Features

No revision without agency approval.

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, go to www.bannerengineering.com.



- Designed for use with approved amplifiers and intrinsically safe barriers in explosive environments
- NAMUR compliant sensors with MINI-BEAM performance and small size
- Output 1 mA or less in the dark condition and 2 mA or more in the light condition
- Models with integral cable or quick-disconnect

WARNING:

- **Do not use this device for personnel protection**
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

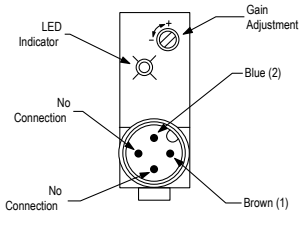
Models

Model[1]	Sensing Mode	Sensing Beam	Sensing Range	Output Type
MI9E	Opposed (Emitter)	Infrared, 880 nm	6 m (20 ft)	Constant Current ≤ 1.2 mA dark ≥ 2.1 mA light
MIAD9R	Opposed (Receiver)			
MIAD9LVAG	Polarized Retroreflective	Visible red, 650 nm	50 mm to 2 m (2 in to 7 ft)	
MIAD9LV	Retroreflective	Visible red, 650 nm	5 m (16.4 ft)	
MIAD9D	Diffuse	Infrared, 880 nm	380 mm (15 in)	
MIAD9W	Divergent Diffuse	Infrared, 880 nm	75 mm (3 in)	
MIAD9CV	Convergent	Visible red, 650 nm	16 mm (0.6 in)	
MIAD9CV2			43 mm (1.7 in)	
MIAD9F	Fiber Optic (Glass)	Infrared, 880 nm	Range varies by sensing mode and fiber optics used	

Overview

MIAD9 Series NAMUR Sensors are small, rugged, self-contained two-wire sensors designed for use with certified intrinsically safe switching amplifiers and barriers (Approved Apparatus) with intrinsically safe circuits. MIAD9 Series NAMUR sensors are designed in accordance with DIN 19234 (IEC/EN 60947-5-6) for operation via two-wire connection to an Approved Apparatus that is controlled by the variable internal resistance of the sensor.

Features (rear of sensor, quick-disconnect model shown)



These sensors vary the impedance across the sensor output, which passes 1 mA or less in the “dark” condition and 2 mA or more in the “light” condition. A red LED on the rear of the sensor lights whenever the sensor sees the “light” condition. A rugged, clutched, 15-turn slotted brass screw Gain control potentiometer enables precise adjustment of system sensitivity.

Models are available with either a 2 m (6.5 ft) or 9 m (30 ft) long attached PVC-covered cable, or a 4-pin M12 quick disconnect (QD) connector. Quick disconnect models (with “**Q**” in the model number suffix) use **MQD9-4.**. mating cable (either straight or right angle connector; see "Quick-Disconnect (QD) Cables" on page 8). Contact Banner Engineering for availability of sensor models with 9 m (30 ft) long attached cable.

[1] Only standard 2 m (6.5 ft) cable models are listed. To order the 4-pin M12 male QD model: add suffix “**Q**” to the model number (for example, **MIAD9RQ**); an accessory mating cable required.

Original Instructions
09-Jul-26

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39616
p/n: 39616 Rev. O

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

Installation Instructions

Ex/HazLoc Applications

WARNING:
- **Explosive Atmospheres/Hazardous Locations**
- It is the user's responsibility to ensure that all local, state, and national laws, rules, codes, or regulations relating to the installation and use of this device in any particular application are satisfied. This device must be installed by a Qualified Person[(2)], in accordance with this document and applicable regulations.

WARNING:
- **Explosion Hazard**
- Do not disconnect equipment unless the power has been switched off or the area is known to be non-hazardous.

WARNING:
- **Electrostatic Discharge (ESD) Specific Conditions for Safe Use**
- Parts of the enclosure are non-conducting and can generate an ignition-capable level of ESD.
- To reduce the risk of ignition due to electrostatic discharge, avoid contact with the equipment while an explosive atmosphere is present.
- Clean the equipment with only a damp cloth.

Specific Conditions for Use and General Notes:
- See Specifications and Wiring Diagrams for important information concerning entity parameters, permissible locations, electrical connections and certifications.
- In addition to the warning above concerning user responsibility, the installation must comply with the following:
  - All installations must comply with all manufacturer's instructions.
  - U.S. Installations: The relevant requirements of the National Electrical Code® (ANSI/NFPA-70 (NEC®) and when appropriate ANSI/ISA-RP12.06.01 Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations.
  - Canadian Installations: The relevant requirements of the Canadian Electrical Code (CSA C22.1).
  - ATEX and IECEx Installations: The relevant requirements of EN IEC 60079-14 and applicable National regulations.
  - For quick disconnect (QD) models only: Use Banner **MQD9-4##** cordsets (see "Quick-Disconnect (QD) Cables" on page 8), or suitable M12 quick disconnect cordsets with threaded retaining nut (see Specifications), The cordset must be securely fastened using the M12x1 QD retaining nut to prevent disconnection. Maximum connector torque: 6 ft-lbs.
- Do not attempt any repairs to this device; it contains no field-replaceable parts or components. Tampering and/or replacement with non-factory components may adversely affect the safe use of the system.
- Approved Apparatus entity parameters must meet the following requirements:
  - V_{oc} or $V_t \leq V_{max}$
  - $C_a \geq C_i + C_{cable}$
  - I_{sc} or $I_t \leq I_{max}$
  - $La \geq L_i + L_{cable}$
- Sensor Entity Parameters:
  - V_{max} (Ui) ≤ 15 V DC
  - I_{max} (Ii) ≤ 60 mA
  - $P_i \leq 225$ mW
  - $C_i = 0.3$ µF
  - $L_i = 0$ mH
- Cable Entity Parameters (if unknown):
  - $C_{cable} = 60$ pF/ft
  - $L_{cable} = 0.2$ µH/ft
- The ambient operating temperature range of the Sensors is –40 °C to +70 °C (–40 °F to +158 °F).
- For U.S. installations, Class II and III, Division 2 applies only to model numbers ending in a Q suffix.
- For intrinsically safe installations, sensors must be used with certified intrinsically safe switching amplifiers and barriers (Approved Apparatus) with intrinsically safe circuits that limit supply voltage and current in the event of failures.
- Associated Apparatus is not required for installation of the devices within a Division 2 hazardous (classified) location when installed per the National Electrical Code. The maximum voltage for Division 2 installation is 15 V DC. In Division 2 installations (without Associated Apparatus), observe Explosion Hazard warning at the beginning of this section.
- Associated Apparatus is not required for installation of the devices within a Division 2 hazardous (classified) location when installed in, or through the wall of a suitable enclosure with provision for connection of rigid metal conduit per the Canadian Electrical Code,

