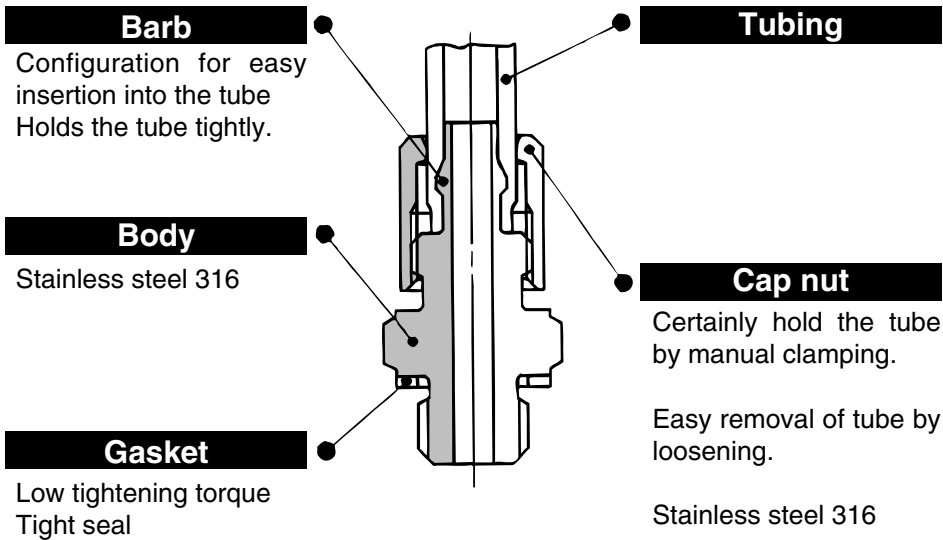


# Series 10-MS Stainless miniature fittings

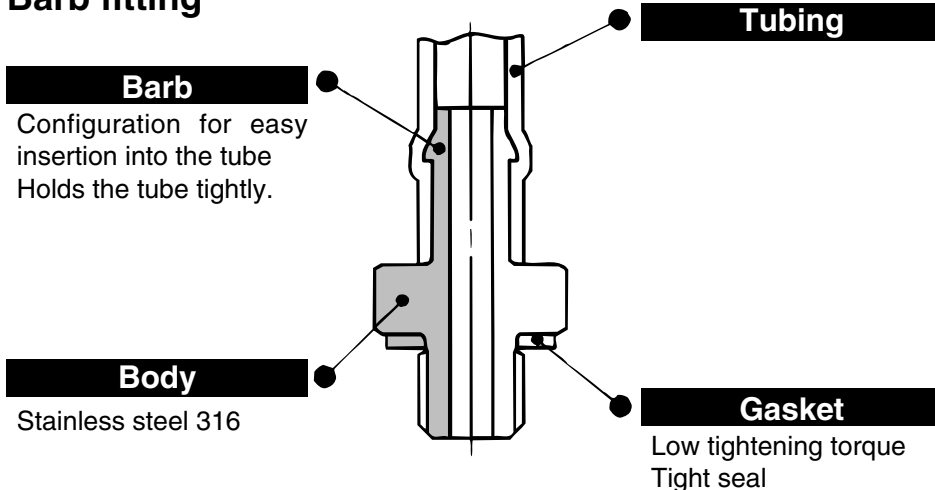
## Construction



### Hose nipple



















### Barb fitting



### Specifications

|  |               |   |
|--|---------------|---|
| <b>Applicable tubing material</b>  |               | Polyurethane                              |
| <b>Applicable tubing diameter</b>  |               | ø3.18/ø2, ø4/ø2.5, ø6/ø4                  |
| <b>Max. operating pressure</b>   |               | 0.8MPa                                    |
| <b>Connection size</b>   |               | M5  |
| <b>Material</b>  | <b>Body</b>   | Stainless steel 316                       |
|  | <b>Gasket</b> | Stainless steel 316 + FKM, aluminum + FKM |
| <b>Grease</b>  |               | Fluorine grease                           |
| <b>Particle generation grade</b><br><small>(Please refer to front matters 13 to 22 for details.)</small> |               | Grade 1                                   |

