

B298 Series, General Purpose & Chemical Industry – 2/2 Normally Closed

Specifications	
Function	<p>Flow direction overseat 1 → 2</p>
Maximum Viscosity	Max. 21cST (3 °E)
Body Material (Std)	Stainless Steel 1.4305 EN 10088 (AISI 303)
Orifice Material	Stainless Steel 1.4305 EN 10088 (AISI 303)
Flange Tube ¹	Stainless Steel (AISI 303)
Plunger and Top Stop	Stainless Steel 1.4105 EN 10088 (AISI 430F) or equivalent
Springs	Stainless Steel AISI 302
Seal Material (Std)	Foodgrade 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	AC +10% to -15%
	DC +10% to -5%
Duty Cycle	100% ED
Protection Class	IP65 (EN 60529) with plug and gasket correctly fitted *
Electrical Connection	to industrial form B
Coil Insulation	Class F 155 °C
Power Rating (Standard)	AC 10 VA (holding) AC 16 VA (inrush) DC 7W

¹ With special nut, different from Standard.

Features and Benefits

- Direct Acting
- 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 5 to 25 ms



Pipe Size	Cv (gpm)	Kv (m ³ /h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
1/8"	0.09	0.08	0 - 22	0 - 18	1.5	FKM	B298DVC
1/8"	0.13	0.11	0 - 18	0 - 8	2.0	FKM	B298DVE
1/8"	0.19	0.16	0 - 13	0 - 2.5	2.5	FKM	B298DVG
1/8"	0.25	0.21	0 - 8	0 - 1	3.0	FKM	B298DVH
1/8"	0.09	0.08	0 - 24	0 - 24	1.5	KALREZ [®]	B298DKC
1/8"	0.13	0.11	0 - 18	0 - 15	2.0	KALREZ [®]	B298DKE
1/8"	0.19	0.16	0 - 15	0 - 3	2.5	KALREZ [®]	B298DKG

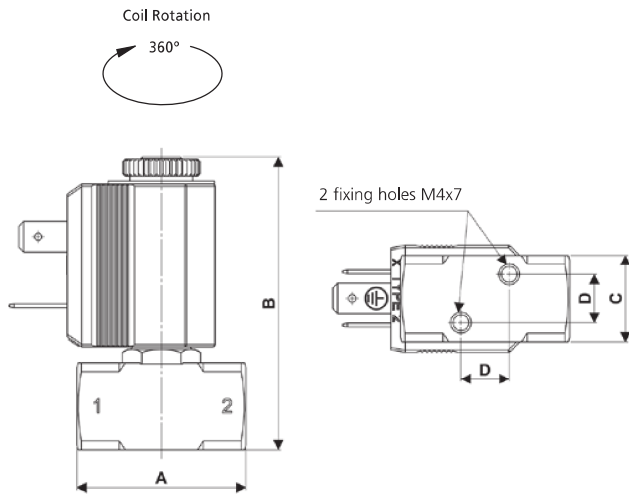
Options Available

Valve Options (see coding chart)
Anticorrosion treatment recommended with aggressive fluids

Seal Material ¹ and Media Temperature Range	Media	Ambient Temperature Range	
		Min	Max
FKM (-10 °C to +130 °C)	Water, oil, air, aggressive fluids	-10 °C	+50 °C
Kalrez [®] Spectrum™ (-10 °C to 130 °C)	Chemicals	-10 °C	+50 °C

¹ See corrosion reference guide and sealing solutions for material compatibility.

