



Model 81

The GO Switch Model 81 offers end sensing and an optional Double Pole Double Throw contact arrangement. With its brass or stainless steel housings and global certifications, it is a popular choice around the world.

Features:

- SPDT or DPDT 10A contacts
- End Sensing
- 40° to 221°F operating temperature

Options:

- Suitable for Zone 0, 1, or 2 explosion proof
- 40° to 350°F high temperature
- Quick disconnect connector
- Underwater capabilities

FAST TRACK DELIVERY

81-20516-A2
CSA Class I Div 2
DPDT Brass, 3 ft. leads

81-20518-A2
UL General Purpose
DPDT Brass, 3 ft. leads

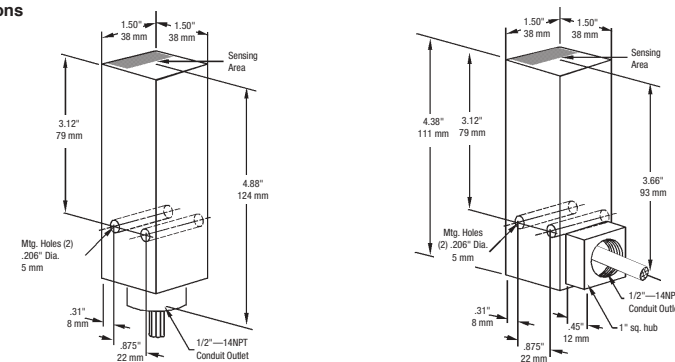
81-20524-A2
CSA Class I Div 1
DPDT Stainless, 3 ft. leads

