

- > **Port size: M5, 1/8" ... 1"**
- > **Extensive range of shapes and sizes including manifolds**
- > **High temperature and pressure copper sealing washers supplied with ISO G threads**



Technical features

Medium:

Compressed air and fluid compatible with sealing materials

Thread forms:

Tapered in conformity with ISO 7.1, BS 21, DIN 2999.
Parallel in conformity with ISO 228 Class A.
Metric in conformity with ISO R/262.

Operating pressure:

Generally limited by tubing specification except where PA sealing washers are used (banjo bolts and M5 units). In these cases pressure is limited to 18 bar (261 psi). Flow regulating banjos are limited to 1 ... 10 bar (1 ... 145 psi) operating range. Suitable for vacuum applications.

Ambient/Media temperature:

Generally limited by tubing specification except where PA sealing washers are used (banjo bolts, & M5 units). In these cases temperature is limited to +70°C (+158 °F).













Materials:

Body of the fittings are made from Brass type; OT UNI EN 12164/5 CW 614/7N and undergo to a nickel-plating process. Other materials will be specified with the fitting details. All ISO G male threads supplied with Copper sealing washer unless stated otherwise.

Straight adaptors, connectors and plugs

| | | | | | | |
|--|---|---|--|---|--|---|
| ISO G - Reducing connector 16023  Page 3 | ISO G - Expanding connector 16023  Page 3 | ISO G - ISO R Expanding connector 15023  Page 3 | ISO G - ISO R Reducing connector 15023  Page 3 | NPT - ISO R Adaptor 15423  Page 3 | ISO G - NPT Adaptor 17223  Page 3 | Metric and ISO G - Bulkhead connector 16029  Page 4 |
| ISO G - Sleeve adaptor 16022  Page 4 | Metric - ISO G - Nipple adaptor 16020  Page 4 | ISO R - Nipple adaptor 15020  Page 4 | ISO R - NPT - Nipple adaptor 15420  Page 4 | | | |
| ISO R - Flat union 15033  Page 5 | ISO R - Conical union 1503D  Page 5 | ISO R - Hose adaptor 29117  Page 5 | ISO G - Hose adaptor 29217  Page 5 | | | |
| ISO G - Plug with flange - hex 16206  Page 6 | ISO G - Plug with flange - spanner 16005  Page 6 | ISO G - Plug 16213  Page 6 | ISO R - Plug 1500  Page 6 | ISO R - Plug 15113  Page 6 | ISO R - Plug Brass (unplated) 25013  Page 6 | |

Elbow adaptors and T-connectors

| | | | | | | |
|--|---|--|---|---|---|---|
| ISO G - Elbow connector 16042  Page 7 | ISO G - ISO R - Elbow connector 15043  Page 7 | ISO R - Elbow connector 15040  Page 7 | ISO G - Tee connector 16062  Page 8 | ISO R - Tee connector 15060  Page 8 | ISO G - ISO R Tee connector 15069  Page 8 | ISO G - ISO R Tee connector 15072  Page 8 |
| ISO G - Cross 16092  Page 8 | ISO G - Cross block 16094  Page 8 | ISO G - Manifold - singlesided - Brass 34050  Page 9 | ISO G - Manifold - single sided - Aluminium 162B4 and 162B6  Page 9 | ISO G - Manifold - double sided - Aluminium 162C4 and 162C6  Page 9 | | |

Elbow banjos

| | | | | |
|---|--|--|---|--|
| ISO G - Banjo elbow assembly - regulating out 16K51  Page 10 | ISO G - Banjo elbow assembly - non-regulating 16A51  Page 10 | ISO G - Banjo elbow body 160511  Page 10 | ISO G - Regulating bolt 20K00, 20L00 and 20M00  Page 10 | ISO G - Non-regulating bolt 20A00 and 20B00  Page 10 |
|---|--|--|---|--|

Seals

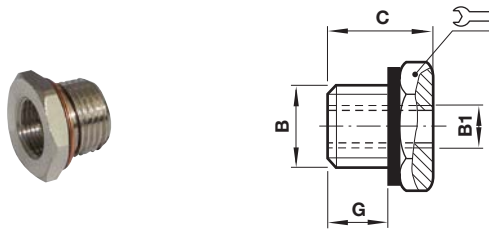
| | | |
|---|---|---|
| Copper seal 48021301 ... 08  Page 11 | Banjo bolt head sealing washer 48030801 ... 04  Page 11 | Banjo bolt thread sealing washer 48030001 ... 04  Page 11 |
|---|---|---|


Accessories

| |
|---|
| PTFE sealing tape DB-R-12  Page 11 |
|---|

ISO G - Reducing connector 16023

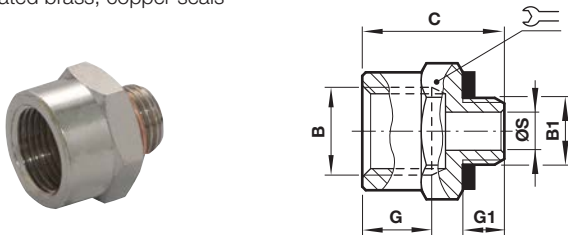
Nickel plated brass, copper seals



| B | B1 | C | G |  | Model |
|------|------|------|----|---|-----------|
| G1/8 | M5 | 10,5 | 6 | 14 | 160231805 |
| G1/4 | G1/8 | 13 | 8 | 17 | 160232818 |
| G3/8 | G1/8 | 14 | 9 | 19 | 160233818 |
| G3/8 | G1/4 | 14 | 9 | 19 | 160233828 |
| G1/2 | G1/8 | 15,5 | 10 | 24 | 160234818 |
| G1/2 | G1/4 | 15,5 | 10 | 24 | 160234828 |
| G1/2 | G3/8 | 15,5 | 10 | 24 | 160234838 |
| G3/4 | G1/4 | 17,5 | 12 | 30 | 160236828 |
| G3/4 | G3/8 | 17,5 | 12 | 30 | 160236838 |
| G3/4 | G1/2 | 17,5 | 12 | 30 | 160236848 |

ISO G - Expanding connector 16023

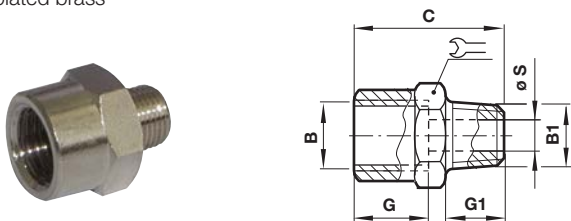
Nickel plated brass, copper seals



| B | B1 | C | G | G1 | Ø S |  | Model |
|------|------|------|------|----|-----|---|-----------|
| G1/8 | M5 | 14,5 | 8,5 | 4 | 2,5 | 14 | 160230518 |
| G1/4 | G1/8 | 20,5 | 12 | 6 | 5,5 | 17 | 160231828 |
| G3/8 | G1/8 | 21,5 | 10,5 | 6 | 5,5 | 22 | 160231838 |
| G3/8 | G1/4 | 23,5 | 13 | 8 | 8 | 22 | 160232838 |
| G1/2 | G1/4 | 26,5 | 16 | 8 | 8 | 26 | 160232848 |
| G1/2 | G3/8 | 36,5 | 16 | 9 | 11 | 26 | 160233848 |
| G3/4 | G1/2 | 31 | 16,5 | 10 | 15 | 32 | 160234868 |

