








# O-Rings Oil Seals





# Static Seals

	Product	Description	Type	Materials (various Shore hardnesses)	Dimensions	Remarks
	O-Ring		OR-10	NBR, FKM, EPDM, VMQ, HNBR, FFKM, FVMQ, FEPM, ACM, CR, SBR, CSM, ECO, BR, IIR, IR, AU, EU, NR	DIN 3771-1, ISO 3601-1, SMS 1586, JIS B 2401, AS 568, BS 1806, BS 4518, NF T47-501, R 0 to R 27, R 28 to R 88	
	O-Ring	FEP- encapsulated	OR-11	FKM / FEP encapsulated VMQ/ FEP encapsulated		
	O-Ring	PTFE- encapsulated	OR-12	PTFE Elastomer core		
	O-Ring made from O-Ring cord	glued	OR-13	NBR, FKM, EPDM, VMQ		
	O-Ring made from O-Ring cord	vulcanised	OR-14	NBR, FKM, EPDM, VMQ		
	X-Ring		XR-10	NBR, FKM, . . .	AS 568	
	Back up ring	concave	BR-10	NBR, FKM		
	Back up ring	solid	BR-11	PTFE, POM, PEEK, NBR, FKM, AU, ...		
	Back up ring	split	BR-12	PTFE, POM, PEEK, NBR, FKM, AU, ...		
	Back up ring	spiral	BR-13	PTFE		
	Flat ring/washer	moulded	WR-10	NBR, FKM, EPDM, VMQ, ...		
	Flat ring/washer	tube cut	WR-11	NBR, FKM, EPDM, VMQ, ...		
	Flat ring/washer	stamped	WR-12	NBR, FKM, EPDM, VMQ, ...		
	Flat ring/washer	lathe cut	WR-13	NBR, FKM, EPDM, VMQ, ...		

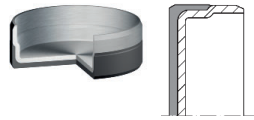
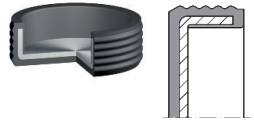
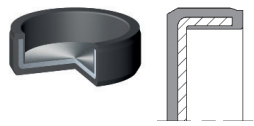
# Static Seals

	Product	Description	Type	Materials (various Shore hardnesses)	Dimensions	Remarks
	D-Ring		WR-14	NBR, FKM, EPDM, VMQ, ...		
	Profile seal	acc. to DIN 3869	WR-15	NBR, FKM, ...	DIN 3869	
	Square ring		SR-10	NBR, FKM, EPDM, VMQ, ...		
	Hygienic seal	standard design	HS-10	NBR, EPDM, VMQ, FKM, HNBR, PTFE, ...	DIN 11851	FDA 177.2600
	Hygienic seal	high version	HS-11	NBR, EPDM, VMQ, FKM, HNBR, PTFE, ...		FDA 177.2600
	Hygienic seal	with flange	HS-12	NBR, EPDM, VMQ, FKM, HNBR, PTFE, ...		FDA 177.2600
	O-Ring cord	extruded	EP-10	NBR, FKM, EPDM, VMQ, ...		
	Profile cord	extruded - profile acc. to drawing	EP-13	NBR, FKM, EPDM, VMQ, ...		
	Bonded seal	standard design	BS-10	NBR, FKM, ...		
	Bonded seal	self centring	BS-11	NBR, FKM, ...		
	Bonded seal	self centring	BS-14	NBR, FKM, ...		
	Bonded seal	self centring	BS-15	NBR, FKM, ...		
	Bonded seal	outside sealing	BS-13	NBR, FKM, ...		
	Bonded seal	design acc. to drawing	BS-12	NBR, FKM, ...		

