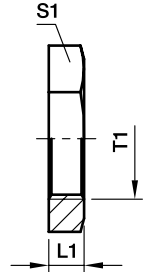


## GM Locknut for bulk heads

For bulkhead SV and WSV

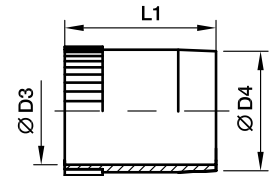


| Series          | Tube O.D. | T1       | L1 | S1 | Weight g/1 piece | Order code |                    |          |
|-----------------|-----------|----------|----|----|------------------|------------|--------------------|----------|
|                 |           |          |    |    |                  | Steel CF   | Stainless Steel 71 | Brass MS |
| L <sup>3)</sup> | 06        | M 12×1.5 | 6  | 17 | 7                | GM06LCFX   | GM06L71X           | GM06LMSX |
|                 | 08        | M 14×1.5 | 6  | 19 | 8                | GM08LCFX   | GM08L71X           | GM08LMSX |
|                 | 10        | M 16×1.5 | 6  | 22 | 11               | GM10LCFX   | GM10L71X           | GM10LMSX |
|                 | 12        | M 18×1.5 | 6  | 24 | 12               | GM12LCFX   | GM12L71X           | GM12LMSX |
|                 | 15        | M 22×1.5 | 7  | 30 | 23               | GM15LCFX   | GM15L71X           | GM15LMSX |
|                 | 18        | M 26×1.5 | 8  | 36 | 37               | GM18LCFX   | GM18L71X           | GM18LMSX |
|                 | 22        | M 30×2.0 | 8  | 41 | 46               | GM22LCFX   | GM22L71X           | GM22LMSX |
|                 | 28        | M 36×2.0 | 9  | 46 | 58               | GM28LCFX   | GM28L71X           | GM28LMSX |
|                 | 35        | M 45×2.0 | 9  | 55 | 71               | GM35LCFX   | GM35L71X           | GM35LMSX |
|                 | 42        | M 52×2.0 | 10 | 65 | 123              | GM42LCFX   | GM42L71X           | GM42LMSX |
| S <sup>4)</sup> | 06        | M 14×1.5 | 6  | 19 | 8                | GM08LCFX   | GM08L71X           | GM06LMSX |
|                 | 08        | M 16×1.5 | 6  | 22 | 11               | GM10LCFX   | GM10L71X           | GM10LMSX |
|                 | 10        | M 18×1.5 | 6  | 24 | 12               | GM12LCFX   | GM12L71X           | GM12LMSX |
|                 | 12        | M 20×1.5 | 6  | 27 | 15               | GM12SCFX   | GM12S71X           | GM12SMSX |
|                 | 14        | M 22×1.5 | 7  | 30 | 23               | GM15LCFX   | GM15L71X           | GM15LMSX |
|                 | 16        | M 24×1.5 | 7  | 32 | 24               | GM16SCFX   | GM16S71X           | GM16SMSX |
|                 | 20        | M 30×2.0 | 8  | 41 | 46               | GM22LCFX   | GM22L71X           | GM22LMSX |
|                 | 25        | M 36×2.0 | 9  | 46 | 58               | GM28LCFX   | GM28L71X           | GM28LMSX |
|                 | 30        | M 42×2.0 | 9  | 50 | 58               | GM30SCFX   | GM30S71X           | GM30SMSX |
|                 | 38        | M 52×2.0 | 10 | 65 | 123              | GM42LCFX   | GM42L71X           | GM42LMSX |

