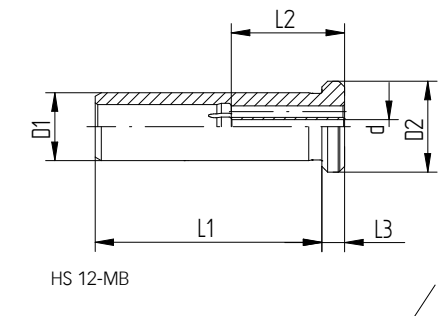
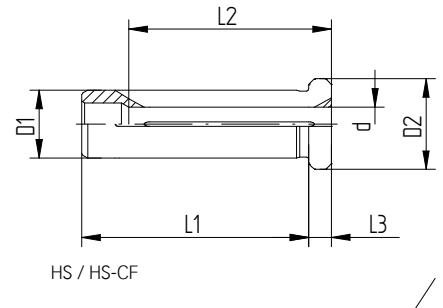


# Reduction sleeves

HS

Measurements [mm]

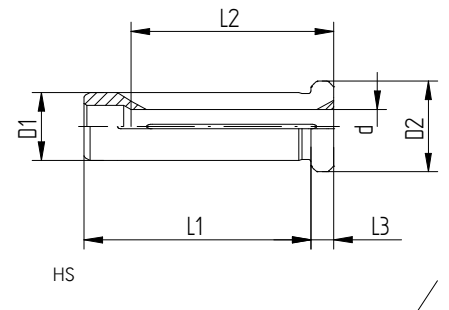
| Type                  | d      | d    | D1 | D2 | L1 | L2 | L3 |
|-----------------------|--------|------|----|----|----|----|----|
| <b>HS 12 HS 12-CF</b> |        |      |    |    |    |    |    |
| Ø 3.0                 | 3      | –    | 12 | 16 | 40 | 29 | 4  |
| Ø 1/8"                | 3.175  | 1/8  | 12 | 16 | 40 | 29 | 4  |
| Ø 4.0                 | 4      | –    | 12 | 16 | 40 | 29 | 4  |
| Ø 3/16"               | 4.763  | 3/16 | 12 | 16 | 40 | 29 | 4  |
| Ø 5.0                 | 5      | –    | 12 | 16 | 40 | 29 | 4  |
| Ø 6.0                 | 6      | –    | 12 | 16 | 40 | 36 | 4  |
| Ø 1/4"                | 6.35   | 1/4  | 12 | 16 | 40 | 36 | 4  |
| Ø 7.0                 | 7      | –    | 12 | 16 | 40 | 37 | 4  |
| Ø 5/16"               | 7.938  | 5/16 | 12 | 16 | 40 | 37 | 4  |
| Ø 8.0                 | 8      | –    | 12 | 16 | 40 | 37 | 4  |
| Ø 9.0                 | 9      | –    | 12 | 16 | 40 | 37 | 4  |
| Ø 3/8"                | 9.525  | 3/8  | 12 | 16 | 40 | 40 | 4  |
| Ø 10.0                | 10     | –    | 12 | 16 | 40 | 40 | 4  |
| <b>HS 12-MB</b>       |        |      |    |    |    |    |    |
| Ø 1.0                 | 1      | –    | 12 | 16 | 40 | 20 | 4  |
| Ø 1.5                 | 1.5    | –    | 12 | 16 | 40 | 20 | 4  |
| Ø 2.0                 | 2      | –    | 12 | 16 | 40 | 20 | 4  |
| Ø 2.5                 | 2.5    | –    | 12 | 16 | 40 | 20 | 4  |
| <b>HS 20 HS 20-CF</b> |        |      |    |    |    |    |    |
| Ø 3.0                 | 3      | –    | 20 | 25 | 50 | 28 | 4  |
| Ø 1/8"                | 3.175  | 1/8  | 20 | 25 | 50 | 28 | 4  |
| Ø 4.0                 | 4      | –    | 20 | 25 | 50 | 28 | 4  |
| Ø 3/16"               | 4.763  | 3/16 | 20 | 25 | 50 | 28 | 4  |
| Ø 5.0                 | 5      | –    | 20 | 25 | 50 | 28 | 4  |
| Ø 6.0                 | 6      | –    | 20 | 25 | 50 | 36 | 4  |
| Ø 1/4"                | 6.35   | 1/4  | 20 | 25 | 50 | 36 | 4  |
| Ø 7.0                 | 7      | –    | 20 | 25 | 50 | 38 | 4  |
| Ø 5/16"               | 7.938  | 5/16 | 20 | 25 | 50 | 37 | 4  |
| Ø 8.0                 | 8      | –    | 20 | 25 | 50 | 37 | 4  |
| Ø 9.0                 | 9      | –    | 20 | 25 | 50 | 38 | 4  |
| Ø 3/8"                | 9.525  | 3/8  | 20 | 25 | 50 | 36 | 4  |
| Ø 10.0                | 10     | –    | 20 | 25 | 50 | 40 | 4  |
| Ø 11.0                | 11     | –    | 20 | 25 | 50 | 40 | 4  |
| Ø 12.0                | 12     | –    | 20 | 25 | 50 | 45 | 4  |
| Ø 1/2"                | 12.7   | 1/2  | 20 | 25 | 50 | 45 | 4  |
| Ø 13.0                | 13     | –    | 20 | 25 | 50 | 45 | 4  |
| Ø 14.0                | 14     | –    | 20 | 25 | 50 | 45 | 4  |
| Ø 15.0                | 15     | –    | 20 | 25 | 50 | 45 | 4  |
| Ø 5/8"                | 15.875 | 5/8  | 20 | 25 | 50 | 48 | 4  |
| Ø 16.0                | 16     | –    | 20 | 25 | 50 | 48 | 4  |



