



OPERATORS

for explosive atmospheres
2 and 3 way
encapsulated moulded coils with leads



Series
EF
EV

FEATURES

- The solenoid is conforming to **ICS-6 ANSI / NEMA** standard and **UL** standards **429, 508 and 1002**
- A one-piece moulded epoxy coated solenoid with an integral 1/2" NPT conduit hub and built-in strain relief for leads
- The epoxy encapsulation serves as the enclosure and the magnetic frame is moulded into the coil
- The operator is available as both pull or push type solenoid and can be installed on normally open and normally closed valves
- The solenoid has 35 cm long leaded wires
- The solenoids include an internal non-resettable thermal fuse to limit solenoid temperature in the event that extraordinary conditions occur, which could cause excessive temperatures

CONSTRUCTION

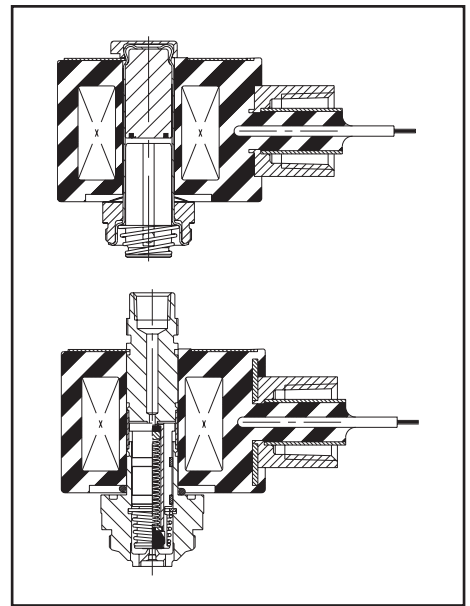
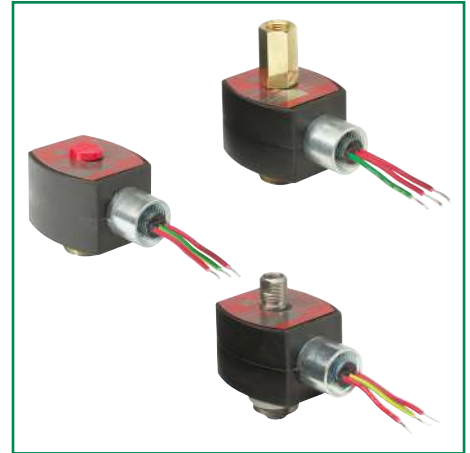
Encapsulant	Thermosetting epoxy-resin
Core tube	Stainless steel
Core and plunger	Stainless steel
Core spring	Stainless steel
Sealings & discs	NBR
Top disc (3 way)	PA
Disc holder	CA
Cartridge	Welded, packless AISI 430
Cartridge seat	Brass
Seat insert	CA
Shading coil	Copper
Ridering (Low Power)	PTFE
Nameplate	Stainless steel
Conduit hub	1/2" NPT zinc plated carbon steel (EF prefix) or 1/2" NPT stainless steel (EV prefix)

ELECTRICAL CHARACTERISTICS

Standard voltages:
DC (=) : 24V - 48V
AC (~) : 24V - 48V - 120V - 240V / 60 Hz
(Other voltages and 50 Hz on request)

SAFETY CODE

NEMA, types 7 and 9



TEMPERATURE CLASSIFICATION TABLES

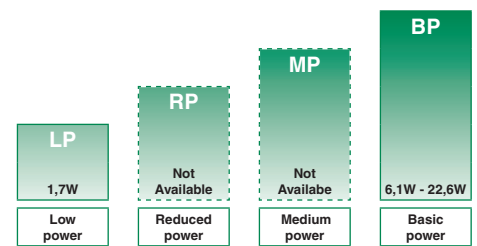
The minimum allowable ambient temperature is -40°C for the operator.
Select the requested "T" classification from the temperature classification tables (AC or DC), respecting the maximum ambient temperature and cold (20°C) electrical holding power values.

