

## FR/SR Series

### Full Sized, Sealed Rocker Switches

FR SERIES



SR SERIES



#### DESCRIPTION

##### FR SERIES

The FR Series illuminated and non-illuminated full size sealed rocker switches offer enhanced design flexibility and set new standards for both performance and reliability. The switches are designed to fit industry standard mounting holes of 44,0 mm x 22,0 mm (1.734 in x 0.867 in) and offer a variety of switch and lamp circuit combinations.

#### FEATURES

##### FR SERIES

- Expected electrical life 50,000 cycles momentary; 100,000 cycles maintained
- Expected mechanical life 250,000 cycles minimum
- Sealed to IP67
- One or two pole circuitry options
- Withstands operating temperatures from -40 °C to 85 °C (-40 °F to 185 °F)
- Welded lamp connection and one-piece internal, jumperless terminal withstand extreme shock and vibration
- 12 terminals offer an extensive range of switch and lamp circuit options, including LED or incandescent illumination.
- Vibration and shock resistant

#### POTENTIAL APPLICATIONS

##### FR/SR SERIES

- Transportation industry
- Test equipment
- Heavy duty machinery
- Marine equipment

##### SR SERIES

The SR Series illuminated and non-illuminated full size sealed rocker switches offer robust performance in a flexible package. These switches are available in single or double pole configurations, have an optional panel seal and the SRL Series can be illuminated with square or bar shaped lenses.

##### SR SERIES

- Expected electrical life 50,000 cycles momentary; 100,000 cycles maintained
- Expected mechanical life 150,000 cycles minimum
- Dual switch seal certified to IP66/IP68.
- UL recognised, CSA certified
- Optional panel seal – prevents water/dust ingress behind panel
- Offered in both 8 and 10 terminal base options. AMP and Packard compatible connectors available.
- Withstands operating temperatures from -40 °C to 85 °C (-40 °F to 185 °F)
- Optional rocker boot available for non-illuminated SRN Series

# FRN Series

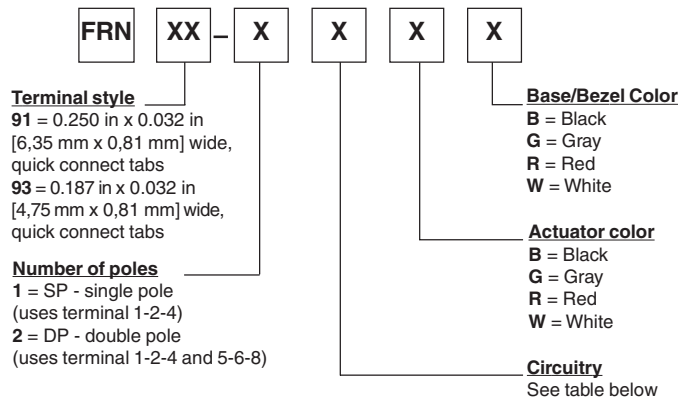
# Sealed Rocker Switches, Non-illuminated