B298 Series, General Purpose & Chemical Industry – 2/2 Normally Closed



Preferred Valve Mounting Options



Pipe Size	A	B	C	D	Weight (kg)
1/8"	35	60.6	18	10	0.1

Dimensions (mm)

Solenoid enclosures

2--0 Type Coil - Insulation class F

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



Type 600 001- Plug

- Rated Voltage (max.): 250 VAC / 300 VDC
- Nominal Current: 10A (rated) / 16A (max)
- Wire cross-section: 1.5 mm² 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



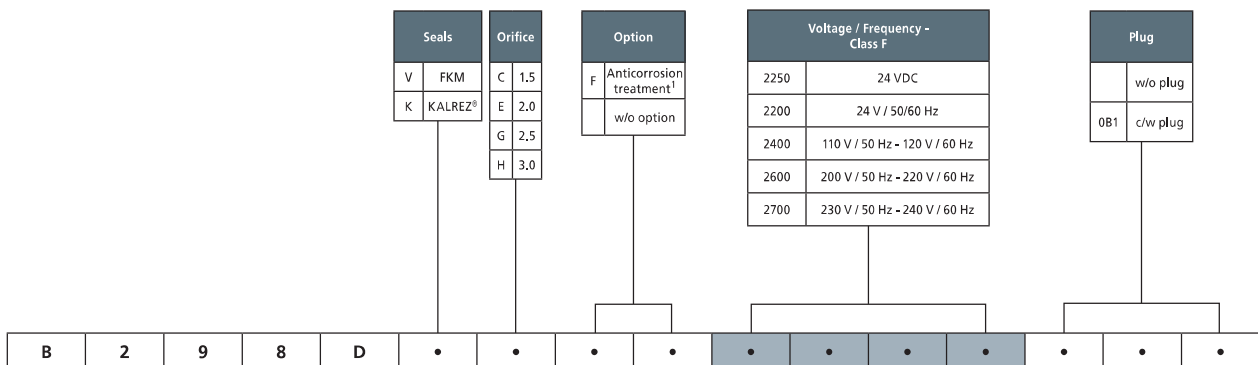
* Plug and gasket not supplied as standard, must be ordered separately.

Coding chart

Main Valve Assembly

Coil options

Plug

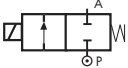


¹ Recommended with aggressive fluids.

Product coding example:

B298DKC 2250
1/8" G, auto operation, stainless steel body, Kalrez® seals, 24 VDC, without plug.

D298/299 Series, General Purpose & Chemical Industry – 2/2 Normally Closed

Specifications	
Function (single acting)	 <p>Flow direction overseat 1 → 2</p>
Maximum Viscosity	Max. 21cST (3 °E)
Body Material (Std)	Stainless Steel 1.4305 EN 10088 (AISI 303)
Orifice Material	Stainless Steel 1.4305 EN 10088 (AISI 303)
Tube	Stainless Steel AISI 304
Flange	Stainless Steel 1.4305 EN 10088 (AISI 303)
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)	Foodgrade 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

Features and Benefits

- Direct Acting
- 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
- Choice of high quality seal materials
- Wide range of available orifices
- Eex option (see separate datasheet)
- Response time 5 to 25 ms



Pipe Size	Cv (gpm)	Kv (m³/h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	0.08	0.07	0 - 24	0 - 24	1.5	FKM EPDM	D299D _Y C D299D _E C
¼"	0.23	0.20	0 - 18	0 - 18	2.5	FKM EPDM	D299D _Y G D299D _E G
¼"	0.32	0.27	0 - 15	0 - 10	3.0	FKM EPDM	D299D _Y H D299D _E H
¼"	0.42	0.36	0 - 10	0 - 5.5	4.0	FKM EPDM	D299D _Y L D299D _E L
¼"	0.53	0.45	0 - 5	0 - 2.5	5.0	FKM EPDM	D299D _Y N D299D _E N
¼"	0.16	0.14	0 - 20	0 - 20	2.0	KALREZ®	D299D _K E
¼"	0.23	0.20	0 - 18	0 - 16	2.5	KALREZ®	D299D _K G
¼"	0.32	0.27	0 - 15	0 - 8	3.0	KALREZ®	D299D _K H

Options Available

Valve Options (see coding chart)	
Body threaded connection G 1/8"	
NPT threads (minimum batch may be required)	
Anticorrosion treatment recommended with aggressive fluids	
Silver shading ring	

EEx T4	
Protection Class	See separate datasheet
EEx T4 (IP65)	

Seal Material ¹ and Media Temperature Range	Media	Ambient Temperature Range	
		Min	Max
FKM (-10 °C to +130 °C)	Water, oil, air, aggressive fluids	-10 °C	+50 °C
EPDM (-10 °C to +120 °C)	Water, hot water	-10 °C	+50 °C
Kalrez® Spectrum™ (-10 °C to +130 °C)	Chemicals	-10 °C	+50 °C

¹ See corrosion reference guide and sealing solutions for material compatibility.