(2) A Qualified Person is a person who, by possession of a recognized degree or certificate of professional training, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve problems relating to the subject matter and work.

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as acceptable to the local inspection authority having jurisdiction. The maximum rating for Division 2 installation is 15 V DC, 60 mA. In Division 2 installations (without Associated Apparatus), observe Explosion Hazard warning at the beginning of this section.
- Maximum non-hazardous area voltage that the Approved Apparatus (intrinsically safe circuit) is connected to must not exceed 250 V.
- Intrinsic safety ground, if required for the Associated Apparatus, shall be less than 1 ohm.

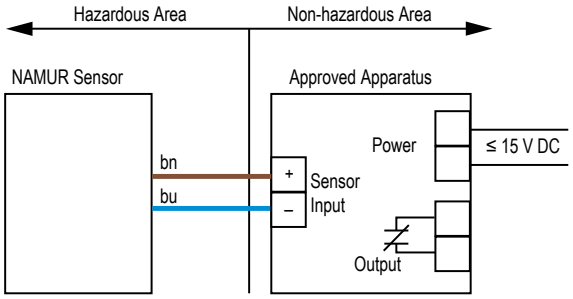
Wiring

MIAD9 Series NUMAR sensors are intrinsically safe ONLY when used with certified intrinsically safe switching amplifiers and barriers (Approved Apparatus) with intrinsically safe circuits.

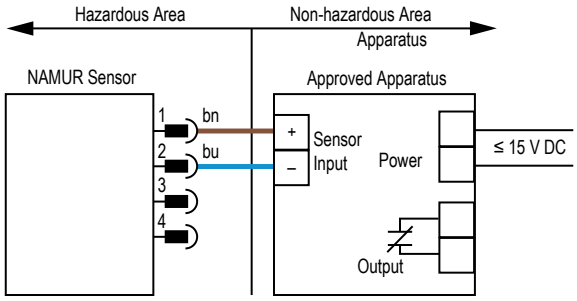
Banner does not manufacture such devices; however, our applications engineers can refer you to suppliers of certified devices that will interface with Banner sensors.

The user is responsible for proper installation and maintenance of this equipment and must conform with the certification requirements relating to barriers and to the maximum allowable capacitance and inductance of the field wiring. If in doubt about these requirements, our applications engineers can refer you to the appropriate authority.

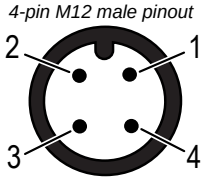
NAMUR sensors with an attached cable



NAMUR sensors with a quick-disconnect connector



4-pin M12 male pinout



1. Brown
2. Blue
3. Not used
4. Not used

Specifications

Supply Voltage and Current

5 to 15 V DC (provided by the amplifier to which the sensor is connected)

Output

Constant current output: ≤ 1.2 mA in the “dark” condition and ≥ 2.1 mA in the “light” condition

Output Response Time

Opposed mode: 2 ms ON/400 µs OFF

All other modes: 5 ms ON/OFF (does not include amplifier response)

Adjustments

15-turn slotted brass screw GAIN (sensitivity) adjustment potentiometer (clutched at both ends of travel); located on rear panel and protected by a clear gasketed acrylic cover

Indicators

Red LED Alignment Indicator Device (AID) located on rear panel lights when the sensor sees a “light” condition; pulse rate is proportional to signal strength (the stronger the signal, the faster the pulse rate).

Construction

Reinforced thermoplastic polyester housing, totally encapsulated, o-ring sealing, acrylic lenses, and stainless steel screws

Connections

PVC-jacketed 2-conductor 2 m or 9 m cables, or special 4-pin M12 quick-disconnect (QD) fitting are available; QD cables are ordered separately.

Connecting 4-pin M12 QD Cordsets (see "Quick-Disconnect (QD) Cables" on page 8): Female single-ended Multiconductor cable (at minimum): UL Style 2517, 24 AWG wire, rated ≥ 80 °C; M12 QD connector: per IEC 61076-2-101, must have threaded M12 × 1 retaining nut.

Application Note

Special Conditions for Safe Use: Parts of the enclosure are non-conducting and may generate an ignition-capable level of ESD. Cleaning of the equipment must be done only with a damp cloth.

