

# ThermaFlo TH-610 and TH-615 Control Valves

TYPE 610-D—DOUBLE-SEATED—NORMALLY OPEN (AIR TO CLOSE)  
 TYPE 610-R—DOUBLE-SEATED—NORMALLY CLOSED (AIR TO OPEN)  
 TYPE 615-D—SINGLE-SEATED—NORMALLY OPEN (AIR TO CLOSE)  
 TYPE 615-R—SINGLE-SEATED—NORMALLY CLOSED (AIR TO OPEN)  
 Sizes ½" through 3"—Semi-Steel Body, Screwed Ends—MAX PRESSURE 125 LBS.

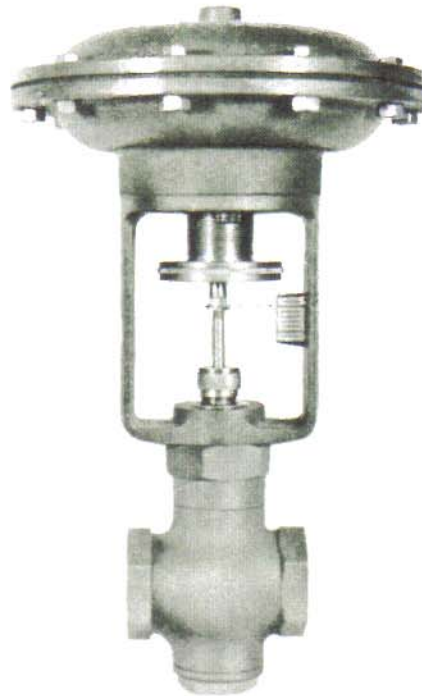
## CONSTRUCTION

Type 610 and Type 615 Diaphragm Control Valves are semi-steel body with either bronze or stainless steel trim.

Inner valves are skirt guided and are supplied in either quick-opening or percentage V-port construction. Soft seat composition inserts are available with quick-opening inner valves on both double and single seated types.

Extra deep stuffing box with TEFLON packing is standard. Asbestos packing with lubricator is optional.

Quick opening inner valves are low lift. Percentage inner valves are high lift. See page twelve for various types of inner valves.



TYPE 610-D

## APPLICATION

Type 610 and Type 615 Control valves are designed for pneumatically controlled process applications where on-off, or comparatively narrow proportional band control action is desired. Type 610 valves have full travel for a range of 3 to 15 lbs. diaphragm loading. When Type 615 single-seated valves are used, it is necessary to consider the unbalanced force across the inner valve and to vary the diaphragm area and spring loading accordingly.

See page seven for effective areas of various top works.

## Cv RATINGS FOR TYPE 610 AND TYPE 615 VALVES

VALVE SIZE	DOUBLE-SEATED								SINGLE-SEATED							
	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"
Quick Opening	5.2	8.5	12.2	22	46	68	108	144	4.3	6.4	9.1	16.5	35	51	81	108
Percent V-port	4.3	7.1	11	19	27	38	72	104	3.2	5.3	8.2	14.2	20	29	54	78



TYPE 610-3  
THREE-WAY

## TYPE 610-3—THREE-WAY

Sizes ½" through 3"—Semi-Steel Body  
MAX PRESSURE 125 LBS.

Type 610-3 Diaphragm Control Valves are designed for use on mixing or by-pass diversion applications. Furnished in semi-steel body with either bronze or stainless steel trim, and supplied with either quick opening or modified V-port inner valve, skirt guided.

Because the three-way valve can be used either as a mixing valve or a diverting valve, order should state

specifically which type is desired. Valve will be supplied marked accordingly.

Type 610-3 control valves are available with No. 0, No. 1, No. 2, and No. 3 top-works. See page seven for effective areas of various top-works.

When calculating capacities of Type 610-3 three-way control valves, use Cv factors shown above for single-seated valves.