



| RATED OPERATING DISTANCE  MOUNTING MODE  MIN. REPEAT ACCURACY   5 2%  TEMPERATURE DRIFT  5 ±10%  5 ±15%, ≤ −25°C v ≥ +70°C  HYSTERESIS  OPERATING TEMPERATURE  CPERATIONAL VOLTAGE  DC RATED OPERATIONAL CURRENT  NO-LOAD CURRENT  RATED INSULATION VOLTAGE  SHORT-CIRCUIT PROTECTION  RESIDUAL CURRENT  MAX. VOLTAGE DROP  MAX. VOLTAGE DROP  SHORT-CIRCUIT PROTECTION  REVERSE POLARITY PROTECTION  REVERSE POLARITY PROTECTION  MAX. SWITCHING FREQUENCY  HOUSING MATERIAL  ACTIVE FACE MATERIAL  PLASTIC, LCP-GF30  END CAP MATERIAL  DEGREE OF PROTECTION  DEGREE OF PROTECTION  PENTALIS NEVEL OF MAPPUTUDE  (IN ALL 3 PLANES)  SHOCK RESISTANCE  DEGREE OF PROTECTION  LED XELLOW   | SPECIFICATIONS               |  |
|--|------------------------------|--|
| MIN. REPEAT ACCURACY  TEMPERATURE DRIFT  ≤ ±10% ≤ ±15%, ≤ −25°C v ≥ +70°C  HYSTERESIS  OPERATING TEMPERATURE  −25°C to +70°C (−13°F to +158°F)  RATED OPERATIONAL VOLTAGE  10−30 VDC  RESIDUAL RIPPLE  ≤ 10%  DC RATED OPERATIONAL CURRENT  NO−LOAD CURRENT  RESIDUAL CURRENT  RESIDUAL CURRENT  RATED INSULATION VOLTAGE  SHORT−CIRCUIT PROTECTION  WIRE BREAKAGE PROTECTION  REVERSE POLARITY PROTECTION  REVERSE POLARITY PROTECTION  MAX. VOLTAGE DROP  MAX. SWITCHING FREQUENCY  HOUSING MATERIAL  ACTIVE FACE MATERIAL  PLASTIC, LCP−GF30  END CAP MATERIAL  PLASTIC, EPTR  CABLE  Ø5.3, PVC  VIBRATION RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  JEGREE OF PROTECTION  IP67   | RATED OPERATING DISTANCE     | 15mm = .591"                               |
| TEMPERATURE DRIFT  ≤ ±10%  ≤ ±15%, ≤ −25°C v ≥ +70°C  HYSTERESIS  OPERATING TEMPERATURE  −25°C to +70°C (−13°F to +158°F)  RATED OPERATIONAL VOLTAGE  DC RATED OPERATIONAL CURRENT  DC RATED OPERATIONAL CURRENT  S = 10%  DC RATED OPERATIONAL CURRENT  S = 15 mA  RESIDUAL CURRENT  RESIDUAL CURRENT  RATED INSULATION VOLTAGE  SHORT—CIRCUIT PROTECTION  WIRE BREAKAGE PROTECTION  REVERSE POLARITY PROTECTION  REVERSE POLARITY PROTECTION  MAX. VOLTAGE DROP  MAX. SWITCHING FREQUENCY  S = 0.5 kHz  HOUSING MATERIAL  ACTIVE FACE MATERIAL  PLASTIC, LCP—GF30  END CAP MATERIAL  PLASTIC, LCP—GF30  VIBRATION RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  JO SON C—13°F to +10°C C  10°C (−13°F to +158°F)  10~30 VDC  10°C (−13°F to +158°F)  10°C (−1  | MOUNTING MODE                | FLUSH                                      |
| S ±15%, S −25°C v ≥ +70°C  HYSTERESIS  OPERATING TEMPERATURE  −25°C to +70°C (−13°F to +158°F)  RATED OPERATIONAL VOLTAGE  RESIDUAL RIPPLE  CRATED OPERATIONAL CURRENT  CRATED OPERATIONAL CURRENT  S 15 mA  RESIDUAL CURRENT  RESIDUAL CURRENT  RESIDUAL CURRENT  RATED INSULATION VOLTAGE  S 0.5 kV  SHORT-CIRCUIT PROTECTION  WIRE BREAKAGE PROTECTION  REVERSE POLARITY PROTECTION  INCORPORATED  OUTPUT FUNCTION  MAX. SWITCHING FREQUENCY  HOUSING MATERIAL  ACTIVE FACE MATERIAL  PLASTIC, LCP-GF30  END CAP MATERIAL  PLASTIC, EPTR  CABLE  Ø5.3, PVC  VIBRATION RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  JEP67   | MIN. REPEAT ACCURACY         | ≤ 2%                                       |