Leverless Limit Switches



Square Switches

Dimensions



Model 81

Model	Contact Form	Sensing Range	Outlet Position	Enclosure Material	Approvals	Wiring Options																									
<p>Repeatability: .002" (.05 mm)</p> <p>Response Time: 8 milliseconds</p> <p>Differential: Approx. 1/4" (6 mm)</p> <p>Operating Temperature: -40° to 221°F (-40°C to 105°C). HiTemp™ option to 350°F (176°C)</p> <p>81 Size: 1 1/2" (38 mm) square x 4 3/8" (111 mm) overall. Subtract 1/2" (13 mm) from length for side conduit</p> <p>Need Accessories? See pp. 92-103 for: Range Extending Target Magnets Mounting Brackets Connectors and more!</p>	<p>Contact Material: Silver cadmium oxide, gold flashed</p> <p>Forms: DPDT, Form CC; SPDT, Form C Electrically isolated</p> <p>Ratings: Resistive</p> <table border="1"> <tr> <th>AC</th> <th>DC</th> </tr> <tr> <td>120 10 24 3</td> <td></td> </tr> <tr> <td>240 5 48 1</td> <td></td> </tr> <tr> <td>480 2.5 120 0.5</td> <td></td> </tr> <tr> <td></td> <td>250 0.5</td> </tr> </table> <p>1 Single Pole Double Throw (Form C)</p> <p>2 Double Pole Double Throw (Form CC)</p>	AC	DC	120 10 24 3		240 5 48 1		480 2.5 120 0.5			250 0.5	<p>Target Material: Ferrous steel</p> <p>Sensing Range: Approx. 1/4" (6 mm)</p> <p>Sensing Range with Target Magnet: up to 3 7/8" (98 mm) (max)</p> <p>0 Approx. 1/4" (6 mm) end sensing</p> <p>Extended Sensing with External Target Magnets (See Accessories for External Target Magnets)</p> <table border="1"> <tr> <th>Magnet</th> <th>Sensing</th> <th>Differential</th> </tr> <tr> <td>AMP3</td> <td>15/16"</td> <td>3/4"</td> </tr> <tr> <td>AMS4</td> <td>1-3/8"</td> <td>1-1/8"</td> </tr> <tr> <td>AMC5</td> <td>3-7/8"</td> <td>2-1/8"</td> </tr> <tr> <td>AMF6</td> <td>2-3/4"</td> <td>1-5/8"</td> </tr> </table>	Magnet	Sensing	Differential	AMP3	15/16"	3/4"	AMS4	1-3/8"	1-1/8"	AMC5	3-7/8"	2-1/8"	AMF6	2-3/4"	1-5/8"	<p>Conduit Outlet: 1/2 NPT Two locations</p> <p>1 Side outlet</p> <p>5 Bottom of enclosure</p>	<p>Material: Brass or Stainless Steel</p> <p>1 Brass - coated with flat black lacquer</p> <p>2 Stainless steel</p> <p>3 Brass - corrosion resistant coating (polyurethane)</p> <p>4 Stainless steel - corrosion resistant coating (polyurethane)</p>	<p>UL SP FM SAA</p> <p>1 No Approvals (Wiring must be 00)</p> <p>2 High temperature to 350°F (176°C) with Teflon™ insulated leads</p> <p>3 UL listed explosion proof for CI I, Div 1 & 2; Grps A,B,C,D; CI II, Div 1 & 2, Grps E-G; CI III (Enclosure must be 2 or 4) (Lead seal req'd within 18") (DPDT, leads only)</p> <p>4 CSA / FM certified explosion proof for CI I, Div 1 & 2; Grps A,B,C,D; CI II, Div 1 & 2, Grps E-G; CI III. (Enclosure must be 2 or 4)</p> <p>6 CSA / FM certified explosion proof for CI I, Div 1 & 2; Grps A,B,C,D; CI II, Div 1 & 2, Grps E-G; CI III</p> <p>7 CSA certified General Purpose</p> <p>8 UL listed General Purpose</p> <p>A SAA: Ex s IIC T6 IP65; CI I Zone 1 & 2; EX S IIC T6 IP65; CI I Zone 0; DIP CI II (Intrinsically safe with entity approved barrier. Install per NEC Article 501.) (Wiring must be A or 00)</p> <p>B SAA: High Temp EX S IIC T6 IP65; CI I Zone 1 & 2; EX S IIC T6 IP65; CI I Zone 0; DIP CI II (Intrinsically safe with entity approved barrier. Install per NEC Article 501.) (Wiring must be F)</p>	<p>Terminal Block 00 Terminal block only (SPDT only, Approvals must be 1)</p> <p>Lead Wires 18 Gauge (.110" dia.) potted-in PVC insulated AWM / TEW stranded lead wires rated at 221°F (105°C) 600V UL / CSA listed</p> <p>A2 36" (914 mm)</p> <p>A3 72" (1829 mm)</p> <p>A4 144" (3658 mm)</p> <p>A_ _ _ Lengths greater than 144" (Specify length in feet (e.g. A150 = 150 ft. of leads))</p> <p>Cable 18 Gauge (.450" dia.) potted-in SO rubber covered cable rated at 194°F (90°C) 600V UL / CSA listed (Contact Form must be 1)</p> <p>B2 36" (914 mm)</p> <p>B3 72" (1829 mm)</p> <p>B4 144" (3658 mm)</p> <p>B_ _ _ Lengths greater than 144" (Specify length in feet (e.g. B150 = 150 ft. of cable))</p> <p>Quick Disconnect Male Quick Disconnect only, potted-in connector. (CSA requires a case ground) (Approval must be 7 or 8) Refer to pp. 92-103 for mating cable assemblies and Aura Light Adapters.</p> <p>Mini-change®</p> <p>DCA 3 - pin Mini-change® type</p> <p>DCD 4 - pin Mini-change® type</p> <p>DCG 5 - pin Mini-change® type</p> <p>SubSea™ Underwater Connector (Enclosure must be 2 or 4)</p> <p>30D 3 pin, certified not to leak underwater (includes male/female Delrin™ lock sleeves)</p> <p>40D 4 pin, certified not to leak underwater (includes male/female Delrin™ lock sleeves)</p> <p>80D 8 pin, certified not to leak underwater (includes male/female Delrin™ lock sleeves)</p> <p>30E 3 pin right-angle, certified not to leak underwater (Enclosure must be 2 or 4)</p> <p>40E 4 pin right-angle, certified not to leak underwater (Enclosure must be 2 or 4)</p> <p>HiTemp Wire 18 gauge (.070" dia.) potted-in Teflon™ insulated leads rated at 482°F (250°C) 600V UL / CSA listed</p> <p>F2 36" (914 mm)</p> <p>F3 72" (1829 mm)</p> <p>F4 144" (3658 mm)</p> <p>F_ _ _ Lengths greater than 144" (Specify length in feet (e.g. F150 = 150 ft. of leads))</p>
AC	DC																														
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<p>Model 81</p>	<p>Contact Form</p>	<p>Sensing Range 0</p>	<p>Outlet Position</p>	<p>Enclosure Material</p>	<p>Approvals</p>	<p>Wiring Options</p>																									

