

CHOOSING YOUR MANIFOLD & LOCATION

THOUGHTS ON ZONING

The function of a manifold is to distribute the correct flow to each loop to meet its specific heating load. This is achieved by balancing each loop to meet the design flow requirement. Customized zoning can be achieved by adding actuators for the different loops controlled by thermostats. Each room would then be a zone, allowing the thermostat to open and close the valve to the room as required. For simpler one zone systems, it is possible to just control a zone valve or the pump. Zoning rooms with different loads or that are seldom occupied, allow you to keep those areas at a lower setting, saving energy without sacrificing comfort elsewhere. Heavily used spaces, such as bathrooms and kitchens, can be kept warmer than the rest of the house for the "barefoot comfort" homeowners often expect from a radiant system.

MANIFOLD LOCATIONS

The number of manifolds and their location will depend on the size of the structure. Most manifolds are installed in the mechanical room. Sometimes, the distance from the mechanical room to the farthest room served will exceed the allowed maximum loop length. In those cases, a manifold will have to be located closer to the served room/zone. It is good practice when designing a system to identify potential trouble spots early and to find manifold locations that meet the system needs. Look for clusters of rooms with similar, exposure, use-patterns, floor construction etc. that may have a common location to feed the loops from, such as a closet or similar. Find planned locations for the manifold(s). Take spot check measurements to verify that the location and distance to all rooms served by the manifold are as planned.

MANIFOLD CONSIDERATION

MrPEX® offers 1 ¼" and 1 ½" stainless steel manifolds, as well as composite and 1 ½" brass manifolds. The selection between stainless steel, composite and brass is strictly matter of preference. The selection of the size is has more to do with the design requirements, but as a rule of thumb the 1 ¼" manifolds are used for residential applications, and the 1 ½" manifolds are mostly used for commercial or larger projects due to the typically higher flow requirements.

Following pages will give you more detailed information about each of the manifolds we offer.

MANIFOLDS

MrPEX® 1 ¼" Stainless Steel Manifold is made from high quality stainless steel, and is offered in 2 through 12 loop configurations. The manifold comes mounted on brackets and it is equipped with full port ball valves provided with thermometers, manual air vents and fill/drain valves. The branch Cv value is 1.39.

The SUPPLY (upper) manifold is fitted with balancing flowmeters with readable range of 0 to 2 GPM that allow flow adjustment of each individual loop. The flow meters have a brass body and the sight glass is made from temperature and impact resistant plastic material, all components are antifreeze resistant up to a 50% mix.

The RETURN (lower) manifold, has manual on/off valves that controls the flow for each individual circuit. The manual knob can be removed to accommodate the MrPEX® actuators VA 10 Adapter (part# 5120700 & 5120701).

Supply and return mains can be connected from either left or right sides. The manifold comes ready for a left-hand connection. Connection from the right can be done by removing the manifold body from the brackets and flipping them over.

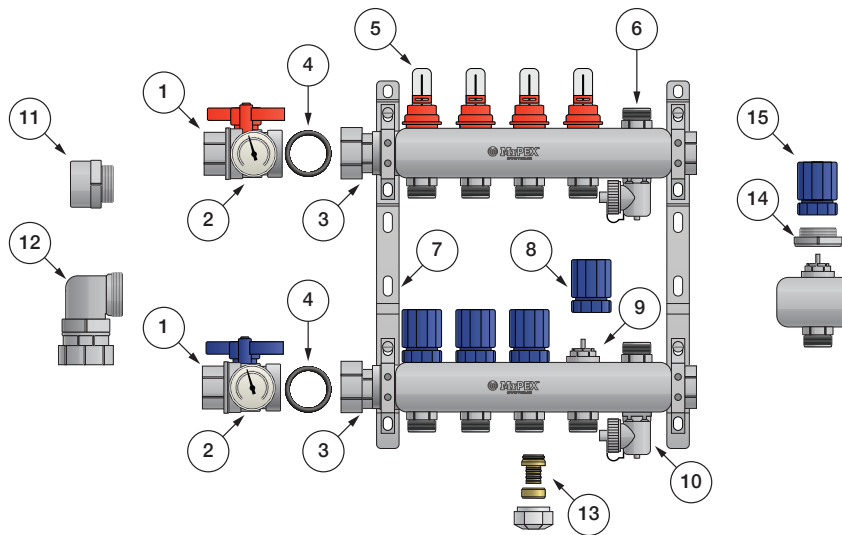
MrPEX® 1 ¼" Stainless Steel Manifold Assembly w/Flowmeter and Ball Valve



