

4200 SERIES FIRE HYDRANT DIAPHRAGM VALVE



We know fire. We know safety. We know you.

Established in 1896, Knowsley SK Ltd. has an enviable reputation for manufacturing quality fire fighting equipment and systems for high value asset protection that can be relied upon when danger strikes.

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PRODUCT DETAILS

Manufactured from high quality materials enabling use with fresh, brackish or seawater, all our valves are fully compliant with BS5041 part 1 (1987).

Knowsley SK Ltd's 4200 series of Fire Hydrant Diaphragm Valves consist of a corrosion-resistant gunmetal body, an Viton / Kevlar diaphragm, and a weir upon which the diaphragm closes the valve.

GENERAL DESCRIPTION

The Knowsley 4200 series is a range of weir type diaphragm valves designed specifically for use in firefighting applications. They are available in both bibnose and horizontal configuration and are supplied as standard with flanged inlet connections although other types are available upon request.

The valve consists of a gunmetal body, a fire resistant Viton / Kevlar seal and a seat upon which the diaphragm closes the valve. The diaphragm is compressed using a plunger which does not come into contact with the firewater flow and thus eliminates the possibility of leakage around the operating spindle. An indicator cap is fitted to each valve to show the valve position.

The benefits of using diaphragm valves are:

- Leak-tight shut off
- Zero stem leakage
- Low turbulence flow
- Low Maintenance
- Self-draining