Environmental Rating

Banner tested to NEMA standards 1, 2, 3, 3S, 4, 4X, 6, 12, and 13

IP67

Operating Conditions

–40 °C to +70 °C (–40 °F to +158 °F)

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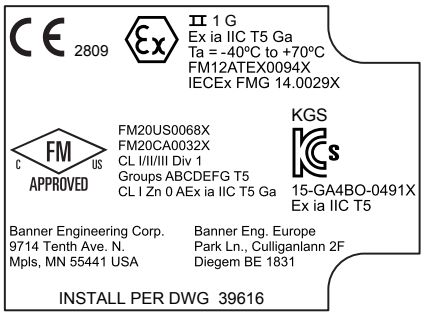
Certifications

2809

IEC IECEx FMG 14.0029X
ATEX FM12ATEX0094X
FM20US0068X CoC 0003046293 (US)
FM20CA0032X CoC 0003046293C (CAN)
CCC 2020012315326661

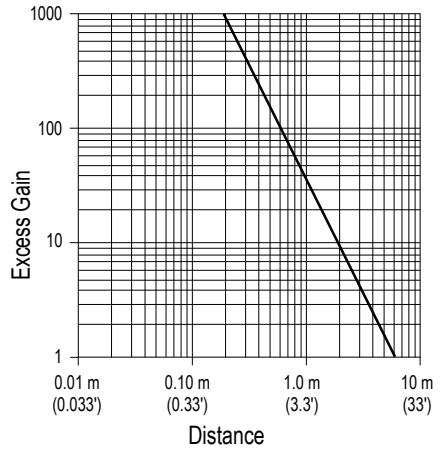
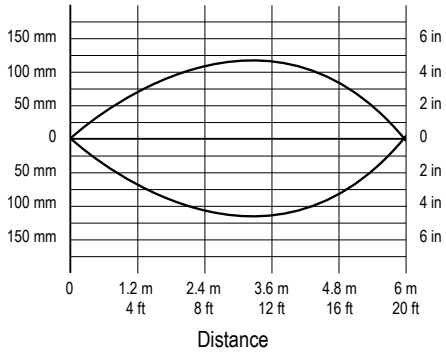
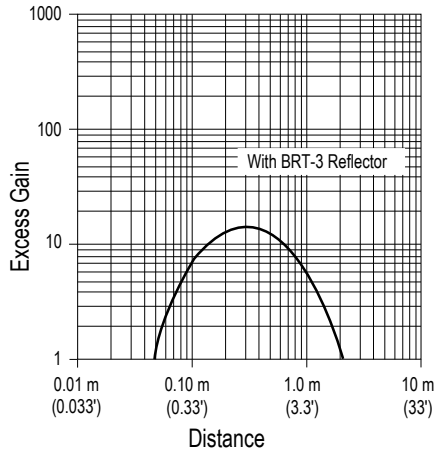
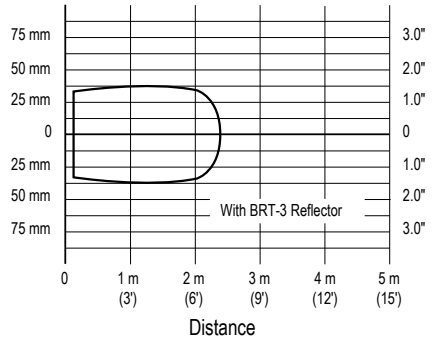
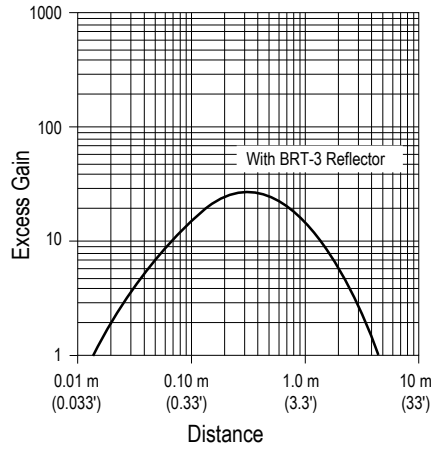
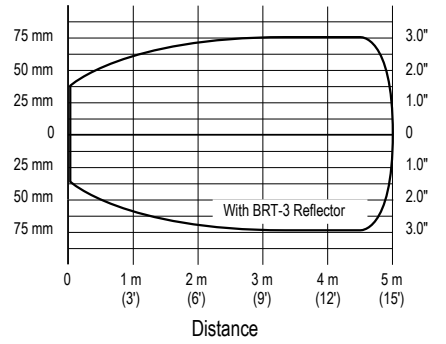
Design Standards	
ATEX (European)	EN IEC 60079-0, EN 60079-11
Canada	CAN/CSA C22.2: No.0-M91, No.142-M1987, No.157-92, No.213-M1987, No.1010.1, E60079-0 and E60079-11
United States	FM Class 3600, 3610, and 3810; ANSI/ISA 61010-1 (82.02.01), 60079-0 and 60079-11
IECEx	IEC 60079-0, IEC 60079-11

Approvals	
MIAD9(a)(b), MI9E(b)	a = Sensing mode D, W, F, LV, LVAG, CV, CV2 or R. b = Connection method Q or blank.
ATEX (European)	II 1 G Ex ia IIC T5 Ga Ta = -40°C to 70°C - 39616; Entity Entity Parameters: U_i = 15 V dc, I_i = 60 mA, P_i = 225 mW, C_i = 0.3 µF, L_i = 0 mH.
Canadian	IS / I,II,III / 1 / ABCDEFG / T5 Ta = -40°C to 70°C - 39616; Entity I / 0 / Ex ia / IIC / T5 Ta = -40°C to 70°C - 39616; Entity (Non-incendive) NI / I / 2 / ABCD / T5 Ta = -40°C to 70°C Entity Parameters: V_{Max} = 15 V dc, I_{Max} = 60 mA, P_i = 225 mW, C_i = 0.3 µF, L_i = 0 mH
United States	IS / I,II,III / 1 / ABCDEFG / T5 Ta = -40°C to 70°C - 39616; Entity I / 0 / AEx ia / IIC / T5 / Ga Ta = -40°C to 70°C - 39616; Entity (Non-incendive) NI / I / 2 / ABCD / T5 Ta = -40°C to 70°C S / II,III / 2 / FG* / T5 Ta = -40°C to 70°C *Class II and III, Division 2 applies only to model numbers ending in a Q suffix. Entity Parameters: V_{Max} = 15 V dc, I_{Max} = 60 mA, P_i = 225 mW, C_i = 0.3 µF, L_i = 0 mH
IECEx	Ex ia IIC T5 Ga Ta = -40 °C to +70 °C - 35331; Entity Entity Parameters: U_i = 15 V dc, I_i = 60 mA, P_i = 225 mW, C_i = 0.3 µF, L_i = 0 mH.



