load	Temperature Range	Velocity
8 - 300 mm	75 N/mm²	–40°C +130°C	1 m/s



Luytex®Slydring®

Prevents metal to metal contact between piston/rod and bore/gland and absorbs high transverse loads. Luytex® is a resin impregnated fine weave fabric material with added lubricants capable of withstanding high side loads, damping vibrations and embedding foreign particles. Higher static loads are permissible. Special materials available to 250°C (482°F).

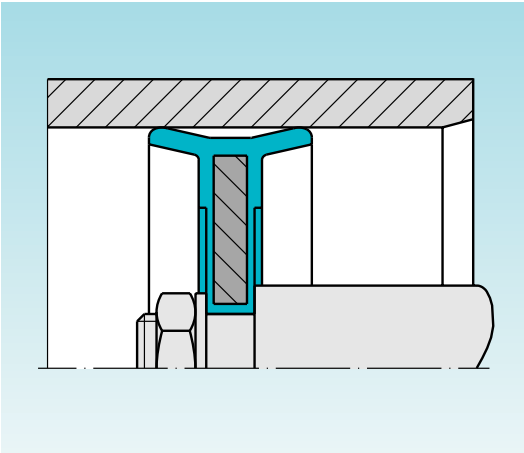


Ø Range	Dynamic Load	Temperature Range	Velocity
8 - 1500 mm	90 N/mm²	–60°C +130°C	1 m/s



Complete Pneumatic Piston PK

A complete double acting piston supplied to CETOP sizes. Comprises of a moulded nitrile (NBR) piston head with vulcanised metal support ring. Fields of application include oily and non processed compressed air and dry oil free air.

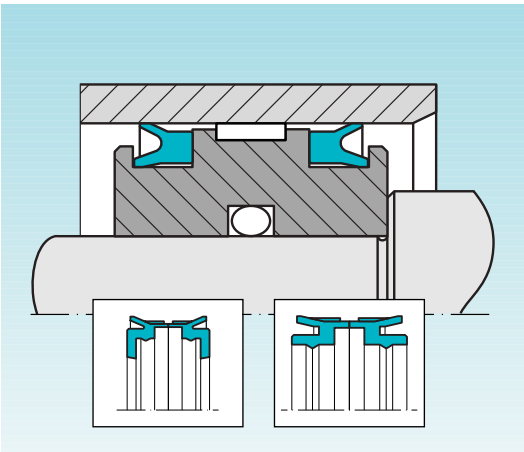


Ø Range	Pressure Range	Temperature Range	Velocity
25 - 200 mm	1.2 MPa	-30°C +100°C	1 m/s



Pneumatic Piston Seal

The pneumatic product range offers single and double acting polyurethane seals for piston applications. Made from extremely wear resistant material, these seals fit into small housings and are easily installed. The pneumatic piston seals range is recommended for standard and magnetically actuated cylinders.

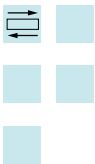
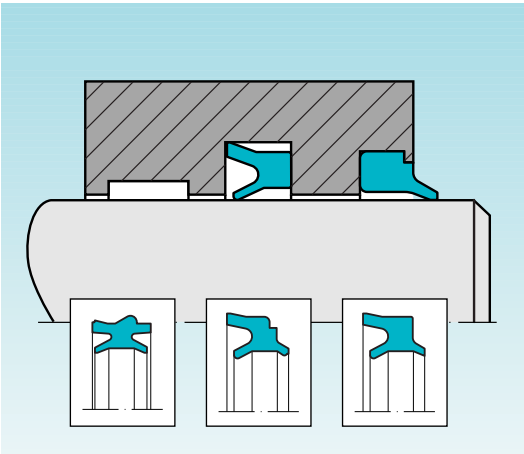


Ø Range	Pressure Range	Temperature Range	Velocity
66 - 200 mm	1.6 MPa	-30°C +80°C	1 m/s



Pneumatic Rod Seal and Rod Seal-Scraper Combination

Pneumatic rod seals are available as standard polyurethane lip seals and rod seal-scraper combinations for closed and open housings. The special polyurethane compounds provide high abrasion resistance and low friction with optimal cost effectiveness. Recommended for applications in standard cylinders - installed with a separate scraper - or as rod seal-scraper combination.

