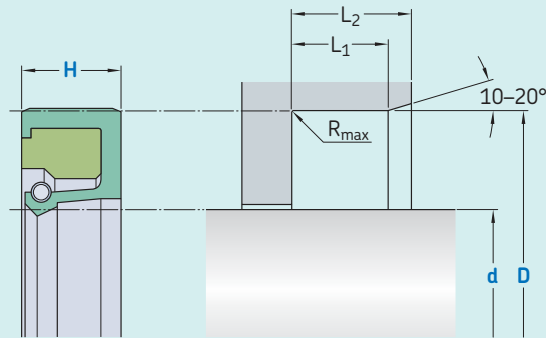


# R01-P



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	0,1–0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions						
d	D	H	$L_1$	$L_2$	$R_{max}$	
h11	H8					
over						incl.
mm						
<b>15</b>	<b>60</b>	d + 12	7,0	5,95	7,3	0,4
<b>60</b>	<b>140</b>	d + 15	8,0	6,80	8,3	0,4
<b>140</b>	<b>300</b>	d + 20	10,0	8,50	10,3	0,4
<b>300</b>	<b>500</b>	d + 30	12,0	10,30	12,3	0,8
<b>500</b>	<b>800</b>	d + 40	20,0	17,00	20,3	0,8
<b>800</b>		d + 50	22,0	18,70	22,3	0,8

## Ordering example

Profile  
 d x D x H [mm]  
 Sealing material / Clamping ring / Spring

Rotary seal R01-P  
 100 x 115 x 8  
 ECOPUR / SKF Ecotal / 1.4310

Operating parameters

Material Seal	Clamping ring <sup>4)</sup>	Spring	Temperature		Speed <sup>1) 2) 3)</sup>	Pressure
			from	to	max	max
			°C		m/s	bar (MPa)
■ ECOPUR	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ ECOPUR LD	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ G-ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ H-ECOPUR	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ H-ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ S-ECOPUR	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ S-ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

1) Surface speed limit values are valid only in the presence of a lubrication film.

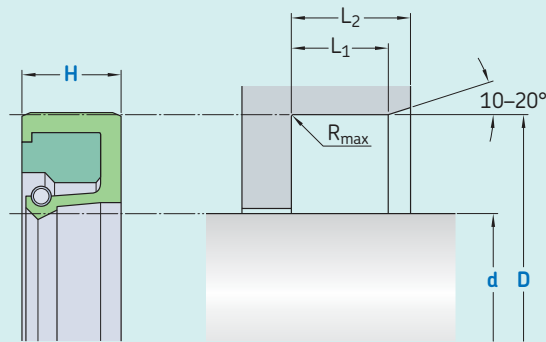
2) Depending on shaft diameter

3) Half speed value for greased applications.

4) Size limitation D: Up to 260 mm SKF Ecotal, from 260 – 400 mm SKF Ecotal or SKF Ecomid and above 400 mm SKF Ecomid.



# R01-R



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	μm	
<b>Sliding surface</b>	≤ 2,5	0,1–0,5
<b>Bottom of groove</b>	≤ 6,3	≤ 1,6
<b>Groove face</b>	≤ 15	≤ 3

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

## Standard dimensions

d	D	H	$L_1$	$L_2$	$R_{max}$	
h11 over	H8					
incl.						
mm						
<b>15</b>	<b>60</b>	d + 12	7,0	5,95	7,3	0,4
<b>60</b>	<b>140</b>	d + 15	8,0	6,80	8,3	0,4
<b>140</b>	<b>300</b>	d + 20	10,0	8,50	10,3	0,4
<b>300</b>	<b>500</b>	d + 30	12,0	10,30	12,3	0,8
<b>500</b>	<b>800</b>	d + 40	20,0	17,00	20,3	0,8
<b>800</b>		d + 50	22,0	18,70	22,3	0,8

## Ordering example

Profile  
 d x D x H [mm]  
 Sealing material / Clamping ring / Spring

Rotary seal R01-R  
 100 x 115 x 8  
 SKF Ecorubber-1 / SKF Ecotal / 1.4310

## Operating parameters

Material Seal	Clamping ring <sup>4)</sup>	Spring	Temperature		Speed <sup>1) 2) 3)</sup>	Pressure
			from	to	max	max
			°C		m/s	bar (MPa)
■ SKF Ecorubber-1	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-1	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-1	■ Metal	1.4310	-30	+100	10	0,2 (0,02)
■ SKF Ecorubber-H	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-H	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-H	■ Metal	1.4310	-25	+150	10	0,2 (0,02)
■ SKF Ecorubber-2	■ SKF Ecotal	1.4310	0	+80	15	0,2 (0,02)
■ SKF Ecorubber-2	■ SKF Ecomid	1.4310	0	+80	15	0,2 (0,02)
■ SKF Ecorubber-2	■ Metal	1.4310	-20	+200	15	0,2 (0,02)
■ SKF Ecorubber-3	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-3	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-3	■ Metal	1.4310	-50	+150	10	0,2 (0,02)
■ SKF Ecoflas	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecoflas	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecoflas	■ Metal	1.4310	-10	+200	10	0,2 (0,02)
■ SKF Ecosil	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ SKF Ecosil	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ SKF Ecosil	■ Metal	1.4310	-60	+200	5	0,2 (0,02)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

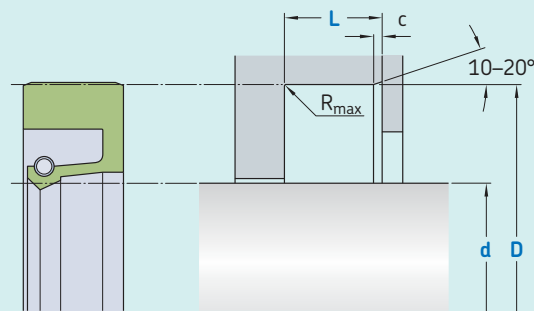
<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Depending on shaft diameter

<sup>3)</sup> Half speed value for greased applications.

<sup>4)</sup> Size limitation D: Up to 260 mm SKF Ecotal, from 260 – 400 mm SKF Ecotal or SKF Ecomid and above 400 mm SKF Ecomid.

# R01-AF



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	$0,1-0,5$
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50-95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

d		d		D	L	c	$R_{max}$
h11		h11		H8	-0,2		
Rotating application		Pivoting application					
over	incl.	over	incl.				
mm							
<b>15</b>	<b>80</b>	<b>5</b>	<b>40</b>	$d + 15$	7	1,2	0,4
<b>80</b>	<b>140</b>	<b>40</b>	<b>70</b>	$d + 20$	8	1,5	0,4
<b>140</b>	<b>240</b>	<b>70</b>	<b>120</b>	$d + 20$	10	1,5	0,4
<b>240</b>	<b>480</b>	<b>120</b>	<b>240</b>	$d + 30$	12	1,8	0,8
<b>480</b>	<b>2 240</b>	<b>240</b>	<b>1 120</b>	$d + 40$	15	1,8	0,8
<b>2 240</b>	<b>3 200</b>	<b>1 120</b>	<b>1 600</b>	$d + 50$	25	3,3	0,8
<b>3 200</b>		<b>1 600</b>		$d + 60$	30	3,3	0,8

### Ordering example

Profile  
 $d \times D \times L$  [mm]  
 Sealing material / Spring

Rotary seal R01-AF  
**100 x 120 x 8**  
 ECOPUR / 1.4310

## Operating parameters

Material Seal	Spring	Temperature		Speed <sup>1) 2) 3)</sup>	Pressure
		from	to	max	max
		°C		m/s	bar (MPa)
■ ECOPUR	1.4310	-30	+110	5	0,5 (0,05)
■ ECOPUR LD	1.4310	-35	+110	5	0,5 (0,05)
■ G-ECOPUR	1.4310	-30	+110	5	0,5 (0,05)
■ H-ECOPUR	1.4310	-20	+110	5	0,5 (0,05)
■ S-ECOPUR	1.4310	-20	+110	5	0,5 (0,05)
■ T-ECOPUR	1.4310	-50	+110	5	0,5 (0,05)
■ SKF Ecorubber-1	1.4310	-30	+100	10	0,5 (0,05)
■ SKF Ecorubber-H	1.4310	-25	+150	10	0,5 (0,05)
■ SKF Ecorubber-2	1.4310	-20	+200	15	0,5 (0,05)
■ SKF Ecorubber-3	1.4310	-50	+150	10	0,2 (0,02)
■ SKF Ecoflas	1.4310	-10	+200	10	0,5 (0,05)
■ SKF Ecosil	1.4310	-60	+200	5	0,2 (0,02)

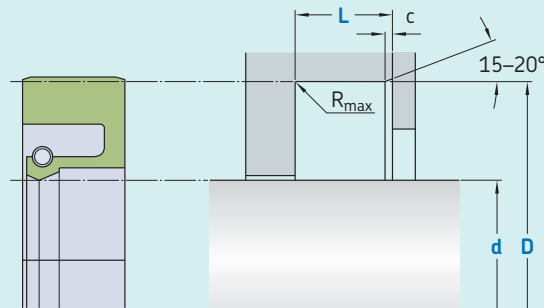
IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

1) Surface speed limit values are valid only in the presence of a lubrication film.

2) Depending on shaft diameter.

3) Half speed value for greased applications.

