

# GNEExCP7-PB-I IS Dual Action Push Button Call Point

**The intrinsically safe GNEExCP7-PB-I dual action, twist and push button Ex d explosion proof manual call points feature a robust GRP enclosure with a 316 stainless steel mechanism and IP66/67 rating – designed for the harshest hazardous environments.**

Requiring a twist and push action to activate the GNEExCP7-PB-I features a robust stainless steel button. Globally approved to IECEx, ATEX, UL and cUL standards for all Class I Div 1 and Zone 0 installations. Available with standard DIN rail terminals or the innovative E2S termination board providing dedicated connections for EOL and/or series devices. SIL2 compliant to IEC 61508 (2010). DNV type approved for exposed locations.

## Features

- Corrosion proof GRP enclosure, anti-static & UV stable
- Ingress protection IP66/67/68, 4/4X/3R/13
- Single or double switch (SPCO/DPCO)
- 316 (A4) Stainless Steel mechanism
- 3 x M20 cable entries, 2 x Stopping plugs included
- Captive stainless steel fasteners
- Optional LED indicator

## Approvals

- UL/cUL cert: UL-USL513632-352311-42200202-2
- IECEx cert: IECEx ULD 19.0007X
- ATEX cert: DEMKO 19 ATEX 2101X
- UKCA cert: UL21UKEX2134X
- DNV cert: TAA000034V
- SIL 2 compliant to IEC 61508 (2010)

## Coding

- NEC Class / Zone  
Class I Zone 0 AEx ia IIC T6 Ga Ta -55°C to +70°C
  - CEC Class / Zone  
Ex ia IIC T6 Ga Ta -55°C to +70°C
  - NEC / CEC Class / Div  
Class I Div 1 Group ABCD T6 Ta -55°C to +70°C
  - IECEx / ATEX  
II 1G Ex ia IIC T6 Ga Ta -55°C to +70°C
- Note: All rated to T4 with EOL, series and/or LED.



### Specification

|                          |                                                                                                                                                                    |                             |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| GNExCP7-PB-I             | IS Dual action push button                                                                                                                                         |                             |
| Temp. Range:             | -55°C to +70°C                                                                                                                                                     |                             |
| Switch:                  | Sealed – IP67                                                                                                                                                      |                             |
| Ingress protection:      | IP66/67/68 to EN/IEC 60529<br>4/4X/3R/13 to UL50E/NEMA250                                                                                                          |                             |
| Enclosure matl:          | GRP Glass Reinforced Polyester, anti-static & UV stable                                                                                                            |                             |
| Colour:                  | Red<br>Other solid and striped colours available                                                                                                                   |                             |
| