

# seal!supply

## Product catalogue



Static  
seals



Rotary  
seals



Hydraulic  
seals



Pneumatic  
seals



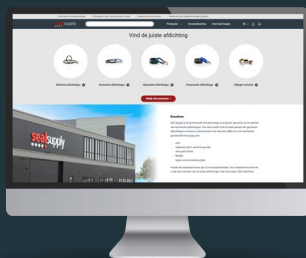
Turned  
seals



## Learn more about Seal Supply

Seal Supply is a specialist in the sealing business with years of experience. It has set itself the goal of delivering any requested seal, as customers in industry and technical trade like to see:

- ✓ good stock
- ✓ with 24x7 insight and ordering
- ✓ excellent service and advice
- ✓ flexible
- ✓ competitive prices



quality  
service  
24x7  
knowhow  
flexible

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## Brands




# Static seals

	Product	Description	Type	Materials [various hardnesses]	Dimensions
	<b>O-ring</b>		OR-10	NBR, FKM, EPDM, VMQ, HNBR, FFKM, FVMQ, FEPM, ACM, CR, SBR, CSM, ECO, BR, IIR, IR, AU, EU, NR, PTFE	DIN 3771-1, ISO 3601-1, SMS 1586, JIS B 2401, AS 568, BS 1806, BS 4518, NF T47-501, R 0 up to R 27, R 28 up to R 88
	<b>O-ring</b>	FEP encapsulated	OR-11	FKM / FEP encapsulated VMQ / FEP encapsulated	
	<b>O-ring</b>	FPA encapsulated	OR-12	FPA encapsulated	
	<b>O-ring of cord</b>	glued	OR-13	NBR, FKM, EPDM, VMQ	
	<b>O-ring of cord</b>	vulcanized	OR-14	NBR, FKM, EPDM, VMQ	
	<b>X-ring</b>		XR-10	NBR, FKM, ...	AS 568
	<b>Backup ring</b>	concave	BR-10	NBR, FKM	
	<b>Backup ring</b>	closed	BR-11	PTFE, POM, PEEK, NBR, FKM, AU, ...	
	<b>Backup ring</b>	cut	BR-12	PTFE, POM, PEEK, NBR, FKM, AU, ...	
	<b>Backup ring</b>	spiral	BR-13	PTFE	
	<b>Backup ring</b>	closed	BR-11	PE 55D	
	<b>Flat ring</b>	moulded	WR-10	NBR, FKM, EPDM, VMQ, ...	
	<b>Flat ring</b>	cut	WR-11	NBR, FKM, EPDM, VMQ, ...	
	<b>Flat ring</b>	die-cut	WR-12	NBR, FKM, EPDM, VMQ, ...	



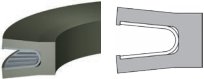

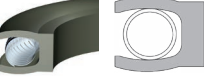
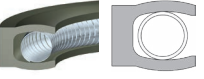




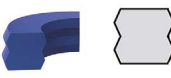

# Static seals

	Product	Description	Type	Materials [various hardnesses]	Dimensions	Notes
	<b>D-ring</b>		WR-14	NBR, FKM, EPDM, VMQ, ...		
	<b>Profile seal</b>	DIN 3869	WR-15	NBR, FKM, EPDM, ...	DIN 3869	
	<b>Kantseal</b>		KS	NBR, FKM, ...		
	<b>Hygienic seal</b>	standard version	HS-10	NBR, EPDM, VMQ, FKM, HNBR, PTFE, ...	DIN 11851	FDA 177.2600
	<b>Hygienic seal</b>	high performance	HS-11	NBR, EPDM, VMQ, FKM, HNBR, PTFE, ...		FDA 177.2600
	<b>Hygienic seal</b>	with collar	HS-12	NBR, EPDM, VMQ, FKM, HNBR, PTFE, ...		FDA 177.2600
	<b>O-ring cord</b>	extruded	EP-10	NBR, FKM, EPDM, VMQ, ...		
	<b>Profile cord</b>	extruded - as per drawing	EP-13	NBR, FKM, EPDM, VMQ, ...		
	<b>Bonded seal</b>	standard version	BS-10	NBR, FKM, ...		
	<b>Bonded seal</b>	self-centering	BS-11	NBR, FKM, ...		
	<b>Bonded seal</b>	self-centering	BS-14	NBR, FKM, ...		
	<b>Bonded seal</b>	self-centering	BS-15	NBR, FKM, ...		
	<b>Bonded seal</b>	outside sealing	BS-13	NBR, FKM, ...		



## Quality

Seal Supply has a global network with leading manufacturers, allowing us to offer a good selection of seals with a wide range of products in the sealing business.

	Product	Description	Type	Materials [various hardnesses]	Notes
	<b>Flange seal</b>	outside closing	FS-10	PTFE compound meander spring, stainless steel	
	<b>Flange seal</b>	inner sealing	FS-11	PTFE compound meander spring, stainless steel	
	<b>Flange seal</b>	outside closing	FS-12	PTFE compound helicoil spring, stainless steel	
	<b>Flange seal</b>	inner sealing	FS-13	PTFE compound helicoil spring, stainless steel	
	<b>Custom made</b>	as per drawing	CP-10	Available in various materials	
	<b>O-ring cord Service box</b>		SK-10	NBR, FKM, EPDM, VMQ, ...	
	<b>O-ring Service box</b>	Box G Box H	SK-22 SK-26	NBR, FKM, EPDM, VMQ, ...	
	<b>X-ring Service box</b>		SK-40	NBR, FKM, EPDM, VMQ, ..	
	<b>SAE Flange seal</b>	static hydraulic connections	FS-14	NBR, PU	Available in inch sizes
	<b>Static PU Seal (ST12 afgebeeld)</b>	up to 60 MPa	ST-10 ST-12 ST-14 ST-16	PU	Inner sealing
	<b>Static PU Seal (ST15 afgebeeld)</b>	up to 60 MPa	ST-11 ST-13 ST-15 ST-17 ST-19	PU	Outside sealing

## Service

We stand out because we offer:

- a wide range of standard seals
- technical advice
- elaborate stock
- repair kits
- a userfriendly webshop



# FFKM O- rings


	Material name	Compound number	Hardness [shore]	Temperature range [°C]	Equivalent of	Description
	<b>evolast® B694</b>	2160-10301	60 [A]	-20 to 270		FDA, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® B794</b>	2170-10303	70 [A]	-20 to 270	Kalrez® 6880 6221, Perlast® G74S	FDA 21 CFR 177.2400, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® B795</b>	2170-10301	70 [A]	-15 to 300	Perlast® G70H	high temperature, FDA, USP Class VI, 3A-Sanitary, chemical resistance
	<b>evolast® B7LT</b>	2170-10304	70 [A]	-40 to 250	Simriz® 483, Chemraz® 514	excellent low temperature, FDA, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® B7SC</b>	2175-10308	75 [A]	-20 to 300	Kalrez® 8575	high temperature, high purity, plasma applications, chemical resistance
	<b>evolast® B894</b>	2180-10304	80 [A]	-20 to 270	Chemraz® SD 517, Chemraz® 513-514	standard applications, FDA, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® B895</b>	2180-10303	80 [A]	-15 to 300	[G75 S], Perlast® G80H	high temperature, FDA, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® N694</b>	2160-10302	60 [A]	-25 to 270		standard applications, chemical resistance
	<b>evolast® N697</b>	2160-10303	60 [A]	-40 to 260		FDA 21 CFR 177.2400 [global migration], excellent for low temperature, chemical resistance
	<b>evolast® N794</b>	2170-10302	70 [A]	-25 to 270	Simriz® 491	FDA 21 CFR 177.2400, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® N7FD</b>	2175-10305	75 [A]	-20 to 270	Kalrez® 6230, Chemraz® SD625	FDA 21 CFR 177.2400, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® N7HC</b>	2170-10305	70 [A]	-20 to 260		steam, hot water, amines, chemical resistance
	<b>evolast® N7LT</b>	2175-10301	75 [A]	-40 to 250	Kalrez® 0040, Chemraz® 505	excellent low temperature, chemical resistance

## FFKM from evolast®

FFKM materials are chemically and thermally the most resilient elastomers. Temperatures above 300°C are achievable with some FFKM types. Resistance to chemicals is almost universal and comparable to that of PTFE. The advantage of FFKM lies in combining the chemical and thermal resistance of PTFE with the elastic properties of elastomeric materials.






These special elastomers are used primarily where the higher price is justified by high safety requirements and or high maintenance costs, and where too much is required of standard elastomers.