# Static Seals

	Product	Description	Type	Materials (various Shore hardnesses)	Dimensions	Remarks
	Flange seal	outside sealing	FS-10	PTFE compounds V-spring stainless steel		
	Flange seal	inside sealing	FS-11	PTFE compounds V-spring stainless steel		
	Flange seal	outside sealing	FS-12	PTFE compounds helical spring stainless steel		
	Flange seal	inside sealing	FS-13	PTFE compound helical spring stainless steel		
	Moulded part acc. to drawing	customer specific	CP-10	all established materials and combinations		
	O-Ring Cord Service box		SK-10	NBR, FKM, EPDM, VMQ, ...		
	O-Ring Service box	inch 1 inch 2 inch 3 inch 4	SK-20 SK-21 SK-22 SK-23	NBR, FKM, EPDM, VMQ, ...		
		metric 1 metric 2 metric 3 metric 4	SK-24 SK-25 SK-26 SK-27			
		french swedish	SK-28 SK-29			
	X-Ring Service box		SK-40	NBR, FKM, EPDM, VMQ, ...		
	Service box	special contents	SK-50	NBR, FKM, EPDM, VMQ, ...		

# Static Seals



Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range [mm]	Remarks
			min	max				
Cover seal	CS-10	NBR	-30	100		0.05	600	smooth rubber OD
		FKM	-20	200				
Cover seal	CS-11	NBR	-30	100		0.05	600	ribbed rubber OD
		FKM	-20	200				
Cover seal	CS-12	NBR	-30	100		0.05	600	metal + smooth rubber OD, ribbed rubber OD possible
		FKM	-20	200				

\* With regard to technical data, please also refer to our detailed product information on the internet.  
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# Rotary Seals

Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range		Remarks
			[°C]				[mm]		
			min	max	max	max	from	to	
Oil seal <b>WA</b>	OS-A10	NBR	-40	100	12	0.05	4	1000	standard design acc. to DIN 3760
		FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	35	0.05			
Oil seal <b>WAS</b>	OS-A11	NBR	-40	100	12	0.05	4	1000	standard design acc. to DIN 3760 with protective lip
		FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	35	0.05			
Oil seal <b>WAO</b>	OS-A12	NBR	-40	100	6	0	3		without spring
		FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	10	0			
Oil seal <b>WASO</b>	OS-A13	NBR	-40	100	6	0	4		without spring with protective lip
		FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	10	0			
Oil seal <b>VIA</b>	OS-F10	FKM	-30	200	35	0.05	4	1000	case fully covered spring 1.4301 standard design for FKM (VITON) material
		NBR VMQ, ACM, EPDM, HNBR, ...	-40	100	12	0.05			
Oil seal <b>VIAS</b>	OS-F11	FKM	-30	200	35	0.05	4	1000	case fully covered spring 1.4301 stand. design with protective lip for FKM (Viton) material
		NBR VMQ, ACM, EPDM, HNBR, ...	-40	100	12	0.05			
Oil seal <b>WAY</b>	OS-N21	NBR	-40	100	12	1	8	300	pressure resistant with protective lip standard design
		FKM	-30	170	35	1			
Oil seal	OS-N34	NBR	-40	100	12	1	8	300	pressure resistant
		FKM	-30	170	35	1			
Oil seal	OS-G10	NBR	-40	100	12	0.05	4	1000	ribbed rubber OD
		FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	35	0.05			
Oil seal	OS-G11	NBR	-40	100	12	0.05	4	1000	ribbed rubber OD with protective lip
		FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	35	0.05			











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# Rotary Seals

	Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range [mm] from to	Remarks
				min	max				
				min	max				
	Oil seal	OS-G12	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10	0 0	3	ribbed rubber OD without spring
	Oil seal	OS-G13	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10	0 0	4	ribbed rubber OD without spring with protective lip
	Oil seal	OS-B10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0.05 0.05	6	1000 standard design metal housing
	Oil seal	OS-B11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0.05 0.05	6	1000 metal housing with protective lip
	Oil seal	OS-B12	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10	0 0	4	metal housing without spring
	Oil seal	OS-B13	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	6 10	0 0	4	metal housing without spring with protective lip
	Oil seal	OS-BG10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0.05 0.05	4	1000 metal + rubber OD
	Oil seal	OS-BG11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0.05 0.05	4	1000 metal + rubber OD with protective lip
	Oil seal	OS-C10	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0.05 0.05	6	1000 standard design metal housing + reinforcement cap
	Oil seal	OS-C11	NBR FKM VMQ, ACM, EPDM, HNBR, ...	-40 -30	100 200	12 35	0.05 0.05	6	1000 metal housing + reinforcement cap with protective lip