ISO G - ISO R - Expanding connector 15023

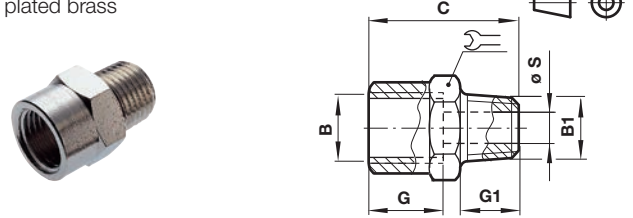
Nickel plated brass




| B | B1 | C | G | G1 | Ø S |  | Model |
|------|------|------|------|------|-----|---|-----------|
| G1/4 | R1/8 | 22 | 12,5 | 7,5 | 5,5 | 17 | 150231828 |
| G3/8 | R1/8 | 22,5 | 7,5 | 10,5 | 5 | 22 | 150231838 |
| G1/2 | R1/8 | 31 | 8,5 | 15 | 5 | 27 | 150231848 |
| G3/8 | R1/4 | 27 | 13 | 11 | 8 | 22 | 150232838 |
| G1/2 | R1/4 | 30 | 16 | 11 | 8 | 26 | 150232848 |
| G1/2 | R3/8 | 30,5 | 16 | 11 | 11 | 26 | 150233848 |
| G3/4 | R3/8 | 38,5 | 12,5 | 16,5 | 11 | 32 | 150233868 |
| G3/4 | R1/2 | 35 | 16,5 | 14 | 15 | 32 | 150234868 |
| G1 | R3/4 | 45 | 19 | 19 | 18 | 41 | 150236888 |

ISO G - ISO R - Reducing connector 15023

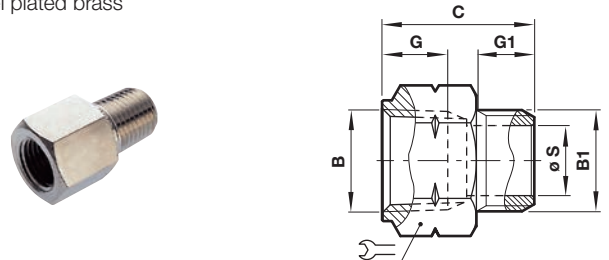
Nickel plated brass


 Dimensions in mm
Projection/First angle


| B | B1 | C | G | G1 | Ø S |  | Model |
|------|------|------|------|------|------|---|-----------|
| G1/8 | R1/8 | 20 | 10 | 7,5 | 5,5 | 14 | 150231818 |
| G1/8 | R1/4 | 16 | 12 | 11 | 6 | 14 | 150232818 |
| G1/4 | R1/4 | 26 | 12 | 11 | 8 | 17 | 150232828 |
| G1/8 | R3/8 | 16,5 | 12 | 11,5 | 6 | 17 | 150233818 |
| G1/4 | R3/8 | 16,5 | 11,5 | 13 | 8,5 | 17 | 150233828 |
| G3/8 | R3/8 | 27,5 | 13 | 11,5 | 11 | 22 | 150233838 |
| G1/8 | R1/2 | 19,5 | 12 | 7,5 | 5,5 | 22 | 150234818 |
| G1/4 | R1/2 | 19,5 | 13 | 14 | 9,5 | 22 | 150234828 |
| G3/8 | R1/2 | 19,5 | 13 | 14 | 14 | 22 | 150234838 |
| G1/2 | R1/2 | 33 | 16 | 14 | 15 | 26 | 150234848 |
| G1/4 | R3/4 | 23,5 | 16,5 | 11,5 | 8 | 27 | 150236828 |
| G3/8 | R3/4 | 23,5 | 11,5 | 16,5 | 20 | 27 | 150236838 |
| G1/2 | R3/4 | 23,5 | 17 | 16,5 | 16 | 27 | 150236848 |
| G1/2 | R1 | 26,5 | 19 | 13 | 15 | 34 | 150238848 |
| G3/4 | R1 | 27,5 | 19 | 16,5 | 24,5 | 34 | 150238868 |

NPT - ISO R - Adaptor 15423

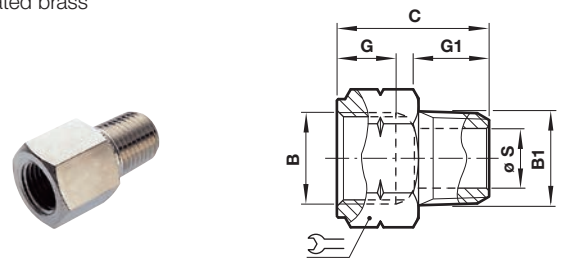
Nickel plated brass



| B | B1 | C | G | G1 | Ø S |  | Model |
|---------|------|------|------|----|------|---|-----------|
| 1/8 NPT | G1/8 | 17 | 9,5 | 6 | 5,5 | 14 | 154231818 |
| 1/4 NPT | G1/4 | 23 | 13,5 | 8 | 8 | 17 | 154232828 |
| 3/8 NPT | G3/8 | 24 | 13,5 | 9 | 11 | 22 | 154233838 |
| 1/2 NPT | G1/2 | 31,5 | 17,5 | 12 | 14,5 | 27 | 154234848 |

ISO G - NPT - Adaptor 17223

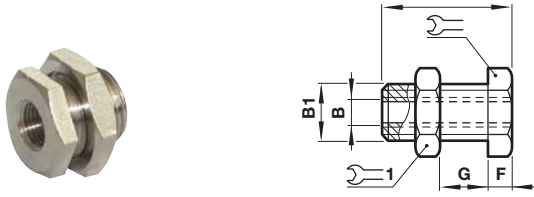
Nickel plated brass



| B | B1 | C | G | G1 | Ø S |  | Model |
|------|---------|----|----|----|-----|---|-----------|
| G1/4 | 1/4 NPT | 27 | 12 | 13 | 8 | 17 | 172232828 |
| G3/8 | 3/8 NPT | 28 | 13 | 13 | 11 | 22 | 172233838 |

