

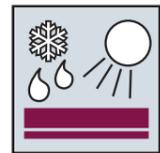


# Hydraulic seals

[www.depac.at](http://www.depac.at)

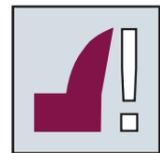
## DEPAC hydraulic seals

Red Super Polymer hydraulic seals from DEPAC are produced according to the latest technical findings. They are made of the optimum raw materials for flexible use and offer several advantages compared to conventional seals made of leather, Neoprene, rubber or fabric-reinforced elastomers.



### Unlimited shelf life

Conventional seals become brittle when exposed to light, heat and ozone and lose their sealing capacity over time. DEPAC hydraulic seals however are made of a unique polymer material with homogeneously incorporated lubricant. They have an unlimited shelf life and can be used without problem even after a long period in storage.



### Positive lip design – gentle and clean

The negative lip forms of normal seals allow dirt and foreign particles to be trapped between the seal lips and the cylinder. This causes grooving and increased repairs to the cylinder and piston rod. DEPAC's computer-calculated positive lip design wipes away dirt and particles without leakage, with little friction and with minimum wear.



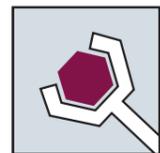
### Non-absorbent polymer material

Conventional seals swell as they absorb hydraulic fluid. This causes excessive wear and filters become blocked with fibres. DEPAC's polymer material however is not absorbent and does not swell. Its homogeneously incorporated lubricant ensures highest lubrication.



### Self-sealing – with no re-adjustment

Many conventional seals require repeated, time-consuming and therefore expensive re-adjustment to avoid excessive leakage. DEPAC's lip-structure has inbuilt pre-tension which automatically adjusts to different pressures. There is no need for tightening or re-tightening.



### Installation damage is avoided

Despite the greatest of care, conventional seals are highly vulnerable to damage of the sensitive sealing surfaces during installation. Reduced service life or total failure of the seal can be the result. DEPAC's unique polymer material prevents installation damage thanks to its high elasticity and wear-resistance.



### Competitive prices

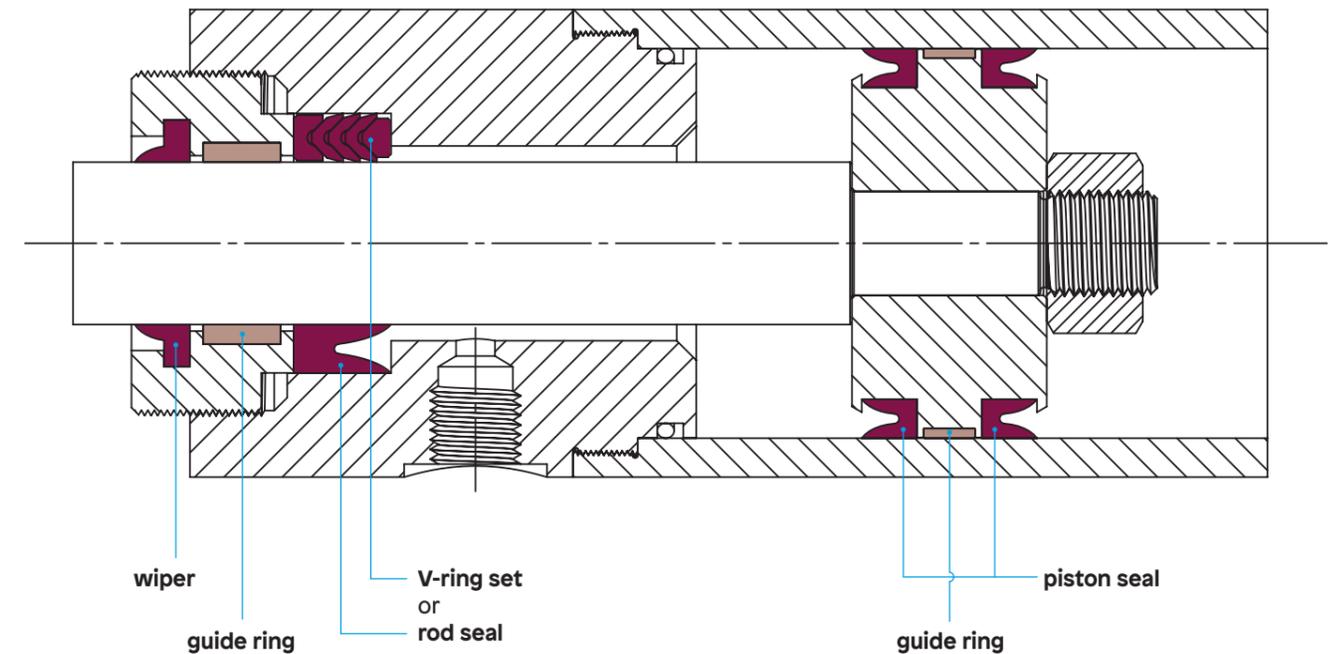
With modern production methods DEPAC is able to supply its entire range of seals at highly competitive prices. With the longer shelf life of the seals and the protection they give to your system, DEPAC seals represent outstanding value for money.



