# 53 STYLE Stocked Coils and Housings

Conduit Housing "C" and Grommet Housing "G"

Non-molded – Class A 221°F (105°C) Rating,

24" Leads of AWG #18 Wire.

Stocked Voltages:

24, 120 and 240 Volt at 50 or 60 Hertz;

6, 12 and 24 Volt DC;

Others available, see Options on page 11.30.

Temperature Range:

 $0^{\circ}F$  (-18°C) to + 104°F (+40°C), ambient.

 $0^{\circ}F$  (-18°C) to + 150°F (+65°C), media.

Typical Response Times:

AC 4 to 8 milliseconds to open or close;

DC 9 to 15 milliseconds to open;

DC 5 to 12 milliseconds to close.

To compute current requirements (±15%) divide factor shown below by voltage

	AC Volts, 60 Hertz		DC Volts
			Inrush, Amp
Function	Inrush, Amp	Holding, Amp	or Holding, Amp
2 Way NC	13.2 ÷ Volts	7.8 ÷ Volts	70.1/04-
2 Way NO	15.2 ÷ Volts	9.0 ÷ Volts	7.2 ÷ Volts
3 Way NC or NO			
Examples	15.2 ÷ 120 = .13 Amp	9.0 ÷ 120 = .08 Amp	7.2 ÷ 12 = .60 Amp

Male Mini-DIN Housing "F"

Molded – Water Tight - Class A 221°F (105°C) IP65 Coil Rating.

European (DIN) Style - 11 mm spacing.

See page 11.30 for connectors or contact your

local distributor for additional choices.

Can also be connected with individual .25" quick connect terminals.

Stocked Voltages:

24, 120 and 240 Volt at 50 or 60 Hertz;

12 and 24 Volt DC;

Others available, see Options on page 11.30.

Temperature Range:

 $0^{\circ}F$  (-18°C) to + 104°F (+40°C), ambient.

0°F (-18°C) to + 150°F (+65°C), media.

Typical Response Times:

AC 4 to 8 milliseconds to open or close;

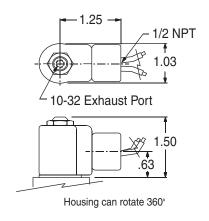
DC 9 to 15 milliseconds to open;

DC 5 to 12 milliseconds to close.

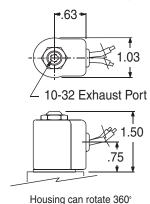
To compute current requirements (±15%) divide factor shown below by voltage.

	AC Volts, 60 Hertz		DC Volts
			Inrush, Amp
Function	Inrush, Amp	Holding, Amp	or Holding, Amp
2 Way NC	14.4 ÷ Volts	9.7 ÷ Volts	10.4 ÷ Volts
2 Way NO	15.2 ÷ Volts	11.8 ÷ Volts	10.4 ÷ Volts
3 Way NC or NO			
Examples	15.2 ÷ 120 = .13 Amp	11.8 ÷ 120 = .10 Amp	10.4 ÷ 12 = .87 Amp

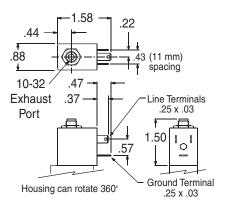
# Conduit Housing "C"



# Grommet Housing "G"



# Male Mini-DIN Housing "F"



Spade terminals accept miniature rectangular quick connect socket (Female DIN style connector, 11 mm spacing) or individual .25" quick connect terminals.

# 53 STYLE Options for Conduit Housing "C" and Grommet Housing "G"

AC Voltages from 5.4 to 575 in 50 or 60 Hertz. DC Voltages from 3 to 300.

Molded Coil . . . . . . . . . . . . . . . . . . Option -M
 Water tight, Molded Coil with Class A 221°F
 (105°C) Rating. Coil is completely molded in
 epoxy for maximum moisture resistance.

NEMA 1, 2, and 3 when in Conduit "C", or Grommet "G" housing.

Potted Coil......Option -P
 Coil is epoxy potted into Conduit "C" housing only.
 Class F 221°F (105C) Rating.

It offers maximum moisture and vibration resistance. NEMA 3R, 3S, 4, 4X, 6, 11, 12 & 13.

- High Temperature . . . . . . . Option -H Molded coil with 356°F (180°C) rating.
- Viton Seals
   (for media compatibility) . . . . . . . Option -V
- Strain Relief Connector.....Option -Q
- "AN" Connector . . . . . . . Option **-W**
- Splice Box . . . . Option -J
- Mounting Bracket . . . . . . . . . . . . . Option -R
- Third Wire Ground . . . . . . . . . . . . . . Option -CC A CSA requirement.

# 53 STYLE Options for Male Mini-DIN Housing "F"

AC Voltages from 4.4 to 277 in 50 or 60 Hertz. DC Voltages from 3 to 180.