# R01-AS



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu\text{m}$	
<b>Sliding surface</b>	$\leq 2,5$	$0,1-0,5$
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth  $> 0,3$  mm.  
 Bearing area: 50–95% and a cutting depth of  $0,5 R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

$d$		$d$		$D$	$L$	$c$	$R_{max}$
h11		h11		H8	-0,2		
Rotating application		Pivoting application					
over	incl.	over	incl.				
mm							
<b>15</b>	<b>70</b>	<b>15</b>	<b>35</b>	$d + 20$	8	1,5	0,4
<b>70</b>	<b>120</b>	<b>35</b>	<b>60</b>	$d + 20$	10	1,5	0,4
<b>120</b>	<b>240</b>	<b>60</b>	<b>120</b>	$d + 30$	12	1,8	0,8
<b>240</b>	<b>1 120</b>	<b>120</b>	<b>560</b>	$d + 40$	15	3,0	0,8
<b>1 120</b>	<b>1 600</b>	<b>560</b>	<b>800</b>	$d + 50$	20	3,3	0,8
<b>1 600</b>		<b>800</b>	<b>2 220</b>	$d + 60$	25	3,3	0,8

### Ordering example

Profile  
 $d \times D \times L$  [mm]  
 Sealing material / Spring

Rotary seal R01-AS  
**100 x 120 x 10**  
 ECOPUR / 1.4310

## Operating parameters

Material Seal	Spring	Temperature		Speed <sup>1) 2) 3)</sup>	Pressure
		from	to	max	max
		°C		m/s	bar (MPa)
■ ECOPUR	1.4310	-30	+110	5	0,5 (0,05)
■ ECOPUR LD	1.4310	-35	+110	5	0,5 (0,05)
■ G-ECOPUR	1.4310	-30	+110	5	0,5 (0,05)
■ H-ECOPUR	1.4310	-20	+110	5	0,5 (0,05)
■ S-ECOPUR	1.4310	-20	+110	5	0,5 (0,05)
■ T-ECOPUR	1.4310	-50	+110	5	0,5 (0,05)
■ SKF Ecorubber-1	1.4310	-30	+100	10	0,5 (0,05)
■ SKF Ecorubber-H	1.4310	-25	+150	10	0,5 (0,05)
■ SKF Ecorubber-2	1.4310	-20	+200	15	0,5 (0,05)
■ SKF Ecorubber-3	1.4310	-50	+150	10	0,2 (0,02)
■ SKF Ecoflas	1.4310	-10	+200	10	0,5 (0,05)
■ SKF Ecosil	1.4310	-60	+200	5	0,2 (0,02)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

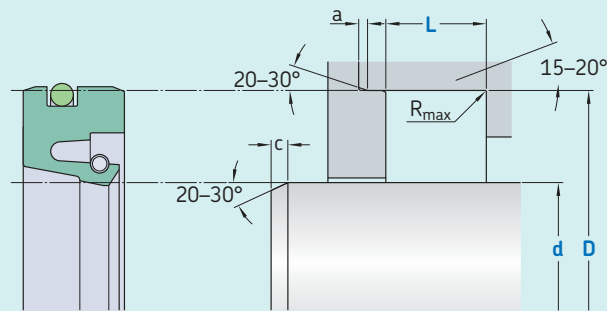
1) Surface speed limit values are valid only in the presence of a lubrication film.

2) Depending on shaft diameter

3) Half speed value for greased applications.



# R01-F



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,2
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: On the surface min 55 HRC, hardened depth  $> 0,3$  mm.  
 Bearing area: 50–95% and a cutting depth of  $0,5 R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

d		d		D	L	c	a	$R_{max}$
h11		h11		H8	-0,1			
Rotating application		Pivoting application						
over	incl.	over	incl.					
mm								
<b>15</b>	<b>66</b>	<b>15</b>	<b>33</b>	$d + 12$	7,0	3,0	1,25	0,4
<b>66</b>	<b>110</b>	<b>33</b>	<b>55</b>	$d + 16$	9,0	3,5	1,50	0,4
<b>110</b>	<b>280</b>	<b>55</b>	<b>140</b>	$d + 20$	10,0	5,0	2,00	0,4
<b>280</b>	<b>400</b>	<b>140</b>	<b>200</b>	$d + 25$	12,5	6,5	2,50	0,8
<b>400</b>	<b>600</b>	<b>200</b>	<b>400</b>	$d + 30$	15,0	7,5	3,00	0,8
		<b>400</b>	<b>600</b>	$d + 40$	20,0	9,0	3,50	0,8

### Ordering example

Profile  
 $d \times D \times L$  [mm]  
 Sealing material / O-Ring / Spring

Rotary seal R01-F  
**100 x 120 x 10**  
**SKF Ecoflon 4 / NBR 70 / 1.4310**

Operating parameters

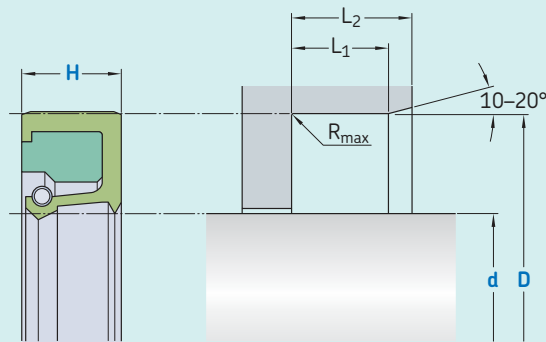
Material Seal	O-Ring	Spring	Temperature		Speed <sup>1)</sup>	Pressure
			from	to	max	max
			°C		m/s	bar (MPa)
■ SKF Ecoflon 4	NBR 70	1.4310	-30	+100	10	15 (1,5)
■ SKF Ecoflon 4	FPM 75	1.4310	-20	+200	10	15 (1,5)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.



# R02-P



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu\text{m}$	
<b>Sliding surface</b>	$\leq 2,5$	0,1–0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

## Standard dimensions

d	D	H	$L_1$	$L_2$	$R_{max}$
h11 over	H8				
	incl.				
mm					
<b>15</b>	<b>60</b>	d + 12	7	5,95	7,3
<b>60</b>	<b>140</b>	d + 15	8	6,80	8,3
<b>140</b>	<b>300</b>	d + 20	10	8,50	10,3
<b>300</b>	<b>500</b>	d + 30	12	10,30	12,3
<b>500</b>	<b>800</b>	d + 40	20	17,00	20,3
<b>800</b>		d + 50	22	18,70	22,3

## Ordering example

Profile  
 d x D x H [mm]  
 Sealing material / Clamping ring / Spring

Rotary seal R02-P  
 100 x 115 x 8  
 ECOPUR / SKF Ecotol / 1.4310

## Operating parameters

Material Seal	Clamping ring <sup>4)</sup>	Spring	Temperature		Speed <sup>1) 2) 3)</sup>	Pressure
			from	to	max	max
			°C		m/s	bar (MPa)
■ ECOPUR	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ ECOPUR LD	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ G-ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ H-ECOPUR	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ H-ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ S-ECOPUR	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ S-ECOPUR	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

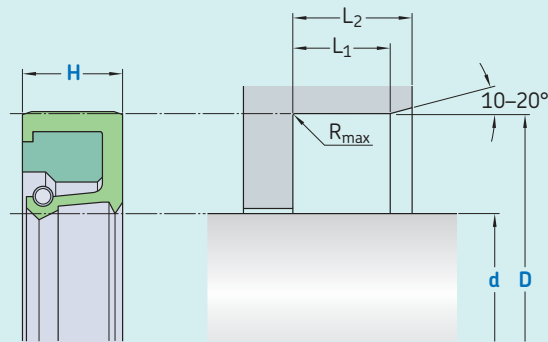
<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Depending on shaft diameter

<sup>3)</sup> Half speed value for greased applications.

<sup>4)</sup> Size limitation D: Up to 260 mm SKF Ecotal, from 260 – 400 mm SKF Ecotal or SKF Ecomid and above 400 mm SKF Ecomid.

# R02-R



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	0,1–0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

## Standard dimensions

d	D	H	$L_1$	$L_2$	$R_{max}$	
h11 over	H8					
incl.						
mm						
<b>15</b>	<b>60</b>	d + 12	7,0	5,95	7,3	0,4
<b>60</b>	<b>140</b>	d + 15	8,0	6,80	8,3	0,4
<b>140</b>	<b>300</b>	d + 20	10,0	8,50	10,3	0,4
<b>300</b>	<b>500</b>	d + 30	12,0	10,30	12,3	0,8
<b>500</b>	<b>800</b>	d + 40	20,0	17,00	20,3	0,8
<b>800</b>		d + 50	22,0	18,70	22,3	0,8

## Ordering example

Profile  
d x D x H [mm]  
Sealing material / Clamping ring / Spring

Rotary seal R02-R  
100 x 115 x 8  
SKF Ecorubber-1 / SKF Ecotal / 1.4310

## Operating parameters

Material Seal	Clamping ring <sup>4)</sup>	Spring	Temperature		Speed <sup>1) 2) 3)</sup>	Pressure
			from	to	max	max
			°C		m/s	bar (MPa)
■ SKF Ecorubber-1	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-1	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-1	■ Metal	1.4310	-30	+100	10	0,2 (0,02)
■ SKF Ecorubber-H	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-H	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-H	■ Metal	1.4310	-25	+150	10	0,2 (0,02)
■ SKF Ecorubber-2	■ SKF Ecotal	1.4310	0	+80	15	0,2 (0,02)
■ SKF Ecorubber-2	■ SKF Ecomid	1.4310	0	+80	15	0,2 (0,02)
■ SKF Ecorubber-2	■ Metal	1.4310	-20	+200	15	0,2 (0,02)
■ SKF Ecorubber-3	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-3	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecorubber-3	■ Metal	1.4310	-50	+150	10	0,2 (0,02)
■ SKF Ecoflas	■ SKF Ecotal	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecoflas	■ SKF Ecomid	1.4310	0	+80	10	0,2 (0,02)
■ SKF Ecoflas	■ Metal	1.4310	-10	+200	10	0,2 (0,02)
■ SKF Ecosil	■ SKF Ecotal	1.4310	0	+80	5	0,2 (0,02)
■ SKF Ecosil	■ SKF Ecomid	1.4310	0	+80	5	0,2 (0,02)
■ SKF Ecosil	■ Metal	1.4310	-60	+200	5	0,2 (0,02)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

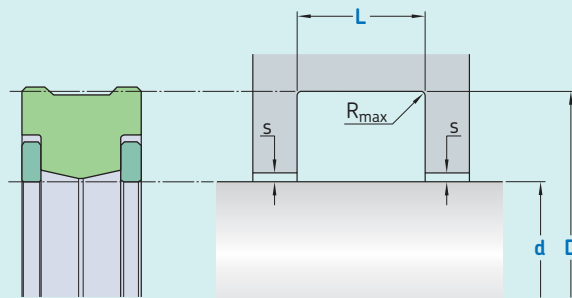
<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Depending on shaft diameter

<sup>3)</sup> Half speed value for greased applications.

<sup>4)</sup> Size limitation D: Up to 260 mm SKF Ecotal, from 260 – 400 mm SKF Ecotal or SKF Ecomid and above 400 mm SKF Ecomid.