D262/263 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)
Orifice Material	Stainless Steel 1.4305 EN 10088 (AISI 303)
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)	Foodgrade 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

Features and Benefits

- Direct Acting
- 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
- Choice of high quality seal materials
- Eex option (see separate datasheet)
- Response time 5 to 25 ms



Pipe Size	Cv (gpm)	Kv (m³/h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	0.04	0.03	0 - 30	0 - 30	1.0	FKM EPDM	D263DVA D263DEA
¼"	0.09	0.08	0 - 24	0 - 24	1.5	FKM EPDM	D263DVC D263DEC
¼"	0.24	0.20	0 - 18	0 - 16	2.5	FKM EPDM	D263DVG D263DEG
¼"	0.32	0.27	0 - 15	0 - 10	3.0	FKM EPDM	D263DVH D263DEH
¼"	0.42	0.36	0 - 10	0 - 5	4.0	FKM EPDM	D263DVL¹ D263DEL¹
¼"	0.53	0.45	0 - 5	0 - 2.5	5.0	FKM EPDM	D263DVN¹ D263DEN¹
¼"	0.56	0.48	0 - 3	0 - 1	6.0	FKM EPDM	D263DVP¹ D263DEP¹

¹ Manual override not available for orifice > Ø 3mm.

Options Available

Valve Options (see coding chart)
Body threaded connection G 1/8"
NPT threads (minimum batch may be required)
Manual override
Electroless nickel plating

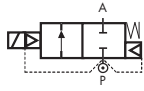
EEx T4	
Protection Class	See separate datasheet
EEx T4 (IP65)	

Vacuum Version
See separate datasheet

Seal Material¹ and Media Temperature Range	Media	Ambient Temperature Range	
		Min	Max
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

¹ See corrosion reference guide and sealing solutions for material compatibility.

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 ¹	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

¹ 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 ³ /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	D884D <u>Y</u> U
⅜"	1.68	1.44				FKM	D885D <u>Y</u> U
½"	1.76	1.50				FKM	D886D <u>Y</u> U

Options Available

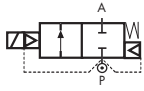
Valve Options (see coding chart)
NPT threads (minimum batch may be required)
Silver shading ring

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

¹ See corrosion reference guide and sealing solutions for material compatibility.

D264/265/266 Series, General Purpose and Compressed Air

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 ¹	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

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

Features and Benefits

- Pilot operated
- 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
- Choice of high quality seal materials
- Response time 50 to 500 ms



Pipe Size	Cv (gpm)	Kv (m ³ /h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	1.47	1.26	0.1- 16	0.1- 7	10.5	NBR	D264DBU
						FKM	D264DYU
						EPDM	D264DEU
⅜"	1.68	1.44	0.1- 16	0.1- 7	10.5	NBR	D265DBU
						FKM	D265DYU
						EPDM	D264DEU
½"	1.76	1.50	0.1- 16	0.1- 7	10.5	NBR	D266DBU
						FKM	D266DYU
						EPDM	D264DEU

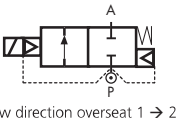
Options Available

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

Seal Material ² 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

² See corrosion reference guide and sealing solutions for material compatibility.

