

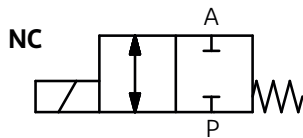
# CV10

## Coaxial Valve direct acting

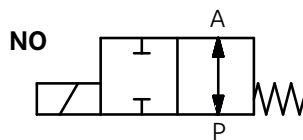


### SERIES CV10

normally closed



normally open



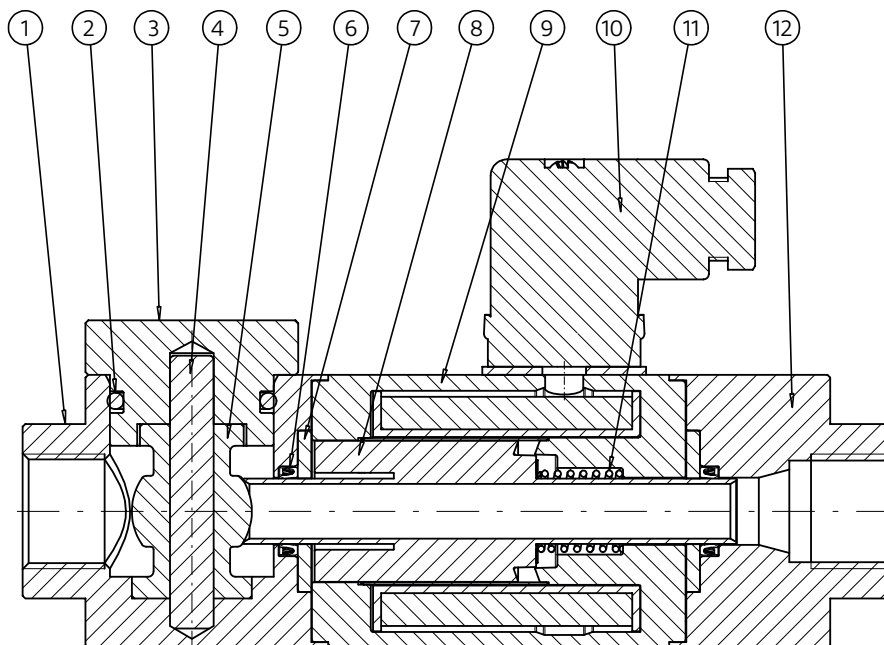
### ROSS – COAXIAL VALVE

Valve Type	CV10	
Functions	2/2-Way valve	
Operating mode	direct acting	
Functions	normally closed (NC)	normally open (NO)
$k_v$	2.1 - 3.7 m <sup>3</sup> /h	
Port-Size	G 1/4 - G 3/4 and NPT 1/4 - NPT 3/4	
Media	neutral gases, liquid, highly viscous, gelatinous and contaminated	
Nominal size	DN 10	
Type of operation	electrtomagnetic	Voltage 24 VDC; Power Consumption 1,5 A
Construction Design	<p>The ROSS coaxial valve consists of a valve seat (4-way adjustable), the control tube, an electromagnet and the connecting pieces.</p> <p>By applying current, the control tube is moved in the axial direction towards the valve seat, thereby opening (NC) or closing (NO) the valve. The axial flow enables high <math>k_v</math> values and low pressure losses. No minimum differential pressure is required to operate the direct operated coaxial valve.</p>	

OPERATING PRESSURE	PARAMETER	SPECIAL DESIGN
Operating pressure	0 to 16 bar / 0 to 40 bar	on demand
Back pressure	0 to 16 bar	
Vacuum		yes
FLOW DIRECTION	PARAMETER	SPECIAL DESIGN
P → A	according to marking	
A → P	max. 16 bar	
TEMPERATURE	PARAMETER	SPECIAL DESIGN
Ambient temperature	-10°C to +50°C	on demand
Media temperature	-10°C to +100°C	
ELECTRICAL PARAMETER	PARAMETER	SPECIAL DESIGN
Voltage	24 VDC	on demand
Voltage tolerance	± 10% as to VDE 0580	
Power consumption	1 A (0 to 16 bar) / 1.5 A (0 to 40 bar)	
Insulation class	H (180°C)	
Duty cycle	100% ED	
Electrical connector	DIN EN 175301-803, Form A	
Plug (optional)	M12x1 with LED	varistor
Enclosure rating	IP 65 (with mounted connector)	
CONSTRUCTION MATERIAL	PARAMETER	SPECIAL DESIGN
Sealing material valve seat	PTFE	
Sealing material static (O-Ring)	FKM (Standard)	EPDM, NBR, HNBR
Sealing material dynamic	PTFE	on demand
Connectors	anodized aluminum	on demand
Magnetic material	burnished steel	
Control tube	1.4571	
TECHNICAL PARAMETER	PARAMETER	SPECIAL DESIGN
Nominal size	DN 10	
k <sub>v</sub> -Value	2.1 - 3.7 m <sup>3</sup> /h	
Functions	normally closed (NC), normally open (NO)	
Response time	ca. 25 ms	
Media*	neutral gases, liquid, highly viscous, gelatinous and contaminated	
Manual override	none	none
Port sizes	G 1/4 - G 3/4 and NPT 1/4 - NPT 3/4	flange, special connectors
MISCELLANEOUS	PARAMETER	SPECIAL DESIGN
Mounting	mounting brackets	mounting brackets
Weight	1,5 kg	1,5 kg
Orientation	any	