# R03-P



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu\text{m}$	
<b>Sliding surface</b>	$\leq 2,5$	$0,1-0,5$
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth  $> 0,3$  mm.  
 Bearing area: 50–95% and a cutting depth of  $0,5 R_z$  based on  $C_{ref} = 0\%$

Standard dimensions		$D$	$L$	$R_{max}$	$s$
$d^*$		H9	+ 0,2		
over	incl.				
mm					
<b>21</b>	<b>22</b>	$d + 8$	6,5	0,2	e8/H9
<b>22</b>	<b>36</b>	$d + 10$	8,0	0,2	e8/H9
<b>36</b>	<b>56</b>	$d + 12$	8,0	0,2	e8/H9
<b>56</b>	<b>85</b>	$d + 15$	11,0	0,2	f7/H7
<b>85</b>	<b>140</b>	$d + 20$	13,0	0,2	f7/H7
<b>140</b>	<b>200</b>	$d + 25$	16,0	0,2	f7/H7
<b>200</b>	<b>300</b>	$d + 30$	19,0	0,2	f7/H7
<b>300</b>		$d + 40$	26,0	0,2	f7/H7

\* Tolerance area shaft  $\leq 56$  mm  $\rightarrow$  e8,  $> 56$  mm  $\rightarrow$  f7

## Ordering example

Profile  
 $d \times D \times L$  [mm]  
 Sealing material / Back-up rings

Rotary seal R03-P  
**100 x 120 x 13**  
 ECOPUR / SKF Ecotal

Operating parameters

Material Seal	Back-up rings <sup>3)</sup>	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
■ ECOPUR	■ SKF Ecotal	-30	+100	0,2	400 (40)
■ ECOPUR	■ SKF Ecomid	-30	+110	0,2	400 (40)
■ H-ECOPUR	■ SKF Ecotal	-20	+100	0,2	400 (40)
■ H-ECOPUR	■ SKF Ecomid	-20	+110	0,2	400 (40)
■ S-ECOPUR	■ SKF Ecotal	-20	+100	0,2	400 (40)
■ S-ECOPUR	■ SKF Ecomid	-20	+110	0,2	400 (40)
■ T-ECOPUR	■ SKF Ecotal	-40	+100	0,2	400 (40)
■ T-ECOPUR	■ SKF Ecomid	-40	+110	0,2	400 (40)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

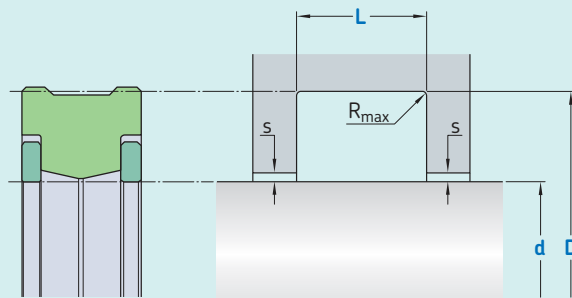
<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.

<sup>3)</sup> Size limitation D: Up to 260 mm SKF Ecotal, from 260 – 400 mm SKF Ecotal or SKF Ecomid and above 400 mm SKF Ecomid.





# R03-R



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	0,1–0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

$d^*$		D	L	$R_{max}$	s
over	incl.	H9	+ 0,2		
mm					
<b>22</b>	<b>36</b>	d + 10	8	0,2	e8/H9
<b>36</b>	<b>56</b>	d + 12	8	0,2	e8/H9
<b>56</b>	<b>85</b>	d + 15	11	0,2	f7/H7
<b>85</b>	<b>140</b>	d + 20	13	0,2	f7/H7
<b>140</b>	<b>200</b>	d + 25	16	0,2	f7/H7
<b>200</b>	<b>300</b>	d + 30	19	0,2	f7/H7
<b>300</b>		d + 40	26	0,2	f7/H7

\* Tolerance area shaft  $\leq 56$  mm  $\rightarrow$  e8, > 56 mm  $\rightarrow$  f7

### Ordering example

Profile  
 d x D x L [mm]  
 Sealing material / Back-up rings

**Rotary seal R03-R**  
**100 x 120 x 13**  
**SKF Ecorubber-1 / SKF Ecotal**

## Operating parameters

Material Seal	Back-up rings <sup>3)</sup>	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
■ SKF Ecorubber-1	■ SKF Ecotal	-30	+100	0,2	250 (25)
■ SKF Ecorubber-1	■ SKF Ecomid	-30	+100	0,2	250 (25)
■ SKF Ecorubber-H	■ SKF Ecotal	-25	+100	0,2	250 (25)
■ SKF Ecorubber-H	■ SKF Ecomid	-25	+110	0,2	250 (25)
■ SKF Ecorubber-2	■ SKF Ecoflon 2	-20	+200	0,2	250 (25)
■ SKF Ecorubber-3	■ SKF Ecoflon 2	-50	+150	0,2	250 (25)
■ SKF Ecorubber-3	■ SKF Ecotal	-50	+100	0,2	250 (25)
■ SKF Ecorubber-3	■ SKF Ecomid	-40	+110	0,2	250 (25)
■ SKF Ecoflas	■ SKCopaek	-10	+200	0,2	250 (25)

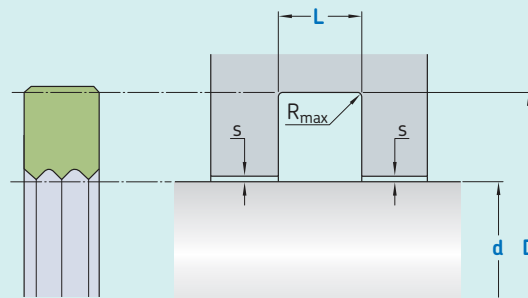
IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.

<sup>3)</sup> Size limitation D: Up to 260 mm SKF Ecotal, from 260 – 400 mm SKF Ecotal or SKF Ecomid and above 400 mm SKF Ecomid.

# R04-A



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	0,1–0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

$d^*$		D	L	$R_{max}$	s
over	incl.	H9	+ 0,2		
mm					
<b>5</b>	<b>22</b>	d + 8	4,5	0,2	e8/H9
<b>22</b>	<b>36</b>	d + 10	5,6	0,2	e8/H9
<b>36</b>	<b>56</b>	d + 12	5,6	0,2	e8/H9
<b>56</b>	<b>85</b>	d + 15	7,7	0,2	f7/H7
<b>85</b>	<b>140</b>	d + 20	9,2	0,2	f7/H7
<b>140</b>	<b>200</b>	d + 25	11,3	0,2	f7/H7
<b>200</b>	<b>300</b>	d + 30	13,5	0,2	f7/H7
<b>300</b>		d + 40	18,5	0,2	f7/H7

\* Tolerance area shaft  $\leq 56$  mm  $\rightarrow$  e8, > 56 mm  $\rightarrow$  f7

### Ordering example

Profile  
 d x D x L [mm]  
 Sealing material

Rotary seal R04-A  
 100 x 120 x 13  
 ECOPUR

## Operating parameters

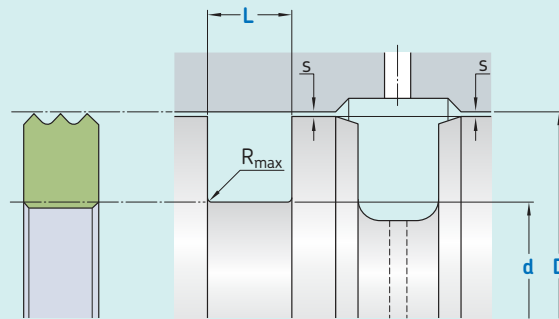
Material Seal	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110	0,2	160 (16)
■ H-ECOPUR	-20	+110	0,2	160 (16)
■ S-ECOPUR	-20	+110	0,2	160 (16)
■ T-ECOPUR	-50	+110	0,2	160 (16)
■ SKF Ecorubber-1	-30	+100	0,2	100 (10)
■ SKF Ecorubber-H	-25	+150	0,2	100 (10)
■ SKF Ecorubber-2	-20	+200	0,2	100 (10)
■ SKF Ecorubber-3	-50	+150	0,2	100 (10)
■ SKF Ecoflas	-10	+200	0,2	100 (10)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.

# R05-A



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	0,1–0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

$D^*$		$d$	$L$	$R_{max}$	$s$
over	incl.	$h8$	$+0,2$		
mm					
<b>13</b>	<b>30</b>	$D - 8$	4,5	0,2	H9/e8
<b>30</b>	<b>46</b>	$D - 10$	5,6	0,2	H9/e8
<b>46</b>	<b>68</b>	$D - 12$	5,6	0,2	H9/e8
<b>68</b>	<b>100</b>	$D - 15$	7,7	0,2	H7/f7
<b>100</b>	<b>160</b>	$D - 20$	9,2	0,2	H7/f7
<b>160</b>	<b>225</b>	$D - 25$	11,3	0,2	H7/f7
<b>225</b>	<b>330</b>	$D - 30$	13,5	0,2	H7/f7
<b>330</b>		$D - 40$	18,5	0,2	H7/f7

\* Tolerance area counter surface  $\leq 68$  mm  $\rightarrow$  H9, > 68 mm  $\rightarrow$  H7

### Ordering example

Profile  
 $d \times D \times L$  [mm]  
 Sealing material

Rotary seal R05-A  
**100 x 120 x 9,2**  
 ECOPUR

## Operating parameters

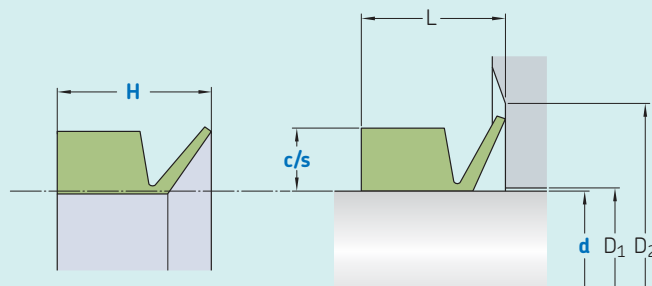
Material Seal	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110	0,2	160 (16)
■ H-ECOPUR	-20	+110	0,2	160 (16)
■ S-ECOPUR	-20	+110	0,2	160 (16)
■ T-ECOPUR	-50	+110	0,2	160 (16)
■ SKF Ecorubber-1	-30	+100	0,2	100 (10)
■ SKF Ecorubber-H	-25	+150	0,2	100 (10)
■ SKF Ecorubber-2	-20	+200	0,2	100 (10)
■ SKF Ecorubber-3	-50	+150	0,2	100 (10)
■ SKF Ecoflas	-10	+200	0,2	100 (10)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.

# R06-P



Ordering dimensions in **blue**

Surface speed	$R_{tmax}$	$R_a$
m/s	$\mu m$	
< 1	$\leq 12$	$\leq 2,5$
1 ... 5	$\leq 10$	$\leq 2,0$
5 ... 10	$\leq 6,3$	$\leq 1,6$
> 10	$\leq 3,2$	$\leq 0,8$

Standard dimensions		$D_1$	$D_2$	$c/s$	H	L
d	$h_{11}$	max	min			
over	incl.					
mm						
<b>5</b>	<b>40</b>	d + 2,00	d + 12,0	4,0	7,50	6,0
<b>40</b>	<b>70</b>	d + 2,50	d + 15,0	5,0	9,00	7,0
<b>70</b>	<b>100</b>	d + 3,00	d + 18,0	6,0	10,85	9,0
<b>100</b>	<b>150</b>	d + 3,50	d + 21,0	7,0	12,70	10,5
<b>150</b>	<b>210</b>	d + 4,00	d + 24,0	8,0	14,60	12,0
<b>210</b>	<b>300</b>	d + 5,00	d + 30,0	10,0	17,56	14,5
<b>300</b>	<b>450</b>	d + 6,25	d + 36,5	12,5	21,26	17,5
<b>450</b>		d + 7,50	d + 45,0	15,0	25,00	20,0

### Ordering example

Profile  
 d x c/s x H [mm]  
 Sealing material

Rotary seal R06-P  
 100 x 7 x 12,7  
 ECOPUR

## Operating parameters

Material Seal	Temperature		Speed <sup>1) 2)</sup>	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110	25	–
■ ECOPUR LD	-35	+110	25	–
■ G-ECOPUR	-30	+110	25	–
■ H-ECOPUR	-20	+110	25	–
■ S-ECOPUR	-20	+110	25	–
■ T-ECOPUR	-50	+110	25	–

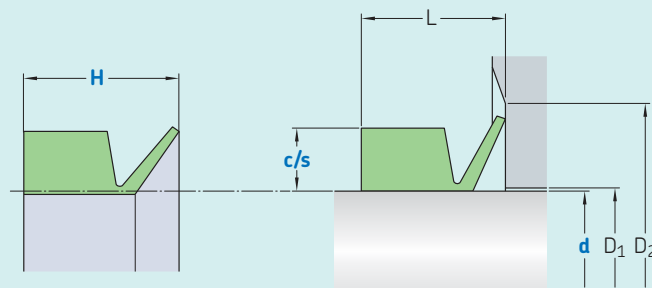
IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only when the seal is rotating.

