M3900 • EXCESS FLOW VALVE

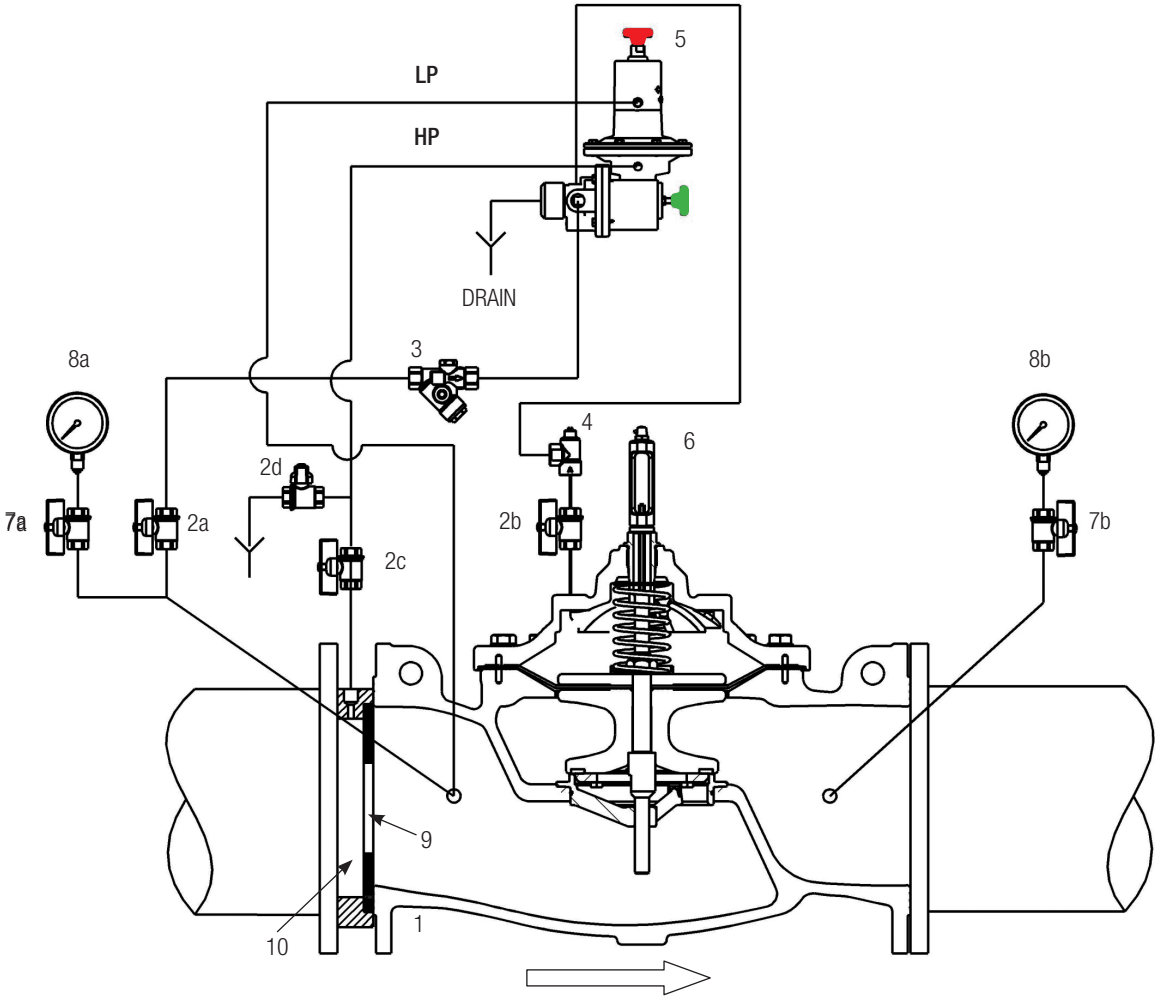
OPERATING PRINCIPLE

This type of valve is normally used at the outlet of big hill tanks or dams. It is used to avoid damages caused by broken of main supply pipeline. It could be used in waterworks, irrigation and hydroelectric plants.
The valve is controlled by the action of a three-way differential pilot (with manual reset) connected through an orifice plate fitted on the inlet flange. When the flow rate is higher than the set pilot value, means that the pipe is broken, so the pilot switches off and the main valve close with a controlled speed. The valve is equipped with two pressure gauge holder to connect a differential manometer (not included). This differential manometer is needed to check the setpoint.