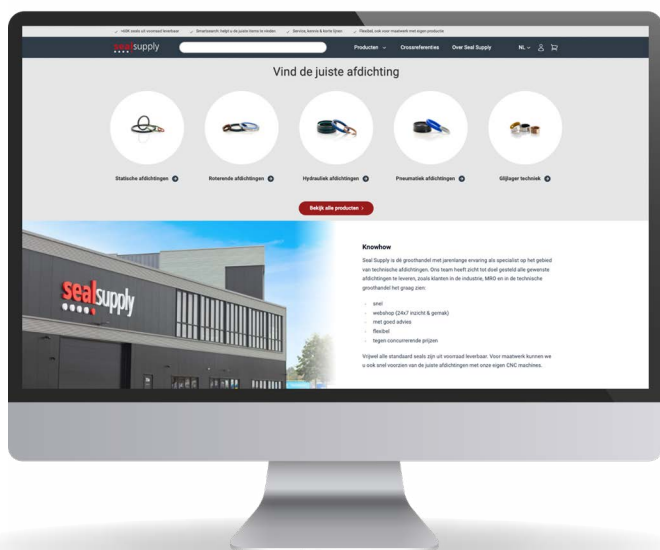
# FFKM O- rings

	Material name	Compound number	Hardness [shore]	Temperature range [°C]	Equivalent of	Description
	<b>evolast® N775</b>	2175-10309	75 [A]	-15 to 340	Spectrum® 7075, Triazinico	high temperature, outstanding thermal stability, not suitable for steam/amine, chemical resistance
	<b>evolast® N894</b>	2175-10307	75 [A]	-25 to 270	Kalrez® 6375, Chemraz® 605, Perlast® G80A, Isolast® 9440, Simriz® 495, Paraflur® V8910-75	standard applications, chemical resistance
	<b>evolast® N896</b>	2175-10303	75 [A]	-15 to 330	Kalrez® 4079, Isolast® J8325-J9876, Chemraz® 615, Perlast® G75B, Chemraz® 551	high temperature, chemical resistance
	<b>evolast® N897</b>	2175-10306	80 [A]	-30 to 260	Isolast® J9503, Simriz® 481	low temperature, chemical resistance
	<b>evolast® N8FD</b>	2175-10310	75 [A]	-15 to 315		high temperature, FDA, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® N8LT</b>	2175-10311	75 [A]	-40 to 260		excellent low temperature, chemical resistance
	<b>evolast® N8SR</b>	2175-10304	75 [A]	-15 to 330	Kalrez® 1050LF	steam, hot water, chemical resistance
	<b>evolast® N993</b>	2190-10302	90 [A]	-20 to 270		standard applications, chemical resistance
	<b>evolast® N995</b>	2190-10304	90 [A]	-15 to 330		high temperature, chemical resistance
	<b>evolast® N9ED</b>	2190-10305	90 [A]	-15 to 260	Chemraz® 526, Isolast® J9510, Perlast® G90D	anti explosive decompression AED, NORSOK M710, chemical resistance
	<b>evolast® N9EX</b>	2190-10301	90 [A]	-15 to 320	Kalrez® 7090	anti explosive decompression AED, NORSOK M710, high temperature, chemical resistance
	<b>evolast® N9LT</b>	2190-10306	90 [A]	-40 to 250		anti explosive decompression AED, NORSOK M710, excellent low temperature, chemical resistance
	<b>evolast® T695</b>	2160-10304	60 [A]	-15 to 275	Perlast® G74P	high purity, plasma applications, chemical resistance



# FFKM O-rings

	Material name	Compound number	Hardness [shore]	Temperature range [°C]	Equivalent of	Description
	<b>evolast® V7FD</b>	2170-10307	70 [A]	-15 to 270		standard applications, FDA, USP Class VI, 3A-Sanitary Standard, chemical resistance
	<b>evolast® V895</b>	2180-10305	80 [A]	-15 to 310		high temperature, chemical resistance
	<b>evolast® B8HC</b>	2180-10307	80 [A]	-20 to 260		excellent for hot water / steam / amine
	<b>evolast® N994</b>	2190-10303	90 [A]	-30 to 260	Chemraz® 510, Kalrez® 3018, Chemraz® 600	suitable for low temperature, chemical resistance
	<b>evolast® N7HC</b>	2175-10312	75 [A]	-20 to 260		superior service life in hot water, steam and amines, excellent chemical resistance, low compression set



**24x7**

Our webshop offers you 24x7 insight, ease and the ability to place orders with your own account.



**sealsupply.co.uk**



## FFKM from evolast®

The below 2 compounds are most commonly used in FFKM. Many sizes are from stock. You can check this stock online via [www.sealsupply.co.uk/ffkm-evolast](http://www.sealsupply.co.uk/ffkm-evolast)

evolast® N894 [equivalent of Kalrez® 6375]  
evolast® N896 [equivalent of Kalrez® 4079]

# Tri-Clamp gaskets

Tri-Clamp gaskets are widely used in food processing, biotechnology and pharmacy for sealing pumps, filters and other fittings. Seal Supply supplies a wide range of high-quality Tri-Clamp gaskets in Mini, Standard and Flanged versions in the compounds EPDM 70 shore and Viton® 80 shore. Tri-Clamp Gaskets are standard available in Inch, ISO and DIN sizes. Other versions can be supplied on request.



## Our Tri-Clamp gaskets are:

FDA compliant

USP Class VI approved

3A-Sanitary Standard



## Tri-Clamp Gasket Mini



## Tri-Clamp Gasket Standard



## Tri-Clamp Gasket Flanged

Material	Temperature range
EPDM (Black)	-48°C to 135°C
Steam Resistant Viton®	-28°C to 204°C
Teflon® (PTFE) Solid (White)	-28°C to 232°C
Tufsteel®	-28°C to 232°C
Silicone (Transparent platinum cured)	-62°C to 232°C (steam to 140°C)
Silicone (Rood)	-62°C to 232°C (steam to 140°C)

When required, we provide you with advice on determining the proper Tri-Clamp gaskets.



# Rubber-Metal Gasket (Elastomet)

This spherical static seal, also known as elastomet gasket ring, is a rubber seal with a vulcanized metal ring. With this special design, a good seal is also realized in applications with less surface pressure. These seals can be supplied in EPDM, NBR & NR.

Depending on the compound, delivery can be made in accordance with DVGW, KTW and FDA.

## Applications for Rubber-Metal Gasket [Elastomet]

Rubber-Metal [elastomet] gaskets are ideal to apply for drinking and cooling water. Depending on the compound, compliance with DVGW, KTW and FDA can also be supplied.

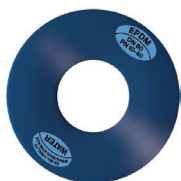
## Materials Rubber-Metal gasket rings

We carry these gaskets in three compounds, namely NBR, EPDM and NR Neoprene].



### Rubber-Metal [elastomet] gasket ring NBR

**Suitable for:** water, gas & media containing hydrocarbons  
**Temperature range:** -15 °C to 100 °C  
**Pressure:** up to 40 Bar  
**Certificates:** DVGW, GBL, EN 681-1 WG Class 70, EN 682 GBL Class 70, TA-Luft



### Rubber-Metal [elastomet] gasket EPDM

**Suitable for:** Specifically suitable for drinking water installations  
**Temperature range:** -40°C to 110°C [peak to 130 °C].  
**Pressure:** up to 40 Bar  
**Certificates:** KTW clearance, DVGW W270, FDA, TA-Luft, EN 681 -1 WAL/WCL Class 70

























### Rubber-Metal [elastomet] gasket Neoprene [NR]

**Suitable for:** sea water, pool water, diluted alkalis up to max. 50%  
**Temperature range:** up to 80°C [peak to 90 °C].  
**Pressure:** up to 40 Bar  
**Certificates:** EN 681 -1 WC Class 70



# Rotary seals

Product		Type	Materials	Temp. [°C]		Speed	Pressure	Notes	
				min.	max.	[m/s] max.	[MPa] max.		
		Oil seal	OS-A10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	
		Oil seal	OS-A11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	with dustlip
		Oil seal	OS-A12	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		without spring
		Oil seal	OS-A13	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		without spring with dustlip
		Oil seal	OS-F10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-30 -40	200 100	35 12	0,05 0,05	fully covered spring 1.4301 standard design FKM
		Oil seal	OS-F11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-30 -40	200 100	35 12	0,05 0,05	completely covered, spring 1.4301 standard design FKM with dustlip
		Oil seal [pressure version]	OS-N21	NBR FKM	-40 -30	100 170	12 35	1 1	pressure-version with dustlip standard design
		Oil seal [pressure version]	OS-N23	NBR FKM	-40 -30	100 170	12 35	>1 >1	pressure-version also known as type BAHD
		Oil seal [pressure version]	OS-N34	NBR FKM	-40 -30	100 170	12 35	1 1	pressure-version
		Oil seal	OS-G10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	ribbed-version
		Oil seal	OS-G11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	ribbed-version with dustlip



# Rotary seals

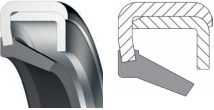


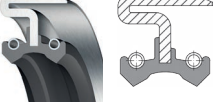





	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	Oil seal	OS-G12	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		ribbed-version without spring
	Oil seal	OS-G13	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		ribbed-version without spring with dustlip
	Oil seal	OS-B10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	standard version metal OD
	Oil seal	OS-B11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	metal OD with dustlip
	Oil seal	OS-B12	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		metal OD without spring
	Oil seal	OS-B13	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		metal OD without spring with dustlip
	Oil seal	OS-BG10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	metal + rubber
	Oil seal	OS-BG11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	metal + rubber with dustlip
	Oil seal	OS-C10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	standard version sealed metal + reinforcement cap
	Oil seal	OS-C11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0,05 0,05	sealed metal + reinforcement cap with dustlip

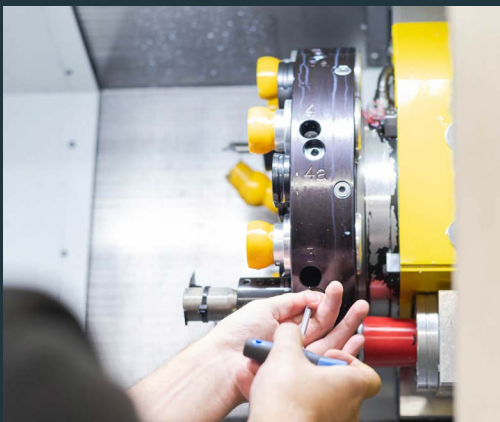


## Knowhow






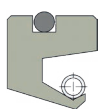






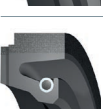



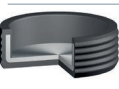

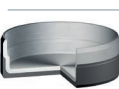

Our experts receive daily requests for all kinds of technical advice. With our years of experience, we are well equipped to assist you with specific issues. We maintain a close relationship with our customers and suppliers. This results, for example, in seals manufactured according to drawings and tailored to customer specifications.