<sup>2)</sup> For speeds above 10 m/s, axial support is recommended.



# R06-R



Ordering dimensions in **blue**

Surface speed m/s	$R_{tmax}$ $\mu m$	$R_a$
< 1	$\leq 12$	$\leq 2,5$
1 ... 5	$\leq 10$	$\leq 2,0$
5 ... 10	$\leq 6,3$	$\leq 1,6$
> 10	$\leq 3,2$	$\leq 0,8$

### Standard dimensions

d	$h_{11}$	$D_1$	$D_2$	c/s	H	L
over	incl.	max	min			
5	40	$d + 2,00$	$d + 12,0$	4,0	7,50	6,0
40	70	$d + 2,50$	$d + 15,0$	5,0	9,00	7,0
70	100	$d + 3,00$	$d + 18,0$	6,0	10,85	9,0
100	150	$d + 3,50$	$d + 21,0$	7,0	12,70	10,5
150	210	$d + 4,00$	$d + 24,0$	8,0	14,60	12,0
210	300	$d + 5,00$	$d + 30,0$	10,0	17,56	14,5
300	450	$d + 6,25$	$d + 36,5$	12,5	21,26	17,5
450		$d + 7,50$	$d + 45,0$	15,0	25,00	20,0

### Ordering example

Profile  
 $d \times c/s \times H$  [mm]  
 Sealing material

Rotary seal R06-R  
 100 x 7 x 12,7  
 SKF Ecorubber-1

## Operating parameters

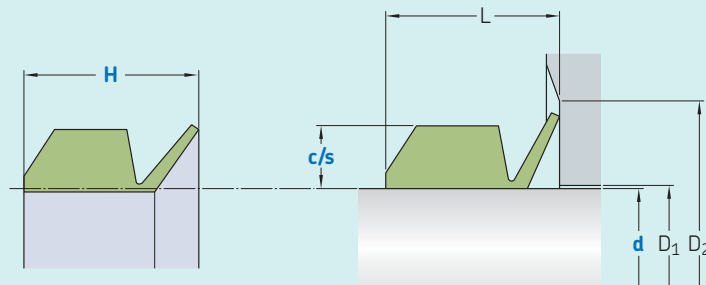
Material Seal	Temperature		Speed <sup>1) 2)</sup>	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ SKF Ecorubber-1	-30	+100	25	-
■ SKF Ecorubber-H	-25	+150	25	-
■ SKF Ecorubber-2	-20	+200	25	-
■ SKF Ecorubber-3	-50	+150	25	-
■ SKF Ecoflas	-10	+200	25	-

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only when the seal is rotating.

<sup>2)</sup> For speeds above 10 m/s, axial support is recommended.

# R07-P



Ordering dimensions in **blue**

Surface speed	$R_{tmax}$	$R_a$
m/s	$\mu m$	
< 1	$\leq 12$	$\leq 2,5$
1 ... 5	$\leq 10$	$\leq 2,0$
5 ... 10	$\leq 6,3$	$\leq 1,6$
> 10	$\leq 3,2$	$\leq 0,8$

Standard dimensions		$D_1$	$D_2$	$c/s$	H	L
d	h11	$D_1$	$D_2$			
over	incl.	max	min			
mm						
<b>5</b>	<b>40</b>	d + 2,00	d + 12,0	4,0	9,76	8,5
<b>40</b>	<b>70</b>	d + 2,50	d + 15,0	5,0	11,82	10,0
<b>70</b>	<b>100</b>	d + 3,00	d + 18,0	6,0	14,23	12,5
<b>100</b>	<b>150</b>	d + 3,50	d + 21,0	7,0	16,65	14,5
<b>150</b>	<b>210</b>	d + 4,00	d + 24,0	8,0	19,11	16,5
<b>210</b>	<b>300</b>	d + 5,00	d + 30,0	10,0	23,20	20,5
<b>300</b>	<b>450</b>	d + 6,25	d + 36,5	12,5	28,31	24,5
<b>450</b>		d + 7,50	d + 45,0	15,0	33,42	28,5

### Ordering example

Profile  
 d x c/s x H [mm]  
 Sealing material

Rotary seal R07-P  
 100 x 7 x 16,65  
 ECOPUR

## Operating parameters

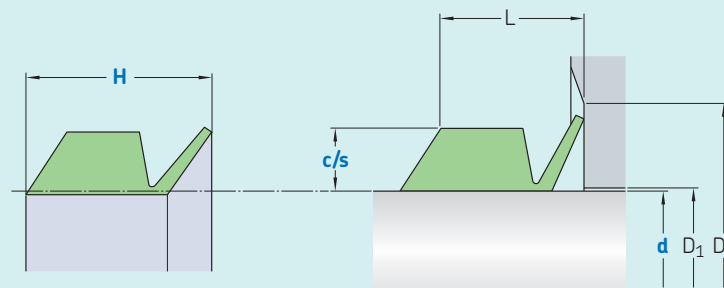
Material Seal	Temperature		Speed <sup>1) 2)</sup>	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110	25	-
■ ECOPUR LD	-35	+110	25	-
■ G-ECOPUR	-30	+110	25	-
■ H-ECOPUR	-20	+110	25	-
■ S-ECOPUR	-20	+110	25	-
■ T-ECOPUR	-50	+110	25	-

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only when the seal is rotating.

<sup>2)</sup> For speeds above 10 m/s, axial support is recommended.

# R07-R



Ordering dimensions in **blue**

Surface speed	$R_{tmax}$	$R_a$
m/s	$\mu m$	
< 1	$\leq 12$	$\leq 2,5$
1 ... 5	$\leq 10$	$\leq 2,0$
5 ... 10	$\leq 6,3$	$\leq 1,6$
> 10	$\leq 3,2$	$\leq 0,8$

Standard dimensions		$D_1$	$D_2$	$c/s$	H	L
d	$h_{11}$	max	min			
over	incl.					
mm						
<b>5</b>	<b>40</b>	d + 2,00	d + 12,0	4,0	9,76	8,5
<b>40</b>	<b>70</b>	d + 2,50	d + 15,0	5,0	11,82	10,0
<b>70</b>	<b>100</b>	d + 3,00	d + 18,0	6,0	14,23	12,5
<b>100</b>	<b>150</b>	d + 3,50	d + 21,0	7,0	16,65	14,5
<b>150</b>	<b>210</b>	d + 4,00	d + 24,0	8,0	19,11	16,5
<b>210</b>	<b>300</b>	d + 5,00	d + 30,0	10,0	23,20	20,5
<b>300</b>	<b>450</b>	d + 6,25	d + 36,5	12,5	28,31	24,5
<b>450</b>		d + 7,50	d + 45,0	15,0	33,42	28,5

### Ordering example

Profile  
 d x c/s x H [mm]  
 Sealing material

Rotary seal R07-R  
 100 x 7 x 16,65  
 SKF Ecorubber-1

## Operating parameters

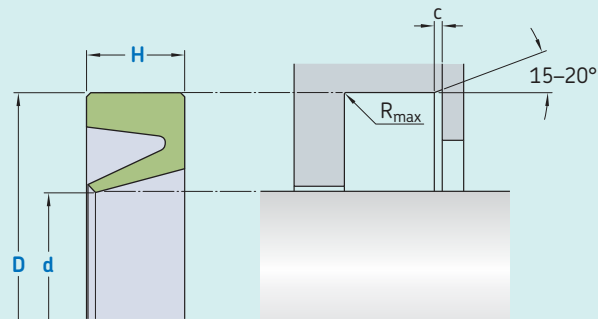
Material Seal	Temperature		Speed <sup>1) 2)</sup>	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ SKF Ecorubber-1	-30	+100	25	-
■ SKF Ecorubber-H	-25	+150	25	-
■ SKF Ecorubber-2	-20	+200	25	-
■ SKF Ecorubber-3	-50	+150	25	-
■ SKF Ecoflas	-10	+200	25	-

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only when the seal is rotating.

<sup>2)</sup> For speeds above 10 m/s, axial support is recommended.

# R08-A



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	0,1–0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

## Standard dimensions

NB	c	$R_{max}$
mm		
6,0	1,0	0,3
7,5	1,2	0,3
10,0	1,5	0,3
15,0	1,8	0,3
20,0	3,0	0,3
25,0	3,3	0,3

Because of the design diversity of this profile, it is not useful to classify it.  
The standard design considers no preload on the sealing lip.

## Ordering example

Profile  
d x D x H [mm]  
Sealing material

Rotary seal R08-A  
100 x 115 x 8  
ECOPUR

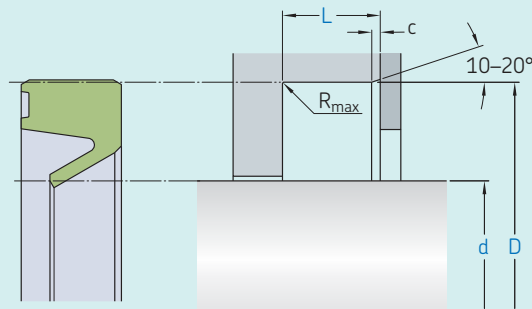
## Operating parameters

Material Seal	Temperature	
	from	to
	°C	
■ ECOPUR	-30	+110
■ ECOPUR LD	-35	+110
■ G-ECOPUR	-30	+110
■ H-ECOPUR	-20	+110
■ S-ECOPUR	-20	+110
■ T-ECOPUR	-50	+110
■ SKF Ecorubber-1	-30	+100
■ SKF Ecorubber-H	-25	+150
■ SKF Ecorubber-2	-20	+200
■ SKF Ecorubber-3	-50	+150
■ SKF Ecoflas	-10	+200
■ SKF Ecosil	-60	+200

IMPORTANT NOTE: Materials are depending on the application. Please contact SKF for more information.