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# Rotary Seals

Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range		Remarks
			min	max			max	max	
 <b>WCO</b>	Oil seal	OS-C12	NBR	-40	100	6	0	6	metal housing + reinforcement cap without spring
			FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	10	0		
 <b>WCSO</b>	Oil seal	OS-C13	NBR	-40	100	6	0	6	metal housing + reinforcement cap without spring with protective lip
			FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	10	0		
 <b>WD</b>	Oil seal	OS-D10	NBR	-40	100	6	0.03	1000	two sealing lips for separating two media
			FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	10	0.03		
 <b>OS-D15</b>	Oil seal	OS-D15	NBR	-40	100	6	0.03	1000	two sealing lips for separating two media
			FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	10	0.03		
 <b>OS-O18</b>	Oil seal	OS-O18	NBR	-40	100	10	0.05	1000	outside sealing
			FKM VMQ, ACM, EPDM, HNBR, ...	-30	200	10	0.05		
 <b>OS-ST18</b>	Oil seal	OS-ST18	NBR	-40	80	7	0.05	300	cassette seal other designs available
			FKM VMQ, ACM, EPDM, HNBR, ...	-30	100	9	0.05		
 <b>OS-PA30</b>	Oil seal	OS-PA30	PTFE compounds	-90	250	40	0.5	20	clamped sealing lip pressure resistant non-mould production
			stainless steel						
 <b>OS-PA31</b>	Oil seal	OS-PA31	PTFE compounds	-90	250	40	1	31	clamped sealing lip pressure resistant non-mould production
			stainless steel						
 <b>OS-PA32</b>	Oil seal	OS-PA32	PTFE compounds	-90	250	40	2.5	31	clamped sealing lip pressure resistant non-mould production
			stainless steel						
 <b>OS-W10</b>	Oil seal	OS-W10	NBR	-40	100	12	0.5	1200	clamped sealing lip pressure resistant non-mould production
			FKM	-30	200	15	1 (optional)		
<b>WCL</b>									

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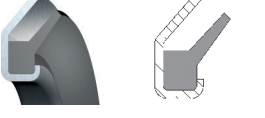
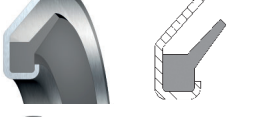





# Rotary Seals

Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range		Remarks
			[°C]				[mm]		
			min	max			max	from to	
	OS-W11	NBR	-40	100	12	0.5	1200		clamped sealing lip pressure resistant non-mould production
		FKM	-30	200	15	1 (optional)			
	OS-W50	PTFE carbon / graphite O-Ring: FKM Spring: 1.4571	-20	200	15	1	300		chemical resistant pressure resistant non-mould production
	OS-Q10	NBR + NBR-Fabric	-30	100	20	0.05	1200		OD made of rubber fabric for large-scale machines split version possible
		FKM + FKM-Fabric	-20	180	25	0.05			
	OS-Q11	NBR + NBR-Fabric	-30	100	20	0.05	1200		OD made of rubber fabric for large-scale machines split version possible
		FKM + FKM-Fabric	-20	180	25	0.05			
	OS-Q12	NBR + NBR-Fabric	-30	100	20	0.05	1200		OD made of rubber fabric for large-scale machines split version possible
		FKM + FKM-Fabric	-20	180	25	0.05			
	OS-Q13	NBR + NBR-Fabric	-30	100	20	0.05	1200		OD made of rubber fabric for large-scale machines split version possible
		FKM + FKM-Fabric	-20	180	25	0.05			

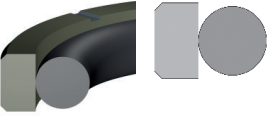
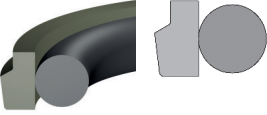


