

Pipe Systems with Quick Couplings

Product Catalogue for Snowmaking

Standard Range

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All information in this catalogue is given in good faith and believed to be correct at the time of creating. However, no responsibility can be accepted for any errors, omissions or incorrect assumptions.

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Steel pipe systems for snowmaking

Alvenius' quick-coupled steel pipe system has all the properties needed for snowmaking in the most cost effective way. The complete FlowMax® system meets the requirement of maximum reliability and easy installation.

Maximum reliability, top-grade safety, resistance to corrosion and aggressive media, long service life and superb life cycle costs (LCC) are key benefits built into all Alvenius FlowMax® systems.

Alvenius FlowMax® pipes are spirally welded with unique pressure-equipment classed steel material. The pipes can be made thin-walled but yet strong.

The combination of the FlowMax® pipes low weight and the quick coupling makes the system extremely easy to assemble and handle. No welding, no special tools and no time-consuming training is required.

Pressure ratings

Pressure ratings on pipes in this catalogue are calculated according to DIN 2460. The ratings are only valid for a buried system and if installation instructions are followed.

The different pressure ratings mentioned on the following pages are according to EN 805 have the below definitions.

PFA is the allowable operating pressure, i.e. the design pressure p according to Appendix C of DIN2460.

This is the maximum hydrostatic pressure, exclusive of surge, that a component can safely withstand in permanent service. PFA supersedes the formerly used allowable nominal pressure PN of a pipeline and can be calculated in accordance with Annex C of DIN 2460.

PMA is the allowable maximum operating pressure, i.e. the maximum internal pressure, including surge which a component can safely withstand in service.

PMA can be expressed as follows: $PMA = PFA \times 1.2$

This relationship holds on condition that the effective period of peak pressure action does not exceed 1 % of the pipeline's service life. If this period exceeds 10 % of the pipeline's service life, then $PMA = PFA$. Intermediate values are to be determined by interpolated.

PEA is the allowable site test pressure, i.e. the maximum hydrostatic pressure that a newly installed component can withstand for a relatively short period, when either fixed above ground level or laid and back-filled underground in order to measure the integrity and leak tightness of the pipe.

PEA can be expressed as follows: $PEA = PMA + 5 \text{ bar}$.

Certifications and norms

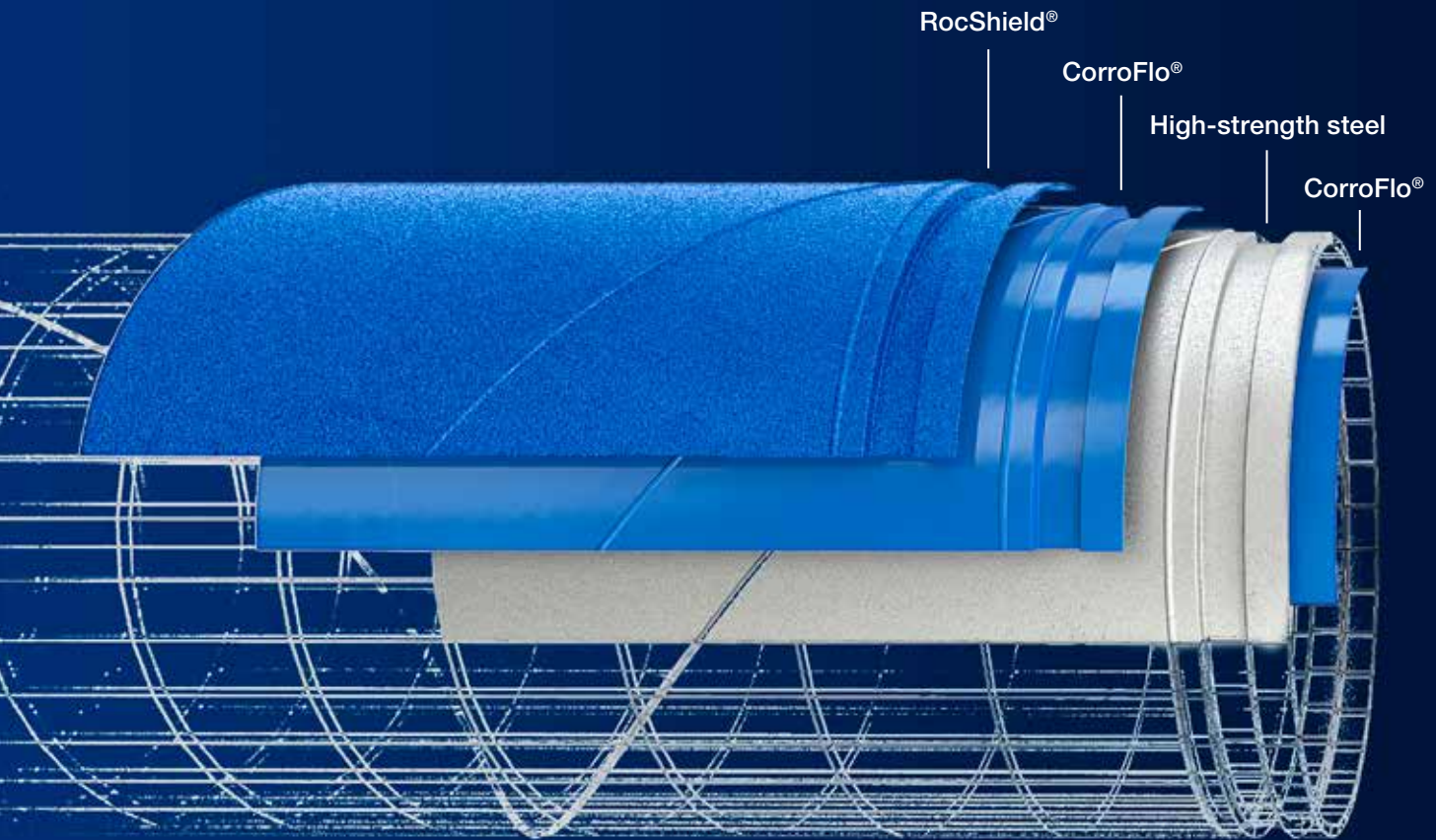
Alvenius is certified according to the quality standard ISO 9001, the environmental standard ISO 14001 and the welding quality standard ISO 3834-2.

