

Merkel U-Ring T 24

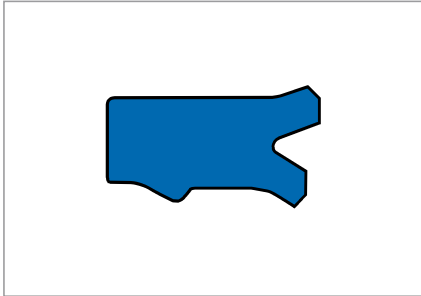


Fig. 1 Merkel U-Ring T 24

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
Novathan (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 ester)	-30 ... +80
HEPG (glycol)	-30 ... +50
Mineral greases	-30 ... +110
Pressure p in MPa	40
Running speed v in m/s	0,5

Surface quality

Surface roughness	R _a	R _{max}
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

Design notes

Please observe our general design notes in → Technical Manual.

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	Max. permissible gap dimension		
	16 MPa	26 MPa	32 MPa
4	0,50	0,40	0,35

Tolerance recommendation and dimension d2

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.

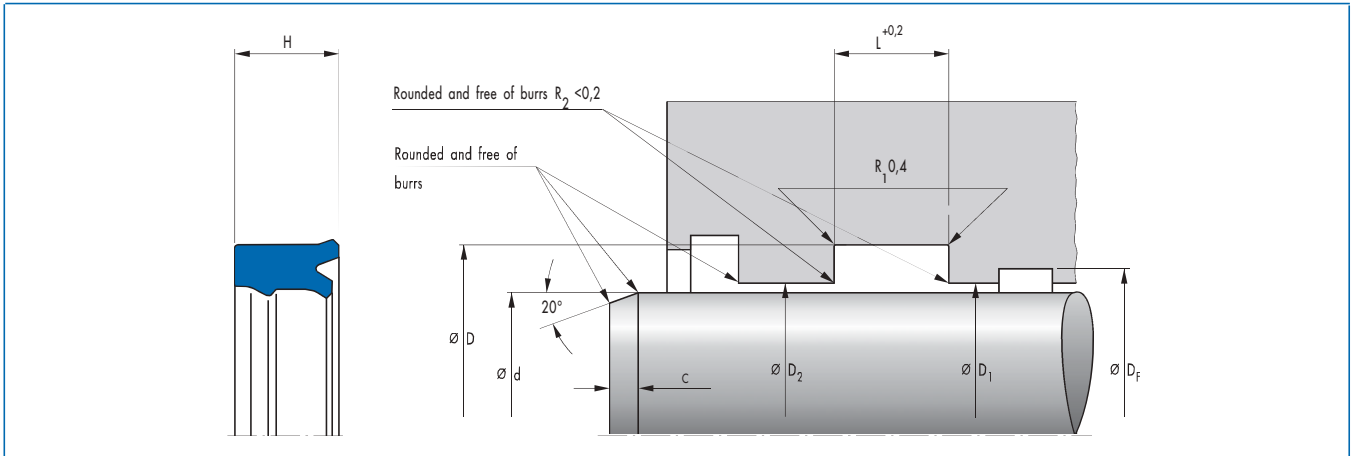
Nominal Ø d	16 MPa		26 MPa		32 MPa	
	d	D	d	D	d	D
45 ... 171	f8	H8	f8	H8	f8	H8

Fitting & installation

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

→ Technical Manual.

Article list



d	D	H	L	Profile	C	Fitting	Material	Article No.	
45	53	10,9	12	4	3	H	95 AU V142	24309792	○
50	58	10,9	12	4	3	H	95 AU V142	24309793	○
55	63	10,9	12	4	3	H	95 AU V142	24309794	●
60	68	10,4	12	4	3	H	95 AU V142	24306330	○
65	73	10,9	12	4	3	H	95 AU V142	24314232	○
70	78	10,9	12	4	3	H	95 AU V142	24308889	○
75	83	10,9	12	4	3	H	95 AU V142	24302750	●
80	88	10,9	12	4	3	H	95 AU V142	24306333	●
90	98	10,9	12	4	3	H	95 AU V142	24302751	●
92	100	10,9	12	4	3	H	95 AU V142	24315416	●
93	101	10,9	12	4	3	H	95 AU V142	24308890	○
95	103	10,9	12	4	3	H	95 AU V142	24314233	○
100	108	10,9	12	4	3	H	95 AU V142	24269499	●
105	113	10,9	12	4	3	H	95 AU V142	24302752	○
110	118	10,9	12	4	3	H	95 AU V142	24309795	●
118	126	10,9	12	4	3	H	95 AU V142	24308891	○
120	128	10,9	12	4	3	H	95 AU V142	24302753	●
125	133	10,9	12	4	3	H	95 AU V142	24316541	●
130	138	10,9	12	4	3	H	95 AU V142	24336027	○
143	151	10,9	12	4	3	H	95 AU V142	24308892	○
150	158	10,9	12	4	3	H	95 AU V142	24336028	○
155	163	11,4	12	4	3	H	95 AU V142	24269864	○
171	179	10,9	12	4	3	H	95 AU V142	24308893	○

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

Fitting: H = by hand; W = with fitting tool; blank = axially accessible housing