## OPERATING CHARACTERISTICS

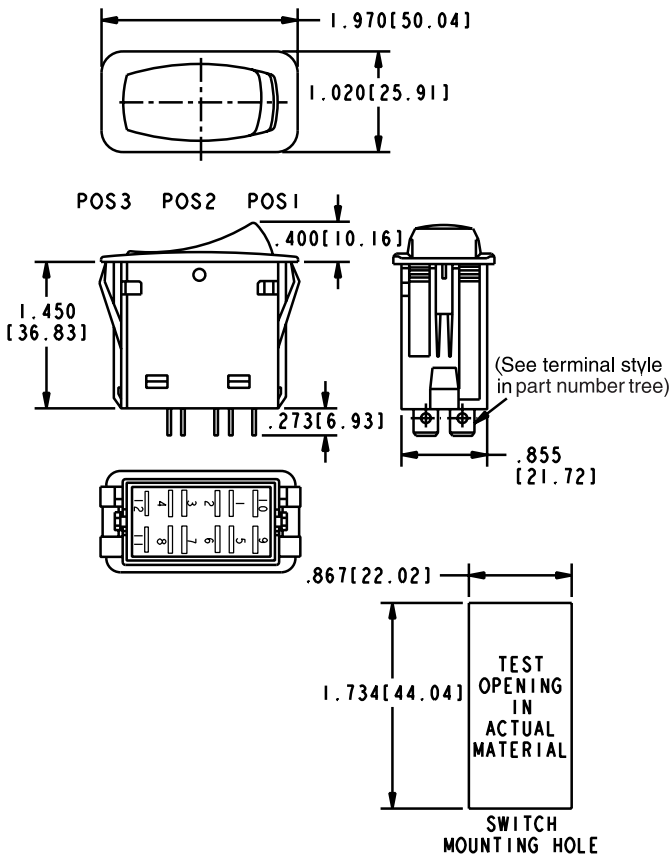
Electrical life	50,000 cycles momentary; 100,000 cycles maintained	
Mechanical life	250,000 cycles min.	
Operating temperature	-40 °C to 85 °C (-40 °F to 185 °F)	
Termination/ Electrical rating	Type 91	0.250 in x 0.032 in [6,35 mm x 0,81 mm] wide tab (QC) 20 A, 12 V
	Type 93	0.187 in x 0.032 in [4,75 mm x 0,81 mm] wide tab (QC) 15 A, 12 V
Vibration	Per Mil-Std-202F, Method 204D Test Condition A, 10 G, 10-500 Hz	
Shock	Per Mil-Std-202F, Method 213B Test Condition K, 30 G	
Thermal Shock	Per Mil-Std-202F, Method 107F Test Condition A, -55 °C to 85 °C	
Salt Spray	Per Mil-Std-202F, Method 101D Test Condition A, 48 Hr	
Moisture Resistance	Per Mil-Std-202F, Method 106F Test Criteria: pre and post test contact resistance	
Sealing	IP67	



## PART NUMBER TREE



## MOUNTING DRAWINGS, FOR REFERENCE ONLY (IN [MM])



**NOTE**  
 Not all permutations are available. Contact Honeywell for more information.

	CIRCUIT MADE WITH ROCKER IN		
	POSITION 3 (1&2, 5&6)	POSITION 2	POSITION 1 (2&4, 6&8)
1	ON	OFF	ON
2	OFF	NONE	ON
3	ON	NONE	ON
4	(OFF)	NONE	ON
5	(ON)	OFF	ON
6	OFF	NONE	(ON)
7	(ON)	OFF	(ON)
8	(ON)	NONE	ON

Note: ( ) denotes momentary action

## ORDER GUIDE

Description	Listing
Non-illuminated	FRN91-12BB
Non-illuminated	FRN91-22BB
Non-illuminated	FRN91-16BB
Non-illuminated	FRN91-26BB
Non-illuminated	FRN91-14BB
Non-illuminated	FRN91-24BB
Non-illuminated	FRN91-13BB
Non-illuminated	FRN91-23BB
Non-illuminated	FRN91-18BB
Non-illuminated	FRN91-28BB
Non-illuminated	FRN91-11BB
Non-illuminated	FRN91-21BB
Non-illuminated	FRN91-15BB
Non-illuminated	FRN91-25BB
Non-illuminated	FRN91-17BB
Non-illuminated	FRN91-27BB
Connector Housing	FR-01

