



Standard Water Flow Control System

- A Reliable and Robust System
- Compact Flow Control
- Easy to select
- 316 St. St.
- Controls Flow within Min & Max Ranges
- Measures and Controls Flow

DESCRIPTION

This Standard flow control system, CS4000 is used to measure and control the flow of liquids. Using a paddlewheel flow sensor, modulating angled seat valve and compact process controller, it offers a reliable, robust and compact unit. The control unit is in 316 stainless steel having screwed BSP ends and supplied with 2 x 5 meter long cables that link valve to sensor and a cable for a 24 VDC power supply. Simple to order from our online configurator, offering a selection of size with minimum and maximum flow ranges configured for the unit. Easy to set up using the quick programmable selector on the valve head. (supplied with programming manual). This simple flow control system is offered as a standard flow control package, ensuring repeatability with ease of installation.

Minimum and Maximum Flow Ranges

Size	Max pressure Bar	Min Flow (l/h)	Max Flow (l/h)
15	16	330	5920
20	16	550	9840
25	12	900	16070
32	16	1200	21550
40	12	1760	31670
50	16	2810	50470



Description

A simple flow control system for water, pre sized, ready to be assembled into the pipeline to control or measure your required flow. Manufactured in stainless steel 316 with screwed end connections. Easy to programme, robust and reliable.



Beschreibung

Ein einfaches Durchflussregelungssystem für Wasser, vorgefertigt und bereit, in die Rohrleitung eingebaut zu werden, um den erforderlichen Durchfluss zu steuern oder zu messen. Hergestellt aus Edelstahl 316 mit Schraubendanschlüssen. Einfach zu programmieren, robust und zuverlässig.



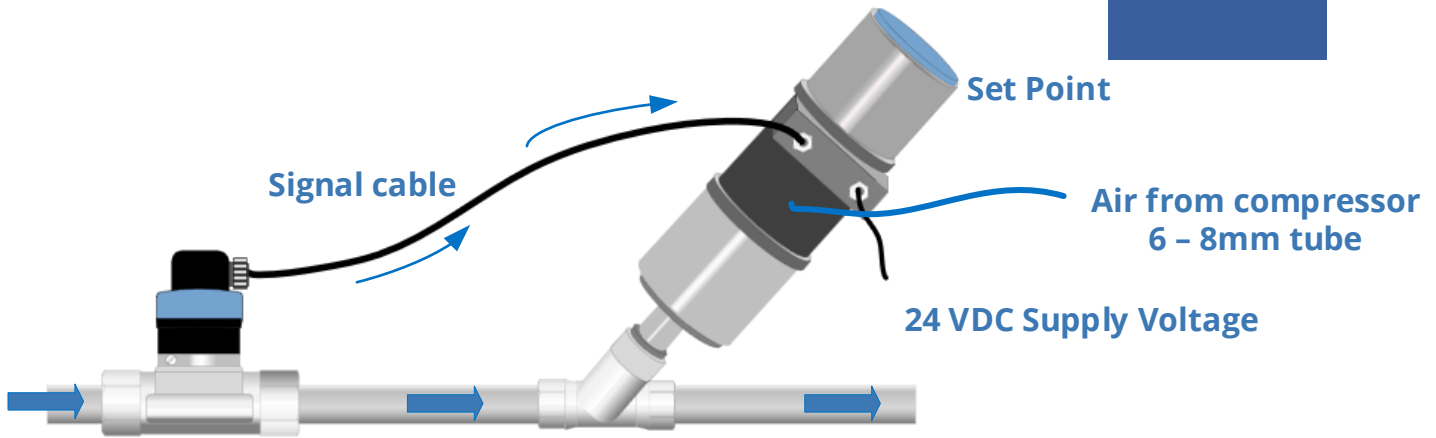
Descripción

Un sistema de control de flujo simple para agua, pre dimensionado, listo para ser ensamblado en la tubería para controlar o medir el flujo requerido. Fabricado en acero inoxidable 316 con conexiones finales atornilladas. Fácil de programar, robusto y confiable.