* Shipped as shown

PART#	TYPE	UNIT
3250200	2 Branches	Each
3250300	3 Branches	Each
3250400	4 Branches	Each
3250500	5 Branches	Each
3250600	6 Branches	Each
3250700	7 Branches	Each
3250800	8 Branches	Each
3250900	9 Branches	Each
3251000	10 Branches	Each
3251100	11 Branches	Each
3251200	12 Branches	Each



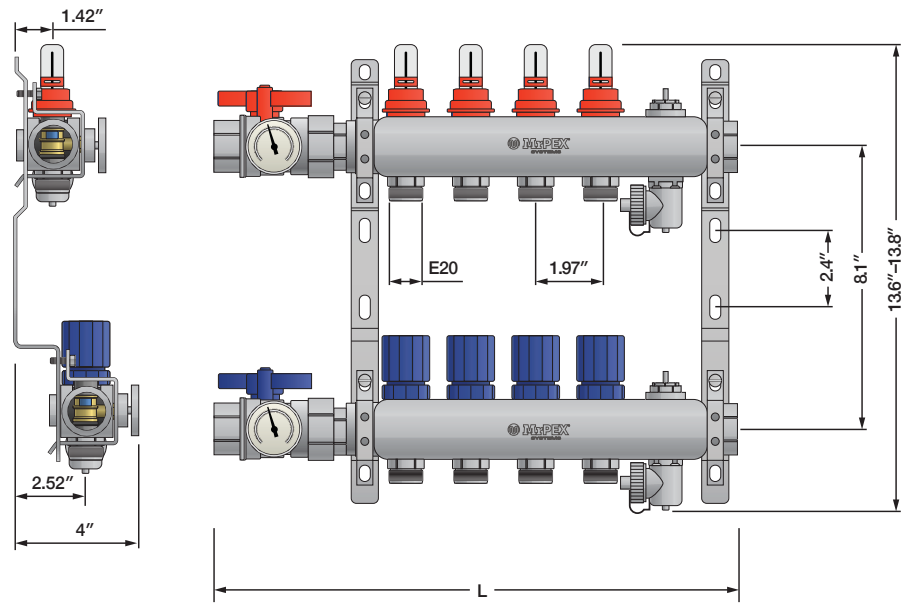


Manifold Options

#	PART#	DESCRIPTION	TYPE
1	3250018	Manifold Ball Valves, supply & return, straight, w/ thermometer, spare part	1" NPT X G 1-1/4" Flat Gasket
2	3250001	Thermometer, spare part	32 °F to 175 °F
3	3250002	1" BSP Manifold Connection X G 1-1/4" Union Flat Gasket, spare part	
4	3761175	Flat Gasket 1-1/4", spare part	Rubber EPDM 60 SH
5	3741172	Flowmeter for manifold series 325XXX and 332XXX, spare part	0 to 2 GPM
6	3740011	Manual Air Vent, spare part	
7	3741171	1-1/4" Manifold Bracket for manifold series 325XXXX, spare part	
8	3741173	Plastic Valve Cap, spare part	Threaded M30x1.5 - Blue
9	3741174	On/Off Valve for manifold series, 325XXX and 332XXX, spare part	Threaded M30x1.5
10	3740002	Fill/Drain Valve for manifold series 325XXXX and 332XXXX, spare part	3/4" GHT
11	3230010	G 1-1/4" Flat Gasket X 1" Female NPT Straight Fitting Kit	
12	3250007	G 1 1/4 Flat Gasket X G 1 1/4 Flat Gasket Union Elbow Kit	
13	4310***	Compression pre-assembled fitting for "MrPEX PE-Xa Tubing"	For sizes 3/8" - 1/2" - 5/8"
13	435****	PEX Expansion fitting Assembly, F1960	For sizes 1/2" - 5/8" - 3/4"
14	5700010	Plastic Adapter for electrothermal actuator 5120701	Threaded M30x1.5 - Type VA10
15	5120700	MrPEX electrothermal actuator 24V AC 4-wire w/ End Switch	Quick connection
15	5120701	MrPEX electrothermal actuator 24V AC 2-wire	Quick connection

* = Requires EK Compression fitting, see compression fitting section in MrPEX® Price List

** = see compression fitting section in MrPEX® Price List



Manifold Options

PART#	TYPE	LENGTH L (INCH)
3250200	2 Branches	10.6"
3250300	3 Branches	12.6"
3250400	4 Branches	14.6"
3250500	5 Branches	16.5"
3250600	6 Branches	18.5"
3250700	7 Branches	20.4"
3250800	8 Branches	22.4"
3250900	9 Branches	24.4"
3251000	10 Branches	26.3"
3251100	11 Branches	28.3"
3251200	12 Branches	30.3"