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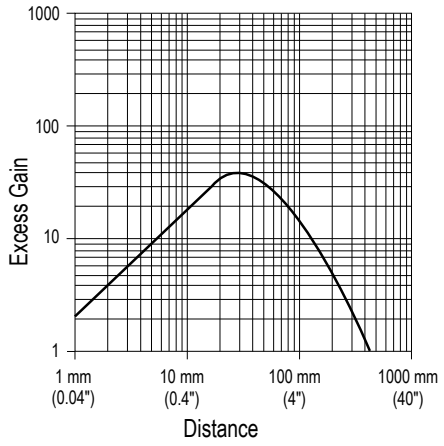
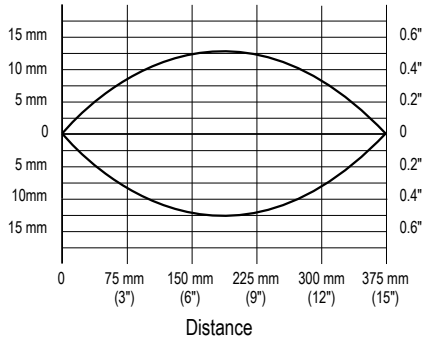
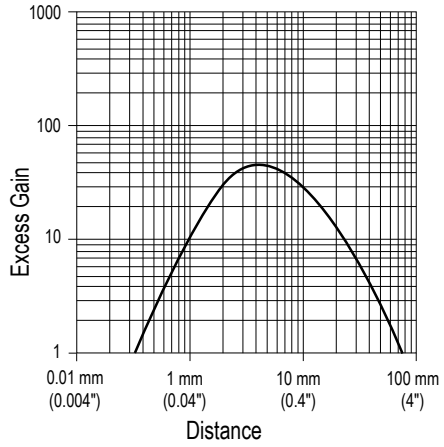
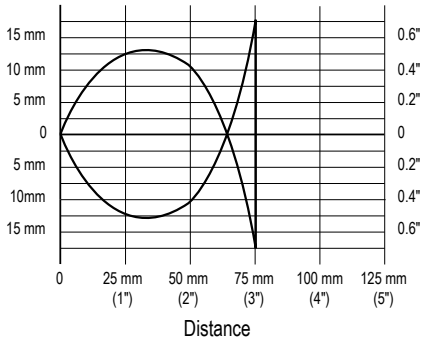
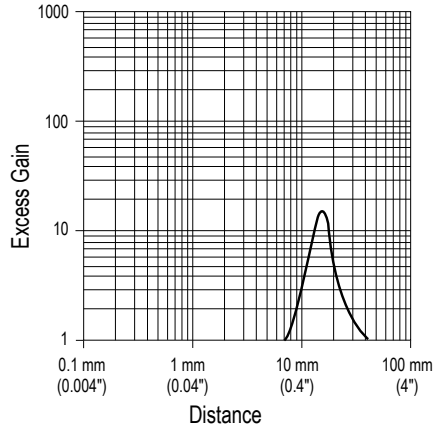
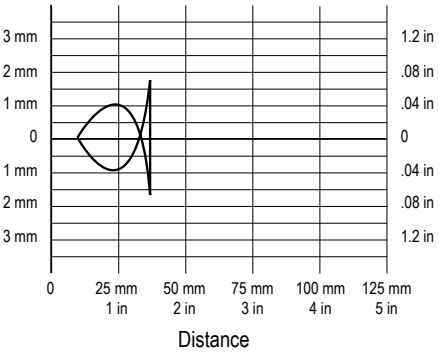
Performance Curves

Mode	Excess Gain	Beam Pattern
	Diffuse mode performance based on 90% reflectance white test card	
Opposed		
Polarized Retroreflective		
Retroreflective		

