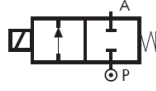


D237/238/239 & CD237/238/239 Series, Vacuum – 2/2 Normally Closed

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)
Additional Flange (HEX 30)	Brass CW614N (EN 12164)
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	
High Power Coil Voltage DC (=)	24 V
High Power Coil Voltage AC 50 Hz (-)	24 V, 110 V, 230 V
High Power Coil Voltage AC 60 Hz (-)	24 V, 120 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 H 180 °C
Power Rating (High Power)	AC 25 VA (holding) AC 50 VA (inrush) DC 22 W

Features and Benefits

- Direct Acting
- Robust construction for industrial applications
- Configuration suitable for vacuum
- 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 5 to 25 ms



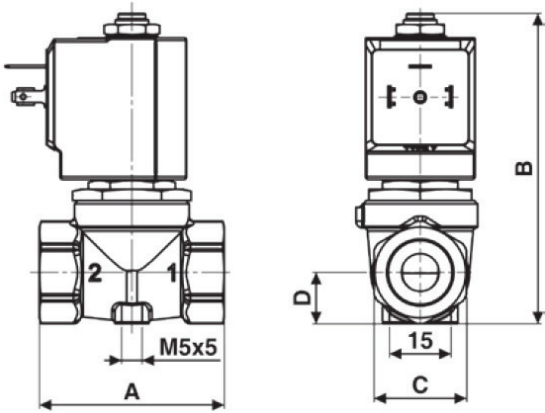
Pipe Size	Cv (gpm)	Kv (m³/h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	1.49	1.27	0 to -0.95	-	10.5	NBR EPDM	D237DBU1 D237DEU1
⅜"	1.68	1.44	0 to -0.95	-	10.5	NBR EPDM	D238DBU1 D238DEU1
½"	1.76	1.50	0 to -0.95	-	10.5	NBR EPDM	D239DBU1 D239DEU1
¼"	1.49	1.27	-	0 to -0.95	10.5	NBR EPDM	C D237DBU1 C D237DEU1
⅜"	1.68	1.44	-	0 to -0.95	10.5	NBR EPDM	C D238DBU1 C D238DEU1
½"	1.76	1.50	-	0 to -0.95	10.5	NBR EPDM	C D239DBU1 C D239DEU1

Options Available

Seal Material ¹ and Media Temperature Range	Media	Ambient Temperature Range	
		Min	Max
NBR 60 shore (-10 °C to +90 °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. Other seals material on request.

Coil Rotation



Preferred Valve Mounting Options



Pipe Size	A	B	C	D	Weight (kg)
1/4" - 3/8" - 1/2"	54	89	HEX 27	15	0.45

Dimensions (mm)

Solenoid enclosures

7-K1 & 7-Z1 Type Coil - Insulation class H

- External material: PPS (glass fiber & mineral filled)
- 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
D AC version
CD DC version

Pipe Size
7 1/4"
8 3/8"
9 1/2"

Seals
E EPDM
B NBR

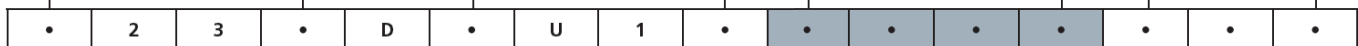
Option
w/o option

Coil options

Voltage / Frequency - Class H, High Power	
72Z1	24 VDC
72K1	24 V / 50/60 Hz
74K1	110 V / 50 Hz - 120 V / 60 Hz
77K1	230 V / 50 Hz - 240 V / 60 Hz

Plug

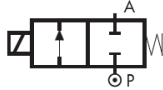
Plug
w/o plug
0A1 c/w plug



Product coding example:

D238DEU1 77K1
3/8" G, auto operation, brass body, EPDM seals, 10.5 mm orifice, 230 V / 50 Hz - 240 V / 60 Hz, without plug.

