

INTERNALLY VALVED PILLAR HYDRANTS



Knowsley SK Limited - Designer and Manufacturer of Fire Fighting Equipment & Systems

Strategic fire protection - when and where its needed most





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 whenever danger strikes.

01 Product Overview

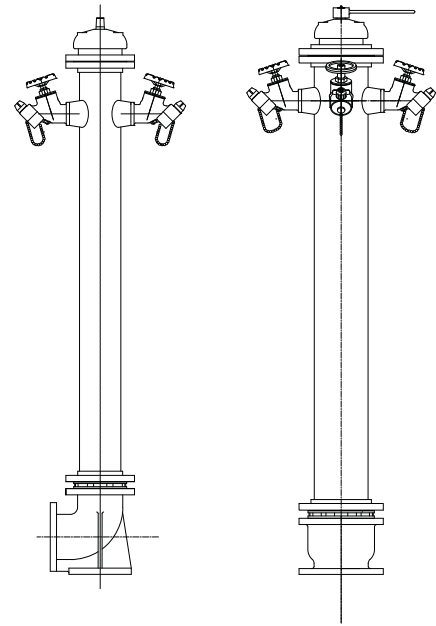
The Knowsley SK Ltd internally valved pillar hydrants are designed to be used on petro-chemical sites where the harshest environments are encountered. The standard body material is carbon steel but other materials are available for particularly challenging ambient conditions.

The pillar hydrant body self-drains automatically to avoid any risk of frost damage in cold climates. Many outlet configurations are available which are designed to meet individual clients requirements. Options include multi-valved hose, large bore pumper and flanged monitor connections.

Hose couplings types are available to match any site standard requirements.

The inlet connection is either a 90° duckfoot bend or a straight inlet.

Design standard : AWWA C502.



02 Product Materials

Main body - Standard : Sch 40 carbon steel to API 5L/ASTM A106 gr B

- Outlet connections: Gunmetal to BS EN 1982 CC491K GS
- Spindle : Manganese bronze to BS 2874 CZ114
- Major internal fittings: Gunmetal to BS EN 1982 CC491K GS
- Duckfoot bend inlet: Cast iron to ISO 185 2005 gr 220
- Straight inlet: SG Iron to EN-JS1030 gr 420/12
- Main body - Options : Gunmetal to BS EN 1982 CC491K GS
or
Low temperature carbon steel to ASTM A333 Gr6

03 Product Details

Knowsley SK manufacture two sizes of internally valved pillar hydrants.

- a) Standard bore - 4" main internal valve with 6" riser pipework
- b) Large bore - 5 1/2" main internal valve with 8" riser pipework.

Main valve operation by either a permanently fitted handwheel or removable wrench.

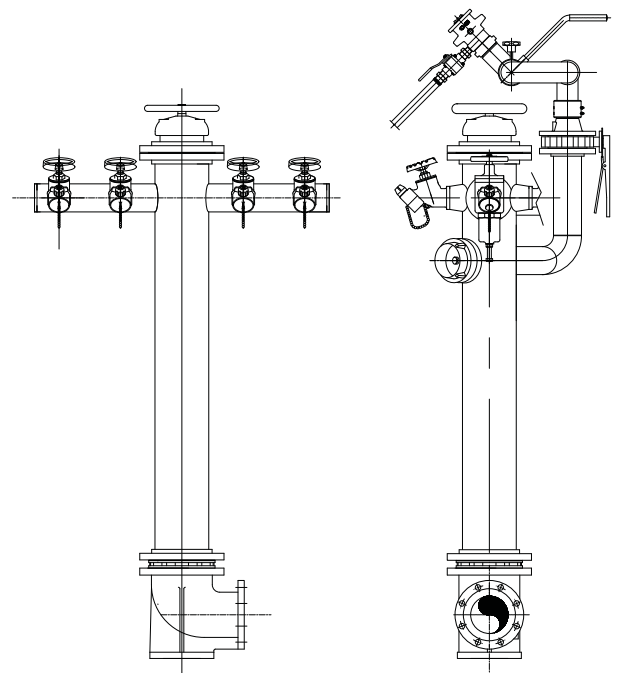


Figure 1. Typical internally valved pillar hydrants

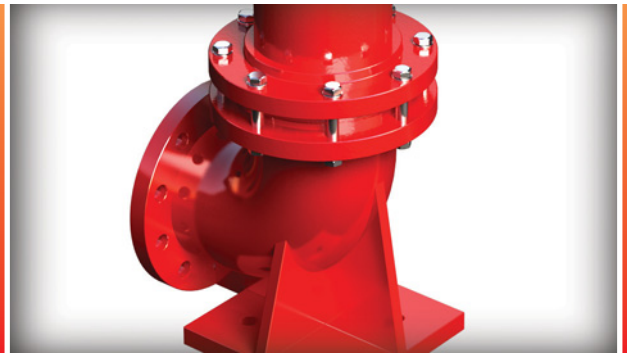


Knowsley SK Limited, Centrepoint, Marshall Stevens Way, Trafford Park, Manchester M17 1AE
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Registered in England No. 1789152 VAT No:383475131