# FRL Series

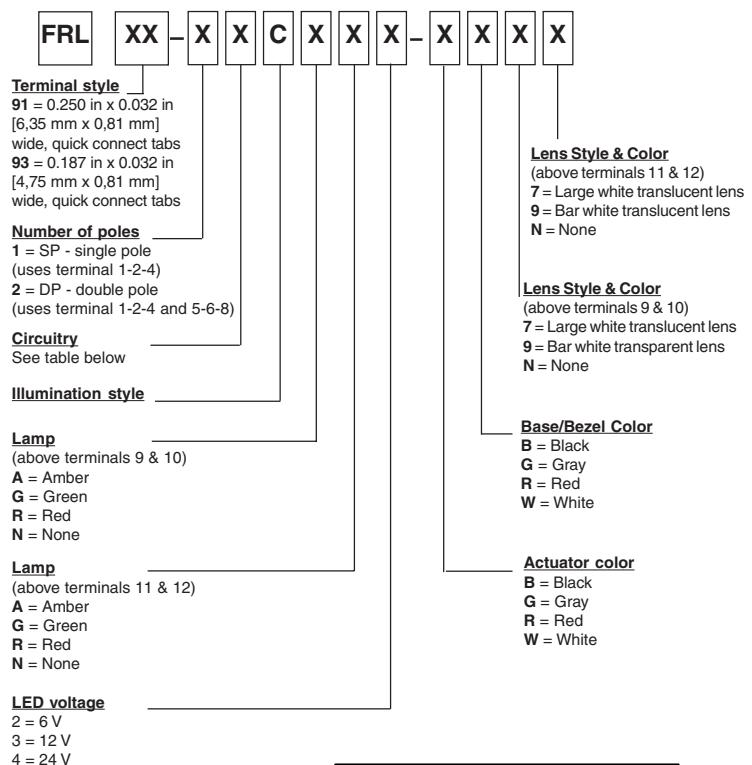
# Sealed Rocker Switches, Illuminated

## OPERATING CHARACTERISTICS

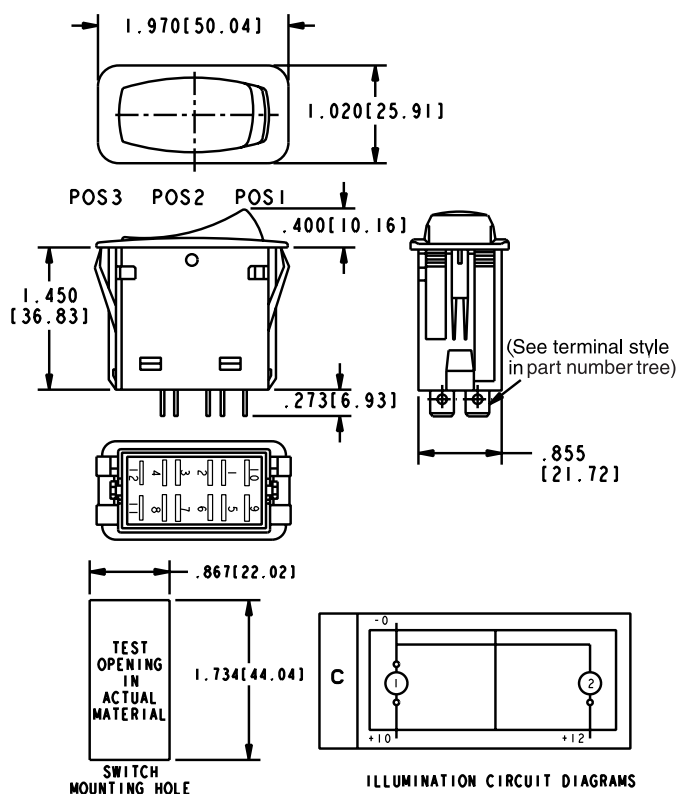
Electrical life	50,000 cycles momentary; 100,000 cycles maintained	
Mechanical life	250,000 cycles min	
Operating temperature	-40 °C to 85 °C (-40 °F to 185 °F)	
Termination/ Electrical rating	Type 91	0.250 in x 0.032 in [6,35 mm x 0,81 mm] wide tab (QC) 20 A, 12 V
	Type 93	0.187 in x 0.032 in [4,75 mm x 0,81 mm] wide tab (QC) 15 A, 12 V
Vibration	Per Mil-Std-202F, Method 204D Test Condition A, 10 G, 10-500 Hz	
Shock	Per Mil-Std-202F, Method 213B Test Condition K, 30 G	
Thermal Shock	Per Mil-Std-202F, Method 107F Test Condition A, -55 °C to 85 °C	
Salt Spray	Per Mil-Std-202F, Method 101D Test Condition A, 48 Hr	
Moisture Resistance	Per Mil-Std-202F, Method 106F Test Criteria: pre and post test contact resistance	
Sealing	IP67	
Illuminated	LED	Rated 100,000 hours ½ life (LED is internally ballasted for voltages to 24 Vdc)