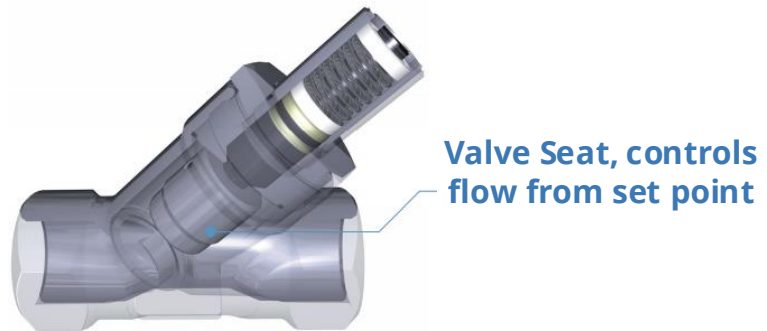
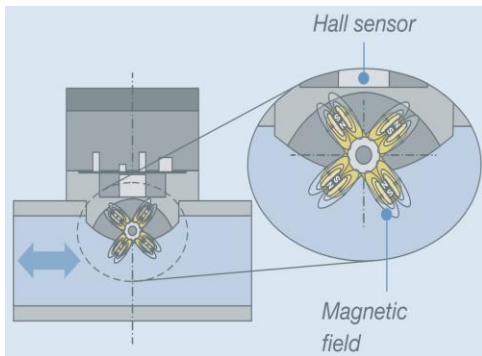


Description

Un système de contrôle de débit simple pour l'eau, pré-dimensionné, prêt à être assemblé dans la canalisation pour contrôler ou mesurer votre débit requis. Fabriqué en acier inoxydable 316 avec raccords d'extrémité vissés. Facile à programmer, robuste et fiable.



How it Works



The system comprises of a paddle wheel flow transmitter and pneumatic modulating angled seat continuous control valve. The paddle wheel revolves with the flow, giving a signal to a sensor in the unit and converts the signal into one that the process control valve recognises. The transmitted signal is connected by cable that is supplied with the system into the control head of the valve. The controller is programmed by you into an easy push button display, setting it with your with your desired flow setting. The signal controls solenoids inside the actuator which in turn control the valve and the flow you have set. The unit is powered via a cable (included) from a 24 volt DC supply. The actuator requires a 6mm or 8mm air supply of around 6 bar (see spec.). The only other requirement is screwed stainless steel pipe to assemble the system into (we can upon request supply lengths of screwed pipe).

Illuminated Display and Control Head



The Systems Components

Angle seat Valve type 2300.

The 2300 angle-seat valve fulfils tough criteria for process environments. The proven self-adjusting spindle packing with V-seals guarantees unrivalled cycle life and sealing integrity. The parabolic trim results in a flow characteristic approximately 35 % larger than conventional control valves.

St. Steel body with screwed BSP port connections.

Parabolic modulating control Plug with PTFE seal for tight shutoff

Excellent combination of good control characteristic and high cycle and flow rates:- Function Normally Closed.

Type 8693 process controller.

The compact process controller Type 8693 is optimized for integrated mounting on the ELEMENT pneumatic actuators and is specially designed for the requirements of a hygienic process environment. The actual value of the process factor is directly supplied to the device as 4...20 mA, PT100 or a frequency signal. The process controller calculates the setpoint for the subordinated positioner through the variance comparison.

With integrated diagnostic functions operation conditions of the control valve can be monitored.. The setup of the process controller can be carried out automatically using the X-TUNE function. The easy handling and the selection of additional software functions are done either on a big graphic display with backlight and keypad or over the Burkert communicator software.

The positioner registers the valve position without deterioration through a contact-free, analogue position sensor. The control is done without internal air consumption.

Direct sensor communication and power supply

Graphic display with backlighting and intuitive menu navigation

24V DC Supply power

M12 cable connections for easy setup

IP67 Ingress protection

Type 8030 Flow sensor

The sensor-fitting Type S030 has a built-in paddle wheel to measure the flow rate and is especially designed for use with neutral, slightly aggressive, solid free liquids.

The Bürkert "Inline quarter-turn" technology is a construction ensuring a leakage free operation.

The paddle wheel rotation (permanent magnets included in the wheels) is detected contactless through the sensor-fitting wall. The transmitter can be snapped-on or removed without opening the pipe or interrupting the process.