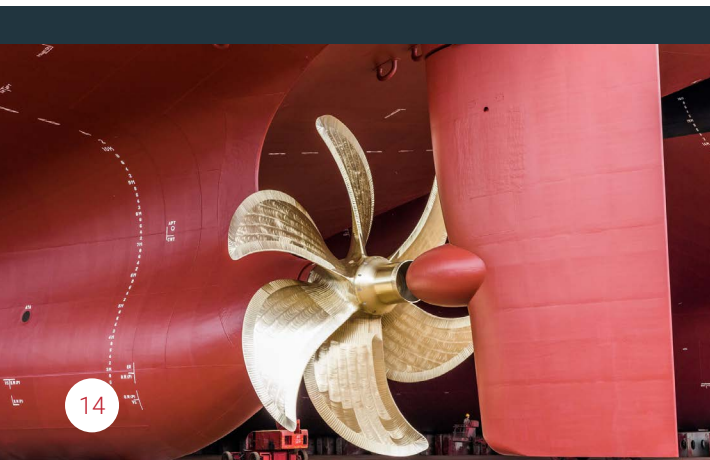
# Rotary seals

Product		Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Oil seal</b>	OS-C12	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		sealed metal + reinforcement cap without spring
	<b>Oil seal</b>	OS-C13	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10		sealed metal + reinforcement cap without spring with dustlip
	<b>Oil seal</b>	OS-D10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10	0,03 0,03	two sealing lips rubber jacket
	<b>Oil seal</b>	OS-D15	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10	0,03 0,03	two sealing lips metal OD
	<b>Oil seal</b>	OS-O18	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	10 10	0,05 0,05	outside sealing version
	<b>Oil seal</b>	OS-ST18	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	80 100	7 9	0,05 0,05	cassette oil seal other versions possible
	<b>Oil seal</b>	OS-PA30	PTFE compound stainless steel	-90	250	40	0,5	pressure version
	<b>Oil seal</b>	OS-PA31	PTFE compound stainless steel	-90	250	40	1	pressure version
	<b>Oil seal</b>	OS-PA32	PTFE compound stainless steel	-90	250	40	2,5	pressure version



# Rotary seals

Product		Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes	
				min.	max.				
		Oil seal	OS-W10	NBR FKM	-40 -30	100 200	12 15	0,5 1 [optional]	clamped sealing lip pressure-version
		Oil seal	OS-W11	NBR FKM	-40 -30	100 200	12 15	0,5 1 [optional]	clamped sealing lip pressure-version with dustlip
		Oil seal	OS-W50	PTFE carbon/graphite, FKM O-ring, Spring: 1.4571	-20	200	15	1	pressure-version
		Oil seal	OS-Q10	NBR + NBR-fabric FKM + FKM-fabric	-30 -20	100 180	20 25	0,05 0,05	OD made of rubber fabric, for large-scale machines
		Oil seal	OS-Q11	NBR + NBR-fabric FKM + FKM-fabric	-30 -20	100 180	20 25	0,05 0,05	OD made of rubber fabric, for large-scale machines
		Oil seal	OS-Q12	NBR + NBR-fabric FKM + FKM-fabric	-30 -20	100 180	20 25	0,05 0,05	OD made of rubber fabric, for large-scale machines
		Oil seal	OS-Q13	NBR + NBR-fabric FKM + FKM-fabric	-30 -20	100 180	20 25	0,05 0,05	OD made of rubber fabric, for large-scale machines
		End cap	CS-10	NBR FKM	-30 -20	100 200		0,05 0,05	rubber covered
		End cap	CS-11	NBR FKM	-30 -20	100 200		0,05 0,05	ribbed outer jacket
		End cap	CS-12	NBR FKM	-30 -20	100 200		0,05 0,05	metal + rubber, ribbed rubber possible













## Flexible

By flexibility, we think first and foremost of the production of Turned Seals, with which we can virtually create any seal. We offer production in over 30 different types of materials.

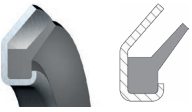

This means we can deliver quickly in order to minimise downtime for your customer.

# Rotary seals

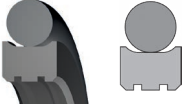





		Product	Type	Materials	Temp. [°C] min. max.	Speed [m/s] max.	Pressure [MPa] max.	Notes
		<b>V-ring</b>	VR-A10	NBR	-40 100	8 [12]		type VA
				FKM	-20 200	6,5 [10]		
				...				
		<b>V-ring</b>	VR-S10	NBR	-40 100	8 [12]		type VS
				FKM	-20 200	6,5 [10]		
				...				
		<b>V-ring</b>	VR-E10	NBR	-40 100	8 [12]		type VE
				FKM	-20 200	6,5 [10]		
				...				
		<b>V-ring</b>	VR-L10	NBR	-40 100	8 [12]		type VL
				FKM	-20 200	6,5 [10]		
				...				
		<b>V-ring</b>	VR-AX10	NBR	-40 100	8 [12]		type VAX
				FKM	-20 200	6,5 [10]		
				...				



## Axial seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	Axial seal	AS-10	NBR	-40	100	12 [20]		standard version Also known as type RB
			FKM ...	-30	180	12 [20]		
	Axial seal	AS-11	NBR	-40	100	12 [20]		version with extended metal OD Also known as type 9RB
			FKM ...	-30	180	12 [20]		

## Radial seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	Radial seal	RD-10	PTFE carbon/graphite,... O-ring: NBR O-ring: FKM	-30 -15	100 200	5	30	for turning and slewing movements inside sealing function
	Radial seal	RD-11	PTFE carbon/graphite,... O-ring: NBR O-ring: FKM	-30 -15	100 200	5	30	for turning and slewing movements outside sealing
	Radial seal	RD-12	NBR / NBR fabric / POM	-30	90	0,2	40	double acting
	Radial seal	RD-13	NBR / NBR fabric	-30	90	0,1	20	double acting
	Radial seal	RD-14	PTFE carbon/graphite,... meander spring: 1.4310	-100	200	2	15	with clamping flange high thermal and chemical resistance
	Radial seal	ROI	PU	-30	90	0,1	35	space-saving rotary seal



Heavy duty seals belong to the mechanical seals and have a specific shape. They are also known as mechanical face seals, lifetime seals or duo cone seals. There are two types of Heavy duty seals:

- the standard type HHDO, bearing steel and cast iron, has an O-ring as a secondary sealing element
- the HDDF type has a diamond-shaped elastomer as a secondary sealing element

#### Applications:

- transport systems
- agricultural machinery
- mining machinery
- excavators and bulldozers
- heavy trucks

Heavy duty seals are used, for example, in mixers, gearboxes, power plants and in other low-maintenance applications where high demands are placed on the seal.

#### Benefits of deploying Heavy duty seals:

- cost-effective
- maintenance-free
- easy to assemble
- strong sealing effect against outside dirt, dust, water and abrasive media
- sustainable
- self-centering to compensate for axis deviations



## HHDO Bearing Steel

The most common type is the HHDO, in which an O-ring functions as a secondary seal.

**Seal material:** bearing steel (1.3505)  
**O-ring material:** NBR



## HHDO Cast Iron

This is also a type of HHDO, where an O-ring functions as a secondary seal.

**Seal material:** cast iron  
**O-ring material:** NBR



## HDDF Bearing Steel

This type has an elastomer with a diamond-shaped cross section as the secondary sealing element instead of the O-ring.

**Seal material:** bearing steel (1.3505)  
**Flat ring material:** NBR



# Garlock® Seals, including PS seals



**PS-seal [Standard]**



**PS-seal [Back to Back]**



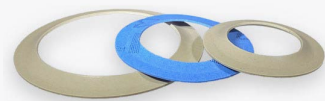
**PS-seal [Reverse]**



**PS-seal [Tandem]**



**PS-seal [Dustlip]**



**PS-Lip Gylon®**



**PS-Static Seal Gylon®**



**Klozure® Seals**

## PS-seals

The PS-Seal® product line stands for reliable sealing of rotating shafts at high circumferential speed, high pressure and extreme temperatures. Abrasive media is sealed as well as aggressive media. Radial shaft seals typically do not perform well under these conditions as their seal lips are made of elastomeric materials. PS-SEALS are used in many different applications and can also be an alternative to mechanical seals and braided packings. The product line PSSEAL® offers a cost-effective and practical solutions to a wide range of applications.



## Materials

PS seals are available in the following materials:

- GYLON® Black [Graphite]
- GYLON® White [Barium Sulfate]
- GYLON® Blue [Gasmicrosphere].
- GYLON® Brown-White [For abrasive food and pharma applications].
- F [Econol]
- MS [Molybdenum Sulphide].
- KF [Carbon Fiber]

## Types

PS-SEAL® STANDARD is a Garlock shaft seal consisting of a stainless steel [1.4571] housing, a GYLON® BLACK sealing lip and a static sealing element made of FKM.

PS-SEAL® NON-STANDARD is a shaft seal in standard format with different configurations of both seal lips and lip seal materials.

PS-SEAL® SPECIAL is there for the other sealing options with single and multiple lip designs. As far as possible, these seals are standardized to provide cost-effective special solutions.

## Garlock Seals

Garlock PS-seals and Klozure seals are easily ordered online, by phone or via email from Seal Supply. With your own webshop account, you benefit from the convenience of finding the right products quickly. Our function 'smartsearch' makes it even easier.



## Stainless steel springs



**SG-10 [at length]**



**SG-11 [unassembled]**



**SG-12 [assembled]**

We can supply stainless steel 316 springs by length, unmounted and in mounted versions.

## Repair sleeves

Repair sleeves are used as a solution to repair worn treads on the shaft. This is a good, quick and cost-effective alternative. After all, an oil seal only seals properly if the tread on the shaft is good. The surface should not be too smooth or rough, should not show any damage and should be free of corrosion. A repair sleeve is a thin stainless steel sleeve that is pushed over the damaged part of the shaft.