Metric and ISO G - Bulkhead connector 16029

Nickel plated brass

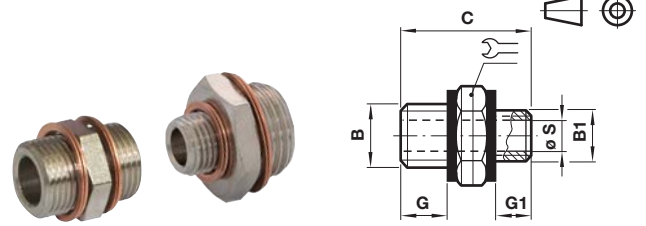


| B | B1 | C | F | G max. |  |  | Model |
|--------|---------|------|-----|--------|---|---|-----------|
| M5 | M10x1,0 | 14 | 3,5 | 7 | 14 | 14 | 160290005 |
| G1/8 | M16x1,5 | 18 | 4 | 10 | 19 | 22 | 160290018 |
| G1/4 | M20x1,5 | 25 | 4 | 16 | 24 | 27 | 160290028 |
| G3/8 | M26x1,5 | 26 | 5 | 15 | 30 | 32 | 160290038 |
| G1/2 | M28x1,5 | 33 | 6 | 21 | 32 | 36 | 160290048 |
| G3/4 | M33x1,5 | 36,5 | 6 | 22,5 | 41 | 41 | 160290068 |
| G1 | M42x1,5 | 41,5 | 8 | 24,5 | 46 | 50 | 160290088 |
| G1 1/4 | M48x1,5 | 50 | 8 | 29,5 | 55 | 55 | 1602900A8 |

Metric - ISO G - Nipple adaptor 16020

Nickel plated brass, copper seals

Dimensions in mm
Projection/First angle




| B | B1 | C | G | G1 | Ø S | Ø S1 |  | Model |
|------|------|------|----|----|-----|------|---|-----------|
| M5 | M5 | 11,5 | 4 | 4 | 2,5 | 2,5 | 8 | 160200505 |
| G1/8 | M5 | 14,5 | 6 | 4 | 5,5 | 3,5 | 14 | 160201805 |
| G1/8 | G1/8 | 16,5 | 6 | 6 | 5,5 | 5,5 | 14 | 160201818 |
| G1/4 | G1/8 | 19 | 8 | 6 | 8 | 5,5 | 17 | 160202818 |
| G1/4 | G1/4 | 21 | 8 | 8 | 8 | 8 | 17 | 160202828 |
| G3/8 | G1/4 | 22 | 9 | 8 | 11 | 8 | 19 | 160203828 |
| G3/8 | G3/8 | 23 | 9 | 9 | 11 | 11 | 19 | 160203838 |
| G1/2 | G1/4 | 23,5 | 10 | 8 | 15 | 8 | 24 | 160204828 |
| G1/2 | G3/8 | 24,5 | 10 | 9 | 15 | 11 | 24 | 160204838 |
| G1/2 | G1/2 | 25,5 | 10 | 10 | 15 | 15 | 24 | 160204848 |
| G3/4 | G1/2 | 27,5 | 12 | 10 | 20 | 15 | 30 | 160206848 |
| G3/4 | G3/4 | 29,5 | 12 | 12 | 20 | 30 | 30 | 160206868 |
| G1 | G1 | 32 | 12 | 12 | 24 | 40 | 40 | 160208888 |

ISO G - Sleeve adaptor 16022

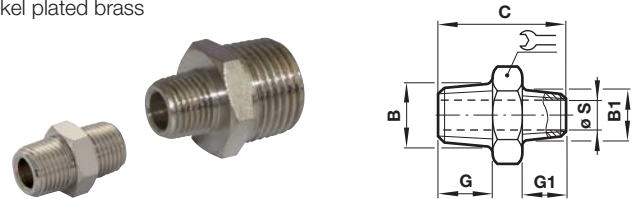
Nickel plated brass



| B | B1 | C | G |  | Model |
|------|------|------|------|---|-----------|
| M5 | M5 | 11 | 11 | 8 | 160220505 |
| G1/8 | M5 | 13 | 7,5 | 14 | 160221805 |
| G1/8 | G1/8 | 15 | 15 | 14 | 160221818 |
| G1/4 | G1/8 | 19 | 11 | 17 | 160222818 |
| G1/4 | G1/4 | 22 | 22 | 17 | 160222828 |
| G3/8 | G1/8 | 20 | 11,5 | 22 | 160223818 |
| G3/8 | G1/4 | 23 | 11,5 | 22 | 160223828 |
| G3/8 | G3/8 | 24 | 24 | 22 | 160223838 |
| G1/2 | G1/8 | 24 | 14 | 24 | 160224818 |
| G1/2 | G1/4 | 25 | 14 | 24 | 160224828 |
| G1/2 | G3/8 | 27,5 | 16 | 24 | 160224838 |
| G1/2 | G1/2 | 30 | 30 | 26 | 160224848 |
| G3/4 | G1/2 | 30 | 16,5 | 30 | 160226848 |
| G3/4 | G3/4 | 32 | 31 | 32 | 160226868 |
| G1 | G3/4 | 41 | 20 | 40 | 160228868 |

ISO R - Nipple adaptor 15020

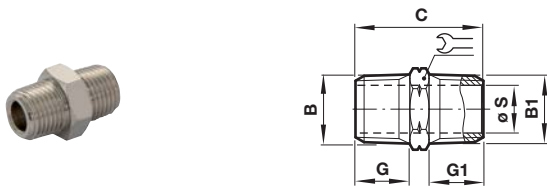
Nickel plated brass




| B | B1 | C | G | G1 | Ø S | Ø S1 |  | Model |
|------|-------|------|------|------|-----|------|---|-----------|
| R1/8 | R1/8 | 19,5 | 7,5 | 7,5 | 5,5 | 5,5 | 12 | 150201818 |
| R1/4 | R1/8 | 23,5 | 11 | 7,5 | 8 | 5,5 | 14 | 150202818 |
| R1/4 | R1/4 | 27 | 11 | 11 | 8 | 8 | 14 | 150202828 |
| R3/8 | R1/8 | 24 | 11,5 | 7,5 | 11 | 5,5 | 17 | 150203818 |
| R3/8 | R1/4 | 27,5 | 11,5 | 11 | 11 | 8 | 17 | 150203828 |
| R3/8 | R3/8 | 28 | 11,5 | 11,5 | 11 | 11 | 17 | 150203838 |
| R1/2 | R1/8 | 27 | 14 | 7,5 | 15 | 5,5 | 22 | 150204818 |
| R1/2 | R1/4 | 30,5 | 14 | 11 | 15 | 8 | 22 | 150204828 |
| R1/2 | R3/8 | 31 | 14 | 11,5 | 15 | 11 | 22 | 150204838 |
| R1/2 | R1/2 | 33,5 | 14 | 14 | 15 | 15 | 22 | 150204848 |
| R3/4 | R1/2 | 37,5 | 16,5 | 14 | 19 | 15 | 27 | 150206848 |
| R3/4 | R 3/4 | 40 | 16,5 | 16,5 | 19 | 19 | 27 | 150206868 |
| R1 | R3/4 | 44 | 19 | 16,5 | 24 | 19 | 34 | 150208868 |
| R1 | R1 | 46,5 | 19 | 19 | 24 | 24 | 34 | 150208888 |