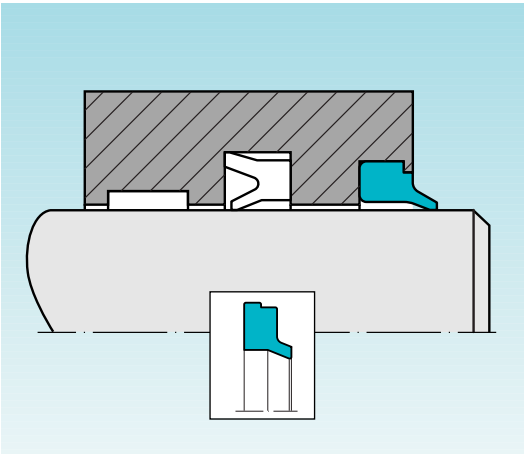


Ø Range	Pressure Range	Temperature Range	Velocity
3 - 100 mm	1.6 MPa	-30°C +80°C	1 m/s

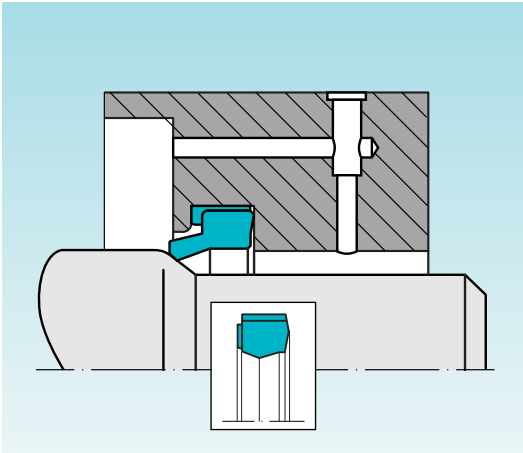


Pneumatic Scraper

Two versions of scrapers which snap easily into open or semi-open grooves. The special flexible lip design protects the cylinder from contamination. Where space is at a premium, the 3 mm long type AWBB, is recommended (guiding units only).



Ø Range	Pressure Range	Temperature Range	Velocity
6 - 60 mm	-	-30°C +80°C	2 m/s



Pneumatic Cushioning Seal

Cushioning seals provide the end of stroke damping in pneumatic cylinders, eliminating the need for check valves. These polyurethane, high performance seal elements are remarkably user friendly and provide automatic centering and easy, snap-in installation.



Ø Range	Pressure Range	Temperature Range	Velocity
6 - 60 mm	1.6 MPa	-30°C +80°C	1 m/s

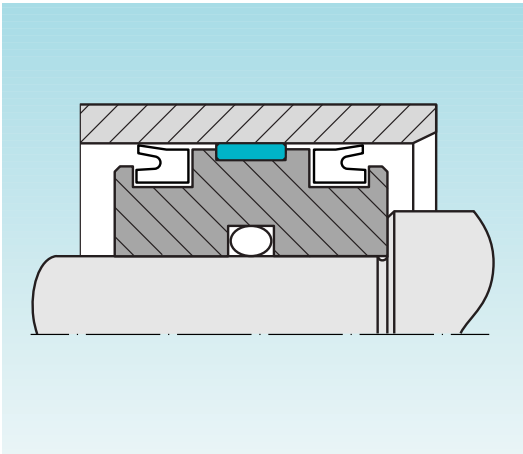


Non-standard Pneumatic Seal

Standard seals are frequently not appropriate for non-reciprocating and high volume applications. As your development partner, we can work with you to design, develop and supply precision elements and sealing systems in accordance with your requirements.



Ø Range	Pressure Range	Temperature Range	Velocity
-	-	-	-

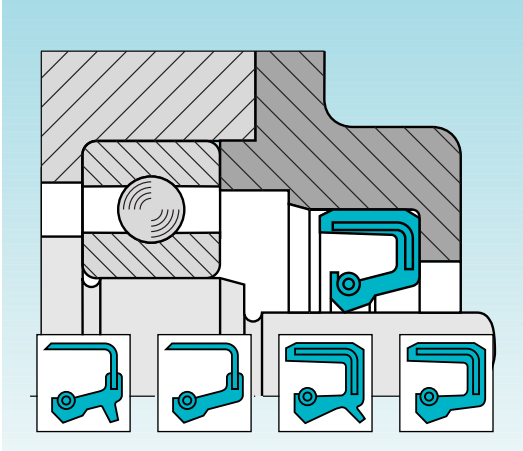


Pneumatic Wear Ring for Pistons and Rods

A complete range of seals and bearings for pneumatics with the most common dimensions for pistons and rods. The guide rings are made of a specially developed, self lubricating plastic material to provide low friction, wear resistance, long term compression stability and excellent service life.



