

Precision Limit Switch Style Analog and Digital Switching

FEATURES

- **Background suppression**
- Sealed to IP 65
- 200 to 1500 mm (7.87 to 59.05 in.) range
- Die cast zinc limit switch style housing
- Temperature compensated, $\pm 1\%$
- Analog output proportional to sensor-to-target distance
- Field adjustable analog output slope
- Two independently adjustable digital setpoints, PNP N.O. outputs
- Inhibit input for multiple sensor synchronization



ORDER GUIDE

Sensor Package Style	Sensing Range* mm (in.)	Output Type	Catalog Listing
Limit switch 454,4 g (16 oz.)	200 - 1500 (7.87 - 59.05)	PNP, two independent N.O. outputs	941-C2V-2E-001
		1.3 - 10 VDC Analog	941-C2V-2E-1C0

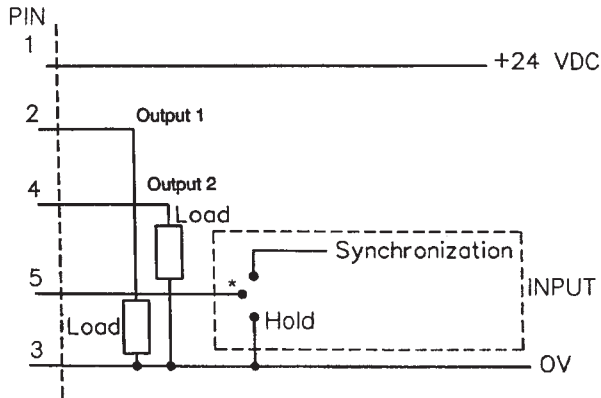
SENSING SPECIFICATIONS

Catalog Listings	941-C2V-2E-001	941-C2V-2E-1C0
Max. Sensing Distance	1500 mm (59.05 in.)	1500 mm (59.05 in.)
Min. Sensing Distance	200 mm (7.87 in.)	200 mm (7.87 in.)
Beam Angle	10°	
POWER SUPPLY		
Supply Voltage	20 - 48 VDC	
Supply Current	<35 mA without load	
Circuit Protection	Reverse polarity	
OUTPUT CHARACTERISTICS		
Load Current	0 - 100 mA	10 mA max.
Switching Frequency	10 Hz	6.6 Hz
Repeatability	± 1 mm	± 1 mm
Dead Zone Adjustment	Digital Switch, 200 - 1100 mm, 100 mm increments	
Repeatability	± 1 mm	
Sensitivity Adjustment	4 turn potentiometer	
Setpoint Adjustment	4 Turn Potentiometer, 200 - 1500 mm	
Slope Adjustment		4 Turn Potentiometer, 5 - 10 mV/mm
Linearity		< 1%
Circuit Protection	Short Circuit	
ENVIRONMENTAL		
Operating Temperature	0 to 70°C (32 to 158°F)	
Storage Temperature	-15 to 70°C (+5 to 158°F)	
Sealing	IP 65	
SPECIAL FEATURES		
Hold Input	Stops transmission and reception when input is connected to 0 VDC. Last digital output will be stored until input is disconnected. Analog output will be zero.	
Synchronization Input	Avoids mutual interference from several sensors. (External synchronization unit is required. See Accessories)	
LED Indicator	RED - Illuminates when sensor detects target	
	YELLOW (SP1 or SP2) - Illuminates when sensor detects target at setpoint distance	
	GREEN - Illuminates when sensor is connected to power supply	

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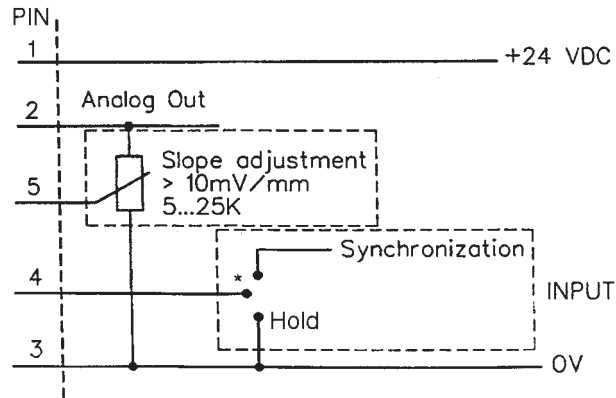
WIRING DIAGRAM

941C2V-2E-001



*Normal operation with no connection

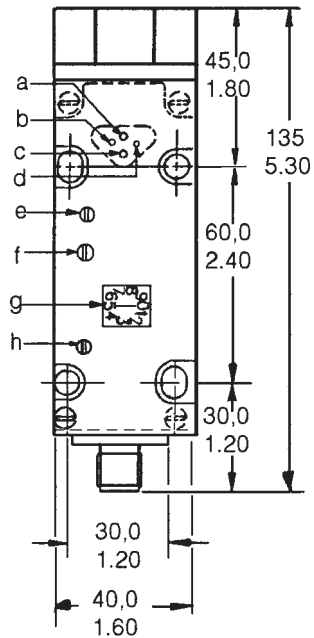
941-C2V-2E-1C0



*Normal operation with no connection

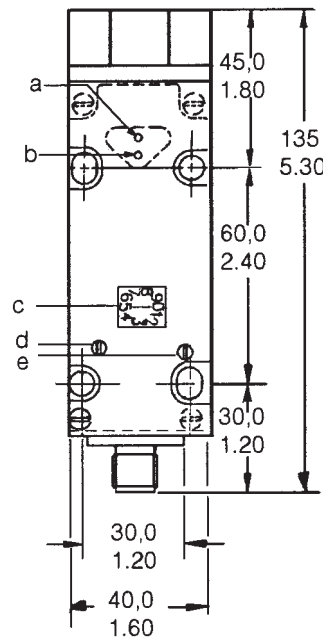
MOUNTING DIMENSIONS (For reference only)

941C2V-2E-001



- a LED echo (RED)
- b LED SP1 (YELLOW)
- c LED VDC (GREEN)
- d LED SP2 (YELLOW)
- e Adjustment setpoint SP1
- f Adjustment setpoint SP2
- g Adjustment dead zone
- h Adjustment receive sensitivity

941-C2V-2E-1C0



- a LED echo (RED)
- b LED VDC (GREEN)
- c Adjustment dead zone
- d Adjustment receive sensitivity
- e Adjustment slope



ACCESSORIES

	Catalog Listing	Feature
2 meter cable with straight connector	RKT5-612/2M	Used for wiring to connector
5 meter cable with straight connector	RKT5-612/5M	Used for wiring to connector
2 meter cable with right angle connector	RKWT5-612/2M	Used for wiring to connector
5 meter cable with right angle connector	RKWT5-612/5M	Used for wiring to connector
24 VDC POWER supply, Relay output, 110 VAC input	FF-MADB24RB	See page B24 for more information