1 1/2" LARGE STAINLESS STEEL MANIFOLDS FOR 5/8" AND 3/4" PEX AND PEX-AL-PEX TUBING

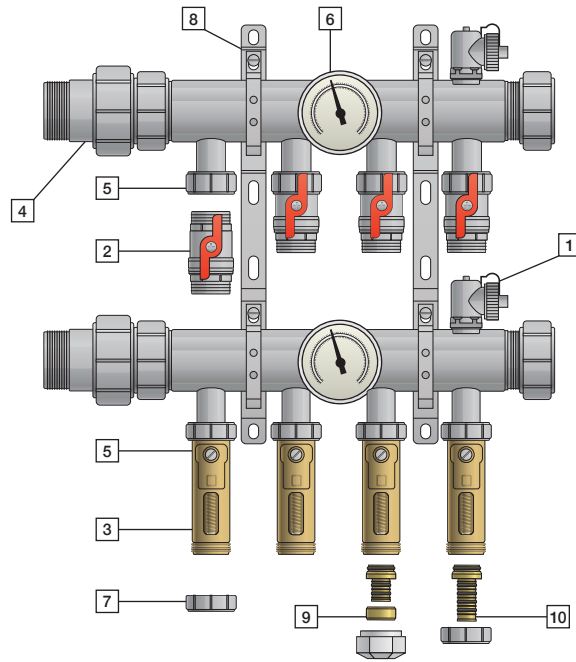
MrPEX® 1 1/2" Stainless Steel Manifolds are made from high-quality Type 304 stainless steel and comes fully assembled in 3–13 loop configurations. The manifold body supply and return inlet comes with 1 1/2" NPT flat gasket union to aid in installation. End cap, vent, drain/purge valve come factory mounted on the body. The branches come with G 1" x EK 25 flat gasket on/off valves on the supply, and G 1" x EK 25 flat gasket inline visual flowmeter with built-in balancing valves on the return. Use any of the MrPEX® EK 25 fitting assemblies (PEX to EK 25 or PEX-AL-PEX to EK 25) to connect tubing to the manifold.



1 1/2" Stainless Steel Manifold, Supply & Return Body, G 1" Branch Union, 3" O.C.

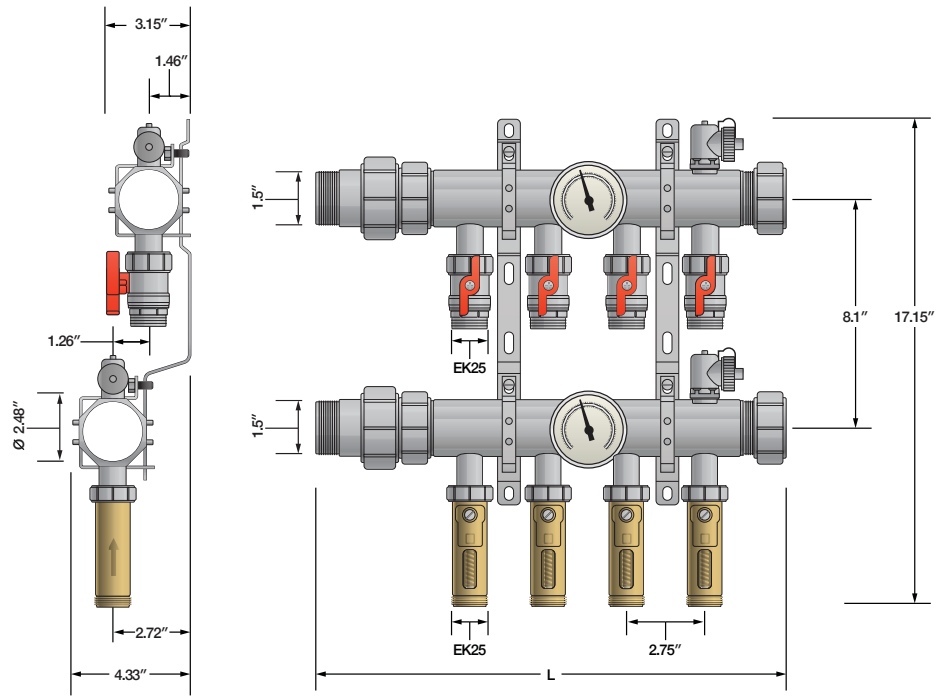
PART#	TYPE	UNIT
3260300	3 Branches	Each
3260400	4 Branches	Each
3260500	5 Branches	Each
3260600	6 Branches	Each
3260700	7 Branches	Each
3260800	8 Branches	Each
3260900	9 Branches	Each
3261000	10 Branches	Each
3261100	11 Branches	Each
3261200	12 Branches	Each
3261300	13 Branches	Each





