Medium Pressure Tubing

Pressures to 20,000 psi (1379 bar)



Parker Autoclave Engineers offers a complete selection of austenetic, cold drawn stainless steel tubing designed to match the performance standards of Parker Autoclave valves and fittings. Parker Autoclave Engineers medium pressure tubing is manufactured specifically for high pressure applications requiring both strength and corrosion resistance. The tubing is furnished in random lengths between 20 feet (6 meters) and 26.5 feet (8.0 meters). The average is 24 feet (7.3 meters). Medium Pressure Tubing is available in six sizes and a variety of materials.

Inspection and Testing

Parker Autoclave Engineers' medium pressure tubing is inspected to assure freedom from seams, laps, fissures or other flaws, as well as carburization or intergranular carbide precipitation. The outside and inside diameters of the tubing are subject to special inspection and are controlled within close tolerences to assure proper fit. Sample pieces of tube for each lot are tested to confirm mechanical properties. Hydrostatic testing is also performed on a statistical basis and is conducted at the working pressure of the tube. Parker Autoclave will perform 100% hydrostatic testing at additional cost if desired.

Special Materials

In addition to the type 316/316L and 304/304L stainless steel tubing listed in this section, Autoclave has limited stock of hard-to-obtain special tubing materials:

Monel 400, Inconel 600*, Inconel 625*, Duplex, Super Duplex, Titanium Grade 2*, Nickel 200*, Hastelloy C276** (*Trademark names) Some are available in shorter lengths only. Please consult factory for stock availability.

Tubing Tolerance

Nominal Tubing Size inches (mm)	Tolerance/Outside Diameter inches (mm)
1/4 (6.35)	.248/.243 (6.30/6.17)
3/8 (9.53)	.370/.365 (9.40/9.27)
9/16 (14.27)	.557/.552 (14.15/14.02)
3/4 (19.05)	.745/.740 (18.92/18.80)
1 (25.40)	.995/.990 (25.27/25.14)
1-1/2 (38.10)	1.495/1.490 (37.98/37.85)

Catalog Number	Tube Material	Fits Connection Type	Tube Size Inches (mm) Outside Diameter	Inside Diameter	Wall Thickness	Flow Area in.² (mm²)	Working Pressure psi (bar)* -423 to 100°F -252 to 37.8°C	200°F 93°C	400°F 204°C	600°F 316°C	800°F 427°C
MS15-092	316SS	SF250CX	1/4 **(6.35)**	0.109 **(2.77)**	0.070 **(1.78)**	0.009 **(5.81)**	20,000 **(1378.93)**	20,000 **(1378.93)**	19,250 **(1327.22)**	18,050 **(1244.48)**	16,800 **(1158.30)**
MS15-192	304SS						20,000 **(1378.93)**	18,950 **(1306.54)**	17,200 **(1185.88)**	17,000 **(1172.09)**	16,150 **(1113.49)**
MS15-093	316SS	SF375CX	3/8 **(9.53)**	0.203 **(5.16)**	0.086 **(2.18)**	0.032 **(20.65)**	20,000 **(1378.93)**	20,000 **(1378.93)**	19,250 **(1327.22)**	18,050 **(1244.48)**	16,800 **(1158.30)**
MS15-193	304SS						20,000 **(1378.93)**	20,000 **(1378.93)**	19,250 **(1327.22)**	18,050 **(1244.48)**	16,800 **(1158.30)**
MS15-085	316SS	SF562CX	9/16 **(14.29)**	0.312 **(7.92)**	0.125 **(3.18)**	0.076 **(49.03)**	20,000 **(1378.93)**	20,000 **(1378.93)**	19,250 **(1327.22)**	18,050 **(1244.48)**	16,800 **(1158.30)**
MS15-187	304SS						20,000 **(1378.93)**	20,000 **(1378.93)**	19,250 **(1327.22)**	18,050 **(1244.48)**	16,800 **(1158.30)**
MS15-097	316SS	SF562CX	9/16 **(14.29)**	0.359 **(9.12)**	0.101 **(2.57)**	0.101 **(65.16)**	15,000 **(1034.16)**	15,000 **(1034.16)**	14,400 **(992.83)**	13,650 **(941.12)**	12,670 **(873.55)**
MS15-194	304SS						15,000 **(1034.16)**	14,170 **(976.97)**	12,900 **(889.41)**	12,750 **(879.07)**	12,670 **(873.55)**
MS15-095	316SS	SF750CX	3/4 **(19.05)**	0.438 **(11.13)**	0.156 **(3.96)**	0.151 **(97.42)**	20,000 **(1378.93)**	20,000 **(1378.93)**	19,250 **(1327.22)**	18,050 **(1244.48)**	16,800 **(1158.30)**
MS15-098	316SS			0.516 **(13.11)**	0.117 **(2.97)**	0.209 **(134.84)**	15,000 **(1034.16)**	15,000 **(1034.16)**	14,400 **(992.83)**	13,650 **(941.12)**	12,670 **(873.55)**
MS15-096	316SS	SF1000CX	1 **(25.40)**	0.562 **(14.27)**	0.219 **(5.56)**	0.248 **(160.00)**	20,000 **(1378.93)**	20,000 **(1378.93)**	19,250 **(1327.22)**	18,050 **(1244.48)**	16,800 **(1158.30)**
MS15-099	316SS			0.688 **(17.48)**	0.156 **(3.96)**	0.371 **(239.35)**	15,000 **(1034.16)**	15,000 **(1034.16)**	14,400 **(992.83)**	13,650 **(941.12)**	12,670 **(873.55)**
13041	316SS	SF1500CX	1-1/2 **(38.10)**	0.937 **(23.80)**	0.281 **(7.15)**	0.589 **(444.88)**	15,000 **(1034.16)**	15,000 **(1034.16)**	14,430 **(994.90)**	13,530 **(932.85)**	12,600 **(868.73)**

Note: Caution should be exercised in proper selection of Medium Pressure Tubing based on actual operating conditions. Two series available: 15,000 psi (1034 bar) and 20,000 psi (1379 bar).
*Maximum pressure rating is based on the lowest rating of any component.
Actual working pressure may be determined by tubing pressure rating, if lower.

All dimensions for reference only and subject to change.
For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.

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