

Threadolet® Branch Outlet Fittings

Integrally reinforced threaded (NPT) branch connections · NPS ½" to 6" · Class 3000 & 6000

PRODUCT DESCRIPTION

The Threadolet® is a forged, integrally reinforced 90° branch outlet fitting that is butt-welded to the run (header) pipe and receives the branch pipe in a female NPT threaded connection. It provides a full-strength, self-reinforced branch without additional reinforcing pads.

The tapered pipe thread is cut to ASME B1.20.1, so the branch pipe or instrument is simply screwed in — no branch welding. It is the standard choice for threaded small-bore branches, instrument connections, drains, vents and sample points in process, oil & gas, power and utility piping.

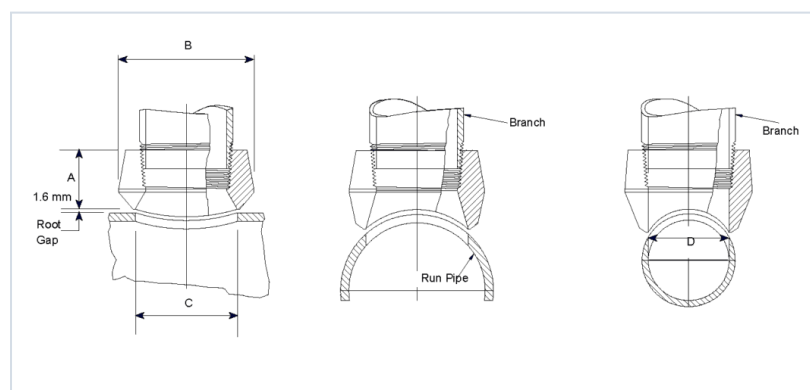
KEY FEATURES

- **Integral reinforcement** — designed to meet branch reinforcement requirements of the piping code without pads.
- **Female NPT branch end** to ASME B1.20.1 — screwed connection, no branch weld or bevel.
- **Class 3000 and 6000** pressure ratings, matching threaded pipe systems.
- **Reducing and size-on-size** outlets from NPS ½" to 6".

SPECIFICATION SUMMARY

Product	Threadolet® (Threaded Outlet) — 90° branch outlet fitting
Design standard	MSS SP-97 — Integrally Reinforced Forged Branch Outlet Fittings
Thread	Female NPT taper pipe thread to ASME B1.20.1
End connections	Butt-weld to run pipe; threaded (NPT) to branch pipe
Size range	NPS ½" – 6" (DN 6 – DN 150)
Pressure classes	Class 3000 Class 6000
Configuration	Reducing outlets (branch smaller than run) and size-on-size outlets
Materials	Carbon steel, low-temperature carbon steel, alloy steel, stainless steel, duplex and nickel alloys — as specified
Testing & certification	Material test certificate; thread gauging; NDT (MPI / DPT / UT) and third-party inspection on request
Marking	Manufacturer, size, class, material grade, heat number

DIMENSIONAL DRAWING



A Height — run-pipe surface to outlet face

B Outside diameter of outlet base

C Hole diameter to be cut in run pipe

D Bore diameter (size-on-size outlets)

Root gap: set approx. **1.6 mm** between outlet base and run pipe before butt welding.

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Dimensions — Class 3000, Class 6000 & Size-on-Size

DIMENSIONS — CLASS 3000

CLASS 3000 REDUCING OUTLETS				15 sizes
NPS inch	A mm	B mm	C mm	Weight kg
1/8	19.05	25.40	15.88	0.05
1/4	19.05	25.40	15.88	0.05
3/8	20.64	31.75	19.05	0.09
1/2	25.40	35.72	23.81	0.11
3/4	26.99	43.66	29.37	0.16
1	33.34	50.80	36.51	0.27
1 1/4	33.34	65.09	44.45	0.41
1 1/2	34.93	72.23	50.80	0.45
2	38.10	88.11	65.09	0.79
2 1/2	46.04	103.19	76.20	1.36
3	50.80	122.24	93.66	1.97
3 1/2	53.98	132.56	101.60	2.61
4	57.15	151.61	120.65	3.22
5	66.68	185.74	141.29	5.44
6	69.85	219.08	169.86	6.94