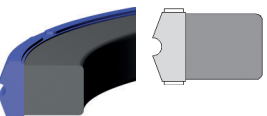
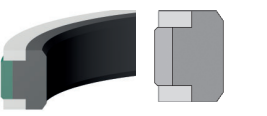
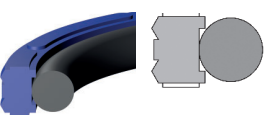
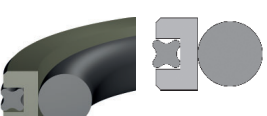
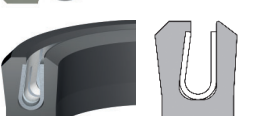

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# Rotary Seals

Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range		Remarks	
			[°C] min	max			[mm] from	to		
	V-Ring	VR-A10	NBR	-40	100	8 (12)	0	3	1000	type A
			FKM	-20	200	6.5 (10)	0			
	V-Ring	VR-S10	NBR	-40	100	8 (12)	0	5	199	type S
			FKM	-20	200	6.5 (10)	0			
	V-Ring	VR-E10	NBR	-40	100	8 (12)	0	300	2000	type E
			FKM	-20	200	6.5 (10)	0			
	V-Ring	VR-L10	NBR	-40	100	8 (12)	0	110	600	type L
			FKM	-20	200	6.5 (10)	0			
	V-Ring	VR-AX10	NBR	-40	100	8 (12)	0	200	2000	type AX
			FKM	-20	200	6.5 (10)	0			
	Axial seal	AS-10	NBR	-40	100	12 (20)	0	10	135	standard design
			FKM	-30	180	12 (20)	0			
	Axial seal	AS-11	NBR	-40	100	12 (20)	0	15	100	version with extended metal case
			FKM	-30	180	12 (20)	0			
	Radial seal	RD-10	PTFE carbon/graphite,...			5	30		2500	for rotating and oscillating movements inside sealing
			O-Ring: NBR	-30	100					
			O-Ring: FKM	-15	200					
	Radial seal	RD-11	PTFE carbon/graphite,...			5	30		2500	for rotating and oscillating movements outside sealing
			O-Ring: NBR	-30	100					
			O-Ring: FKM	-15	200					
	Radial seal	RD-14	PTFE carbon/graphite,...	-100	200	2	15		2500	with clamp flange high thermal and chemical resistance
			V-spring: 1.4310							

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# Hydraulic Seals

Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range [mm]	Remarks
			min	max				
			min	max	max	max	up to	
	Piston seal	PS-10 PTFE bronze ... + OR NBR	-30	100	15	40	2500	double acting
			-15	200	15	40		
			-30	100	2			
	Piston seal	PS-11 PTFE bronze ... + OR NBR	-30	100	15	40	2500	single acting
			-15	200	15	40		
			-30	100	2			
	Piston seal	PS-12 PTFE bronze ... + OR NBR	-30	100	2	16	2500	double acting
			-15	200	2	16		
			-30	100	2			
	Piston seal	PS-13 PTFE compounds + OR NBR	-30	100	15	35	2500	double acting
			-15	200	15	35		
			-30	100	2			
	Piston sealL	PS-14 PUR + NBR	-30	100	0.5	40	200	double acting
	Piston sealL	PS-17 PTFE + NBR + POM	-30	100	1.5	40	290	double acting heavy duty
	Piston sealL	PS-18 PUR + NBR	-30	100	0.5	25	250	double acting
	Piston seal	PS-19 PTFE bronze ... + OR NBR	-30	100	2	40	700	double acting
			-15	200	2	40		
			-30	100	2			
	Piston seal	PS-87 PTFE carbon/graphite ... V-spring: 1.4310	-150	250	15	35	2500	single acting
	Piston seal	PS-88 PTFE compounds Spring: 1.4310	-150	250	10	25 (45)	2500	single acting