The pipes are dimensioned according to the SS-EN 13480 series. Tolerances are according to SS-EN 10217-1.

More information

This is an excerpt from Alvenius' standard range and includes the most common products used in a piping system for snowmaking.

Further information about the products and the complete range can be found in our standard product catalogue and at www.alvenius.com



Surface coatings for all conditions and needs

Demanding conditions, aggressive or abrasive media, the need for a cost-effective pipe system. No problem. Alvenius offers surface coatings to meet all needs and requirements.

Internal surface coating advantages

- Improved life cycle cost – extremely low flow resistance means lower energy consumption and lower overall costs
- Very good resistance to corrosion and chemicals
- Optimal hygiene properties – the smooth coating prevents the build-up of deposits inside the pipes

External surface coating advantages

- Resistance to external impact on the pipes
- Superior service life – proven by independent tests in extreme environments
- Ideal in aggressive environments thanks to the high resistance to acidic and alkaline liquids
- Very good resistance to corrosion
- The surface coating has an elongation at failure of up to 800%
- Flexible and easy to repair if damaged

HDG

HDG (Hot-Dip Galvanized) is an ideal surface coating for pipes that may need to be dismantled and reassembled as it provides a highly robust surface layer.

Such pipes are highly resistant to impact, wear and harsh weather conditions. What's more, the zinc layer "heals" if damaged.

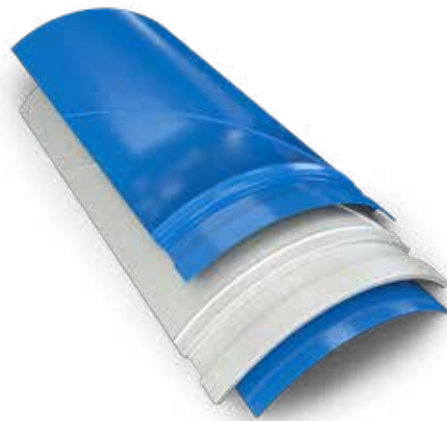


CorroFlo®

Alvenius FlowMax® pipes are coated both internally and externally with CorroFlo®. These pipes are ideal for environments and applications where, for example, acidic water and aggressive chemicals are a problem.

Our CorroFlo® coated products are certified according to ISO 12944-6 for corrosion resistance and comply with the requirements for C5 classification.

Independent tests show that pipes coated with CorroFlo® offer a service life of more than 50 years.



RocShield®

For extra-durable wear and impact protection, the external surface of the pipes can be treated with RocShield® on top of the CorroFlo® coating.

RocShield® is a 500 µm LDPE layer that offers extreme resistance, making it suitable for pipes used in exposed environments.

The surface structure with its good gripping properties also offers easier and safer handling.



Pipe

Our standard pipes are available with different pressure ratings depending on your requirement. To make it possible to easily customize the system the pipes are available in different lengths. The pipes are dimensioned according to the SS-EN 13480 series. Tolerances are according to SS-EN 10217-1. Pressure ratings on pipes in this catalogue are calculated according to DIN 2460.