<sup>3)</sup> L = light series; <sup>4)</sup> S = heavy series

## VH Support sleeve

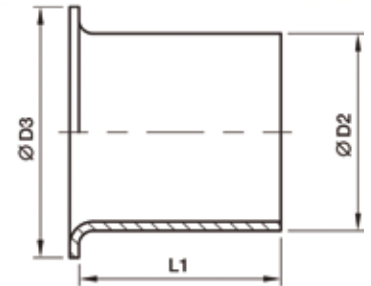
for thin-walled metal tubing



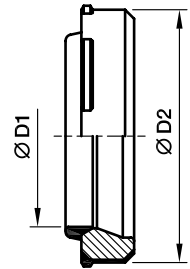
| Tube I.D. | D3   | D4   | L1   | Weight g/1 piece | Order code |                    |            |
|-----------|------|------|------|------------------|------------|--------------------|------------|
|           |      |      |      |                  | Steel CF   | Stainless Steel 71 | Brass MS   |
| 4.00      | 2.6  | 3.8  | 14.0 | 0.7              | VH04CFX    | VH0471X            | VH04MSX    |
| 4.50      | 3.1  | 4.3  | 14.0 | 0.8              | VH04.5CFX  | VH04.571X          | VH04.5MSX  |
| 5.00      | 3.6  | 4.8  | 14.0 | 0.8              | VH05CFX    | VH0571X            | VH05MSX    |
| 6.00      | 4.6  | 5.8  | 14.0 | 1.0              | VH06CFX    | VH0671X            | VH06MSX    |
| 6.50      | 5.1  | 6.3  | 14.0 | 1.0              | VH06.5CFX  | VH06.571X          | VH06.5MSX  |
| 7.00      | 5.6  | 6.8  | 15.5 | 1.3              | VH07CFX    | VH0771X            | VH07MSX    |
| 8.00      | 6.6  | 7.8  | 15.5 | 1.6              | VH08CFX    | VH0871X            | VH08MSX    |
| 9.00      | 7.6  | 8.8  | 15.5 | 1.8              | VH09CFX    | VH0971X            | VH09MSX    |
| 10.00     | 8.6  | 9.8  | 15.5 | 2.1              | VH10CFX    | VH1071X            | VH10MSX    |
| 10.05     | 8.6  | 9.8  | 15.5 | 2.1              | VH10.05CFX | VH10.0571X         | VH10.05MSX |
| 10.50     | 9.1  | 10.3 | 15.5 | 2.3              | VH10.5CFX  | VH10.571X          | VH10.5MSX  |
| 11.00     | 9.6  | 10.8 | 15.5 | 2.6              | VH11CFX    | VH1171X            | VH11MSX    |
| 12.00     | 10.2 | 11.8 | 17.0 | 3.7              | VH12CFX    | VH1271X            | VH12MSX    |
| 12.95     | 11.2 | 12.8 | 17.0 | 3.9              | VH12.95CFX | VH12.9571X         | VH12.95MSX |
| 13.00     | 11.2 | 12.8 | 17.0 | 3.9              | VH13CFX    | VH1371X            | VH13MSX    |
| 14.00     | 12.2 | 13.8 | 17.0 | 4.3              | VH14CFX    | VH1471X            | VH14MSX    |
| 15.00     | 13.2 | 14.8 | 20.0 | 5.7              | VH15CFX    | VH1571X            | VH15MSX    |
| 16.00     | 14.2 | 15.8 | 20.0 | 5.8              | VH16.00CFX | VH16.0071X         | VH16.00MSX |
| 16.20     | 14.2 | 15.8 | 20.0 | 5.8              | VH16CFX    | VH1671X            | VH16MSX    |
| 17.00     | 15.2 | 16.8 | 20.0 | 6.3              | VH17CFX    | VH1771X            | VH17MSX    |
| 18.00     | 16.2 | 17.8 | 20.0 | 6.3              | VH18CFX    | VH1871X            | VH18MSX    |
| 19.00     | 17.2 | 18.8 | 16.0 | 5.8              | VH19CFX    | VH1971X            | VH19MSX    |
| 19.90     | 18.2 | 19.8 | 21.5 | 7.9              | VH19.90CFX | VH19.9071X         | VH19.90MSX |
| 20.00     | 18.2 | 19.8 | 21.5 | 7.9              | VH20CFX    | VH2071X            | VH20MSX    |
| 21.00     | 19.2 | 20.8 | 21.5 | 8.0              | VH21CFX    | VH2171X            | VH21MSX    |
| 22.00     | 20.2 | 21.8 | 23.5 | 9.7              | VH22CFX    | VH2271X            | VH22MSX    |
| 23.00     | 21.2 | 22.8 | 23.5 | 10.6             | VH23CFX    | VH2371X            | VH23MSX    |
| 24.00     | 22.2 | 23.8 | 23.5 | 11.1             | VH24CFX    | VH2471X            | VH24MSX    |
| 24.90     | 23.3 | 24.8 | 23.5 | 10.8             | VH24.90CFX | VH24.9071X         | VH2490MSX  |
| 25.00     | 23.2 | 24.8 | 23.5 | 10.8             | VH25CFX    | VH2571X            | VH25MSX    |
| 26.00     | 24.2 | 25.8 | 23.5 | 12.7             | VH26CFX    | VH2671X            | VH26MSX    |
| 27.00     | 25.2 | 26.8 | 23.5 | 12.2             | VH27CFX    | VH2771X            | VH27MSX    |
| 30.00     | 27.8 | 29.8 | 26.5 | 18.7             | VH30CFX    | VH3071X            | VH30MSX    |
| 31.00     | 28.8 | 30.8 | 26.5 | 20.7             | VH31CFX    | VH3171X            | VH31MSX    |
| 32.00     | 29.8 | 31.8 | 26.5 | 19.2             | VH32CFX    | VH3271X            | VH32MSX    |
| 32.10     | 29.8 | 31.8 | 26.5 | 19.2             | VH32.10CFX | VH32.1071X         | VH32.10MSX |
| 33.00     | 30.8 | 32.8 | 26.5 | 19.9             | VH33CFX    | VH3371X            | VH33MSX    |
| 34.00     | 31.8 | 33.8 | 26.5 | 26.5             | VH34CFX    | VH3471X            | VH34MSX    |
| 37.80     | 35.8 | 37.7 | 31.0 | 19.5             | VH37.8CFX  | VH37.871X          | VH37.8MSX  |
| 38.00     | 35.8 | 37.8 | 21.0 | 19.7             | VH38CFX    | VH3871X            | VH38MSX    |
| 39.00     | 36.8 | 38.8 | 21.0 | 19.5             | VH39CFX    | VH3971X            | VH39MSX    |

## E Tube/hose insert

for plastic tubing



| Tube O.D. | Tube I.D. | D2   | D3   | L1 | Weight g/1 piece | Order code Brass   |
|-----------|-----------|------|------|----|------------------|--------------------|
| 04        | 2.0       | 2.0  | 3.5  | 8  | 1                | <b>E04/02X</b>     |
| 04        | 2.5       | 2.5  | 4.0  | 8  | 1                | <b>E04/2.5X</b>    |
| 05        | 3.0       | 3.0  | 5.0  | 14 | 1                | <b>E0506/03X</b>   |
| 06        | 3.0       | 3.0  | 5.0  | 14 | 1                | <b>E0506/03X</b>   |
| 05        | 4.0       | 4.0  | 5.0  | 14 | 1                | <b>E0506/04X</b>   |
| 06        | 4.0       | 4.0  | 5.0  | 14 | 1                | <b>E0506/04X</b>   |
| 08        | 4.0       | 4.0  | 6.6  | 14 | 1                | <b>E08/04X</b>     |
| 06        | 5.0       | 5.0  | 6.0  | 14 | 1                | <b>E06/05X</b>     |
| 08        | 5.0       | 5.0  | 6.0  | 14 | 1                | <b>E08/05X</b>     |
| 10        | 6.0       | 6.0  | 8.0  | 15 | 1                | <b>E0810/06X</b>   |
| 08        | 6.0       | 6.0  | 8.0  | 15 | 1                | <b>E0810/06X</b>   |
| 10        | 8.0       | 8.0  | 10.0 | 15 | 1                | <b>E10/08X</b>     |
| 12        | 8.0       | 8.0  | 12.0 | 15 | 2                | <b>E12/08X</b>     |
| 12        | 9.0       | 9.0  | 12.0 | 15 | 2                | <b>E12/09X</b>     |
| 12        | 10.0      | 10.0 | 12.0 | 15 | 2                | <b>E1215/10X</b>   |
| 15        | 12.0      | 12.0 | 14.8 | 15 | 3                | <b>E15/12X</b>     |
| 15        | 12.5      | 12.5 | 14.8 | 15 | 3                | <b>E1516/12.5X</b> |
| 16        | 12.5      | 12.5 | 14.8 | 15 | 3                | <b>E1516/12.5X</b> |
| 18        | 14.0      | 14.0 | 17.8 | 15 | 4                | <b>E18/14X</b>     |
| 18        | 16.0      | 16.0 | 17.8 | 20 | 4                | <b>E1820/16X</b>   |
| 20        | 16.0      | 16.0 | 17.8 | 20 | 4                | <b>E1820/16X</b>   |
| 22        | 18.0      | 18.0 | 21.8 | 16 | 5                | <b>E22/18X</b>     |

