

## N298/299 Series, Eex – 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)
Armature Tube	Stainless Steel solenoid grade
Plunger and Top Stop	Stainless Steel solenoid grade
Seal Material (Std)	FKM
Connection Type (Std)	G parallel thread (ISO 228-1)
Coil Characteristics	
Standard Coil Voltage DC (=)	24 V
Standard Coil Voltage AC 50 Hz (-)	24 V, 110 V, 230 V
Standard Coil Voltage AC 60 Hz (-)	24 V, 120 V
Voltage Tolerance	+10% to -10% (AC/ DC)
Duty Cycle	100% ED
Protection Class	EEx m II 2GD T4 (IP65 - EN 60529)
Cable Type	H05V2V2-F 3G1
Coil Insulation	Class F to EN 60730

### Features and Benefits

- Direct Acting
- Robust construction for industrial applications
- Fitted with explosion-proof operator and coil class EEx m II 2GD T4
- The valve are supplied with a 3 m power cable entry, wired on a non-removable plug
- Wide range of available orifices (max. Ø3 mm)



### ⚠ WARNING

**The Ex approval is only valid for complete solenoid valves supplied ex factory (replacing the solenoid doesn't make a valve explosion-proof!).**

Repairs may be performed by the manufacturer only, spare parts are not available (a valve is a closed system according to Directive 2014/34/UE).

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 - 12	0 - 12	1.5	FKM	N299D <sub>Y</sub> C
¼"	0.23	0.20	0 - 12	0 - 12	2.5	FKM	N299D <sub>Y</sub> G
¼"	0.32	0.27	0 - 12	0 - 10	3.0	FKM	N299D <sub>Y</sub> H

### Options Available

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

Solenoid Enclosure		
Coil	Voltage - Power	Fuse <sup>2</sup>
N253	24 VDC - 10,1 W	800
N203 <sup>1</sup>	24 V / 50/60 Hz - AC 7,2 VA	800
N403 <sup>1</sup>	110 V / 50 Hz - AC 9,1 VA	200
NK03 <sup>1</sup>	120 V / 60 Hz - AC 8,6 VA	200
N703	230 V / 50 Hz - AC 8,5 VA	100

<sup>1</sup> MOQ required.

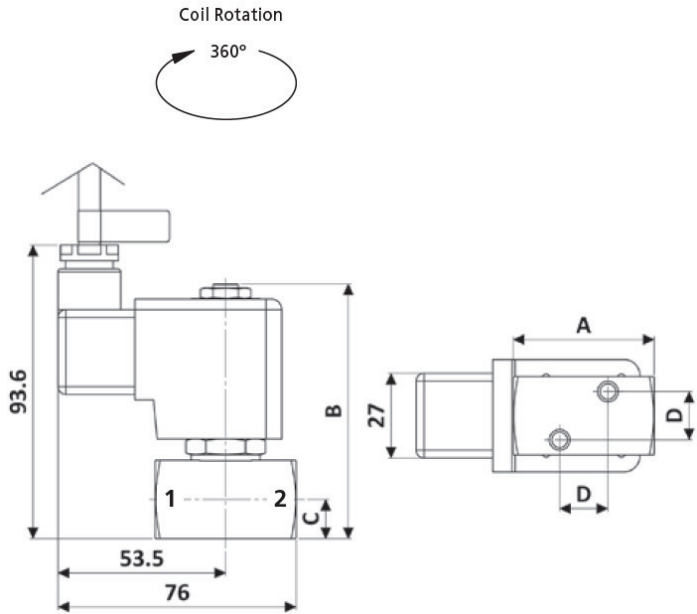
### ⚠ SAFETY WARNING

<sup>2</sup> A mains fuse or equivalent means of protection (breaking value shown on the table above for each coil type) must be installed on the mains supply line. Absence of mains protection is a non conformity to safety standards (EC Directives 2014/34/UE and 1999/92/EC) and could be a potential risk of explosion.

Seal Material <sup>3</sup> and Media Temperature Range	Media	Ambient Temperature Range	
		Min	Max
FKM (-20 °C to +80 °C)	Water, oil, air, aggressive fluids	-20 °C	+50 °C

<sup>3</sup> See corrosion reference guide and sealing solutions for material compatibility.

## Preferred Valve Mounting Options



Pipe Size	A	B	C	D	Weight (kg)
1/8" - 1/4"	45	81.2	12.5	15.4	-

Dimensions (mm)

## Solenoid enclosures

### N--- Type Coil - Insulation class F

- External material: thermoplastic
- Connection type: 3 m wired cable, with ferrules
- Enclosure classification: conforms to IP65 (according to EN 60529)
- Type examination certificates: PTB 03 ATEX 2086 X, IECEx PTB 05.0005X



## Coding chart

### Main Valve Assembly

Pipe Size	
8	1/8"
9	1/4"

Orifice	
C	1.5
G	2.5
H	3.0

Option	
N	NPT
	w/o option

### Coil options

Voltage / Frequency - Class F	
N253	24 VDC
N203	24 V / 50/60 Hz
N403	110 V / 50 Hz
NK03	120 V / 60 Hz
N703	230 V / 50 Hz



### Product coding example:

N298DVH N253  
1/8" G, Ex m solenoid operator, stainless steel body, FKM seals, 3.0 mm orifice, 24 VDC.