

Datasheet C5I

IP65 control valve for gas and liquid flow applications

> Introduction

For liquid flow applications with higher flow rates and pressure rating up to 100 bar, Bronkhorst designed the control valve model C5I, however the control valve may also be used for gas flow applications. The C5I control valve is directly operated by a magnetic coil with IP65 (weatherproof) housing and is closed when de-energized (Normally Closed). Depending on flow rate and fluid the C5I valve allows a pressure drop of max. 5 to 40 bar (d). Together with Bronkhorst mass flow meters it offers possibilities to constitute a compact flow or pressure control loop.



Control Valve model C5I

> Technical specifications

Control specifications

Control span : 1 : 50 (2...100%)
 Temperature range : -10...+70°C

Mechanical parts

Material (wetted parts) : stainless steel 316L or comparable
 Pressure rating : 100 bar abs
 Process connections : compression type or face seal male
 Seals : metal to metal
 Plunger : Kalrez; other on request
 Ingress protection (housing) : IP65

Electrical properties

Power supply : +15...24 Vdc ±10%
 Power consumption : max. 4 W.

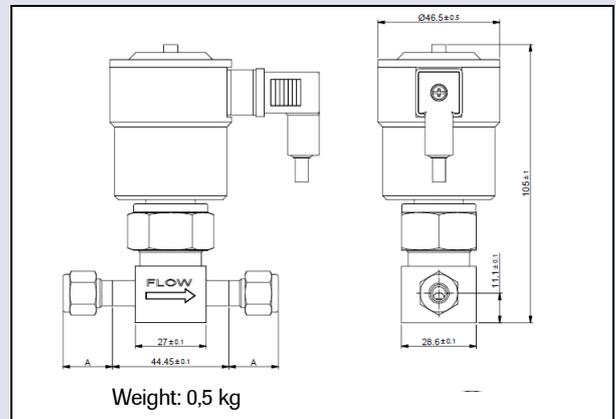
Kv-values vs Max. ΔP

Kv-value (up to)	Orifice size (mm)	Coil type	ΔP max* (bar d)
4,3.10-3	0,5	ITU	40
8,4.10-3	0,7	ITU	40
1,7.10-2	1,0	ITU	30
2,9.10-2	1,3	ITU	15
3,9.10-2	1,5	ITU	10
5,0.10-2	1,7	ITU	8
6,6.10-2	2,0	ITU	5

* depending on flow rate (based on water)

Although all specifications in this datasheet are believed to be accurate, the right is reserved to make changes without notice or obligation.

> Dimensions (mm) and weight (kg)



Compression type	3/8" tube
adapter 3mm OD	A
adapter 6mm OD	18.0mm
adapter 8mm OD	18.9mm
adapter 10mm OD	26.6mm
adapter 12mm OD	39.7mm
adapter 1/16" OD	42.4mm
adapter 1/8" OD	15.6mm
adapter 1/4" OD	17.5mm
adapter 3/8" OD	18.9mm
adapter 1/2" OD	26.4mm
adapter 1/2" OD	42.2mm

Face-seal male	3/8" tube
adapter 1/8" inlet	A
adapter 1/4" inlet	13.7mm
adapter 1/2" inlet	17.6mm
adapter 1/2" inlet	37.6mm



Bronkhorst®

Nijverheidsstraat 1a, NL-7261 AK Ruurlo The Netherlands

T +31 (0)573 45 88 00 F +31 (0)573 45 88 08 I www.bronkhorst.com E info@bronkhorst.com