AC (~) Solenoids

power level (watt)	insulation class	maximum ambient ⁽¹⁾ temp. "T" classification			
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)	T3 (G) 200°C (D)
Low power (LP)					
-	-	-	-	-	-
Basic power (BP)					
6,1	F	-	-	-	52°C
9,1	F	-	-	-	52°C
10,1	F	-	-	-	52°C
12,0 ⁽²⁾	F	-	-	-	52°C
15,1	F	-	-	-	52°C
17,1	F	-	-	-	52°C

DC (=) Solenoids

power level (watt)	insulation class	maximum ambient ⁽¹⁾ temp. "T" classification			
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)	T3 (G) 200°C (D)
Low power (LP)					
1,7	F	-	-	-	40°C
Basic power (BP)					
10,6	F	-	-	-	40°C
11,6	F	-	-	-	40°C
22,6	F	-	-	-	40°C



POWER LEVELS - cold electrical holding values (watt)

⁽¹⁾ Make sure that the selected ambient temperature does not exceed the allowable valve temperature characteristics as specified on the appropriate valve catalogue sheets
⁽²⁾ AC (~) Full wave rectified coil construction

PREFIX TABLE

prefix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
E	F						Explosionproof - NEMA 7, 9 - zinc plated steel conduit	○	-	-	●
E	V						Explosionproof - NEMA 7, 9 - 316 SS conduit	○	-	-	●
						X	Other special constructions	-	-	-	-

- Available feature
- Available feature in DC only
- Not available

PRODUCT SELECTION GUIDE

(The selection can only be made in conjunction with the appropriate valve catalogue sheet)

STEP 1

Select basic valve catalogue number, including pipe thread identification letter from one of the specification tables on the separate catalogue pages.

Example: G327G001

STEP 2

Select voltage. Refer to standard voltages on page 1.

Example: 24V / DC

STEP 3

Select solenoid prefix (combination). Refer to the prefix table on this page and respect the indicated power level, cold electrical holding values and "T" classification mentioned on page 1.

NOTE: Make sure that the ambient temperature does not exceed the allowable valve temperature characteristics.

Example: EF

40°C ambient

**Basic Power (BP) 11,6W
NEMA Type 7 and 9, T3**

STEP 4

Final catalogue / ordering number.

Example:

EF G327G001 24V / DC

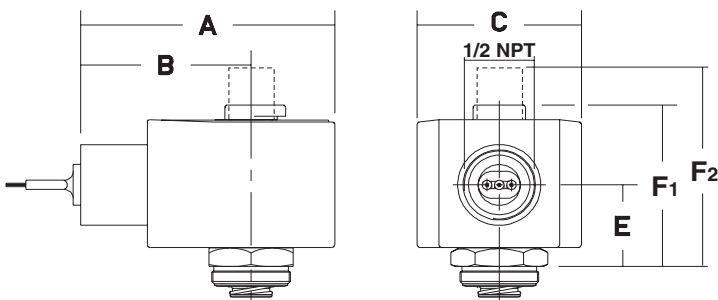
ORDERING EXAMPLES VALVES:

	EF	B	320G200	MO	240V / 60 Hz
prefix	EV	E	316G084	MB	240V / 60 Hz
pipe thread					voltage
basic number					suffix

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- The solenoid can be rotated 360° to select the most favourable position for cable entry

DIMENSIONS (mm), WEIGHT (kg)



type	prefix/option	power level	A	B	C	E	F1 ⁽¹⁾	F2	weight
M6	EF / EV (M6)	BP	70	48	43	24	46	-	0,25 kg
MXX	EF / EV (MXX)	BP	77	52	50	26	51	-	0,35 kg
MXX	EF / EV	BP	77	52	50	26	49	66	0,35 kg

⁽¹⁾ 2/2 way construction only

SECTIONAL DRAWING