NPT - ISO R - Nipple adaptor 15420

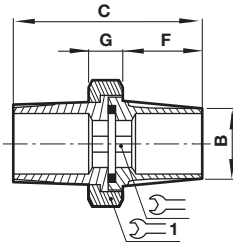
Nickel plated brass



| B | B1 | C | G | G1 | Ø S |  | Model |
|---------|------|------|-----|-----|------|---|-----------|
| 1/8 NPT | R1/8 | 21,5 | 8,5 | 8,5 | 5,5 | 12 | 154201818 |
| 1/4 NPT | R1/4 | 31 | 13 | 13 | 8 | 14 | 154202828 |
| 3/8 NPT | R3/8 | 31 | 13 | 13 | 11 | 19 | 154203838 |
| 1/2 NPT | R1/2 | 40 | 17 | 17 | 16,5 | 22 | 154204848 |

ISO R - Flat union 15033

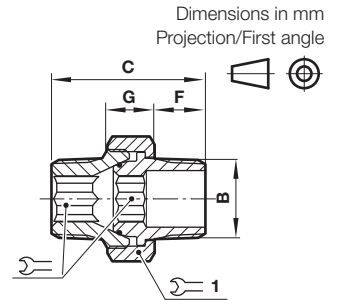
Nickel plated brass, O-ring NBR
Temperature: -20 ... +80°C
Operating pressure: -1 ... +15 bar



| B | C | F | G | | | Model |
|------|------|------|------|----|----|-----------|
| R1/8 | 33,5 | 10 | 8,5 | 5 | 15 | 150331818 |
| R1/4 | 42 | 13 | 10,5 | 8 | 24 | 150332828 |
| R3/8 | 43 | 13 | 11 | 10 | 27 | 150333838 |
| R1/2 | 52 | 17,5 | 11,5 | 14 | 30 | 150334848 |
| R3/4 | 56,5 | 19 | 12,5 | 17 | 38 | 150336868 |
| R1 | 68 | 23 | 16 | 19 | 46 | 150338888 |

ISO R - Conical union 1503D

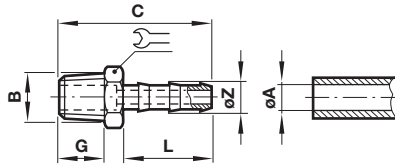
Brass, O-ring NBR
Temperature: -20 ... +80°C
Operating pressure: -1 ... +15 bar



| B | C | F | G | | | Model |
|------|------|------|-----|----|----|-----------|
| R1/8 | 27 | 9 | 8,5 | 5 | 15 | 1503D1818 |
| R1/4 | 33,5 | 11,5 | 9,5 | 6 | 19 | 1503D2828 |
| R3/8 | 36,5 | 13 | 10 | 8 | 22 | 1503D3838 |
| R1/2 | 45 | 16 | 12 | 12 | 27 | 1503D4848 |
| R3/4 | 54 | 18 | 17 | 14 | 36 | 1503D6868 |
| R1 | 65 | 21,5 | 20 | 19 | 46 | 1503D8888 |

ISO R - Hose adaptor 29117

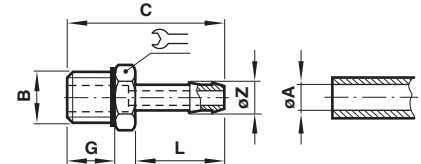
Nickel plated brass



| Ø A | B | C | G | L | | Ø Z | Model |
|-----|------|------|------|------|----|-----|-----------|
| 4 | R1/8 | 32 | 7,5 | 19,5 | 12 | 6 | 291170418 |
| 4 | R1/4 | 35,5 | 11 | 19,5 | 14 | 6 | 291170428 |
| 6 | R1/8 | 32 | 7,5 | 19,5 | 12 | 8 | 291170618 |
| 6 | R1/4 | 35,5 | 11 | 19,5 | 14 | 8 | 291170628 |
| 6 | R3/8 | 36 | 11,5 | 19,5 | 17 | 8 | 291170638 |
| 7 | R1/8 | 32 | 7,5 | 19,5 | 14 | 9 | 291170718 |
| 7 | R1/4 | 35 | 11 | 19,5 | 17 | 9 | 291170728 |
| 7 | R3/8 | 36 | 11,5 | 19,5 | 17 | 9 | 291170738 |
| 8 | R1/8 | 32 | 7,5 | 19,5 | 12 | 10 | 291170818 |
| 8 | R1/4 | 35,5 | 11 | 19,5 | 14 | 10 | 291170828 |
| 8 | R3/8 | 36 | 11,5 | 19,5 | 17 | 10 | 291170838 |
| 8 | R1/2 | 39 | 14 | 19,5 | 22 | 10 | 291170848 |
| 9 | R1/8 | 32 | 7,5 | 19,5 | 12 | 11 | 291170918 |
| 9 | R1/4 | 35,5 | 11 | 19,5 | 14 | 11 | 291170928 |
| 9 | R3/8 | 36 | 11,5 | 19,5 | 17 | 11 | 291170938 |
| 9 | R1/2 | 39 | 14 | 19,5 | 17 | 11 | 291170948 |
| 10 | R1/4 | 35,5 | 11 | 19,5 | 14 | 12 | 291171028 |
| 10 | R3/8 | 36 | 11,5 | 19,5 | 17 | 12 | 291171038 |
| 10 | R1/2 | 39 | 14 | 19,5 | 22 | 12 | 291171048 |
| 12 | R3/8 | 36 | 11,5 | 19,5 | 17 | 14 | 291171238 |
| 12 | R1/2 | 39 | 14 | 19,5 | 22 | 14 | 291171248 |
| 13 | R1/4 | 35,5 | 11 | 19,5 | 22 | 15 | 291171328 |
| 13 | R3/8 | 36 | 11,5 | 19,5 | 17 | 15 | 291171338 |
| 13 | R1/2 | 39 | 14 | 19,5 | 22 | 15 | 291171348 |
| 13 | R3/4 | 43,5 | 14,5 | 19,5 | 27 | 15 | 291171368 |
| 16 | R3/8 | 36 | 11,5 | 19,5 | 19 | 18 | 291171638 |
| 16 | R1/2 | 39 | 14 | 19,5 | 22 | 18 | 291171648 |
| 16 | R3/4 | 43,5 | 16,5 | 19,5 | 27 | 18 | 291171668 |
| 19 | R3/8 | 47,5 | 11,5 | 30 | 22 | 21 | 291171938 |
| 19 | R1/2 | 49,5 | 14 | 30 | 22 | 21 | 291171948 |
| 19 | R3/4 | 54 | 16,5 | 30 | 27 | 21 | 291171968 |
| 25 | R3/4 | 52,5 | 14,5 | 30 | 28 | 27 | 291172568 |
| 25 | R1 | 53,5 | 16 | 30 | 34 | 27 | 291172588 |
| 32 | R1 | 55 | 16 | 30 | 36 | 34 | 291173288 |

