

TRANE THE COMPLETE LINE

featuring the TRANE Lifetime VALVE



Fig. 1. — The Lifetime Diaphragm — a simple metal disc that revolutionized valve design.



Fig. 2. — No. 44 Lifetime Angle Valve.

THE NO. 44 LIFETIME VALVE — For over 35 years The Trane Company has manufactured steam specialties. Today it offers one of the most complete lines available from any manufacturer. The pace-setter for this preeminent line of heating specialties is the famous Trane No. 44 Lifetime Valve — the only valve in the world with a lifetime guarantee against leakage around its stem.

The Lifetime Valve — a truly packless valve — is hermetically sealed by a phosphor bronze diaphragm which prevents leakage around the stem. Revolutionary, yet simple in design, it is available in a complete range of sizes and patterns. Widely used on vapor, vacuum, two-pipe steam and forced circulation hot water systems. Essentially of non-rising stem construction the handle rises only $\frac{3}{8}$ " to fully open the valve with less than one turn. Recommended maximum pressure 50 pounds.

THE NO. 30 DOUBLE SEAL VALVE is packed with multiple graphite coated asbestos rings held tightly around valve stem under spring compression. Ground joint metal to metal shoulders give secondary provision against leakage. Stem is non-rising. Slipping or creeping from any setting is impossible. Non-swelling, non-shrinking composition discs assure tight closing. Recommended maximum pressure 50 pounds.

THE NO. 88 ECONOMY VALVE is the packed type having externally adjustable packing nut with molded asbestos packing rings. It has a high disc lift with less than one full turn of the handle, thus reducing packing wear.

All valve bodies are cast brass with forged brass covers. Pointer shows exact degree of valve opening on graduated dial. Sizes and body styles shown in Table 2.

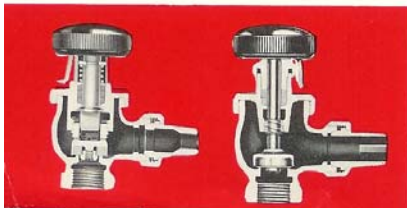


Fig. 3. — Left No. 30 Spring Packed Valve. Right — No. 88 Packed Valve.



Fig. 4 — Above Orifice Cup Right Extended Tube Orifice.

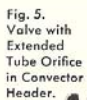


Fig. 5. Valve with Extended Tube Orifice in Convactor Header.



Fig. 6. Valve with Fixed Extension Stem.



Fig. 7. Valve with Adjustable Extension Stem.



Fig. 8. Valve with Chain and Wheel Attachment.

ORIFICES — Orifices in the supply valve on each heating unit provide even distribution of steam throughout the heating system. They prevent heaters nearest the boiler or source of steam from overheating while other more remotely located units fail to receive enough heat.

The Trane Company manufactures two styles of orifices. The cup type orifices are most commonly employed with angle valves. They are fitted over the end of the tailpipe and held in place when the coupling nut is tightened against the valve body.

The extended tube orifice is used on bottom supply connections for Trane Convectors. Made only in $\frac{3}{4}$ " and 1" pipe size, the application requires the use of a valve with a male tailpipe and collar since the flange of the extended tube orifice is clamped between the tailpipe and the valve body.

Any Trane Valve may be equipped with lever handles or furnished with key operated lock shield covers. Fixed extension stems available in six standard lengths up to $2\frac{1}{8}$ "; special lengths to a maximum of 12". Use only with wheel handles.

Adjustable extension stems for use with wheel or lever handles employ $\frac{1}{8}$ " square rods cut to any length desired. For manual control of ceiling radiators, aluminum wheels with steel chains may be mounted in place of the regular wheel handle.

OF HEATING SPECIALTIES

TABLE 1—CAPACITIES (See Note Below)

SIZE IN IN.	STEAM SYSTEMS RATINGS IN SQ. FT. EDR PRES. DIFF. IN POUNDS					HOT WATER SYSTEMS FORCED CIRCULATION TYPE ONLY					
	¼*	½†	1	2	ONE PIPE STEAM	PRESSURE DROP THROUGH VALVE IN INCHES OF WATER					
						COL. 1	COL. 2	COL. 3	COL. 4	COL. 5	
½	45	60	90	120	USE NO. 30 NO. 88 ONLY	GPM	.66	.94	1.15	1.50	2.10
						MBH	6.6	9.4	11.5	15.0	21.0
¾	90	120	180	250	USE NO. 30 NO. 88 ONLY	GPM	1.65	2.35	2.85	3.70	5.20
						MBH	16.5	23.5	28.5	37.0	52.0
1	150	200	300	450	30	GPM	2.20	3.10	3.80	4.90	6.90
						MBH	22.0	31.0	38.0	49.0	69.0
1 ¼	250	350	500	700	70	TRANE VALVES ARE NOT RECOMMENDED FOR GRAVITY CIRCULATION HOT WATER SYSTEMS					
1 ½	375	500	700	1000	100						

