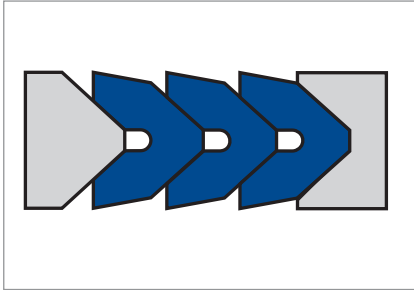


PACKING RING TFW MADE OF PTFE



Merkel Packing Ring TFW made of PTFE

PRODUCT DESCRIPTION

V-shape sealing ring made of PTFE for making up packings, comprising:

- 1 saddle ring TFS
- 3 to 5 angled rings TFW
- 1 mating ring TFG.

Note:

Only TFW rings are available from stock. Complete packings are only available on request.

PRODUCT ADVANTAGES

Packing rings TFW feature very good chemical and thermal resistance, low friction and favourable breakaway forces even after long periods of down-time.

APPLICATION

Packing rings TFW are suitable for axially operated valve spindles, rods and plungers, as well as slowly turning shafts.

MATERIAL

| Saddle ring | Angled ring | Mating ring |
|--|--|--|
| PTFE on request Metal (customer solution) | PTFE 15/F52902 (graphite-filled PTFE) | PTFE on request Metal (customer solution) |

→ Technical Manual.

OPERATING CONDITIONS

| Pressure | Temperature |
|----------|------------------|
| 31,5 MPa | -200 ... +220 °C |

| Running speed | on axial movement | on rotary movement |
|------------------------|-------------------|--------------------|
| Continuous operation | approx. 0,5 m/s | approx. 0,2 m/s |
| Intermittent operation | approx. 1,5 m/s | approx. 0,4 m/s |

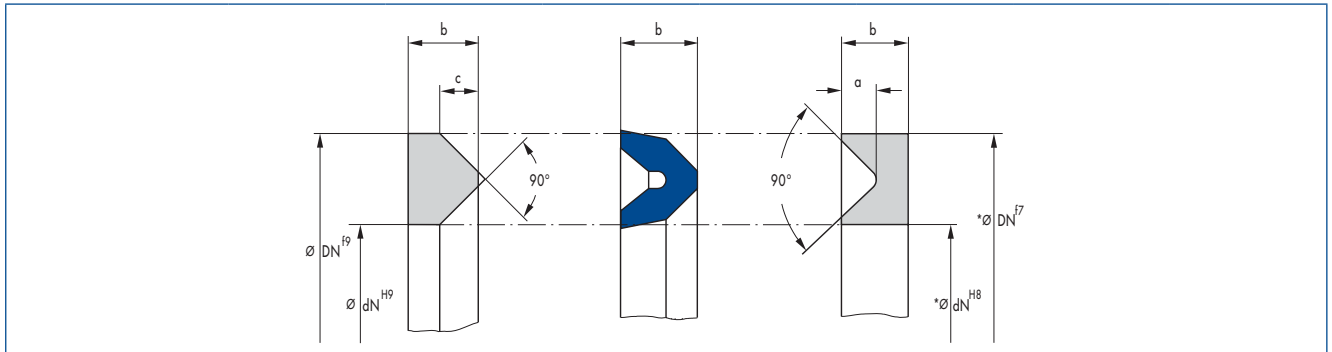
FITTING & INSTALLATION

With fluctuating operating temperatures or when sealing a rotating shaft, the packing is to be pre-loaded with 1,5 to 2 N/mm² on the pressure side using a spring. If the spring must be installed on the non-pressurised side then its pre-load is to be matched to the maximum pressure that occurs. If metal saddle and mating rings are manufactured by the customer, the dimensions are to be taken from the table. The number of PTFE angled rings depends on the pressure of the medium.

We recommend:

| p ≤ 3 MPa | p > 3 ... 10 MPa | p > 10 MPa |
|-----------|------------------|------------|
| 3 TFW | 4 TFW | 5 TFW |

LIST OF DIMENSIONS



* = tolerances only apply for metal design

| Ø Difference DN-dN | Mating ring TFG ¹⁾ | | Angled ring TFW | Saddle ring TFS ¹⁾ | | Packing height | |
|--------------------|-------------------------------|-----|-----------------|-------------------------------|-----|------------------------------|------------------|
| | b | a | b | b | c | b ₁ ²⁾ | Δh ³⁾ |
| 8 | 4,0 | 1,4 | 3,8 | 4,0 | 1,7 | 15,3 | 2,9 |
| 10 | 4,5 | 1,8 | 4,8 | 4,5 | 2,1 | 17,8 | 3,6 |
| 12 | 5,0 | 2,1 | 5,8 | 5,0 | 2,5 | 20,3 | 4,2 |
| 15 | 6,0 | 2,6 | 7,0 | 6,0 | 3,1 | 23,5 | 4,7 |
| 20 | 7,5 | 3,4 | 9,3 | 7,5 | 4,3 | 29,6 | 6,0 |
| 25 | 9,0 | 4,5 | 11,2 | 9,0 | 5,4 | 33,7 | 6,8 |
| 30 | 10,5 | 5,5 | 13,0 | 10,5 | 6,3 | 38,4 | 7,7 |

¹⁾ TFS/TFG available on request

²⁾ Height with 3 TFW

³⁾ Height increase for each additional angled ring TFW