| Dim | t [mm] | System | L [m] | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP & RC |
|-----|--------|--------|-------|-----------|-----------|-----------|--------------------------------|---------------------|
| 76 | 2.0 | CG | 0.6 | 84 | 101 | 106 | 100073801 | |
| 76 | 2.0 | CG | 1.0 | 84 | 101 | 106 | 100075801 | |
| 76 | 2.0 | CG | 3.0 | 84 | 101 | 106 | 100077801 | |
| 76 | 2.0 | CG | 6.0 | 84 | 101 | 106 | 1149-01 | |
| 76 | 2.0 | K10 | 0.5 | 84 | 101 | 106 | 100074101 | |
| 76 | 2.0 | K10 | 1.0 | 84 | 101 | 106 | 100075101 | |
| 76 | 2.0 | K10 | 2.0 | 84 | 101 | 106 | 100076101 | |
| 76 | 2.0 | K10 | 3.0 | 84 | 101 | 106 | 100077101 | |
| 76 | 2.0 | K10 | 5.8 | 40 | 48 | 53 | 100081101 | |
| 76 | 2.0 | K10 | 6.0 | 40 | 48 | 53 | 100080101 | |
| 89 | 2.1 | CG | 0.6 | 122 | 147 | 152 | 122551801 | 122551809 |
| 89 | 2.1 | CG | 1.0 | 122 | 147 | 152 | 122091801 | 122091809 |
| 89 | 2.1 | CG | 3.0 | 122 | 147 | 152 | 122093801 | 122093829 |
| 89 | 2.1 | CG | 6.0 | 122 | 147 | 152 | 1151-01 | 1151-29 |
| 102 | 2.0 | K10 | 0.5 | 40 | 48 | 53 | 100104101 | |
| 102 | 2.0 | K10 | 1.0 | 40 | 48 | 53 | 100105101 | |
| 102 | 2.0 | K10 | 2.0 | 40 | 48 | 53 | 100106101 | |
| 102 | 2.0 | K10 | 3.0 | 40 | 48 | 53 | 100107101 | |
| 102 | 2.0 | K10 | 5.8 | 40 | 48 | 53 | 100111101 | |
| 114 | 2.0 | CG | 3.0 | 56 | 67 | 72 | 100417801 | 100417829 |
| 114 | 2.0 | CG | 6.0 | 56 | 67 | 72 | 100422801 | 100422829 |
| 114 | 2.8 | CG | 0.6 | 129 | 155 | 160 | 4270-01 | 4270-09 |
| 114 | 2.8 | CG | 1.0 | 129 | 155 | 160 | 4271-01 | 4271-09 |
| 114 | 2.8 | CG | 3.0 | 129 | 155 | 160 | 4272-01 | 4272-29 |
| 114 | 2.8 | CG | 6.0 | 129 | 155 | 160 | 4274-01 | 4274-29 |
| 139 | 2.1 | CG | 6.0 | 78 | 93 | 98 | 1136-01 | 1136-29 |
| 139 | 2.8 | CG | 0.6 | 105 | 127 | 132 | 5390-01 | 5390-09 |
| 139 | 2.8 | CG | 1.0 | 105 | 127 | 132 | 5391-01 | 5391-09 |
| 139 | 2.8 | CG | 3.0 | 105 | 127 | 132 | 5392-01 | 5392-29 |
| 139 | 2.8 | CG | 6.0 | 105 | 127 | 132 | 4897-01 | 4897-29 |
| 152 | 2.0 | K10 | 5.8 | 40 | 48 | 53 | 101240101 | |
| 152 | 2.1 | K10 | 0.5 | 40 | 48 | 53 | 100144111 | |
| 152 | 2.1 | K10 | 1.0 | 40 | 48 | 53 | 100145111 | |
| 152 | 2.1 | K10 | 2.0 | 40 | 48 | 53 | 100146111 | |
| 152 | 2.1 | K10 | 3.0 | 40 | 48 | 53 | 100147111 | |
| 152 | 2.1 | K10 | 5.8 | 40 | 48 | 53 | 100160101 | |

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Dim = Dimension
t = thickness
L = Length

Dim 2 = Second dimension
TP = Coated inside & outside with thermo-plastic in blue color (part.no ending with 09)
RC = Coated inside & outside with RocShiled® in blue color (part.no ending with 29)

Blue is the default color for snowmaking pipes. Other colors are available upon request.
Technical Specifications, see "Alvenius Pipe System Technical Data"