Continued on page 5

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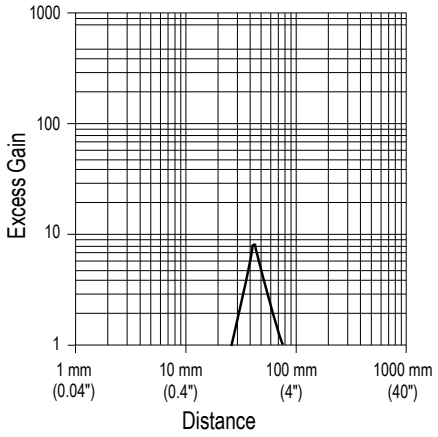
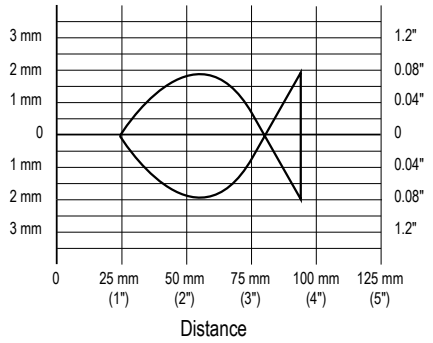
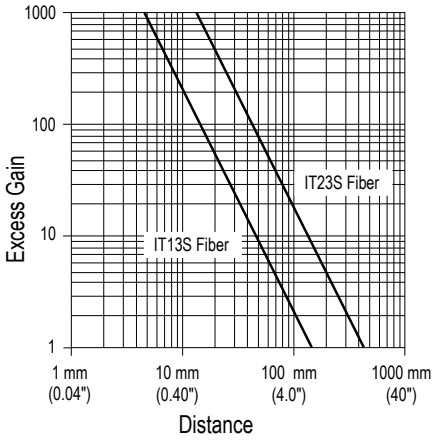
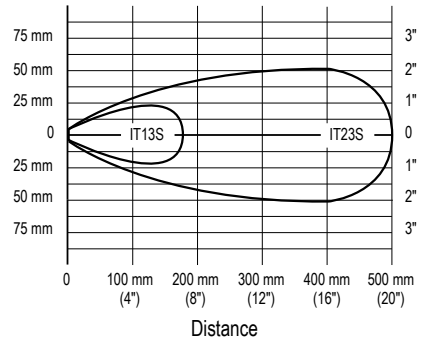
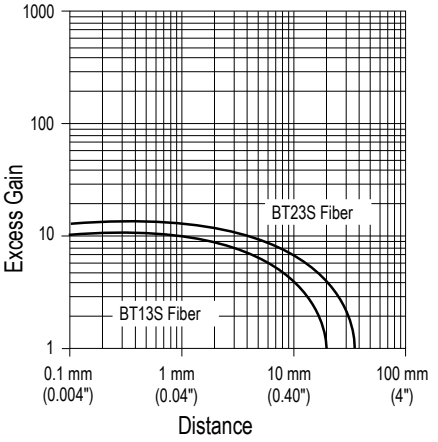
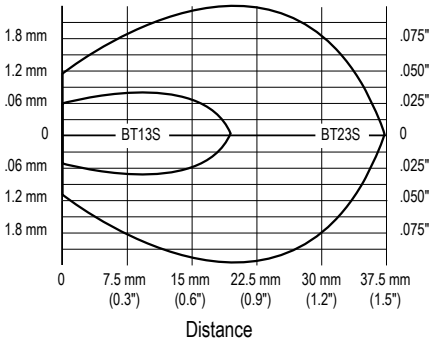
Continued from page 5

Mode	Excess Gain	Beam Pattern
	Diffuse mode performance based on 90% reflectance white test card	
Diffuse		
Divergent Diffuse		
Convergent 16 mm (0.6 in)		

Continued on page 7

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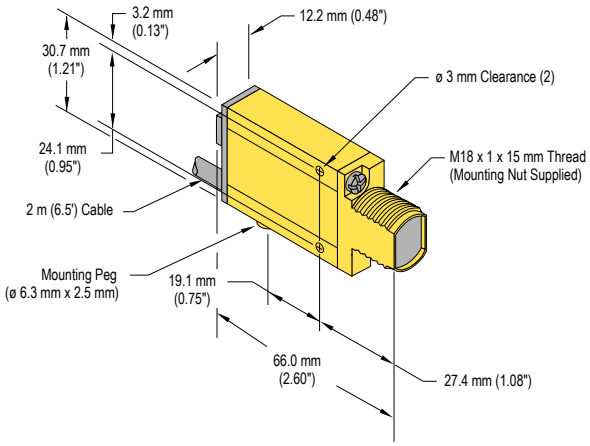
Continued from page 6

Mode	Excess Gain	Beam Pattern
	Diffuse mode performance based on 90% reflectance white test card	
Convergent 43 mm (1.7 in)		
Glass Fiber Optic, Opposed		
Glass Fiber Optic, Diffuse		

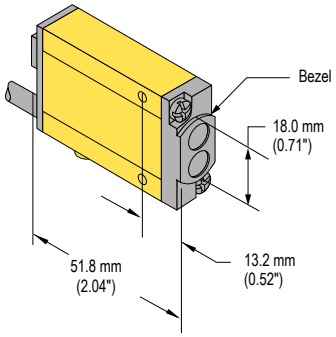
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Dimensions

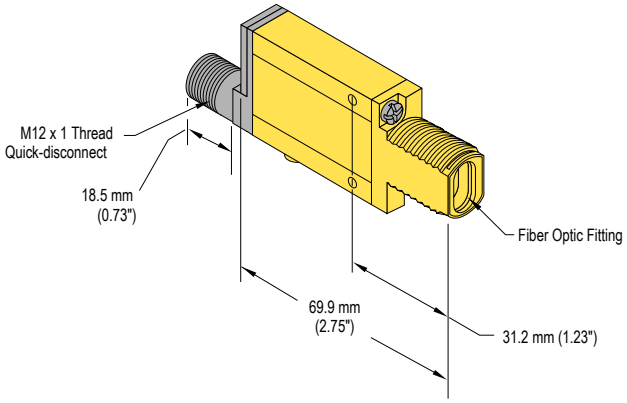
Opposed, Retro, Diffuse, Convergent Models



Diffuse Models

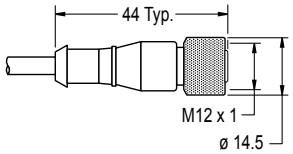
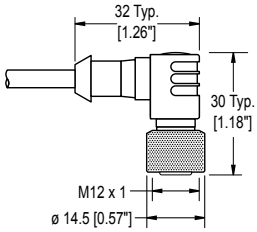
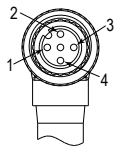


