



*Valtek Mark One-X
Control Valves*

Valtek Mark One-X Control Valves

The Valtek® Mark One-X control valve is designed as an economy measure to permit installation of a small valve in a much larger line without using line reducers or expanders. The valve is a standard Mark One, except for the body, which incorporates expanded outlets. Because line expanders and reducers are not used, field installation expenses are lower. Importantly, the Mark One-X costs less, since most of the parts are smaller than a full-size valve.

Although originally designed for use in power plant heater drain applications, this product can be used in any application where significant trim reductions are required, and where the use of reducers or expanders is undesirable. For example, an 8 x 4-inch (203.2 x 101.6 mm) Mark One-X can be installed in an 8-inch

pipeline. All parts of the Mark One-X, other than the body, are identical to those on a standard 4-inch (101.6 mm) Mark One control valve. A significant benefit in the cost of the valve is realized and the extra cost of installing a 4-inch (101.6 mm) valve in an 8-inch (203.2 mm) line is also avoided.

Because all parts of the Mark One-X, except the body, are identical to standard Mark One control valve, they are completely interchangeable, reducing the need for larger part inventories and ensuring that parts are available from existing stock.

Since the Mark One-X is so closely related to the Mark One control valve, refer to the *Valtek Mark One Control Valves* technical bulletin for all specifications.

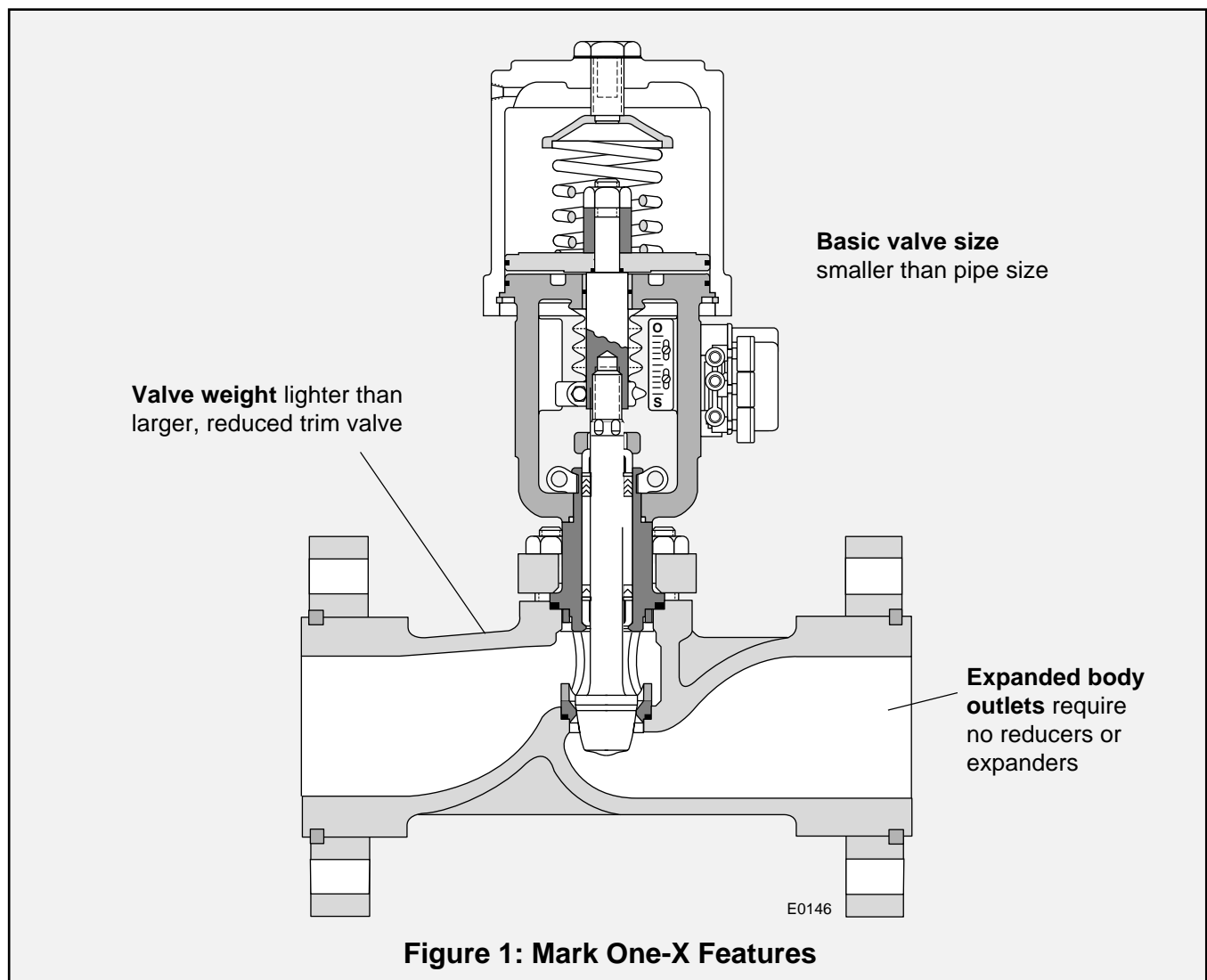


Figure 1: Mark One-X Features

Valtek Mark One-X

Major Features

Features include:

- **Smaller basic valve parts** result in significantly lower control valve costs.
- **Light valve weight** for reduced trim applications.
- **Full part interchangeability** with entire Mark One control valve line.
- **No welded, field-installed reducers**, eliminating radiography and lowering installation costs.