Ø Range	Dynamic Load	Temperature Range	Velocity
8 - 250 mm	40 N/mm²	-40°C +110°C	1 m/s



Radial Oil Seal

Radial lip seal design for shafts and spindles. Consisting of a rubber sleeve, metal stiffening ring and a spiral tensioning spring. Oil seals provide long lasting sealing efficiency. Available with or without external dust lip, they are self retained in an open groove to ISO 6194 and DIN 3760.

Versions available without tensioning spring which can be used as a scraper and for helical movements.



Ø Range	Pressure Range	Temperature Range	Velocity
4 - 500 mm	0.05 MPa	-40°C +170°C	12 m/s

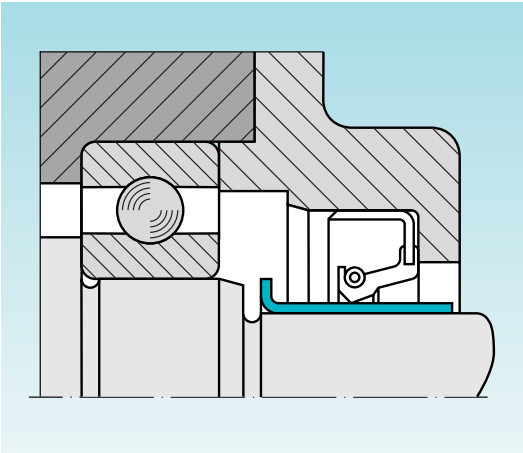


Shaft Repair Kit

Suitable for the repair of worn shafts or on OEM installation to avoid the need to harden the shaft. Shaft repair kits are a thin walled stainless steel surface which do not require any modification to the existing seal sizes. Tools for installation on the shaft are included in the kit.



Ø Range	Pressure Range	Temperature Range	Velocity
12 - 200 mm	–	–	–

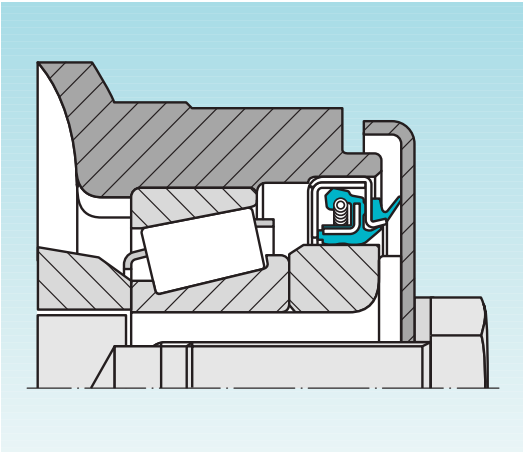


STEFA System 500/3000/5000 Cassette Seals

The STEFA System is a completely enclosed seal providing the functions of oil seals, wear sleeve and dust protection in one unit. This seal generation has been developed to meet the ever increasing requirements of long service-life, high functional reliability, environmental safety and easy installation. STEFA System 500/3000/5000 Cassette Seals are used in heavy duty vehicle axes, hubs and industrial gearboxes.



Ø Range	Pressure Range	Temperature Range	Velocity
90 - 320 mm	0.05 MPa	–30°C +200°C	10 m/s

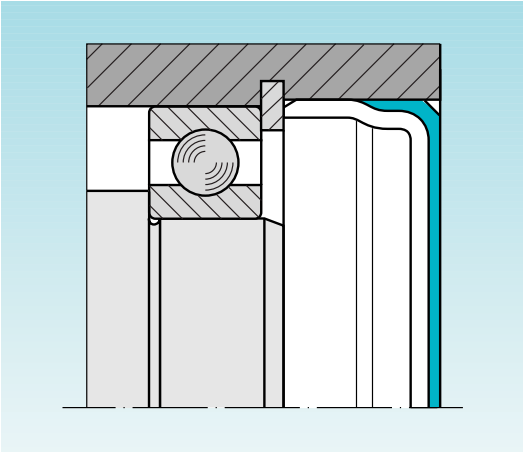


Sealing Cap

Sealing Caps consist of a metallic banding and have a rubber coated front. They are applied in order to seal gaps, core removing holes or bearing seals. They are often used as a substitute for sealing flanges and covers in gear manufacture.