**DOZ EO-2 Soft sealing ring**


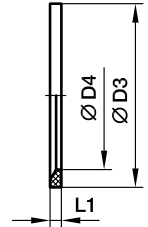
**Assembly direction:**  
Sealing lip shows to the tube end

| Series           | D1<br>          | D2   | Weight<br>g/1 piece | Order code     |                  |                        |                        |                    |
|------------------|-----------------|------|---------------------|----------------|------------------|------------------------|------------------------|--------------------|
|                  |                 |      |                     | Steel<br>NBR   | Steel<br>FKM     | Stainless Steel<br>FKM | Stainless Steel<br>NBR |                    |
| LL <sup>2)</sup> | 04              | 6.8  | 1                   | <b>DOZ04LL</b> | —                | —                      | —                      |                    |
|                  | 06              | 8.8  | 1                   | <b>DOZ06LL</b> | —                | —                      | —                      |                    |
| L <sup>3)</sup>  | 06              | 10.3 | 1                   | <b>DOZ06L</b>  | <b>DOZ06LVIT</b> | <b>DOZ06L71</b>        | <b>DOZ06LNBR71</b>     |                    |
|                  | 08              | 12.3 | 1                   | <b>DOZ08L</b>  | <b>DOZ08LVIT</b> | <b>DOZ08L71</b>        | <b>DOZ08LNBR71</b>     |                    |
|                  | 10              | 14.3 | 2                   | <b>DOZ10L</b>  | <b>DOZ10LVIT</b> | <b>DOZ10L71</b>        | <b>DOZ10LNBR71</b>     |                    |
|                  | 12              | 16.3 | 2                   | <b>DOZ12L</b>  | <b>DOZ12LVIT</b> | <b>DOZ12L71</b>        | <b>DOZ12LNBR71</b>     |                    |
|                  | 15              | 20.3 | 3                   | <b>DOZ15L</b>  | <b>DOZ15LVIT</b> | <b>DOZ15L71</b>        | <b>DOZ15LNBR71</b>     |                    |
|                  | 18              | 24.3 | 5                   | <b>DOZ18L</b>  | <b>DOZ18LVIT</b> | <b>DOZ18L71</b>        | <b>DOZ18LNBR71</b>     |                    |
|                  | 22              | 27.7 | 6                   | <b>DOZ22L</b>  | <b>DOZ22LVIT</b> | <b>DOZ22L71</b>        | <b>DOZ22LNBR71</b>     |                    |
|                  | 28              | 33.7 | 7                   | <b>DOZ28L</b>  | <b>DOZ28LVIT</b> | <b>DOZ28L71</b>        | <b>DOZ28LNBR71</b>     |                    |
|                  | 35              | 42.7 | 14                  | <b>DOZ35L</b>  | <b>DOZ35LVIT</b> | <b>DOZ35L71</b>        | <b>DOZ35LNBR71</b>     |                    |
|                  | 42              | 49.7 | 17                  | <b>DOZ42L</b>  | <b>DOZ42LVIT</b> | <b>DOZ42L71</b>        | <b>DOZ42LNBR71</b>     |                    |
|                  | S <sup>4)</sup> | 06   | 12.3                | 2              | <b>DOZ06S</b>    | <b>DOZ06SVIT</b>       | <b>DOZ06S71</b>        | <b>DOZ06SNBR71</b> |
|                  |                 | 08   | 14.3                | 2              | <b>DOZ08S</b>    | <b>DOZ08SVIT</b>       | <b>DOZ08S71</b>        | <b>DOZ08SNBR71</b> |
| 10               |                 | 16.3 | 3                   | <b>DOZ10S</b>  | <b>DOZ10SVIT</b> | <b>DOZ10S71</b>        | <b>DOZ10SNBR71</b>     |                    |
| 12               |                 | 18.3 | 4                   | <b>DOZ12S</b>  | <b>DOZ12SVIT</b> | <b>DOZ12S71</b>        | <b>DOZ12SNBR71</b>     |                    |
| 14               |                 | 20.3 | 4                   | <b>DOZ14S</b>  | <b>DOZ14SVIT</b> | <b>DOZ14S71</b>        | <b>DOZ14SNBR71</b>     |                    |
| 16               |                 | 22.3 | 5                   | <b>DOZ16S</b>  | <b>DOZ16SVIT</b> | <b>DOZ16S71</b>        | <b>DOZ16SNBR71</b>     |                    |
| 20               |                 | 27.7 | 9                   | <b>DOZ20S</b>  | <b>DOZ20SVIT</b> | <b>DOZ20S71</b>        | <b>DOZ20SNBR71</b>     |                    |
| 25               |                 | 33.7 | 13                  | <b>DOZ25S</b>  | <b>DOZ25SVIT</b> | <b>DOZ25S71</b>        | <b>DOZ25SNBR71</b>     |                    |
| 30               |                 | 39.7 | 18                  | <b>DOZ30S</b>  | <b>DOZ30SVIT</b> | <b>DOZ30S71</b>        | <b>DOZ30SNBR71</b>     |                    |
| 38               |                 | 49.7 | 27                  | <b>DOZ38S</b>  | <b>DOZ38SVIT</b> | <b>DOZ38S71</b>        | <b>DOZ38SNBR71</b>     |                    |