# R08-P



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2,5$	0,1-0,5
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50-95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

$d$	$D$	$L$	$c$	$R_{max}$
$h11$	H8	$\pm 0,1$		
over	incl.			
<hr/>				
mm				
<hr/>				
<b>12</b>	<b>60</b>	$d + 12$	7,0	1,5
<b>60</b>	<b>140</b>	$d + 15$	8,0	1,5
<b>140</b>	<b>300</b>	$d + 20$	10,0	1,8
<hr/>				
<b>300</b>	<b>500</b>	$d + 30$	12,0	1,8
<b>500</b>	<b>800</b>	$d + 40$	20,0	3,3
<b>800</b>		$d + 50$	22,0	3,3

### Ordering example

Profile  
 $d \times D \times L$  [mm]  
 Sealing material

Rotary seal R08-P  
**100 x 115 x 8**  
 ECOPUR

## Operating parameters

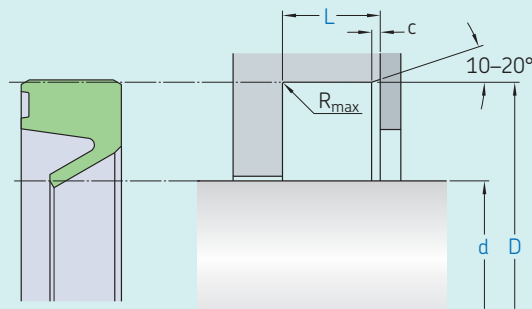
Material Seal	Temperature		Speed <sup>1) 2)</sup>	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110	2,5	–
■ ECOPUR LD	-35	+110	2,5	–
■ G-ECOPUR	-30	+110	2,5	–
■ H-ECOPUR	-20	+110	2,5	–
■ S-ECOPUR	-20	+110	2,5	–
■ T-ECOPUR	-50	+110	2,5	–

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously. For grease applications only.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Depending on shaft diameter.

# R08-R



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	μm	
<b>Sliding surface</b>	≤ 2,5	0,1-0,5
<b>Bottom of groove</b>	≤ 6,3	≤ 1,6
<b>Groove face</b>	≤ 15	≤ 3

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50-95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

d	D	L	c	$R_{max}$
h11 over	H8	±0,1		
incl.				
mm				
<b>12</b>	<b>60</b>	d + 12	7,0	1,5
<b>60</b>	<b>140</b>	d + 15	8,0	1,5
<b>140</b>	<b>300</b>	d + 20	10,0	1,8
<b>300</b>	<b>500</b>	d + 30	12,0	1,8
<b>500</b>	<b>800</b>	d + 40	20,0	3,3
<b>800</b>		d + 50	22,0	3,3

### Ordering example

Profile  
 d x D x L [mm]  
 Sealing material

Rotary seal R08-R  
 100 x 115 x 8  
 SKF Ecorubber-1

## Operating parameters

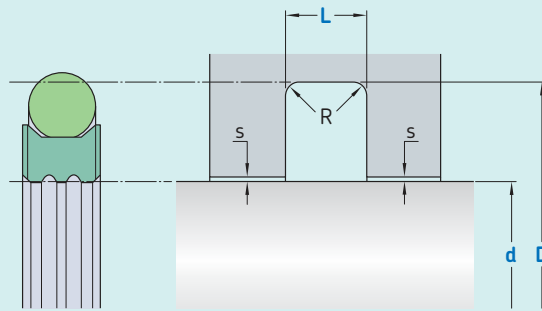
Material Seal	Temperature		Speed <sup>1) 2)</sup>	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ SKF Ecorubber-1	-30	+100	2,5	–
■ SKF Ecorubber-H	-25	+150	5	–
■ SKF Ecorubber-2	-20	+200	7,5	–
■ SKF Ecorubber-3	-50	+150	5	–
■ SKF Ecoflas	-10	+200	7,5	–
■ SKF Ecosil	-60	+200	–	–

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously. For grease applications only.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Depending on shaft diameter.

# R09-F



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,2
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: On the surface min 55 HRC, hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions					Maximal radial extrusion gap		
d	f8	D	L	R	$s^*$		
over	incl.	H9	+ 0,2		100 bar	200 bar	350 bar
mm					mm		
<b>5</b>	<b>19</b>	d + 4,9	2,2	0,3	0,15	0,10	0,10
<b>19</b>	<b>38</b>	d + 7,5	3,2	0,5	0,20	0,15	0,10
<b>38</b>	<b>200</b>	d + 11	4,2	0,7	0,25	0,20	0,10
<b>200</b>	<b>256</b>	d + 15,5	6,3	1,2	0,30	0,25	0,10
<b>256</b>	<b>650</b>	d + 21,0	8,1	1,5	0,30	0,25	0,15
<b>650</b>	<b>1 000</b>	d + 28,0	9,5	2,0	0,45	0,30	0,20

\* Extrusion gap values shown above are valid for a temperature of 80 °C, higher temperatures require lower values.

## Ordering example

Profile  
 d x D x L [mm]  
 Sealing material / Energizer

Rotary seal R09-F  
 100 x 111 x 4,2  
 SKF Ecoflon 4 / NBR 70

## Operating parameters

Material Seal	Energizer	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
■ SKF Ecoflon 4	NBR 70	-30	+100	0,4	350 (35)
■ SKF Ecoflon 4	FPM 75	-20	+200	0,4	350 (35)

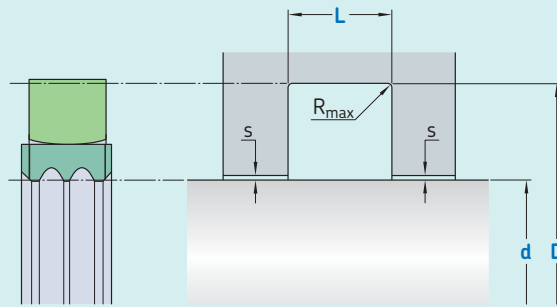
IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.



# R09-FS



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,2
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: On the surface min 55 HRC, hardened depth  $> 0,3$  mm.  
 Bearing area: 50–95% and a cutting depth of  $0,5 R_z$  based on  $C_{ref} = 0\%$

Standard dimensions					Maximal radial extrusion gap		
d	f8	D	L	$R_{max}$	$s^*$		
over	incl.	H9	+ 0,2		100 bar	200 bar	350 bar
mm					mm		
<b>5</b>	<b>50</b>	d + 10	5,0	0,4	0,25	0,20	0,10
<b>50</b>	<b>60</b>	d + 15	7,5	0,4	0,30	0,25	0,10
<b>60</b>	<b>200</b>	d + 20	10,0	0,4	0,30	0,25	0,15
<b>200</b>	<b>300</b>	d + 25	12,5	0,4	0,30	0,25	0,15
<b>300</b>	<b>530</b>	d + 30	15,0	0,4	0,45	0,30	0,20
<b>530</b>	<b>650</b>	d + 35	17,5	0,4	0,45	0,30	0,20
<b>650</b>	<b>1 000</b>	d + 40	20,0	0,4	0,50	0,35	0,25

\* Extrusion gap values shown above are valid for a temperature of 80 °C, higher temperatures require lower values.

## Ordering example

Profile  
 d x D x L [mm]  
 Sealing material / Energizer

Rotary seal R09-FS  
**100 x 120 x 10**  
**SKF Ecoflon 4 / SKF Ecorubber-1**

## Operating parameters

Material Seal	Energizer	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
■ SKF Ecoflon 4	■ SKF Ecorubber-1	-30	+100	0,4	350 (35)
■ SKF Ecoflon 4	■ SKF Ecorubber-2	-20	+200	0,4	350 (35)

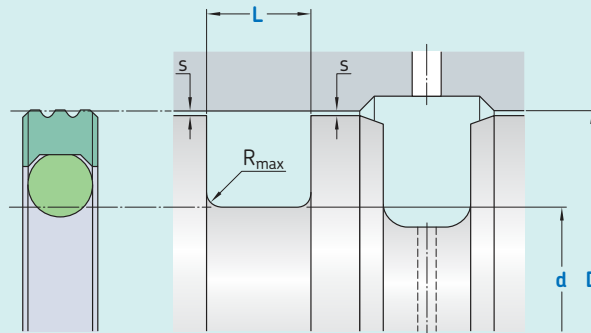
IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.



# R10-F



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,2
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: On the surface min 55 HRC, hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions					Maximal radial extrusion gap		
D	d	L	R	$s^*$			
H8	h8	+ 0,2			100 bar	200 bar	350 bar
over	incl.				mm		
mm					mm		
<b>10</b>	<b>19</b>	D – 4,9	2,2	0,3	0,15	0,10	0,10
<b>19</b>	<b>38</b>	D – 7,5	3,2	0,5	0,20	0,15	0,10
<b>38</b>	<b>200</b>	D – 11	4,2	0,7	0,25	0,20	0,10
<b>200</b>	<b>256</b>	D – 15,5	6,3	1,2	0,30	0,25	0,10
<b>256</b>	<b>650</b>	D – 21	8,1	1,5	0,30	0,25	0,15
<b>650</b>	<b>1 000</b>	D – 28	9,5	2,0	0,45	0,30	0,20

\* Extrusion gap values shown above are valid for a temperature of 80 °C, higher temperatures require lower values.

## Ordering example

Profile  
 D x d x L [mm]  
 Sealing material / Energizer

Rotary seal R10-F  
 100 x 89 x 4,2  
 SKF Ecoflon 4 / NBR 70

## Operating parameters

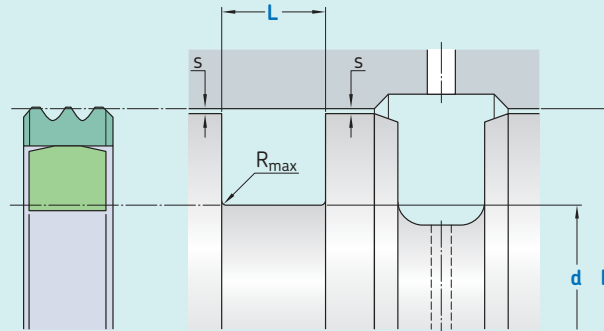
Material Seal	Energizer	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
■ SKF Ecoflon 4	NBR 70	-30	+100	0,4	350 (35)
■ SKF Ecoflon 4	FPM 75	-20	+200	0,4	350 (35)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.