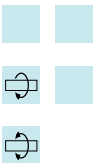


Ø Range	Pressure Range	Temperature Range	Velocity
16 - 180 mm	–	–30°C +100°C	–

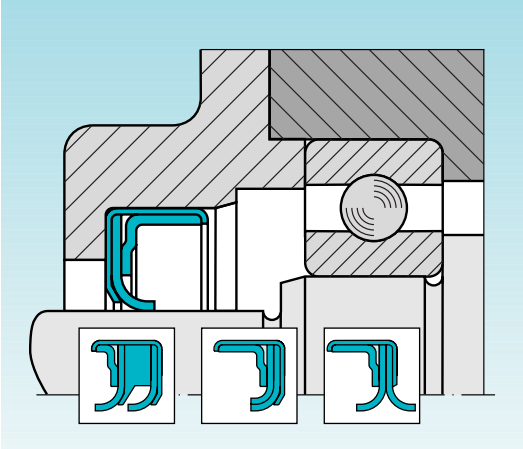


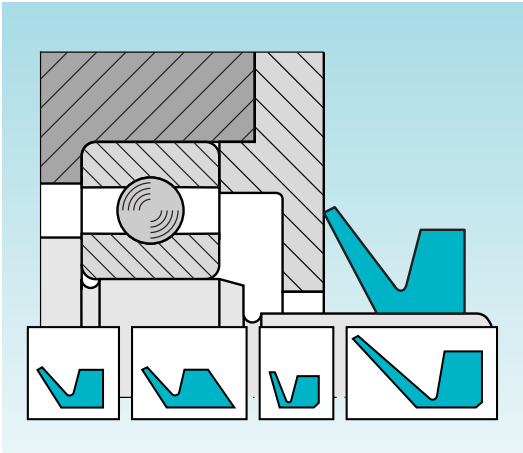
Varilip® Radial Lip Shaft Seal

A high performance rotary shaft seal comprising Turcon® sealing lip(s) for low friction and wear, in a stainless steel case. May operate either lubricated or unlubricated. Variations include single and double lipped versions with or without an excluder lip. Installs in ISO 6194/1 and DIN 3760 open groove dimensions.



Ø Range	Pressure Range	Temperature Range	Velocity
6 - 170 mm	2 MPa	–60°C +200°C	40 m/s





V-Ring®

A flexible axial lip seal for shafts and bearings. The V-Ring® fits directly into the shaft and seals axially against a counterface e.g. shaft collar, thrust washer, roller bearing face etc. Provides reliable sealing against dust, dirt, oil, grease etc. with low friction. Available in nitrile (NBR) and fluorocarbon (FKM).



Ø Range	Pressure Range	Temperature Range	Velocity
3 - 2000 mm	–	–40°C +180°C	12 m/s

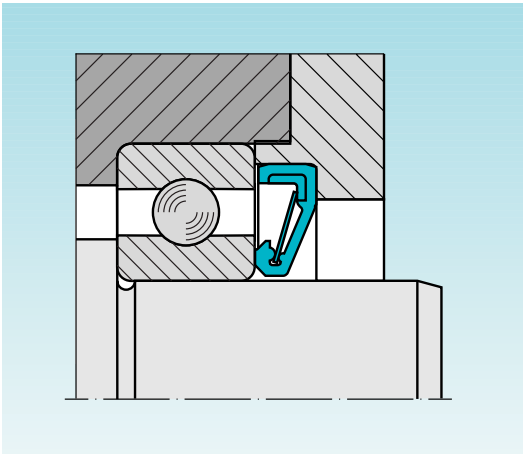


GAMMA Seal

An axial rotary seal to exclude contamination, moisture, grease etc. consisting of an elastomer sealing lip contained in a metal carrier - able to cope with arduous static and dynamic conditions in mobile hydraulics and power transmission applications.