DIMENSIONS — CLASS 6000

CLASS 6000 REDUCING OUTLETS				8 sizes
NPS inch	A mm	B mm	C mm	Weight kg
1/4	28.58	34.13	14.29	0.14
3/8	28.58	34.13	14.29	0.14
1/2	31.75	43.66	19.05	0.20
3/4	36.51	49.61	25.40	0.34
1	39.69	61.91	33.34	0.57
1 1/4	41.28	69.06	38.10	0.73
1 1/2	42.86	82.55	49.21	0.88
2	55.03	102.39	69.85	2.27

DIMENSIONS — SIZE-ON-SIZE, CLASS 3000

CLASS 3000 SIZE-ON-SIZE OUTLETS					12 sizes
NPS inch	A mm	B mm	C mm	D mm	Weight kg
1/2	25.40	34.93	23.81	15.88	0.07
3/4	26.99	41.28	30.16	20.64	0.11
1	33.34	50.80	36.51	26.99	0.20
1 1/4	33.34	60.33	44.45	34.93	0.32
1 1/2	34.93	73.03	50.80	41.28	0.41
2	38.10	88.90	65.09	52.39	0.64
2 1/2	48.42	103.19	76.20	63.50	1.13
3	50.80	122.24	93.66	77.79	1.95
3 1/2	53.98	136.53	112.71	90.49	2.04
4	57.15	153.99	120.65	103.19	3.08
5	61.91	184.15	133.35	133.35	4.17
6	69.85	220.66	146.05	146.05	7.12

- All dimensions in millimetres; weights in kilograms and approximate.
- Reducing-outlet dimensions apply to outlets on run pipe larger than the branch; size-on-size outlets are for run and branch of equal nominal size (D = bore).
- Threads per ASME B1.20.1; design per MSS SP-97.

TYPICAL MATERIAL GRADES

Carbon steel	ASTM A105 / A105N
Low-temperature CS	ASTM A350 LF2 Cl.1 / Cl.2
Alloy steel	ASTM A182 F11, F22, F5, F9, F91
Stainless steel	ASTM A182 F304/304L, F316/316L, F321, F347
Duplex / super duplex	ASTM A182 F51 (S31803 / S32205), F53, F55
Nickel & copper alloys	Inconel, Monel, Hastelloy, Cu-Ni 90/10 & 70/30 — on request

Other grades, dual-certified materials and NACE MR0175 / ISO 15156 compliance available on request.

RELATED PRODUCTS

Weldolet	Socketlet	Elbolet	Latrolet	Nipolet
Sweepolet	Flanges	Forged fittings		

THREADED INSTALLATION GUIDANCE

- **Run-pipe weld:** cut hole C in the run pipe, fit the contoured base with a 1.6 mm root gap and complete the full-penetration butt weld.
- **Thread protection:** protect the NPT thread from weld spatter and heat; re-gauge after welding if required.
- **Branch make-up:** apply thread sealant or PTFE tape and engage the branch pipe hand-tight plus 1½ – 3 turns per ASME B1.20.1 practice.
- **Seal welding:** where the piping code or service requires, the threaded joint may be seal-welded after make-up — advise at time of order.

QUALITY & DOCUMENTATION

- Manufactured under an ISO-certified quality management system.
- Material test certificates with full heat-number traceability.
- Dimensional inspection report to MSS SP-97; threads gauged to ASME B1.20.1.
- Optional NDT: magnetic particle, dye penetrant or ultrasonic examination.
- Third-party / customer witness inspection arranged on request.

Ordering information: specify run-pipe size & schedule, branch size, pressure class (3000 / 6000), material grade, quantity, and any additional testing or certification requirements.