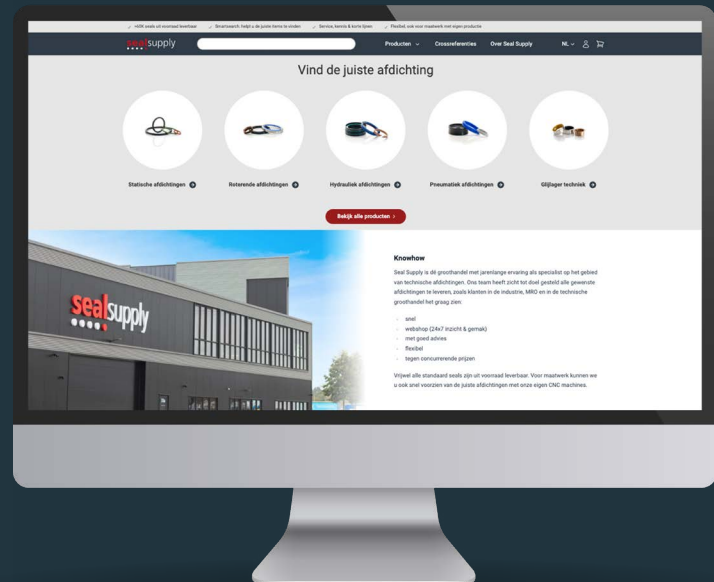


## The online store for all your seals

Ordering seals is very easy at Seal Supply. You may order seals online, by phone or by e-mail. Our smart search function allows you to find the product you are looking for quickly. Our webshop always has insight into our stock and delivery times.




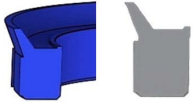
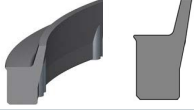







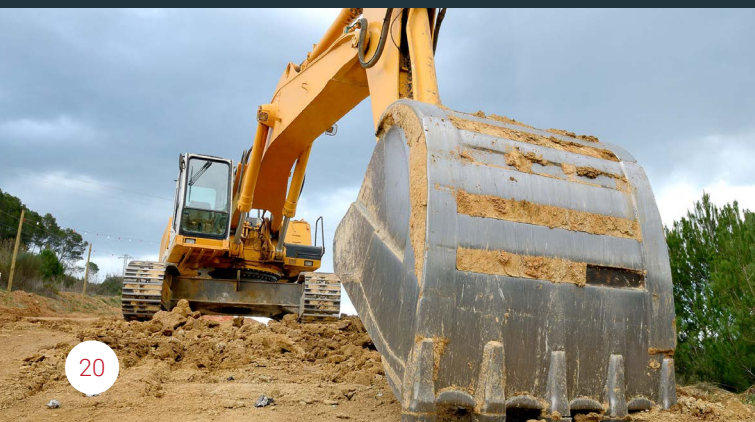
[www.sealsupply.co.uk](http://www.sealsupply.co.uk)





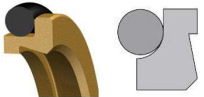
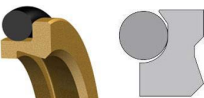
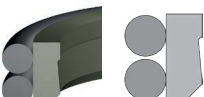
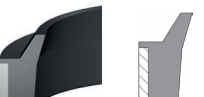



quality  
service  
24x7  
knowhow  
flexible

# Hydraulic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Notes
				min.	max.		
	<b>Wiper</b>	WS-10	NBR PU FKM	-40 -40 -15	100 100 200	1 1 1	single acting
	<b>Wiper</b>	WS-11	NBR PU FKM	-40 -40 -15	100 100 200	1 1 1	single acting
	<b>Wiper</b>	WS-13	NBR	-40	100	3	single acting
	<b>Wiper</b>	WS-16	PU	-40	100	0,8	single acting exterior sealing
	<b>Wiper</b>	WS-17	TPEE	-40	120	2	single acting
	<b>Wiper</b>	WS-18	PU	-30	100	1	single acting
	<b>Wiper</b>	WS-26	NBR + brass FKM + stainless steel	-30 -20	120 200	1 1	single acting
	<b>Wiper</b>	WS-27	TPEE	-40	100	0,8	single acting
	<b>Wiper</b>	WS-30	PTFE bronze + O-ring NBR PTFE bronze + O-ring FKM PU + O-ring NBR	-30 -15 -30	100 200 100	15 15 2	single acting
	<b>Wiper</b>	WS-D14	NBR PU	-40 -40	100 100	1 0,8	double acting



# Hydraulic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Notes
				min.	max.		
	<b>Wiper</b>	WS-D15	PU NBR	-40 -40	100 100	1 1	double acting
	<b>Wiper</b>	WS-D24	PU + metal NBR + metal	-40 -40	100 100	1 1	double acting with metal OD
	<b>Wiper</b>	WS-D31	PTFE bronze + O-ring NBR PTFE bronze + O-ring FKM PU + O-ring NBR	-30 -15 -30	100 200 100	15 15 2	double acting
	<b>Wiper</b>	WS-D32	PTFE bronze + O-ring NBR PTFE bronze + O-ring FKM PU + O-ring NBR	-30 -15 -30	100 200 100	15 15 2	double acting
	<b>Wiper</b>	WS-D33	PTFE bronze + O-rings NBR PTFE bronze + O-rings FKM	-30 -15	100 200	5 5	double acting
	<b>Wiper</b>	WS-20	NBR + metal FKM + metal	-40 -15	100 200	1 1	single acting with metal OD
	<b>Wiper</b>	WS-21	NBR + metal FKM + metal	-40 -15	100 200	1 1	single acting with metal core
	<b>Wiper</b>	WS-22	PU + metal	-40	100	2	single acting with metal OD
	<b>Wiper</b>	WS-23	PU + metal	-40	100	1	single acting with metal OD heavy duty



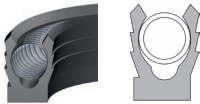

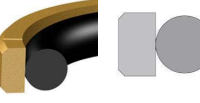


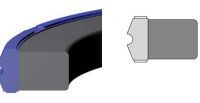


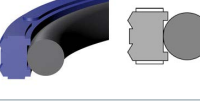
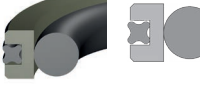
# Hydraulic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Hydraulic seals</b>	PS-11	PTFE bronze + OR NBR PTFE bronze + OR FKM PU 72D + OR NBR	-30 -15 -30	100 200 100	15 15 2	40 40 60	single acting
	<b>Piston seal</b>	PS-20	NBR / fabric + POM FKM / tissue	-30 -15	100 150	0,5 0,5	40 40	single acting
	<b>Piston seal</b>	PS-31	NBR+ NBR canvas + POM support ring	-30	100	0,5	40	single acting
	<b>Piston seal</b>	PS-33	NBR+ NBR + POM retainingring+ POM guide ring	-30	100	0,5	50	single acting also available without lock ring as PS-32
	<b>Piston seal</b>	PS-60	NBR Canvas + NBR	-30	110	0,5	25	single acting
	<b>Piston seal</b>	PS-61	NBR Canvas + NBR + POM support ring	-30	110	0,5	70	single acting
	<b>Piston seal</b>	PS-64	PU + POM met glas	-40	100	0,5	40	single acting
	<b>Piston seal</b>	PS-65	PU + POM	-30	100	0,5	40	single acting
	<b>Piston seal</b>	PS-72	PU NBR	-40 -30	100 100	0,5 0,5	40 15	single acting
	<b>Piston seal</b>	PS-87	PTFE carbon/graphite... meander spring:: 1.4310	-150	250	15	35	single acting

## Gerrit Knopert

As general manager of Seal Supply, I will always put customer needs first. Seal Supply offers a unique and refreshing way of doing business. Let your business benefit from our knowledge and foresight. I like to give customers reasons for doing business with us. Put us to the test!

# Hydraulic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Piston seal</b>	PS-88	PTFE compound Helicoil spring: 1.4310	-150	250	10	25	single acting
	<b>Piston seal</b>	PS-89	PTFE compound, Helicoil spring: 1.4310	-150	250	5	30	single acting
	<b>Piston seal</b>	PS-10	PTFE bronze + O-ring NBR PTFE bronze + O-ring FKM PU 72D + O-ring NBR	-30 -15 -30	100 200 100	15 15 2	40 40 60	double acting
	<b>Piston seal</b>	PS-12	PTFE bronze + O-ring NBR PTFE bronze + O-ring FKM	-30 -15	100 200	2 2	16 16	double acting
	<b>Piston seal</b>	PS-13	PTFE + O-ring NBR PTFE + O-ring FKM	-30 -15	100 200	15 15	35 35	double acting
	<b>Piston seal</b>	PS-14	PU + NBR	-30	100	0,5	40	double acting
	<b>Piston seal</b>	PS-16	PTFE bronze + O-rings / X-ring NBR PTFE bronze + O-rings / X-ring FKM	-30 -15	100 200	3 3	40 40	double acting
	<b>Piston seal</b>	PS-17 PS-17 PU	PTFE + NBR + POM PU + NBR + POM	-30 -30	100 110	1,5 0,5	60 40	double acting heavy duty
	<b>Piston seal</b>	PS-18	PU + NBR	-30	100	0,5	25	double acting
	<b>Piston seal</b>	PS-19	PTFE bronze + O-ring / X-ring NBR PTFE bronze + O-ring / X-ring FKM	-30 -15	100 200	2 2	40 40	double acting



## Alexander Dijkstra

As commercial director of Seal Supply, I value a high level of service and that simply starts with keeping appointments. At Seal Supply, I am therefore very happy with the combination of the strengths of our partners and the flexibility and short lines of communication within our own team of driven colleagues.