# Reduction sleeves

HS

| Type         | Measurements [mm] |       |    |    |    |    |    |
|--------------|-------------------|-------|----|----|----|----|----|
|              | d                 | d     | D1 | D2 | L1 | L2 | L3 |
| <b>HS 25</b> |                   |       |    |    |    |    |    |
| Ø 3.0        | 3                 | –     | 25 | 30 | 56 | 29 | 4  |
| Ø 1/8"       | 3.175             | 1/8   | 25 | 30 | 56 | 29 | 4  |
| Ø 4.0        | 4                 | –     | 25 | 30 | 56 | 29 | 4  |
| Ø 3/16"      | 4.763             | 3/16  | 25 | 30 | 56 | 29 | 4  |
| Ø 5.0        | 5                 | –     | 25 | 30 | 56 | 29 | 4  |
| Ø 6.0        | 6                 | –     | 25 | 30 | 56 | 37 | 4  |
| Ø 1/4"       | 6.35              | 1/4   | 25 | 30 | 56 | 37 | 4  |
| Ø 7.0        | 7                 | –     | 25 | 30 | 56 | 37 | 4  |
| Ø 5/16"      | 7.938             | 5/16  | 25 | 30 | 56 | 37 | 4  |
| Ø 8.0        | 8                 | –     | 25 | 30 | 56 | 37 | 4  |
| Ø 9.0        | 9                 | –     | 25 | 30 | 56 | 38 | 4  |
| Ø 3/8"       | 9.525             | 3/8   | 25 | 30 | 56 | 38 | 4  |
| Ø 10.0       | 10                | –     | 25 | 30 | 56 | 40 | 4  |
| Ø 7/16"      | 11.112            | 7/16  | 25 | 30 | 56 | 40 | 4  |
| Ø 12.0       | 12                | –     | 25 | 30 | 56 | 46 | 4  |
| Ø 1/2"       | 12.7              | 1/2   | 25 | 30 | 56 | 46 | 4  |
| Ø 14.0       | 14                | –     | 25 | 30 | 56 | 47 | 4  |
| Ø 9/16"      | 14.288            | 9/16  | 25 | 30 | 56 | 47 | 4  |
| Ø 5/8"       | 15.875            | 5/8   | 25 | 30 | 56 | 48 | 4  |
| Ø 16.0       | 16                | –     | 25 | 30 | 56 | 48 | 4  |
| Ø 11/16"     | 17.461            | 11/16 | 25 | 30 | 56 | 48 | 4  |
| Ø 18.0       | 18                | –     | 25 | 30 | 56 | 48 | 4  |
| Ø 3/4"       | 19.05             | 3/4   | 25 | 30 | 56 | 48 | 4  |
| Ø 20.0       | 20                | –     | 25 | 30 | 56 | 50 | 4  |
| Ø 13/16"     | 20.638            | 13/16 | 25 | 30 | 56 | 50 | 4  |



### Expert advice

Reduction sleeve may be damaged, if clamped without a tool.