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 FKM EPDM	D187DBW D187DVW D187DEW		
⅜"	4.21	3.60			15	NBR FKM EPDM	D188DBW D188DVW D188DEW		
½"	4.56	3.90			15	NBR FKM EPDM	D189DBW D189DVW D189DEW		
¾"	5.62	4.80			15	NBR FKM EPDM	D190DBW D190DVW D190DEW		
1" compact	5.97	5.10			15	NBR FKM EPDM	D192DBW D192DVW D192DEW		
1"	9.83	8.40			25	NBR FKM EPDM	D293DBY D293DYY D293DEY		
¼"	3.51	3.00			-	0 - 6	15	NBR FKM EPDM	C D187DBW C D187DVW C D187DEW
⅜"	4.21	3.60					15	NBR FKM EPDM	C D188DBW C D188DVW C D188DEW
½"	4.56	3.90					15	NBR FKM EPDM	C D189DBW C D189DVW C D189DEW
¾"	5.62	4.80	15	NBR FKM EPDM			C D190DBW C D190DVW C D190DEW		
1" compact	5.97	5.10	15	NBR FKM EPDM			C D192DBW C D192DVW C D192DEW		
1"	9.83	8.40	25	NBR FKM EPDM			C D293DBY C D293DYY C D293DEY		

Options Available

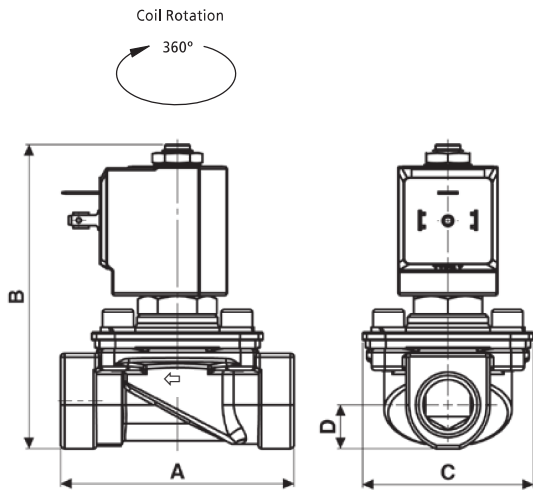
Valve Options (see coding chart)
NPT threads (minimum batch may be required)
Electroless nickel plating

Vacuum version
See separate datasheet

Seal Material ¹ 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

¹ See corrosion reference guide and sealing solutions for material compatibility.

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



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 mm² 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	Pipe Size
D AC version	187 ¼"
DC version	188 ⅜"
	189 ½"
	190 ¾"
	192 1" compact
	293 1"

Seals	Orifice ¹
B NBR	W 15
V FKM	Y 25
E EPDM	

Option
N NPT
K Electroless nickel plating
w/o option

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

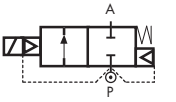


¹ DN25 for D293 and C D293 only.

Product coding example:

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

B203/204/205/206/222 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 and Top Stop	Stainless Steel 1.4105 EN 10088 (AISI 430F) or equivalent
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 industrial form B
Coil Insulation	Class F 155 °C
Power Rating (Standard)	AC 10 VA (holding) AC 16 VA (inrush) DC 7 W

Features and Benefits

- Pilot operated
- 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
- Choice of high quality seal materials
- Response time 50 to 500 ms



Pipe Size	Cv (gpm)	Kv (m ³ /h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	1.83	1.56	0.3 - 16	0.3 - 16	13	NBR	B203DBZ
						FKM	B203DVZ
EPDM	B203DEZ						
¾"	3.86	3.30				NBR	B204DBZ
						FKM	B204DVZ
						EPDM	B204DEZ
½"	4.42	3.78			NBR	B205DBZ	
					FKM	B205DVZ	
¾" compact	7.02	6.00			EPDM	B205DEZ	
					NBR	B206DBX	
			FKM	B206DVX			
¾"	9.83	8.40	EPDM	B206DEX			
			25	FNBR	B206D ¹ Y ¹		
				FKM	B206D ¹ V ¹		
1"	11.23	9.60	EPDM	B206D ¹ E ¹			
			25	NBR	B222D ¹ BY		
				FKM	B222D ¹ V ¹ Y		
1"	11.23	9.60	EPDM	B222D ¹ E ¹ Y			

¹ Non standard, MOQ required.