Pipe

| Dim] | t [mm] | System | L [m] | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP & RC |
|------|--------|--------|-------|-----------|-----------|-----------|--------------------------------|---------------------|
| 168 | 2.1 | CG | 6.0 | 65 | 77 | 82 | 1137-01 | 1137-29 |
| 168 | 2.8 | CG | 0.6 | 88 | 105 | 110 | 122446801 | 122446809 |
| 168 | 2.8 | CG | 1.0 | 88 | 105 | 110 | 122762801 | 122762809 |
| 168 | 2.8 | CG | 3.0 | 88 | 105 | 110 | 122763801 | 122763829 |
| 168 | 2.8 | CG | 6.0 | 88 | 105 | 110 | 1138-01 | 1138-29 |
| 219 | 3.0 | CG | 6.0 | 44 | 53 | 58 | 100885801 | 100885829 |
| 219 | 3.6 | CG | 0.6 | 87 | 105 | 110 | 122920801 | 122920809 |
| 219 | 3.6 | CG | 1.0 | 87 | 105 | 110 | 122403801 | 122403809 |
| 219 | 3.6 | CG | 3.0 | 87 | 105 | 110 | 122404801 | 122404829 |
| 219 | 3.6 | CG | 6.0 | 87 | 105 | 110 | 122407801 | 122407829 |
| 273 | 3.6 | CGB | 3.0 | 72 | 87 | 92 | 5160-01 | 5160-29 |
| 273 | 3.6 | CGB | 6.0 | 72 | 87 | 92 | 4974-01 | 4974-29 |
| 273 | 4.4 | CG | 0.6 | 86 | 103 | 108 | 122343801 | 122343809 |
| 273 | 4.4 | CGB | 1.0 | 88 | 106 | 111 | 5138-01 | 5138-09 |
| 273 | 4.4 | CGB | 3.0 | 88 | 106 | 111 | 5139-01 | 5139-29 |
| 273 | 4.4 | CGB | 6.0 | 88 | 106 | 111 | 4793-01 | 4793-29 |
| 323 | 4.4 | CG | 3.0 | 73 | 87 | 92 | 122863801 | 122863829 |
| 323 | 4.4 | CG | 6.0 | 73 | 87 | 92 | 1143-01 | 1143-29 |
| 323 | 5.7 | CG | 0.6 | 95 | 114 | 119 | 122960801 | 122960809 |
| 323 | 5.7 | CG | 1.0 | 95 | 114 | 119 | 2732-01 | 2732-09 |
| 323 | 5.7 | CG | 3.0 | 95 | 114 | 119 | 122316801 | 122316829 |
| 323 | 5.7 | CG | 6.0 | 95 | 114 | 119 | 1144-01 | 1144-29 |

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Technical Specifications, see "Alvenius Pipe System Technical Data"

Coupling

Including rubber gasket (EPDM).

| Dim | System | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Painted |
|-----|--------|-----------|-----------|-----------|------------------|
| 60 | ST75 | 35 | 41 | 46 | 120930800 |
| 76 | K10 | 40 | 48 | 53 | 120276109 |
| 89 | ST75 | 35 | 41 | 46 | 120932800 |
| 89 | ST77 | 80 | 80 | 100 | 120809800 |
| 102 | K10 | 40 | 48 | 53 | 120290109 |
| 114 | ST75 | 35 | 41 | 46 | 120933800 |
| 114 | ST77 | 80 | 80 | 100 | 120943800 |
| 139 | ST75 | 31 | 37 | 42 | 120937800 |
| 139 | ST77 | 80 | 80 | 100 | 120813800 |
| 152 | K10 | 40 | 48 | 53 | 120311109 |
| 168 | ST75 | 31 | 37 | 42 | 120935800 |
| 168 | ST77 | 80 | 80 | 100 | 120811800 |
| 219 | ST75 | 31 | 37 | 42 | 120936800 |
| 219 | ST77 | 80 | 80 | 100 | 120804800 |
| 273 | ST77 | 80 | 80 | 100 | 120825800 |
| 323 | ST77 | 80 | 80 | 100 | 120826800 |

Rubber gasket

EPDM rubber gasket as a spare part.

| Dim | System | Part no. |
|-----|--------|-----------|
| 60 | CG | 120803801 |
| 76 | K10 | 120282101 |
| 89 | CG | 120449801 |
| 102 | K10 | 120296101 |
| 114 | CG | 120805801 |
| 139 | CG | 120798801 |
| 152 | K10 | 120315101 |
| 168 | CG | 120806801 |
| 219 | CG | 120807801 |
| 273 | CG | 120799801 |
| 323 | CG | 120800801 |

Mounting grease & Densotape

| | Part no. |
|---------------------------------|-----------|
| Mounting grease, can, 1000 g | 300028000 |
| Densotape, W=100 mm, L=10000 mm | 800731000 |

Always use grease for maximal service life of your system

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Technical Specifications, see "Alvenius Pipe System Technical Data"

Hydrant outlet

A hydrant outlet is an extended tee with a 2" or 1 ½" externally threaded outlet.