# R10-FS



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	μm	
<b>Sliding surface</b>	≤ 2	0,05–0,2
<b>Bottom of groove</b>	≤ 6,3	≤ 1,6
<b>Groove face</b>	≤ 15	≤ 3

Hardness: On the surface min 55 HRC, hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions					Maximal radial extrusion gap		
D	d	L	$R_{max}$	$s^*$			
H8	h8	+ 0,2		100 bar	200 bar	350 bar	
over	incl.			mm			
mm				mm			
<b>15</b>	<b>50</b>	D – 10	5,0	0,25	0,20	0,10	
<b>50</b>	<b>60</b>	D – 15	7,5	0,30	0,25	0,10	
<b>60</b>	<b>200</b>	D – 20	10,0	0,30	0,25	0,15	
<b>200</b>	<b>300</b>	D – 25	12,5	0,30	0,25	0,15	
<b>300</b>	<b>530</b>	D – 30	15,0	0,45	0,30	0,20	
<b>530</b>	<b>650</b>	D – 35	17,5	0,45	0,30	0,20	
<b>650</b>	<b>1 000</b>	D – 40	20,0	0,50	0,35	0,25	

\* Extrusion gap values shown above are valid for a temperature of 80 °C, higher temperatures require lower values.

## Ordering example

Profile  
 D x d x L [mm]  
 Sealing material / Energizer

**Rotary seal R10-FS**  
**100 x 80 x 10**  
**SKF Ecoflon 4 / SKF Ecorubber-1**

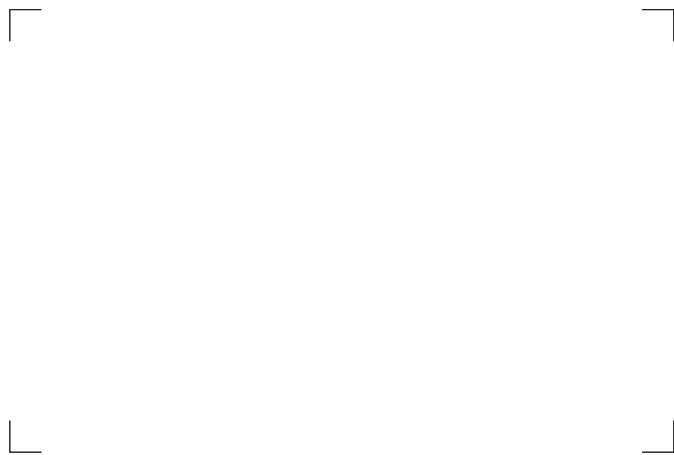
**Operating parameters**

Material Seal	Energizer	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
■ SKF Ecoflon 4	■ SKF Ecorubber-1	-30	+100	0,4	350 (35)
■ SKF Ecoflon 4	■ SKF Ecorubber-2	-20	+200	0,4	350 (35)

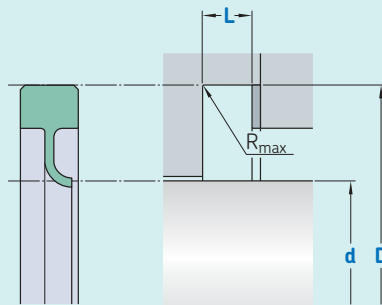
IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

1) Surface speed limit values are valid only in the presence of a lubrication film.

2) Pressure ratings depend on the size of the extrusion gap.



# R11-F



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu\text{m}$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,2
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$   
 Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.

Standard dimensions		D	$L_{min}$	$R_{max}$
d	f8	H10		
over	incl.			
mm				
<b>50</b>	<b>100</b>	d + 20	4 -0,05	0,4
<b>100</b>	<b>150</b>	d + 25	5 -0,05	0,4
<b>150</b>		d + 30	6 -0,10	0,4

## Ordering example

Profile  
 d x D x L [mm]  
 Sealing material

**Rotary seal R11-F**  
**100 x 120 x 4**  
**SKF Ecoflon 4**

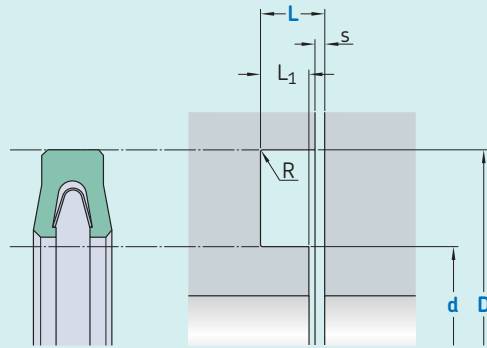
## Operating parameters

Material Seal	Temperature		Speed <sup>1)</sup>	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ SKF Ecoflon 2	-200	+260	20	5 (0,5)
■ SKF Ecoflon 3	-200	+260	20	5 (0,5)
■ SKF Ecoflon 4	-200	+260	20	5 (0,5)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

# R12-F



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,2
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

D	d	L	$L_1$	R	$s_{max}^{1)}$
H8 over	incl.		min		
mm					
<b>39,6</b>	<b>46</b>	D – 9,6	3,1 +0,08	1,5	0,4
<b>46</b>	<b>125</b>	D – 14,2	4,7 +0,10	2,4	0,4
<b>125</b>	<b>600</b>	D – 19	6,1 +0,15	3,1	0,4

<sup>1)</sup> The extrusion gap is valid for the side opposite to the pressure side.

### Ordering example

Profile  
D x d x L [mm]  
Sealing material / Spring

**Rotary seal R12-F**  
**125 x 110,8 x 4,7**  
**SKF Ecoflon 2 / 1.4310**

**Operating parameters**

Material Seal	Spring <sup>3)</sup>	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
SKF Ecoflon 1	1.4310	-200	+260	1	300 (30)
SKF Ecoflon 2	1.4310	-200	+260	1	300 (30)
SKF Ecoflon 3	1.4310	-200	+260	1	300 (30)
SKF Ecoflon 4	1.4310	-200	+260	1	300 (30)

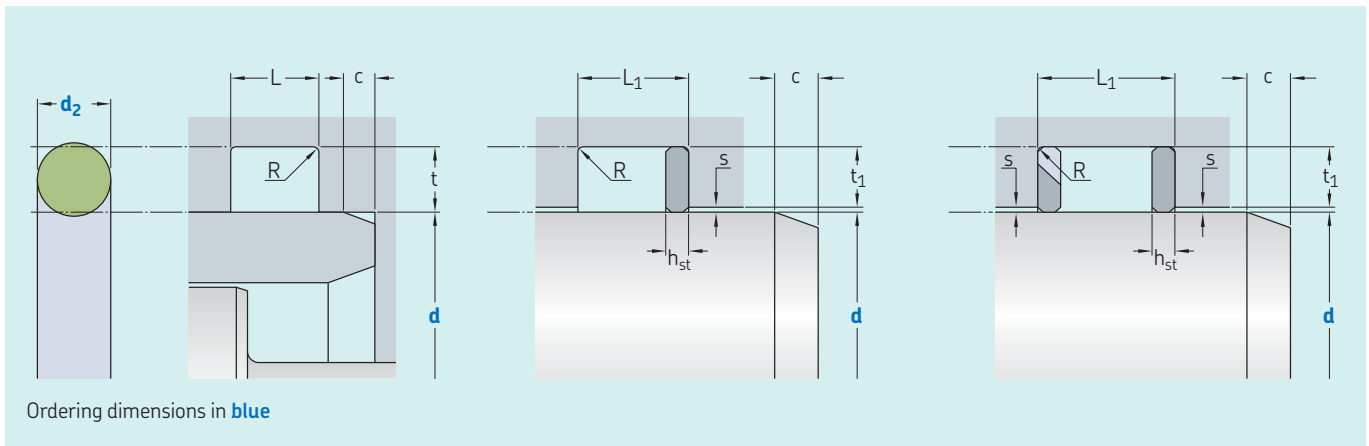
IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.



# R13



Ordering dimensions in **blue**

Pressure Surface roughness	Constant		Pulsating	
	$R_{tmax}$	$R_a$	$R_{tmax}$	$R_a$
	m		m	
<b>Sliding surface<sup>1)</sup></b>	6,3	1,6	3,2	0,8
<b>Bottom of groove<sup>2)</sup></b>	12,5	3,2	6,3	1,6
<b>Groove face</b>	12,5	3,2	12,5	3,2

<sup>1)</sup>  $R_{tmax} / R_a$  for dynamic application: 1,6  $\mu\text{m} / 0,4 \mu\text{m}$   
<sup>2)</sup>  $R_{tmax} / R_a$  for dynamic application: 6,3  $\mu\text{m} / 1,6 \mu\text{m}$   
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions		t	L	t <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>	R	h <sub>st</sub>	c	s	
d <sub>2</sub>	AS										
	ISO										
568A <sup>1)</sup>	3601 <sup>2)</sup>										
mm											
<b>1,78</b>	<b>1,8</b>	1,35	2,5	1,58	3,5	4,5	0,3	1,0	3,0	f7/H8	
<b>2,62</b>	<b>2,65</b>	2,18	3,5	2,42	5,0	6,5	0,3	1,5	3,5	f7/H8	
<b>3,53</b>	<b>3,55</b>	3,00	4,4	3,70	5,9	7,4	0,5	1,5	4,0	f7/H8	
<b>5,33</b>	<b>5,3</b>	4,50	6,7	5,60	8,4	10,1	0,6	1,7	5,0	f7/H8	
<b>6,99</b>	<b>7</b>	5,94	8,8	7,37	10,8	12,8	0,8	2,0	6,0	f7/H8	
<b>10</b>	<b>10</b>	8,50	12,5	10,5	15,0	17,5	1,0	2,5	10,0	f7/H8	
<b>12</b>	<b>12</b>	10,20	15,5	12,85	18,5	21,5	1,0	3,0	12,0	f7/H8	
<b>15</b>	<b>15</b>	12,75	19,0	15,88	22,0	25,0	1,0	3,0	15,0	f7/H8	

<sup>1)</sup> American standard  
<sup>2)</sup> DIN 3771

### Ordering example

Profile  
 d x d<sub>2</sub> [mm]  
 Sealing material

**Rotary seal R13**  
**100 x 3,53**  
**ECOPUR**

## Operating parameters

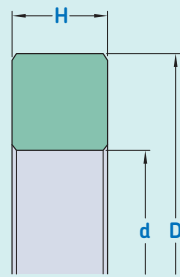
Material Seal	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110	only recommended for static application	600 (60)
■ ECOPUR LD	-35	+110		600 (60)
■ G-ECOPUR	-30	+110		600 (60)
■ H-ECOPUR	-20	+110		600 (60)
■ S-ECOPUR	-20	+110		600 (60)
■ T-ECOPUR	-50	+110		600 (60)
■ SKF Ecorubber-1	-30	+100		160 (16)
■ SKF Ecorubber-H	-25	+150		160 (16)
■ SKF Ecorubber-2	-20	+200		160 (16)
■ SKF Ecorubber-3	-50	+150		160 (16)
■ SKF Ecosil	-60	+200		160 (16)
■ SKF Ecoflon 1	-200	+260		160 (16)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> We recommend the use of back-up rings for ECOPUR above 400 bar and for SKF Ecorubber above 100 bar.

## R14



Ordering dimensions in **blue**

**Standard dimensions**

Because of the design diversity of this profile, it is not useful to list standard dimensions.

The size and position of the tolerance field have to be considered and may be adapted to special functions.