Our Century of experience, continuous product development and world-wide support network provides the confidence for clients to select Knowsley SK as their first choice for asset protection whatever, whenever and wherever the risk



The heavy duty main valve opens against the mains line pressure and closes with the mains line pressure.

See **fig 2** for operating details.

Pillar hydrants are normally fitted with at least two 2 ½" globe or pressure reducing valved outlets for use with hand held nozzles.

They are also available with:

- a) large bore pumper connections for feeding high capacity wheeled monitors or vehicles
- b) 90° bends fitted with a valved fixed monitor.

Overall heights

The standard height from grade to the centre line of the 2 ½" outlets is about 500mm and from grade to the centre line of the main is about 1200mm. Other heights are available to meet site requirements.

Temperature rating

The standard ambient operating temperature is -20°C to +60°C. Optional low temperature designs are available suitable for as low as -48°C ambient conditions.

Painting

Standard paint finish is black bitumastic paint below ground and a red enamel paint system above ground. Alternative epoxy paint systems are available for more corrosive environments.

04 Layout

As direct manufacturer, we are able to offer complete flexibility in the layout of our hydrants. According to specifications, we can furnish any of the following:

- Number of outlets
- Size of outlets
- Position / orientation of outlets
- Flanged / threaded connections



Figure 2. Typical internally valved pillar hydrant section



Figure 3. High Volume Pillar Hydrant with Oscillating Monitor





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05 Spare Parts

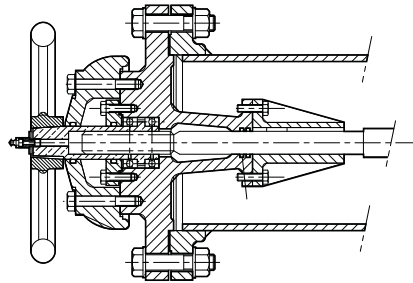
Please contact our dedicated spares department for the components listed below:
spares@knowsleysk.co.uk

Table 1. 4" internally valved pillar hydrant - Spares

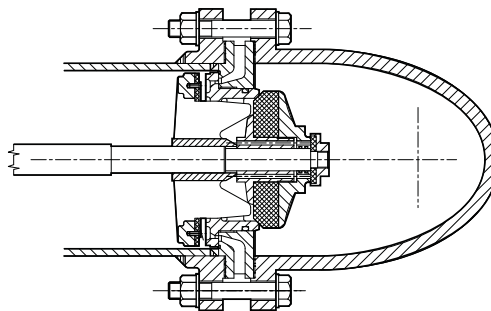
Qty	Part No	Description	Material
2	4493/326/1	O-Ring	Nitrile
2	4493/217/1	O-Ring	Nitrile
1	7072/28/1	Gasket	Novus 30
1	7072/34/1	1/8" BSP Male Grease Nipple	Stainless steel
1	7207/30/1	Clack washer	Rubber
1	7240/43/1	Drain clack washer	Rubber
3	8500/12/1	Gasket	Novus 30
1	7240/49/2	Drain clack ring	Brass
8	7174/44A/1	Set screw	Brass
1	4493/255/1	O-Ring	Nitrile
1	4493/246/1	O-Ring	Nitrile

Table 2. 5.5" internally valved pillar hydrant - Spares

Qty	Part No	Description	Material
1	7072/34/1	1/8" BSP Male Grease Nipple	Stainless steel
2	4493/326/1	O-Ring	Nitrile
2	4493/217/1	O-Ring	Nitrile
1	7072/28/1	Gasket	Novus 30
1	7216/12/1	Gasket	Novus 30
1	7301/16/1	Gasket	Rubber
1	7301/30/1	Clack Washer	Rubber
2	7216/12/1	Gasket	Novus 30
2	4493/120/1	O-Ring	Nitrile
1	7216/43/1	Drain clack washer	Rubber
8	7174/44A/1	Set screw	Brass
1	7216/49/2	Drain Clack Ring	Brass
1	4493/1945.30/1	O-Ring	Nitrile
1	4493/361/1	O-Ring	Nitrile



Typical 5.5" internally valved pillar hydrant - Top Section



Typical 5.5" internally valved pillar hydrant - Bottom Section



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