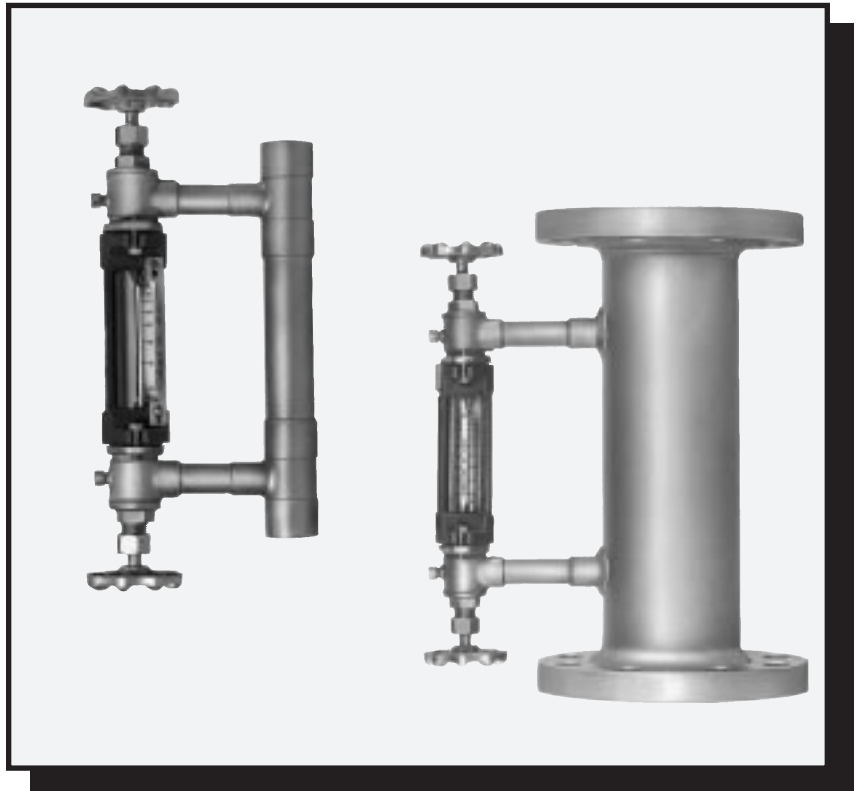




Bulletin A-505B

Bell & Gossett



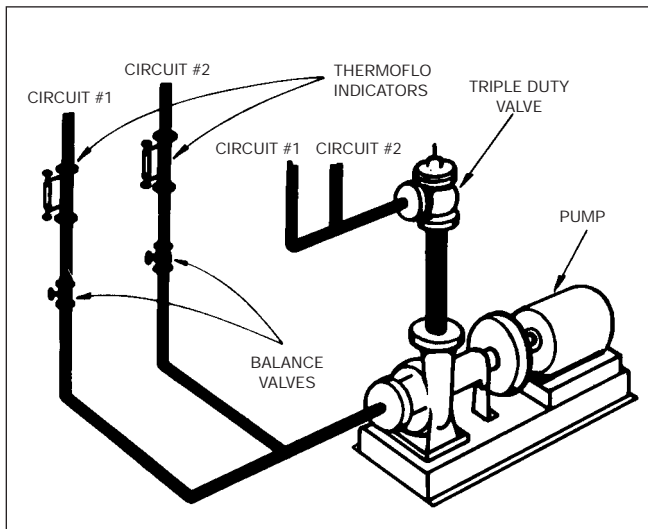
Thermoflo[®] Indicator

For balancing water flows

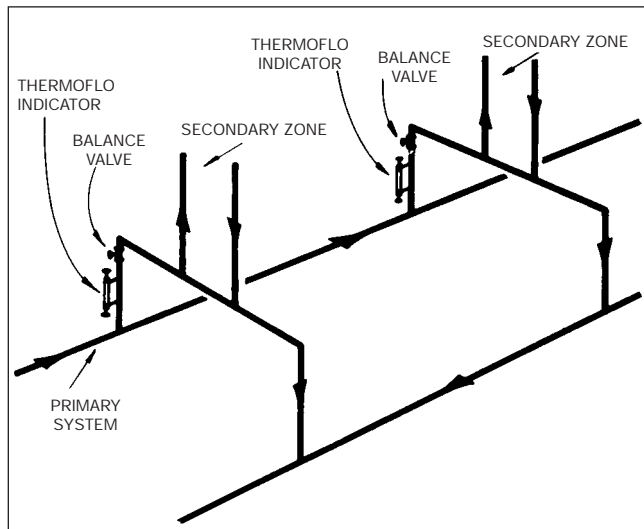
With a B&G Thermoflo Indicator installed in each circuit of a Hydronic System, flows can be accurately balanced according to design requirements.