**Ordering example**

Profile  
d x D x H [mm]  
Sealing material

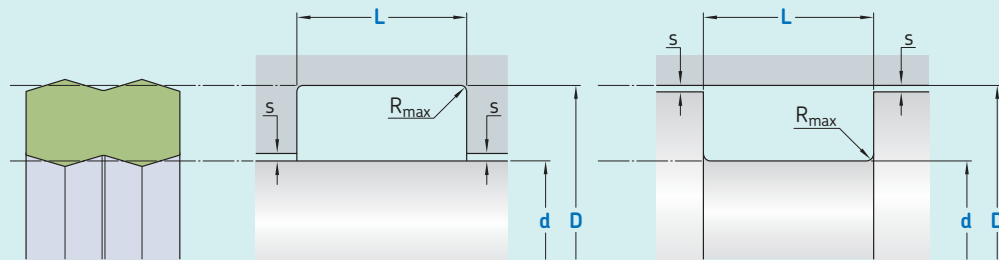
Rotary seal R14  
85 x 100 x 2  
SKF Ecotal

## Operating parameters

Material Seal	Temperature	
	from	to
	°C	
■ ECOPUR	-30	+110
■ ECOPUR LD	-35	+110
■ G-ECOPUR	-30	+110
■ H-ECOPUR	-20	+110
■ S-ECOPUR	-20	+110
■ T-ECOPUR	-50	+110
■ X-ECOPUR	-30	+110
■ G-ECOPUR 54 D	-30	+110
■ X-ECOPUR H	-20	+110
■ X-ECOPUR S	-20	+110
■ SKF Ecorubber-1	-30	+100
■ SKF Ecorubber-H	-25	+150
■ SKF Ecorubber-2	-20	+200
■ SKF Ecorubber-3	-50	+150
■ SKF Ecoflas	-10	+200
■ SKF Ecosil	-60	+200
■ SKF Ecoflon 1	-200	+260
■ SKF Ecoflon 2	-200	+260
■ SKF Ecoflon 3	-200	+260
■ SKF Ecoflon 4	-200	+260
■ SKF Ecotal	-50	+100
■ SKF Ecomid	-40	+110
■ SKF Ecopaek	-100	+260
■ SKF Ecowear 1000	-200	+90

IMPORTANT NOTE: Materials are depending on the application. Please contact SKF for more information.

# R15



Ordering dimensions in **blue**

### Standard dimensions

d	D	L	R <sub>max</sub>	s
h9	H8	+0,2		
over	incl.			
mm				
<b>5</b>	<b>15</b>	d + 2,5	3,3	0,3
<b>15</b>	<b>75</b>	d + 5,0	5,4	0,3
<b>75</b>	<b>150</b>	d + 8,0	7,7	0,3
<b>150</b>	<b>200</b>	d + 10,0	9,3	0,6
<b>200</b>	<b>350</b>	d + 15,0	13,0	0,6
<b>350</b>	<b>1250</b>	d + 20,0	17,0	0,6

Pressure Surface roughness	Constant		Pulsating	
	R <sub>tmax</sub>	R <sub>a</sub>	R <sub>tmax</sub>	R <sub>a</sub>
	µm		µm	
<b>Sliding surface</b>	12,5	3,2	6,3	1,6
<b>Bottom of groove</b>	12,5	3,2	6,3	1,6
<b>Groove face</b>	12,5	3,2	6,3	1,6

Bearing area: 50–95% and a cutting depth of 0,5 R<sub>z</sub> based on C<sub>ref</sub> = 0%

### Ordering example

Profile  
d x D x L [mm]  
Sealing material

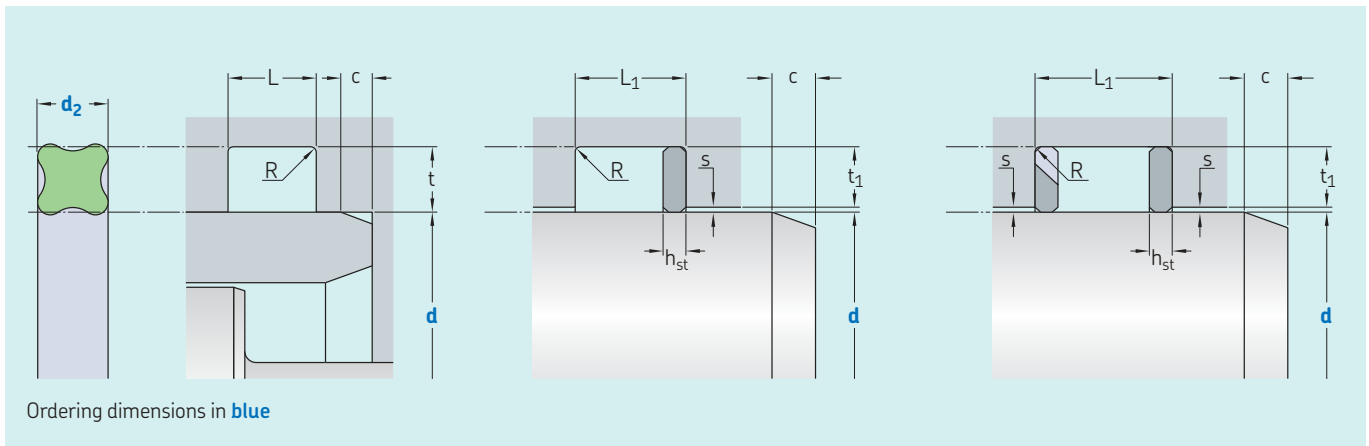
**Rotary seal R15**  
**100 x 108 x 7,7**  
**ECOPUR**

## Operating parameters

Material Seal	Temperature		Speed	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110		400 (40)
■ ECOPUR LD	-35	+110		400 (40)
■ G-ECOPUR	-30	+110	only recommended for static application	400 (40)
■ H-ECOPUR	-20	+110		400 (40)
■ S-ECOPUR	-20	+110		400 (40)
■ T-ECOPUR	-50	+110		400 (40)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

# R16



Ordering dimensions in blue

Pressure Surface roughness	Constant		Pulsating	
	$R_{tmax}$	$R_a$	$R_{tmax}$	$R_a$
	$\mu\text{m}$		$\mu\text{m}$	
<b>Sliding surface<sup>1)</sup></b>	6,3	1,6	3,2	0,8
<b>Bottom of groove<sup>2)</sup></b>	12,5	3,2	6,3	1,6
<b>Groove face</b>	12,5	3,2	12,5	3,2

<sup>1)</sup>  $R_{tmax} / R_a$  for dynamic application: 1,6  $\mu\text{m} / 0,4 \mu\text{m}$   
<sup>2)</sup>  $R_{tmax} / R_a$  for dynamic application: 6,3  $\mu\text{m} / 1,6 \mu\text{m}$   
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions											
$d_2$	t	L	$t_1$	$L_1$	$L_2$	R	$h_{st}$	c	s		
AS 568A <sup>1)</sup>	ISO 3601 <sup>2)</sup>										
mm											
<b>2,62</b>	<b>2,65</b>	2,25	3	2,35	4,4	5,8	0,3	1,4	3,5	0,08	
<b>3,53</b>	<b>3,55</b>	3,10	4	3,21	5,4	6,8	0,4	1,4	4,0	0,08	
<b>5,33</b>	<b>5,3</b>	4,75	6	4,89	7,7	9,4	0,4	1,7	5,0	0,10	
<b>6,99</b>	<b>7</b>	6,20	8	6,40	10,5	13,0	0,6	2,5	6,0	0,10	

<sup>1)</sup> American standard  
<sup>2)</sup> DIN 3771

### Ordering example

Profile  
 d x  $d_2$  [mm]  
 Sealing material

**Rotary seal R16**  
**100 x 3,55**  
**SKF Ecorubber-1**

**Operating parameters**

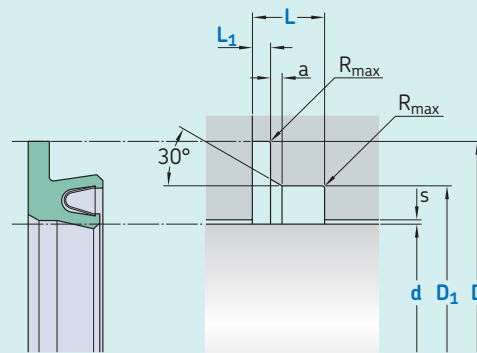
Material Seal	Temperature		Speed	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110		400 (40)
■ ECOPUR LD	-35	+110		400 (40)
■ G-ECOPUR	-30	+110		400 (40)
■ H-ECOPUR	-20	+110		400 (40)
■ S-ECOPUR	-20	+110		400 (40)
■ T-ECOPUR	-50	+110		400 (40)
■ SKF Ecorubber-1	-30	+100		50 (5)
■ SKF Ecorubber-H	-25	+150		50 (5)
■ SKF Ecorubber-2	-20	+200		50 (5)
■ SKF Ecorubber-3	-50	+150		50 (5)
■ SKF Ecoflas	-10	+200		50 (5)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.





# R19-F



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu m$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,2
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Hardness: Min 45 HRC (55 HRC recommended), hardened depth > 0,3 mm.  
 Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions							Maximal radial extrusion gap			
d	D	$D_1$	a	L	$L_1$	$R_{max}$	$s^*$			
f8	H10	H9		+ 0,2			20 bar	100 bar	150 bar	
over	incl.						mm			
<b>8</b>	<b>20</b>	d + 9,0	d + 5,0	0,8	3,6	0,85 -0,10	0,4	0,25	0,15	0,10
<b>20</b>	<b>40</b>	d + 12,5	d + 7,0	1,2	4,8	1,35 -0,10	0,4	0,35	0,20	0,15
<b>40</b>	<b>400</b>	d + 17,5	d + 10,5	1,4	7,1	1,80 -0,15	0,4	0,50	0,25	0,20
<b>400</b>	<b>1 600</b>	d + 22,0	d + 14,0	1,6	9,5	2,80 -0,20	0,4	0,60	0,30	0,25





\* Extrusion gap values shown above are valid for a temperature of 80 °C, higher temperatures require lower values.