<sup>2)</sup> LL = very light series; <sup>3)</sup> L = light series; <sup>4)</sup> S = heavy series

## ED Eolastic soft seal (for BSPP and metric parallel threads)

For Type: GE...ED, EGE...ED, EVGE...ED, EW...ED, EV...ED, ET...ED, EL...ED, VSTI...ED, RI...ED

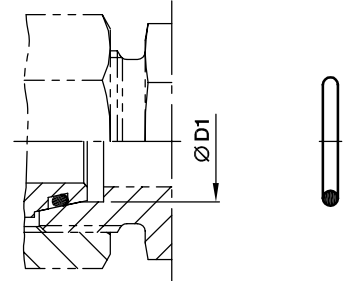


| Male stud metric thread<br>T1 | Male stud BSP thread<br>T1 | D3   | D4   | L1  | Weight<br>g/1 piece | Order code<br>NBR | Order code<br>FKM   |
|-------------------------------|----------------------------|------|------|-----|---------------------|-------------------|---------------------|
| M 08×1.0                      |                            | 9.9  | 6.5  | 1.0 | 0.1                 | <b>ED8X1X</b>     | <b>ED8X1VITX</b>    |
| M 10×1.0                      | G 1/8 A                    | 11.9 | 8.4  | 1.0 | 0.1                 | <b>ED10X1X</b>    | <b>ED10X1VITX</b>   |
| M 12×1.5                      |                            | 14.4 | 9.8  | 1.5 | 0.2                 | <b>ED12X1.5X</b>  | <b>ED12X1.5VITX</b> |
| M 14×1.5                      | G 1/4 A                    | 16.5 | 11.6 | 1.5 | 0.2                 | <b>ED14X1.5X</b>  | <b>ED14X1.5VITX</b> |
| M 16×1.5                      |                            | 18.9 | 13.8 | 1.5 | 0.1                 | <b>ED16X1.5X</b>  | <b>ED16X1.5VITX</b> |
|                               | G 3/8 A                    | 18.9 | 14.7 | 1.5 | 0.2                 | <b>ED3/8X</b>     | <b>ED3/8VITX</b>    |
| M 18×1.5                      |                            | 20.9 | 15.7 | 1.5 | 0.1                 | <b>ED18X1.5X</b>  | <b>ED18X1.5VITX</b> |
| M 20×1.5                      |                            | 22.9 | 17.8 | 1.5 | 0.2                 | <b>ED20X1.5X</b>  | <b>ED20X1.5VITX</b> |
|                               | G 1/2 A                    | 23.9 | 18.5 | 1.5 | 0.3                 | <b>ED1/2X</b>     | <b>ED1/2VITX</b>    |
| M 22×1.5                      |                            | 24.3 | 19.6 | 1.5 | 0.2                 | <b>ED22X1.5X</b>  | <b>ED22X1.5VITX</b> |
| M 26×1.5                      | G 3/4 A                    | 29.2 | 23.9 | 1.5 | 0.4                 | <b>ED26X1.5X</b>  | <b>ED26X1.5VITX</b> |
| M 27×2.0                      | G 3/4 A                    | 29.2 | 23.9 | 1.5 | 0.4                 | <b>ED26X1.5X</b>  | <b>ED26X1.5VITX</b> |
| M 33×2.0                      | G 1 A                      | 35.7 | 29.7 | 2.0 | 0.7                 | <b>ED33X2X</b>    | <b>ED33X2VITX</b>   |
| M 42×2.0                      | G 1 1/4 A                  | 45.8 | 38.8 | 2.0 | 0.9                 | <b>ED42X2X</b>    | <b>ED42X2VITX</b>   |
| M 48×2.0                      | G 1 1/2 A                  | 50.7 | 44.7 | 2.0 | 1.0                 | <b>ED48X2X</b>    | <b>ED48X2VITX</b>   |

**OR O-Ring for fittings with EO 24° DKO swivel**

For Type:

DA, EGE, EGEO, MAVE, EW, EV, ET, EL, RED, GZ, GZR, VKA, VKAM

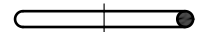
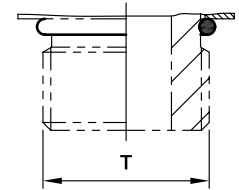


