

# Merkel Double Wiper PU 11

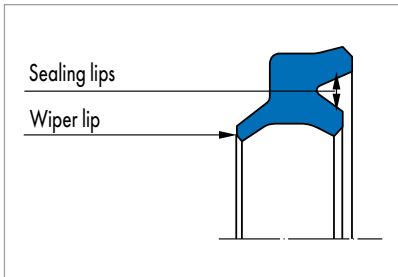


Fig. 1 Merkel Double Wiper PU 11

## Product description

U-ring with wiper lip (double-lip wiper); sealing edge of wiper lip lightly rounded.

## Product advantages

Double wiper for improvement of total tightness; dimensions also for standardised housing according to ISO 6195 Type C

- Sealing lips pointing inwards fulfil the function of a U-ring
- Wiper lip with lightly rounded sealing edge reliably wipes away dirt and leaves a residual oil film on the retracting rod
- Tightness, service life and friction behaviour of the entire system are improved.

Merkel Double Wiper PU 11 is preferably fitted in combination with our rod seals Merkel Omegat OMS-MR. The double-lip wiper can take pressures up to 1,6 MPa. If higher pressures can build, up we recommend a pressure relieving bore between seal and wiper.

## Application

Industrial vehicles, injection moulding machines, standard cylinders.

## Material

Material	Code	Hardness
Polyurethane	95 AU V142	95 Shore A

## Operating conditions

Material	95 AU V142
Temperature range in °C	
Hydraulic oils HL, HLP	-30 ... +110
HFA fluids	+5 ... +50
HFB fluids	+5 ... +50
HFC fluids	-30 ... +40
HFD fluids	-
Water	+5 ... +50
HETG (rapeseed oil)	-30 ... +60
HEES (synthetic esters)	-30 ... +80
HEPG (glycol)	-30 ... +50
Mineral greases	-30 ... +110
Running speed v in m/s	1

## Surface quality

Surface roughness	R <sub>a</sub>	R <sub>max</sub>
Sliding surface	*	*
Groove base	≤1,6 µm	≤6,3 µm
Groove flanks	≤3,0 µm	≤15,0 µm

\* Surface roughness of the sliding surface to suit the sealing component used.

## Design notes

Please observe our general design notes in → Technical Manual.

## Tolerance recommendation

Nominal Ø d	D	D <sub>1</sub>
12 ... 200	H11	H11

The tolerance for the Ø d is defined by the buffer seal.

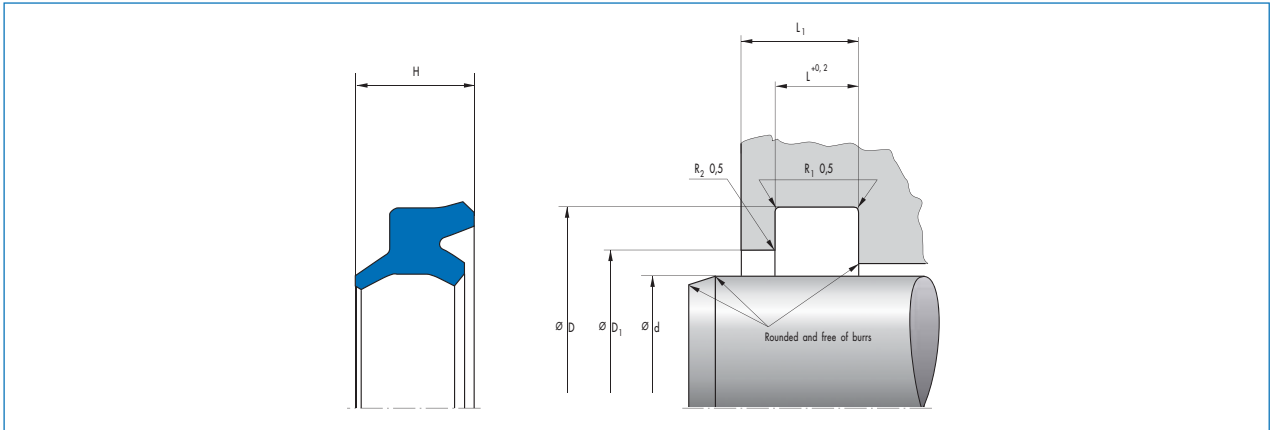
## Lead-in chamfers

Length and angle are to be designed to suit the rod seal used.

## Fitting & installation

Careful fitting is a prerequisite for the correct function of the Merkel Double Wiper PU 11. Generally, wipers can be quickly and easily fitted by deforming into a kidney shape.  
→ Technical Manual.

Article list



d	D	L	L <sub>1</sub>	H	D <sub>1</sub>	Profile	Material	Article No.	
12	18	4	6	6	14,5	3	95 AU V142	24348683	●
14	20	4	6	6	16,5	3	95 AU V142	24348684	●
16	22	4	6	6	18,5	3	95 AU V142	24338682	○
18	24	4	6	6	20,5	3	95 AU V142	24338683	●
22	28	4	6	6	24,5	3	95 AU V142	24314567	●
25	31	4	6	6	27,5	3	95 AU V142	49003027	○
28	36	5	7	7,5	31	4	95 AU V142	24294432	●
30	38	5	7	7,5	33	4	95 AU V142	49003028	○
36	44	5	7	7,5	39	4	95 AU V142	24311422	●
40	48	5	7	7,5	43	4	95 AU V142	24360973	○
45	53	5	7	7,5	48	4	95 AU V142	24338684	●
50	58	5	7	7,5	53	4	95 AU V142	49003029	○
55	65	6	8	8,5	58	5	95 AU V142	49000803	○
56	66	6	8	8,5	59	5	95 AU V142	24314566	●
60	70	6	8	8,5	63	5	95 AU V142	49003030	○
65	75	6	8	8,5	68	5	95 AU V142	49000804	○
70	80	6	8	8,5	73	5	95 AU V142	24338685	●
75	85	6	8	8,5	78	5	95 AU V142	49000806	○
80	90	6	8	8,5	83	5	95 AU V142	24369056	○
90	100	6	8	8,5	93	5	95 AU V142	24338686	●
110	125	8,5	10,5	12	114	7,5	95 AU V142	24338687	●
140	155	8,5	10,5	12	144	7,5	95 AU V142	24348685	●
150	165	8,5	10,5	12	154	7,5	95 AU V142	529428	○
170	185	8,5	10,5	12	174	7,5	95 AU V142	24349427	○

● Available from stock ○ On request: Tool is available, delivery at short notice