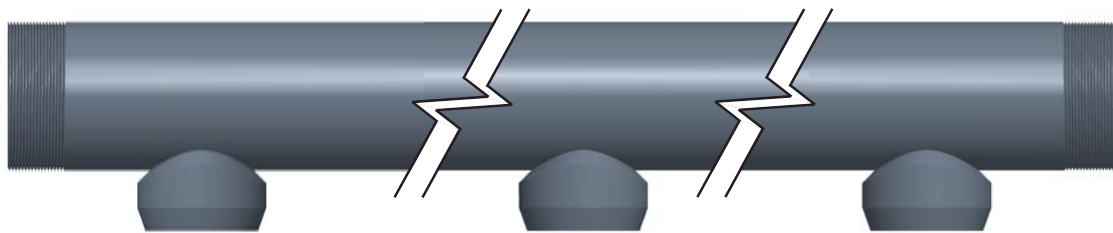


Manifold

Manifolds are fabricated sections of steel pipework. They enable multiple containers to be connected to a common pipe network. They may also be used in systems where main / reserve containers arrangements are required.

Figure 19 - Typical Manifold Assembly



Technical Information

Material: ASTM A106 Gr B / BS 3601 Schedule 80
 Inlet: NPT socket
 Outlet: BSP Taper / NPT Taper / 6" Flange
 Test Press. 90 bar (1305 psi)
 Finish: Primed, Ready to paint on site.

Note: Assemblies do not include check valves and end caps.
 For 343 litre manifolds the check valves are part of the hose.

Table 6: Manifolds

Part No.	No. of Inlets	Manifold Pipe Size	Inlet to End Cap Distance mm	Inlet to Inlet Distance mm	Inlet to End Connection Distance mm	Container Size	Overall Length mm	End Thread Connection
307.209.022	2	65mm (2.5")	150 (6")	350 (14")	150 (6")	4.5 L to 32 L	650 (25.6")	BSPT
307.209.023	3	65mm (2.5")	150 (6")	350 (14")	150 (6")	4.5 L to 32 L	1000 (39.4")	BSPT
307.209.024	4	65mm (2.5")	150 (6")	350 (14")	150 (6")	4.5 L to 32 L	1350 (53.1")	BSPT
307.209.001	2	65mm (2.5")	150 (6")	350 (14")	150 (6")	4.5 L to 32 L	650 (25.6")	NPT
307.209.002	3	65mm (2.5")	150 (6")	350 (14")	150 (6")	4.5 L to 32 L	1000 (39.4")	NPT
307.209.003	4	65mm (2.5")	150 (6")	350 (14")	150 (6")	4.5 L to 32 L	1350 (53.1")	NPT
307.209.025	2	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	808 (31.8")	BSPT
307.209.026	3	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1316 (51.8")	BSPT
307.209.027	4	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1824 (71.8")	BSPT
307.209.028	5	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2332 (91.8")	BSPT
307.209.029	6	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2840 (111.8")	BSPT
307.209.004	2	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	808 (31.8")	NPT
307.209.005	3	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1316 (51.8")	NPT
307.209.006	4	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1824 (71.8")	NPT
307.209.007	5	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2332 (91.8")	NPT
307.209.008	6	80mm (3")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2840 (111.8")	NPT

SECTION 2 - SYSTEM COMPONENTS

Table 6: Manifolds (Continued)

Part No.	No. of Inlets	Manifold Pipe Size	Inlet to End Cap Distance mm	Inlet to Inlet Distance mm	Inlet to End Connection Distance mm	Container Size	Overall Length mm	End Thread Connection
307.209.030	2	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	808 (31.8")	BSPT
307.209.031	3	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1316 (51.8")	BSPT
307.209.032	4	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1824 (71.8")	BSPT
307.209.033	5	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2332 (91.8")	BSPT
307.209.034	6	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2840 (111.8")	BSPT
307.209.009	2	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	808 (31.8")	NPT
307.209.010	3	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1316 (51.8")	NPT
307.209.011	4	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	1824 (71.8")	NPT
307.209.012	5	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2332 (91.8")	NPT
307.209.013	6	100mm (4")	150 (6")	508 (20")	150 (6")	52 L to 180 L	2840 (111.8")	NPT
307.209.014	3	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	1416 (55.7")	Flange
307.209.015	4	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	1924 (75.7")	Flange
307.209.016	5	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	2432 (95.7")	Flange
307.209.017	6	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	2940 (115.7")	Flange
307.209.018	7	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	3448 (135.7")	Flange
307.209.019	8	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	3956 (155.7")	Flange
307.209.020	9	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	4464 (175.7")	Flange
307.209.021	10	150mm (6")	150 (6")	508 (20")	200 (8")	52 L to 180 L	4972 (195.7")	Flange
307.209.038	2	100mm (4")	150 (6")	711 (28")	150 (6")	343 L	1011 (40")	BSPT
307.209.039	3	100mm (4")	150 (6")	711 (28")	150 (6")	343 L	1722 (68")	BSPT
307.209.040	4	100mm (4")	150 (6")	711 (28")	150 (6")	343 L	2433 (96")	BSPT
307.209.035	2	100mm (4")	150 (6")	711 (28")	150 (6")	343 L	1011 (40")	NPT
307.209.036	3	100mm (4")	150 (6")	711 (28")	150 (6")	343 L	1722 (68")	NPT
307.209.037	4	100mm (4")	150 (6")	711 (28")	150 (6")	343 L	2433 (96")	NPT
307.209.041	2	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	1111 (43.7")	Flange
307.209.042	3	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	1822 (71.7")	Flange
307.209.043	4	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	2533 (99.7")	Flange
307.209.044	5	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	3244 (127.7")	Flange
307.209.045	6	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	3955 (155.7")	Flange
307.209.046	7	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	4666 (183.7")	Flange
307.209.047	8	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	5377 (211.7")	Flange
307.209.048	9	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	6088 (239.7")	Flange
307.209.049	10	150mm (6")	150 (6")	711 (28")	200 (8")	343 L	6799 (267.7")	Flange