St. Steel body with screwed BSP port connections.

PVDF paddlewheel. FKM Seals

Pulsed output

Max temperature: 100DegC

Type KK02 Cables

2 x M12 4pin cables for easy connection to 8693 process controller

Flying leads for connection to 24V power supply / Sensor

5m cable length

For power and signal transmission

PVC insulation



Type 2300 + 8693

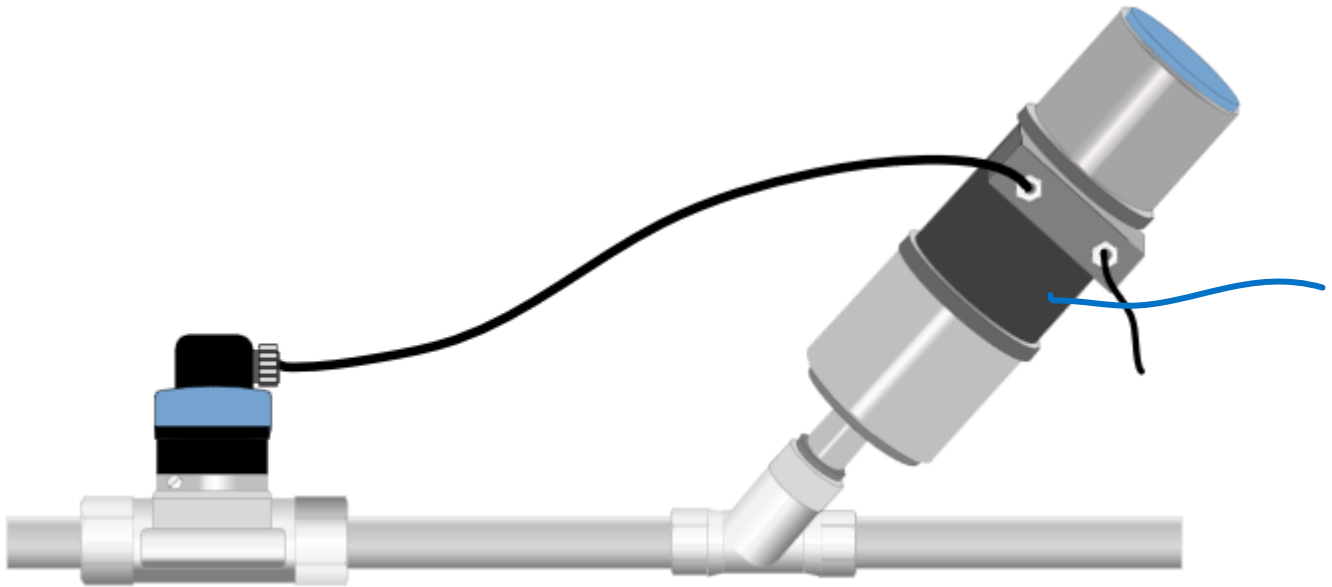


Type 8030

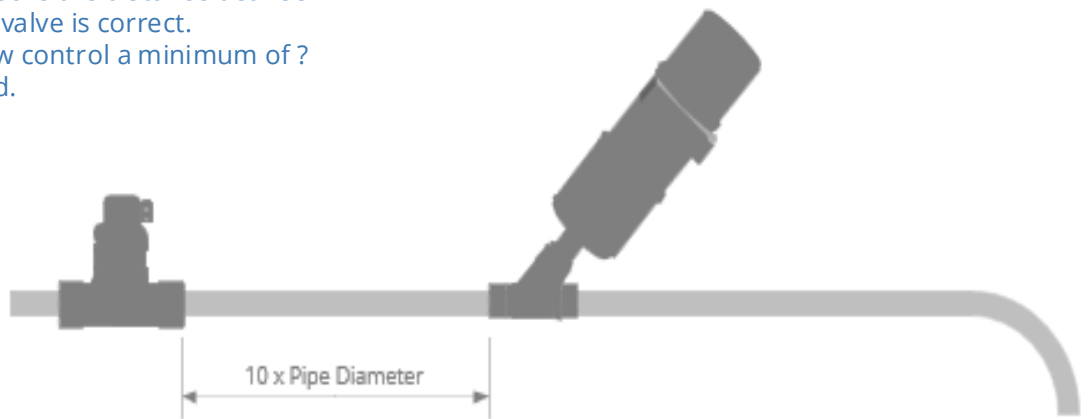


Type KK02

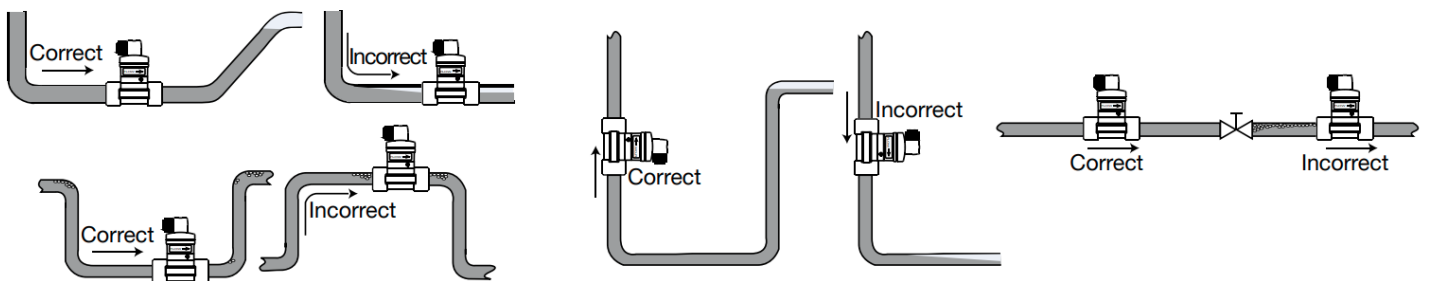
Installation



- On assembly please ensure the distance between flow meter and control valve is correct.
- To achieve accurate flow control a minimum of 7 Bar must be maintained.



The device can be installed into either horizontal or vertical pipes. Important criteria for this are; ensure that the measurement pipe is fully filled and that the measurement pipe is air bubble free