Manifold Options

#	PART#	DESCRIPTION	TYPE
1	3740002	Fill/Drain Valve, Spare Part for Manifold Series 326xxxx	G 1/2" x 3/4" GHT
2	3761174	Branch On/Off Valve, Spare Part	G 1" Flat Gasket x EK 25
3	3761172	Inline Flowmeter, Spare Part	G 1" Flat Gasket x EK 25
4	3760001	Union Connection for Manifold Series 326xxxx, Spare Part	G 1-1/2" Female 1-1/2" NPT
5	3761176	Flat Gasket 1", Spare Part	Rubber EPDM 60SH
6	5240748	Strap On Thermometer with Spring, Spare Part	32" to 176"
7	3610004	Loop Cap for Manifolds, G1"	G 1" for EK25
8	3761171	Manifold Bracket for Manifold Series 326xxxx, Spare Part	5/8" PEX x EK 25
9	4320525	PEX Fitting Assembly (Nut, Ring, & Insert) for EK 25	5/8" PEX x EK 25
9	4320750	PEX Fitting Assembly (Nut, Ring, & Insert) for EK 25	3/4" PAP x EK 25
10	4360625	PEX Expansion Fitting Assembly F1960 for EK 25	5/8" PEX x EK 25
10	4360750	PEX Expansion Fitting Assembly F1960 for EK 25	3/4" PAP x EK 25



Manifold Options

PART#	TYPE	LENGTH
3260300	3 Branches	11.8"
3260400	4 Branches	14.55"
3260500	5 Branches	17.30"
3260600	6 Branches	20.05"
3260700	7 Branches	22.80"
3260800	8 Branches	25.55"
3260900	9 Branches	28.30"
3261000	10 Branches	31.05"
3261100	11 Branches	33.80"
3261200	12 Branches	36.55"
3261300	13 Branches	39.30"

COMPOSITE MANIFOLD FOR UP TO 5/8" TUBING, 2-12 BRANCHES

MrPEX Composite Radiant Manifold is made from a durable high performance glass filled plastic designed to withstand high temperature and pressure. The manifold exceeds the oxygen diffusion standard DIN 4726 and is completely corrosion resistant. The manifold has flow capacity of 15.4 GPM with a branch Cv of 1.35 GPM and comes partially assembled as a complete kit.

Kit includes;

- › A complete supply body with positive shut-off balancing flowmeters, thermometer, a Fill/Drain valve with Vent, and a blank end cap.
- › A complete return body with on/off valves for manual shut-off, thermometer, a Fill/Drain valve with Vent, and a blank end cap.
- › A set of mounting brackets
- › A set of 1" NPT isolation union ball-valves.



* Shipped as a kit

Plastic cap on the return valve can be removed to accommodate valve actuator #5120700 or #5120701 (Adapter VA 90 part #5700090 is needed and purchased separately). The branches have Eurokonus (EK20) connections, and all MrPEX® EK20 compression fitting assemblies (PEX to EK20 or PEX-AL-PEX to EK20) can be used to connect tubing up to 5/8" to the manifold. Single, 2 loop, 3 loop, and 4 loop add-on supply and return manifold sections and other accessories are sold separately to allow for easy add-on.



Composite Manifold, Valve & Flowmeter, Complete Kit

PART#	TYPE	UNIT
3810200	2 Branches	Each
3810300	3 Branches	Each
3810400	4 Branches	Each
3810500	5 Branches	Each
3810600	6 Branches	Each
3810700	7 Branches	Each
3810800	8 Branches	Each
3810900	9 Branches	Each
3811000	10 Branches	Each
3811100	11 Branches	Each
3811200	12 Branches	Each



