

Features

Sentronic^{TWIN} is a highly dynamical 3-way proportional valve with digital control.

Sentronic^{TWIN} stands for:

- Digital communication and control
- Direct operated valve
- Dynamic behaviour (high speed)

A special feature of the Sentronic^{TWIN} is its ATC software supplied for optimum adjustment over PC and viewing of setpoint and feedback signals. Other functions are valve diagnostics, parameter setting and maintenance.



General

Fluids	: Compressed air or inert gases, compressed air according to ISO 8573-1:2010 [7:4:4]
Port	: G / NPT 1/4
Operating pressure	: Max. 90 bar
Pressure range	: Max. 80 bar
Fluid temperature	: 0 ... 60°C
Ambient temperature	: 0 ... 60°C
Setpoint - analog	: 0-20 mA / 4-20 mA (impedance 250 Ω)
Feedback output	: 0-20 mA / 4-20 mA (load resistance 50 - 500 Ω)
Hysteresis	: 3% of span
Repeatability	: 3% of span
Linearity	: 3% of span

Construction

Direct operated valve

Body	: Aluminium
Internal parts	: Stainless Steel, brass
Seals	: FPM, NBR, TPS

Electrical Characteristics

Nominal diameter DN (mm)	Voltage	Max. power (W)	Max. current (mA)	Insulation class	Degree of protection	Electrical connection
1	24V/DC +/- 10%	24	1000	F	IP65	5-pin M12 connector ⁽¹⁾
1,2	24V/DC +/- 10%	24	1000	F	IP65	5-pin M12 connector ⁽¹⁾

⁽¹⁾ to be ordered separately

Specifications

Pipe size	Orifice size (mm)	Flow	
		Coefficient Kv (Nm ³ /h)	at 6 bar (Nl/min)
1/4	1	0,035	38,8
1/4	1,2	0,048	53,7

Catalog Number
615372 0 1 1 1 4H

Version (ports), body

- 0 = DN1.2 (G1/4) Exhaust
- 1 = DN1 (G1/4) Exhaust
- 8 = DN1.2 (NPT1/4) Exhaust
- 9 = DN1 (NPT1/4) Exhaust
- A = DN1.2 (G1/4) Pressure hold
- B = DN1 (G1/4) Pressure hold
- C = DN1.2 (NPT1/4) Pressure hold
- D = DN1 (NPT1/4) Pressure hold

Setpoint

- 0 = 0...10V
- 1 = 0...20mA
- 2 = 4...20mA

Feedback

- 1 = Feedback output 0-10V
- 2 = Feedback output 0-20mA
- 3 = Feedback output 0-20mA

Pressure range

Relative pressure

- 4H = 0-40 bar, max. allowable pressure 50 bar
- 5H = 0-50 bar, max. allowable pressure 60 bar
- 6H = 0-60 bar, max. allowable pressure 70 bar⁽²⁾
- 7H = 0-70 bar, max. allowable pressure 80 bar⁽²⁾
- 8H = 0-80 bar, max. allowable pressure 90 bar⁽²⁾

Digital output

- 1 = Pressure switch output PNP ±5%

⁽²⁾ Only version 1 = DN1,0 possible

Connector pinning / Cable wiring

Pin	Description	5-wire cable	6-wire cable
1	24 V voltage supply	brown	brown
2	Analog setpoint input	white	white
3	Supply ground	blue	green
	Analog ground ⁽¹⁾	-	yellow
4	Analog output (Feedback)	black	pink
5	Digital output (Pressure switch)	grey	grey
Body	EMC screen	shield	shield

⁽¹⁾ A 6-wire cable with separate analog ground is used for cable lengths over 2 m to set off the voltage drop for the setpoint.

Europe and Asia

Description	Catalog Number
Straight M12 female connector, 5 pins, with screw terminals	881 00 256
Right-angle M12 female connector, 5 pins, with screw terminals	881 00 725
Supply cable 2 m; 5x0,25 mm ² ; straight connector	881 00 726
Supply cable 2 m; 5x0,25 mm ² ; right-angle connector	881 00 727
Supply cable 5 m; 6x0,50 mm ² ; straight connector	881 00 728
Supply cable 5 m; 6x0,50 mm ² ; right-angle connector	881 00 729
Supply cable 10 m; 6x0,50 mm ² ; straight connector	881 00 730
Supply cable 10 m; 6x0,50 mm ² ; right-angle connector	881 00 731
Parameter adapter Sentronic ^{TWIN} USB, 1 m cable	N50930300200000

Accessories America

Description	Catalog Number
M12 , straight, 5-pin, straight, 12 mm Cable fitting PG9	TC05F20000000000
M12 , angled, 5-pin, 90°, 12 mm Cable fitting PG9	TC05F20000000000
supply cable, 6-wire, straight electrical connector, 5-pin M12, 24 AWG, 3 m	TC0503MMS000671Y
supply cable, 6-wire, straight electrical connector, 5-pin M12, 24 AWG, 5 m	TC0505MMS000671Y
supply cable, 6-wire, angled electrical connector, 5-pin M12, 24 AWG, 3 m	TD0503MMS000671Y
supply cable, 6-wire, angled electrical connector, 5-pin M12, 24 AWG, 5 m	TD0505MMS000671Y
supply cable, electrical connector / plug, 4-pin M12, 22 AWG, Euro Color Code, 3 m	TC0403MMETA04000
supply cable, electrical connector / plug, 4-pin M12, 22 AWG, Euro Color Code, 5 m	TC0405MMETA04000
supply cable, electrical connector / plug angled, 4-pin M12, 22 AWG, Euro Color Code, 3 m	TD0403MMETA04000
supply cable, electrical connector / plug angled, 4-pin M12, 22 AWG, Euro Color Code, 5 m	TD0405MMETA04000
Parameterization adapter Sentronic TWIN, USB	N5093030020000

Dimensions (mm), Weight (kg)