D262/263 Series, Vacuum – 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
- Configuration suitable for vacuum
- 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 5 to 25 ms



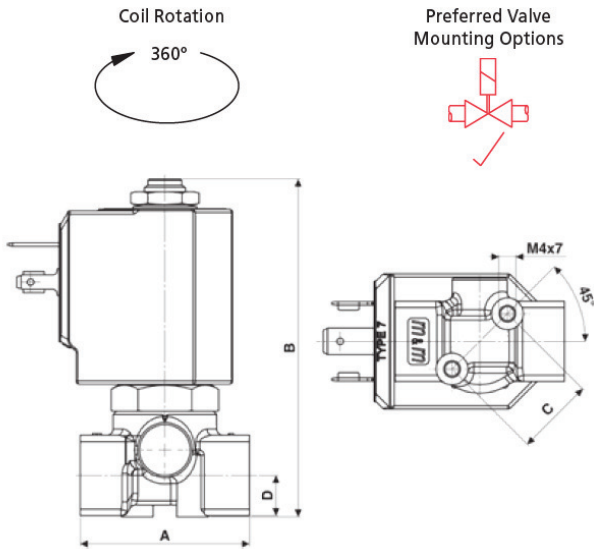
Pipe Size	Cv (gpm)	Kv (m³/h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	0.04	0.03	-0.9 to 1	-0.9 to 1	1.0	FKM NBR	D263DV ¹ AL D263DB ¹ AL
¼"	0.09	0.08	-0.9 to 1	-0.9 to 1	1.5	FKM NBR	D263DV ¹ CL D263DB ¹ CL
¼"	0.24	0.20	-0.9 to 1	-0.9 to 1	2.5	FKM NBR	D263DV ¹ GL D263DB ¹ GL
¼"	0.32	0.27	-0.9 to 1	-0.9 to 1	3.0	FKM NBR	D263DV ¹ HL D263DB ¹ HL
¼"	0.42	0.36	-0.9 to 1	-0.9 to 1	4.0	FKM NBR	D263DV ¹ LL D263DB ¹ LL
¼"	0.53	0.45	-0.9 to 1	-0.9 to 1	5.0	FKM NBR	D263DV ¹ NL D263DB ¹ NL
¼"	0.56	0.48	-0.9 to 1	-0.9 to 1	6.0	FKM NBR	D263DV ¹ PL D263DB ¹ PL

Options Available

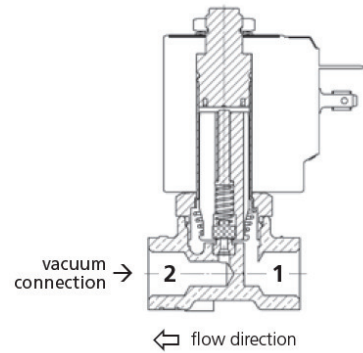
Valve Options (see coding chart)
Body threaded connection G 1/8"

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
NBR (-10 °C to +90 °C)	Water, oil, air	-10 °C	+50 °C

¹ See corrosion reference guide and sealing solutions for material compatibility. Other seals material on request.



Connection scheme



Pipe Size	A	B	C	D	Weight (kg)
1/8" - 1/4"	40	77.5	18.5	9.5	0.26

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

Pipe Size
2
3

Seals	Orifice
V FKM	A 1.0
B NBR	C 1.5
	G 2.5
	H 3.0
	L 4.0
	N 5.0
	P 6.0

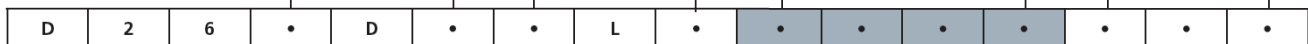
Option
w/o option

Coil options

Voltage / Frequency - Class F
7250
7200
7400
7600
7700

Plug

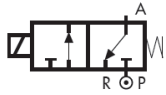



Plug
w/o plug
0A1



Product coding example:

D263DBPL 7700
1/4" G, auto operation, brass body, FKM seals, 6.0 mm orifice, 230 V / 50 Hz - 240 V / 60 Hz, without plug.

D362/363 Series, Vacuum – 3/2 Normally Closed

Specifications	
Function (single acting)	 <p>Flow direction underseat 2 → 1</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 and Class H Coil Voltage DC (=)	24 V
Standard and Class H Coil Voltage AC 50 Hz (-)	24 V, 110 V, 200 V, 230 V
Standard and Class H Coil Voltage AC 60 Hz (-)	24 V, 120 V, 220 V, 240 V
 Coil Voltage DC (=)	24 V
 Coil Voltage AC 50 Hz (-)	24 V, 110 V, 230 V
 Coil Voltage AC 60 Hz (-)	120 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 and Class H)	AC 18 VA (holding) AC 36 VA (inrush) DC 14 W
	AC 15 VA (holding) AC 30 VA (inrush) DC 10 W

Features and Benefits

- Direct Acting
- Robust construction for industrial applications
- Configuration suitable for vacuum
- 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
- High quality seal materials
- Response time 5 to 25 ms



