

# Pressure Relief Transducer Assembly

Product Information

9800-3906-BS-0



P/N 9800-3906-BS-0

## Providing Monitored Cable Pressure Relief in Positive Air Flow Systems

The Positive Air Flow (PAF) System™ is an engineering design that has proven to be successful in helping telephone companies reduce high resistance cable trouble in underground cables. The high resistance cable trouble is attributed to two primary factors: high ambient temperature and moisture in the underground. These factors can result in the development of high vapor pressure, which penetrates the cable sheath and results in elevated relative humidity readings in the cables. When a cable with high relative humidity (40% to 50%) comes in contact with a cooling force, such as a water main or creek, its temperature drops suddenly and the humidity condenses. This causes a moisture pocket to develop inside the cable which, in turn, causes the high resistance trouble.

The PAF System makes it possible to distribute a constant source of pressurized, monitored air flow through the cables. The increased air flow dries any existing or developing moisture pockets inside the sheath and helps to reduce/prevent high resistance cable trouble.

One of the important components in the system is the stand-alone Pressure Relief Transducer Assembly (Part No. 9800-3906-BS-0). It consists of a stainless steel, 90-degree transducer mounting bracket containing a 0-30 psi High Resolution Pressure Transducer™. Pneumatically connected to the transducer is a branch T with a 1/4" NPT-M to 3/8" tubing connector on one end (to accept feed from cable), and a pressure relief valve, manual shutoff valve and particulate filter on the other end.

For PAF installations where pressure relief for multiple cables is required, a Pressure Relief Manifold Assembly (Part No. 9800-3905-BS-0) is available. The Pressure Relief Manifold Assembly allows single transducer monitoring of up to five cables connected to the assembly's manifold. (Refer to document #: 3770911.AHD.)

### Performance Characteristics:

- Transducer remotely monitors cable pressure (psi) protection
- Permits air flow from pneumatically connected cable to atmosphere
- Maintains adequate cable protection—relief valve stops air flow when pressure drops to 4.85 psi
- Supplied with manual shutoff valve to assist with leak locating

### Specifications:

- **Mounting Bracket:** 90 degree stainless steel, for vertically mounting stand-alone transducer assembly
- **Transducer:** 0-30 psi output, 0.1 psi reading resolution; includes nickel-plated brass conductor tubing connector, 15 feet of plastic tubing, and 18 feet of 2-pair conductor wire
- **Pressure Relief Valve:** combined nickel-plated brass/plastic components; single direction flow, closes at 4.85 psi (supplied with particulate filter to prevent clogging)
- **Shutoff Valve:** high quality, manually-activated shutoff assembly with handle position-locking collar

Please give us a call if you'd like more information about the Pressure Relief Transducer Assembly's performance capabilities, installation requirements, or ordering procedures.

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