Ordering Guide

Fill in the boxes to create your 'ordering number.'

Agency Approvals

Approvals	(1) No Approvals	(3) UL Class 1 Div 1	(4) CSA/FM Class 1 Div 1	(6) CSA/FM Class 1 Div 2	(7) CSA General Purpose	(8) UL General Purpose	(A) SAA Exs IIc T6 IP65
Termination Options							
00 - Terminal Block	X						
A - Potted PVC Leads		X	X	X	X	X	X
B - Potted SO Cable		X	X	X	X	X	
D - Quick Disconnect					X	X	
D - SubSea™ Connector					X	X	
F - Potted HiTemp™ Leads		X	X	X	X	X	

X = Approvals Available

NEMA Ratings

NEMA CLASSES	Non-Hazardous					Hazardous	
	4	4X	6	6P	7	9	
00 - Terminal Block	X						
A - Potted PVC Leads	X	SS	X	SS	SS	SS	
B - Potted SO Cable	X	SS	X	SS	SS	SS	
D - Quick Disconnect	X	SS	X	SS			
D - SubSea™ Connector	X	SS	X	SS			
F - Potted HiTemp™ Leads	X	SS	X	SS	SS	SS	

SS = Stainless steel

X = Designed to meet respective NEMA specifications

Wiring Diagrams (male view)

4 Wire PVC & HiTemp Leads	
N/C	Red
N/O	Blue
COM	Black
GND	Green

Terminations A & F

SO Cable	
N/C	Red
N/O	White
COM	Black
GND	Green

Termination B

PVC Leads, Cable & Teflon Leads	
N/C1 - Red	N/C2 - Red/White Stripe
N/O1 - Blue	N/O2 - Blue/White Stripe
COM1 - Black	COM2 - Black/White Stripe
GND - Green	

Termination A & F

Mini-Change QDC - 3 Pin	
Pin 1	COM
Pin 2	N/C
Pin 3	N/O

Termination DCA

Mini-Change QDC - 4 Pin	
Pin 1	COM
Pin 2	N/O
Pin 3	N/C
Pin 4	GND

Termination DCD

Mini-Change QDC - 5 Pin	
Pin 1	N/O
Pin 2	N/C
Pin 3	GND
Pin 4	Inactive
Pin 5	COM

Termination DCG

SubSea - 3 Pin - Lock Sleeve	
Pin 1	N/C
Pin 2	COM
Pin 3	N/O

Termination 3DD

SubSea - 3 Pin - Right Angle	
Pin 1	COM
Pin 2	N/O
Pin 3	N/C

Termination 3DE

SubSea - 4 Pin - Lock Sleeve	
Pin 1	COM
Pin 2	N/O
Pin 3	N/C
Pin 4	GND

Termination 4DD

SubSea - 8 Pin - Lock Sleeve	
Pin 1	COM ₁
Pin 2	N/O ₁
Pin 3	N/C ₁
Pin 4	GND
Pin 5	N/C ₂
Pin 6	N/O ₂
Pin 7	COM ₂
Pin 8	Inactive

Termination 8DD

Mini-Change QDC - 7 Pin	
Pin 1	N/O ₂
Pin 2	COM ₁
Pin 3	N/C ₂
Pin 4	N/C ₁
Pin 5	COM ₂
Pin 6	N/O ₁
Pin 7	GND

Termination DCH