## Ordering example

Profile  
 d x D/D<sub>1</sub> x L/L<sub>1</sub> [mm]  
 Sealing material / Spring

Rotary seal R19-F  
 100 x 117,5/110,5 x 7,1/1,8  
 SKF Ecoflon 4 / 1.4310

## Operating parameters

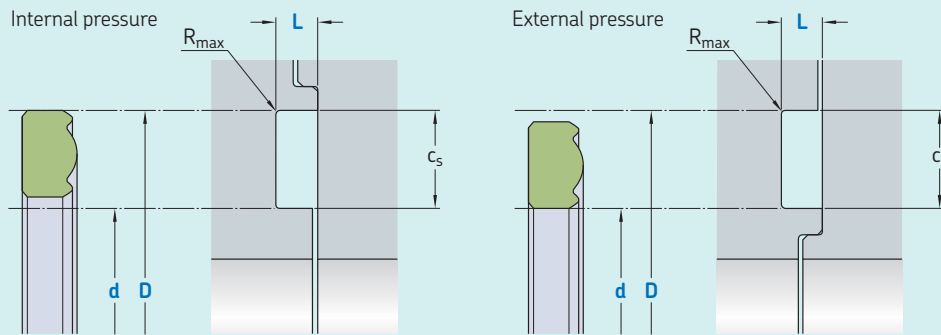
Material Seal	Spring	Temperature		Speed <sup>1)</sup>	Pressure <sup>2)</sup>
		from	to	max	max
		°C		m/s	bar (MPa)
 SKF Ecoflon 1	1.4310	-200	+260	2	150 (15)
 SKF Ecoflon 2	1.4310	-200	+260	2	150 (15)
 SKF Ecoflon 3	1.4310	-200	+260	2	150 (15)
 SKF Ecoflon 4	1.4310	-200	+260	2	150 (15)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Surface speed limit values are valid only in the presence of a lubrication film.

<sup>2)</sup> Pressure ratings depend on the size of the extrusion gap.

# R20-P



Ordering dimensions in **blue**

Pressure Surface roughness	Constant		Pulsating	
	$R_{tmax}$	$R_a$	$R_{tmax}$	$R_a$
	$\mu\text{m}$		$\mu\text{m}$	
<b>Sliding surface</b>	12,5	3,2	6,3	1,6
<b>Bottom of groove</b>	12,5	3,2	6,3	1,6
<b>Groove face</b>	12,5	3,2	6,3	1,6

Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions					
d	D	$c_s$	L	$R_{max}$	
h11	H11		+ 0,2		
over	incl.				
mm					
<b>5</b>	<b>75</b>	d + 15	7,5	2,5	0,4
<b>75</b>	<b>100</b>	d + 16	8,0	4,0	0,4
<b>100</b>	<b>150</b>	d + 20	10,0	5,0	0,4
<b>150</b>	<b>200</b>	d + 25	12,5	6,0	0,4
<b>200</b>	<b>350</b>	d + 30	15,0	7,5	0,4
<b>350</b>	<b>600</b>	d + 40	20,0	10,0	0,4

Standard definition for this profile is inner pressure.  
d h11 = D H11

## Ordering example

Profile  
d x D x L [mm] / Pressure side  
Sealing material

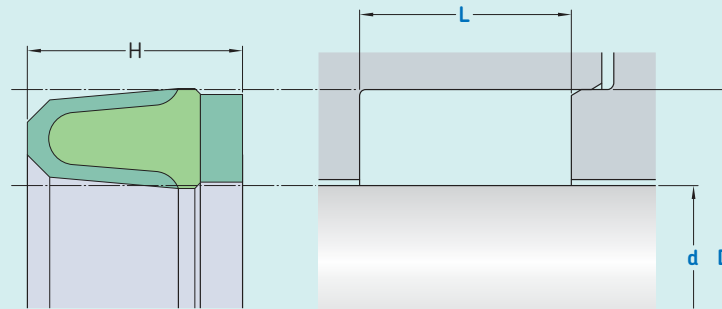
**Rotary seal R20-P**  
**100 x 125 x 7,7 / Internal pressure**  
**ECOPUR**

## Operating parameters

Material Seal	Temperature		Speed	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110	only recommended for static application	800 (80)
■ ECOPUR LD	-35	+110		800 (80)
■ G-ECOPUR	-30	+110		800 (80)
■ H-ECOPUR	-20	+110		800 (80)
■ S-ECOPUR	-20	+110		800 (80)
■ T-ECOPUR	-50	+110		800 (80)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously. Standard of this profile is inner pressure.

# R30-A



Ordering dimensions in **blue**

Surface roughness	$R_{tmax}$	$R_a$
	$\mu\text{m}$	
<b>Sliding surface</b>	$\leq 2$	0,05–0,3
<b>Bottom of groove</b>	$\leq 6,3$	$\leq 1,6$
<b>Groove face</b>	$\leq 15$	$\leq 3$

Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

### Standard dimensions

Minimum nominal inside diameter  
 $d \geq 5 \text{ mm}$ .

This is not a standard profile and serves as a replacement seal to fit in existing housings. New constructions should use standard profiles.

### Ordering example

Profile  
d x D x L [mm]  
Sealing material / Casing / Back-up ring

Rotary seal R30-A  
100 x 108 x 10  
SKF Ecorubber-2 / SKF Ecoflon 1 / SKF Ecotal

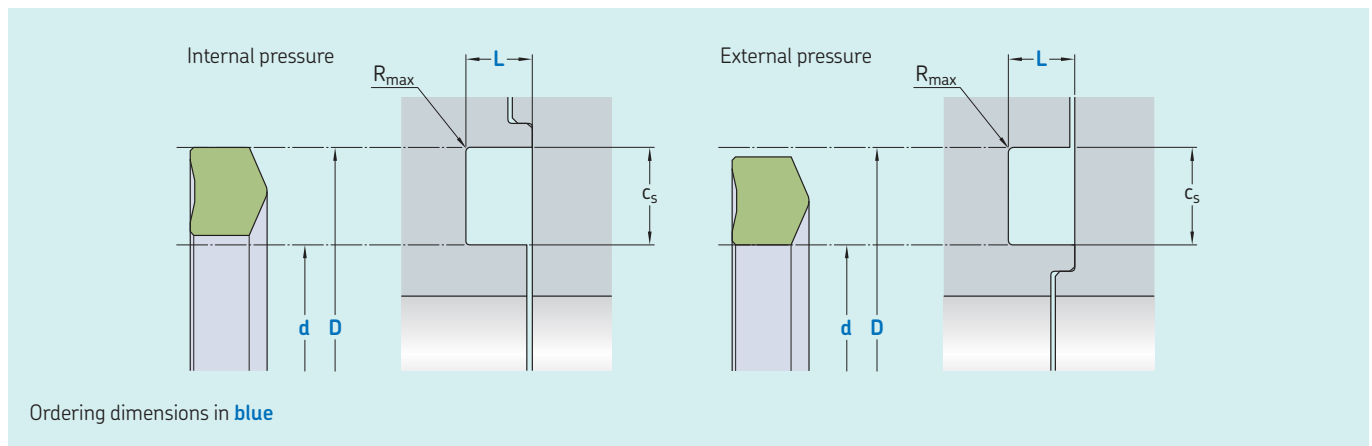
## Operating parameters

Material Seal	Casing	Back-up ring <sup>1)</sup>	Temperature		Speed	Pressure
			from	to	max	max
			°C		m/s	bar (MPa)
■ SKF Ecorubber-H	■ SKF Ecoflon 1	■ SKF Ecotal	-25	+100	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 1	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 1	■ SKF Ecopaek	-25	+150	0,5	1 000 (100)
■ SKF Ecorubber-H	■ SKF Ecoflon 2	■ SKF Ecotal	-25	+100	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 2	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 2	■ SKF Ecopaek	-25	+150	0,5	1 000 (100)
■ SKF Ecorubber-H	■ SKF Ecoflon 3	■ SKF Ecotal	-25	+100	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 3	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 3	■ SKF Ecopaek	-25	+150	0,5	1 000 (100)
■ SKF Ecorubber-H	■ SKF Ecoflon 4	■ SKF Ecotal	-25	+100	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 4	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-H	■ SKF Ecoflon 4	■ SKF Ecopaek	-25	+150	0,5	1 000 (100)
■ SKF Ecorubber-2	■ SKF Ecoflon 1	■ SKF Ecotal	-20	+100	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 1	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 1	■ SKF Ecopaek	-20	+200	0,5	1 000 (100)
■ SKF Ecorubber-2	■ SKF Ecoflon 2	■ SKF Ecotal	-20	+100	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 2	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 2	■ SKF Ecopaek	-20	+200	0,5	1 000 (100)
■ SKF Ecorubber-2	■ SKF Ecoflon 3	■ SKF Ecotal	-20	+100	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 3	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 3	■ SKF Ecopaek	-20	+200	0,5	1 000 (100)
■ SKF Ecorubber-2	■ SKF Ecoflon 4	■ SKF Ecotal	-20	+100	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 4	■ SKF Ecomid	-20	+110	0,5	500 (50)
■ SKF Ecorubber-2	■ SKF Ecoflon 4	■ SKF Ecopaek	-20	+200	0,5	1 000 (100)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.

<sup>1)</sup> Size limitation D: Up to 260 mm SKF Ecotal, from 260 – 400 mm SKF Ecotal or SKF Ecomid and above 400 mm SKF Ecomid.

# R35-A



Surface roughness	$R_{tmax}$	$R_a$
	μm	
<b>Sliding surface</b>	≤ 2,5	0,1–0,5
<b>Bottom of groove</b>	≤ 6,3	≤ 1,6
<b>Groove face</b>	≤ 15	≤ 3

Bearing area: 50–95% and a cutting depth of 0,5  $R_z$  based on  $C_{ref} = 0\%$

Standard dimensions		$C_s$	L	R
Corresponding O-ring cord diameter $d_2$				
AS 568A <sup>1)</sup>	ISO 3601 <sup>2)</sup>			
mm				
1,78	1,8	2	1,40	0,4
2,62	2,65	3	2,25	0,4
3,53	3,55	4	3,10	0,4
5,33	5,3	6	4,75	0,4
6,99	7	8	6,20	0,4

<sup>1)</sup> American standard  
<sup>2)</sup> DIN 3771  
 Minimum nominal inside diameter  $d \geq 5$  mm.  
 Standard definition for this profile is inside pressure.

### Ordering example

Profile  
 d x D x L [mm] / Pressure side  
 Sealing material

**Rotary seal R35-A**  
**100 x 112 x 4,75 / Internal pressure**  
**ECOPUR**

## Operating parameters

Material Seal	Temperature		Speed	Pressure
	from	to	max	max
	°C		m/s	bar (MPa)
■ ECOPUR	-30	+110		800 (80)
■ ECOPUR LD	-35	+110		800 (80)
■ G-ECOPUR	-30	+110		800 (80)
■ H-ECOPUR	-20	+110		800 (80)
■ S-ECOPUR	-20	+110		800 (80)
■ T-ECOPUR	-50	+110	only recommended for static application	800 (80)
■ SKF Ecorubber-1	-30	+100		250 (25)
■ SKF Ecorubber-H	-25	+150		250 (25)
■ SKF Ecorubber-2	-20	+200		250 (25)
■ SKF Ecorubber-3	-50	+150		250 (25)
■ SKF Ecoflas	-10	+200		250 (25)
■ SKF Ecosil	-60	+200		250 (25)

IMPORTANT NOTE: The stated operating conditions represent general indications. It is recommended not to use all maximum values simultaneously.