| Dim | Dim 2 | L [mm] | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. TP |
|-----|-------|--------|--------|----------|-----------|-----------|-----------|-------------|
| 89 | 2" | 600 | CG | Steel | 80 | 80 | 100 | 2930-09 |
| 114 | 2" | 600 | CG | Steel | 80 | 80 | 100 | 2931-09 |
| 139 | 2" | 600 | CG | Steel | 80 | 80 | 100 | 2932-09 |
| 168 | 2" | 600 | CG | Steel | 80 | 80 | 100 | 2933-09 |
| 219 | 2" | 600 | CG | Steel | 80 | 80 | 100 | 2934-09 |
| 273 | 2" | 600 | CG | Steel | 80 | 80 | 100 | 2935-09 |
| 323 | 2" | 600 | CG | Steel | 80 | 80 | 100 | 122497809 |
| 89 | 1 ½" | 600 | CG | Steel | 80 | 80 | 100 | 2936-09 |
| 114 | 1 ½" | 600 | CG | Steel | 80 | 80 | 100 | 2937-09 |
| 139 | 1 ½" | 600 | CG | Steel | 80 | 80 | 100 | 2938-09 |
| 168 | 1 ½" | 600 | CG | Steel | 80 | 80 | 100 | 2939-09 |
| 219 | 1 ½" | 600 | CG | Steel | 80 | 80 | 100 | 2940-09 |
| 273 | 1 ½" | 600 | CG | Steel | 80 | 80 | 100 | 2941-09 |
| 323 | 1 ½" | 600 | CG | Steel | 80 | 80 | 100 | 4796-09 |

Elbow

Elbows are used when the deflection offered by the coupling is insufficient.

| Dim | Angle [°] | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP |
|-----|-----------|--------|-----------|-----------|-----------|-----------|-----------------------------|-------------|
| 76 | 7.5 | K10 | Cast iron | 40 | 48 | 53 | 1092-01 | |
| 76 | 15 | K10 | Cast iron | 40 | 48 | 53 | 1091-01 | |
| 76 | 30 | K10 | Cast iron | 40 | 48 | 53 | 1090-01 | |
| 76 | 45 | K10 | Cast iron | 40 | 48 | 53 | 1089-01 | |
| 76 | 90 | K10 | Cast iron | 40 | 48 | 53 | 1087-01 | |
| 89 | 7.5 | CG | Steel | 80 | 80 | 100 | 122508801 | 122508809 |
| 89 | 11.25 | CG | Cast iron | 80 | 80 | 100 | 122507801 | 122507809 |
| 89 | 22.5 | CG | Cast iron | 80 | 80 | 100 | 122510801 | 122510809 |
| 89 | 45 | CG | Cast iron | 80 | 80 | 100 | 122511801 | 122511809 |
| 89 | 90 | CG | Cast iron | 80 | 80 | 100 | 122513801 | 122513809 |
| 102 | 7.5 | K10 | Steel | 40 | 48 | 53 | 110529101 | |
| 102 | 15 | K10 | Cast iron | 40 | 48 | 53 | 110530111 | |
| 102 | 30 | K10 | Cast iron | 40 | 48 | 53 | 110531111 | |
| 102 | 45 | K10 | Cast iron | 40 | 48 | 53 | 110532111 | |
| 102 | 90 | K10 | Cast iron | 40 | 48 | 53 | 110524111 | |
| 114 | 7.5 | CG | Steel | 80 | 80 | 100 | 122543801 | 122543809 |
| 114 | 11.25 | CG | Cast iron | 80 | 80 | 100 | 122542801 | 122542809 |
| 114 | 22.5 | CG | Cast iron | 80 | 80 | 100 | 122545801 | 122545809 |
| 114 | 45 | CG | Cast iron | 80 | 80 | 100 | 122546801 | 122546809 |
| 114 | 90 | CG | Cast iron | 80 | 80 | 100 | 122548801 | 122548809 |

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Blue is the default color for snowmaking pipes. Other colors are available upon request.
 Technical Specifications, see "Alvenius Pipe System Technical Data"