Note: For ease of assembly flanged manifolds are available for 150 mm diameter.

150mm flanged manifolds with either 3 or 4 ports are supplied as a one piece assembly. Whilst manifolds with 5 to 10 ports are made up from smaller sections due to the size and weight as listed below:

5 port manifold - 3 port end and 2 port mid section

6 port manifold - 3 port end and 3 port mid section

7 port manifold - 3 port end and 2 port mid section

8 port manifold - 4 port end and 3 port mid section

9 port manifold - 3 port end and two 3 port mid sections

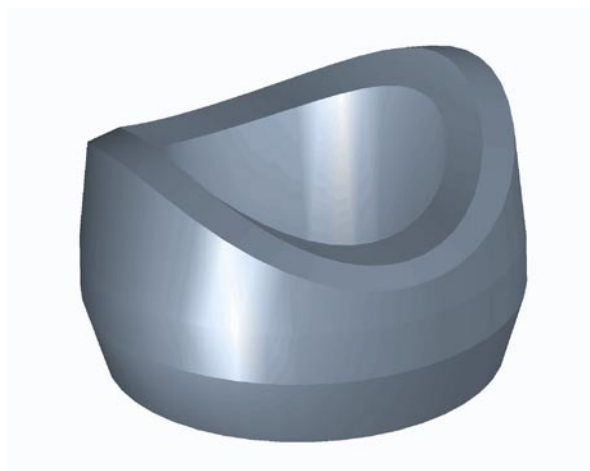
10 port manifold - 4 port end and two 3 port mid sections

All 150mm flanged manifolds include an end cap.

Manifold Inlets (Sockets)

Manifold inlets are available for the construction of system manifolds.

Figure 20 - Threaded Inlet for Manifolds.



Technical Information

Material: Carbon Steel to
ASTM A105 / ASTM A350 LF2
Dimensions: ANSI B16.11 / BS3799
Pressure Rating: 3000lb

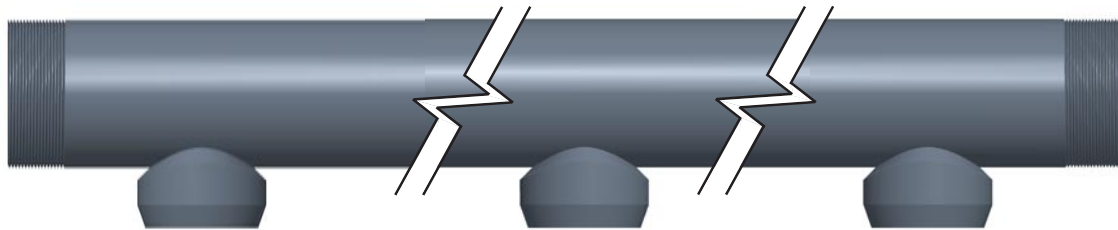
Table 7: Manifold Inlets

Part No.	Manifold Pipe Size	Container Size	Overall Diameter mm	Thread Connection	Overall Height mm	Weight kg
17036	65mm (2½")	4.5 L to 32 L	75 dia. (2.95")	1½ in. NPT	44 (1.73")	0.71 (1.57 lbs)
17037	80mm (3")	52 L to 180 L	100 dia. (3.94")	2½ in. NPT	63 (2.48")	1.20 (2.65 lbs)
17038	100mm (4")	52 L to 180 L	100 dia. (3.94")	2½ in. NPT	63 (2.48")	1.52 (3.35 lbs)
17467	150mm (6")	52 L to 180 L	100 dia. (3.94")	2½ in. NPT	63 (2.48")	1.54 (3.40 lbs)
15332	100mm (4")	343 L	122 dia. (4.80")	3 in. NPT	70 (2.76")	2.05 (4.52 lbs)
15333	150mm (6")	343 L	122 dia. (4.80")	3 in. NPT	63 (2.48")	1.53 (3.37 lbs)

SECTION 2 - SYSTEM COMPONENTS**Construction of Manifolds**

For customers wishing to manufacture their own manifolds they must be constructed as detailed below, and use the manifold inlets specified on Page 24, (Figure 20 and Table 7).

