DFS11 - Instructions

Features:

- Intuitive numerical/percentage diagnostic OLED display
- Attractive 10mm wide housing
- Low power & wide operating voltage
- Advanced remote programming
- Six **AUTOSET** modes including window
- Crosstalk rejection of up to eight sensors synchronized via single wire network or two sensors without a wire
- Programmable output/input configurations
- High-speed, High-resolution, and Long-range modes
- Combinable dual timers, with latching and reset capability
- CE approved

How To Specify

1. Select Sensor: DFS11
Digital
Fiber Optic Sensor

2. Select Light Source:
R = Red
I = Infrared

3. Select Connection:
Blank = 6ft cable (1.8m)
C = 4-pin M8 connector

Example: DFS11 R C

DFS
Digital Fiber Optic Sensor

Light Source

Connection

Features

WIDE VARIETY OF FIBERS
Visit www.ttco.com for full listing.

AUTOSET (●)
Push to perform AUTOSET.

THRESHOLD/VALUE ADJUST ROCKER (▼▲)
1. Manually adjusts the threshold.+/-
2. Alters programming parameters. +/-
Hold to scroll for numeric values.

MODE (■)
1. Tap to display sensor status screen.
2. Tap again to access parameters.

CONNECTION
4-Pin M8 connector or built-in cable.

FIBER RELEASE CLAMP
Locks fibers in place.

OUTPUT LEDS
1. Illuminates solid when output is ON.
2. Flashes when output is overloaded.

ADVANCED DIAGNOSTIC OLED DISPLAY
See next page for complete listing.

INPUT FUNCTION LIGHT RING
1. Illuminates when input is activated.
2. Illuminates when synchronous crosstalk communication is received.

Note: Only available on connector models.

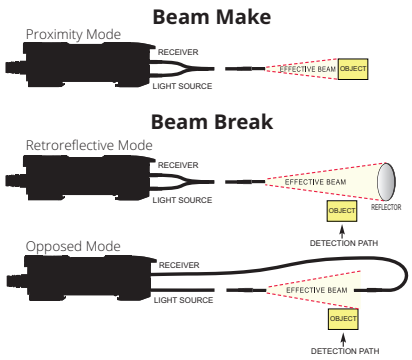
Quick Start

The Digital Fiber Optic Sensor is designed to provide reliable detection using fiber optic light guides. Sensor is adjusted by a single push of a button; there is no guess work on the part of the operator. The sensor *default settings** (Light State) will work for most applications.

Follow the three step procedure below:

* *Note: Consult all default settings on page 6.*

1. Establish one of the following conditions:
Beam Make/Proximity - Reflect light off object.
Beam Break - Remove object from light beam path.



2. Tap **AUTOSET** (●) button:

Pressing the AUTOSET button sets the sensors threshold to the desired level.

3. Verify setup on advanced diagnostic OLED display. If needed, the threshold can be altered by tapping up or down on the threshold adjust rocker.

Advanced Diagnostic OLED Display

Signal Level → 01100 00990 ← Threshold

DFS21 - Instructions

DFS Dual Channel Sensor

Channel 1 & Channel 2
- Two Individual Thresholds
- Two Individual Outputs

OR

Channel 1 & Health Monitor
- Health Monitoring System and Display
- Auto Signal Tracking

Additional Features:

- Intuitive numerical/percentage diagnostic OLED display
- Attractive 10mm wide housing
- Low power & wide operating voltage
- Advanced remote programming
- Six **AUTOSET** modes including window
- Crosstalk rejection between two sensors without a wire
- Programmable output/input configurations
- High-speed, High-resolution, and Long-range modes
- Combinable dual timers, and counters
- CE approved

How To Specify

1. Select Sensor: DFS21
Dual Channel Digital Fiber Optic Sensor

2. Select Light Source:
R = Red
I = Infrared

3. Select Connection:
Blank = 6ft cable (1.8m)
C = 5-pin M8 connector

Example: DFS21 R C

DFS21
Digital Fiber Optic Sensor

Light Source

Connection

Features

WIDE VARIETY OF FIBERS
Visit www.ttco.com for full listing.

AUTOSET (●)
1. Push to perform AUTOSET.
2. Instantly optimizes when in Health Monitor Mode

3-WAY ROCKER SWITCH (▼▲)
1. Manually adjusts the threshold.+/-
2. Alters programming parameters.+/-
   Hold to scroll for numeric values.
3. Press down on center to switch channels. 1 2

MODE (■)
Tap to access parameters.

FIBER RELEASE CLAMP
Locks fibers in place.

DUAL CHANNEL OUTPUT LEDS
1. Channel 1 or 2 each illuminates solid when output is ON.
2. Flashes when output is overloaded.

ADVANCED DIAGNOSTIC OLED DISPLAY
See next page for complete listing.

CONNECTION
5-Pin M8 connector or built-in cable.