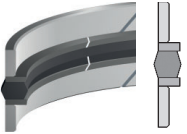
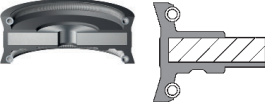
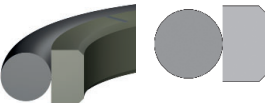
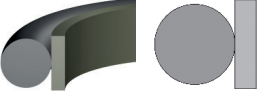
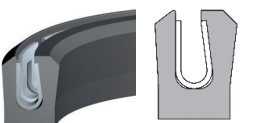

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# Hydraulic Seals

Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range [mm]	Remarks	
			min	max					
	Piston seal	PS-89	PTFE compounds Spring: 1.4310	-150	250	5	30	2500	single acting
	Piston seal	PS-20	NBR / Fabric + POM  FKM / Fabric	-30	100	0.5	40	1200	single acting
	Piston seal	PS-72	TPU NBR	-40	100	0.5	40	250 360	single acting
	Piston seal	PS-65	PUR + POM	-30	100	0.5	40	240	single acting
	Piston seal	PS-33	NBR + NBR/Fabric + POM	-30	100	0.5	50	200	single acting
	Piston seal	PS-40	NBR + PE + POM ...	-30	100	0.5	40	300	double acting
	Piston seal	PS-42	NBR + TPE + POM	-30	100	0.5	70	350	double acting
	Piston seal	PS-44	NBR + NBR/Fabric + POM	-30	100	0.5	40	250	double acting
	Piston seal	PS-45	NBR + POM	-30	100	0.5	15	300	double acting

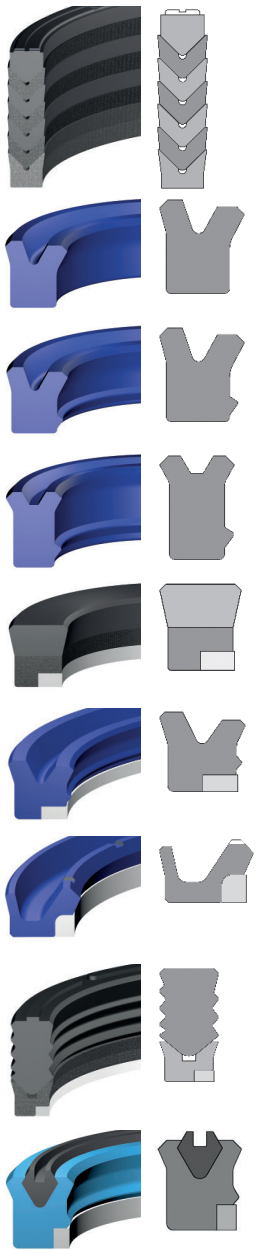
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# Hydraulic Seals

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			min	max					
	Piston seal	PS-53	NBR + TPE + POM	-30	100	0.5	40	203.2	double acting
	Piston seal	PS-50	NBR ...	-30	100	0.5	1-6	300	double acting
	Rod seal	RS-10	PTFE bronze ... + OR NBR PTFE bronze ... + OR FKM TPU + OR NBR	-30	100	15	40	2500	double acting
	Rod seal	RS-11	PTFE bronze ... + OR NBR PTFE bronze ... + OR FKM TPU + OR NBR	-30	100	15	40	2500	single acting
	Rod seal	RS-12	PTFE bronze ... + OR NBR PTFE bronze ... + OR FKM	-30	100	2	16	2500	double acting
	Rod seal	RS-13	PTFE compound ... + OR NBR PTFE compound ... + OR FKM	-30	100	15	35	2500	double acting
	Rod seal	RS-87	PTFE carbon/graphite ... V-spring: 1.4310	-150	250	15	35	2500	single acting
	Rod seal	RS-88	PTFE compounds Spring: 1.4310	-150	250	10	25 (45)	2500	single acting
	Rod seal	RS-89	PTFE compounds Spring: 1.4310	-150	250	5	30	2500	single acting

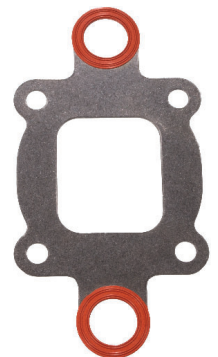
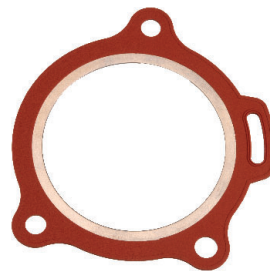
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# Hydraulic Seals