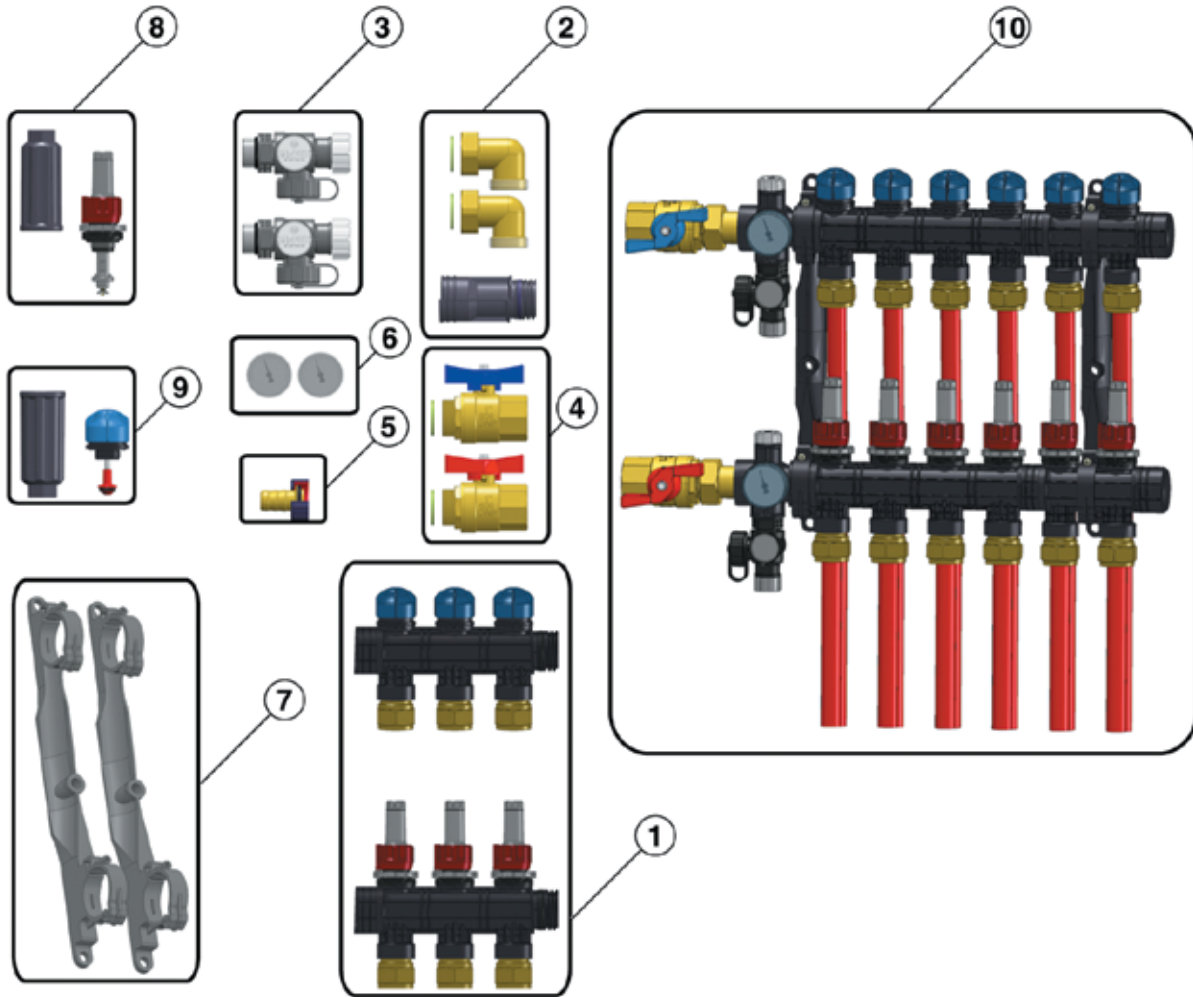
Composite Manifold Sections, Valve & Flowmeter

PART#	TYPE	UNIT
3810001	1 Branche	Each
3810002	2 Branches	Each
3810003	3 Branches	Each