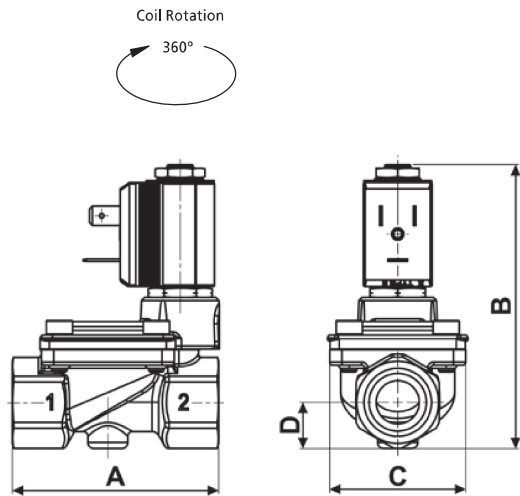
Options Available

Valve Options (see coding chart)
NPT threads (minimum batch may be required)
Manual override
Electroless nickel plating treatment
Speed control screw (on DN25 only)

Seal Material ¹ 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

¹ See corrosion reference guide and sealing solutions for material compatibility.

B203/204/205/206/222 Series, General Purpose – 2/2 Normally Closed



Preferred Valve Mounting Options



Pipe Size	A	B	C	D	Weight (kg)
¼" - ⅜" - ½"	67	90	45.6	15	0.4
¾" compact	82	105	51.6	20.25	0.6
¾" to 1"	96	115	72	23	1.2

Dimensions (mm)

Solenoid enclosures

2--0 Type Coil - Insulation class F

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



Type 600 001- Plug

Rated Voltage (max.): 250 VAC / 300 VDC
 Nominal Current: 10A (rated) / 16A (max)
 Wire cross-section: 1.5 mm² 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

Pipe Size
03 ¼"
04 ⅜"
05 ½"
06 ¾" (compact)
06 ¾" 1
22 1"

Seals	Orifice ²
B NBR	Z 13
V FKM	X 21
E EPDM	Y 25

Option
N NPT
M Manual Override
K Electroless nickel plating
V Speed control screw ³
w/o option

Coil options

Voltage / Frequency - Class F	
2250	24 VDC
2200	24 V / 50/60 Hz
2400	110 V / 50 Hz - 120 V / 60 Hz
2600	200 V / 50 Hz - 220 V / 60 Hz
2700	230 V / 50 Hz - 240 V / 60 Hz

Plug

Plug
w/o plug
081 c/w plug



¹ Non standard, MOQ required.

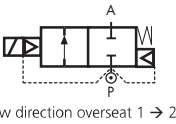
² DN13 only for B203/204/205, DN21 only for B206 compact, DN25 only for B206 and B222.

³ Speed control screw available on B206D-Y and B222D-Y.

Product coding example:

B203DBZ 2250
 ¼" G, auto operation, brass body, NBR seals, 13 mm orifice, 24 VDC, without plug.

D223/224/225 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
- 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
- Choice of high quality seal materials
- Speed control screw as standard
- 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			
1 ¼"	25.97	22.20	0.5 - 16	0.5 - 16	40	NBR	D223DBK
						FKM	D223DYK
						EPDM	D223DEK
1 ½"	28.08	24.00	0.5 - 16	0.5 - 16	40	NBR	D224DBK
						FKM	D224DYK
						EPDM	D224DEK
2"	37.91	32.40	0.5 - 16	0.5 - 16	50	NBR	D225DBJ
						FKM	D225DYJ
						EPDM	D225DEJ

Options Available

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

Vacuum Version
See separate datasheet

Seal Material ¹ 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

¹ See corrosion reference guide and sealing solutions for material compatibility.