Viton Seals
 (for media compatibility) . . . . . . Option -V

# **53 STYLE** Options for Yoke Housing

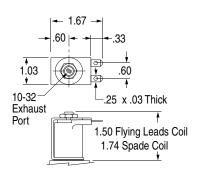
Yoke with Standard coil
(24" flying leads) . . . . . Option -YB

Yoke with Molded coil
(24" flying leads) . . . . . Option -YM

Yoke with Molded

Spade Terminal and coil ......Option -KM

Yoke replaces housing for protected and control box applications. Molded coil with two .25" spade terminals for quick assembly and disconnect.



# 53 STYLE Explosion Proof . . . . Option -EP

UL File #E37780

CSA File #LR-26894

For hazardous locations, includes Molded Coil.

UL Class I Div. 1 Groups C & D.

UL Class II Div. 1Groups E, F & G.

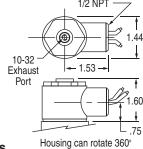
UL Class II Div. 2 Groups A, B, C, D, E & F.

NEMA 7 Class 1 Group D.

NEMA 9 & 9A Class II Groups F & G.

#### ! CAUTION!

To prevent explosion, disconnect electrical circuit before opening enclosure! Keep tightly closed when in operation.



#### **Option -EP Current Factors**

AC Volts, 60 Hertz	InrushHolding
2 Way NC	16.0 7.8
2 Way NO	16.9
3 Way NC or NO	16.9 10.7

DC Volts Inrush or Holding

2 Way NC or NO 7.2 3 Way NC or NO 7.2

Divide "Factor" shown above by Volts to find current. See examples on opposite page.

### 58 Style

3 Way – Normally Closed – Exhaust to Atmosphere Temperature Range:

 $0^{\circ}F$  (-18°C) to + 122°F (+50°C), ambient.

 $0^{\circ}F$  (-18°C) to + 122°F (+50°C), media.

Available with or without Push Button Manual Override

# #1 Operator

0.9 Watts

Response time: 9 ms @ 0 psi

0.6 mm Inlet Orifice - 0.8 mm Exhaust Orifice

130 psi Maximum Operating Pressure

# #4 Operator

3.5 Watts

Volts - See Chart at Right

Amperage Draw - See Chart at Right

Response time: 8 ms with DC Volts;

3 - 9 ms with AC Volts.

1.0 mm Inlet Orifice – 1.0 mm Exhaust Orifice

145 psi Maximum Operating Pressure

		Amperage Draw, mA	
Volts	Hertz	Inrush	Holding
24	60	252	220
120	60	43	37
12	DC	294	294
24	DC	145	145

## 58 Style

[#1 (0.9 Watts), or #4 (3.5 Watts)] Operator

#### Male Micro-DIN, Coil "F"

Molded - Water Tight

Class A 221°F (105°C) IP65 Coil Rating European (DIN) Style – 9.4 mm spacing See page 11.32 for connectors or contact your local distributor for additional choices.

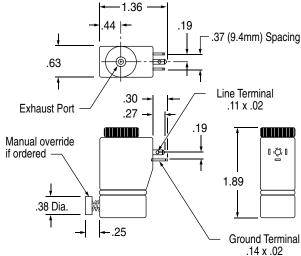
# 58 Style

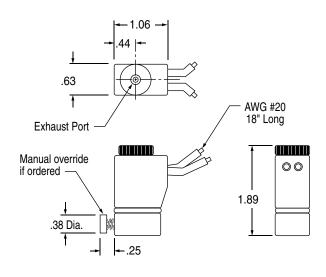
[#1 (0.9 Watts), or #4 (3.5 Watts)] Operator

#### Wire Leads, Coil "G"

Molded - Water Tight

Class A 221°F (105°C) IP65 Coil Rating Leadwires – AWG #20, 18 inches long





# Solenoid Exhaust Mufflers, #SM-10

for "C" & "G" housings and "F" DIN coil operators. See page 14.1.

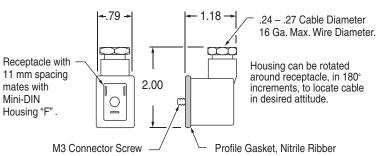
# Connectors 53 Style (11 mm spacing)

NEMA 4, IP65 For Male Mini-DIN Housing "F"

Part Number with LED:	Application
122-09-T-A.1-12VDC	12 VDC
122-09-T-A.1-24/60	24 VDC, 12-24 VAC 50/60 Hz
122-09-T-A.1-120/60	48-120 VDC,
	100-240 VAC 50/60 Hz

(Transparent Housing allows LED to be seen)





# Connectors 58 Style (9.4 mm Spacing)

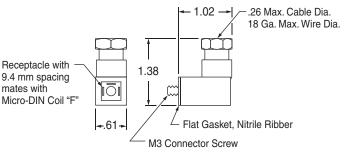
NEMA 4, IP65

For Male Micro-DIN Housing "F":

Part Number with LED:	Application
192-07-T-A.1-12/60	12 VDC or VAC 50/60 Hz
192-07-T-A.1-24/60	24 VDC or VAC 50/60 Hz
192-07-T-A.1-120/60	110-240 VDC or VAC 50/60 Hz

(Transparent Housing allows LED to be seen)





Housing can rotate around receptacle, in 90 ° increments, to locate cable in desired attitude.

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