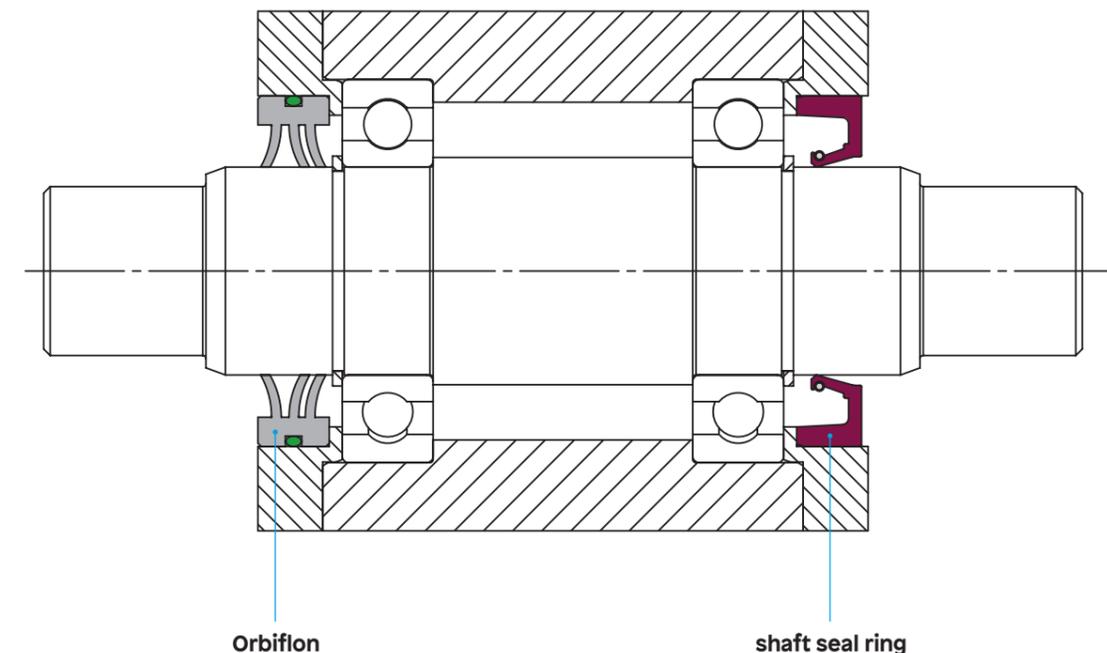
### Short delivery times

The sometimes substantial delivery times of many hydraulic seal manufacturers increase warehouse capital for the customer. DEPAC however can guarantee supply of the most varied seal designs within just a few days.