| OPERATING TEMPERATURE  -25°C to +70°C (−13°F to +158°F)  RATED OPERATIONAL VOLTAGE  10−30 VDC  RESIDUAL RIPPLE  ≤ 10%  DC RATED OPERATIONAL CURRENT  S 200 mA  NO−LOAD CURRENT  RESIDUAL CURRENT  RESIDUAL CURRENT  S 0.1 mA  RATED INSULATION VOLTAGE  SHORT−CIRCUIT PROTECTION  WIRE BREAKAGE PROTECTION  REVERSE POLARITY PROTECTION  INCORPORATED  OUTPUT FUNCTION  MAX. SWITCHING FREQUENCY  S 0.5 kHz  HOUSING MATERIAL  ACTIVE FACE MATERIAL  PLASTIC, LCP−GF30  END CAP MATERIAL  PLASTIC, EPTR  CABLE  VIBRATION RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  JOS CHOOLE  10−30 VDC  10−30  | TEMPERATURE DRIFT            | 1070                                       |
| RATED OPERATIONAL VOLTAGE  RESIDUAL RIPPLE  S 10%  DC RATED OPERATIONAL CURRENT  NO—LOAD CURRENT  S 15 mA  RESIDUAL CURRENT  RESIDUAL CURRENT  S 0.1 mA  RATED INSULATION VOLTAGE  SHORT—CIRCUIT PROTECTION  MAX. VOLTAGE DROP  WIRE BREAKAGE PROTECTION  REVERSE POLARITY PROTECTION  MAX. SWITCHING FREQUENCY  HOUSING MATERIAL  ACTIVE FACE MATERIAL  CABLE  WETAL, BRASS/CHROME—PLATED  VIBRATION RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  J 10%  10—30 VDC  10—40 MA  10—30 VDC  10—40 MA  10—30 VDC  10—30 VDC  10—30 VDC  10—40 MA  10—30 VDC  10—40 MA  10—30 VDC  10—30 VDC  10—30 VDC  10—40 MA  10—40  | HYSTERESIS                   | 3-15%                                      |
| RESIDUAL RIPPLE ≤ 10%  DC RATED OPERATIONAL CURRENT ≤ 200 mA  NO—LOAD CURRENT ≤ 15 mA  RESIDUAL CURRENT ≤ 0.1 mA  RATED INSULATION VOLTAGE ≤ 0.5 kV  SHORT—CIRCUIT PROTECTION YES  MAX. VOLTAGE DROP ≤ 1.8 V  WIRE BREAKAGE PROTECTION INCORPORATED  REVERSE POLARITY PROTECTION INCORPORATED  OUTPUT FUNCTION 3—WIRE, NORMALLY OPEN, PNP  MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME—PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP—GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (55 Hz. 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67  | OPERATING TEMPERATURE        | -25°C to +70°C (-13°F to +158°F)           |
| DC RATED OPERATIONAL CURRENT ≤ 200 mA  NO—LOAD CURRENT ≤ 15 mA  RESIDUAL CURRENT ≤ 0.1 mA  RATED INSULATION VOLTAGE ≤ 0.5 kV  SHORT—CIRCUIT PROTECTION YES  MAX. VOLTAGE DROP ≤ 1.8 V  WIRE BREAKAGE PROTECTION INCORPORATED  REVERSE POLARITY PROTECTION INCORPORATED  OUTPUT FUNCTION 3—WIRE, NORMALLY OPEN, PNP  MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME—PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP—GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (55 Hz. 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67   | RATED OPERATIONAL VOLTAGE    | 10-30 VDC                                  |
| NO—LOAD CURRENT ≤ 15 mA  RESIDUAL CURRENT ≤ 0.1 mA  RATED INSULATION VOLTAGE ≤ 0.5 kV  SHORT—CIRCUIT PROTECTION YES  MAX. VOLTAGE DROP ≤ 1.8 V  WIRE BREAKAGE PROTECTION INCORPORATED  REVERSE POLARITY PROTECTION INCORPORATED  OUTPUT FUNCTION 3—WIRE, NORMALLY OPEN, PNP  MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME—PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP—GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (5.5 Hz. 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67   | RESIDUAL RIPPLE              | < 10%                                      |