# Reduction sleeves

HS

| Type           | Measurements [mm] |       |    |    |    |    |    |
|----------------|-------------------|-------|----|----|----|----|----|
|                | d                 | d     | D1 | D2 | L1 | L2 | L3 |
| HS 32 HS 32-CF |                   |       |    |    |    |    |    |
| Ø 3/16"        | 4.763             | 3/16  | 32 | 36 | 60 | 29 | 4  |
| Ø 5.0          | 5                 | -     | 32 | 36 | 60 | 29 | 4  |
| Ø 6.0          | 6                 | -     | 32 | 36 | 60 | 36 | 4  |
| Ø 1/4"         | 6.35              | 1/4   | 32 | 36 | 60 | 36 | 4  |
| Ø 7.0          | 7                 | -     | 32 | 36 | 60 | 37 | 4  |
| Ø 5/16"        | 7.938             | 5/16  | 32 | 36 | 60 | 36 | 4  |
| Ø 8.0          | 8                 | -     | 32 | 36 | 60 | 36 | 4  |
| Ø 9.0          | 9                 | -     | 32 | 36 | 60 | 37 | 4  |
| Ø 3/8"         | 9.525             | 3/8   | 32 | 36 | 60 | 37 | 4  |
| Ø 10.0         | 10                | -     | 32 | 36 | 60 | 40 | 4  |
| Ø 11.0         | 11                | -     | 32 | 36 | 60 | 40 | 4  |
| Ø 7/16"        | 11.112            | 7/16  | 32 | 36 | 60 | 45 | 4  |
| Ø 12.0         | 12                | -     | 32 | 36 | 60 | 45 | 4  |
| Ø 1/2"         | 12.7              | 1/2   | 32 | 36 | 60 | 45 | 4  |
| Ø 13.0         | 13                | -     | 32 | 36 | 60 | 45 | 4  |
| Ø 14.0         | 14                | -     | 32 | 36 | 60 | 46 | 4  |
| Ø 9/16"        | 14.288            | 9/16  | 32 | 36 | 60 | 46 | 4  |
| Ø 15.0         | 15                | -     | 32 | 36 | 60 | 46 | 4  |
| Ø 5/8"         | 15.875            | 5/8   | 32 | 36 | 60 | 46 | 4  |
| Ø 16.0         | 16                | -     | 32 | 36 | 60 | 48 | 4  |
| Ø 17.0         | 17                | -     | 32 | 36 | 60 | 48 | 4  |
| Ø 11/16"       | 17.461            | 11/16 | 32 | 36 | 60 | 48 | 4  |
| Ø 18.0         | 18                | -     | 32 | 36 | 60 | 49 | 4  |
| Ø 19.0         | 19                | -     | 32 | 36 | 60 | 49 | 4  |
| Ø 3/4"         | 19.05             | 3/4   | 32 | 36 | 60 | 50 | 4  |
| Ø 20.0         | 20                | -     | 32 | 36 | 60 | 50 | 4  |
| Ø 13/16"       | 20.638            | 13/16 | 32 | 36 | 60 | 50 | 4  |
| Ø 22.0         | 22                | -     | 32 | 36 | 60 | 50 | 4  |
| Ø 7/8"         | 22.225            | 7/8   | 32 | 36 | 60 | 50 | 4  |
| Ø 15/16"       | 23.813            | 15/16 | 32 | 36 | 60 | 52 | 4  |
| Ø 25.0         | 25                | -     | 32 | 36 | 60 | 56 | 4  |
| Ø 1"           | 25.4              | 1     | 32 | 36 | 60 | 56 | 4  |