**Model**

| Model         | Description   | Application   | Note                                | Model         | Description   | Application  | Note   |                     |                            |
|---------------|---|---|-------------------------------------|---------------|---|--|--|---------------------|----------------------------|
| 10-MS-5AU-3   | Barb fittings for polyurethane tube   | For polyurethane tube   | ø3.18/ø2 x M5                       | 10-MS-5UL     | Universal elbow   | Body rotates at 360° around the stud axis.   | M5 female x M5 male                          |                     |                            |
| 10-MS-5AU-4   |    |   | ø4/ø2.5 x M5                        |               |    |  |  |                     |                            |
| 10-MS-5AU-6   |    |   | ø6/ø4 x M5                          |               |    |  |  |                     |                            |
| 10-MS-5ALHU-3 | Barb elbow for polyurethane tube  | For polyurethane tube<br>· Body rotates at 360° around the stud axis. | ø3.18/ø2 x M5                       | 10-MS-5B      | Bushing   | For reducing R (PT) 1/8 to M5  | R1/8 x M5 female                             |                     |                            |
| 10-MS-5ALHU-4 |    |   | ø4/ø2.5 x M5                        |               |    |  |  |                     |                            |
| 10-MS-5ALHU-6 |    |   | ø6/ø4 x M5                          |               | 10-MS-5P  |  |  | Plug                | Use to plug unused M5 port |
| 10-MS-5H-4    | Hose nipple   | For polyurethane tube   | ø4/ø2.5 x M5                        | 10-MS-5J      |   | Extension fitting  | Solid piece moves fitting up from workpiece. | M5 male x M5 female |                            |
| 10-MS-5H-6    |  |   | ø6/ø4 x M5                          |               |   |     |  |                     |                            |
| 10-MS-5HLH-4  | Hose elbow  | For polyurethane tube<br>· Body rotates at 360° around the stud axis. | ø4/ø2.5 x M5                        | 10-MS-5N      | Nipple  | For fitting to workpiece or fitting to fitting connection                                | M5 male x M5 male                            |                     |                            |
| 10-MS-5HLH-6  |  |   | ø6/ø4 x M5                          |               |  |  |  |                     |                            |
| 10-M-5G3      | Gasket  | To seal M5 thread   | Material: Stainless steel 316 + FKM | 10-MS-5UN     | Universal nipple  | Body rotates at 360° around the stud axis.   | M5 male x M5 male PAT.                       |                     |                            |
|               |  |   |                                     |               |  |  |  |                     |                            |
|               |   |   |                                     | 10-MS-5ATHU-3 | Barb tee for polyurethane tube  |  | ø3.18/ø2 x M5                                |                     |                            |
|               |   |   |                                     | 10-MS-5ATHU-4 |  | For polyurethane tube<br>· Body rotates at 360° around the stud axis.                    | ø4/ø2.5 x M5                                 |                     |                            |
|               |   |   |                                     | 10-MS-5ATHU-6 |  |  | ø6/ø4 x M5                                   |                     |                            |
|               |   |   |                                     | 10-M-5GH      | Gasket (H)  | To seal M5 thread<br>10-MS-5ALHU-6<br>10-MS-5ALH-4<br>10-MS-5ALH-6<br>10-MS-5ATHU-6 only | Material: Aluminum + FKM                     |                     |                            |
|               |   |   |                                     |               |  |  |  |                     |                            |