Elbow

| Dim | Angle [°] | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP |
|-----|-----------|--------|-----------|-----------|-----------|-----------|--------------------------------|----------------|
| 139 | 7.5 | CG | Steel | 80 | 80 | 100 | 122600801 | 122600809 |
| 139 | 15 | CG | Steel | 80 | 80 | 100 | 122601801 | 122601809 |
| 139 | 30 | CG | Steel | 80 | 80 | 100 | 122602801 | 122602809 |
| 139 | 45 | CG | Cast iron | 80 | 80 | 100 | 122603801 | 122603809 |
| 139 | 90 | CG | Cast iron | 80 | 80 | 100 | 122604801 | 122604809 |
| 152 | 7.5 | K10 | Cast iron | 40 | 48 | 53 | 112401101 | |
| 152 | 15 | K10 | Cast iron | 40 | 48 | 53 | 112402101 | |
| 152 | 30 | K10 | Cast iron | 40 | 48 | 53 | 112403101 | |
| 152 | 45 | K10 | Cast iron | 40 | 48 | 53 | 112404101 | |
| 152 | 90 | K10 | Cast iron | 40 | 48 | 53 | 112405101 | |
| 168 | 7.5 | CG | Steel | 80 | 80 | 100 | 122376801 | 122376809 |
| 168 | 11.25 | CG | Cast iron | 80 | 80 | 100 | 122380801 | 122380809 |
| 168 | 22.5 | CG | Cast iron | 80 | 80 | 100 | 122378801 | 122378809 |
| 168 | 45 | CG | Cast iron | 80 | 80 | 100 | 122379801 | 122379809 |
| 168 | 90 | CG | Cast iron | 80 | 80 | 100 | 122381801 | 122381809 |
| 219 | 7.5 | CG | Steel | 80 | 80 | 100 | 122641801 | 122641809 |
| 219 | 11.25 | CG | Cast iron | 80 | 80 | 100 | 122645801 | 122645809 |
| 219 | 22.5 | CG | Cast iron | 80 | 80 | 100 | 122643801 | 122643809 |
| 219 | 45 | CG | Cast iron | 80 | 80 | 100 | 122644801 | 122644809 |
| 219 | 90 | CG | Cast iron | 80 | 80 | 100 | 122646801 | 122646809 |
| 273 | 7.5 | CG | Steel | 80 | 80 | 100 | 122669801 | 122669809 |
| 273 | 11.25 | CG | Cast iron | 80 | 80 | 100 | 2601-01 | 2601-09 |
| 273 | 22.5 | CG | Cast iron | 80 | 80 | 100 | 2910-01 | 2910-09 |
| 273 | 45 | CG | Cast iron | 80 | 80 | 100 | 1082-01 | 1082-09 |
| 273 | 90 | CG | Cast iron | 80 | 80 | 100 | 1078-01 | 1078-09 |
| 323 | 7.5 | CG | Steel | 80 | 80 | 100 | 122697801 | 122697809 |
| 323 | 15 | CG | Steel | 80 | 80 | 100 | 122698801 | 122698809 |
| 323 | 30 | CG | Steel | 80 | 80 | 100 | 122699801 | 122699809 |
| 323 | 45 | CG | Cast iron | 80 | 80 | 100 | 122703801 | 122703809 |
| 323 | 90 | CG | Cast iron | 80 | 80 | 100 | 122702801 | 122702809 |

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Technical Specifications, see "Alvenius Pipe System Technical Data"

Tee

The standard range includes a wide selection of straight and reducer tees.

| Dim | Dim 2 | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP |
|-----|-------|--------|-----------|-----------|-----------|-----------|--------------------------------|----------------|
| 76 | 76 | K10 | Steel | 40 | 48 | 53 | 111701101 | |
| 89 | 89 | CG | Cast iron | 80 | 80 | 100 | 122100801 | 122100809 |
| 102 | 102 | K10 | Cast iron | 40 | 48 | 53 | 2050-01 | |
| 114 | 60 | CG | Cast iron | 80 | 80 | 100 | 122737801 | 122737809 |
| 114 | 114 | CG | Cast iron | 80 | 80 | 100 | 122105801 | 122105809 |
| 139 | 139 | CG | Cast iron | 80 | 80 | 100 | 122109801 | 122109809 |
| 152 | 152 | K10 | Cast iron | 40 | 48 | 53 | 2389-01 | |
| 168 | 60 | CG | Cast iron | 80 | 80 | 100 | 122736801 | 122736809 |
| 168 | 76 | CG | Cast iron | 80 | 80 | 100 | 122720801 | 122720809 |
| 168 | 168 | CG | Cast iron | 80 | 80 | 100 | 122115801 | 122115809 |
| 219 | 168 | CG | Cast iron | 80 | 80 | 100 | 122731801 | 122731809 |
| 219 | 219 | CG | Cast iron | 80 | 80 | 100 | 122120801 | 122120809 |
| 273 | 273 | CG | Cast iron | 80 | 80 | 100 | 122735801 | 122735809 |
| 323 | 323 | CG | Cast iron | 80 | 80 | 100 | 122905801 | 122905809 |

Reducer

Reducers are used to connect pipes of different diameters.

The standard range includes a wide selection of reducers for connecting different diameters.

| Dim | Dim 2 | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP |
|-----|-------|--------|-----------|-----------|-----------|-----------|--------------------------------|----------------|
| 89 | 60 | CG | Cast iron | 80 | 80 | 100 | 122042801 | |
| 89 | 76 | CG | Cast iron | 80 | 80 | 100 | 122043801 | |
| 114 | 60 | CG | Cast iron | 80 | 80 | 100 | 122044801 | |
| 114 | 76 | CG | Cast iron | 80 | 80 | 100 | 122047801 | |
| 114 | 89 | CG | Cast iron | 80 | 80 | 100 | 122870801 | 122870809 |
| 139 | 89 | CG | Cast iron | 80 | 80 | 100 | 122897801 | 122897809 |
| 139 | 114 | CG | Cast iron | 80 | 80 | 100 | 122048801 | 122048809 |
| 168 | 60 | CG | Cast iron | 80 | 80 | 100 | 122858801 | 122858809 |
| 168 | 89 | CG | Cast iron | 80 | 80 | 100 | 122859801 | 122859809 |
| 168 | 114 | CG | Cast iron | 80 | 80 | 100 | 122876801 | 122876809 |
| 168 | 139 | CG | Cast iron | 80 | 80 | 100 | 122875801 | 122875809 |
| 219 | 114 | CG | Cast iron | 80 | 80 | 100 | 122890801 | 122890809 |
| 219 | 139 | CG | Cast iron | 80 | 80 | 100 | 122054801 | 122054809 |
| 219 | 168 | CG | Cast iron | 80 | 80 | 100 | 122877801 | 122877809 |
| 273 | 219 | CG | Cast iron | 80 | 80 | 100 | 122882801 | 122882809 |
| 323 | 273 | CG | Cast iron | 80 | 80 | 100 | 122207801 | 122207809 |