## Installation example, hydraulic unit



## Installation example, rotating shaft



## Endless rings

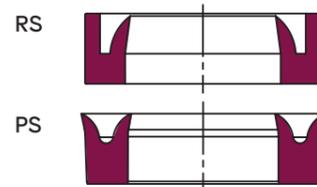
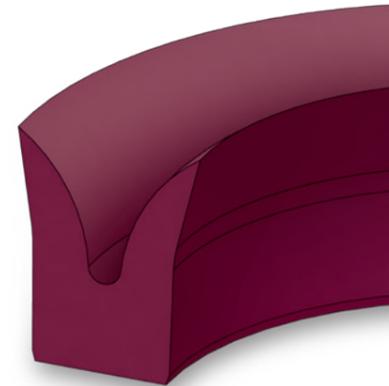
RS (rod mounted)  
PS (piston mounted)

### Advantages

- Computer-designed stable lip design
- Solid impact-resistant body
- Self-sealing
- No adjustment necessary
- For deep and shallow installation chambers
- Self-lubricating
- No extruding
- Minimum wear
- Non-absorbent polymer material
- Available in mm and inches
- Pressure up to 500 bar

### Required information for order

- Type description
- Measurements of the installation space (see order form page 10 /11)



## V-ring set

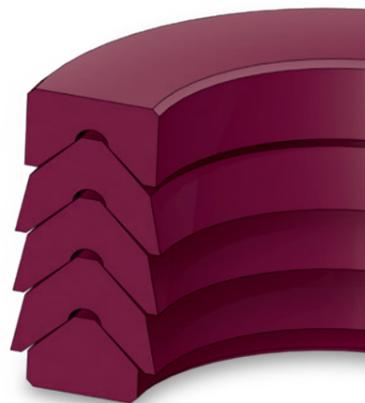
RS

### Advantages

- Fully-automatic seal
- Split or continuous
- No adjustment necessary
- Stable lip design
- Permanent self-lubrication
- No extruding
- Non-absorbent polymer material
- Minimum friction
- Available in mm and inches
- Pressure up to 500 bar

### Required information for order

- Type description
- Measurements of the installation space (see order form page 10 /11)



## Wiper

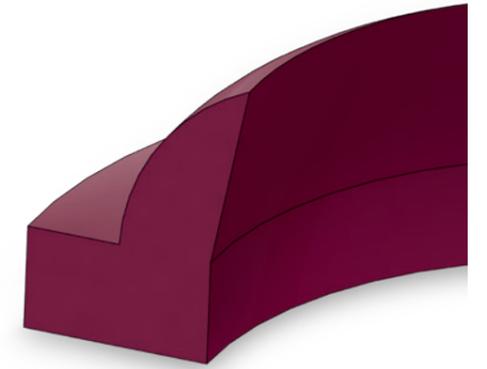
WR

### Advantages

- Low friction
- Stable lip form
- Automatic lip pretension
- No aging
- High elasticity
- Universal wiper
- Best rod cleaning
- Self-lubricating
- Available in mm and inches

### Required information for order

- Type description
- Measurements of the installation space (see order form page 10 /11)



## Required information for order

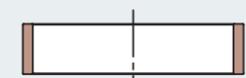
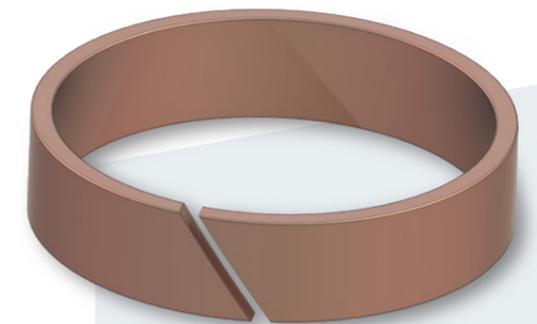
BW

### Advantages

- Pressure-resistance 340 N / mm<sup>2</sup>
- Resistant to water and oil
- Rings and products by the meter
- Also supplied in synthetic fabric made of phenolic resin fibres with incorporated PTFE

### Required information for order

- Type description
- Measurements of the installation space (see order form page 10 /11)



