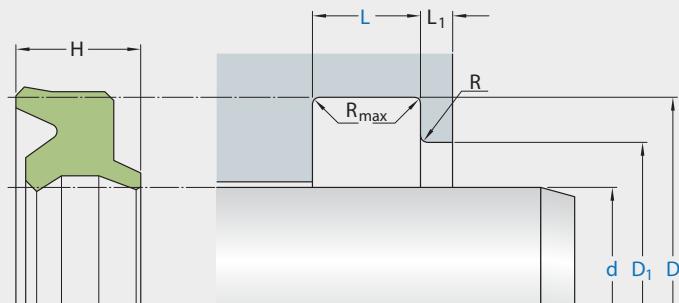


# A11-I



Ordering dimensions in blue

Surface roughness	$R_{t\max}$	$R_a$
Sliding surface	$\leq 2,5 \mu\text{m}$	$0,05\text{--}0,3 \mu\text{m}$
Bottom of groove	$\leq 6,3 \mu\text{m}$	$\leq 1,6 \mu\text{m}$
Groove face	$\leq 15 \mu\text{m}$	$\leq 3 \mu\text{m}$
Bearing area: 50–95% and a cutting depth of $0,5 R_z$ based on $C_{ref} = 0\%$		

Standard dimensions		D H11	D <sub>1</sub> H11	L $+0,2$	L <sub>1</sub>	$R_{t\max}$	R	H
d f8 over	incl.							
mm								
5 50 100	50 100	d + 8 d + 10 d + 15	d + 4 d + 5 d + 7,5	5 6 8,5	$\geq 2$ $\geq 2$ $\geq 2$	0,4 0,4 0,4	$\leq 0,3$ $\leq 0,4$ $\leq 0,4$	8 9,7 13

## application



not bolded symbols; please consult our technical for application limitations

## operating parameters & material

material	temperature	max. surface speed	max. pressure <sup>1</sup>	hydrolysis	diameter range: up to 600 mm	
					dry running	wear resistance
ECOPUR	-30 °C ... +110 °C	4 m/s	16 bar (1,6 MPa)	-	+	++
H-ECOPUR	-20 °C ... +110 °C	4 m/s	16 bar (1,6 MPa)	++	+	++
T-ECOPUR	-50 °C ... +110 °C	4 m/s	16 bar (1,6 MPa)	-	+	++
S-ECOPUR	-20 °C ... +110 °C	5 m/s	16 bar (1,6 MPa)	++	++	++
G-ECOPUR	-30 °C ... +110 °C	4 m/s	16 bar (1,6 MPa)	++	+	++
Ecorubber 1	-30 °C ... +100 °C	4 m/s	16 bar (1,6 MPa)	-	-	O
Ecorubber 2	-20 °C ... +200 °C	4 m/s	16 bar (1,6 MPa)	-	-	O
Ecorubber 3 <sup>2</sup>	-50 °C ... +150 °C	4 m/s	16 bar (1,6 MPa)	++	-	O
Ecorubber H	-25 °C ... +150 °C	4 m/s	16 bar (1,6 MPa)	+	O	+

the stated operation conditions represent general indications. it is recommended not to use all maximum values simultaneously.  
surface speed limits apply only to the presence of adequate lubrication film.

<sup>1</sup> pressure ratings are dependent on the size of the extrusion gap.

<sup>2</sup> attention: not suitable for mineral oils!

++ ... particularly suitable

o ... conditional suitable

+ ... suitable

- ... not suitable

for detailed information regarding chemical resistance please refer to our "list of resistance". for increased chemical and thermal resistance rubber materials are to be preferred, polyurethan materials increase wear resistance.

## surface quality

surface roughness	Rtmax (µm)	Ra (µm)
sliding surface according to seal data		
bottom of groove	≤6,3	≤1,6
groove face	≤15	≤3

## tolerance recommendation

seal housing tolerances	cs	R [mm]
L < 10 mm	0,2	≤ 5 max. 0,3
L ≥ 10 mm	0,3	>5.....≤ 7,5 max. 0,4
D1	H11	>7,5....≤ 10 max. 0,6
D	H11	> 10 max. 0,8

## ISO- wiper housing for A11-l:

d	NB (cs)	L	D1	L1min
12.....≤ 28	3	4	d+2,5	2
> 28.....≤ 56	4	5	d+3	2
> 56.....≤ 110	5	6	d+3	2
> 110... ≤ 140	7,5	8,5	d+4	2

## mode of installation

the prerequisites for perfect functioning are careful fitting and an accurately dimensioned mounting space. in general, wipers snap easily into their housing when distorted into a kidney shape (over 20mm diameter).