Quick Start

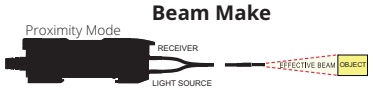
The Digital Fiber Optic Sensor is designed to provide reliable detection using fiber optic light guides. Sensor is adjusted by a single push of a button; there is no guess work on the part of the operator. The sensor *default settings** (Channel 1, Light State) will work for most applications.

Follow the three step procedure below:

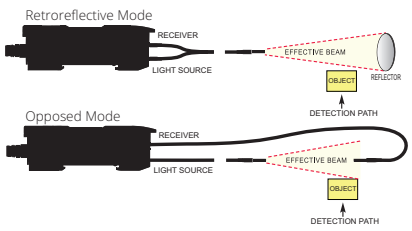
* *Note: Consult all default settings on page 6.*

1. Establish one of the following conditions:
Beam Make/Proximity - Reflect light off object.
Beam Break - Remove object from light beam path.

Beam Make



Beam Break

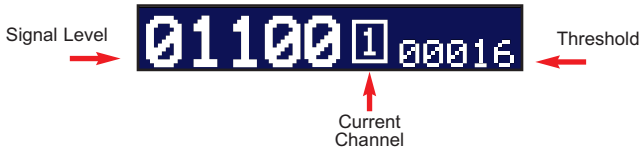


2. Tap **AUTOSET** (●) button:

Pressing the AUTOSET button sets the sensors threshold to the desired level.

3. Verify setup on advanced diagnostic OLED display. If needed, the threshold can be altered by tapping up or down on the threshold adjust rocker.

Advanced Diagnostic OLED Display



DFS61 - Instructions

1460nm SWIR - Short-Wave Infrared

Features:

- Detects water based fluid
- Intuitive numerical/percentage diagnostic OLED display
- Attractive 10mm wide housing
- Low power & wide operating voltage
- Advanced remote programming
- Six **AUTOSET** modes including window
- Crosstalk rejection between two sensors without a wire
- Programmable output/input configurations
- Combinable dual timers, and counters

How To Specify

1. Select Sensor: DFS61
Short-wave Infrared
Digital Fiber Optic Sensor

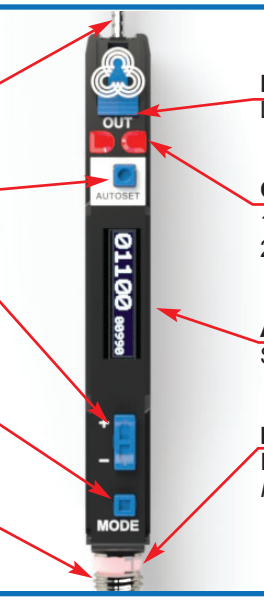
2. Select Light Source:
I = SWIR (1460nm)

3. Select Connection:
Blank = 6ft cable (1.8m)
C = 4-pin M8 connector

Example: DFS61 I C

DFS
SWIR Digital Fiber Optic Sensor
Light Source
Connection

Features



WIDE VARIETY OF FIBERS
Visit www.ttco.com for full listing.

AUTOSET (●)
Push to perform AUTOSET.

THRESHOLD/VALUE ADJUST ROCKER (▼▲)
1. Manually adjusts the threshold.+/-
2. Alters programming parameters. +/-
Hold to scroll for numeric values.

MODE (■)
1. Tap to display sensor status screen.
2. Tap again to access parameters.

CONNECTION
4-Pin M8 connector or built-in cable.

FIBER RELEASE CLAMP
Locks fibers in place.

OUTPUT LEDS
1. Illuminates solid when output is ON.
2. Flashes when output is overloaded.

ADVANCED DIAGNOSTIC OLED DISPLAY
See next page for complete listing.

INPUT FUNCTION LIGHT RING
Illuminates when input is activated.
Note: Only available on connector models.

Quick Start

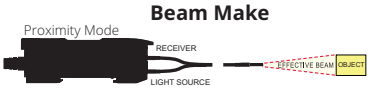
The Digital Fiber Optic Sensor is designed to provide reliable detection using fiber optic light guides. Sensor is adjusted by a single push of a button; there is no guess work on the part of the operator. The sensor *default settings** (Light State) will work for most applications.

Follow the three step procedure below:

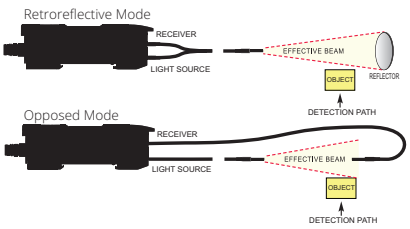
** Note: Consult all default settings on page 6.*

1. Establish one of the following conditions:
Beam Make/Proximity - Reflect light off object.
Beam Break - Remove object from light beam path.

Beam Make



Beam Break



2. Tap **AUTOSET** (●) button:

Pressing the AUTOSET button sets the sensors threshold to the desired level.

3. Verify setup on advanced diagnostic OLED display. If needed, the threshold can be altered by tapping up or down on the threshold adjust rocker.

Advanced Diagnostic OLED Display

Signal Level → 01100 00990 ← Threshold