

# D187/188/189/190/192/293 - C D187/188/189/190/192/293 Series, General Purpose – 2/2 Normally Closed

Specifications	
Function (single acting)	<p>Flow direction overseat 1 → 2</p>
Maximum Viscosity	Max. 21cSt (3 °E)
Body Material (Std)	Brass CW617N (EN 12165)
Flange	Stainless Steel 1.4305 EN 10088 (AISI 303)
Tube	Stainless Steel AISI 304
Plunger	Stainless Steel 1.4106 EN 10088 (AISI 430F)
Top Stop	Stainless Steel 1.4105 EN 10088 (AISI 430F)
Springs	Stainless Steel AISI 302
Seal Material (Std)	NBR
Connection Type (Std)	G parallel thread (ISO 228-1)
Shading Ring	Copper
Electrical Characteristics	
Standard Coil Voltage DC (=)	24 V
Standard Coil Voltage AC 50 Hz (-)	24 V, 110 V, 200 V, 230 V
Standard Coil Voltage AC 60 Hz (-)	24 V, 120 V, 220 V, 240 V
Voltage Tolerance	+10% to -15% (AC)
	+10% to -5% (DC)
Duty Cycle	100% ED
Protection Class	IP65 (EN 60529) with plug and gasket correctly fitted *
Electrical Connection	to EN 175301 - 803 - A (ex DIN 43650)
Coil Insulation	Class F 155 °C
Power Rating (Standard)	AC 18 VA (holding) AC 36 VA (inrush) DC 14 W

## Features and Benefits

- Pilot operated with linked diaphragm
- Robust construction for industrial applications
- Zero pressure rated
- Stainless steel AISI 430F operators with low residual magnetism
- Coils tested 100% in compliance to RoHS directive and to relevant international standards
- Choice of high quality seal materials
- Speed control screw as standard for type D293 and C D293
- Response time 50 to 500 ms



Pipe Size	Cv (gpm)	Kv (m³/h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	3.51	3.00	0 - 16	-	15	NBR	D187DBW
						FKM	D187DWW
						EPDM	D187DEW
¾"	4.21	3.60			15	NBR	D188DBW
						FKM	D188DWW
						EPDM	D188DEW
½"	4.56	3.90			15	NBR	D189DBW
						FKM	D189DWW
						EPDM	D189DEW
¾"	5.62	4.80			15	NBR	D190DBW
			FKM	D190DWW			
			EPDM	D190DEW			
1" compact	5.97	5.10	15	NBR	D192DBW		
				FKM	D192DWW		
				EPDM	D192DEW		
1"	9.83	8.40	25	NBR	D293DBY		
				FKM	D293DYY		
				EPDM	D293DEY		
¼"	3.51	3.00	-	0 - 6	15	NBR	C D187DBW
						FKM	C D187DWW
						EPDM	C D187DEW
¾"	4.21	3.60			15	NBR	C D188DBW
						FKM	C D188DWW
						EPDM	C D188DEW
½"	4.56	3.90			15	NBR	C D189DBW
						FKM	C D189DWW
						EPDM	C D189DEW
¾"	5.62	4.80			15	NBR	C D190DBW
			FKM	C D190DWW			
			EPDM	C D190DEW			
1" compact	5.97	5.10	15	NBR	C D192DBW		
				FKM	C D192DWW		
				EPDM	C D192DEW		
1"	9.83	8.40	-	0 - 3.5	25	NBR	C D293DBY
						FKM	C D293DYY
						EPDM	C D293DEY

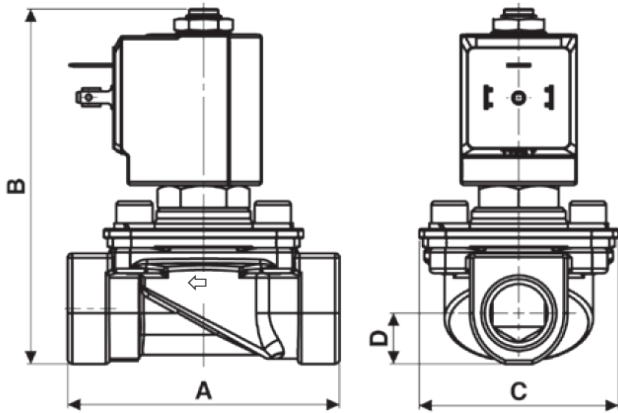
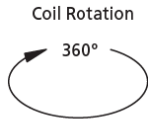
## Options Available

Valve Options (see coding chart)
NPT threads (minimum batch may be required)
Electroless nickel plating

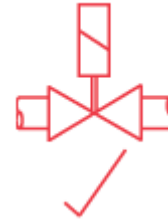
Vacuum version
See separate datasheet

Seal Material <sup>1</sup> and Media Temperature Range	Media	Ambient Temperature Range	
		Min	Max
NBR (-10 °C to +90 °C)	Water, oil, air	-10 °C	+50 °C
FKM (-10 °C to +130 °C)	Water, oil, air	-10 °C	+50 °C
EPDM (-10 °C to +120 °C)	Water, hot water	-10 °C	+50 °C

<sup>1</sup> See corrosion reference guide and sealing solutions for material compatibility.