Thermoflo Indicator for Precise Balancing of Hydronic Systems

Typical Equipment Room Application



Typical Primary Secondary System Application



Insures Proper Flow Through:

1. Multiple heating or cooling circuits.
2. Primary secondary bridges.
3. Boilers or chillers.
4. Condensers.
5. Air handling units.
6. Heat exchangers.
7. Process heating or cooling circuits.
8. Cooling towers.

Insures Economical Use of Horsepower

With the Thermoflo Indicator, a simple adjustment of the rate of flow through the circuit brings each installation to desired flow conditions – operating pump horsepower is never wasted.

Built To Last

Ruggedly constructed to 125 lbs. (862 kPa) working pressure, the B&G Thermoflo Indicator remains permanently in each circuit to register precise flow at all times.

Quiet Operation

The Thermoflo Indicator is a hydronic device designed to assure quiet operation. It has none of the noisy moving parts sometimes associated with laboratory type flow meters.

Individually Calibrated

Each Thermoflo Indicator is individually tested and calibrated to assure precise flow rate indication.

Low Pressure Drop

The Thermoflo Indicator utilizes an orifice principle to divert water through the by-pass circuit containing the indicating gauge. Pressure drop is negligible at normally used flow rates.

Economical To Install

Two soldered or flanged connections and a balance valve are all that is needed to put the Thermoflo Indicator in operation.

Shutoff Valves

Thermoflo Indicators are equipped with two shutoff valves to isolate the indicator assembly from the system during normal system operation. The shutoff valves should remain closed except when monitoring system flow.

Multi-Circuit Hydronic Systems

The time required to adjust multi-circuit hydronic systems to within practical limits can be reduced by the Thermoflo Indicator. Large systems using direct return and heating-and-cooling systems in particular require this device. Thermoflo Indicators can be installed wherever and whenever Hydronic flow rate information is desired. Best of all it remains permanently in the circuit as a check on the system and as a means of adjusting balance. Balance valves should always be installed on the discharge side of Thermoflo Indicators.

Versatile mounting makes it possible to install the Thermoflo Indicator virtually anywhere in a circuit.

Thermoflo Indicator

Allow 1" clearance on each end of shut-off valve.

To read direct GPM flow, align base of spring with reading on nameplate.

Models TFI-4 thru TFI-8 are indirect reading.

The same flow direction must be maintained.

If necessary, the gauge can be turned 180° by removing the two cap screws in both flanged ends.

Reference mark to zero nameplate for accuracy

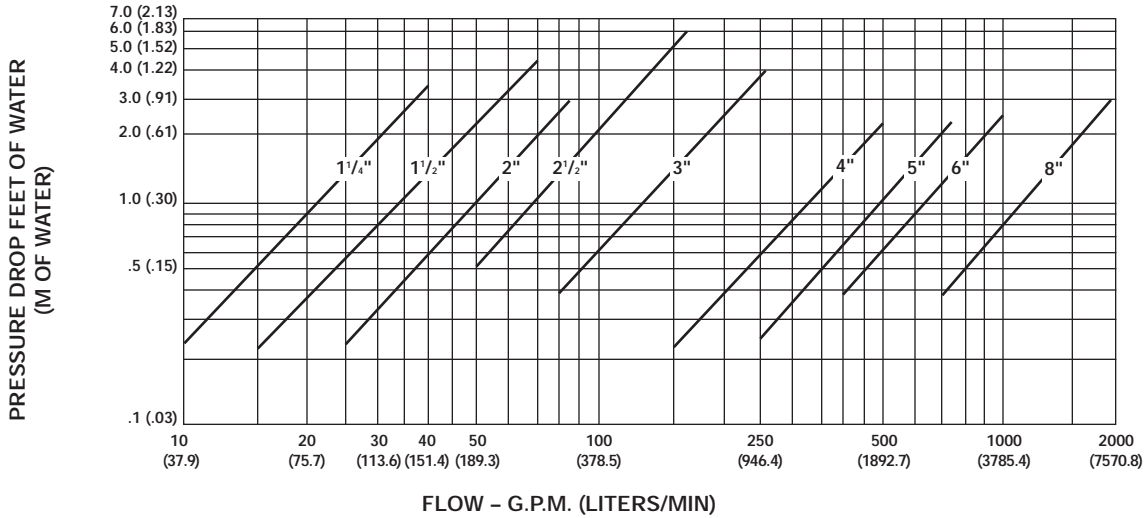
Vent or drain.