Ø Range	Pressure Range	Temperature Range	Velocity
10 - 225 mm	–	–30°C +200°C	12 m/s

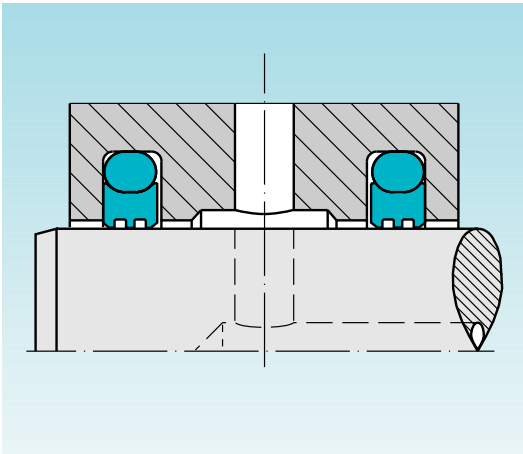


Axial Shaft Seal

An axial lip seal for shafts and bearings. Consists of a rubber sleeve, a metal stiffening ring and an axial spring. This sealing element seals axially against any suitable surface e.g. the front of a ball race or shaft collar. Available with either an inner or outer lip seal.



Ø Range	Pressure Range	Temperature Range	Velocity
6 - 180 mm	0.5 MPa	–40°C +200°C	30 m/s



Turcon® Roto Glyd Ring®

Double acting O-ring energised seal designed for rotating, oscillating and helically moving pistons, rods and shafts. Installed in grooves to ISO 7425. Available in single acting version for higher rotating speeds.



Ø Range	Pressure Range	Temperature Range	Velocity
6 - 2500 mm	30 MPa	–45°C +200°C	2 m/s

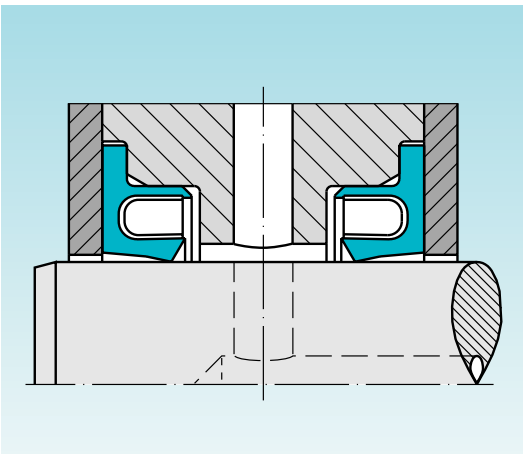


Turcon® Roto Variseal®

Single acting sealing element comprising a U-shaped Turcon® ring and stainless energising finger spring. Low friction with no stick-slip, minimised break out force and high wear resistance. Constrained flange eliminates potential seal rotation. Resistant to most liquids and chemicals. Unlimited shelf life.



Ø Range	Pressure Range	Temperature Range	Velocity
5 - 2500 mm	15 MPa	-100°C +260°C	2 m/s



Rotary Seals

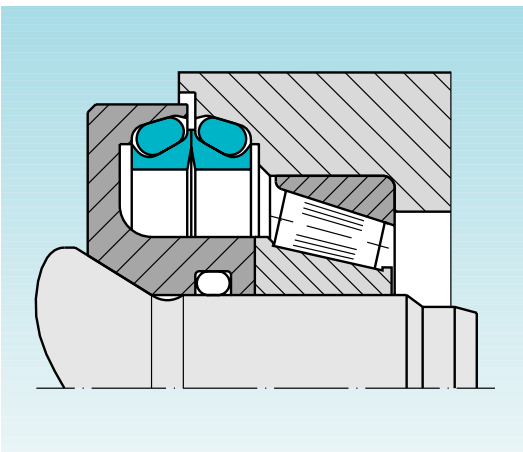


Heavy Duty Seal

Heavy duty seals prevent lubricant from escaping from axles and prevent the ingress of dirt. Applications include gearboxes and axles on tracked vehicles, heavy trucks and wheel loaders etc. Available in two versions, type DO and DF for diameters up to 590 mm. The face seals are made in special purpose hard cast alloy or roller bearing steel 100Cr6 with elastomers made of nitrile (NBR).