ADDITIONAL FUNCTIONS

- shut-off with electrical remote control;
- pressure reducing;
- relief function.

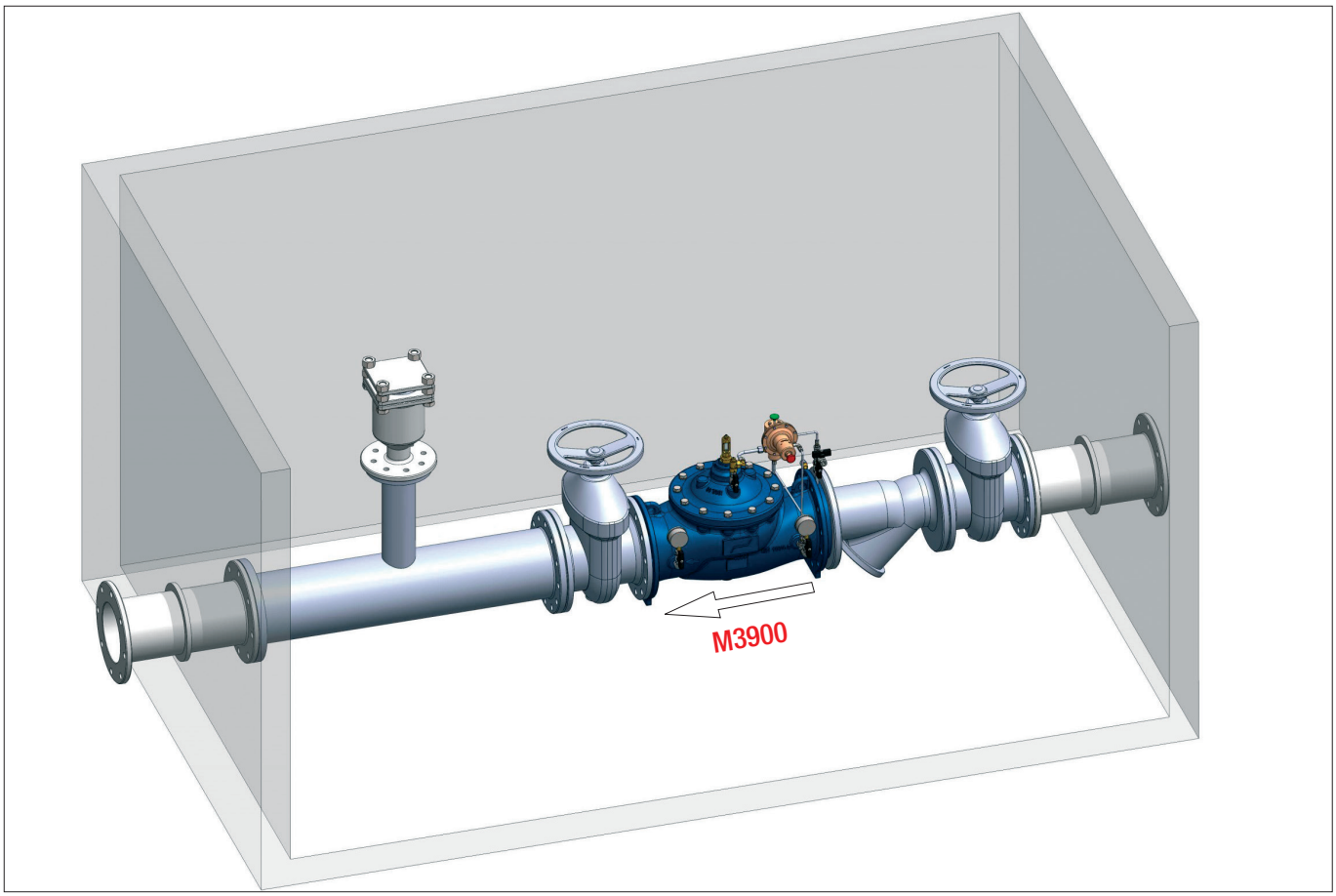
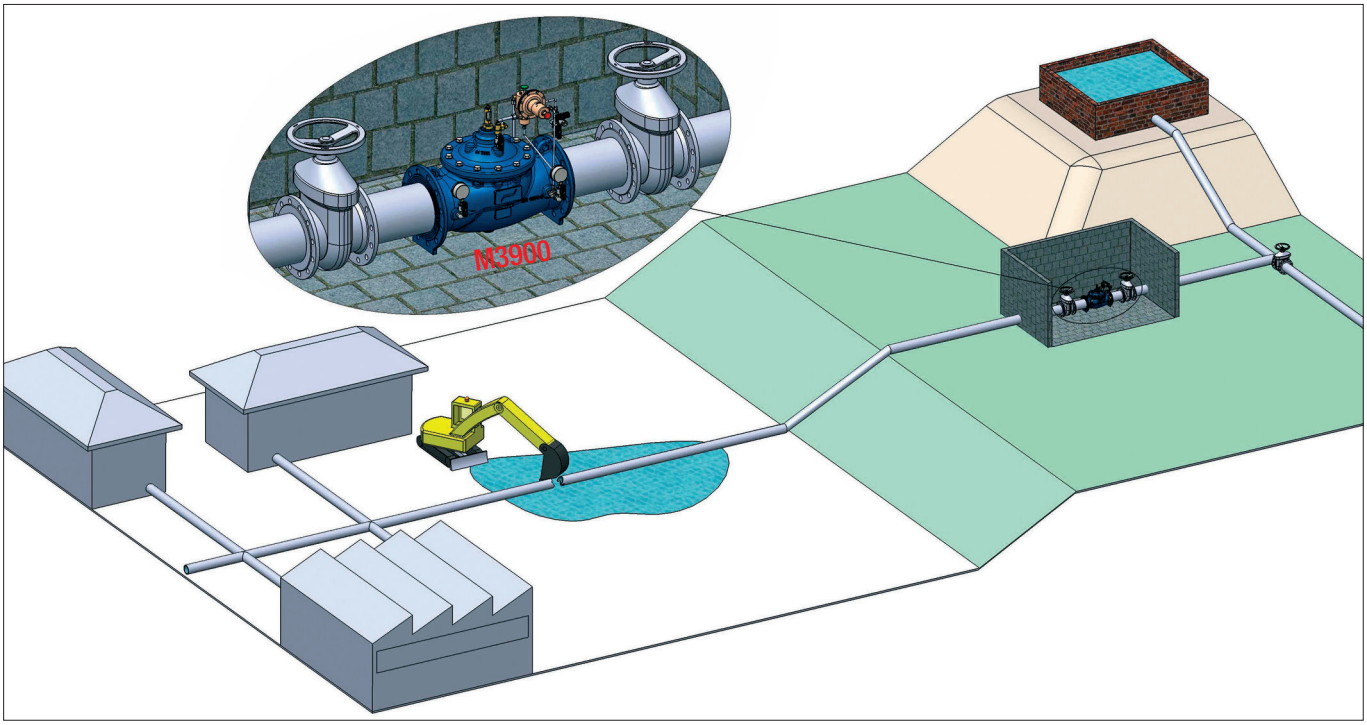
CIRCUIT AND MATERIALS