| Series          | D1<br> | O-ring NBR<br>Shore-hardness approx. 90 | O-ring FKM<br>Shore-hardness approx. 90 |
|-----------------|--------|---|---|
| L <sup>3)</sup> | 6      | <b>OR4.5X1.5X</b>                       | <b>OR4.5X1.5VITX</b>                    |
|                 | 8      | <b>OR6.5X1.5X</b>                       | <b>OR6.5X1.5VITX</b>                    |
|                 | 10     | <b>OR8.5X1.5X</b>                       | <b>OR8X1.5VITX</b>                      |
|                 | 12     | <b>OR10.5X1.5X</b>                      | <b>OR10X1.5VITX</b>                     |
|                 | 15     | <b>OR12.5X2X</b>                        | <b>OR12X2VITX</b>                       |
|                 | 18     | <b>OR16X2X</b>                          | <b>OR15X2VITX</b>                       |
|                 | 22     | <b>OR20X2X</b>                          | <b>OR20X2VITX</b>                       |
|                 | 28     | <b>OR26X2X</b>                          | <b>OR26X2VITX</b>                       |
|                 | 35     | <b>OR32X2.5X</b>                        | <b>OR32X2.5VITX</b>                     |
|                 | 42     | <b>OR39X2.5X</b>                        | <b>OR38X2.5VITX</b>                     |
| S <sup>4)</sup> | 6      | <b>OR4.5X1.5X</b>                       | <b>OR4.5X1.5VITX</b>                    |
|                 | 8      | <b>OR6.5X1.5X</b>                       | <b>OR6.5X1.5VITX</b>                    |
|                 | 10     | <b>OR8.5X1.5X</b>                       | <b>OR8X1.5VITX</b>                      |
|                 | 12     | <b>OR10.5X1.5X</b>                      | <b>OR10X1.5VITX</b>                     |
|                 | 14     | <b>OR12X2X</b>                          | <b>OR12X2VITX</b>                       |
|                 | 16     | <b>OR14X2X</b>                          | <b>OR13X2VITX</b>                       |
|                 | 20     | <b>OR17X2.5X</b>                        | <b>OR16.3X2.4VITX</b>                   |
|                 | 25     | <b>OR22X2.5X</b>                        | <b>OR20.3X2.4VITX</b>                   |
|                 | 30     | <b>OR27X2.5X</b>                        | <b>OR25.3X2.4VITX</b>                   |
|                 | 38     | <b>OR35X2.5X</b>                        | <b>OR33.3X2.4VITX</b>                   |

<sup>3)</sup> L = light series; <sup>4)</sup> S = heavy series

## OR O-rings for male stud ends

Male metric thread – O-ring (ISO 6149)  
 Male UN/UNF thread – O-ring (ISO 11926)



Types with metric thread:  
 VSTI-OR, GEO, EGEO

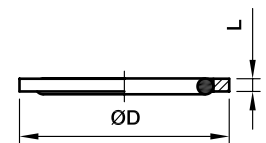
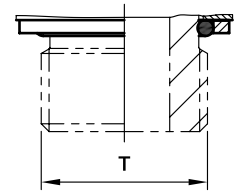
| Thread<br>T | O-ring<br>NBR     | O-ring<br>FKM         |
|-------------|-------------------|-----------------------|
| M 08x1.0    | <b>OR6.1X1.6</b>  | <b>OR6.1X1.6VITX</b>  |
| M 10x1.0    | <b>OR8.1X1.6</b>  | <b>OR8.1X1.6VITX</b>  |
| M 12x1.5    | <b>OR9.3X2.2</b>  | <b>OR9.3X2.2VITX</b>  |
| M 14x1.5    | <b>OR11.3X2.2</b> | <b>OR11.3X2.2VITX</b> |
| M 16x1.5    | <b>OR13.3X2.2</b> | <b>OR13.3X2.2VITX</b> |
| M 18x1.5    | <b>OR15.3X2.2</b> | <b>OR15.3X2.2VITX</b> |
| M 22x1.5    | <b>OR19.3X2.2</b> | <b>OR19.3X2.2VITX</b> |
| M 27x2.0    | <b>OR23.6X2.9</b> | <b>OR23.6X2.9VITX</b> |
| M 33x2.0    | <b>OR29.6X2.9</b> | <b>OR29.6X2.9VITX</b> |
| M 42x2.0    | <b>OR38.6X2.9</b> | <b>OR38.6X2.9VITX</b> |
| M 48x2.0    | <b>OR44.6X2.9</b> | <b>OR44.6X2.9VITX</b> |

Types with UN/UNF thread:  
 GE-UNF

| Thread<br>T  | O-ring<br>NBR       | O-ring<br>FKM           |
|--------------|---------------------|-------------------------|
| 7/16-20 UNF  | <b>OR8.92X1.83</b>  | <b>OR8.92X1.83VITX</b>  |
| 9/16-18 UNF  | <b>OR11.89X1.98</b> | <b>OR11.89X1.98VITX</b> |
| 3/4-16 UNF   | <b>OR16.36X2.21</b> | <b>OR16.36X2.21VITX</b> |
| 7/8-14 UNF   | <b>OR19.18X2.46</b> | <b>OR19X2.5VITX</b>     |
| 1 1/16-12 UN | <b>OR23.47X2.95</b> | <b>OR23.47X2.95VITX</b> |
| 1 5/16-12 UN | <b>OR29.74X2.95</b> | <b>OR29.74X2.95VITX</b> |
| 1 5/8-12 UN  | <b>OR37.46X3</b>    | <b>OR37.46X3VITX</b>    |
| 1 7/8-12 UN  | <b>OR43.69X3</b>    | <b>OR43.69X3VITX</b>    |

## OR O-rings and retaining rings for male stud ends

Adjustable BSPP thread – O-ring + retaining ring (ISO 1179)