* USE FOR SMALL VAPOR SYSTEMS
 † USE FOR VACUUM SYSTEMS & LARGE VAPOR SYSTEMS

NOTE: Capacity ratings for forced circulation hot water systems are based on a temperature drop of 20° F. through the convector or radiator. For small systems, valves should ordinarily be sized from capacity ratings shown in Col. 2, but for large systems, valves may be selected from capacity

TABLE 2—DIMENSIONS AND WEIGHTS

SIZE IN IN.	BODY PATTERN	A		B	C	D*			E	L	NET WT. LBS.
		NO. 44	NO. 30 AND NO. 88			NO. 44	NO. 30	NO. 88			
½	ANGLE	1 ½	1 ¼	2 ¾	1 ¼	3 ½	2 ½	3 ¼	1	—	1 ½
¾	ANGLE	1 ½	1 ¼	2 ¾	1 ¼	3 ½	2 ½	3 ¼	1	—	1 ½
1	ANGLE	1 ½	1 ½	3	1 ½	3 ½	3	3 ½	1 ½	—	2
1 ¼	ANGLE	2 ½	1 ½	3 ½	1 ½	3 ½	3 ½	3 ½	1 ½	—	3 ¼
1 ½	ANGLE	1 ½	1 ½	3 ½	2 ½	3 ½	3 ½	3 ½	1 ½	—	4 ¼
½	GLOBE	1 ¾	1 ¾	2 ¾	1	3 ¾	3 ¾	3 ¾	1 ½	—	4 ¾
¾	GLOBE	1 ¾	1 ¾	2 ¾	1	3 ¾	3 ¾	3 ¾	1 ½	—	4 ¾
1	GLOBE	2	2	3	1 ½	3 ¾	3 ¾	3 ¾	1 ½	—	4 ¾
1 ¼	GLOBE	2 ¾	2 ¾	3 ½	1 ½	4 ¾	4 ¾	4 ¾	2	—	5 ¾
1 ½	GLOBE	2 ¾	2 ¾	3 ½	1 ½	4 ¾	4 ¾	4 ¾	2 ¼	—	6 ¾
¾	CORNER	1 ½	1 ½	2 ¾	1 ½	3 ½	2 ½	3 ¼	1	—	1 ½
¾	D.U. STRWY. CONV.	1 ½	1 ¾	2 ¾	1	3 ½	3 ¾	3 ¾	2 ¾	—	5 ¾
½	S.U. STRWY. CONV.	1 ½	1 ¾	1 ¾	1	3 ½	3 ¾	3 ¾	2 ¾	—	4 ¾
¾	S.U. STRWY. CONV.	1 ½	1 ¾	1 ¾	1	3 ½	3 ¾	3 ¾	2 ¾	—	4 ¾

*DIMENSION "D" WITH LEVER HANDLE IS ¼" LESS THAN FOR WHEEL HANDLE
 DIMENSION "D" WITH LOCK SHIELD IS ¾" LESS THAN FOR WHEEL HANDLE

ratings in Col. 5. This is true because total friction head in the former may vary from 2 to 5 feet of water while larger installations may employ as much as 100 feet friction head. When other friction heads are desired, valve selections may be made from capacities shown in columns 1, 3, or 4.

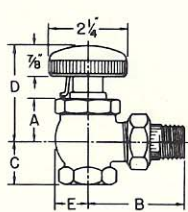


Fig. 9
Angle

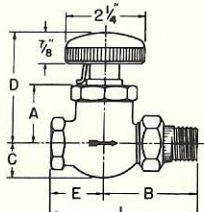


Fig. 10
Globe

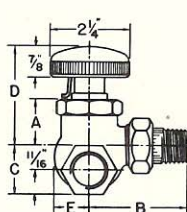


Fig. 11
R. H. Corner

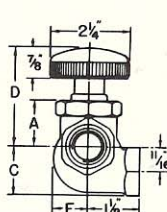


Fig. 12
L. H. Corner

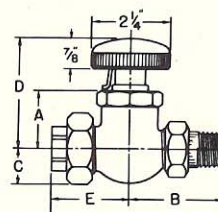


Fig. 13
D. U. Strwy. Conv.

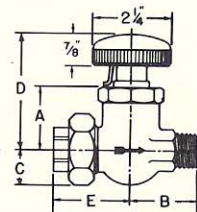


Fig. 14
S. U. Strwy. Conv.

THERMOSTATIC TRAPS



Fig. 15
Heart of all
Thermostatic Traps
The Famous Trane
Bellows.

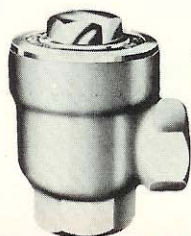


Fig. 16
High Pressure
Angle Trap.



Fig. 17
Vertical Trap.

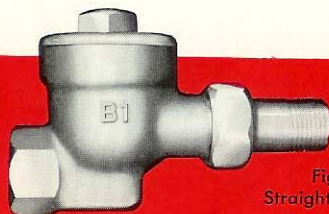


Fig. 18
Straightway Trap.



Fig. 19
Offset Trap.

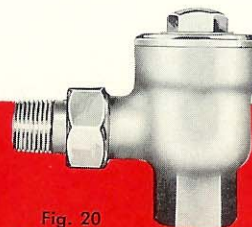


Fig. 20
Angle Trap.