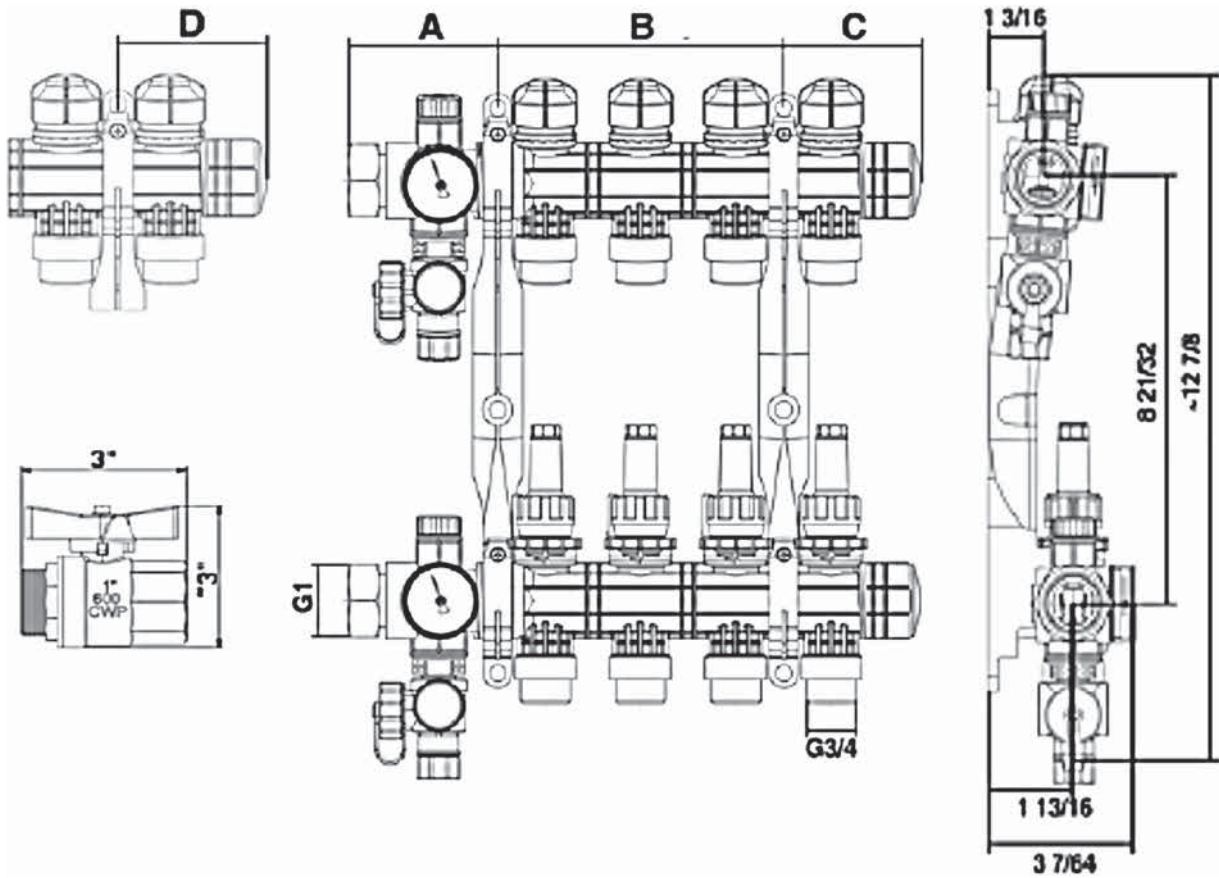
Composite Manifold Elbow Set

PART#	TYPE	UNIT
3810007	90° Supply and Return Elbow set	Set of 2



Manifold Options

#	PART#	DESCRIPTION	TYPE	UNIT
1	3810001	Composite Manifold Sections, Valve & Flow-meter	1 Branch	Each
	3810002	Composite Manifold Sections, Valve & Flow-meter	2 Branch	Each
	3810003	Composite Manifold Sections, Valve & Flow-meter	3 Branch	Each
2	3810007	Composite Manifold Body Extension Set		Set of 2
3	3810010	Drain Valve for #3810009, spare part		Set of 2
4	3810014	Composite Manifold Isolation ball-valves, spare part		Set of 2
5	3810015	Hose connector for drain valve, spare part		Each
6	3810016	Composite Manifold Thermometer, spare part		Set of 2
7	3810171	Composite Manifold Bracket, spare part		Set of 2
8	3810172	Composite Manifold Supply flowmeter valve, spare part		Each
9	3810174	Composite Manifold On/Off valve, spare part		Each
10	3810200	Composite Manifold, Valve & Flowmeter, Complete Kit	2 Branch	Each
	3810300	Composite Manifold, Valve & Flowmeter, Complete Kit	3 Branch	Each
	3810400	Composite Manifold, Valve & Flowmeter, Complete Kit	4 Branch	Each
	3810500	Composite Manifold, Valve & Flowmeter, Complete Kit	5 Branch	Each
	3810600	Composite Manifold, Valve & Flowmeter, Complete Kit	6 Branch	Each
	3810700	Composite Manifold, Valve & Flowmeter, Complete Kit	7 Branch	Each
	3810800	Composite Manifold, Valve & Flowmeter, Complete Kit	8 Branch	Each
	3810900	Composite Manifold, Valve & Flowmeter, Complete Kit	9 Branch	Each
	3811000	Composite Manifold, Valve & Flowmeter, Complete Kit	10 Branch	Each
	3811100	Composite Manifold, Valve & Flowmeter, Complete Kit	11 Branch	Each
	3811200	Composite Manifold, Valve & Flowmeter, Complete Kit	12 Branch	Each



