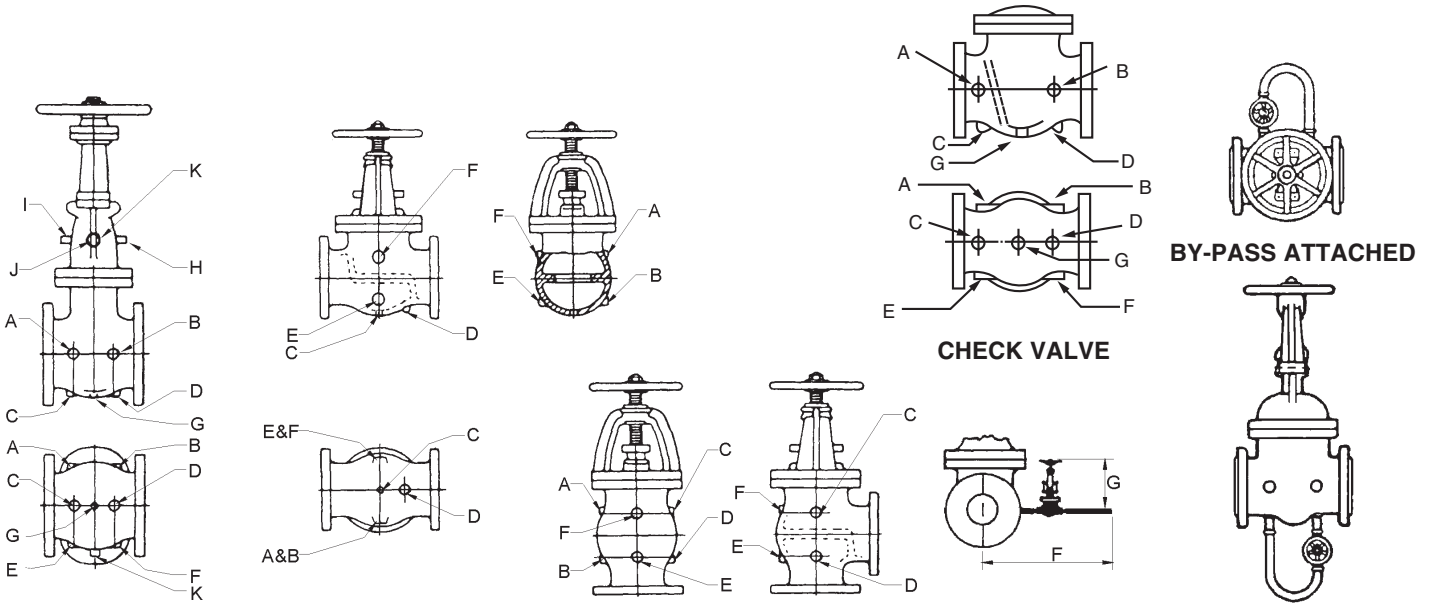
TAPS & DRAINS

MSS SPECIFICATION SP-45 / “BY-PASS & DRAIN CONNECTION STANDARD”



These illustrations indicate the standard method of designating the location of tapped holes, when specified, on cast steel valves. This standard conforms to Manufacturers Standardization Society specification SP-45 entitled “By-Pass and Drain Connection Standard”.

In general, 2- to 4-inch valves can be furnished with a 1/2-inch tapping; 5- to 8-inch valves with a 3/4-inch tapping; and 10-inch and larger valves with a 1-inch tapping.

A “Drain” is interpreted to mean a boss tapped and fitted with a pipe plug. If nipple and drain valves are required, they should be specified on inquiries and orders.

BY-PASSES FOR CAST STEEL VALVES
By-passes are furnished with a steel bolted bonnet, outside screw and yoke socket-welding globe valve. All connections are socket-welded.

Pipe bends are used for flexibility and to compensate for expansion strains. The pipe is seamless steel and the pipe and by-pass valves are of ample weight for the service for which the main valve is recommended. The by-pass trim is suitable for the same services as the main valve.

NOTE: The size of by-pass, as shown in the table below, is in accordance with MSS-SP-45.

LOCATION OF BY-PASSES ON FLANGED VALVES
Gate Valves. It is regular practice to attach the bypass to the side of the main valve with the stems of both valves parallel. However, when ordered, bottom attachment can be provided with the stem of the by-pass at a right angle to the main valve stem.

Globe Valves. Attachment to the right hand side of the main valve with both stems parallel is regular practice. Right-hand side is defined as the right when facing the flowport leading to the underside of the disc.

APPROXIMATE DIMENSIONS

VALVE SIZE	IN.	2	3	4	6	8	10	12	14	16	18	20	24
SIZE OF BYPASS	Class 150	1/2	1/2	1/2	3/4	3/4	1	1	1	1	1	1	1
	Class 300	1/2	1/2	1/2	3/4	3/4	1	1	1	1	1	1	1
	Class 600	1/2	1/2	1/2	3/4	3/4	1	1	–	–	–	–	–
F	Class 150	20	20	20	20 1/8	22 1/4	25	26 1/2	30	31 3/4	35 1/2	36 5/8	44
	Class 300	20	20	20	20 1/8	22 1/4	25	26 1/2	30	31 3/4	35 1/2	36 5/8	44
	Class 600	20	20	20	20 1/8	22 1/4	25	26 1/2	–	–	–	–	–
G (Open)	Class 150	6	6	6	6 1/8	6 1/8	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
	Class 300	6	6	6	6 1/8	6 1/8	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4
	Class 600	6	6	6	6 1/8	6 1/8	7 3/4	7 3/4	–	–	–	–	–

*Class 600 Valves, 14” and larger are not available.