Air cylinder

Rotary actuator

Air gripper

Directional control valve

Flow control equipment

Filter, Pressure control equipment

Fittings & Tubing

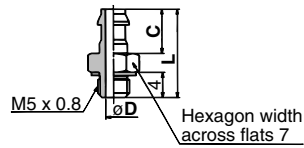
Air preparation equipment

Pressure switch

Clean gas filter

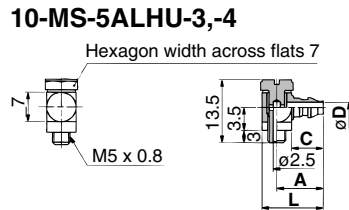
## Stainless miniature fittings 10-MS

### Barb fittings for polyurethane tube: 10-MS-5AU-3, -4, -6

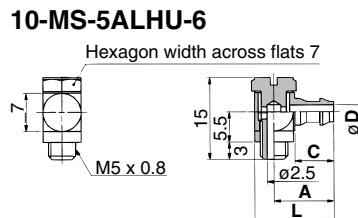


| Model       | C   | D   | L    | Effective area (mm <sup>2</sup> ) | Weight (g) |
|-------------|-----|-----|------|-----------------------------------|------------|
| 10-MS-5AU-3 | 4.5 | 1.6 | 11.5 | 1.7                               | 1.4        |
| 10-MS-5AU-4 | 5   | 1.8 | 12   | 2.1                               | 1.5        |
| 10-MS-5AU-6 | 7   | 2.5 | 14   | 4.0                               | 1.7        |

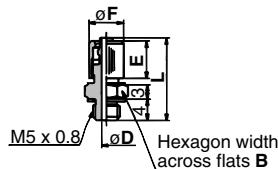
### Barb elbow for polyurethane tube: 10-MS-5ALHU-3, -4, -6



| Model         | A    | C   | D   | L    | Effective area (mm <sup>2</sup> ) | Weight (g) |
|---------------|------|-----|-----|------|-----------------------------------|------------|
| 10-MS-5ALHU-3 | 8    | 4.5 | 1.6 | 11.8 | 1.1                               | 3.0        |
| 10-MS-5ALHU-4 | 8.8  | 5.0 | 1.8 | 12.6 | 1.4                               | 3.1        |
| 10-MS-5ALHU-6 | 10.8 | 7.0 | 2.5 | 14.6 | 2.4                               | 3.7        |

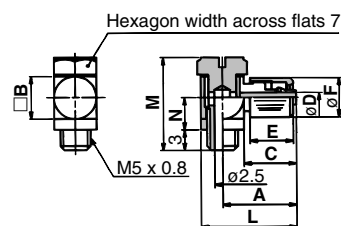


### Hose nipple: 10-MS-5H-4, -6



| Model      | B | D   | L    | E | F   | Effective area (mm <sup>2</sup> ) | Weight (g) |
|------------|---|-----|------|---|-----|-----------------------------------|------------|
| 10-MS-5H-4 | 7 | 1.8 | 15.5 | 7 | 6.5 | 2.1                               | 2.5        |
| 10-MS-5H-6 | 8 | 2.5 | 16.5 | 8 | 8.5 | 4.0                               | 3.7        |

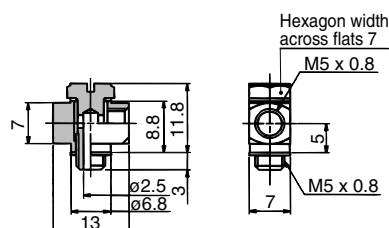
### Hose elbow: 10-MS-5HLH-4, -6



| Model        | A    | B | C   | D   | E | F   | L    | M  | N   | Effective area (mm <sup>2</sup> ) | Weight (g) |
|--------------|------|---|-----|-----|---|-----|------|----|-----|-----------------------------------|------------|
| 10-MS-5HLH-4 | 12   | 7 | 8.5 | 1.8 | 7 | 6.5 | 15.8 | 15 | 5.5 | 1.4                               | 4.2        |
| 10-MS-5HLH-6 | 13.5 | 8 | 9.5 | 2.5 | 8 | 8.5 | 17.8 | 16 | 6   | 2.4                               | 6.2        |