THE TRANE THERMOSTATIC TRAP has been, for a quarter of a century, a leader in saving steam, saving service, saving money. The function of these traps is to release air and condensate into return lines and keep steam in the heaters. By doing so they help prevent water hammer, eliminate danger of short circuiting and the difficulties resulting from steam leakage into the returns — AND THEY SAVE STEAM DOLLARS.

Suitable for operation where steam pressures are as high as 200 pounds, they are available in a variety of body styles and sizes and four pressure classes.

No trap can be better than its thermostat. The Trane Trap is built around its bellows and in the Trane-built bellows are many outstanding features that have made the trap famous.

Fifty-six separate, intricate operations are required to produce

VENTS

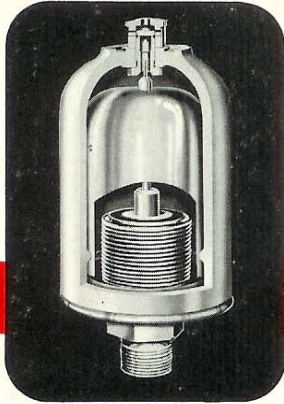


Fig. 42
Float Vent.

TRANE QUICK VENTS — both No. 1 and No. 2 — provide quick air elimination on mains where only steam and air are encountered. A vacuum protector prevents return of air to the system. Venting port is 1/4" in diameter, providing extra capacity. No. 1 Quick Vent has integral seat machined in the cast brass body; has 12 corrugation bellows. Capacity 1,500 Sq. Ft. No. 2 Quick Vent has cast iron body, removable brass seat and 14 corrugation bellows. Maximum pressure 20 pounds. Capacity 2,000 Sq. Ft.

TRANE FLOAT VENTS—provide quick air elimination on returns or steam mains where steam, water and air are encountered. Vacuum check prevents return of air to system, full 1/4" diameter venting port provides large capacity. Oversize seamless brass float prevents escape of water. Maximum pressure 20 pounds. Capacity 2,000 Sq. Ft.

NO. 9 VENT TRAP — Float operated vent for elimination of extremely large quantities of air. Vacuum check. Heavy iron body. Copper float with brass mechanism. Venting port 1/2" in diameter. Capacity 10,000 Sq. Ft. Three 1/4" inlet tappings.

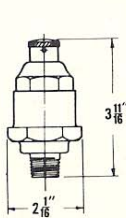


Fig. 43
1/2" No. 1
Quick Vent.

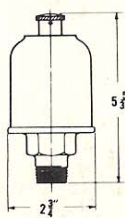


Fig. 44
3/4" No. 2
Quick Vent.

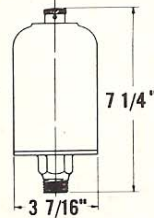


Fig. 45
3/4" Float Vent.

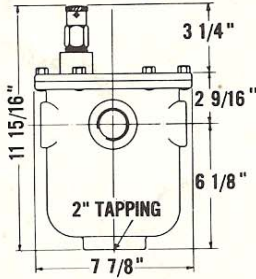


Fig. 46
Vent Trap.

DIRECT RETURN TRAPS

Trane Direct Return Traps are designed to positively return condensate to the boiler against pressures as high as 20 pounds per square inch. Three sizes are available. Bodies are cast iron, floats are seamless copper and the mechanism is stainless steel except the sturdy springs which are monel metal. Mechanism is simple and can easily be disassembled. The mechanism is positive, quiet, and dependable in operation.

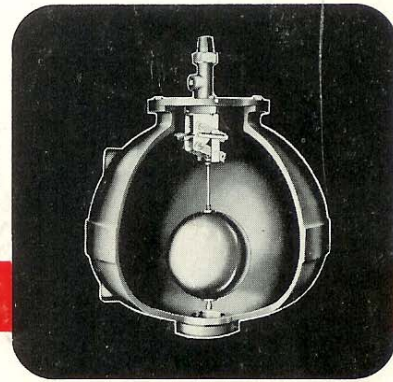
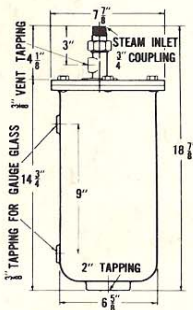
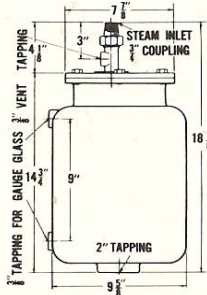


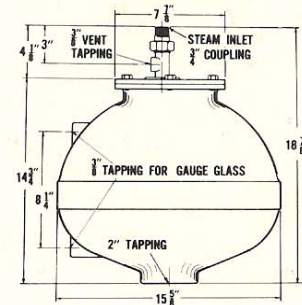
Fig. 47 — No. 413 Direct Return Trap.



Cap. Sq. Ft. 2,000
Fig. 48
No. 411.



Cap. Sq. Ft. 4,000
Fig. 49
No. 412.



Cap. Sq. Ft. 10,000
Fig. 50
No. 413.