Types with BSPP thread: WEE-R

| Thread<br>T | O-ring<br>NBR        | Steel |     |                                    | O-ring<br>FKM           | Stainless Steel |     | Order code<br>Retaining ring<br>Stainless Steel |
|-------------|----------------------|-------|-----|------------------------------------|-------------------------|-----------------|-----|---|
|             |                      | D     | L   | Order code<br>Retaining ring<br>CF |                         | D               | L   |   |
| G 1/8 A     | <b>OR8X1.88X</b>     | 14.8  | 1.4 | <b>RRS1/8CF</b>                    | same like steel         | 15.0            | 1.4 | <b>8207SS1/8</b>                                |
| G 1/4 A     | <b>OR10.77X2.62X</b> | 19.8  | 1.9 | <b>RRS1/4CF</b>                    | <b>OR10.77X2.62VITX</b> | 19.5            | 1.9 | <b>8207SS1/4A</b>                               |
| G 3/8 A     | <b>OR13.94X2.62X</b> | 22.8  | 2.0 | <b>RRS3/8CF</b>                    | same like steel         | 23.5            | 1.9 | <b>8207SS3/8A</b>                               |
| G 1/2 A     | <b>OR18X3.15X</b>    | 27.8  | 2.6 | <b>RRS1/2CF</b>                    | <b>OR17.96X2.62VITX</b> | 28.5            | 1.9 | <b>8207SS1/2</b>                                |
| G 3/4 A     | <b>OR23X3X</b>       | 32.8  | 2.5 | <b>RRS3/4CF</b>                    | <b>OR23.47X2.62VITX</b> | 34.5            | 1.9 | <b>8207SS3/4</b>                                |
| G 1 A       | <b>OR29.74X3.53X</b> | 40.8  | 2.5 | <b>RRS1CF</b>                      | same like steel         | 43.5            | 2.6 | <b>8207SS1A</b>                                 |
| G 1 1/4 A   | <b>OR37.69X3.53X</b> | 50.8  | 2.6 | <b>RRS11/4CF</b>                   | same like steel         | 52.5            | 2.6 | <b>8207SS11/4</b>                               |
| G 1 1/2 A   | <b>OR44.04X3.53X</b> | 55.8  | 2.6 | <b>RRS11/2CF</b>                   | same like steel         | 60.0            | 2.6 | <b>8207SS11/2</b>                               |

| Order code suffixes |                  |
|---------------------|------------------|
| Material            | Example          |
| NBR                 | OR10.77X2.62X    |
| FKM                 | OR10.77X2.62VITX |

## OR O-Rings for banjo fittings WH/TH

| For<br>WH / TH | For<br>WH / TH | O-ring<br>NBR      | O-ring<br>FKM         |
|----------------|----------------|--------------------|-----------------------|
| 06LM/LR        |                | <b>OR9.3X1.5X</b>  | <b>OR9.3X1.5VITX</b>  |
| 08LM/LR        | 06SM/SR        | <b>OR12.5X1.5X</b> | <b>OR12.5X1.5VITX</b> |
| 10LM/LR        | 08SM/SR        | <b>OR12.5X1.5X</b> | <b>OR12.5X1.5VITX</b> |
| 12LM/LR        | 10SM/SR        | <b>OR16X1.5X</b>   | <b>OR16X1.5VITX</b>   |
|                | 12SR           | <b>OR16X1.5X</b>   | <b>OR16X1.5VITX</b>   |
| 15LM           | 12SM           | <b>OR18X1.5X</b>   | <b>OR18X1.5VITX</b>   |
| 15LR           | 14SM/SR        | <b>OR20X1.5X</b>   | <b>OR20X1.5VITX</b>   |
| 18LM/LR        | 16SM/SR        | <b>OR20X1.5X</b>   | <b>OR20X1.5VITX</b>   |
| 22LM/LR        | 20SM/SR        | <b>OR25X2X</b>     | <b>OR25X2VITX</b>     |
| 28LM/LR        | 25SM/SR        | <b>OR33X2.5X</b>   | <b>OR33X2.5VITX</b>   |
| 35LM/LR        | 30SM/SR        | <b>OR41X2.5X</b>   | <b>OR41X2.5VITX</b>   |
| 42LM/LR        | 38SM/SR        | <b>OR46X3X</b>     | <b>OR46X3VITX</b>     |

## OR O-Rings for banjo elbows SWVE..M/R KDSOMD

| For<br>SWVE..M/R KDSOMD                   | O-ring<br>NBR        |
|---|----------------------|
| 04LLR/-   06LLR/LLM   08LLR/LLM   06LR/LM | <b>OR9X1.2X</b>      |
| 08LM   06SM                               | <b>OR10X1.5X</b>     |
| 08LR   06SR   10LR/LM   08SR/LM           | <b>OR12.5X1.5X</b>   |
| 12LR/LM   10SR/LM   12SR                  | <b>OR15X1.5X</b>     |
| 15LM   12SM                               | <b>OR16X1.5X</b>     |
| 15LR   14SR/-                             | <b>OR19X1.5X</b>     |
| 18LR/LM   16SR/SM                         | <b>OR20X1.5X</b>     |
| 22LR/LM   20SR/SM                         | <b>OR25.12X1.78X</b> |
| 28LR/LM   25SR/SM                         | <b>OR33X2.5X</b>     |
| 35LR/LM   30SR/SM                         | <b>OR41X2.5X</b>     |
| 42LR/LM   38SR/SM                         | <b>OR46X3.0X</b>     |

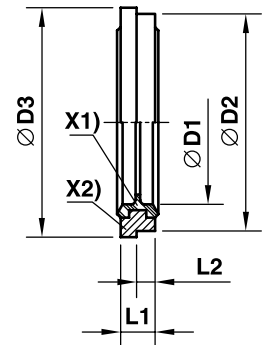
## DKI Sealing ring for pressure gauge connectors

| Female<br>thread | D1 | D2   | L1  | Weight<br>g/1 piece | Order code       |                       |
|------------------|----|------|-----|---------------------|------------------|-----------------------|
|                  |    |      |     |                     | Steel<br>CF      | Stainless Steel<br>71 |
| G 1/4            | 6  | 11.3 | 4.5 | 2.5                 | <b>DKI1/4CFX</b> | <b>DKI1/471X</b>      |
| G 1/2            | 12 | 18.5 | 5.0 | 5.0                 | <b>DKI1/2CFX</b> | <b>DKI1/271X</b>      |



