



# CYCLOPS

Z – Purge Indicator

Y – Purge Indicator



- Low cost
- Simple to install & use
- Highly reliable & maintenance free
- Enclosure vent is part of casing
- Local & remote status indicator
- Casing available in anodized aluminum & 316 stainless steel
- 12 or 24 VDC & 115 or 230 VAC
- All in One Unit

## OVERVIEW:

To prevent the possibility of fire or explosion inside the enclosures of energized electrical equipment, a protective gas supply is used to dilute potentially flammable vapors to an acceptable level, creating a safe area for the devices within the enclosure. Positive pressure prevents the ingress of flammable vapors in the surrounding atmosphere from entering into the enclosure as long as positive pressure is maintained. After the enclosure is purged, power may be manually applied to the protected electrical equipment.

The Purge Solutions CYCLOPS Y and Z – Purge Indicator provides objective evidence of positive enclosure pressure with both a visible indicator and supplied standard, a dry-contact output for remote status monitoring. The enclosure purge vent is an integrated part of the CYCLOPS Y and Z – Purge Indicator's casing, which mounts directly to the enclosure being purged. No additional holes, sheet metal, or plumbing is required.

## FEATURES:

- The CYCLOPS Y and Z – Purge Indicator mounts directly to purged enclosure. No additional sheet metal enclosures or plumbing is required. (Refer to Figures 1, 2, 3, & 4)
- Enclosure purge vent is an integrated part of the CYCLOPS Y and Z – Purge Indicator casing. No additional holes or plumbing is required in purged enclosure. (Refer to Figure 4)
- Dry contact output for remote monitoring is supplied as standard. Contact open on alarm (Standard). Contact closed on alarm (Optional). Order optional contact closed on alarm by adding an “X” at end of Purge Solutions model number. (Refer to Figure 4)
- Rugged, visual green LED indicator. Green LED on; enclosure purge pressure at or above required pressure. Green LED off, enclosure purge pressure below required pressure.