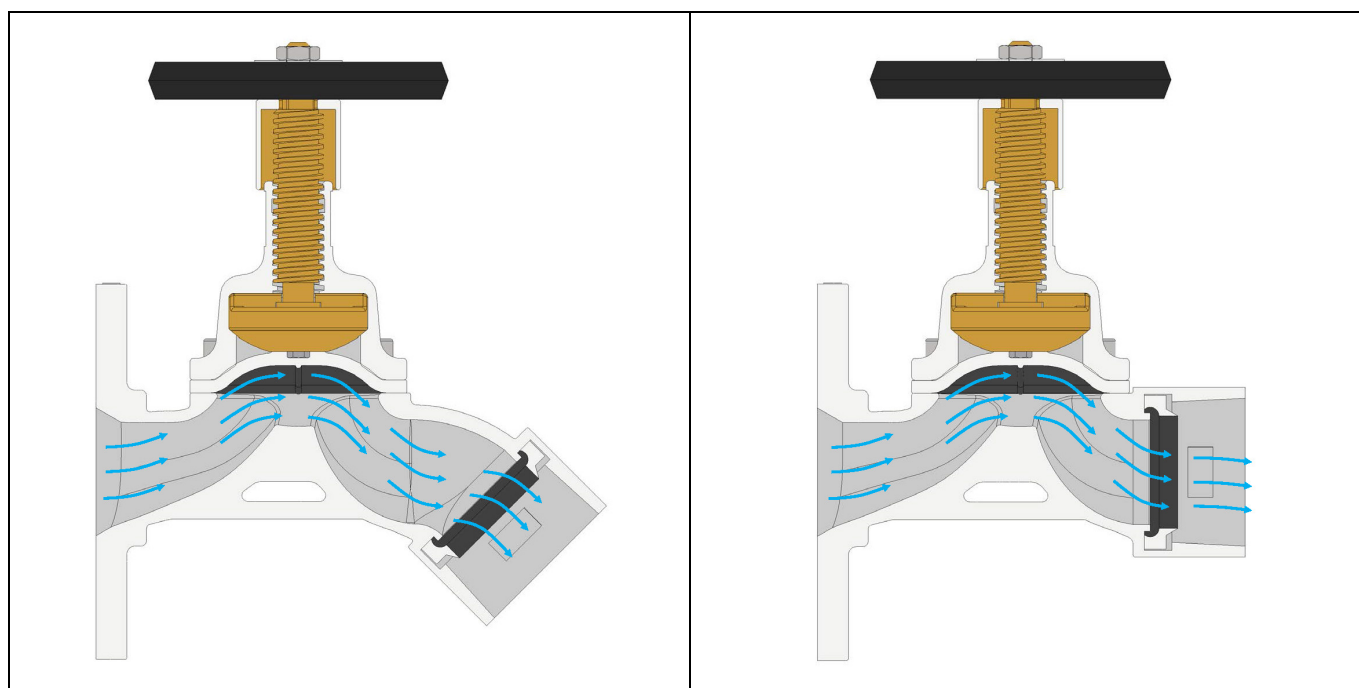


Figure 1 Diagram showing the flow path and self-draining design of both Bibnose and horizontal types.

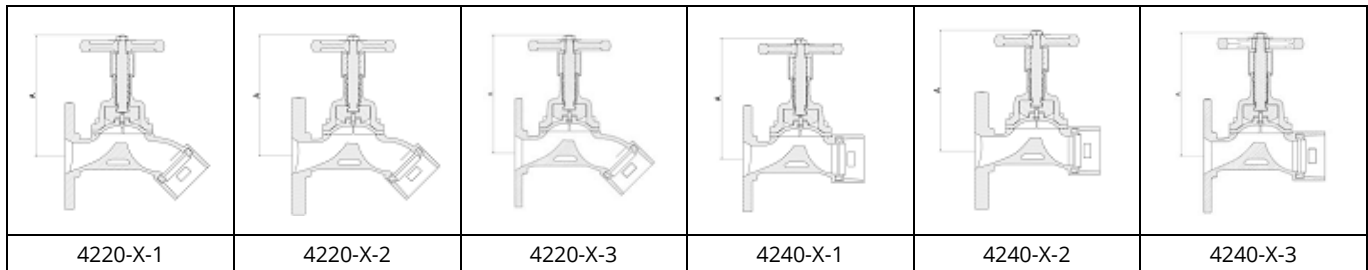
PRESSURE RATING

- Design Pressure: 18.0 barg*
- Body Test Pressure: 24.0 barg
- Seat Test Pressure: 16.0 barg

*When fitted with instantaneous couplings the outlet pressure must be limited to 16.0 barg as defined by BS336.

4200 SERIES FIRE HYDRANT DIAPHRAGM VALVE

VALVE CONFIGURATIONS



VALVE DATA

Table 1 Valve Data

Model	Orientation	Inlet Size /Type	Outlet Size / Type	Open (mm) A	Closed (mm) A	Weight (kg)	Maximum Rated Working Pressure
4220-X-1	Bibnose	3"150lb ASME flange FF	2 ½" instantaneous female to BS336	218	189	11.9	232 psig (16 barg)
4220-X-2	Bibnose	3"300lb ASME flange FF	2 ½" instantaneous female to BS336	218	189	14.5	232 psig (16 barg)
4220-X-3	Bibnose	M80 PN16 BS 5404 FF flange	2 ½" instantaneous female to BS336	218	189	11	232 psig (16 barg)
4240-X-1	Horizontal	3"150lb ASME flange FF	2 ½" instantaneous female to BS336	218	189	11.1	232 psig (16 barg)
4240-X-2	Horizontal	3"300lb ASME flange FF	2 ½" instantaneous female to BS336	218	189	13.8	232 psig (16 barg)
4240-X-3	Horizontal	M80 PN16 BS 5404 FF flange	2 ½" instantaneous female to BS336	218	189	10.3	232 psig (16 barg)

APPROVALS

FM Approved

SPARE PARTS

Please contact our dedicated spares department at spares@knowsleysk.co.uk for the components listed below for the 4200 Series Valve.

Note that valve components are common to all four models. Refer to Figure 2 for Item locations.