Glass Fiber Models



Accessories

Quick-Disconnect (QD) Cables

4-Pin Single-Ended M12 Female Cordsets (for use with NAMUR sensors)					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**	
MQD9-406	2 m (6.56 ft)	Straight			1 = Brown 2 = Blue
MQD9-415	5 m (16.4 ft)				
MQD9-430	9 m (29.5 ft)				
MQD9-406RA	2 m (6.56 ft)	Right-Angle			
MQD9-415RA	5 m (16.4 ft)				
MQD9-430RA	9 m (29.5 ft)				

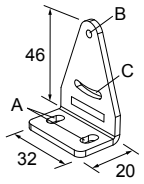
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MIAD6 Brackets

SMB312S

- Stainless steel 2-axis, side-mount bracket
- CAD Files: DXF, PDF, IGS, STP

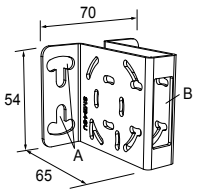
A = 4.3 × 7.5, B = diam. 3, C = 3 × 15.3



SMB46U

- Right-angle
- U bracket for sensor protection
- 14-ga. 316 stainless steel
- CAD Files: DXF, PDF, IGS, STP

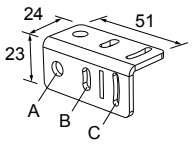
Hole center spacing: A = 16.0
Hole size: A = 16.5 × 18.7, B = 34.0 × 13.0



SMB312B

- Stainless steel 2-axis, bottom-mount bracket
- Includes mounting foot
- CAD Files: DXF, PDF, IGS, STP

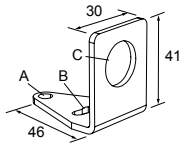
A = diam. 6.9, B = 4.3 × 10.5, C = 3.1 × 15.2



SMB18A

- Right-angle mounting bracket with a curved slot for versatile orientation
- 12-ga. stainless steel
- 18 mm sensor mounting hole
- Clearance for M4 (#8) hardware
- CAD Files: DXF, PDF, IGS, STP

Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17.0 × 4.6, C = ø 18.5

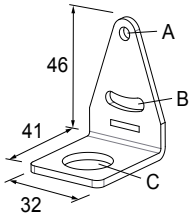


SMB312PD

- Right-angle mounting bracket with a curved slot for versatile orientation
- 12-ga. stainless steel
- 18 mm sensor mounting hole
- Clearance for M4 (#8) hardware
- CAD Files: DXF, PDF, IGS, STP

Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17 × 4.6, C = ø 18.5

NOTE: Not for use with plastic fiber optic sensors



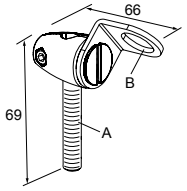
SMB18FA..

- Swivel bracket with tilt and pan movement for precision adjustment
- Easy sensor mounting to extruded rail T-slots
- Metric and inch size bolts available
- 18 mm sensor mounting hole

Hole size: B=ø 18.1

Bolt Thread (A):

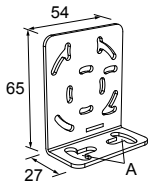
SMB18FA = 3/8 - 16 × 2 in
CAD Files: DXF, PDF, IGS, STP
SMB18FAM10 = M10 - 1.5 × 50
CAD Files: DXF, PDF, IGS, STP
SMB18FAM12 = n/a; no bolt included. Mounts directly to 12 mm (½ in) rods
CAD Files: DXF, PDF, IGS, STP



SMB46L

- Right-angle
- L bracket
- 14-ga. 316 stainless steel
- CAD Files: DXF, PDF, IGS, STP

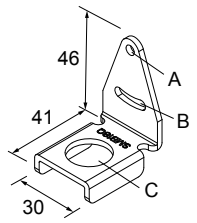
Hole center spacing: A = 16.0
Hole size: A = 16.5 × 18.7



SMB18Q

- Right-angle flanged bracket
- 18 mm sensor mounting hole
- 12-ga. stainless steel
- CAD Files: DXF, PDF, IGS, STP

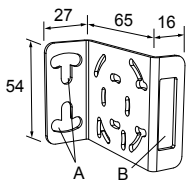
Hole center spacing: A to B = 24.2
Hole size: A = ø 4.6, B = 17.0 × 4.6, C = ø 19.0



SMB46S

- Right-angle
- S bracket
- 14-ga. 316 stainless steel
- CAD Files: DXF, PDF, IGS, STP

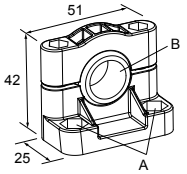
Hole center spacing: A = 16.0
Hole size: A = 16.5 × 18.7, B = 34.0 × 10.0



SMB18SF

- 18 mm swivel bracket with M18 × 1 internal thread
- Black thermoplastic polyester
- Stainless steel swivel locking hardware included
- CAD Files: DXF, PDF, IGS, STP

Hole center spacing: A = 36.0
Hole size: A = ø 5.3, B = ø 18.0



Continued on page 10

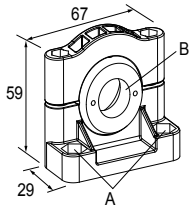
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Continued from page 9

SMB3018SC

- 18 mm swivel side or barrel-mount bracket
- Black reinforced thermoplastic polyester
- Stainless steel swivel locking hardware included
- CAD Files: DXF, PDF, IGS, STP

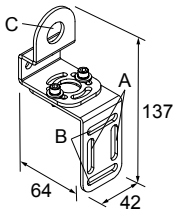
Hole center spacing: A = 50.8
Hole size: A = ø 7.0, B = ø 18.0