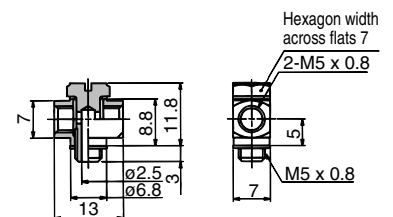
### Universal elbow: 10-MS-5UL

Effective area: 2.4mm<sup>2</sup>  
Weight: 4.5g



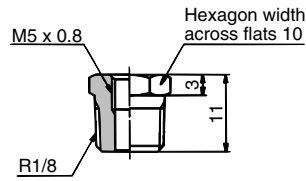
### Universal tee: 10-MS-5UT

Effective area: 2.4mm<sup>2</sup>  
Weight: 4.5g



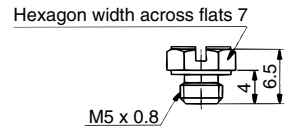
**Bushing: 10-MS-5B**

Effective area: 12mm<sup>2</sup>  
Weight: 5.5g



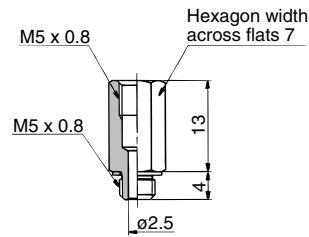
**Plug: 10-MS-5B**

Weight: 1.2g



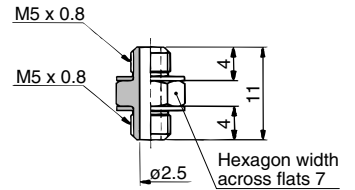
**Extension fitting: 10-MS-5J**

Effective area: 4.0mm<sup>2</sup>  
Weight: 3.4g



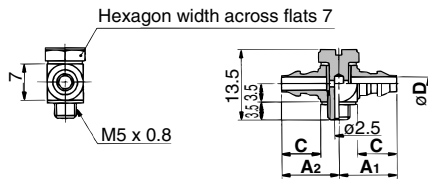
**Nipple: 10-MS-5N**

Effective area: 4.0mm<sup>2</sup>  
Weight: 1.4g

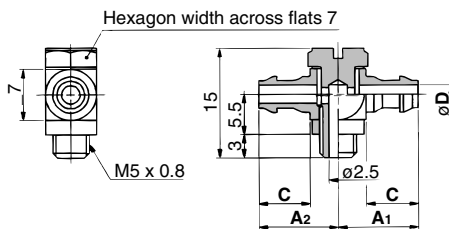


**Barb tee for polyurethane tube: 10-MS-5ATHU-3, -4, -6**

**10-MS-5ATHU-3, -4**



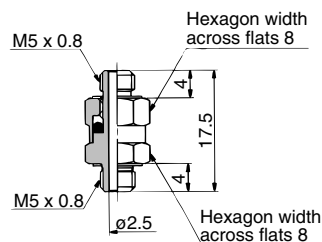
**10-MS-5ATHU-6**



| Model         | A1   | A2   | C   | D   | Effective area (mm <sup>2</sup> ) | Weight (g) |
|---------------|------|------|-----|-----|-----------------------------------|------------|
| 10-MS-5ATHU-3 | 8    | 8.3  | 4.5 | 1.6 | 1.1                               | 3.4        |
| 10-MS-5ATHU-4 | 8.8  | 8.8  | 5.0 | 1.8 | 1.4                               | 3.6        |
| 10-MS-5ATHU-6 | 10.8 | 10.8 | 7.0 | 2.5 | 2.4                               | 4.2        |

**Universal nipple: 10-MS-5UN**

Effective area: 4.0mm<sup>2</sup>  
Weight: 3.7g



**Gasket: 10-M-5G3, 10-M-5GH1**

Weight: 0.04g

Weight: 0.08g