| RESIDUAL CURRENT  RATED INSULATION VOLTAGE  SHORT—CIRCUIT PROTECTION  MAX. VOLTAGE DROP  WIRE BREAKAGE PROTECTION  REVERSE POLARITY PROTECTION  OUTPUT FUNCTION  MAX. SWITCHING FREQUENCY  HOUSING MATERIAL  ACTIVE FACE MATERIAL  CABLE  WETAL, BRASS/CHROME—PLATED  PLASTIC, LCP—GF30  WIRE MAPLITUDE  (INCORPORATED  ACTIVE FACE MATERIAL  METAL, BRASS/CHROME—PLATED  PLASTIC, LCP—GF30  END CAP MATERIAL  PLASTIC, EPTR  CABLE  WETAL, 1 mm AMPLITUDE  (IN ALL 3 PLANES)  SHOCK RESISTANCE  30 g, 11 ms  DEGREE OF PROTECTION  IP67   | DC RATED OPERATIONAL CURRENT | ≤ 200 mA                                   |
| RATED INSULATION VOLTAGE ≤ 0.5 kV  SHORT—CIRCUIT PROTECTION YES  MAX. VOLTAGE DROP ≤ 1.8 V  WIRE BREAKAGE PROTECTION INCORPORATED  REVERSE POLARITY PROTECTION INCORPORATED  OUTPUT FUNCTION 3—WIRE, NORMALLY OPEN, PNP  MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME—PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP—GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (55 Hz. 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67  | NO-LOAD CURRENT              | ≤ 15 mA                                    |
| SHORT—CIRCUIT PROTECTION  MAX. VOLTAGE DROP  ✓ 1.8 V  WIRE BREAKAGE PROTECTION  REVERSE POLARITY PROTECTION  OUTPUT FUNCTION  MAX. SWITCHING FREQUENCY  ✓ 0.5 kHz  HOUSING MATERIAL  METAL, BRASS/CHROME—PLATED  ACTIVE FACE MATERIAL  PLASTIC, LCP—GF30  END CAP MATERIAL  CABLE  Ø5.3, PVC  VIBRATION RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  JEST 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE  SHOCK RESISTANCE  JEST 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE  JEST 2 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE  JEST 2 1 mm AMPLITUDE (IN ALL 3 PLANES)   | RESIDUAL CURRENT             | ≤ 0.1 mA                                   |
| MAX. VOLTAGE DROP  Signature   ≤ 1.8 V    WIRE BREAKAGE PROTECTION   INCORPORATED    REVERSE POLARITY PROTECTION   INCORPORATED    OUTPUT FUNCTION   3-WIRE, NORMALLY OPEN, PNP    MAX. SWITCHING FREQUENCY   ≤ 0.5 kHz    HOUSING MATERIAL   METAL, BRASS/CHROME-PLATED    ACTIVE FACE MATERIAL   PLASTIC, LCP-GF30    END CAP MATERIAL   PLASTIC, EPTR    CABLE   Ø5.3, PVC    VIBRATION RESISTANCE   Ø5.3 PLANES    SHOCK RESISTANCE   30 g, 11 ms    DEGREE OF PROTECTION   IP67   | RATED INSULATION VOLTAGE     | ≤ 0.5 kV                                   |
| WIRE BREAKAGE PROTECTION INCORPORATED  REVERSE POLARITY PROTECTION INCORPORATED  OUTPUT FUNCTION 3-WIRE, NORMALLY OPEN, PNP  MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME-PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP-GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (55 Hz. 1 pm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67  | SHORT-CIRCUIT PROTECTION     | YES  |
| REVERSE POLARITY PROTECTION INCORPORATED  OUTPUT FUNCTION 3-WIRE, NORMALLY OPEN, PNP  MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME-PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP-GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (N ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67   | MAX. VOLTAGE DROP            | ≤ 1.8 V                                    |
| OUTPUT FUNCTION 3-WIRE, NORMALLY OPEN, PNP  MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME-PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP-GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (N ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67   | WIRE BREAKAGE PROTECTION     | INCORPORATED                               |