PART#	TYPE	A	B	C	D
3810200	2 Branches	3.125"	4"	3"	1"
3810300	3 Branches	5.125"	4"	3"	1"
3810400	4 Branches	5.125"	4"	5"	2.875"
3810500	5 Branches	5.125"	6"	5"	2.875"
3810600	6 Branches	5.125"	6"	5"	2.875"
3810700	7 Branches	7.125"	7.875"	5"	2.875"
3810800	8 Branches	7.125"	7.875"	7"	4.875"
3810900	9 Branches	7.125"	9.875"	7"	4.875"
3811000	10 Branches	9"	9.875"	7"	4.875"
3811100	11 Branches	9"	11.875"	7"	4.875"
3811200	12 Branches	9"	11.875"	9"	6.875"

1 1/2" BRASS MANIFOLDS

MrPEX 1 1/2" Brass Manifold is made from high quality alloy extruded and chrome plated after machining, and is offered in 2 through 12 loop configurations. The manifold comes mounted on brackets and it is equipped with high flow ball valves provided with thermometers, manual air vents and fill/drain valves.

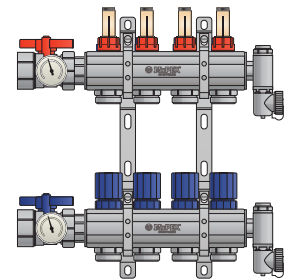
The SUPPLY (upper) manifold is fitted with balancing flowmeters with readable range of 0 to 2 GPM that allow flow adjustment of each individual loop. The flow meters have a brass body and the sight glass is made from temperature and impact resistant plastic material, all components are antifreeze resistant up to a 50% mix.

The RETURN (lower) manifold, has manual on/off valves that controls the flow for each individual circuit. The manual knob can be removed to accommodate the MrPEX actuators (part#5120700 & 5120701).

Supply and return mains can be connected from either left or right sides. The manifold comes ready for a left-hand connection. Connection from the right can be done by removing the manifold body from the brackets and flipping them over.

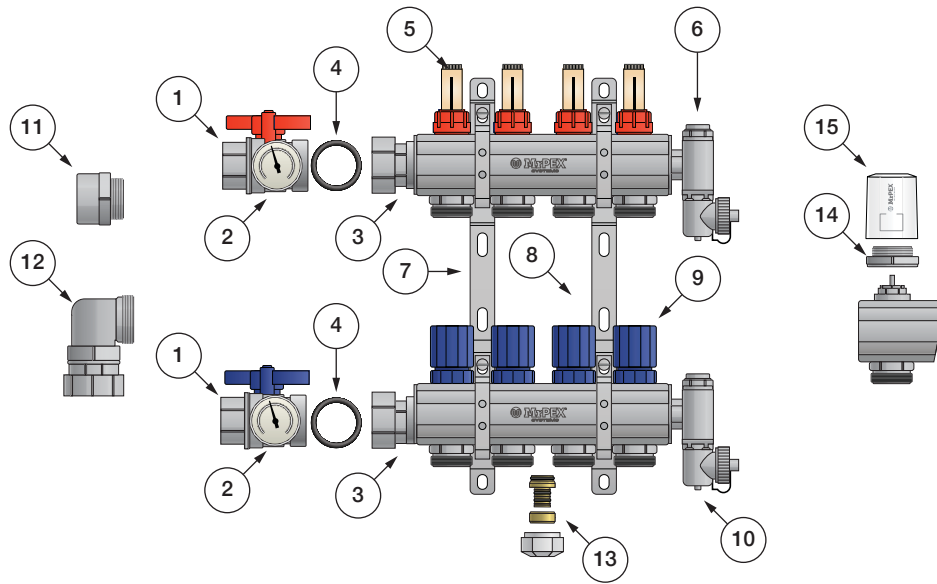
1 1/2" Manifold Valve & Balancing Flow Meter Fully Assembled

PART#	TYPE	UNIT
3320200	2 Branches	Each
3320300	3 Branches	Each
3320400	4 Branches	Each
3320500	5 Branches	Each
3320600	6 Branches	Each
3320700	7 Branches	Each
3320800	8 Branches	Each
3320900	9 Branches	Each
3321000	10 Branches	Each
3321100	11 Branches	Each
3321200	12 Branches	Each