\*see operating instructions

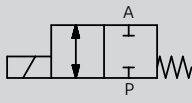
## DESCRIPTION - VALVE COMPONENTS

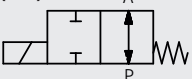


POSITION	DESCRIPTION	QUANTITY
1	Connector outlet	1
2	O-Ring Valve cover	1
3	Valve cover	1
4	Cylinder pin	1
5	Sealing body	1
6	Rod seal	2
7	Guiding disc	2
8	Control rod	1
9	Solenoid	1
10	Appliance connection switch	1
11	Valve spring	1
12	Connector inlet	1



## ORDERING CHART - VARIANTS WITH SEALING MATERIAL PTFE / FKM

TYPE/FUNCTION	NOMINAL SIZE (mm)	PIPE SIZE	$k_v$ -VALUE (m <sup>3</sup> /h)	NOMINAL PRESSURE (bar)	ORDER NUMBER (with Connector)	NOMINAL PRESSURE (bar)	ORDER NUMBER (with Connector)
2/2-way, normally closed (NC) 	10 mm	G 1/4	2.1	0 - 16	CV102DC016F10AG014A0	0 - 40	CV102DC040F10AG014A0
		G 3/8	3.2		CV102DC016F10AG038A0		CV102DC040F10AG038A0
		G 1/2	3.7		CV102DC016F10AG012A0		CV102DC040F10AG012A0
		G 3/4	3.7		CV102DC016F10AG034A0		CV102DC040F10AG034A0
		NPT 1/4	2.1		CV102DC016F10AN014A0		CV102DC040F10AN014A0
		NPT 3/8	3.2		CV102DC016F10AN038A0		CV102DC040F10AN038A0
		NPT 1/2	3.7		CV102DC016F10AN012A0		CV102DC040F10AN012A0
		NPT 3/4	3.7		CV102DC016F10AN034A0		CV102DC040F10AN034A0

TYPE/FUNCTION	NOMINAL SIZE (mm)	PIPE SIZE	$k_v$ -VALUE (m <sup>3</sup> /h)	NOMINAL PRESSURE (bar)	ORDER NUMBER (with Connector)	NOMINAL PRESSURE (bar)	ORDER NUMBER (with Connector)
2/2-way, normally open (NO) 	10 mm	G 1/4	2.1	0 - 16	CV102DO016F10AG014A0	0 - 40	CV102DO040F10AG014A0
		G 3/8	3.2		CV102DO016F10AG038A0		CV102DO040F10AG038A0
		G 1/2	3.7		CV102DO016F10AG012A0		CV102DO040F10AG012A0
		G 3/4	3.7		CV102DO016F10AG034A0		CV102DO040F10AG034A0
		NPT 1/4	2.1		CV102DO016F10AN014A0		CV102DO040F10AN014A0
		NPT 3/8	3.2		CV102DO016F10AN038A0		CV102DO040F10AN038A0
		NPT 1/2	3.7		CV102DO016F10AN012A0		CV102DO040F10AN012A0
		NPT 3/4	3.7		CV102DO016F10AN034A0		CV102DO040F10AN034A0

ORDERING CHART - ACCESSORIES		ORDER NUMBER
DIN Connector with LED – 24 VDC		936K87-A
Connector M12x1 with LED – 24 VDC		RESK 4610.1
Mounting brackets		HTW-CV10
Repair kit, sealing body and valve cover (see page 3, items 2, 3, 4 and 5)		DICH-CV10

## SPECIAL VALVES ON REQUEST

We reserve the right to make technical changes in the course of product development.

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