## KDS Soft sealing ring for banjo fittings SWVE, WH and TH from steel

for small and wide spot faces of ports

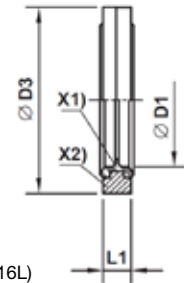


X1) NBR sealing  
X2) Supporting-ring (Steel)

| Male stud<br>metric thread | Male stud<br>BSPP thread | D1   | D2   | D3   | L1  | L2  | Weight<br>g/1 piece | Order code    |
|----------------------------|--------------------------|------|------|------|-----|-----|---------------------|---------------|
|                            |                          |      |      |      |     |     |                     | Steel/NBR     |
| M 10×1.0                   | G 1/8 A                  | 10.3 | 14.9 | 16.0 | 2.5 | 1.1 | 2                   | <b>KDS10X</b> |
| M 12×1.5                   |                          | 12.3 | 17.0 | 18.0 | 3.0 | 1.6 | 2                   | <b>KDS12X</b> |
| M 14×1.5                   | G 1/4 A                  | 14.3 | 18.9 | 20.0 | 3.0 | 1.6 | 2                   | <b>KDS14X</b> |
| M 16×1.5                   | G 3/8 A                  | 17.0 | 21.9 | 24.0 | 3.0 | 2.1 | 3                   | <b>KDS16X</b> |
| M 18×1.5                   |                          | 18.3 | 23.9 | 23.9 | 3.0 |     | 4                   | <b>KDS18X</b> |
| M 22×1.5                   | G 1/2 A                  | 22.3 | 26.9 | 30.0 | 4.5 | 2.6 | 7                   | <b>KDS22X</b> |
| M 26×1.5                   |                          | 26.3 | 31.9 | 35.0 | 3.5 | 2.6 | 7                   | <b>KDS26X</b> |
| M 27×2.0                   | G 3/4 A                  | 27.3 | 32.9 | 38.0 | 3.5 | 2.6 | 8                   | <b>KDS27X</b> |
| M 33×2.0                   | G 1 A                    | 33.6 | 39.9 | 42.0 | 3.5 | 2.6 | 10                  | <b>KDS33X</b> |
| M 42×2.0                   | G 1 1/4 A                | 42.4 | 49.9 | 49.9 | 3.5 |     | 12                  | <b>KDS42X</b> |
| M 48×2.0                   | G 1 1/2 A                | 48.4 | 55.9 | 60.0 | 3.5 | 2.6 | 16                  | <b>KDS48X</b> |

## KD Soft sealing ring for banjo fittings WH/TH from stainless steel

for wide spot faces of ports

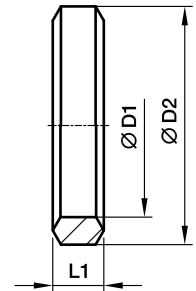


X1) Vulcanized FKM Seal  
X2) Supporting-ring (Stainless Steel 316L)

| Metric thread parallel | BSPP thread parallel | D1   | D3   | L1  | Weight g/1 piece | Order code<br>Stainless steel<br>FKM |
|------------------------|----------------------|------|------|-----|------------------|--------------------------------------|
| M 10×1.0               | G 1/8 A              | 10.3 | 17.0 | 2.5 | 3                | <b>KD10-1/8SS</b>                    |
| M 12×1.5               |                      | 12.3 | 22.0 | 3.0 | 5                | <b>KD12SS</b>                        |
| M 14×1.5               | G 1/4 A              | 14.3 | 22.0 | 3.0 | 5                | <b>KD14-1/4SS</b>                    |
| M 16×1.5               | G 3/8 A              | 17.0 | 27.0 | 3.0 | 6                | <b>KD16-3/8SS</b>                    |
| M 18×1.5               |                      | 18.3 | 29.0 | 3.0 | 8                | <b>KD18SS</b>                        |
| M 22×1.5               | G 1/2 A              | 22.3 | 32.0 | 4.5 | 12               | <b>KD22-1/2SS</b>                    |
| M 26×1.5               |                      | 26.3 | 41.0 | 3.5 | 18               | <b>KD26SS</b>                        |
| M 27×2.0               | G 3/4 A              | 27.3 | 41.0 | 3.5 | 19               | <b>KD27-3/4SS</b>                    |
| M 33×2.0               | G 1 A                | 33.6 | 46.0 | 3.5 | 18               | <b>KD33-1SS</b>                      |
| M 42×2.0               | G 1 1/4 A            | 42.4 | 57.0 | 3.5 | 26               | <b>KD42-11/4SS</b>                   |
| M 48×2.0               | G 1 1/2 A            | 48.4 | 64.0 | 3.5 | 35               | <b>KD48-11/2SS</b>                   |

## DKAZ Sealing ring

for low pressure banjos DSVW

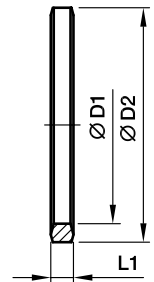


| For DSVW |      | Metric thread parallel | D1   | D2 | L1  | Weight g/1 piece | Order code Steel CF |
|----------|------|------------------------|------|----|-----|------------------|---------------------|
| 06LM     |      | M 10×1.0               | 10.1 | 14 | 3.2 | 2                | <b>DKAZ10CFX</b>    |
| 08LM     | 06SM | M 12×1.5               | 12.1 | 17 | 4.2 | 3                | <b>DKAZ12CFX</b>    |
| 10LM     | 08SM | M 14×1.5               | 14.1 | 19 | 4.5 | 4                | <b>DKAZ14CFX</b>    |
| 12LM     | 10SM | M 16×1.5               | 16.1 | 21 | 4.5 | 4                | <b>DKAZ16CFX</b>    |
| 15LM     | 12SM | M 18×1.5               | 18.1 | 23 | 4.5 | 5                | <b>DKAZ18CFX</b>    |
|          | 14SM | M 20×1.5               | 20.1 | 25 | 4.5 | 5                | <b>DKAZ20CFX</b>    |
| 18LM     | 16SM | M 22×1.5               | 22.1 | 27 | 4.5 | 6                | <b>DKAZ22CFX</b>    |
| 22LM     |      | M 26×1.5               | 26.1 | 31 | 4.5 | 7                | <b>DKAZ26CFX</b>    |
|          | 20SM | M 27×2.0               | 27.1 | 32 | 5.0 | 8                | <b>DKAZ27CFX</b>    |
| 28LM     | 25SM | M 33×2.0               | 33.1 | 39 | 6.0 | 15               | <b>DKAZ33CFX</b>    |
| 35LM     | 30SM | M 42×2.0               | 42.1 | 49 | 6.5 | 22               | <b>DKAZ11/4CFX</b>  |
| 42LM     | 38SM | M 48×2.0               | 48.1 | 55 | 6.5 | 25               | <b>DKAZ11/2CFX</b>  |

