



44-x-HY/PR2

INSTALLATION

OPERATION

MAINTENANCE



This document specifies the operating concept of DOROT Hydraulic Hydrant Valve model 44-x-HY/PR2 (x refers to valve size in Inch)



HYDRANT VALVE MODEL 44-x-HY/PR2 General description

“DOROT” Hydrant valve model 44-x-HY/PR is a weir-type hydraulic valve, activated manually.

The valve is the connection point for fire- extinguishing flexible hose, that enables controlled filling of the hose, preventing water hammer due to too-fast filling-up of the hose.

It allows manual control of the pressure when the system is at full-operation.

The valve can be opened or closed effortlessly, using a selector valve which is part of the control circuit.

Fig. 1- DY/PR2 valve



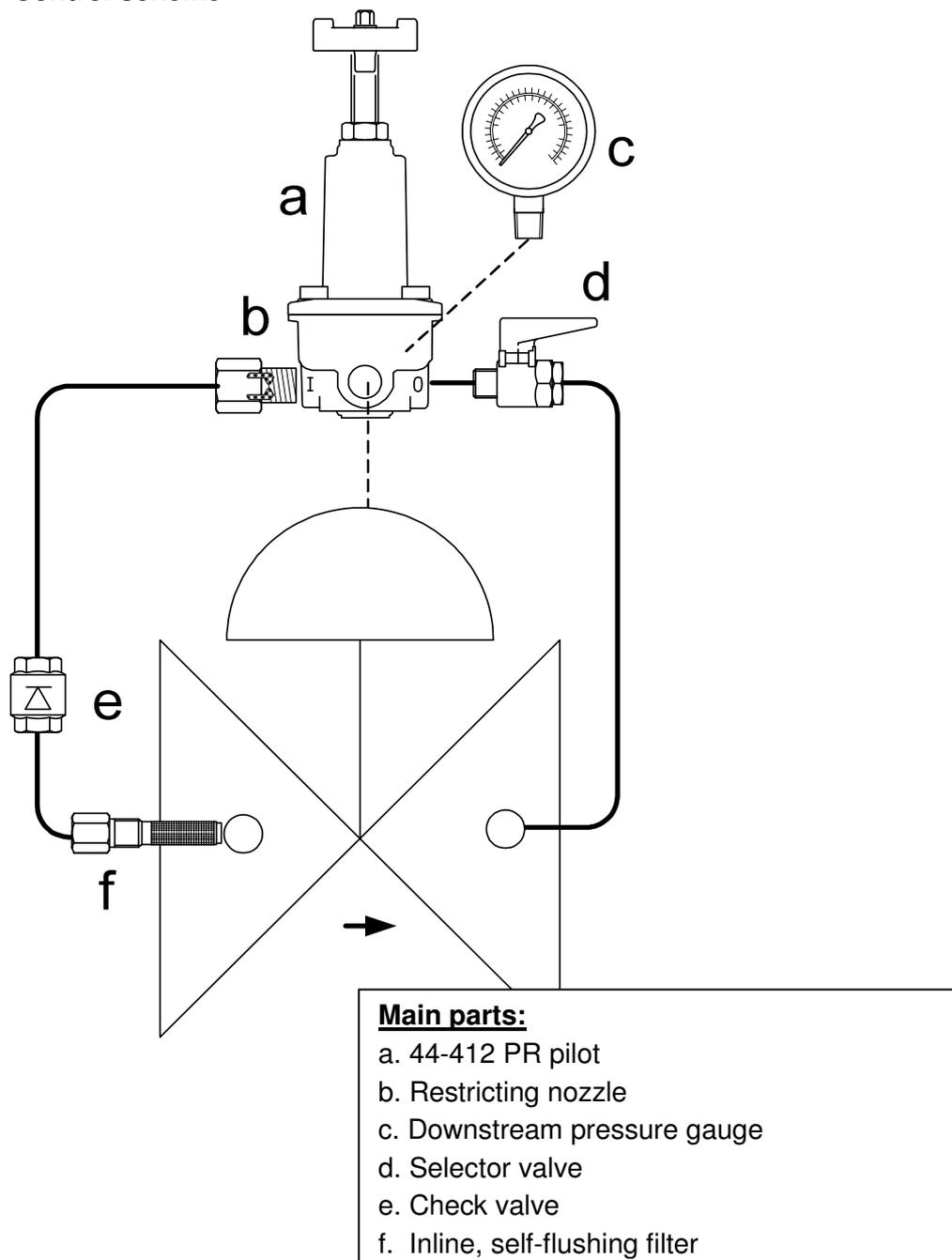
Operating description:

1. The valve opens instantly when the selector is turned to “open” position.
2. The filling of the hose is controlled by the handle wheel of the pressure- control pilot valve. Turning the wheel in counter- clockwise direction accelerates the initial stage of the fire hose filling.
3. When the water has reached the hose nozzle, the pressure can be adjusted by the same wheel.
4. The valve can be closed instantly by the selector valve, or gradually by reducing the hose pressure to almost-zero by the wheel of the pilot valve, preventing pressure surge in the water-supply network.
5. An inline, self-flushing screen filter, assembled in the valve body, guarantees clog-free performance of the piloting system

DELUGE VALVE MODEL 44-x-HY/PR2 Installation recommendations

1. The valve installation position should be horizontal, to facilitate convenient connection of the hose.
2. It is essential to enable free and easy access to the selector valve and the pilot adjusting wheel

Fig. 2- Control scheme





HYDRANT VALVE MODEL 44-x-HY/PR2 Design Data

1. Operating conditions:

Valve size		Max. recommended flow		Flow factor		Equal pipe length*	
mm	inch	m ³ /h	gpm	Kv	Cv	m	Feet
50	2	32	140	102	119	8	25
80	3	80	350	155	181	7	22
100	4	130	570	210	245	11	38
150	6	270	1200	605	710	11	36
200	8	510	2250	870	1020	24	78
250	10	800	3500	1147	1340	45	148

* Calculated for V=5m/s (15ft/s), nominal pipe, Chw=100

- 1.1. Max. recommended flow velocity 5.5m/s (18 ft./s)
- 1.2. Pressure Rating 12 bar (175psi)
- 1.3. Min. system pressure 1.5 bar (22 psi)
- 1.4. Mod. 44, 84 are supplied at 2" & 3" size only.

Maintenance

Extract the inline filter [f] and clean it, in case the valve fails to close