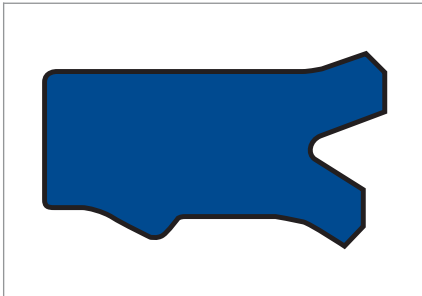


# MERKEL U-RING T 24



## PRODUCT DESCRIPTION

Merkel U-ring with asymmetrical profile, inner lip set back, additional support edge and sealing edge and press fit at the outside diameter.

## PRODUCT ADVANTAGES

Single-acting rod seal especially for telescopic cylinders and radially restricted housings.

- Very good static and dynamic tightness
- Additional sealing edge prevents ingress of dirt to a large degree
- (Note: low dynamic deformation value, therefore not suitable for sealing systems)

## APPLICATION

- Telescopic cylinders

## MATERIAL

Material	Code	Hardness
Polyurethane	95 AU V142	95 Shore A

## OPERATING CONDITIONS

Pressure p	40 MPa
Running speed v	0,5 m/s

Medium/ Temperature	95 AU V142
Hydraulic oils HL, HLP	-30 °C ... +110 °C
HFA fluids	+5 °C ... +50 °C
HFB fluids	+5 °C ... +50 °C
HFC fluids	-30 °C ... +40 °C
HFD fluids	-
Water	+5 °C ... +50 °C
HETG (rapeseed oil)	-30 °C ... +60 °C
HEES (synthetic ester)	-30 °C ... +80 °C
HEPG (glycol)	-30 °C ... +50 °C
Mineral greases	-30 °C ... +110 °C

## DESIGN NOTES

Please observe our general design notes in → Technical Manual.

### Surface quality

Peak-to-valley heights	R <sub>a</sub>	R <sub>max</sub>
Sliding surface	0,05 ... 0,3 µm	≤2,5 µm
Groove base	≤1,6 µm	≤6,3 µm
Groove flanks	≤3,0 µm	≤15,0 µm

### Admissible gap dimension

The decisive factor for the function of the seal is the largest gap dimension occurring during operation on the non-pressurised side of the seal. → Technical Manual.

Profile dimension	16 MPa	26 MPa	32 MPa
4,0 mm	0,50 mm	0,40 mm	0,35 mm

### Tolerances

The admissible gap width, tolerances, guide play and deflection of the guide under load are to be taken into account when designing D2. → Technical Manual.

Nominal Ø d	D	d
45 ... 171 mm	H8	f8

## FITTING & INSTALLATION

Careful fitting is a prerequisite for the correct function of the seal. → Technical Manual.