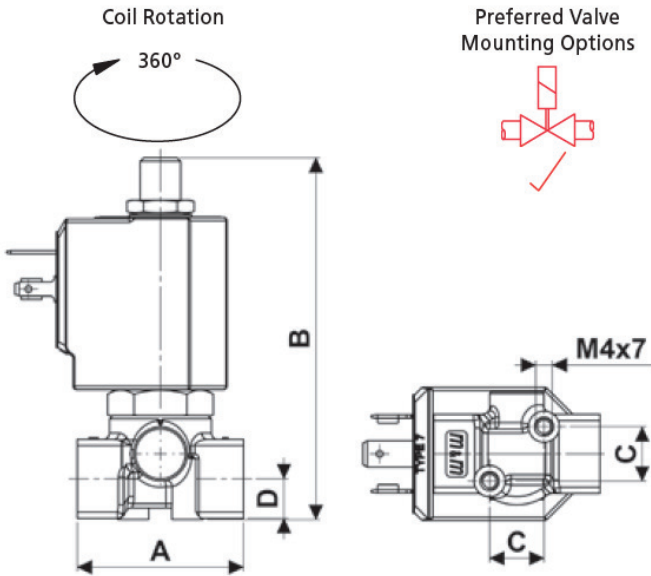
Pipe Size	Cv (gpm)	Kv (m³/h)	OPD (bar)		Orifice (mm)	Seal Material	Valve Code
			AC Voltages	DC Voltages			
¼"	0.15	0.13	0 to -0.95	0 to -0.95	2.0	FKM	D363CVEL
¼"	0.24	0.20	0 to -0.95	0 to -0.95	2.5	FKM	D363CVGL
¼"	0.32	0.27	0 to -0.95	0 to -0.95	3.0	FKM	D363CVHL
¼"	0.42	0.36	0 to -0.95	0 to -0.95	4.0	FKM	D363CVLL

Options Available

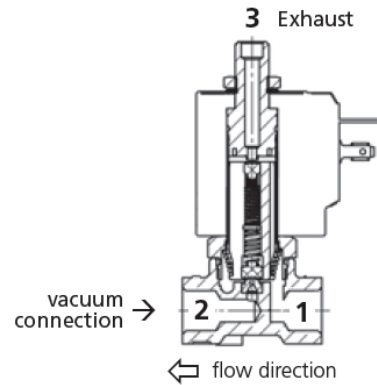
Valve Options (see coding chart)
Body threaded connection G 1/8"

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. Other seals material on request.



Connection scheme



Pipe Size	A	B	C	D	Weight (kg)
1/8" - 1/4"	40	87	13	9.5	0.26

Dimensions (mm)

Solenoid enclosures

7--0 & 7--1 Type Coil - Insulation class F & H

- External material (7--0): PBT (reinforced fiberglass 30%)
- External material (7--1): PPS (glass fiber & mineral filled)
- 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*



7--R cULus Type Coil - Insulation class F

- Encapsulation material: PET 815ER Rynite®
- Electrical connection: DIN EN 175301-803 form A
- Winding insulation: Class H (P180)
- Enclosure classification: Conforms to IP65 (according to EN 60529) with plug and gasket correctly fitted*
- UL approved, file No: E193928



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

Pipe Size
2 1/8"
3 1/4"

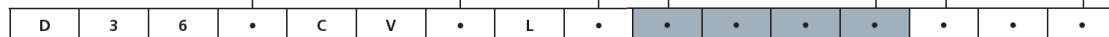
Orifice
E 2.0
G 2.5
H 3.0
L 4.0

Option
w/o option

Option	Voltage / Frequency - Class F		Voltage / Frequency - Class H	
	7250	24 VDC	7251	24 VDC
7200	24 V / 50/60 Hz	7201	24 V / 50/60 Hz	
7400	110 V / 50 Hz - 120 V / 60 Hz	7401	110 V / 50 Hz - 120 V / 60 Hz	
7600	200 V / 50 Hz - 220 V / 60 Hz	7601	200 V / 50 Hz - 220 V / 60 Hz	
7700	230 V / 50 Hz - 240 V / 60 Hz	7701	230 V / 50 Hz - 240 V / 60 Hz	
Voltage / Frequency - Class F - cULus approved				
725R	24 VDC			
720R	24 V / 50 Hz			
740R	110 V / 50 Hz - 120 V / 60 Hz			
770R	230 V / 50 Hz - 240 V / 60 Hz			

Plug

Plug
w/o plug
0A1 c/w plug



Product coding example:

D362CVGL 7250
1/8" G, auto operation, brass body, FKM seals, 2.5 mm orifice, 24 VDC, without plug.