Metric and ISO G - Hose adaptor 29217

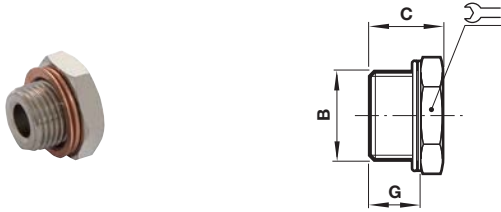
Nickel plated brass, copper seal



| Ø A | B | C | G | L | | Ø Z | Model |
|-----|------|------|----|-----|----|------|-----------|
| 3 | M5 | 15,5 | 4 | 7,5 | 8 | 3,5 | 292170305 |
| 4 | G1/8 | 30 | 6 | 20 | 14 | 6,5 | 292170418 |
| 4 | G1/4 | 33 | 8 | 20 | 17 | 6,5 | 292170428 |
| 5 | G1/8 | 30 | 6 | 20 | 14 | 7,5 | 292170518 |
| 6 | G1/8 | 30 | 6 | 20 | 14 | 8,5 | 292170618 |
| 6 | G1/4 | 33 | 8 | 20 | 17 | 8,5 | 292170628 |
| 9 | G1/8 | 30 | 6 | 20 | 14 | 11,5 | 292170918 |
| 9 | G1/4 | 33 | 8 | 20 | 17 | 11,5 | 292170928 |
| 9 | G3/8 | 34 | 9 | 20 | 19 | 11,5 | 292170938 |
| 9 | G1/2 | 35,5 | 10 | 20 | 24 | 11,5 | 292170948 |
| 10 | G1/4 | 33 | 8 | 20 | 17 | 12,5 | 292171028 |
| 10 | G3/8 | 34 | 9 | 20 | 19 | 12,5 | 292171038 |
| 10 | G1/2 | 37,5 | 10 | 22 | 24 | 12,5 | 292171048 |
| 13 | G1/4 | 33 | 8 | 20 | 17 | 15,5 | 292171328 |
| 13 | G3/8 | 34 | 9 | 20 | 19 | 15,5 | 292171338 |
| 13 | G1/2 | 37,5 | 10 | 22 | 24 | 15,5 | 292171348 |
| 13 | G3/4 | 39,5 | 12 | 22 | 30 | 15,5 | 292171368 |
| 19 | G3/4 | 41,5 | 12 | 24 | 30 | 21,5 | 292171968 |

ISO G - Plug with flange - spanner 16005

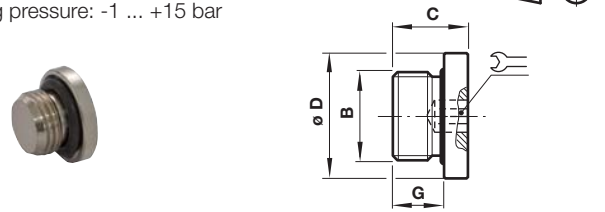
Nickel plated brass, copper seal





ISO G - Plug with flange - hex 16206

Nickel plated brass, O-ring NBR
Temperature: -20 ... +80°C
Operating pressure: -1 ... +15 bar

Dimensions in mm
Projection/First angle

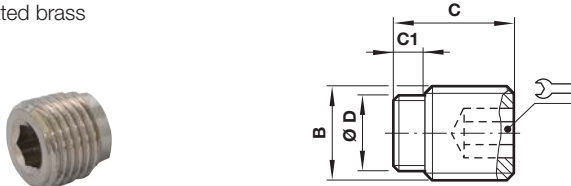


| B | C | G |  | Model |
|------|------|-----|---|-----------|
| M5 | 8 | 4,5 | 8 | 160050005 |
| G1/8 | 10 | 6,5 | 14 | 160050018 |
| G1/4 | 13 | 9 | 17 | 160050028 |
| G3/8 | 13,5 | 9,5 | 19 | 160050038 |
| G1/2 | 14,5 | 10 | 24 | 160050048 |
| G3/4 | 16 | 11 | 30 | 160050068 |
| G1 | 17 | 12 | 40 | 160050088 |

| B | C | G | ØD |  | Model |
|------|------|----|----|---|-----------|
| M5 | 6 | 4 | 8 | 2 | 162060005 |
| G1/8 | 8,5 | 6 | 14 | 5 | 162060018 |
| G1/4 | 11 | 8 | 17 | 6 | 162060028 |
| G3/8 | 12,5 | 9 | 20 | 8 | 162060038 |
| G1/2 | 13,5 | 10 | 25 | 10 | 162060048 |

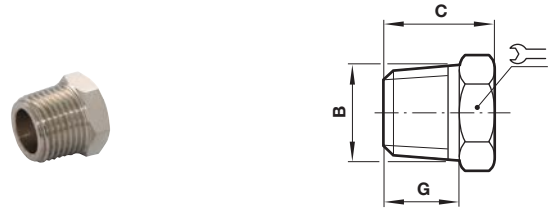
ISO G - Plug 16213


Nickel plated brass



ISO R - Plug 15005

Nickel plated brass

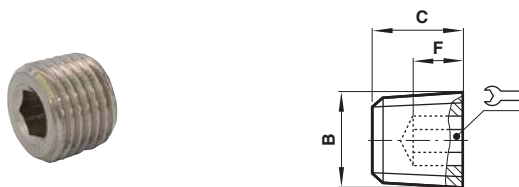


| B | C | C1 | ØD |  | Model |
|------|------|-----|------|---|-----------|
| G1/8 | 8 | 2 | 8 | 5 | 162130018 |
| G1/4 | 11 | 3 | 11 | 6 | 162130028 |
| G3/8 | 12,5 | 3,5 | 14,5 | 8 | 162130038 |
| G1/2 | 14 | 4 | 18 | 10 | 162130048 |
| G3/4 | 14 | 3 | 21,5 | 12 | 162130068 |

| B | C | G |  | Model |
|------|------|------|---|-----------|
| R1/8 | 11 | 7,5 | 10 | 150050018 |
| R1/4 | 15 | 11 | 14 | 150050028 |
| R3/8 | 15,5 | 11,5 | 17 | 150050038 |
| R1/2 | 18,5 | 14 | 22 | 150050048 |
| R3/4 | 21,5 | 16,5 | 27 | 150050068 |
| R1 | 25 | 19 | 34 | 150050088 |

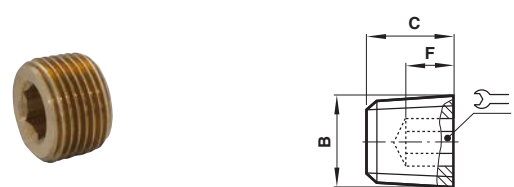
ISO R - Plug 15113

Nickel plated brass



ISO R - Plug 25013

Brass (unplated)

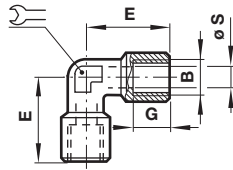


| B | C | F |  | Model |
|------|-----|---|---|-----------|
| R1/8 | 7,5 | 5 | 5 | 151130018 |
| R1/4 | 10 | 7 | 6 | 151130028 |
| R3/8 | 11 | 7 | 8 | 151130038 |
| R1/2 | 13 | 8 | 10 | 151130048 |

| B | C | F |  | Model |
|------|-----|---|---|-----------|
| R1/8 | 7,5 | 5 | 5 | 250130018 |
| R1/4 | 10 | 7 | 6 | 250130028 |
| R3/8 | 11 | 7 | 8 | 250130038 |
| R1/2 | 13 | 8 | 10 | 250130048 |