Technical Info

Voltage

Size **24 VDC**

Pressure / Temperature Ratings

Temperature	-20°C to 80°C
Working Pressure	See Chart

Pneumatic Air Supply

Clean Dry Air	5.5 - 7 Bar
Air inlet 1/8" BSP	tube - 6/8mm

Minimum and Maximum Flow Ranges

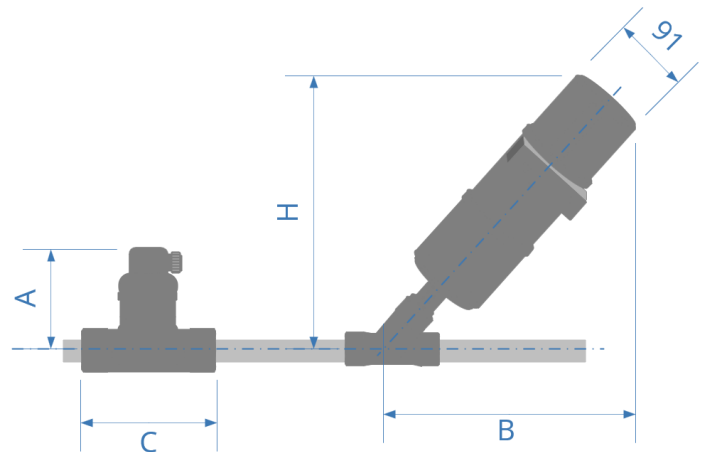
Size	Max pressure Bar	Min Flow (l/h)	Max Flow (l/h)
15	10	160	2100
20	10	650	8750
25	10	940	12600
40	6	2340	31500
50	10	3740	50400

Valve and Flow Meter

Connections	Screwed BSP
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Dimensions

Size	ACT. Size	B	H	A	C
1/2"	15	70	285	100.5	84
3/4"	20	70	293	98	94
1"	25	70	295	98	104
1 1/4"	32	90	304	102	119
1 1/2"	40	90	351	105.5	129
2"	50	130	403	112	149



Dimensions are given as a guideline only. For pipe lengths and spacing see chart.