Dim = Dimension

t = thickness

L = Length

Dim 2 = Second dimension

TP = Coated inside & outside with thermo-plastic in blue color (part.no ending with 09)

RC = Coated inside & outside with RocShiled® in blue color (part.no ending with 29)

Blue is the default color for snowmaking pipes. Other colors are available upon request.
Technical Specifications, see "Alvenius Pipe System Technical Data"

Connection pieces with thread

Adapter with thread used to connect pipes to, for example, threaded valves or a threaded pipe system. OD 114, OD 139 and OD 168 is an end cap with 2" inside thread.

| Dim | Dim 2 | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP |
|-----|-------|--------|-----------|-----------|-----------|-----------|--------------------------------|----------------|
| 89 | 2" | CG | Cast iron | 80 | 80 | 100 | 1127-01 | 1127-09 |
| 102 | 2" | K10 | Steel | 40 | 48 | 53 | 110227101 | |
| 114 | 2" | CG | Cast iron | 80 | 80 | 100 | 1050-01 | 1050-09 |
| 139 | 2" | CG | Cast iron | 80 | 80 | 100 | 1053-01 | 1053-09 |
| 168 | 2" | CG | Cast iron | 80 | 80 | 100 | 1057-01 | 1057-09 |

Flanged adapter

Used to easily connect the system to other ØD pipe systems and flanged valves.

| Dim | Flange DN/ DIN | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP |
|-----|-------------------|--------|----------|-----------|-----------|-----------|--------------------------------|----------------|
| 89 | 80/2635 | CG | Steel | 40 | 48 | 53 | 111777801 | 111777809 |
| 89 | 80/2636 | CG | Steel | 63 | 76 | 81 | 111776801 | 111776809 |
| 114 | 100/2635 | CG | Steel | 40 | 48 | 53 | 111782801 | 111782809 |
| 114 | 100/2636 | CG | Steel | 63 | 76 | 81 | 111783801 | 111783809 |
| 139 | 125/2635 | CG | Steel | 40 | 48 | 53 | 111787801 | 111787809 |
| 139 | 125/2636 | CG | Steel | 63 | 76 | 81 | 111788801 | 111788809 |
| 168 | 150/2635 | CG | Steel | 40 | 48 | 53 | 111765801 | 111765809 |
| 168 | 150/2636 | CG | Steel | 63 | 76 | 81 | 111766801 | 111766809 |
| 219 | 200/2635 | CG | Steel | 40 | 48 | 53 | 111792801 | 111792809 |
| 219 | 200/2636 | CG | Steel | 63 | 76 | 81 | 111793801 | 111793809 |
| 273 | 250/2636 | CG | Steel | 63 | 76 | 81 | 111798801 | 111798809 |

End cap

| Dim | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Hot-dip galvanized | Part no. TP |
|-----|--------|-----------|-----------|-----------|-----------|--------------------------------|----------------|
| 76 | K10 | Steel | 40 | 48 | 53 | 110353101 | |
| 89 | CG | Cast iron | 80 | 80 | 100 | 122354801 | 122354809 |
| 102 | K10 | Steel | 40 | 48 | 53 | 110357101 | |
| 114 | CG | Cast iron | 80 | 80 | 100 | 122355801 | 122355809 |
| 139 | CG | Cast iron | 80 | 80 | 100 | 122385801 | 122385809 |
| 152 | K10 | Steel | 40 | 48 | 53 | 110361101 | |
| 168 | CG | Cast iron | 80 | 80 | 100 | 122383801 | 122383809 |
| 219 | CG | Cast iron | 80 | 80 | 100 | 122384801 | 122384809 |
| 273 | CG | Cast iron | 80 | 80 | 100 | 122369801 | 122369809 |
| 323 | CG | Cast iron | 80 | 80 | 100 | 122370801 | 122370809 |

Dim = Dimension

t = thickness

L = Length

Dim 2 = Second dimension

TP = Coated inside & outside with thermo-plastic in blue color (part.no ending with 09)

RC = Coated inside & outside with RocShiled® in blue color (part.no ending with 29)

Blue is the default color for snowmaking pipes. Other colors are available upon request.
Technical Specifications, see "Alvenius Pipe System Technical Data"

Welding ring

For adaptation of pipe pieces, there are loose welding rings in all dimensions. The welding rings are of the same type as the ends of the pipes and can be connected the rest of the system.