## PART NUMBER TREE



## MOUNTING DRAWINGS, FOR REFERENCE ONLY (IN [MM])



**NOTE**  
Not all permutations are available. Contact Honeywell for more information.

	CIRCUIT MADE WITH ROCKER IN		
	POSITION 3 (1&2, 5&6)	POSITION 2	POSITION 1 (2&4, 6&8)
1	ON	OFF	ON
2	OFF	NONE	ON
3	ON	NONE	ON
4	(OFF)	NONE	ON
5	(ON)	OFF	ON
6	OFF	NONE	(ON)
7	(ON)	OFF	(ON)
8	(ON)	NONE	ON

Note: ( ) denotes momentary action

## ORDER GUIDE

Description	Listing
Illuminated	FRL91-22CGA3-BB79
Illuminated	FRL91-23CGA3-BB79
Illuminated	FRL91-21CGG3-BB77
Illuminated	FRL91-27CGG3-BB77
Connector Housing	FR-01

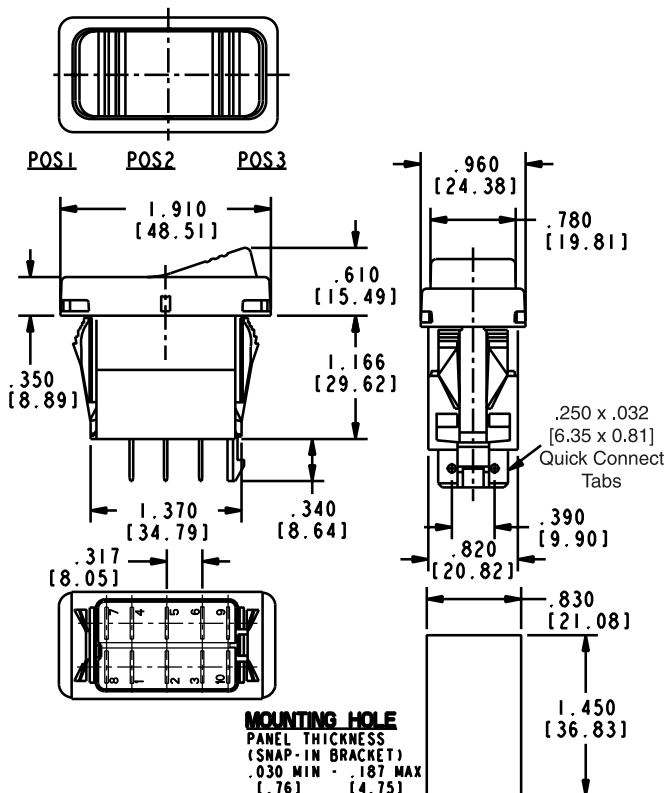
# SRN Series

# Sealed Rocker Switches, Non-illuminated

## OPERATING CHARACTERISTICS

Electrical life	50,000 cycles momentary; 100,000 cycles maintained
Mechanical life	150,000 cycles min.
Operating temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Termination	0.250 in x 0.032 in [6,35 mm x 0,81 mm] wide tab (QC)
Electrical rating/Approvals	10 A 250 Vac ½ HP / UL, CSA 15 A 125 Vac ½ HP / UL, CSA
Vibration	Per Mil-Std-202F, Method 204D Test Condition A, 10 G, 10-500 Hz
Shock	Per Mil-Std-202F, Method 213B Test Condition K, 30 G
Thermal Shock	Per Mil-Std-202F, Method 107F Test Condition A, -55 °C to 85 °C
Salt Spray	Per Mil-Std-202F, Method 101D Test Condition A, 48 Hr
Moisture Resistance	Per Mil-Std-202F, Method 106F Test Criteria: pre and post test contact resistance
Sealing	IP66/IP68
Ignition protection	All switches with a sealed construction meet the require- ments of UL1500/ISO8846 for ignition protection, in addition to conformance with EC directive 94/25/EC for marine products.