Product	Type	Materials	Temp.* [°C]		Speed* [m/s]	Pressure* [MPa]	Range [mm]	Remarks
			min	max				
Rod seal	RS-20	NBR / Fabric + NBR + POM	-30	100	0.5	40	500	single acting
		FKM / Fabric + FKM	-15	150	0.5	40		
Rod seal	RS-72	TPU	-40	100	0.5	40	250	single acting
		NBR	-30	100	0.5	16		
		...						
Rod seal	RS-73	TPU	-40	100	0.5	40	250	single acting
Rod seal	RS-76	TPU	-40	100	0.5	40	250	single acting
Rod seal	RS-31	NBR + NBR/Fabric + POM	-30	100	0.5	40	230	single acting
Rod seal	RS-74	PUR + POM	-30	100	0.5	40	380	single acting
Rod seal	RS-80	PUR + POM	-30	100	0.5	40	150	single acting buffer seal
Rod seal	RS-32	NBR + NBR/fabric (TPE) + POM	-30	100	0.5	70	260	single acting
Rod seal	RS-35	PUR + NBR + POM	-30	100	0.5	63	340	single acting heavy duty

\* With regard to technical data, please also refer to our detailed product information on the internet.  
The specified maximum values may not appear in common.



# Hydraulic Seals


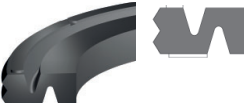



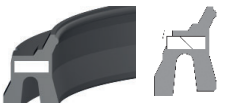





Product	Type	Materials	Temp.* [°C]		Speed* [m/s]	Pressure* [MPa]		Range [mm] up to	Remarks
			min	max		max	max		
Rod seal	RS-36	NBR + NBR/fabric	-30	100	0.5	25	110	single acting heavy duty	
Rod and Piston seal	RP-70	TPU	-40	100	0.5	30	250	single acting	
		NBR	-30	100	0.5	16	500		
Rod and Piston seal	RP-75	TPU	-40	100	0.5	40	250	single acting	
Rod and Piston seal	RP-30	NBR + NBR/Fabric	-30	100	0.5	20	140	single acting	

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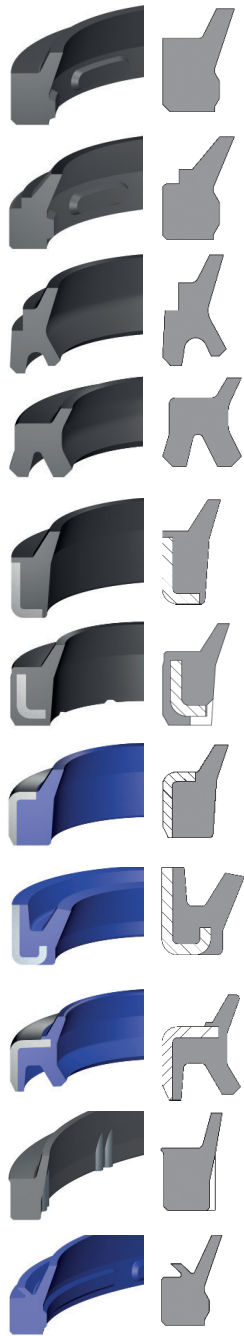
# Pneumatic Seals

	Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range [mm]	Remarks
				min	max				
	Piston seal	PS-51	NBR ...	-30	100	1	1.6	400	double acting
	Piston seal	PS-81	NBR	-30	100	1	1.2	125	double acting
	Piston seal	PS-85	NBR	-30	100	1	1.2	320	single acting
			PUR	-30	80	1	1.6		
	Piston seal	PS-86	NBR	-30	100	1	1.2	320	single acting
			PUR	-30	120	1	1.6		
	Rod seal	RS-85	PUR	--30	80	1	1.6	60	single acting combination wiper/seal
	Rod seal	RS-86	NBR + steel	-30	100	1	1.6	50	single acting combination wiper/seal
	Rod seal	RS-94	NBR + TPE	-30	100	1	1.6	63	single acting combination wiper/seal
	Rod seal	RS-95	NBR	-30	100	1	1.2	30	single acting combination wiper/seal
			PUR	--30	80	1	1.6		
	Rod seal	RS-93	NBR	-30	100	1	1.2	70	Cushion seal
			PUR	--30	80	1	1.6		