# Orbiflon

DO

## Rotation seals for bearing protection

### Advantages

- For optimum protection of the bearing against dirt, water and moisture
- Exclusive PTFE compound (PTFE 9)
- Self-adjusting lip(s) for optimum wear compensation
- 1, 2, 3 or more lips
- Shaft diameters from 10 to 1000 mm
- For shaft speeds up to 23 m/sec
- Food-compatible (FDA-compliant PTFE compound)
- Operating temperature max. 200° C
- Can increase service life by a factor of 10

### Areas for use

- Bearing housings (pumps, mixers, kneaders, agitators)
- Gearboxes
- Single-thrust bearings
- Worm bearings

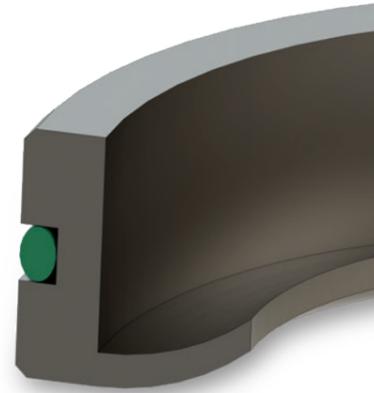
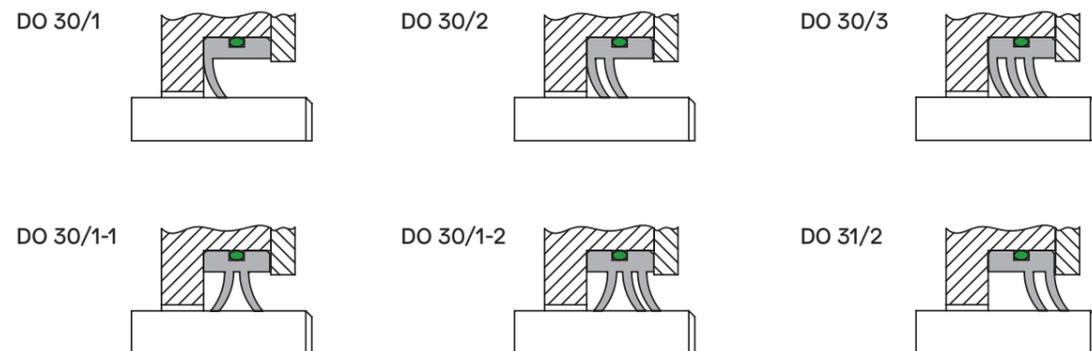
### Installation instruction

Bevelling (FW) may be required depending on the installation direction.

### Required information for order

- Type description
- Measurements of the installation space (see order form page 10 /11)

### Orbiflon profile overview



# Seal materials

## Polyurethanes

Description	Colour	Operating temperature	Hardness at 20° C	Primary use
Red Super Polymer		-50°C to +120°C	Shore A 95 +/-2	Endless rings, wipers, V-ring sets, base bushings for mechanical seals and other sealing elements Resistant to HFA, HFB, HFC and biologically degradable hydraulic fluids Improved chemical and thermal resistance Excellent resistance to hot water (+95°C) Triple self-lubrication with MoS2 (molybdenum disulphide), wax and grease Very low friction values (on steel) from 0.18 to 0.22
PU light blue FDA		-50°C to +105°C	Shore A 95 +/-2	FDA-approved white H-PU polyurethane Endless rings, wipers, V-ring sets and other sealing elements Mineral oils, HFA and HFB fluids, water, seawater Low friction values (on steel) from 0.4 to 0.6

## Elastomers

EPDM		-50°C to +130°C	Shore A 85 +/-5	Endless rings, wipers, V-ring sets and other sealing elements Hot water and steam, ozone, dilute acids and alkalis EPDM is NOT mineral oil-resistant FDA-compliant versions also available
FKM		-20°C to +210°C	Shore A 85 +/-5	Lip seals, wipers, chevron seals, shaft seals at high speeds and other sealing elements Mineral oils, HFD liquids at high temperatures Very good chemical resistances e.g. phosphate and chlorinated hydrocarbons, crude oil and sour gas FDA-compliant versions also available
Aflas® *		-15°C to +210°C	Shore A 85 +/-5	Endless rings, wipers, V-ring sets and other sealing elements Mineral oils, HFA, HFB, HFC and HFD fluids, hot water and steam, ozone, dilute acids and alkalis, acidic oils and gases, amines