Figure 21 - Manifold construction



- PIPING MUST BE SCHEDULE 80
- TEST PRESSURE - 90 BAR (1300 psi)
- ALL DIMENSIONS MUST BE WITHIN± 1/8"
- AFTER WELDING, MAKE CERTAIN ALL INLET HOLES IN THE PIPE ARE CLEAN OF ANY WELD SPATTER AND OPEN COMPLETELY

Table 8: Manifolds

No. of Inlets	End Connection	Overall Length mm	Inlet to End Cap Distance mm	Inlet to Inlet Distance mm	Container Size	Socket Part No.
2	2½ in. BSPT / 2½ in. NPT	650 (25.6")	150 (6")	350 (14")	4.5 L to 32 L	17036
3	2½ in. BSPT / 2½ in. NPT	1000 (39.4")	150 (6")	350 (14")	4.5 L to 32 L	17036
4	2½ in. BSPT / 2½ in. NPT	1350 (53.1")	150 (6")	350 (14")	4.5 L to 32 L	17036
2	3 in. BSPT / 3 in. NPT	808 (31.8")	150 (6")	508 (20")	52 L to 180 L	17037
3	3 in. BSPT / 3 in. NPT	1316 (51.8")	150 (6")	508 (20")	52 L to 180 L	17037
4	3 in. BSPT / 3 in. NPT	1824 (71.8")	150 (6")	508 (20")	52 L to 180 L	17037
5	3 in. BSPT / 3 in. NPT	2332 (91.8")	150 (6")	508 (20")	52 L to 180 L	17037
6	3 in. BSPT / 3 in. NPT	2840 (111.8")	150 (6")	508 (20")	52 L to 180 L	17037
2	4 in. BSPT / 4 in. NPT	808 (31.8")	150 (6")	508 (20")	52 L to 180 L	17038
3	4 in. BSPT / 4 in. NPT	1316 (51.8")	150 (6")	508 (20")	52 L to 180 L	17038
4	4 in. BSPT / 4 in. NPT	1824 (71.8")	150 (6")	508 (20")	52 L to 180 L	17038
5	4 in. BSPT / 4 in. NPT	2332 (91.8")	150 (6")	508 (20")	52 L to 180 L	17038
6	4 in. BSPT / 4 in. NPT	2840 (111.8")	150 (6")	508 (20")	52 L to 180 L	17038
3	6 in. Flange	1366 (53.8")	150 (6")	508 (20")	52 L to 180 L	17467
4	6 in. Flange	1874 (73.8")	150 (6")	508 (20")	52 L to 180 L	17467
5	6 in. Flange	2382 (93.8")	150 (6")	508 (20")	52 L to 180 L	17467
6	6 in. Flange	2890 (113.8")	150 (6")	508 (20")	52 L to 180 L	17467
7	6 in. Flange	3398 (133.8")	150 (6")	508 (20")	52 L to 180 L	17467
8	6 in. Flange	3906 (153.8")	150 (6")	508 (20")	52 L to 180 L	17467
9	6 in. Flange	4414 (173.8")	150 (6")	508 (20")	52 L to 180 L	17467
10	6 in. Flange	4922 (193.8")	150 (6")	508 (20")	52 L to 180 L	17467

Table 8: Manifolds (Continued)

No. of Inlets	End Connection	Overall Length mm	Inlet to End Cap Distance mm	Inlet to Inlet Distance mm	Container Size	Socket Part No.
2	4 in. BSPT / 4 in. NPT	1011 (40")	150 (6")	711 (28")	343 L	15332
3	4 in. BSPT / 4 in. NPT	1722 (68")	150 (6")	711 (28")	343 L	15332
4	4 in. BSPT / 4 in. NPT	2433 (96")	150 (6")	711 (28")	343 L	15332
2	6 in. Flange	1061 (42")	150 (6")	711 (28")	343 L	15333
3	6 in. Flange	1772 (70")	150 (6")	711 (28")	343 L	15333
4	6 in. Flange	2483 (98")	150 (6")	711 (28")	343 L	15333
5	6 in. Flange	3192 (126")	150 (6")	711 (28")	343 L	15333
6	6 in. Flange	3905 (154")	150 (6")	711 (28")	343 L	15333
7	6 in. Flange	4616 (182")	150 (6")	711 (28")	343 L	15333
8	6 in. Flange	5327 (210")	150 (6")	711 (28")	343 L	15333
9	6 in. Flange	6038 (238")	150 (6")	711 (28")	343 L	15333
10	6 in. Flange	6749 (266")	150 (6")	711 (28")	343 L	15333