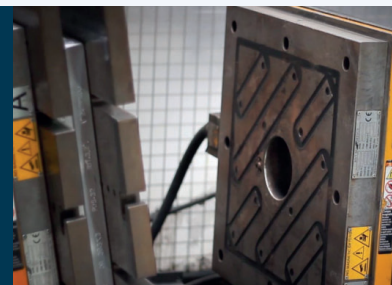
\* With regard to technical data, please also refer to our detailed product information on the internet.  
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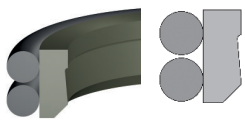
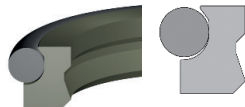
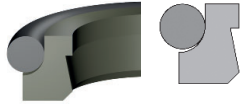
# Wipers



Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range [mm] up to	Remarks
			min	max				
Wiper	WS-10	NBR	-40	100	4		350	single acting
		TPU	-40	100	2		250	
Wiper	WS-11	NBR	-40	100	4		250	single acting
		TPU	-40	100	2		180	
Wiper	WS-D14	NBR	-40	100	1		500	double wiper
		...						
Wiper	WS-D15	NBR	-40	100	1		300	double wiper
		TPU	-40	100	1		250	
Wiper	WS-20	NBR	-40	100	1		300	single acting with metal case
		...						
Wiper	WS-21	NBR	-40	100	1		300	single acting with metal case
		...						
Wiper	WS-22	TPU	-40	100	2		250	single acting with metal case
Wiper	WS-23	TPU	-40	100	1		250	single acting with metal case
Wiper	WS-D24	TPU	-40	100	1		250	double wiper with metal case
Wiper	WS-17	TPE	-40	120	2		450	single acting
Wiper	WS-18	PUR	-30	100	1		200	single acting

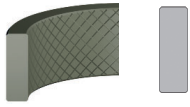


# Wipers



Product	Type	Materials	Temp.*		Speed* [m/s]	Pressure* [MPa]	Range [mm] up to	Remarks
			min	max				
Wiper	WS-30	PTFE bronze ... + OR NBR	-30	100	15		2500	single acting
		PTFE bronze ... + OR FKM	-15	200	15			
		TPU + OR NBR	-30	100	2			
Wiper	WS-D31	PTFE bronze ... + OR NBR	-30	100	15		2500	double wiper
		PTFE bronze ... + OR FKM	-15	200	15			
		TPU + OR NBR	-30	100	2			
Wiper	WS-D32	PTFE bronze ... + OR NBR	-30	100	15		2500	double wiper
		PTFE bronze ... + OR FKM	-15	200	15			
		TPU + OR NBR	-30	100	2			
Wiper	WS-D33	PTFE bronze ... + OR NBR	-30	100	5		2500	double wiper
		PTFE bronze ... + OR FKM	-15	200	5			

# Guiding elements



Product	Type	Materials	Temp.*		Speed* [m/s]	Contact pressure* [N/mm²]	Remarks
			min	max			
Guide ring	GR-P10	PTFE bronze ...	-60	200	15	15	piston guide ring
		laminated fabric	-50	130	1	350	
		POM-glass	-30	110	1	35	
Guide ring	GR-R10	PTFE bronze ...	-60	200	15	15	rod guide ring
		laminated fabric	-50	130	1	350	
		POM-glass	-30	110	1	35	
Guide strip per roll	GS-10	PTFE bronze ...	-60	200	15	15	special surface structure chamfered edges
Guide strip precut	GS-11	PTFE bronze ...	-60	200	15	15	Precut shapes: diagonal (30°) straight (90°) Z-cut

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