

# Flow controller and indicator CDV



- **Mounting:** vertical or horizontal
- **Direct reading** on glass tube
- **Measurement independent of pressure**
- **Construction:** brass or stainless steel
- **Adjustable change over contact:** N.O.
- **Range:** 9 scales from 0.005 up to 150 L/min
- **Temperature:** 0 to 100 °C
- **Pressure up to 16 or 10 bar (acc. fittings)**

## APPLICATIONS

This model CDV is designed for cooling circuit survey, or survey of any high pressure circuits, to protect pumps against flow less accidents.

## PRINCIPLE

The fluid moves over an orifice plate with a built-in magnet. A compensating spring allows the mounting in any position. CDV operates without incidence of pressure on measurement, even with low flow rates.

The diver indicates the flow rate through a graduated glass tube. A Reed contact is adjustable all along the scale. The contact is Normally Open (*opened with flow less conditions*).

## TECHNICAL FEATURES

Pressure limits	Fittings 1/4" and 1/2": 16 bar Fittings 1": 10 bar
Temperature limits:	0 to 100 °C (sealing NBR)
Scale unit :	For water at 20 °C
Accuracy :	±10 %
Pressure drop:	0.02 to 0.4 bar (acc. F.S.)
Contact:	N.O. (Switching power: refer to next page)
Hysteresis :	≈1.5 mm
Connector:	DIN 43650 - IP 65
Transparent tube:	DURAN® 50 glass tube
Magnet:	Ferrite

### Brass version

Body:	Aluminium alloy, anodized
Fittings, orifice plate:	Brass
Seals:	NBR
Spring:	Stainless steel 304

### Stainless steel version

Body:	Aluminium alloy, anodized
Fittings, orifice plate:	Stainless steel 316 L
Seals:	FPM
Spring:	Stainless steel 304

## CONTACTS: Description and technical features

**Caution: The Reed contact is inside polyamide housing. Protect it against over-riding.**

The adjustment is continuous, sliding the switch along its guide and fixed it up with a screw. The connector is type DIN 43650, IP 65

### Contact N.O., opened with flow less condition

Fitting 1":	230 V / 1 A / 50 VA
Fitting 1/2":	230 V / 3 A / 60 VA
Fitting 1/4":	200 V / 1 A / 20 VA

### Change over contact (option)

Fitting 1/2" and 1":	250 V / 1,5 A / 50 VA
Fitting 1/4":	200 V / 1 A / 20 VA

### Ex area: Contact ATEX, EEx m IIC T6 (option)

Fitting 1/2" and 1":	Change over: 250 V / 1 A / 30 VA
	N.O.: 250 V / 2 A / 60 VA

## CODE NUMBERS AND REFERENCES

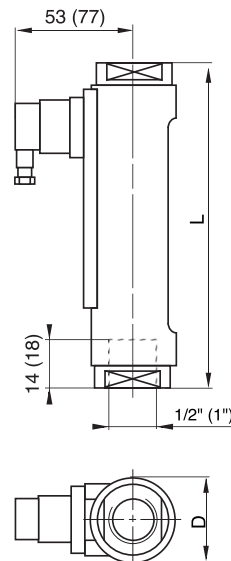
Type	Code Brass	Code AISI 316	Fitting	Range L/min H <sub>2</sub> O	L [mm]	D [mm]	Mass [g]
CDV 01	722 500	722 600	1/4"	0.005 - 0.060	90	20	140
CDV 02	722 502	722 602	1/4"	0.025 - 0.13	90	20	140
CDV 06	722 506	722 606	1/4"	0.1 - 0.6	90	20	140
CDV 3	722 508	722 608	1/4"	0.5 - 3	90	20	140
CDV 8	722 528	722 628	1/2"	2 - 8	114	32	300
CDV 20	722 529	722 629	1/2"	8 - 20	114	32	300
CDV 45	722 533	722 633	1"	15 - 45	158	50	900
CDV 90	722 536	722 636	1"	30 - 90	158	50	900
CDV150	722 539	722 639	1"	60 - 150	158	50	900

## SPECIFIC SCALES

### Compressed air

Available for 1 bar absolute at 20 °C

Fitting	Range NL/min Air	
1/4"	0.2 - 1,3	
	0.5 - 2	
	0.8 - 3	
	1.5 - 5	
	2 - 8	
	3 - 12	
	3.5 - 14	
	5.5 - 20	
	7 - 24	
	10 - 35	
	10 - 42	
	1/2"	3 - 12
		7 - 30
12 - 40		
28 - 125		
50 - 200		
1"	100 - 420	
	120 - 480	
	22.5 - 80	
	50 - 130	
	130 - 420	
	200 - 625	



## STARTING-UP

Series CDV is designed for mounting in vertical or horizontal hydraulic pipe lines. Fluid must not contain particles, better to fit before the instrument a convenient filter. The controller must be mounted away from magnetic induction fields. Any ferrous parts must be at 10 cm minimum from the contact. Caution to respect the switching power. Amplifying relays are available (ES 2001); please see the data sheet 250-02.

Adjustment of trigger point: in front of flow rate indicated on the graduated tube.

# BAMO MESURES

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**CDV**

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**DEB**

**722-02/2**