ISO G - Elbow connector 16042

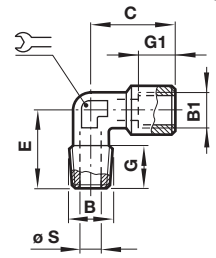
Nickel plated brass



| B | E | G | Ø S |  | Model |
|------|------|------|-----|---|-----------|
| G1/8 | 21 | 7 | 5,5 | 11 | 160420018 |
| G1/4 | 25,5 | 8,5 | 8 | 13 | 160420028 |
| G3/8 | 28 | 11 | 11 | 17 | 160420038 |
| G1/2 | 32 | 15 | 15 | 20 | 160420048 |
| G3/4 | 36,5 | 16,5 | 19 | 27 | 160420068 |
| G1 | 45 | 19 | 24 | 30 | 160420088 |

ISO G - ISO R Elbow connector 15043

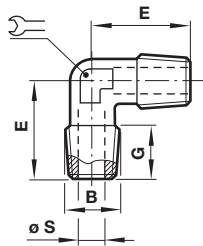
Nickel plated brass


 Dimensions in mm
Projection/First angle


| B | B1 | C | E | G | G1 | Ø S |  | Model |
|------|------|------|------|------|------|-----|---|-----------|
| R1/8 | G1/8 | 21 | 18 | 7,5 | 8,5 | 5,5 | 12 | 150430018 |
| R1/4 | G1/4 | 25,5 | 24 | 11 | 11 | 8 | 13 | 150430028 |
| R3/8 | G3/8 | 28 | 27 | 11,5 | 12 | 11 | 16 | 150430038 |
| R1/2 | G1/2 | 32 | 29,5 | 14 | 15 | 15 | 20 | 150430048 |
| R3/4 | G3/4 | 36,5 | 32 | 14,5 | 16,5 | 19 | 27 | 150430068 |
| R1 | G1 | 45 | 39 | 16 | 19 | 24 | 30 | 150430088 |

ISO R - Elbow connector 15040

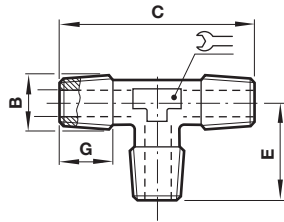
Nickel plated brass




| B | E | G | Ø S |  | Model |
|------|------|------|-----|---|-----------|
| R1/8 | 18 | 7,5 | 6 | 11 | 150400018 |
| R1/4 | 24 | 11 | 8 | 13 | 150400028 |
| R3/8 | 27 | 12 | 11 | 17 | 150400038 |
| R1/2 | 29,5 | 14 | 15 | 20 | 150400048 |
| R3/4 | 32 | 14,5 | 19 | 27 | 150400068 |
| R1 | 39 | 17 | 24 | 30 | 150400088 |

ISO R - Tee connector 15060

Nickel plated brass



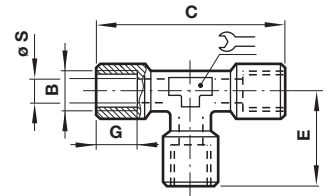
| B | C | E | G | Ø S |  | Model |
|------|------|------|------|-----|---|-----------|
| R1/8 | 35 | 17,5 | 8 | 5,5 | 12 | 150600018 |
| R1/4 | 46 | 23 | 11 | 8 | 13 | 150600028 |
| R3/8 | 51,5 | 25,5 | 11,5 | 11 | 16 | 150600038 |
| R1/2 | 59 | 29,5 | 14 | 15 | 20 | 150600048 |
| R3/4 | 64 | 32 | 14,5 | 19 | 27 | 150600068 |
| R1 | 78 | 39 | 17 | 24 | 30 | 150600088 |

ISO G - Tee connector 16062

Nickel plated brass

Dimensions in mm

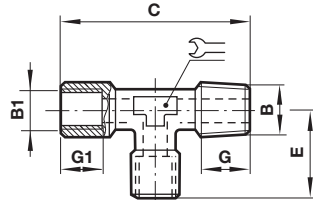
Projection/First angle



| B | C | E | G | Ø S |  | Model |
|------|----|------|------|-----|---|-----------|
| G1/8 | 39 | 19,5 | 8,5 | 6 | 12 | 160620018 |
| G1/4 | 49 | 24,5 | 11 | 8 | 13 | 160620028 |
| G3/8 | 54 | 27 | 12 | 11 | 16 | 160620038 |
| G1/2 | 64 | 32 | 15 | 15 | 20 | 160620048 |
| G3/4 | 73 | 36,5 | 16,5 | 19 | 27 | 160620068 |
| G1 | 90 | 45 | 19 | 24 | 30 | 160620088 |

ISO G - ISO R Tee connector 15072

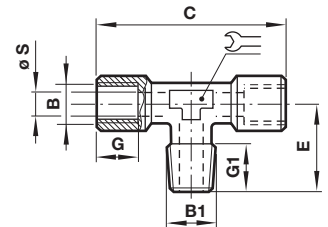
Nickel plated brass



| B | B1 | C | E | G | G1 |  | Model |
|------|------|------|------|------|------|---|-----------|
| G1/8 | R1/8 | 37 | 19,5 | 8 | 8,5 | 12 | 150720018 |
| G1/4 | R1/4 | 47,5 | 24,5 | 11 | 11 | 13 | 150720028 |
| G3/8 | R3/8 | 52,5 | 27 | 11,5 | 12 | 16 | 150720038 |
| G1/2 | R1/2 | 61,5 | 32 | 14 | 15 | 20 | 150720048 |
| G3/4 | R3/4 | 68,5 | 36,5 | 14,5 | 16,5 | 27 | 150720068 |
| G1 | R1 | 84 | 45 | 17 | 19 | 30 | 150720088 |

ISO G - ISO R Tee connector 15069

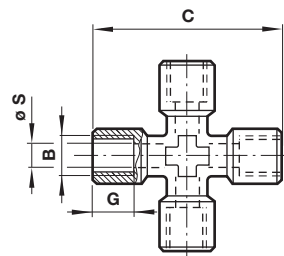
Nickel plated brass




| B | B1 | C | E | G | G1 | Ø S |  | Model |
|------|------|----|------|------|------|-----|---|-----------|
| G1/8 | R1/8 | 39 | 17,5 | 8,5 | 8 | 6 | 12 | 150690018 |
| G1/4 | R1/4 | 49 | 23 | 11 | 11 | 8 | 13 | 150690028 |
| G3/8 | R3/8 | 54 | 25,5 | 12 | 11,5 | 11 | 16 | 150690038 |
| G1/2 | R1/2 | 64 | 29 | 15 | 14 | 15 | 20 | 150690048 |
| G3/4 | R3/4 | 73 | 32 | 16,5 | 14,5 | 19 | 27 | 150690068 |
| G1 | R1 | 90 | 39 | 19 | 17 | 24 | 30 | 150690088 |