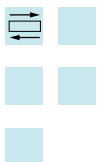


Ø Range	Pressure Range	Temperature Range	Velocity
35 - 590 mm	0.3 MPa	-40°C +120°C	3 m/s

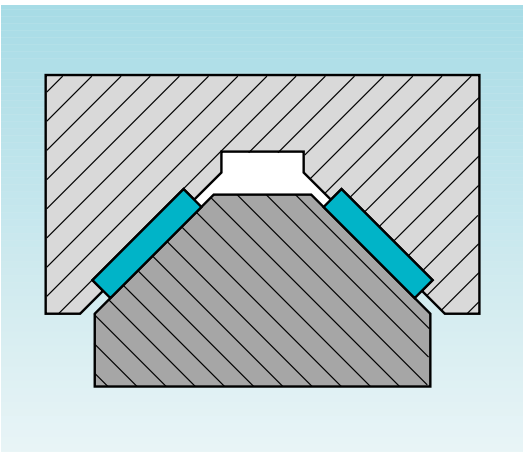


Turcite®-B Slydway®

Turcite®-B Slydway® is a low friction linear bearing strip material for use, primarily, on the ways and gibs of machine tools. It provides low friction, stick-slip free operation, long life and minimum wear. Turcite®-B Slydway® is applied using a two part epoxy resin after cleaning and degreasing the bare metal surface thoroughly. The Turcite®-B Slydway® is dimensionally stable, maintenance free and can be operated with or without lubrication.



Ø Range	Load	Temperature Range	Velocity
-	9 N/mm ²	up to 260°C	1 m/s

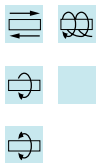


Linear Bearing & Bushes

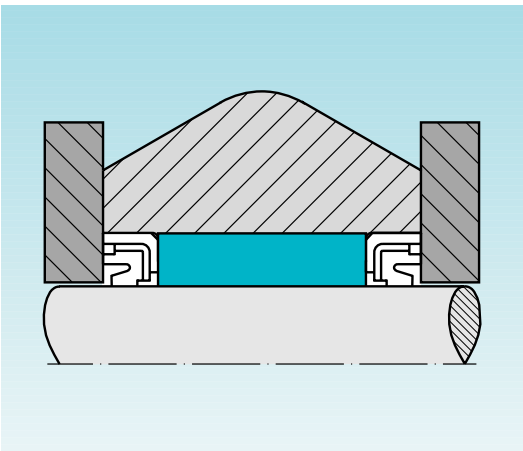


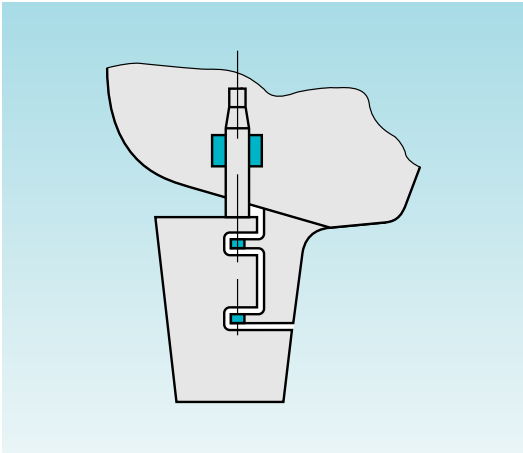
Luytex®, Turcite® and HiMod® Bearings

High load bearings made from Turcite® and HiMod® engineered thermoplastics or Luytex® synthetic composites. The bearings are dimensionally stable, wear resistant and provide excellent performance under dry and boundary lubrication conditions.



Ø Range	Load	Temperature Range	Velocity
2 - 3000 mm	120 N/mm ² static 90 N/mm ² dynamic	-60°C +250°C	6 m/s





Orkot® Marine Bearings

A non-asbestos synthetic composite material incorporating solid lubricants. Orkot® Marine Bearings have exceptional wear resistance, and virtually no swell in water. Their elasticity, compared to metal bearings, permits edge loading and misalignment, under the heaviest loads. They provide effective and maintenance free solutions where (salt) water is involved. Hydrodynamic running is possible when velocities are at least 1 m/s.