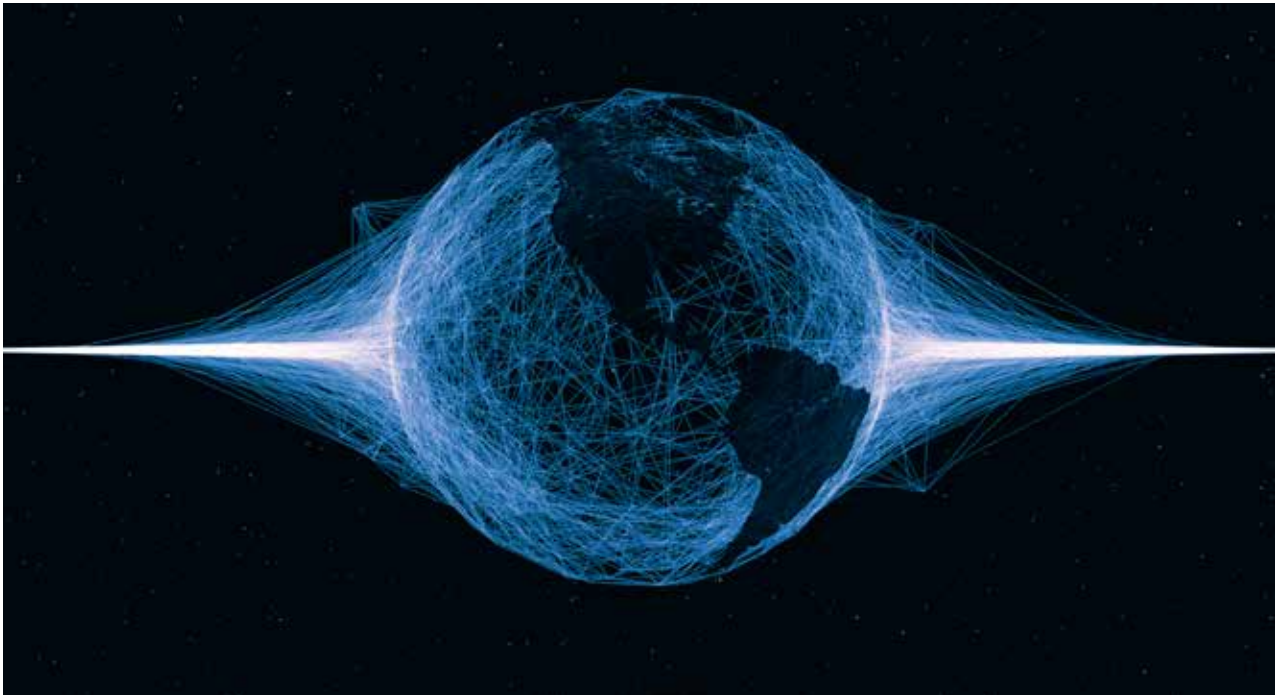
| Dim | t [mm] | System | Material | PFA [bar] | PMA [bar] | PEA [bar] | Part no. Untreated |
|-----|--------|--------|----------|-----------|-----------|-----------|--------------------|
| 76 | 2.0 | K10 | Steel | 40 | 48 | 53 | 121910100 |
| 89 | 2.2 | CG | Steel | 80 | 80 | 100 | 122985820 |
| 102 | 2.0 | K10 | Steel | 40 | 48 | 53 | 121902100 |
| 114 | 2.7 | CG | Steel | 80 | 80 | 100 | 122851850 |
| 139 | 3.3 | CG | Steel | 80 | 80 | 100 | 122852840 |
| 152 | 2.5 | K10 | Steel | 40 | 48 | 53 | 121904100 |
| 168 | 2.8 | CG | Steel | 80 | 80 | 100 | 122855860 |
| 219 | 3.6 | CG | Steel | 80 | 80 | 100 | 122865820 |
| 273 | 4.4 | CG | Steel | 80 | 80 | 100 | 2118-00 |
| 323 | 6.5 | CG | Steel | 80 | 80 | 100 | 122844850 |



Dim = Dimension
t = thickness
L = Length

Dim 2 = Second dimension
TP = Coated inside & outside with thermo-plastic in blue color (part.no ending with 09)
RC = Coated inside & outside with RocShiled® in blue color (part.no ending with 29)

Blue is the default color for snowmaking pipes. Other colors are available upon request.
 Technical Specifications, see "Alvenius Pipe System Technical Data"



Alvenius was founded in 1951 and ever since we have focused on supplying the global market with high-quality quick coupling steel pipe systems.

Today, Alvenius focuses its expertise on the segments tunnels, mines, industry, fire protection and extinguishing, water and wastewater systems and artificial snow making.

We have a presence in Asia, Africa, the Middle East, North and South America, Europe and, of course, our domestic market Sweden.

Our international approach offers many advantages.

Above all else, it means that we understand the conditions and demands of your particular market – wherever that may be.



Member of Boxholm Group



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