Winged Cam Assembly (Comprising Items 6-10)

Item 11 Instantaneous Washer

Item 17 Diaphragm

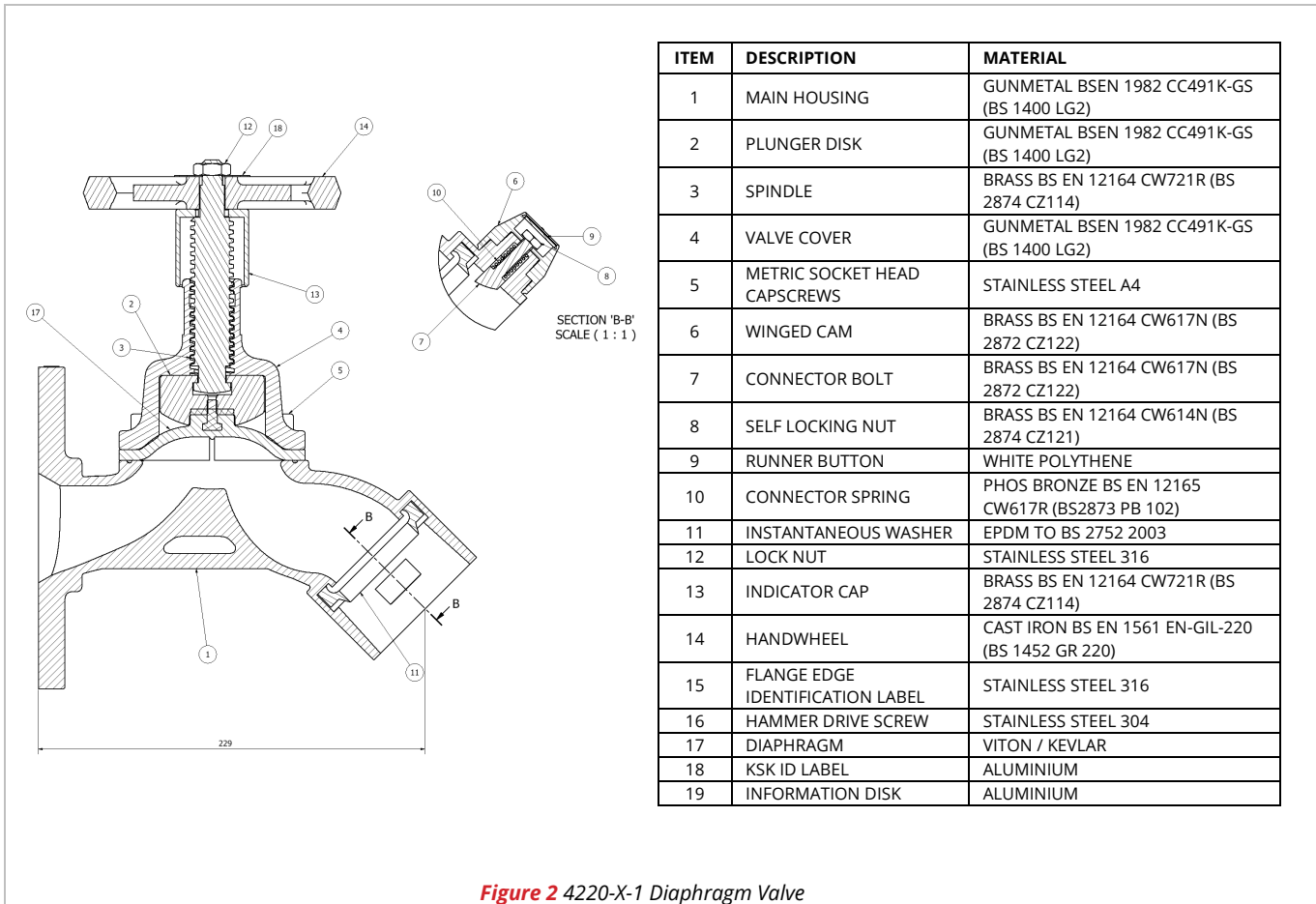


Figure 2 4220-X-1 Diaphragm Valve