ISO G - Cross 16092

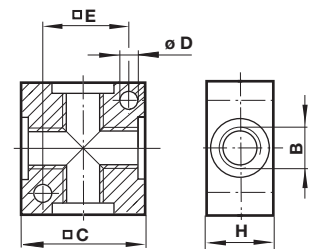
Nickel plated brass



| B | C | G | Ø S |  | Model |
|------|----|-----|-----|---|-----------|
| G1/8 | 39 | 8,5 | 6 | 11 | 160920018 |
| G1/4 | 50 | 11 | 8 | 13 | 160920028 |
| G3/8 | 56 | 12 | 11 | 17 | 160920038 |
| G1/2 | 64 | 15 | 15 | 20 | 160920048 |

ISO G - Cross block 16094

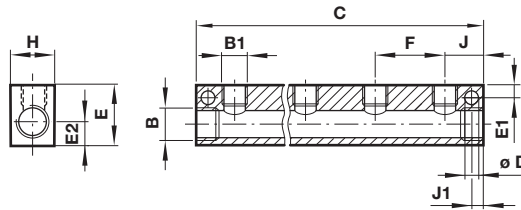
Aluminium



| B | C | Ø D | E | H | Model |
|------|----|-----|------|----|-----------|
| G1/8 | 25 | 4,5 | 17,5 | 16 | 160940018 |
| G1/4 | 40 | 5,5 | 27 | 20 | 160940028 |
| G3/8 | 50 | 5,5 | 35 | 25 | 160940038 |
| G1/2 | 50 | 5,5 | 35 | 32 | 160940048 |

ISO G - Manifold - single sided 34050

Brass

 Dimensions in mm
Projection/First angle

Numbers of outputs: 4

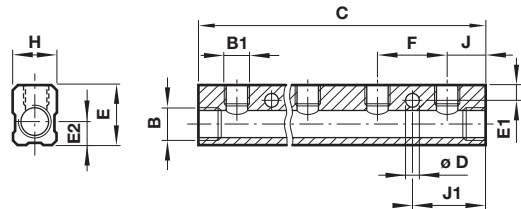
| B | B1 | C | ØD | E | E1 | E2 | F | H | J | J1 | Model |
|------|------|-----|-----|----|----|----|----|------|----|----|----------|
| G1/8 | G1/8 | 81 | 5,5 | 25 | 5 | 15 | 17 | 16 | 15 | 5 | 34050401 |
| G1/4 | G1/4 | 109 | 5,5 | 31 | 5 | 20 | 23 | 23 | 20 | 5 | 34050402 |
| G3/8 | G3/8 | 127 | 6,5 | 35 | 6 | 23 | 27 | 25,5 | 20 | 6 | 34050403 |

Numbers of outputs: 6

| B | B1 | C | ØD | E | E1 | E2 | F | H | J | J1 | Model |
|------|------|-----|-----|----|----|----|----|------|----|----|----------|
| G1/8 | G1/8 | 115 | 5,5 | 25 | 5 | 15 | 17 | 16 | 15 | 5 | 34050601 |
| G1/4 | G1/4 | 155 | 5,5 | 31 | 5 | 20 | 23 | 23 | 20 | 5 | 34050602 |
| G3/8 | G3/8 | 181 | 6,5 | 35 | 6 | 23 | 27 | 25,5 | 20 | 6 | 34050603 |

ISO G - Manifold - single sided 162B4 and 162B6

Aluminium


Numbers of outputs: 4

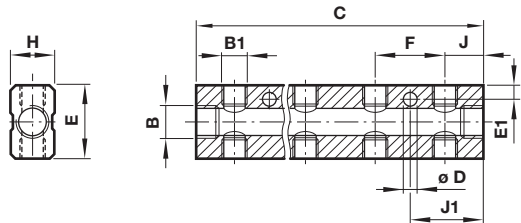
| B | B1 | C | ØD | E | E1 | E2 | F | H | J | J1 | Model |
|------|------|-----|-----|----|-----|----|----|----|------|------|-----------|
| G1/4 | G1/8 | 125 | 4,5 | 24 | 6 | 9 | 30 | 18 | 17,5 | 32,5 | 162B42818 |
| G3/8 | G1/4 | 148 | 5,5 | 30 | 7 | 11 | 36 | 22 | 20 | 38 | 162B43828 |
| G1/2 | G3/8 | 170 | 5,5 | 35 | 7,5 | 13 | 40 | 26 | 25 | 45 | 162B44838 |

Numbers of outputs: 6

| B | B1 | C | ØD | E | E1 | E2 | F | H | J | J1 | Model |
|------|------|-----|-----|----|-----|----|----|----|------|------|-----------|
| G1/4 | G1/8 | 185 | 4,5 | 24 | 6 | 9 | 30 | 18 | 17,5 | 32,5 | 162B62818 |
| G3/8 | G1/4 | 220 | 5,5 | 30 | 7 | 11 | 36 | 22 | 20 | 38 | 162B63828 |
| G1/2 | G3/8 | 250 | 5,5 | 35 | 7,5 | 13 | 40 | 26 | 25 | 45 | 162B64838 |

ISO G - Manifold - double sided 162C4 and 162C6

Aluminium


Numbers of outputs: 8

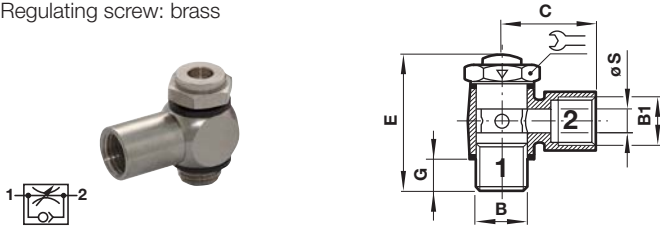
| B | B1 | C | ØD | E | E1 | F | H | J | J1 | Model |
|------|------|-----|-----|----|-----|----|----|------|------|-----------|
| G1/4 | G1/8 | 125 | 4,5 | 30 | 6 | 30 | 18 | 17,5 | 32,5 | 162C42818 |
| G3/8 | G1/4 | 148 | 5,5 | 38 | 7 | 36 | 22 | 20 | 38 | 162C43828 |
| G1/2 | G3/8 | 170 | 5,5 | 44 | 7,5 | 40 | 26 | 25 | 45 | 162C44838 |


Numbers of outputs: 12

| B | B1 | C | ØD | E | E1 | F | H | J | J1 | Model |
|------|------|-----|-----|----|-----|----|----|------|------|-----------|
| G1/4 | G1/8 | 185 | 4,5 | 30 | 6 | 30 | 18 | 17,5 | 32,5 | 162C62818 |
| G3/8 | G1/4 | 220 | 5,5 | 38 | 7 | 36 | 22 | 20 | 38 | 162C63828 |
| G1/2 | G3/8 | 250 | 5,5 | 44 | 7,5 | 40 | 26 | 25 | 45 | 162C64838 |

ISO G - Regulating out banjo elbow assembly 16K51

Regulating out, with seals
Body and regulating bolt: Nickel plated brass
Regulating screw: brass