## Plastics

POM		-50°C to +100°C	-	Backup and guide rings, rotating parts with tight tolerances Mineral oils, HFA, HFB and HFC fluids Low water absorption Very low friction values (on steel) of < 0.4 FDA-compliant versions also available
PTFE		-200°C to +260°C	Shore D 51-60	Backup or sliding rings with preloading element, spring-preloaded seals, backup and guide rings Resistant to nearly all common chemicals and fluids with the exception of molten alkali metals Very low friction values (on steel) of 0.06 FDA-compliant versions also available
PTFE 9		-200°C to +260°C	Shore D 62-67	Special compound of pure virgin PTFE and carbon made exclusively for Orbiflon shaft seals Resistant to acids, alkalis and aggressive media Sliding speeds up to 23 m/s possible FDA-compliant versions also available
KT 200		-50°C to +130°C	-	Special synthetic fabric made of phenolic resin fibres with incorporated PTFE Exclusively for guide rings For guiding pistons and piston rods Prevention of metallic contact of the components

### Other special materials on request.

Important: The specified minus-temperatures are only a guideline as the function in the cold depends on the type of seal, the conditions for use and the surrounding metal parts. The specified plus-temperatures can be exceeded but under certain circumstances this will reduce the service life.

\* Aflas® is a registered trademark of the Asahi Glass Company

Wipers	
Profile	Wipers
	WR01
	WR01A
	WR02
	WR02A
	WR02B
	WR02C
	WR02D
	WR03
	WR04
	WR07
	WR08
	WR11
	WR12
	WR13
	WR13_E2
	WR14
	WR15
	WR16
	WR17
	WR18

Rod seals	
Profile	Wipers
	RS01
	RS01A
	RS01B
	RS01C
	RS02
	RS02A

Rod seals	
Profile	Wipers
	RS02B
	RS02C
	RS03
	RS04
	RS04A
	RS05
	RS05A
	RS08
	RS09
	RS09A
	RS09B
	RS10-12B
	RS91
	RS91B
	RS16
	RS17
	RS17A
	RS17B
	RS17C
	RS17D
	RS17E
	RS19
	RS19A
	RS20
	RS31-33
	RS35
	RS35A

Piston seals	
Profile	Wipers
	PS01
	PS01A
	PS01B
	PS01C
	PS02
	PS02A
	PS03
	PS04
	PS04A
	PS05
	PS05A
	PS08
	PS08A
	PS08B
	PS08C
	PS08D
	PS08E
	PS08F
	PS81
	PS81B
	PS81C
	PS09
	PS09A
	PS10-12B
	PS16
	PS16A
	PS17
	PS17A
	PS17B

Piston seals	
Profile	Wipers
	PS19
	PS19A
	PS20
	PS23
	PS35
	PS35A

Symmetrical seals	
Profile	Wipers
	PRS06
	PRS06A
	PRS06B
	PRS06C
	PRS06D
	PRS06E
	PRS07
	PRS10SP
	PRS10-12
	PRS10-12A
	PRS13-15
	PRS18
	PRS19
	PRS19B
	PRS19C
	PRS19D
	PRS22
	PRS25-27
	PRS99

Guide rings	
Profile	Wipers
	BWR01
	BWR01A
	BWR03
	BWR04
	BWR05
	BWR06
	BWR07
	BWR08
	BWR09

Static seals and O-rings	
Profile	Wipers
	FL01A
	FL02B
	FL03
	FL04
	FL05
	FL06
	FL07
	FL08
	OR
	ORH
	ORV
	QR01
	QR02
	SS01

Rotary seals	
Profile	Wipers
	OS01A
	OS02A
	OS03A
	OS08
	OS08A
	R03
	R04
	R04A
	R05
	R05A
	VR06
	VR07
	R08
	R08D
	R09
	R09A
	R10
	R10A
	R11
	R11D
	R35A
	R35B