SMB18UR

- 2-piece universal swivel bracket
- 300 series stainless steel
- Stainless steel swivel locking hardware included
- Mounting hole for 18 mm sensor
- CAD Files: DXF, PDF, IGS, STP

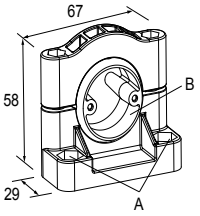
Hole center spacing: A = 25.4, B = 46.7
Hole size: B = 6.9 × 32.0, C = ø 18.3



SMB30SUS

- Side-mount swivel with extended range of motion
- Black reinforced thermoplastic polyester
- Stainless steel swivel locking hardware included
- CAD Files: DXF, PDF, IGS, STP

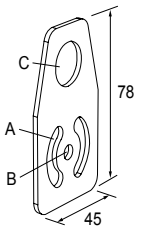
Hole center spacing: A=50.8, B=24.1
Hole size: A=ø 7, B=ø 7.6



SMBAMS18P

- Flat SMBAMS series bracket with 18 mm hole
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel
- CAD Files: DXF, PDF, IGS, STP

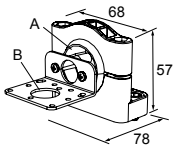
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0



SMB30SK

- Flat-mount swivel bracket with extended range of motion
- Black reinforced thermoplastic polyester and 316 stainless steel
- Stainless steel swivel locking hardware included
- CAD Files: DXF, PDF, IGS, STP

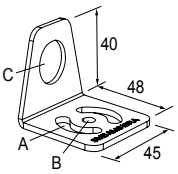
Hole center spacing: A=50.8
Hole size: A=ø 7, B=ø 18



SMBAMS18RA

- Right-angle SMBAMS series bracket with 18 mm hole
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel
- CAD Files: DXF, PDF, IGS, STP

Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0



Repairs and Translations (No Field-Replaceable Parts)

English

Contact Banner Engineering for troubleshooting of this device. **Do not attempt any repairs to this Banner device; it contains no field-replaceable parts or components.** If the device, device part, or device component is determined to be defective by a Banner Applications Engineer, they will advise you of Banner's RMA (Return Merchandise Authorization) procedure.

```
IMPORTANT: If instructed to return the device, pack it with care. Damage that occurs in return shipping is
not covered by warranty.
```

Obtain assistance with product repairs by contacting your local Banner Engineering Corp distributor or by calling Banner directly at (763) 544-3164. Access literature translated into your native language on the Banner website at www.bannerengineering.com or contact Banner directly at (763) 544-3164.

Deutsch

Wenden Sie sich zur Fehlerbehebung dieses Geräts an Banner Engineering. **Versuchen Sie nicht, Reparaturen an diesem Banner-Gerät vorzunehmen. Das Gerät enthält keine am Einsatzort auszuwechselnden Teile oder Komponenten.** Wenn ein Banner-Anwendungstechniker zu dem Schluss kommt, dass dieses Gerät, ein Teil oder eine Komponente davon defekt ist, erhalten Sie von dem Techniker Erläuterungen zu Banners RMA-Verfahren (Return Merchandise Authorization) für die Warenrückgabe.

```
WICHTIG: Wenn Sie der Techniker anweist, das Gerät zurückzusenden, verpacken Sie es bitte sorgfältig.
Transportschäden bei der Rücksendung werden von der Garantie nicht abgedeckt.
```

Unterstützung bei Produktreparaturen erhalten Sie von Ihrem örtlichen Banner Engineering Corp Händler oder direkt von Banner unter Tel. (763) 544-3164. Die in Ihre Muttersprache übersetzte Literatur finden Sie auf der Banner-Website unter www.bannerengineering.com oder kontaktieren Sie Banner direkt unter Tel. (763) 544-3164.

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Français

Pour plus d'informations sur le dépannage du produit, contactez Banner Engineering. **Ne tentez pas de réparer ce dispositif Banner. Il ne contient aucun composant ou pièce qui puisse être remplacé sur place.** Si un ingénieur de Banner conclut que le dispositif ou l'une de ses pièces ou composants est défectueux, il vous informera de la procédure à suivre pour le retour des produits (RMA).

Important : Si vous devez retourner le dispositif, emballez-le avec soin. Les dégâts occasionnés pendant le transport de retour ne sont pas couverts par la garantie.

Pour vous aider lors de la réparation de produits, contactez votre distributeur Banner local our appelez directement Banner au (763) 544-3164. La documentation traduite dans votre langue est disponible sur le site internet de Banner www.bannerengineering.com ou contactez directement Banner au (763) 544-3164.

Italiano

Per le procedure di individuazione e riparazione dei guasti di questo dispositivo, contattare Banner Engineering. **Non tentare di riparare questo dispositivo Banner, in quanto non contiene parti o componenti sostituibili dall'utente.** Se il dispositivo, una parte del dispositivo o un componente del dispositivo viene riscontrato difettoso da un tecnico Banner, il nostro personale vi comunicherà la procedura da seguire per ottenere l'autorizzazione al reso.

Importante: Se si ricevono istruzioni di rispedire il dispositivo al produttore, imballarlo con cura. I danni dovuti al trasporto non sono coperti dalla garanzia.

Per assistenza nelle riparazioni dei prodotti, contattare il distributore locale Banner Engineering Corp o contattare direttamente Banner al numero (763) 544-3164. È possibile accedere alla documentazione tradotta nella propria lingua madre sul sito Web Banner all'indirizzo www.bannerengineering.com o contattare direttamente Banner al numero (763) 544-3164.