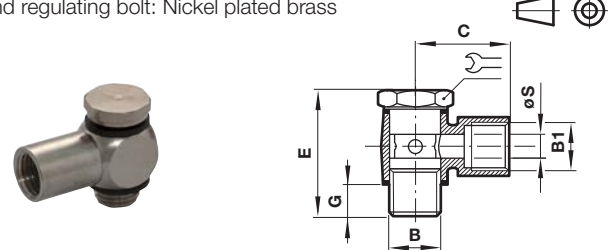


| B/B1 | C | E | G | Ø S | Operating pressure |  | Model |
|------|----|----|------|-----|--------------------|---|-----------|
| G1/8 | 21 | 34 | 7,5 | 6 | 10 bar max | 14 | 16K511818 |
| G1/4 | 28 | 37 | 8 | 7,6 | 10 bar max | 17 | 16K512828 |
| G3/8 | 31 | 52 | 12 | 9,6 | 10 bar max | 22 | 16K513838 |
| G1/2 | 47 | 58 | 14,5 | 9,6 | 10 bar max | 27 | 16K514848 |

ISO G - Banjo elbow assembly 16A51

Non-regulating, with seals
Body and regulating bolt: Nickel plated brass

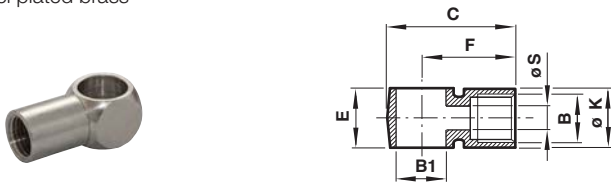
Dimensions in mm
Projection/First angle



| B/B1 | C | E | G | Ø S |  | Model |
|------|----|----|-----|-----|---|-----------|
| G1/8 | 21 | 29 | 5 | 6 | 14 | 16A511818 |
| G1/4 | 28 | 32 | 6 | 7,6 | 17 | 16A512828 |
| G3/8 | 31 | 45 | 9,5 | 9,6 | 22 | 16A513838 |
| G1/2 | 47 | 47 | 12 | 9,6 | 27 | 16A514848 |

ISO G - Banjo elbow body 16051

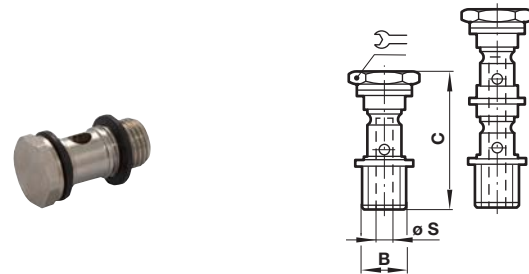
Nickel plated brass




| B/B1 | C | E | F | Ø K | Ø S | Model |
|------|----|------|----|------|-----|-----------|
| G1/8 | 28 | 14 | 21 | 13 | 6 | 160511818 |
| G1/4 | 37 | 16 | 28 | 16 | 7,6 | 160512828 |
| G3/8 | 42 | 20,5 | 31 | 20,5 | 9,6 | 160513838 |
| G1/2 | 61 | 22 | 47 | 24,5 | 9,6 | 160514848 |

ISO G - Banjo bolt 20A00 and 20B00

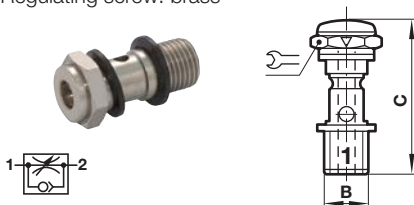
Non-regulating, with seals
Nickel plated brass




| B | C | Ø S | Number banjo bodies |  | Model |
|------|------|------|---------------------|---|-----------|
| G1/8 | 29 | 4,5 | single | 14 | 20A000018 |
| G1/4 | 31,5 | 8 | single | 17 | 20A000028 |
| G3/8 | 42,5 | 9,5 | single | 22 | 20A000038 |
| G1/2 | 47,5 | 11,5 | single | 27 | 20A000048 |
| G1/8 | 46,5 | 4,5 | double | 14 | 20B000018 |
| G1/4 | 52,5 | 8 | double | 17 | 20B000028 |
| G3/8 | 64 | 9,5 | double | 22 | 20B000038 |
| G1/2 | 72,5 | 11,5 | double | 27 | 20B000048 |

ISO G - Regulating out banjo bolts 20K00

With seals (screwdriver adjustable), Regulating bolt: Nickel plated brass
Regulating screw: brass




| B | C | Operating pressure |  | Model |
|------|------|--------------------|---|-----------|
| G1/8 | 35 | 10 bar max | 14 | 20K000018 |
| G1/4 | 37,5 | 10 bar max | 17 | 20K000028 |
| G3/8 | 51,5 | 10 bar max | 22 | 20K000038 |
| G1/2 | 57 | 10 bar max | 27 | 20K000048 |

ISO G - Regulating in banjo bolts 20L00

With seals (screwdriver adjustable), Regulating bolt: Nickel plated brass
Regulating screw: brass




| B | C | Operating pressure |  | Model |
|------|------|--------------------|---|-----------|
| G1/8 | 34 | 10 bar max | 14 | 20L000018 |
| G1/4 | 36,5 | 10 bar max | 17 | 20L000028 |
| G3/8 | 51,5 | 10 bar max | 22 | 20L000038 |
| G1/2 | 57 | 10 bar max | 27 | 20L000048 |

ISO G - Bi-directional banjo bolts 20M00

With seals (screwdriver adjustable), Regulating bolt: Nickel plated brass
Regulating screw: brass



| B | C | Operating pressure |  | Model |
|------|------|--------------------|---|-----------|
| G1/8 | 35 | 10 bar max | 14 | 20M000018 |
| G1/4 | 37,5 | 10 bar max | 17 | 20M000028 |
| G3/8 | 51,5 | 10 bar max | 22 | 20M000038 |
| G1/2 | 57 | 10 bar max | 27 | 20M000048 |

Standard copper seal
**Banjo bolt sealing
washers**

 Dimensions in mm
Projection/First angle

**ISO G - Copper sealing
washer
48021301 ... 08**
**ISO G - Banjo bolt head
sealing washer -
Polyamide
48030801 ... 04**
**ISO G - Banjo bolt thread
sealing washer -
Polyamide
48030001 ... 04**


| Port size | Model |
|-----------|----------|
| G1/8 | 48021301 |
| G1/4 | 48021302 |
| G3/8 | 48021303 |
| G1/2 | 48021304 |
| G3/4 | 48021306 |
| G1 | 48021308 |

| Port size | Model |
|-----------|----------|
| G1/8 | 48030801 |
| G1/4 | 48030802 |
| G3/8 | 48030803 |
| G1/2 | 48030804 |

| Port size | Model |
|-----------|----------|
| M5 | 48030005 |
| G1/8 | 48030001 |
| G1/4 | 48030002 |
| G3/8 | 48030003 |
| G1/2 | 48030004 |

**PTFE - sealing tape
DB-R-12**

Warning

These products are intended for use in industrial compressed air and rail transport systems only. Do not use these products where pressures and temperatures can exceed those listed under

»**Technical features/data**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.