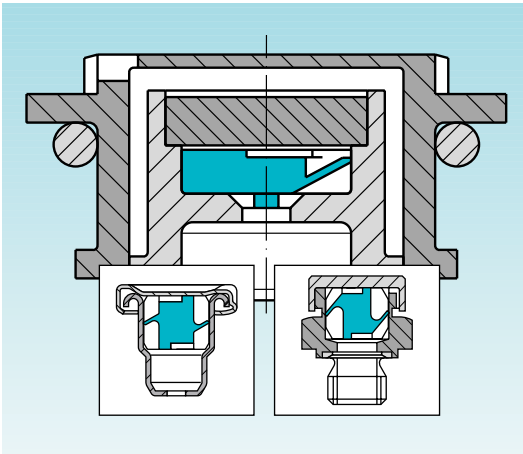
Ø Range	Load	Temperature Range	Velocity
6 - 2000 mm	120 N/mm² static	-60°C +130°C	6 m/s
	90 N/mm² dynamic		



HiMod® High Modulus Plastics

A wide range of high performance, high modulus thermoplastics for use as custom moulded components, reinforcing rings and back-up rings. Grades available to optimise on structural, chemical, electrical and high performance bearing applications.

Temperature to 300°C



Ventseal

Ventseal is a cost effective engineered rubber venting valve offering premium performance. Available in a wide range of design such as a single acting vent insert up to a perfect tuned double acting ventilation system. Ventseal offers superior tightness in combination with the advantage of a reliable single acting rubber vent insert opening and closing characteristics. Due to the optional tuning control of all piece parts involved Ventseal is adaptable to a full range of low pressure application from 50 mbar up to <2.5 bar. The Ventseal types are primarily used as ventilation unit in applications like e.g. VRLA batteries, NiCad batteries, gearboxes, axles and automatic transmissions. Ventseal is suitable for a wide range of other low pressure applications.

Temperature -40°C +200°C



Custom made Elastomeric Products

Custom moulded elastomeric and thermoplastic components to close tolerances and in a wide range of engineered materials including Isolast®. Produced with design assistance or to customer drawing.

Temperature to 325°C





Custom made PTFE Components

A wide range of filled and unfilled engineered PTFE components for all facets of industry including valve seats, pump diaphragms, chevron packings, nozzles, bellows, guides, bearings, electrical insulators, etc. Produced with design assistance or to Customer drawing.

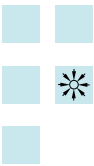
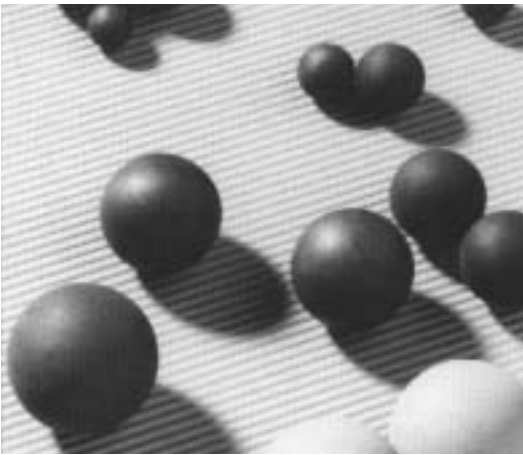


Temperature to 260°C



Ground Balls

Ground Balls are rubber spheres of high dimensional accuracy. They guarantee sealing without leaks, are insensitive to dirt and produce little noise. Ground Balls are used primarily as sealing elements in non-return check valves to seal against hydraulic fluid, water or air.

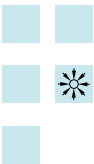


Temperature -30°C +200°C



Elastomer Diaphragms

Diaphragms are available in many forms and designs in a variety of homogeneous or fabric-reinforced elastomers. Technically challenging applications are solved through composite design and material technology including the application of PTFE and other barrier materials for chemically aggressive environments. Plastic or metal-to-rubber bonding can be incorporated to simplify assembly and provide precision control of movement or pressure. Diaphragms are normally engineered as complete customised solutions to solve particular application challenges. Applications include automotive and aerospace components, chemical processing, sanitary systems and water management.



Pressure Range (not re-enforced)	Pressure Range (re-enforced)	Temperature Range
up to 0.05 MPa	10 MPa	-50°C +325°C