# Hydraulic seals



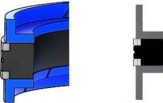
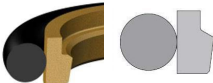


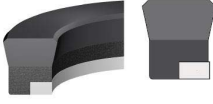


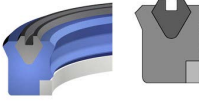
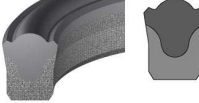
	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Piston seal</b>	PS-40	NBR + TPE + POM	-30	100	0,5	40	double acting
	<b>Piston seal</b>	PS-41	NBR + Canvas + POM	-30	100	0,5	50	double acting
	<b>Piston seal</b>	PS-42	NBR + TPE + POM	-30	100	0,5	70	double acting
	<b>Piston seal</b>	PS-43	NBR + Canvas + POM	-30	110	0,5	40	double acting
	<b>Piston seal</b>	PS-44	NBR + Canvas + POM	-30	100	0,5	40	double acting
	<b>Piston seal</b>	PS-45	NBR + POM	-30	100	0,5	15	double acting
	<b>Piston seal</b>	PS-47	NBR + Canvas	-30	120	0,5	70	double acting
	<b>Piston seal</b>	PS-48	NBR + TPE + POM	-40	110	0,5	40	double acting
	<b>Piston seal</b>	PS-50	NBR + steel + spring steel	-30	100	0,5	6	double acting
	<b>Piston seal</b>	PS-53	NBR + TPE + POM	-30	100	0,5	40	double acting
	<b>Piston seal</b>	PS-105	NBR + Canvas + POM	-30	100	0,5	50	double acting



## Hans Lindeboom

At Seal Supply, the focus is the customer. Our goal is to unburden customers and in the sales department. I can rely on years of experience in sealing technology. The goal of customers is often simple, getting a fast and effective solution. Call or email us or come and meet us in person.

# Hydraulic seals

Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes	
			min.	max.				
	<b>Piston seal</b>	PS-55	PU + NBR + POM	-30	100	0,5	40	double acting
	<b>Piston seal</b>	PS-106	PA with glass + NBR	-30	105	1	50	double acting Z-cut
	<b>Piston seal</b>	PS-400	NBR + TPE + POM	-30	100	0,5	25	double acting
	<b>Rod seal</b>	RS-11	PTFE bronze + NBR O-ring PTFE bronze + FKM O-ring PU 72D + NBR O-ring	-30 -15 -30	100 200 100	15 15 2	40 40 60	single acting
	<b>Rod seal</b>	RS-13	PTFE compound + OR NBR PTFE compound + OR FKM	-30 -15	100 200	15 15	35 35	double acting
	<b>Rod seal</b>	RS-20	NBR Canvas + NBR + POM FKM Canvas + FKM	-30 -15	100 150	0,5 0,5	40 40	single acting
	<b>Rod seal</b>	RS-31	NBR + Canvas + POM FKM + Canvas + PTFE	-30 -10	105 150	0,5 0,5	40 40	single acting
	<b>Rod seal</b>	RS-32	NBR Canvas + NBR + TPE + POM	-30	100	0,5	70	single acting
	<b>Rod seal</b>	RS-33	NBR fabric / NBR	-30	100	0,5	25	single acting NBR fabric is primary sealing element
	<b>Rod seal</b>	RS-35	PU + NBR + POM	-30	100	0,5	63	single acting
	<b>Rod seal</b>	RS-36	NBR / NBR fabric	-30	100	0,5	25	single acting



## Jeroen Bijma

As Production Manager of Seal Supply, I am responsible for the production of Turned seals. With our PU1TEC CNC machines we can produce over 150 different standard profiles. Furthermore, we offer production according to your drawings or specification. In combination with a variety of materials, we can produce your Turned seals from approx. 5 to 500 mm. diameter in a very short time [larger diameters within a few weeks]. Seal Supply would like to be your partner, also for Turned seals.

# Hydraulic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	Rod seal	RS-72	PU NBR	-40 -30	100 100	0,5 0,5	40 15	single acting
	Rod seal	RS-73	PU	-40	100	0,5	40	single acting
	Rod seal	RS-74	PU + POM	-35	100	0,5	40	single acting
	Rod seal	RS-76	PU	-40	100	0,5	40	single acting
	Rod seal	RS-77	PU + POM	-40	100	0,5	70	single acting
	Rod seal	RS-80	PU + POM	-40	100	0,5	40	single acting buffer seal
	Rod seal	RS-87	PTFE carbon/graphite meander spring: 1.4310	-150	250	15	35	single acting
	Rod seal	RS-98	NBR	-30	105	0,5	1,5	single acting
	Rod seal	RS-99	PU + NBR + POM	-40	100	0,5	70	single acting
	Rod seal	RS-10	PTFE bronze + NBR O-ring PTFE bronze + FKM O-ring PU 72D + NBR O-ring	-30 -15 -30	100 200 100	15 15 2	40 40 60	double acting
	Rod seal	RS-12	PTFE bronze + NBR O-ring PTFE bronze + FKM O-ring	-30 -15	100 200	2 2	16 16	double acting

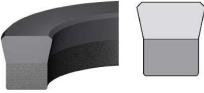





## Guido den Hertog

I enjoy customer contact, and I strengthen the team with solution-oriented action and positivity.

I am by nature very eager to learn, so completely in my element in this industry where you never stop learning. My day is a success when our customers are served to their full satisfaction.

# Hydraulic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Rod and piston seal</b>	RP-30	NBR + Canvas FKM + Canvas	-30 -15	105 150	0,5 0,5	25 25	single acting
	<b>Rod and piston seal</b>	RP-70	PU NBR	-40 -30	105 100	0,5 0,5	40 15	single acting
	<b>Rod and piston seal</b>	RP-75	PU	-40	100	0,5	40	single acting
	<b>Rod and piston seal</b>	RP-78	PU + NBR O-ring	-40	100	0,5	40	single acting

## KITS

### Repair kits [KITS]

Seal Supply can assemble your repair kits [KITS] according to specifications, for recurring purchase, for example.

Each bag is then labeled with the name of the KIT and if needed with your own company logo.

We can also print the barcodes on the labels so that processing at your place can be organized optimally.



GEA



 **OilQuick®**

 **Parker**

 **CASAPPA®**  
FLUID POWER DESIGN  
GEARPUMPS

**HYVA®**

CONTARINI

 **JCB**

 **MANITOU**

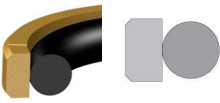
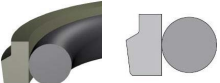
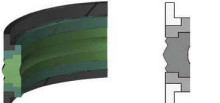
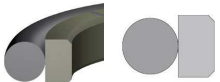
### Seal kits

Supplying repair kits (kits) is a service of Seal Supply, where we supply seals as kits for cylinder repairs, for example. For recurring orders, this is very convenient. Due to the breadth of our package, we can supply many of these kits. The kits are labelled with your own kit number, for example the cylinder number.

### The benefits at a glance

- all seals packed together as a kit
- all available through one unique partnumber
- packaged with your own logo

# FKM Hydraulic seals

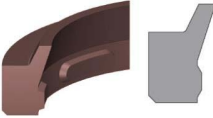
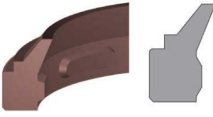
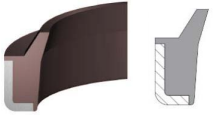

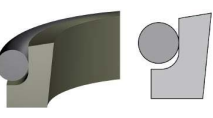
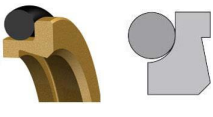
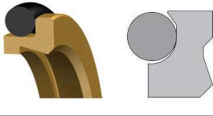
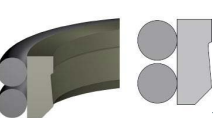
	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Piston seal</b>	PS-10	PTFE bronze + O-ring FKM	-15	200	15	40	double acting
	<b>Piston seal</b>	PS-11	PTFE bronze + O-ring FKM	-15	200	15	40	single acting
	<b>Piston seal</b>	PS-40	FKM + PE + POM	-15	120	0,5	40	double acting
	<b>Rod seal</b>	RS-10	PTFE bronze + O-ring FKM	-15	200	15	40	double acting
	<b>Rod seal</b>	RS-11	PTFE bronze + O-ring FKM	-15	200	15	40	single acting
	<b>Rod seal</b>	RS-20	FKM + FKM Canvas	-15	150	0,5	40	single acting
	<b>Rod and piston seal</b>	RP-30	FKM Canvas	-15	150	0,5	25	single acting
	<b>Rod seal</b>	RS-31	FKM Canvas + PTFE	-15	150	0,5	40	single acting



## FKM seals

We also carry a wide range of piston seals, rod seals and wipers made of FKM [Viton®]. If the temperature runs higher than standard seals in NBR and PU can handle, then FKM can offer a solution. Even if the hydraulic system is equipped with Bio-oil, it is necessary to replace the NBR seals with the FKM [Viton®] variety.

# FKM Hydraulic seals











	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Notes
				min.	max.		
	<b>Wiper</b>	WS-10	FKM	-15	200	1	single acting
	<b>Wiper</b>	WS-11	FKM	-15	200	1	single acting
	<b>Wiper</b>	WS-20	FKM + metal	-15	200	1	single acting with metal OD
	<b>Wiper</b>	WS-21	FKM + metal	-15	200	1	single acting with metal core
	<b>Wiper</b>	WS-30	PTFE bronze + O-ring FKM	-15	200	15	single acting
	<b>Wiper</b>	WS-D31	PTFE bronze + O-ring FKM	-15	200	15	double acting
	<b>Wiper</b>	WS-D32	PTFE bronze + O-ring FKM	-15	200	15	double acting
	<b>Wiper</b>	WS-D33	PTFE bronze + O-rings FKM	-15	200	5	double acting



## FKM seals

If the seal you are looking for is not in the web shop, please feel free to contact our sales team via **+31[0]38 30 32 700** or **sales@sealsupply.nl**. With our CNC machines, we can produce a large number of types specifically for you.

# Hallite seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	Piston seal	606	PU 93	-45	110	1	40	single acting
	Piston seal	730	TPE+NBR+POM	-40	110	0,3	70	double acting
	Piston seal	780	NBR+PE+POM	-30	100	0,5	40	double acting
	Piston and rod seal	601	PU 93	-45	110	1	40	single acting
	Rod seal	605	PU 93	-45	110	1	40	working only
	Bufferseal	616	PU 93	-45	110	1	24	single acting
	Rod seal	621	PU+NBR+POM	-45	110	1	70	single acting
	Wiper	38	TPEE	-40	120	4		heavy duty
	Wiper	831	PU 93	-45	110	4		single acting
	Wiper	839	PU 93	-45	110	4		double acting






## Distributor of Hallite in the Netherlands

Hallite has made a name for itself in the world of hydraulic seals. In the Netherlands, Seal Supply is the official distributor and service partner of Hallite. As your stock keeping partner of this A-brand hydraulic seals, Seal Supply is happy to serve you.