Español

Comuníquese con Banner Engineering para solucionar de problemas de este dispositivo. **No intente ninguna reparación a este dispositivo de Banner, contiene piezas o componente que no se pueden cambiar en terreno.** Si algún ingeniero de aplicaciones de Banner determina que el dispositivo, alguna de las piezas o alguno de los componentes del dispositivo está defectuoso, le informará el procedimiento de autorización de devolución de mercancía (RMA, por sus siglas en inglés) de Banner.

Importante: Si se le solicita devolver el dispositivo, empáquelo con cuidado. Puede haber daños durante el envío de devolución que no estén cubiertos por la garantía.

Para reparaciones de productos, por favor contacte a su distribuidor local de Banner Engineering o llame a Banner directamente al 00 1 (763) 544-3164. Vea la literatura traducida en su idioma en el sitio web Banner en www.bannerengineering.com o comuníquese con Banner directamente al 00 1 (763) 544-3164.

中国人

如需对本装置进行故障排查，请联系邦纳。**请勿尝试自行维修该邦纳装置；本装置不包含任何可在现场更换的部件或组件。** 若经邦纳应用工程师确认设备、设备部件或组件存在缺陷，他们将告知您邦纳退货授权 (RMA) 流程。

重要注意事项： 如被要求退回装置，请妥善包装后寄回。退货运输过程中发生的损坏不在保修范围内。

请联系当地的 Banner Engineering Corp 经销商或直接致电 Banner +1 (763) 544-3164，以获得产品维修帮助。请访问邦纳网站 www.bannerengineering.com 或直接拨打 +1 (763) 544-3164 联系邦纳，获取翻译成您母语的资料。

한국인

이 장치의 문제를 해결하려면 Banner Engineering에 문의하십시오. **이 Banner 장치에는 현장에서 교체할 수 있는 부품 또는 구성품이 없으므로 수리를 시도하지 마십시오.** Banner 애플리케이션 엔지니어가 장치, 장치 부품 또는 장치 구성품에 결함이 있는 것으로 판정하면, Banner의 RMA(제품 반송 승인)절차에 대해 안내해 드립니다.

중요: 제품을 반송하도록 안내 받으셨다면 잘 포장해주십시오. 반송 도중에 발생한 손상은 보증 서비스가 적용되지 않습니다.

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重要 ： 返品を指示された場合は、装置を丁寧に梱包してください。返品時に発生した破損は保証の対象外となります。

製品の修理については、最寄りのBanner Engineering Corp代理店にお問い合わせいただくか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。バナーのウェブサイト（www.bannerengineering.com）でお客様の言語に翻訳された資料にアクセスするか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。

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čeština

Pro řešení problémů se zařízením kontaktujte společnost Banner Engineering. **Neprovádějte žádné opravy zařízení Banner. Neobsahují žádné komponenty nebo části, které by byly vyměnitelné.** Pokud je zařízení, jeho část nebo díl označen technikem společnosti Banner jako poškozený, bude Vám doporučeno vyplnit reklamační RMA protokol.

Důležité: Pokud byl vydán požadavek na vrácení zařízení, pečlivě ho zabalte. Poškození vzniklé při dopravě není považováno za záruční opravu.

Pokud produkt potřebuje opravu, vyžádejte si pomoc od místního distributora společnosti Banner Engineering Corp nebo přímo na telefonním čísle (763) 544-3164. Dokumentaci přeloženou do vašeho jazyka si vyhledejte na webových stránkách společnosti Banner na adrese www.bannerengineering.com nebo se obraťte přímo na společnost Banner na telefonním čísle (763) 544-3164.

Polski

W celu rozwiązania problemów z urządzeniem należy skontaktować się z działem technicznym firmy Banner Engineering. **Pod żadnym pozorem nie próbuj naprawiać tego urządzenia firmy Banner; nie zawiera ono części ani elementów, które można wymieniać samodzielnie.** Jeśli urządzenie, jego część lub element zostaną uznane za wadliwe przez inżyniera technicznego Banner, poinformuje on użytkownika o firmowej procedurze zwrotu towaru (RMA) firmy Banner.

Ważne: Jeśli urządzenie ma zostać zwrócone, należy je starannie zapakować. Uszkodzenia powstałe podczas odsyłki nie są objęte gwarancją.

Aby uzyskać pomoc w zakresie naprawy produktu, należy skontaktować się z lokalnym dystrybutorem Banner Engineering Corp lub zadzwonić bezpośrednio do firmy Banner pod numer (763) 544-3164. Dostęp do literatury przetłumaczonej na swój język ojczysty można uzyskać na stronie internetowej firmy Banner pod adresem www.bannerengineering.com lub kontaktując się bezpośrednio z firmą Banner pod numerem (763) 544-3164.

Português

Entre em contato com a Engenharia da Banner para a solução de problemas deste dispositivo. **Não tente fazer nenhum reparo neste dispositivo Banner; ele não contém peças ou componentes substituíveis em campo.** Se um técnico de aplicações da Banner determinar que o dispositivo, peça ou componente do dispositivo está com defeito, ele o informará sobre o procedimento de RMA (Autorização de Devolução de Mercadoria) da Banner.

Importante: Se for instruído a devolver o dispositivo, embale-o com cuidado. Os danos ocorridos no transporte de devolução não são cobertos pela garantia.

Obtenha assistência para reparos do produto entrando em contato com o distribuidor local da Banner Engineering Corp ou ligando diretamente para a Banner no telefone (763) 544-3164. Acesse a literatura traduzida para seu idioma nativo no site da Banner em www.bannerengineering.com ou entre em contato diretamente com a Banner pelo telefone (763) 544-3164.

Türkçe

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ÖNEMLİ: İade etmeniz istenirse, cihazı dikkatli bir şekilde paketleyin. İade nakliyesinde meydana gelecek hasarlar garanti kapsamında değildir.

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