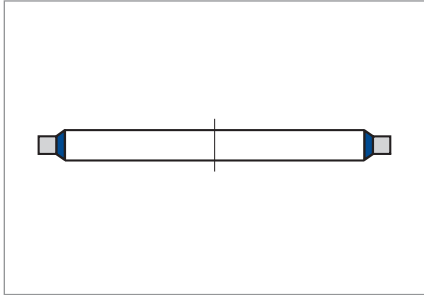


USIT RINGS U, UA, USF



Usit Ring U

PRODUCT DESCRIPTION

Metal gasket with internally (U) or externally (UA) vulcanised, trapezoidal, rubber-elastic sealing bead for static sealing of

- Threaded fittings
- Flange connections
- (USF) with centring diaphragm.

PRODUCT ADVANTAGES

- Easy fitting
- Force-fit connections
- Secure, self-reinforced sealing
- Suitable for high pressures.

APPLICATION

Sealing of threaded fittings and flange connections e.g. in mechanical engineering.

MATERIAL

Metal ring	Steel SPCC (similar to DC01 C290) Steel SPCC-1B (similar to DC01 C590) Stainless steel SUS 304 (similar to X5CrNi 18-10)
Sealing bead	NBR rubber 72 NBR 99041 FKM rubber 75 FKM 99104 Other materials are available on enquiry from special production.
Surface protection metal ring	SPCC/NBR zinc chrome plated (CR VI free coating) SPCC-1B/NBR zinc chrome plated (CR VI free coating) SPCC/FKM phosphated SPCC-1B/FKM phosphated

OPERATING CONDITIONS

NBR

Media	Mineral oils (as per DIN 51524), hydraulic fluids HFA, HFB, HFC (as per VDMA 24320)
Temperature	-30 ... +100 °C

FKM

Media	Hot air (+250 °C) Mineral oils (as per DIN 51524, +150 °C) Hydraulic fluids (as per VDMA 24320, +150 °C)
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Operating pressure	<100 MPa (installation in counter bore) <40 MPa (installation without counter bore for \varnothing <40 mm; only USF) <25 MPa (installation without counter bore for \varnothing <40 mm)
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Recommendation

Steel material	Max. permissible starting torque
SPCC	corresponding to 5.6 screw
SPCC-1B / SUS304	corresponding to 8.8 screw

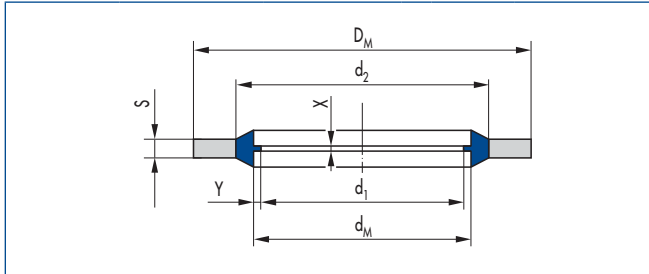
If the starting torques exceed the starting torque of a 8.8 screw, functioning can no longer be guaranteed. In this case, installation tests are required. We recommend SUS304 or SPCC-1B for these tests.

DESIGN NOTES

Installation

Surface	Flat surfaces	$R_{\max} \leq 15 \mu\text{m}$ $R_a \leq 3 \mu\text{m}$
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Tolerances on finished parts



D_M	D_M	D_M	s	s
≤ 28	$+0,15/-0,10$	$+0,10/-0,20$	1,0	$+0,08/-0,15$
28 ... 50	$+0,20/-0,10$	$+0,10/-0,30$	1,5	$+0,13/-0,20$
> 50	$+0,25/-0,10$	$+0,10/-0,40$	2,0	$+0,13/-0,20$
			3,0	$+0,20/-0,25$
			3,5	$+0,20/-0,30$