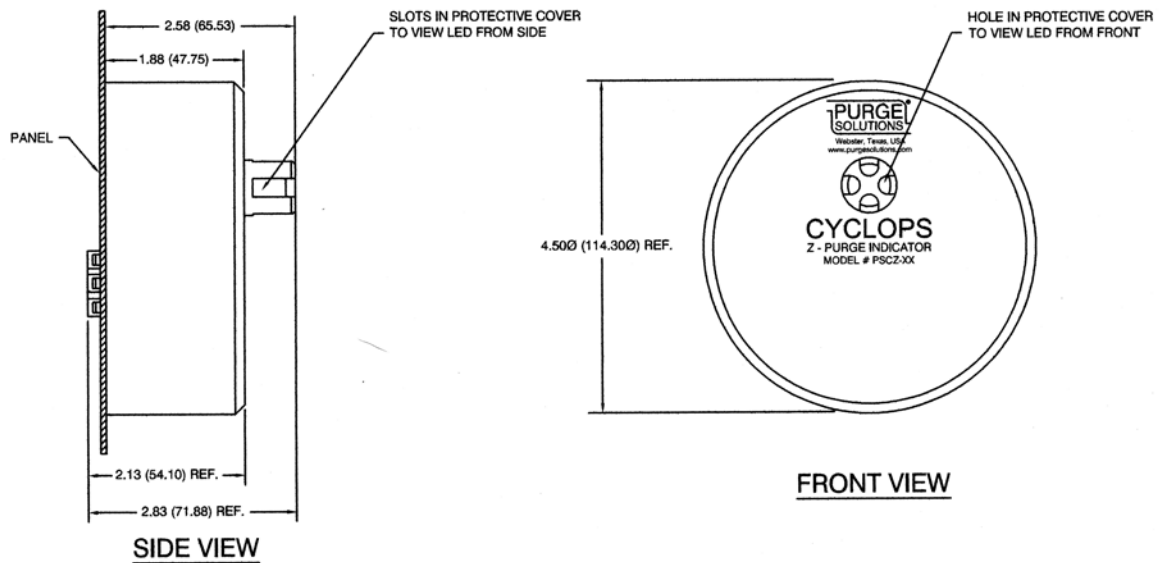


Figure 1

Figure 2

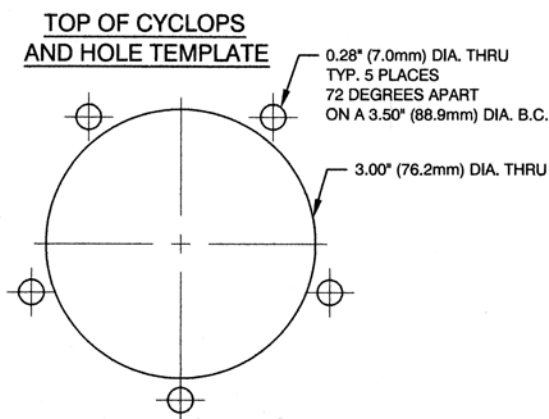


Figure 3

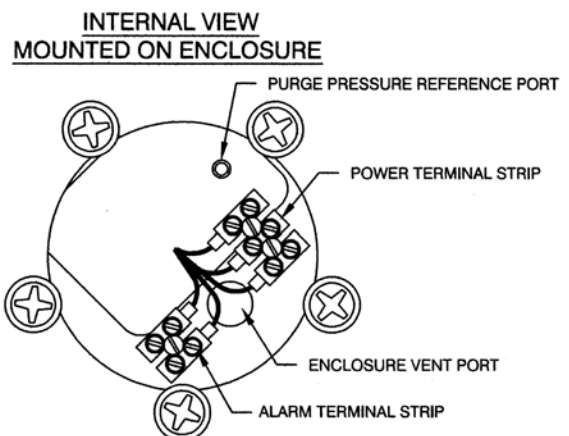


Figure 4



# CYCLOPS

Z – Purge Indicator

Y – Purge Indicator

## OPTIONS AVAILABLE:

- **Purge Indicator Casing:** Anodized aluminum (standard) 316 stainless steel (optional).
- **Input Voltages Available:** Either 12 VDC, 24 VDC, 115 VAC, or 230 VAC.
- **Purge Solutions Available Models:**
  1. Type Z – Purge Indicator: 12 VDC, Anodized aluminum: Purge Solutions model number PSCZ-1A
  2. Type Z – Purge Indicator: 12 VDC, 316 stainless steel: Purge Solutions model number PSCZ-1S
  3. Type Z – Purge Indicator: 24 VDC, Anodized aluminum: Purge Solutions model number PSCZ-2A
  4. Type Z – Purge Indicator: 24 VDC, 316 stainless steel: Purge Solutions model number PSCZ-2S
  5. Type Z – Purge Indicator: 115 VAC, Anodized aluminum: Purge Solutions model number PSCZ-3A
  6. Type Z – Purge Indicator: 115 VAC, 316 stainless steel: Purge Solutions model number PSCZ-3S
  7. Type Z – Purge Indicator: 230 VAC, Anodized aluminum: Purge Solutions model number PSCZ-4A
  8. Type Z – Purge Indicator: 230 VAC, 316 stainless steel: Purge Solutions model number PSCZ-4S
  9. Type Y – Purge Indicator: 12 VDC, Anodized aluminum: Purge Solutions model number PSCY-1A
  10. Type Y – Purge Indicator: 12 VDC, 316 stainless steel: Purge Solutions model number PSCY-1S
  11. Type Y – Purge Indicator: 24 VDC, Anodized aluminum: Purge Solutions model number PSCY-2A
  12. Type Y – Purge Indicator: 24 VDC, 316 stainless steel: Purge Solutions model number PSCY-2S
  13. Type Y – Purge Indicator: 115 VAC, Anodized aluminum: Purge Solutions model number PSCY-3A
  14. Type Y – Purge Indicator: 115 VAC, 316 stainless steel: Purge Solutions model number PSCY-3S
  15. Type Y – Purge Indicator: 230 VAC, Anodized aluminum: Purge Solutions model number PSCY-4A
  16. Type Y – Purge Indicator: 230 VAC, 316 stainless steel: Purge Solutions model number PSCY-4S
- **Continuous Dilution Purge Gas Inlet Kit:** For interfacing and regulating pressure of protective gas supply to enclosure. Small Continuous Dilution Purge Gas Inlet Kit for enclosures with a volume up to 15 cubic feet (425 liters). Model number PSO-SCD-A is our small aluminum version and PSO-SCD-S is our small stainless version. Small Continuous Dilution Purge Gas Inlet Kit supply gas inlet to regulator is 1/4-18 FNPT. Medium Continuous Dilution Purge Gas Inlet Kit for enclosures with a volume up to 75 cubic feet (2,125 liters). Model number PSO-MCD-A is our medium aluminum version and PSO-MCD-S is our medium stainless version. Medium Continuous Dilution Purge Gas Inlet Kit supply gas inlet to regulator is 3/8-18 FNPT. Large Continuous Dilution Purge Gas Inlet Kit for enclosures with volumes up to 200 cubic feet (5,663 liters). Model number PSO-LCD-A is our large aluminum version and PSO-LCD-S is our large stainless version. Large Continuous Dilution Purge Gas Inlet Kit supply gas inlet to regulator is 1/2-14 FNPT. All kits include input fitting, regulator, gauge, bracket and mounting hardware.
- **Manual Leakage Compensation Purge Gas Inlet Kit:** Having two outlets from manifold able to increase the amount of purge gas to enclosure during dilution may be manually selected to speed up dilution of potentially flammable materials to an acceptable level, reducing dilution time and permitting a more rapid restoration of power to purge protected equipment. Small Manual Leakage Compensation Purge Gas Inlet Kits are for enclosures with a volume up to 15 cubic feet (425 liters). Model number PSO-SLC-A is our small aluminum version and model number PSO-SLC-S is our small stainless steel version. Small Manual Leakage Compensation Purge Gas Inlet Kit supply gas inlet to regulator is 1/4-18 FNPT. Medium Manual Leakage Compensation Purge Gas Inlet Kits are for enclosures with a volume up to 75 cubic feet (2,125 liters). Model number PSO-MLC-A is our medium aluminum version and model number PSO-MLC-S is our medium stainless steel version. Medium Manual Leakage Compensation Purge Gas Inlet Kit supply gas inlet to regulator is 3/8-18 FNPT. Large Manual Leakage Compensation Purge Gas Inlet Kit is for enclosures with volumes up to 200 cubic feet (5,663 liters). Model number PSO-LLC-A is our large aluminum version and PSO-LLC-S is our large stainless steel version. Large Manual Leakage Compensation Purge Gas Inlet Kit supply gas inlet to regulator is 1/2-14 FNPT. All kits include input fittings, regulator, gauge and manifold block.