Customized seals	
Profile	Wipers

Mining seals	
Profile	Wipers
	P50
	P50A
	P51
	P51A
	P51G
	P52
	P53
	P54
	P54A
	P55
	R50
	R50A
	R51
	R52
	R53
	W50
	W51
	W53
	W54
	BWR01-P
	BWR01-R
	P58

Back-up rings	
Profile	Wipers
	BUR08
	BUR09
	BUR10
	BUR11
	BUR12
	BUR13

# Order form

## General Information

Pressure [bar]    Temperature [°C]    Stroke length [mm]    Stroke speed [m/s]    RPM    Medium

Material: **Polyurethanes**    **Elastomers**    **Plastics**

Red Super Polymer     EPDM     POM     KT 200

PU light blue FDA     FKM     PTFE

Alfas®     PTFE 9

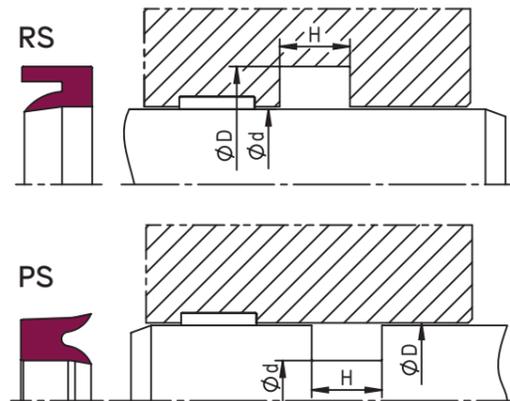
Other material:

continuous     split

## Endless ring

RS (rod mounted)

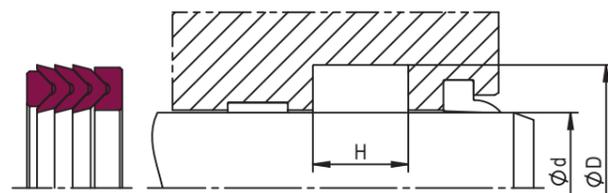
PS (piston mounted)



Quantity:     Type:     d (Piston)     D     H

## V-ring set

RS

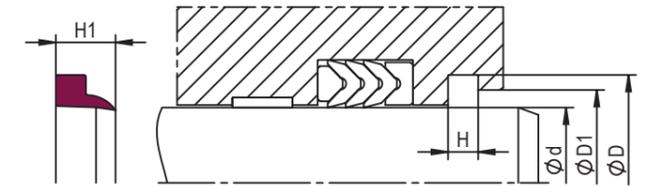


Quantity:     Type:     d (Piston)     D     H

# Order form

## Wiper

WR

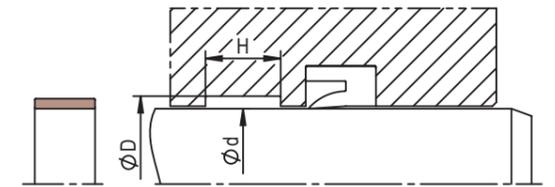


Quantity:

Typ:     d (Piston)     D     D1     H     H1

## Guide ring

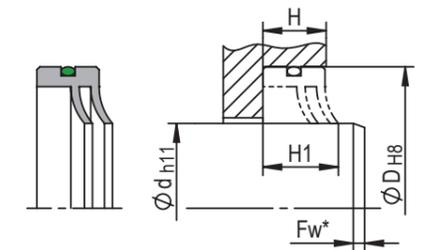
BW



Quantity:     Type:     d (Piston)     D     H

## Orbiflon

\*Bevelling (FW) may be required depending on the installation direction.



Quantity:

Type:     d (Piston)     D     H     H1

## Other Profiles

Backup ring DBST

High pressure rotary seal DHR

Shaft seal DBP

Pneumatic seal DPA

O-ring DOR

Type:

Quantity:

d (Piston)     D     H



Mechanical seals  
Packings  
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