# Hallite seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Wiper</b>	842	PU 93	-45	110	4		Umbrella Wiper Technology™
	<b>Wiper</b>	844	PU 96	-45	110	4		Umbrella Wiper Technology™
	<b>Wiper</b>	846	PU 93	-45	110	4		Umbrella Wiper Technology™
	<b>Wiper</b>	847	PU 55D	-40	100	4		Umbrella Wiper Technology™
	<b>Guide / guide strip</b>	506	Thermoset polyester	-40	120	5 1 0,1	0,8 6 10	Surface pressure: up to 450 N/ mm <sup>2</sup>

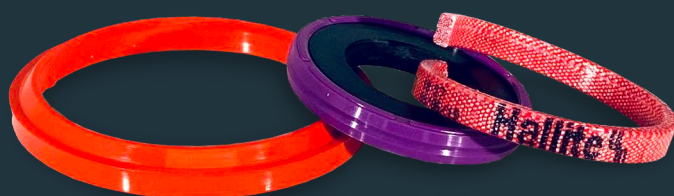
## Hallite seals

We stock these seals, among others, as standard:







Product	Type
	<b>Wiper</b> 38
	<b>Wiper</b> 842
	<b>Wiper</b> 844
	<b>Wiper</b> 846
	<b>Wiper</b> 847

Product	Type
	<b>Rod seal</b> 605
	<b>Rod seal</b> 616
	<b>Piston seal</b> 780
	<b>Piston seal</b> 58
	<b>Piston seal</b> 777

Product	Type
	<b>Guide</b> 506
	<b>Guide Strap</b> 506
















# Guide rings

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Contact pressure [N/ mm <sup>2</sup> ]	Notes
				min.	max.			
	<b>Guide ring</b>	GR-P10	PTFE bronze hard fabric POM glass-filled	-60 -40 -30	200 130 110	15 1 1	15 330 35	piston guide
	<b>Guide ring</b>	GR-R10	PTFE bronze hard fabric POM glass-filled	-60 -40 -30	200 130 110	15 1 1	15 330 35	rod guide
	<b>Guide ring</b>	GS-10	PTFE bronze	-60	200	15	15	diamond grid beveled edges
	<b>Guide ring</b>	FSP	Acetal resin with glass	-40	110	0,8	40 [20 °C] 30 [70 °C]	rod guide for plunger cylinder
	<b>Guide ring</b>	FIT	Acetal resin with glass	-40	110	1	40 [20 °C] 30 [70 °C]	rod guide
	<b>Guide ring</b>	FIL	Acetal resin with glass	-40	110	1	40 [20 °C] 30 [70 °C]	rod guide



# Straight bushing










	Product	Type	Material	Static carrying capacity	Dynamic carrying capacity	Glide speed [m/s]	Friction value [ $\mu$ ]	Temp. [°C] min. max.		Maintenance	Notes
	<b>Straight bushing</b>	GL-10	PTFE tinned steel	≤ 250	≤ 140	≤ 2,5	0,03 - 0,25	-200	280	maintenance-free	
	<b>Straight bushing</b>	GL-10K	PTFE tinned steel	≤ 250	≤ 140	≤ 2,5	0,03 - 0,25	-200	280	maintenance-free	with collar
	<b>Straight bushing</b>	GL-11	PTFE tinned steel	≤ 250	≤ 140	≤ 2 ≤ 5, oil lubricated	0,02 - 0,20 ≤ 0,05, oil lubricated	-195	280	maintenance-free	
	<b>Straight bushing</b>	GL-11K	PTFE tinned steel	≤ 250	≤ 140	≤ 2 ≤ 5, oil lubricated	0,02 - 0,20 ≤ 0,05, oil lubricated	-195	280	maintenance-free	with collar
	<b>Straight bushing</b>	GL-12	CuSn8P [DIN 17662]	≤ 120	≤ 40	≤ 2,5	0,03 - 0,25	-100	200	maintenance-free	
	<b>Straight bushing</b>	GL-13	PTFE Stainless steel 1.4301	≤ 250	≤ 140	≤ 2	0,02 - 0,20	-200	280	maintenance-free	
	<b>Straight bushing</b>	GL-14	CuPb10Sn10 copper-plated steel	≤ 200	≤ 75	≤ 4	0,08 - 0,22	-20	200	maintenance-free	
	<b>Straight bushing</b>	GL-15	PTFE / bronze	≤ 200	≤ 140	≤ 2,5	0,02 - 0,20	-200	280	maintenance-free	
	<b>Straight bushing</b>	GL-15K	PTFE / bronze	≤ 200	≤ 140	≤ 2,5	0,02 - 0,20	-200	280	maintenance-free	with collar
	<b>Straight bushing</b>	GL-16	sintered bronze	≤ 10	≤ 5	≤ 6 ≤ 0,05, oil lubricated	0,05 - 0,20	-20	100	maintenance-free	sintered iron possible
	<b>Straight bushing</b>	GL-16K	sintered bronze	≤ 10	≤ 5	≤ 6 ≤ 0,05, oil lubricated	0,05 - 0,20	-20	100	maintenance-free	with collar
	<b>Straight bushing</b>	GL-17	PTFE / bronze	≤ 150	≤ 100	≤ 0,4	0,03 - 0,20	-100	300	maintenance-free	
	<b>Straight bushing</b>	GL-17K	PTFE / bronze	≤ 150	≤ 100	≤ 0,4	0,03 - 0,20	-100	300	maintenance-free	with collar

## Straight bushing

In our assortment we have nearly all standard straight bushing. We keep these standard sizes and designs in stock in our warehouse. When other materials, sizes or designs are required, our team is happy to process your order and find what you need.



# Straight bushing







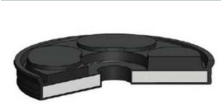
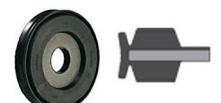
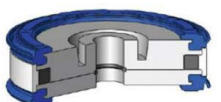
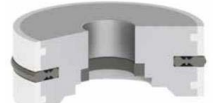
	Product	Type	Material	Static load	Dynamic load	Sliding speed [m/s]	Friction value [μ]	Temp. [°C] min. max.		Maintenance	Notes
	<b>Straight bushing</b>	GL-18	C67 / spring steel 55Si7	≤ 350	≤ 200	≤ 1	> 0,5	-200	350	Bound to maintenance	
	<b>Straight bushing</b>	GL-20	CuPb10Sn10 tinned or copper-plated steel	≤ 250	≤ 140	≤ 2,5	0,04 - 0,12	-40	250	Bound to maintenance	
	<b>Straight bushing</b>	GL-22	CuSn8P [DIN 17662]	≤ 120	≤ 40	≤ 2,5	0,05 - 0,20	-40	250	Bound to maintenance	
	<b>Straight bushing</b>	GL-23	CuSn8P [DIN 17662]	≤ 120	≤ 40	≤ 2,5	0,05 - 0,12	-40	250	Bound to maintenance	
	<b>Straight bushing</b>	GL-23K	CuSn8P [DIN 17662]	≤ 120	≤ 40	≤ 2,5	0,05 - 0,12	-40	250	Bound to maintenance	with collar
	<b>Straight bushing</b>	GL-24	POM tinned steel	≤ 250	≤ 140	≤ 2,5	0,04 - 0,12	-40	130	Bound to maintenance	
	<b>Straight bushing</b>	GL-25	CuSn8P [DIN 17662]	≤ 120	≤ 40	≤ 2,5	0,02 - 0,20	-40	250	Bound to maintenance	
	<b>Straight bushing</b>	GL-25K	CuSn8P [DIN 17662]	≤ 120	≤ 40	≤ 2,5	0,02 - 0,20	-40	250	Bound to maintenance	with collar
	<b>Straight bushing</b>	GL-26	Solid hardened steel	≤ 250	≤ 150	≤ 0,6	0,05-0,25	-100	250	Bound to maintenance	

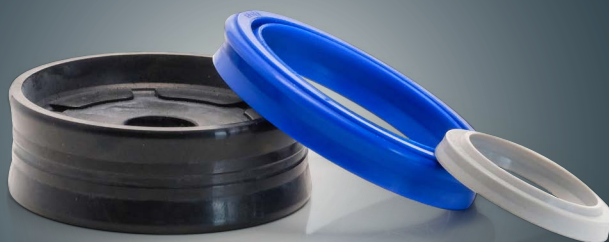


**Ian Harvey**




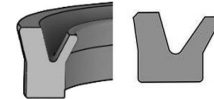

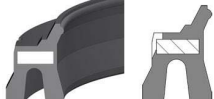




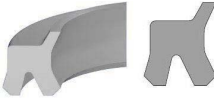
Seal Supply offers a unique and refreshing way of doing business. Let our knowledge and foresight be of benefit to your company. I like to give customers reasons to do business with us. Put us to the test!