## OPTIONS AVAILABLE CONTINUED:

- **Back-Up Purge Gas Kit:** In the event that the initial protective gas supply is lost, a back-up source of protective gas may be automatically applied to the protected enclosure. Purge Solutions model number is PSO-BUPG-K
- **Protective Gas Loss Indicator Kit:** An explosion-proof differential pressure switch may be installed to provide an alarm contact output signal to indicate the loss of the backup source of protective gas. Another explosion-proof differential pressure switch may be installed on the main protective gas supply to indicate that the primary protective gas pressure is adequate. Purge Solutions model number is PSO-PGLI-K.
- **Back-Up Vent Kit:** To protect the enclosure from over pressure; Purge Solutions offers two sizes of back-up vents. The first size is our Small Back-Up Vent for enclosures with a volume up to 15 cubic feet (425 liters). Model number PSO-SBUV-S is our small side mount version and model number PSO-SBUV-T is our small top mount version. The second size we offer is our Large Back-Up Vent for enclosures with volumes up to 200 cubic feet (5,663 liters). Model number PSO-LBUV-S is our large side mount version and model number PSO-LBUV-T is our large top mount version. All Back-Up Vents are constructed of 316 stainless steel and come with all mounting hardware.
- **Purge Gas Supply Blower:** For applications where compressor gas is not available or has oil, which can introduce hydrocarbons into the purge enclosure, Purge Solutions offers a Purge Gas Supply Blower. The Purge Gas Supply Blower will be mounted in a non-hazardous area, where the blower fan within the system, will move up to 131 CFM (3,709 LPM) purge air through a 2 inch diameter (50.8 mm diameter) tube to the enclosure located within the hazardous area. The Purge Gas Supply Blower is constructed of 316 stainless steel and is available in 115VAC or 230VAC. The model number for the 115VAC system is PSO-GSB-1 and the model number for the 230VAC system is PSO-GSB-2.
- **Differential Pressure Gauge Kit:** Purge Solutions also offers an all stainless steel differential pressure gauge kit, which can be mounted on left side model number PSO-DPG-L, right side model number PSO-DPG-R, top model number PSO-DPG-T or bottom model number PSO-DPG-B of enclosure.

## GENERAL SPECIFICATIONS:

- **Casing Dimensions:** 4.5" diameter x 1.9" tall (114.3mm diameter x 48.3mm tall).
- **Operating Temperature Range:** - 40°F to 150°F (- 40°C to 65°C).
- **Purge Pressure Lower Limit:** 0.20 inches H<sub>2</sub>O (0.50 mbar).
- **Casing:** Anodized aluminum, 2.48 lbs. (1.13 kg), IP66, NEMA 4, (standard) 316 stainless steel, 6.70 lbs. (3.04 kg), IP66, NEMA 4X, (optional).
- **Power Input:** 0.5 Watts max.
- **Voltage:** 12 VDC model (11 VDC to 16 VDC), 24 VDC model (19 VDC to 28 VDC), 115 VAC model (85 VAC to 160 VAC), 230 VAC model (130 VAC to 265 VAC), 47 to 63 Hz.
- **Dry Contact Rating:** Contact open on alarm (Standard). Contact closed on alarm (Optional). 265 Volts AC / DC, 150mA max.
- **Standard Hardware:** All stainless mounting fasteners, o-ring, 1/4" (6.4mm) diameter vent restrictor, warning label, and CD with all required documentation.
- **Hazardous Area Approvals:** (ATEX and IECEx) II 3 G Ex e mb [py] IIC T6 Gb "for Zone 1 gas hazardous areas" 3 G Ex e mb [pz] IIC T6 Gc "for Zone 2 gas hazardous areas" II 3 D Ex tD [py] A21 68°C IP66 Db "for Zone 1 dust hazardous areas" II 3 D Ex tD [pz] A22 68°C IP66 Dc "for Zone 2 dust hazardous areas" (NEC / NFPA and CEC) Type Y – Purge for Class 1, Division 1, Groups B,C,&D, T6, Type Z – Purge for Class 1, Division 2, Groups B,C,&D, T6 and CE Marked.