## MOUNTING DRAWINGS, FOR REFERENCE ONLY (IN [MM])



## PART NUMBER TREE



**Terminal style**  
91 = 0.250 in x 0.032 in  
[6,35 mm x 0,81 mm]  
wide, quick connect tabs

**Base/Bezel Color**  
B = Black  
G = Gray  
W = White

**Number of poles**  
1 = SP - single pole  
(uses terminal 1-2-3)  
2 = DP - double pole  
(uses terminal 1-2-3 and 4-5-6)

**Actuator color**  
B = Black  
G = Gray  
R = Red  
W = White

**Circuitry**  
See table below

**NOTE**  
Not all permutations  
are available. Contact  
Honeywell for more  
information.

	CIRCUIT MADE WITH ROCKER IN		
	POSITION 3 (1&2, 4&5)	POSITION 2	POSITION 1 (2&3, 5&6)
1	ON	OFF	ON
2	OFF	NONE	ON
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4	(OFF)	NONE	ON
5	(ON)	OFF	ON
6	OFF	NONE	(ON)
7	(ON)	OFF	(ON)
8	(ON)	NONE	ON

Note: ( ) denotes momentary action

## ORDER GUIDE

Description	Listing
Non-illuminated	SRN91-12BB
Non-illuminated	SRN91-22BB
Non-illuminated	SRN91-16BB
Non-illuminated	SRN91-26BB
Non-illuminated	SRN91-14BB
Non-illuminated	SRN91-24BB
Non-illuminated	SRN91-13BB
Non-illuminated	SRN91-23BB
Non-illuminated	SRN91-18BB
Non-illuminated	SRN91-28BB
Non-illuminated	SRN91-11BB
Non-illuminated	SRN91-21BB
Non-illuminated	SRN91-15BB
Non-illuminated	SRN91-25BB
Non-illuminated	SRN91-17BB
Non-illuminated	SRN91-27BB
Connector Housing	HRSR-01
Rocker Boot	SR-01

