

ProBell™ Reflective Speed Sensor Kit

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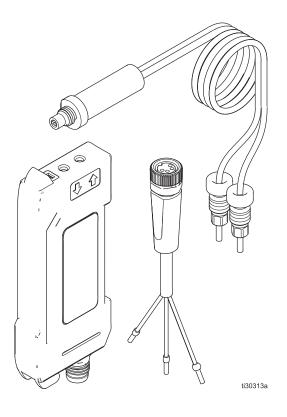
ΕN

For use with the ProBell when reflective speed sensing is required. For professional use only.



Important Safety Instructions

Read all warnings and instructions in this manual and other **Related Manuals** on page 2. Save all instructions.



Related Manuals

Manual No.	Description
334626	ProBell Rotary Applicator, Hollow Wrist
334452	ProBell Rotary Applicator

Part Numbers Covered

Part Number	Description
24Z183	Reflective Fiber Optic Sensor Kit: Includes fiber optic sensor, electrical wiring cable, and reflective fiber optic cable kit 25A537.
25A537	Reflective Fiber Optic Cable Kit: Includes reflective fiber optic cable with housing and hardware required to install in a ProBell applicator.

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Introduction

This manual provides instructions for installing a reflective speed sensor kit in a ProBell applicator. See manual 334452 or 334626 for more details on the ProBell applicator.

Installation

Remove Magnetic Pickup Sensor and Fiber Optic Cable

For instructions on removing the magnetic pickup sensor and fiber optic cable, see "Replace Magnetic Pickup Sensor or Fiber Optic Extension Cable" in the standard applicator manual 334452 (steps 1–7) or the hollow wrist applicator manual 334626 (steps 1–5).

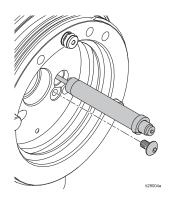


Fig. 1: Remove Existing Screw and Sensor

Cut New Reflective Fiber Optic Cable to Length

Cut the fiber optic cable to length according to the style of ProBell being used. Clean cuts can be accomplished using the Graco Fiber Optic Cutter.

 For a standard applicator cut both cable strands to 7.7 inches (195 mm), measuring from the back of the cable housing to the end of the cable. See "A" in Fig. 2.

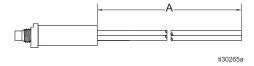


Fig. 2: Cut Cables to Length

 For a hollow wrist applicator cut both cable strands to 11.3 inches (287 mm), measuring from the back of the cable housing to the end of the cable. See "A" in Fig. 2.

Install Reflective Sensor and Cable

For instructions on installing the reflective sensor and cable, see "Replace Magnetic Pickup Sensor or Fiber Optic Extension Cable" in the standard applicator manual 334452 (steps 8–9) or the hollow wrist applicator 334626 (steps 6–7).

Note: The cable strands must be fed through the applicator housing as the reflective fiber optic cable housing is being installed.

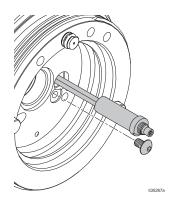


Fig. 3: Install New Sensor and Screw

Assemble Reflective Fiber Optic Cable

 Install the provided nuts, fittings, and cable markers onto the cable strands. Nuts can be installed using a 3/16" nut driver or twisting by hand. Adjust each nut so that the fiber optic cable extends 0.11 inches (2.8 mm) past the nut.

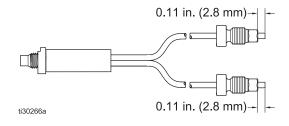


Fig. 4: Extend Fiber Optic Cable Past Nut

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2. Screw both the fittings into the applicator rear manifold or base plate.

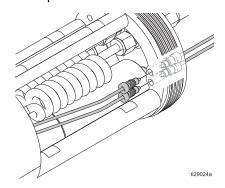


Fig. 5: Screw Fitting into Applicator

Connect the Applicator to the Fiber Optic Sensor

 Connect the dual strand fiber optic cables to ports F on the applicator. See the image below for the proper fiber optic end length for each applicator style.