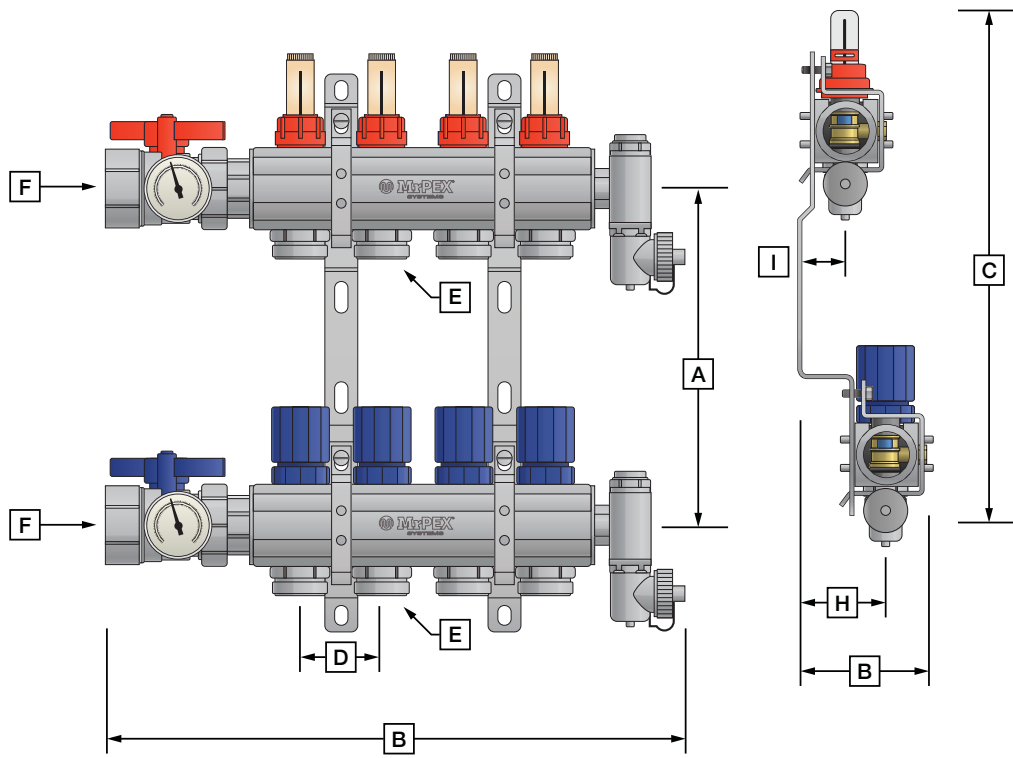
* Shipped as shown





Manifold Options

#	PART#	DESCRIPTION	TYPE	UNIT
1	3320018	Manifold Ball Valves , supply & return, straight , w/ thermometer, spare part	1-1/4" NPT X G 1-1/4 " Flat Gasket	Set of 2
2	3250001	Thermometer, spare part	32 °F to 175 °F	Each
3	3320002	1-1/4" BSP Manifold Connect ion X G 1-1/4" Union Flat Gasket, spare part		Set of 2
4	3761175	Flat Gasket 1-1/4", spare part	Rubber EPDM 60 SH	Set of 10
5	3741172	Flow meter for manifold series 325XXX and 332XXX, spare part	0 to 2 GPM	Each
6	3740011	Manual Air Vent , spare part		Each
7	3761171	1-1/2 " Manifold Bracket for manifold series 332XXXX, spare part		Set of 2
8	3741173	Plastic Valve Cap, spare part	Threaded M30xl.5 - Blue	Each
9	3741174	On/ Off Valve for manifold series, 325XXX and 332XXX, spare part	Threaded M30xl .5	Each
10	3740002	Fill/ Drain Valve for manifold series 325XXXX and 332XXXX, spare part	3/4" GHT	Each
11	3250010	G 1-1/4 " Flat Gasket X 1" Female NPT Straight Fitting Kit		Set of 2
12	3250007	G 11/4 Flat Gasket X G 11/4 Flat Gasket Union Elbow Kit		Set of 2
13	***	Compression fitting for "MrPEX PEX Tubing"	For sizes 5/ 8" - 3/ 4"	Set of 2
14	5700010	Plastic Adapter for electrothermal actuator 5120701	Threaded M30xl.5 - Type VA10	Each
15	5120700	MrPEX electrothermal actuator 24V AC 4-wire w/ End Switch	Quick connection	Each
15	5120701	MrPEX electrothermal actuator 24V AC 2-wire	Quick connection	Each



1 1/2" Brass Manifold, Valve & Balancing Flow Meter

PART#	TYPE	A	B	C	D	E	F	G	H	I
3320200	2 Branches	8.1"	10.2"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3320300	3 Branches	8.1"	12.2"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3320400	4 Branches	8.1"	14.2"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3320500	5 Branches	8.1"	16.1"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3320600	6 Branches	8.1"	18.1"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3320700	7 Branches	8.1"	20.1"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3320800	8 Branches	8.1"	22.0"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3320900	9 Branches	8.1"	26.0"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3321000	10 Branches	8.1"	26.0"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3321100	11 Branches	8.1"	28.0"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"
3321200	12 Branches	8.1"	29.9"	13.6"-13.8"	1.97"	EK25	1 1/4" FIP	4.21"	2.72"	1.26"