| MAX. SWITCHING FREQUENCY ≤ 0.5 kHz  HOUSING MATERIAL METAL, BRASS/CHROME—PLATED  ACTIVE FACE MATERIAL PLASTIC, LCP—GF30  END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (N ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67   | REVERSE POLARITY PROTECTION  | INCORPORATED                               |
| HOUSING MATERIAL  ACTIVE FACE MATERIAL  END CAP MATERIAL  PLASTIC, LCP-GF30  END CAP MATERIAL  PLASTIC, EPTR  Ø5.3, PVC  VIBRATION RESISTANCE  SHOCK RESISTANCE  JOSH MALE 1 MM AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE  JOSH MALE 3 PLANES  SHOCK RESISTANCE  JOSH MALE 3 PLANES  BEGREE OF PROTECTION  JOSH METAL, BRASS/CHROME-PLATED  WETAL, BRASS/CHROME-PLATED  WETAL, BRASS/CHROME-PLATED  JOSH METAL, BRASS/CHROME-PLATED  WETAL, BRASS/CHROME-PLATED  PLASTIC, LCP-GF30  JOSH MATERIAL  PLASTIC, EPTR  JOSH MATERIAL  JOSH MATERIAL  JOSH MATERIAL  PLASTIC, EPTR  JOSH MATERIAL  J | OUTPUT FUNCTION              | 3-WIRE, NORMALLY OPEN, PNP                 |
| ACTIVE FACE MATERIAL  PLASTIC, LCP-GF30  END CAP MATERIAL  PLASTIC, EPTR  PLASTIC, EPTR  PLASTIC, EPTR  PLASTIC, EPTR  PLASTIC, EPTR  PS. 3, PVC  PUBRATION RESISTANCE  SHOCK RESISTANCE  SHOCK RESISTANCE  DEGREE OF PROTECTION  PLASTIC, LCP-GF30  PS. 30  PS. 3, PVC  VIBRATION RESISTANCE  SHOCK RESISTANCE  JO 9, 11 ms  DEGREE OF PROTECTION  PLASTIC, LCP-GF30  PLASTIC, LCP-GF30  PLASTIC, LCP-GF30  PLASTIC, LCP-GF30  PLASTIC, EPTR  PS. 3, PVC  VIBRATION RESISTANCE  JO 9, 11 ms  DEGREE OF PROTECTION  PLASTIC, LCP-GF30  PLASTIC, EPTR  PS. 3, PVC  VIBRATION RESISTANCE  JO 9, 11 ms  DEGREE OF PROTECTION  PLASTIC, LCP-GF30  PLASTIC, EPTR  PS. 3, PVC  VIBRATION RESISTANCE  JO 9, 11 ms  DEGREE OF PROTECTION  PLASTIC, LCP-GF30  PLASTIC, LCP-GF30  PLASTIC, EPTR  PS. 3, PVC  VIBRATION RESISTANCE  JO 9, 11 ms  PLASTIC, LCP-GF30  PLASTIC, EPTR  PS. 4, 1 mm AMPLITUDE  (IN ALL 3 PLANES)   | MAX. SWITCHING FREQUENCY     | ≤ 0.5 kHz                                  |
| END CAP MATERIAL PLASTIC, EPTR  CABLE Ø5.3, PVC  VIBRATION RESISTANCE (N ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67  | HOUSING MATERIAL             | METAL, BRASS/CHROME-PLATED                 |
| CABLE Ø5.3, PVC  VIBRATION RESISTANCE (Sh Azt. 1 mm AMPLITUDE (IN ALL 3 PLANES)  SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67   | ACTIVE FACE MATERIAL         | PLASTIC, LCP-GF30                          |
| VIBRATION RESISTANCE  55 Hz, 1 mm AMPLITUDE (N ALL 3 PLANES)  SHOCK RESISTANCE  30 g, 11 ms  DEGREE OF PROTECTION  IP67  | END CAP MATERIAL             | PLASTIC, EPTR                              |
| SHOCK RESISTANCE 30 g, 11 ms  DEGREE OF PROTECTION IP67  | CABLE                        | ,  |
| DEGREE OF PROTECTION IP67  | VIBRATION RESISTANCE         | 55 Hz, 1 mm AMPLITUDE<br>(IN ALL 3 PLANES) |
|  | SHOCK RESISTANCE             | 30 g, 11 ms                                |
| CWITCHING STATUS INDICATION   LED VELLOW   | DEGREE OF PROTECTION         | IP67                                       |
| SWITCHING STATUS INDICATION LED, TELLOW  | SWITCHING STATUS INDICATION  | LED, YELLOW                                |

## SOURCE DRAWING - FOR REFERENCE ONLY