# Pneumatic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max.	Pressure [MPa] max.	Notes
				min.	max.			
	<b>Piston seal</b>	PS-51	NBR + metal	-30	100	1	1,6	double acting
	<b>Piston seal</b>	PS-72	PU	-35	80	1	2	single acting
	<b>Piston seal</b>	PS-81	NBR	-30	100	1	1,2	double acting
	<b>Piston seal</b>	PS-85	NBR PU	-30 -30	100 80	1 1	1,2 1,6	single acting
	<b>Piston seal</b>	PS-86	NBR PU	-30 -30	100 80	1 1	1,2 1,6	single acting
	<b>Piston seal</b>	PS-94	NBR 75	-30	105	1	1,6	equivalent to Parker Z5
	<b>Piston seal</b>	PS-97	NBR in combination with aluminium	-30	105	1	1,2	single acting
	<b>Piston seal</b>	PS-98	NBR + metal	-20	100	1	1	double acting
	<b>Piston seal</b>	PS-99	PU - POM - NBR in combination with aluminium	-30	80	1	1,6	double acting
	<b>Piston seal</b>	PS-100	NBR - POM in combination with aluminium	-30	105	1	1,2	double acting



# Pneumatic seals

	Product	Type	Materials	Temp. [°C]		Speed [m/s] max	Pressure [MPa] max	Notes
				min	max			
	<b>Piston seal</b>	PS-101	NBR	-30	105	1	1,2	double acting
	<b>Piston seal</b>	PS-102	NBR	-30	105	1	1,2	double acting
	<b>Piston seal</b>	PS-103	NBR	-30	105	1	1,2	double acting
	<b>Rod seal</b>	RS-72	PU	-35	80	1	2	single acting
	<b>Rod seal</b>	RS-85	PU	-30	80	1	1,6	single acting combi wiper/seal
	<b>Rod seal</b>	RS-86	NBR + metal	-30	100	1	1,6	single acting combi Wiper/seal with metal core
	<b>Rod seal</b>	RS-94	NBR + TPE	-30	100	1	1,6	single acting combi wiper/seal
	<b>Rod seal</b>	RS-95	NBR PU	-30 -30	100 80	1 1	1,2 1,6	double acting combi wiper/seal
	<b>Rod seal</b>	RS-97	NBR PU	-30 -30	105 80	1 1	1,2 1,6	single acting
	<b>Cushioning seals</b>	RS-93	NBR PU	-30 -30	100 80	1 1	1,2 1,6	also known as cushion seal
	<b>Sweepers</b>	WS-D15	PU	-35	80	1	1,6	double acting



## Pneumatic seals

Seal Supply also supplies seals for pneumatic applications, where cylinders and valves are activated by air. These types of seals are often used in dynamic applications with high speed, linear and rotary movements.

Looking for a pneumatic seal that is not standard in stock? We can produce a number of types of pneumatic seals with our CNC machines.

# Seals for the food industry

## FDA and EC1935/2004

In the food industry, it is important to work with the right materials, for safety and compliance with laws and regulations. This also applies to the use of seals that may come into direct or indirect contact with food. By no means all materials are suitable for this. For food safety, guidelines have been established for the materials to be used [compounds] in the food industry. Two of the most important guidelines are laid down in the legislation EC1935/2004 and in the FDA [Food and Drugs Administration, USA].



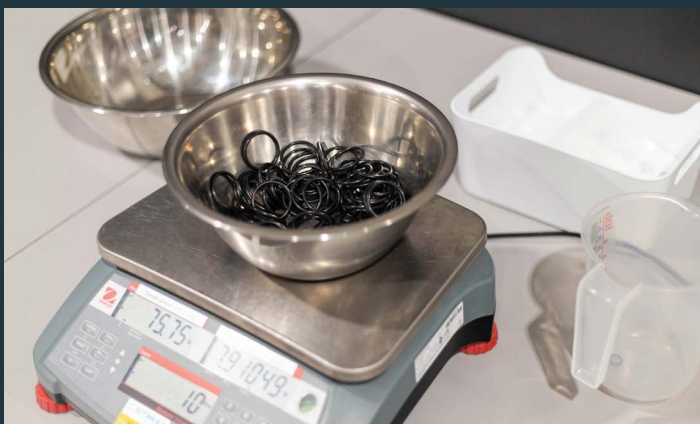
## Choosing the right seal

In addition to PS-Seals and hygienic seals, a number of other O-ring compounds are also suitable for the food industry. Seal Supply supplies these O-rings below in compounds that comply with this guideline(s):

- VMQ [silicone, red]
- EPDM [peroxide cured]
- NBR
- FKM brown
- PTFE [white]
- Evolast® FFKM [various compounds].
- VMQ FEP
- FKM FEP

## DoC

At the request of our customers, we will provide a so-called Declaration of Conformity [DoC], in which we declare that our seals comply with the applicable European regulations.