ITEM	DESCRIPTION	MATERIALS (STANDARD)	MATERIALS (HQY-HQ)
1	Main valve	GJS400-15 EN1563	GJS400-15 EN1563
2 (a,b,c,d)	Isolating ball valve	Ni-plated Brass	HQY: Ni-plated Brass HQ: 1.4401 EN10088-3
3	Y - strainer with calibrated orifice	1.4401 EN10088-3 + Brass	1.4401 EN10088-3
4	Bidirectional needle valve	1.4401 EN10088-3 + Brass	1.4401 EN10088-3
5	Three way differential pilot	1.4301 EN10088-3 + Brass (CS900)	1.4401 EN10088-3 (CS900SS)
6	Position indicator with drain valve	Brass + Hardened glass	1.4401 EN10088-3 + Hardened glass
7 (a,b)	Gauge holder with drain	Ni-plated Brass	HQY: Ni-plated Brass HQ: 1.4401 EN10088-3
8 (a,b)	Pressure gauge	1.4301 EN10088-3 + Glycerine	1.4301 EN10088-3 + Glycerine
9	Calibrated orifice	1.4301 EN10088-3	1.4301 EN10088-3
10	Clamping plate	Steel epoxy coated	DN≤80=1.4301 EN 10088-3 DN≥100=S235JR EN10025-2 + epoxy coated
--	Pipe	1.4401 EN10088-3	1.4401 EN10088-3
--	Fittings	1.4401 EN10088-3	1.4401 EN10088-3
--	Compression fittings	1.4401 EN10088-3 + Brass	1.4401 EN10088-3

TIS Service reserves the right to make technical changes • ED. 01-2026

TYPICAL INSTALLATION



TYPICAL APPLICATION