## Preferred Valve Mounting Options



Pipe Size	A	B	C	D	Weight (kg)
¼" - ½"	75	108	55	14	0.5
¾" - 1" compact	85	108	55	21.5	0.8
1"	100	113	70	21.5	1.2

Dimensions (mm)

### Solenoid enclosures

#### 7--0 Type Coil - Insulation class F

- External material: PBT (reinforced fiberglass 30%)
- Electrical connection: DIN EN 175301-803 form A
- Winding insulation: Class H (E180)
- Enclosure classification: Conforms to IP65 (according to EN 60529) with plug and gasket correctly fitted\*



#### Type 600 011- Plug

- Rated Voltage (max.): 250 VAC / 300 VDC
- Nominal Current: 10A (rated) / 16A (max)
- Wire cross-section: 1.5 mm<sup>2</sup> max
- Cable Entry: PG9 (6 to 8 mm)
- Enclosure classification: Conforms to IP65 (according to EN 60529) with supplied gasket
- Insulation class: group C- VDE 0110
- Housing colour: black
- UL approved, file No: E205538



\* Plug and gasket not supplied as standard, must be ordered separately.

### Coding chart

#### Main Valve Assembly

Valve Type	
D	AC version
CD	DC version

Pipe Size	
187	¼"
188	⅜"
189	½"
190	¾"
192	1" compact
293	1"

Seals	
B	NBR
V	FKM
E	EPDM

Orifice <sup>1</sup>	
W	15
Y	25

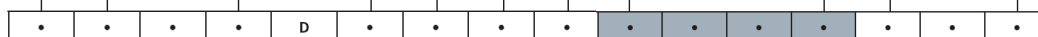
Option	
N	NPT
K	Electroless nickel plating
	w/o option

#### Coil options

Voltage / Frequency - Class F	
7150	12 VDC
7250	24 VDC
7200	24 V / 50/60 Hz
7400	110 V / 50 Hz - 120 V / 60 Hz
7600	200 V / 50 Hz - 220 V / 60 Hz
7700	230 V / 50 Hz - 240 V / 60 Hz

#### Plug

Plug	
	w/o plug
0A1	c/w plug

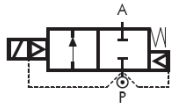


<sup>1</sup> DN25 for D293 and C D293 only.

### Product coding example:

D188DBW 7200  
 ⅜" G, auto operation, brass body, NBR seals, 15 mm orifice, 24 V / 50/60 Hz, without plug.

# D884/885/886 Series, General Purpose – 2/2 Normally Closed

Specifications	
Function (single acting)	 <p>Flow direction overseat 1 → 2</p>
Maximum Viscosity	Max. 21cST (3 °E)
Body Material (Std)	Brass CW617N (EN 12165)
Flange <sup>1</sup>	Stainless Steel 1.4305 EN 10088 (AISI 303)
Tube	Stainless Steel AISI 304
Plunger	Stainless Steel 1.4106 EN 10088 (AISI 430F)
Top Stop	Stainless Steel 1.4105 EN 10088 (AISI 430F)
Springs	Stainless Steel AISI 302
Seal Material (Std)	FKM
Connection Type (Std)	G parallel thread (ISO 228-1)
Shading Ring	Copper
Electrical Characteristics	
Standard Coil Voltage DC (=)	24 V
Standard Coil Voltage AC 50 Hz (-)	24 V, 110 V, 200 V, 230 V
Standard Coil Voltage AC 60 Hz (-)	24 V, 120 V, 220 V, 240 V
Voltage Tolerance	+10% to -15% (AC)
	+10% to -5% (DC)
Duty Cycle	100% ED
Protection Class	IP65 (EN 60529) with plug and gasket correctly fitted *
Electrical Connection	to EN 175301 - 803 - A (ex DIN 43650)
Coil Insulation	Class F 155 °C
Power Rating (Standard)	AC 18 VA (holding) AC 36 VA (inrush) DC 14 W

<sup>1</sup> This valve carries an additional flange HEX 30 in Brass CW614N (EN 12164) between body and flange tube.

## Features and Benefits

- Pilot operated with assisted lift
- Robust construction for industrial applications
- Stainless steel AISI 430F operators with low residual magnetism
- Coils tested 100% in compliance to RoHS directive and to relevant international standards
- High quality seal materials
- Response time 50 to 500 ms



Pipe Size	Cv (gpm)	Kv (m <sup>3</sup> /h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	1.47	1.26	0 - 16	0 - 6	10.5	FKM	D884DVU
⅜"	1.68	1.44				FKM	D885DVU
½"	1.76	1.50				FKM	D886DVU

## Options Available

Valve Options (see coding chart)
NPT threads (minimum batch may be required)
Silver shading ring

Seal Material <sup>1</sup> and Media Temperature Range	Media	Ambient Temperature Range	
		Min	Max
FKM (-10 °C to +130 °C)	Water, oil, air	-10 °C	+50 °C

<sup>1</sup> See corrosion reference guide and sealing solutions for material compatibility.