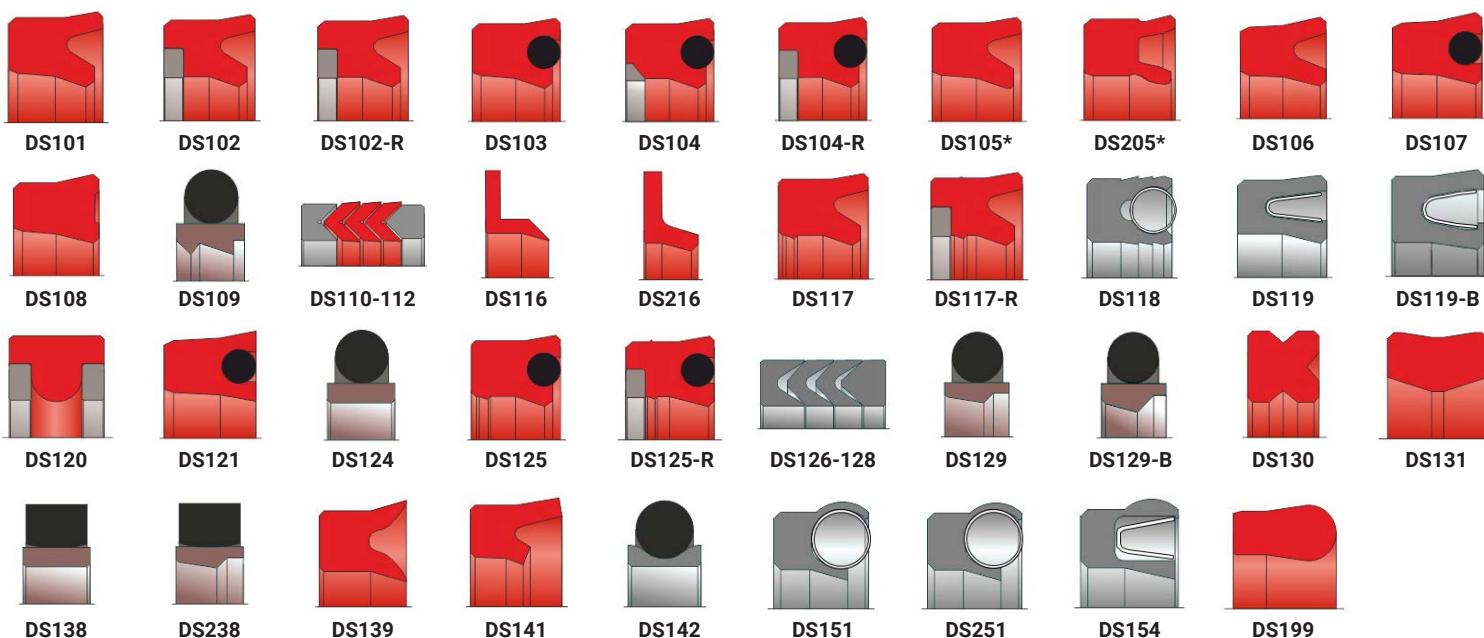
# Turned seals

## Profiles

### Wipers



### Rod seals



*\* Only suitable for pneumatic applications*

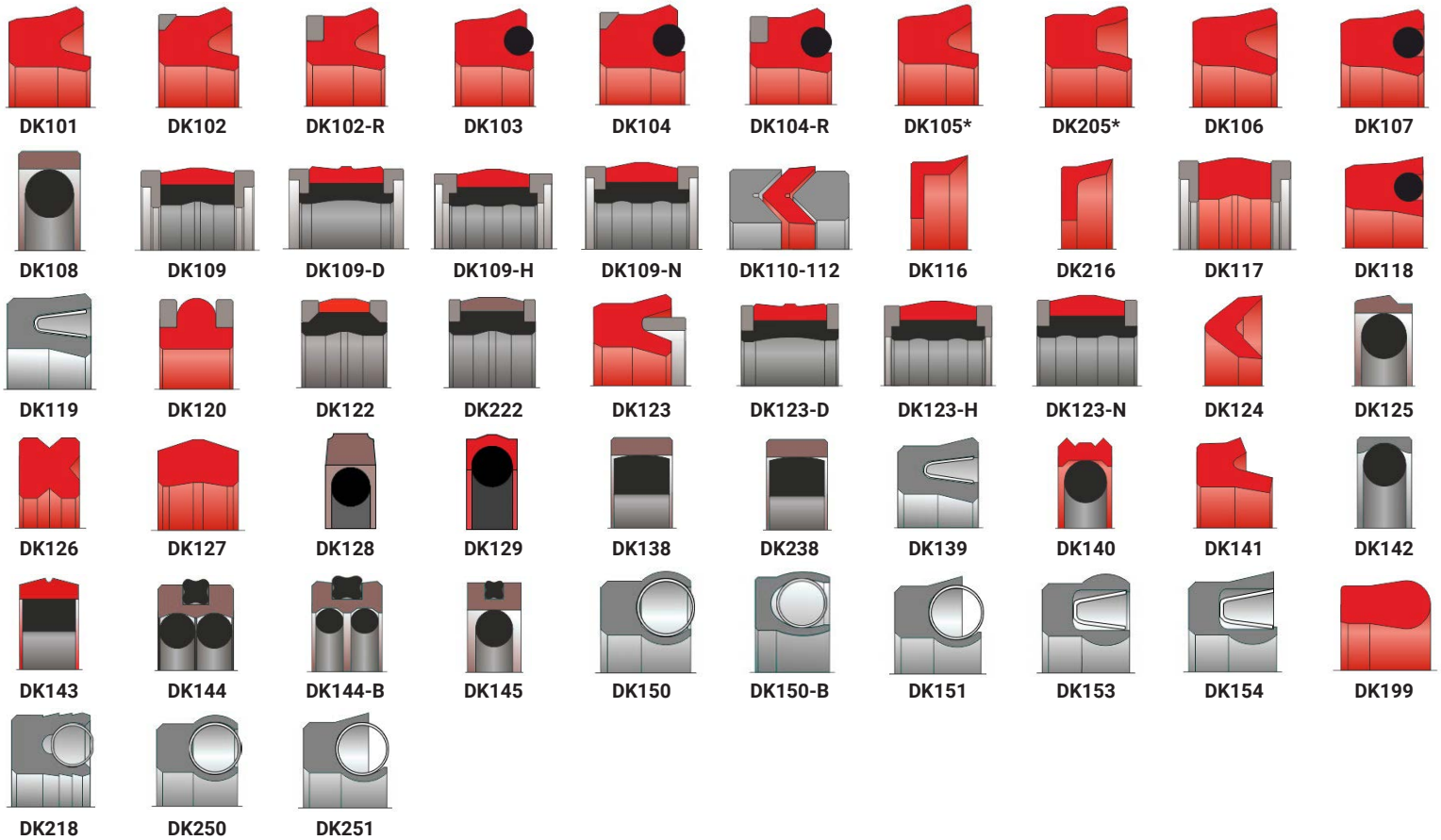


## Turned Seals

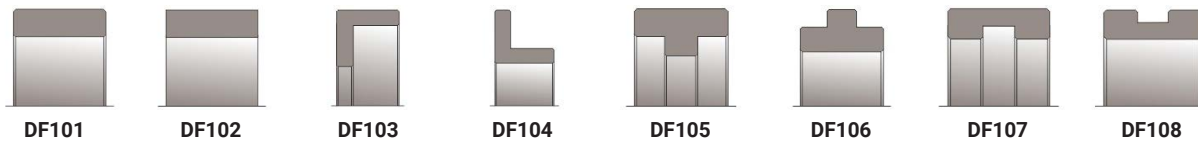
For producing turned seals, Seal Supply has CNC machines. These machines from PU1TEC have high precision cutting tools, specially optimized for producing seals to be used in critical environments. With a wide range of profiles, we can produce virtually any seal required on an immediate basis. A variety of materials is available for production of your specified seal.

## Profiles

### Piston seals



### Guide rings



### Back-up rings



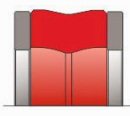
*\* Only suitable for pneumatic applications*



# Turned seals

## Profiles

### Radial Seals



DR103



DR104



DR105



DR108



DR110



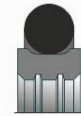
DR111



DR112



DR113



DR115



DR116



DR117



DR121

### Oil seals



DR101



DR102



DR201



DR202



DR203



DR204



DR205



DR206



DR207



DR101-F

### V-rings



DR106

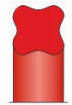


DR107

### O-rings & X-rings



DFL106



DFL111

### Flange seals



DFL101



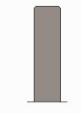
DFL102



DFL103



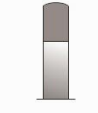
DFL104



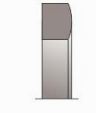
DFL105



DFL108



DFL109



DFL110



DFL112-A



DFL112-B



DR118



DR119



## Almost any seal can be produced

For turned seals, please first check this brochure to see what type of seal you need, in terms of shape and material. For prices and delivery time, please contact us by phone at **+31[0] 38 30 32 700** or email to [sales@sealsupply.nl](mailto:sales@sealsupply.nl).








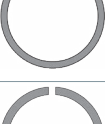
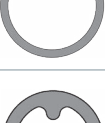

*We are happy to serve you!*

## Material overview [\* default material choice]

Material	Color	Compound nr.	Description	Hardness [shore]	Temp. [°C]	
					min.	max.
<b>NBR *</b>	Black	1085-00121	Nitrile butadiene rubber	85	-30	110
<b>NBR</b>	White	1085-01812	Nitrile butadiene rubber, FDA, EC 1935/2004	85	-22	100
<b>FKM *</b>	Black	1185-00121	Fluorocarbon rubber	85	-20	210
<b>FKM</b>	Brown	1185-01811	Fluorocarbon rubber, Viton®	85	-20	210
<b>FKM</b>	Brown	1185-01812	Fluorocarbon rubber, FDA, EC 1935/2004	85	-25	210
<b>EPDM *</b>	Black	1285-00121	Ethylene-Propylene-Diene-Monomer rubber, Peroxide cured	85	-45	130
<b>EPDM</b>	White	1285-01812	Ethylene-Propylene-Diene-Monomer rubber, FDA, EC 1935/2004	85	-50	100
<b>VMQ</b>	Light Blue	1385-00121	Silicone rubber	85	-60	200
<b>VMQ *</b>	Transparant	1385-00122	Silicone rubber, FDA	85	-60	200
<b>H-NBR</b>	Green	1885-00121	Hydrogenated Nitrile Butadiene rubber	85	-20	150
<b>H-PU *</b>	Red	1595-00121	Hydrolysis-resistant Polyurethane	95	-20	115
<b>H-PU</b>	Light red	1594-00122	Hydrolysis resistant Polyurethane, FDA, EC 1935/2004	94	-20	115
<b>H-PU</b>	Light green	1590-01811	Hydrolysis resistant Polyurethane, for pneumatic	90	-30	115
<b>H-PU</b>	Orange	1595-01812	Hydrolysis-resistant Polyurethane, higher temperature	95	-30	135
<b>H-PU</b>	Light Blue	1595-01813	Hydrolysis resistant Polyurethane, FDA, EC 1935/2004, low temperature	95	-50	105
<b>H-PU</b>	Purple	1595-01814	Hydrolysis resistant Polyurethane, FDA, EC 1935/2004, CIP suitable	95	-30	115
<b>H-PU</b>	Dark red	1595-01815	Hydrolysis resistant Polyurethane, low friction	95	-30	125
<b>H-PU</b>	Blue	1557-01811	Hydrolysis resistant Polyurethane, FDA, EC 1935/2004	57D	-30	125
<b>PU</b>	Light Yellow	1558-00471	Polyurethane, alternative to Z52® and Z54®.	58D	-70	130
<b>PU</b>	Light Yellow	1572-00471	Polyurethane, alternative to Z51® and Z53®.	72D	-70	130
<b>PTFE *</b>	White	1699-01381	PTFE pure white, FDA, EC 1935/2004, USP Class VI	51D	-200	260
<b>PTFE *</b>	Grey	1699-01382	PTFE 15% Glass, 5% MoS2	55D	-200	260
<b>PTFE *</b>	Brown	1699-01383	PTFE 40% Bronze	58D	-200	260
<b>PTFE *</b>	Dark gray	1699-01384	PTFE 25% Carbon	60D	-200	260
<b>PTFE</b>	Black	1699-01385	PTFE 15% Graphite	55D	-200	260
<b>PTFE</b>	Cream	1699-01386	PTFE 10% Ekonol®	55D	-200	260
<b>PTFE</b>	Natural	1699-01387	PTFE 25% Glass	70D	-200	260
<b>PTFE</b>	Turquoise	1699-00125	PTFE 1% Turquoise, more wear resistant than pure white PTFE	57D	-200	260
<b>POM</b>	White	1999-01811	Polyacetal, food grade	85D	-50	100
<b>PA</b>	Natural	3299-01811	Polyamide, from approx. 215 mm inner diameter	85D	-30	100
<b>UHMW-PE</b>	Natural	3399-01481	Ultra-High-Molecule-Weight PolyEthylene, EC 1935/2004	63D	-200	80



# Cirlips

	Product	Description	Type	Materials	DIN norm
	<b>Cirlips</b>	for shaft [A]	CR-10	spring steel stainless steel	DIN 471
	<b>Cirlips</b>	for house [J]	CR-11	spring steel stainless steel	DIN 472
	<b>Cirlips</b>	for shaft [AS] [heavy-duty]	CR-20	spring steel stainless steel	DIN 471
	<b>Cirlips</b>	for house [JS] [heavy-duty]	CR-21	spring steel stainless steel	DIN 472
	<b>Cirlips</b>	for shaft [AK]	CR-30	spring steel stainless steel	DIN 983
	<b>Cirlips</b>	for house [JK]	CR-31	spring steel stainless steel	DIN 984
	<b>Cirlips</b>	for shaft [A]	CR-40	spring steel	DIN 7993
	<b>Cirlips</b>	for house [B]	CR-41	spring steel	DIN 7993
	<b>Cirlips</b>	Circlip according to DIN 616	CR-50	spring steel	DIN 5417
	<b>Cirlips</b>	for shaft	RR-10	spring steel stainless steel	DIN 6799





## Tools for O-rings

We have tools in our assortment for determining the size and compound and for assembling and disassembling O-rings. Shown here is a shore meter, which can be used to determine the hardness of seals.

## O-ring recognizer

This is an O-ring recognizer. This simple tool is suitable for recognizing EPDM, NBR, FKM [viton] and FFKM compounds. Seal Supply also stocks tools for determining the size of O-rings. For example, a measuring cone or a circumferometer. For mounting and dismounting seals, we have a 4 and 8 piece mounting kit. The assembly set can be used for O-rings and groove seals.



## Calibrator

We have these calibrating pliers in stock for PTFE seals. Besides these calibrating pliers carry various other tools for hydraulic seals in our webshop:

[www.sealsupply.nl/gereedschap-en-liquids](http://www.sealsupply.nl/gereedschap-en-liquids)

## Complete tool box

We can also supply a complete tool kit for seals from stock. This kit contains a variety of tools for measuring, cutting, assembling and disassembling seals.



## Measuring cone [5 - 286 mm.]

With this multi-part measuring cone, which can be stacked, you can measure O-rings from 5 mm. up to 286 mm. For many companies that deal with O-rings on a daily basis, this is an indispensable tool.

## Tools and liquids

Seal Supply also supplies [measuring] tools that can be used to assemble, disassemble or measure seals. Furthermore we have a number of standard Loctite brand liquids and grease to properly assemble O-rings.

For more information visit our webshop:  
[www.sealsupply.co.uk/tools-and-liquids](http://www.sealsupply.co.uk/tools-and-liquids)



[www.sealsupply.co.uk](http://www.sealsupply.co.uk)



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