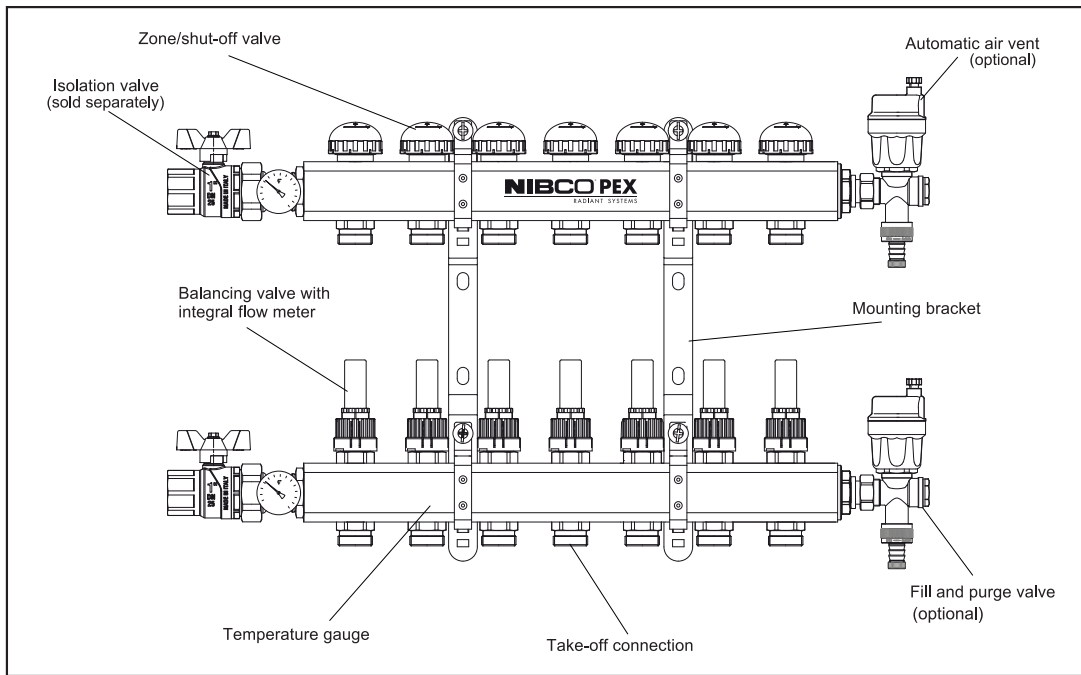


Project Name: \_\_\_\_\_  
 NIBCO Representative: \_\_\_\_\_  
 Unit Tag #: \_\_\_\_\_ Order by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

## MANIFOLD SET COMPONENTS



## ENGINEERING SPECIFICATION

Manifold sets, consisting of Supply and Return manifolds, shall include/make available: temperature gauges, mounting brackets, balancing valves, shutoff valves, hose bibbs for filling/purging, automatic air vents, pre-assembled adaptor fittings for connecting PEX tubing. Manifolds shall have at least a 1" internal diameter and be produced from brass, nickel-plated for corrosion protection. Manifolds shall accept SDR 9 Oxygen-Barrier PEX tubing produced to the requirements of ASTM F876/F877 in nominal dimensions of 1/2" and 5/8". Manifolds shall be isolated from Supply and Return piping using valves suitable for isolation. Supply manifolds shall have manual loop/circuit flow rate adjustment with lockshields to discourage tampering and integral flow meters for measuring system fluid flow rate. Return manifolds shall have manual loop/circuit shutoff valves able to be optionally thermostatically controlled via electrothermal actuator heads. Manifold sets shall be assembled using high-viscosity non-toxic silicone lubricant on all o-rings to allow proper seating of components.

*Performance:* Maximum pressure and temperature ratings shall be 90 psi @ 180°F. Manifolds of 1" internal diameter have a Cv of 7.7 and have a loop Cv of 1.23 using 1/2" tubing. Maximum heating output per loop is 7,500 Btuh.

## PRODUCT DESCRIPTION

Manifold sets are used to distribute system fluids (water or water/glycol mix) in closed-loop hydronic heating/cooling/snow-melt applications. Manifold sets are available to accommodate a minimum of 2 and a maximum of 10 tubing loops. Manifold sets include balancing valves with integrated flow meters used to precisely control flow through each loop and zone/shut-off valves to activate or deactivate individual loops.

Optional actuators may be mounted to the Return manifold in place of zone/shut-off valve knobs for automatic ON-OFF control of individual loops.

### PRODUCT DATA

Number of Ports	Figure Number	Material Number	Description
2	NR1	PX10502	NR 2 PORT 1" MANIFOLD
3	NR1	PX10503	NR 3 PORT 1" MANIFOLD
4	NR1	PX10504	NR 4 PORT 1" MANIFOLD
5	NR1	PX10505	NR 5 PORT 1" MANIFOLD
6	NR1	PX10506	NR 6 PORT 1" MANIFOLD
7	NR1	PX10507	NR 7 PORT 1" MANIFOLD
8	NR1	PX10508	NR 8 PORT 1" MANIFOLD
9	NR1	PX10509	NR 9 PORT 1" MANIFOLD
10	NR1	PX10510	NR 10 PORT 1" MANIFOLD
-	NR1	PX10541	NR VALVE SET FOR MANIFOLD 1" FIP STRAIGHT
-	NR1	PX10542	NR VALVE SET FOR MANIFOLD 1" FIP ANGLE
-	NR1	PX10546	FILL & PURGE KIT
-	NR1	PX10548	ACTUATOR 24VAC NC
-	NR1	PX10552	MANIFOLD 1/2" PEX CONNECTOR
-	NR1	PX10554	MANIFOLD 5/8" PEX CONNECTOR