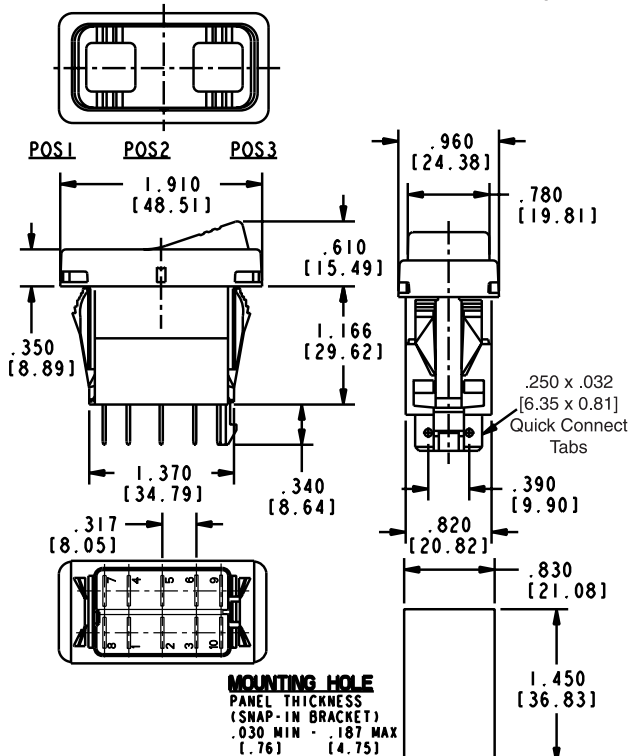
# SRL Series

# Sealed Rocker Switches, Illuminated

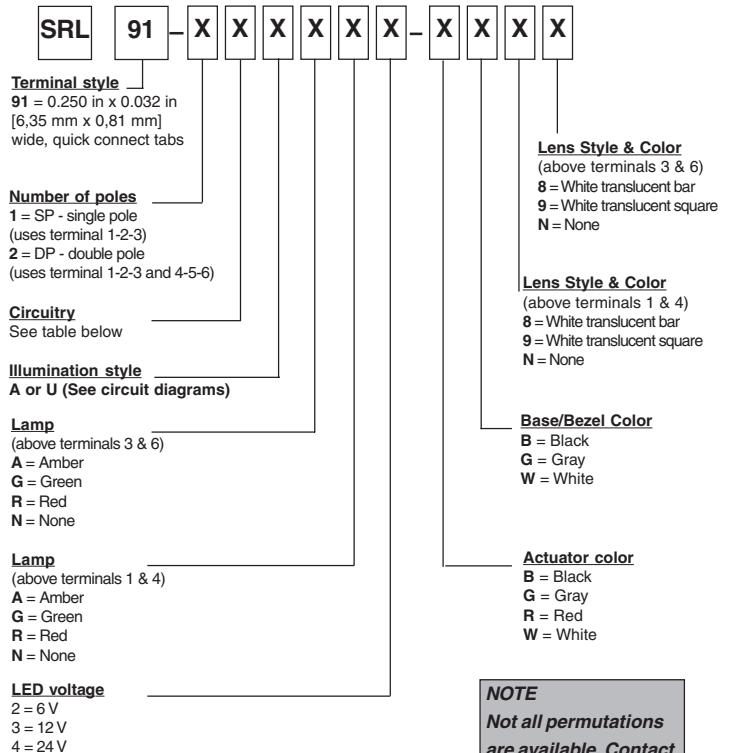
## OPERATING CHARACTERISTICS

Electrical life	50,000 cycles momentary; 100,000 cycles maintained
Mechanical life	150,000 cycles min.
Operating temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Termination	0.250 in x 0.032 in [6,35 mm x 0,81 mm] wide tab (QC)
Electrical rating/Approvals	10 A 250 Vac ½ HP / UL, CSA 15 A 125 Vac ½ HP / UL, CSA
Vibration	Per Mil-Std-202F, Method 204D Test Condition A, 10 G, 10-500 Hz
Shock	Per Mil-Std-202F, Method 213B Test Condition K, 30 G
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Salt Spray	Per Mil-Std-202F, Method 101D Test Condition A, 48 Hr
Moisture Resistance	Per Mil-Std-202F, Method 106F Test Criteria: pre and post test contact resistance
Sealing	IP66/IP68
Illuminated:	LED Rated 100,000 hours ½ life (LED is internally ballasted for voltages to 24 Vdc)
Ignition protection	All switches with a sealed construction meet the requirements of UL1500/ISO8846 for ignition protection, in addition to conformance with EC directive 94/25/EC for marine products.

## MOUNTING DRAWINGS, FOR REFERENCE ONLY (IN [MM])



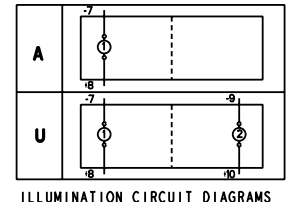
## PART NUMBER TREE



	CIRCUIT MADE WITH ROCKER IN		
	POSITION 3 (1&2, 4&5)	POSITION 2	POSITION 1 (2&3, 5&6)
1	ON	OFF	ON
2	OFF	NONE	ON
3	ON	NONE	ON
4	(OFF)	NONE	ON
5	(ON)	OFF	ON
6	OFF	NONE	(ON)
7	(ON)	OFF	(ON)
8	(ON)	NONE	ON

Note: ( ) denotes momentary action

**NOTE**  
Not all permutations are available. Contact Honeywell for more information.



## ORDER GUIDE

Description	Listing
Illuminated	SRL91-22ARN3-BB9N
Illuminated	SRL91-23URR3-BB99
Illuminated	SRL91-21URR3-BB99
Illuminated	SRL91-27URR3-BB99
Illuminated	SRL91-22UGA3-BB99
Illuminated	SRL91-23UGG3-BB99
Illuminated	SRL91-21UGG3-BB99
Illuminated	SRL91-22UGG3-BB99
Connector Housing	HRSR-01

**⚠ WARNING**  
**MISUSE OF DOCUMENTATION**

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

**⚠ WARNING**  
**PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

**WARRANTY/REMEDY**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

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Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

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**Internet:** [www.honeywell.com/sensing](http://www.honeywell.com/sensing)

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100483-2-EN IL50 GLO  
August 2006  
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