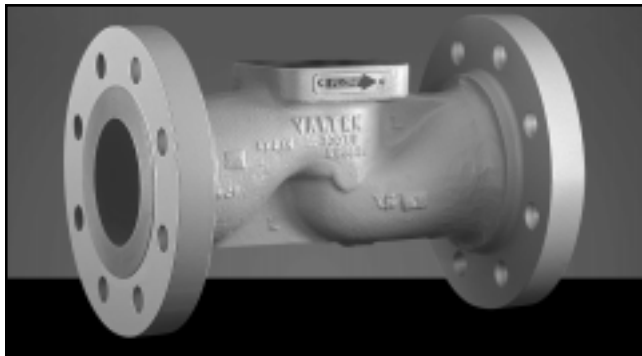


Figure 2: Mark One-X body

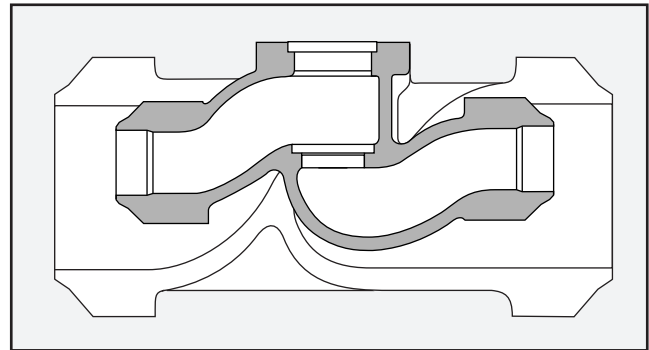


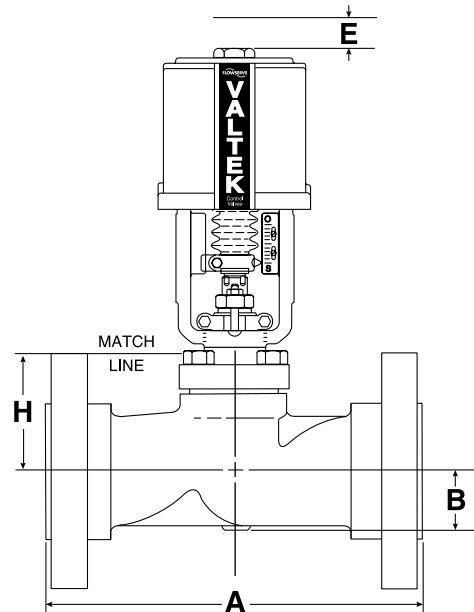
Figure 3: Standard Mark One Body Overlaying a Mark One-X Body

Table 1: Body Specifications

Sizes	<i>(The first number represents the end connection size; the second, the basic valve size, inches / mm)</i>		
	4 x 2 101.6 x 50.8	8 x 4 203.2 x 101.6	10 x 6 254 x 152.4
	6 x 3 152.4 x 76.2	8 x 6 203.2 x 152.4	12 x 6 304.8 x 152.4
	6 x 4 152.4 x 101.6	10 x 4 254 x 101.6	12 x 8 304.8 x 203.2
Form	Globe		
Rating	ANSI Class 300 and 600 (PN: 40 and 100)		
Materials	Carbon Stainless Steel Chrome-moly Alloy 20 Hastelloy B Hastelloy C	Monel Nickel Titanium Bronze Other castable materials	
End Connections	Buttweld for Schedule 40 or Schedule 80 per ANSI B 16.25-1986 or per customer requirement. Separable flanged ends per ANSI B16.5-1988 – 4 thru 8-inch only. Integral raised face per ANSI B16.5-1988. RTJ integral flanged ends per ANSI B16.5-1988.		
Separable End Flanges	Carbon steel 316 stainless steel Other materials as required		

Valtek Mark One-X

Dimensions


Table I: Mark One-X Dimensions (inches / mm)

Body (inches)	A						B		E Disassembly Clearance Required		H	
	ANSI/Globe*		ANSI/ISA**									
	Class 300, 600		Class 300		Class 600							
4 x 2	17.0	432	14.5	368	15.5	394	2.5	63	5.4	137	5.4	137
6 x 3	N/A		18.6	473	20.0	508	5.1	130	6.9	175	6.8	172
6 x 4	N/A		18.6	473	20.0	508	5.1	130	10.5	267	8.4	214
8 x 4	N/A		22.4	568	24.0	610	6.4	164	12.8	324	8.4	214
8 x 6	N/A		22.4	568	24.0	610	7.9	200	12.8	324	12.3	311
10 x 4	N/A		27.9	708	29.6	752	5.9	151	14.0	356	8.4	214
10 x 6	N/A		27.9	708	29.6	752	7.4	187	14.0	356	12.3	311
12 x 6	N/A		30.5	775	32.3	819	7.2	182	14.5	368	12.3	311
12 x 8	N/A		30.5	775	32.3	819	7.2	182	14.5	368	14.4	365

* Per ANSI B16.5-1988

** Per ANSI/ISA S75.03-1985

All dimensions are in inches / mm and are to be used for estimation only. For further dimensions, refer to Mark One Control Valves Bulletin. Certified drawings will be supplied upon request.

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