| For DSVW  |           | BSPP thread parallel | D1   | D2 | L1  | Weight g/1 piece | Order code Steel CF |
|-----------|-----------|----------------------|------|----|-----|------------------|---------------------|
| 06LR      |           | G 1/8 A              | 9.8  | 14 | 3.2 | 2                | <b>DKAZ1/8CFX</b>   |
| 08LR/10LR | 06SR/08SR | G 1/4 A              | 13.3 | 18 | 4.5 | 4                | <b>DKAZ1/4CFX</b>   |
| 12LR      | 10SR/12SR | G 3/8 A              | 16.8 | 22 | 4.5 | 5                | <b>DKAZ3/8CFX</b>   |
| 15LR/18LR | 14SR/16SR | G 1/2 A              | 21.1 | 26 | 5.0 | 6                | <b>DKAZ1/2CFX</b>   |
| 22LR      | 20SR      | G 3/4 A              | 26.6 | 32 | 5.0 | 11               | <b>DKAZ3/4CFX</b>   |
| 28LR      | 25SR      | G 1 A                | 33.4 | 39 | 6.0 | 14               | <b>DKAZ1CFX</b>     |
| 35LR      | 30SR      | G 1 1/4 A            | 42.1 | 49 | 6.5 | 22               | <b>DKAZ11/4CFX</b>  |
| 42LR      | 38SR      | G 1 1/2 A            | 48.1 | 55 | 6.5 | 25               | <b>DKAZ11/2CFX</b>  |

## DKA Sealing ring

for banjo fittings WH/TH and SWVE



| BSPP thread | D1   | D2 | L1  | Weight g/1 piece | Order code           |                      |
|-------------|------|----|-----|------------------|----------------------|----------------------|
|             |      |    |     |                  | Steel CF             | Stainless Steel 71   |
| G 1/8 A     | 9.8  | 14 | 2.5 | 1                | <b>DKA1/8CFX</b>     | <b>DKA1/871X</b>     |
| G 1/4 A     | 13.3 | 18 | 3.0 | 3                | <b>DKA1/4CFX</b>     | <b>DKA1/471X</b>     |
| G 3/8 A     | 16.8 | 22 | 3.0 | 3                | <b>DKA3/8CFX</b>     | <b>DKA3/871X</b>     |
| G 1/2 A     | 21.1 | 26 | 4.5 | 6                | <b>DKA1/2X4.5CFX</b> | <b>DKA1/2X4.571X</b> |
| G 3/4 A     | 26.6 | 32 | 3.5 | 6                | <b>DKA3/4CFX</b>     | <b>DKA3/471X</b>     |
| G 1 A       | 33.4 | 39 | 3.5 | 8                | <b>DKA1CFX</b>       | <b>DKA171X</b>       |
| G 1 1/4 A   | 42.1 | 49 | 3.5 | 12               | <b>DKA11/4CFX</b>    | <b>DKA11/471X</b>    |
| G 1 1/2 A   | 48.1 | 55 | 3.5 | 15               | <b>DKA11/2CFX</b>    | <b>DKA11/271X</b>    |

| Male stud metric thread | D1   | D2 | L1  | Weight g/1 piece | Order code          |                     |
|-------------------------|------|----|-----|------------------|---------------------|---------------------|
|                         |      |    |     |                  | Steel CF            | Stainless Steel 71  |
| M 08×1.0                | 8.1  | 12 | 2.5 | 1                | <b>DKA08CFX</b>     |                     |
| M 10×1.0                | 10.1 | 14 | 3.0 | 1                | <b>DKA10CFX</b>     | <b>DKA1071X</b>     |
| M 12×1.5                | 12.1 | 17 | 3.0 | 2                | <b>DKA12CFX</b>     | <b>DKA1271X</b>     |
| M 14×1.5                | 14.1 | 19 | 3.0 | 3                | <b>DKA14CFX</b>     | <b>DKA1471X</b>     |
| M 16×1.5                | 16.1 | 21 | 3.0 | 3                | <b>DKA16CFX</b>     | <b>DKA1671X</b>     |
| M 18×1.5                | 18.1 | 23 | 3.0 | 3                | <b>DKA18CFX</b>     | <b>DKA1871X</b>     |
| M 20×1.5                | 20.1 | 25 | 3.0 | 4                | <b>DKA20CFX</b>     | <b>DKA2071X</b>     |
| M 22×1.5                | 22.1 | 27 | 4.5 | 6                | <b>DKA22X4.5CFX</b> | <b>DKA22X4.571X</b> |
| M 26×1.5                | 26.1 | 31 | 3.5 | 6                | <b>DKA26X3.5CFX</b> | <b>DKA26X3.571X</b> |
| M 27×2.0                | 27.1 | 32 | 3.5 | 6                | <b>DKA27CFX</b>     | <b>DKA2771X</b>     |
| M 33×2.0                | 33.1 | 39 | 3.5 | 8                | <b>DKA33CFX</b>     | <b>DKA3371X</b>     |
| M 42×2.0                | 42.1 | 49 | 3.5 | 12               | <b>DKA11/4CFX</b>   | <b>DKA11/471X</b>   |
| M 48×2.0                | 48.1 | 55 | 3.5 | 15               | <b>DKA11/2CFX</b>   | <b>DKA11/271X</b>   |