

# Messenger Wire Installation

## Description

Messenger wire (a Protectowire innovation), is available with any model Detector on special order. It consists of high tensile strength stainless steel wire, which is wound around the Detector at the rate of approximately one turn per foot (0.3m). It is a carrier or support wire which is designed to simplify the installation of the Detector in areas where mounting is difficult due to the lack of appropriate support structures or mounting surfaces.

When using messenger wire to support the Detector, turnbuckles and eyebolts must be employed at each end of a straight run to place tension on the support wire.

The maximum detector run length between turnbuckles should not exceed 250 feet (76m) and the wire must also be supported with approved intermediate fasteners at intervals typically ranging from 15 (4.5m) to 20 feet (6m). The final spacing of intermediate fasteners is largely determined by each individual application however, spacing should never exceed 50 feet (15m) as excessive sag will result. Outdoor messenger wire installations present additional challenges due to environmental factors such as snow loads, ice build-up or wind. Increased detector support must be provided by using additional intermediate fasteners with closer spacing in all outdoor installations.