System PH should be maintained between 7 and 9.

To retain full calibrated accuracy, elbows or restrictions immediately adjacent to the Thermoflo Indicator should be avoided.

DIRECT READING MODEL SHOWN

PERFORMANCE CHARACTERISTICS

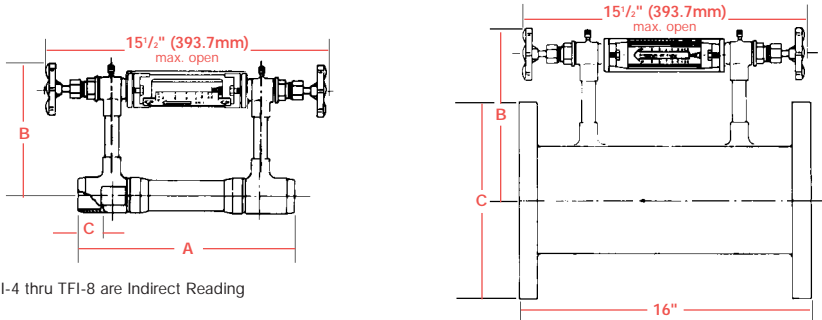


SCHEDULE

MAXIMUM DESIGN PRESSURE 125 PSI (862 kPa) – MAXIMUM DESIGN TEMPERATURE 250°F (121°C)

MODEL NUMBER	SIZES – INCHES	FLOW RATE G.P.M. (LITERS/MIN)
TF-1 1/4	1 1/4	10-40 (37.8-151.4)
TF-1 1/2	1 1/2	15-69 (56.8-261.2)
TF-2	2	25-85 (94.6-321.8)
TF-2 1/2	2 1/2	50-170 (189.3-643.5)
TF-3	3	80-260 (302.8-984.2)
TF-4	4	150-500 (567.8-1892.7)
TF-5	5	250-750 (946.4-2839.0)
TF-6	6	400-1000 (1514.2-3785.4)
TF-8	8	700-1950 (2649.8-7381.5)

DIMENSIONS AND WEIGHTS



Models TFI-4 thru TFI-8 are Indirect Reading

MODEL NUMBER	TYPE	DIMENSIONS IN INCHES (MM)			APPROX. SHIPPING WEIGHT – LBS. (KG)
		A	B	C	
TFI-1 1/4	SWEAT	11 5/16 (287.3)	5 1/4 (146.1)	3 1/32 (24.6)	7 (3.2)
TFI-1 1/2		11 5/8 (295.3)	5 1/8 (149.2)	1 3/32 (27.8)	
TFI-2		12 1/16 (306.4)	6 1/4 (158.8)	1 11/32 (34.1)	
TFI-2 1/2		12 7/16 (319.1)	6 5/8 (168.3)	1 15/32 (37.3)	
TFI-3	FLANGE	—	7 5/8 (193.7)	7 1/2 (190.5)	40 (18.1)
TFI-4		—	8 1/8 (206.4)	9 (228.6)	52 (23.6)
TFI-5		—	8 5/8 (219.1)	10 (254.0)	64 (29.0)
TFI-6		—	9 3/16 (233.4)	11 (279.4)	67 (30.4)
TFI-8		—	10 3/16 (258.8)	13 1/2 (342.9)	100 (45.4)

NOTE: 1. System pH must be maintained between 7 and 9.
2. Shut off valves should be closed after balancing to prevent damage from shock or accidental glass breakage.

For further information, contact ITT Bell & Gossett, 8200 N. Austin Avenue, Morton Grove, IL 60053, Phone (847) 966-3700 — Facsimile (847) 966-9052.

ITT Bell & Gossett
Morton Grove, IL, U.S.A.