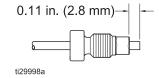


Fig. 6: Standard Style Applicator

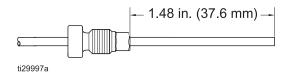


Fig. 7: Hollow Wrist Style Applicator

2. Connect the other end of the dual strand fiber optic cable to the reflective fiber optic sensor.

Install Reflective Fiber Optic Sensor

Connect the supplied sensor cable. Mount and make wiring connections according to the sensor manufacturer's manual.

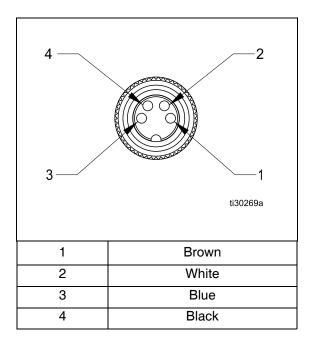


Fig. 8: Sensor Cable Color Code

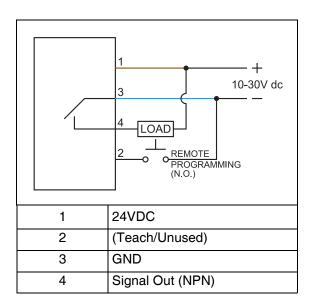


Fig. 9: NPN Models Cable I.O.

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Teach Reflective Sensor

See the manufacturer's manual shipped with the device to set the "on1shot" timer to zero, and set the "tchsel" to "2pttch". Then perform a two point teach:

With bearing air applied, rotate the bell cup and note the numbers on the detector screen to tell when the sensor is over the reflective portion of the disk versus the dark portion of the disk.

Perform a two point teach, one over the reflective portion and one over the dark portion. Note, the reflective disk on the ProBell has two pulses per revolution.

Accessories

Fiber Optic Cables: Use to connect the applicator to the reflective fiber optic sensor. Use one dual strand fiber optic cable or two single strand fiber optic cables for each applicator.

Note: For dual strand fiber optic cables, the length of the cable extending past the fitting nut must be adjusted for use with the ProBell. See Figure 1 and 2. Single strand fiber optic cables are adjusted at the factory.

Dual Strand Fiber Optic Cables

Part Number	Description
24X003	Fiber Optic Cable, Reflective, 25 ft.
24X004	Fiber Optic Cable, Reflective, 50 ft.
24X005	Fiber Optic Cable, Reflective, 100 ft.

Fiber Optic Supplies

24W875	Fiber Optic Repair Kit – includes fittings for one double-strand fiber optic cable and a cutter tool.
24W876	Fiber Optic Bulkhead Fitting, SST – Qty 2. Accepts Graco fiber optic cable fittings. Fits $\frac{1}{2}$ inch (13mm) panel hole.
24W877	Fiber Optic Bulkhead, Plastic- Qty 2. Accepts bare fiber optic cable. Fits 5/16inch (8mm) panel hole.
24W823	Fiber Optic Cutter Tool – Qty 3
24X009	Marker Numbers for Fiber Optic Cable Ends – Pack of 30 (#1 and #2)

Fiber Optic Cables, Hollow Wrist Models

Standard single fiber.

Kit	Description	Qty
24Z193	CABLE, fiber optic, 11 m (36 ft.)	1
24Z194	CABLE, fiber optic, 20 m (66 ft.)	1
24Z195	CABLE, fiber optic, 30 m (99 ft.)	1

Fiber Optic Cables, Reciprocator Models

Standard single fiber.

Description	Qty
CABLE, fiber optic, 11 m (36 ft.)	1
CABLE, fiber optic, 20 m (66 ft.)	1
CABLE, fiber optic, 30 m (99 ft.)	1
	Description CABLE, fiber optic, 11 m (36 ft.) CABLE, fiber optic, 20 m (66 ft.) CABLE, fiber optic, 30 m (99 ft.)

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For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6921 or Toll Free: 1-800-328-0211 Fax: 612-378-3505

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Graco reserves the right to make changes at any time without notice.

Original instructions. This manual contains English. MM 3A3642

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