



Gator 3 Way Universal Brass Pilot Valve

The **Gator** 3WUI is a 3 way universal pilot valve suitable for pressure reducing, pressure sustaining and pressure relief applications on hydraulic control valves.

The 3WUI is manufactured from high grade brass and stainless steel components and is suitable for operation with valve sizes from DN50 to DN200 with a maximum operating pressure of 16 Bar.

This product can be used in typical industrial, waterworks and irrigation applications.



Materials

Body – Brass
Spring Housing – Brass
Shaft – Stainless Steel
Spring – Stainless Steel
O Rings – Nitrile
Diaphragms and Seals - Natural Rubber
Adjustment Bolt and Lock Nut – Stainless Steel

Pressure Reducing Plumbing

Port 2 – Vent
Port 3 – Upstream Pressure
Port 4 – Command (Common)
Port 5 – Downstream (Sense)

Specifications

Max. Operating Pressure – 16 Bar
Pressure Setting Range –
1 to 6 Bar (Standard Spring)
4 to 12 Bar (Heavy Duty Spring)
Port Sizes – 1/4" BSP

Pressure Sustaining / Relief Plumbing

Port 2 – Upstream Pressure
Port 3 – Vent
Port 4 – Command (Common)
Port 5 – Upstream (Sense)

DESCRIPTION

Brass 3 Way Universal Pilot

HR CODE

G8V3WBUP

Setting Valve with PRV Pilot

Operation

PRV operation monitors pressure at downstream side of valve. If pressure is higher than PRV pre-set, the valve will tend to close in order to reduce pressure on the downstream side. If the pressure on the downstream side drops below the PRV pre-set, the valve will tend to open in order to increase the pressure on the downstream side.

Settings

It is recommended that a pressure gauge is installed on the downstream side of the valve. Turn Sagiv (Three-Way Valve) on "Auto" to activate PRV functions. "Open" will fully open valve and "Close" will fully close valve. Turn the PRV set screw all the way out (anticlockwise) to a point just before it disconnects from the pilot. This will result in the valve being fully closed when pressurising the water system. While the system is under pressure, slowly turn the PRV set screw in (clockwise). This will result in the valve opening slowly in order to increase the downstream pressure. Sometimes it is practical to turn in $\frac{1}{4}$ or $\frac{1}{2}$ turn increments and to check the result for a few seconds before turning further. Water venting from port 2 means water is being released from the valve's diaphragm, which results in the valve opening in order to allow more pressure on the downstream side. Turn the screw until the required downstream pressure is reached and lock the locknut. Valve is now set.

Setting Valve with PSV Pilot

Operation

PSV operation monitors pressure at upstream side of valve. Valve only opens once the PSV pre-set pressure is reached. Once opened and pressure drops on the upstream side, the valve will tend to close in order to maintain the pre-set pressure. This allows for a gradual opening of the valve at pump start, creating a "back-pressure" and preventing the pump from running too far right on the curve during line-filling.

Settings

It is recommended that a pressure gauge is installed on the upstream side of the valve. Turn Sagiv (Three-Way Valve) on "Auto" to activate PSV functions. "Open" will fully open valve and "Close" will fully close valve. Turn the pilot's screw all the way in (clockwise). Slowly turn the set screw out (anti-clockwise), which will result in the valve slowly opening and releasing water downstream. Turn the screw until the minimum pressure at which the pump should work is achieved on the upstream side. Lock the locknut. Valve is now set.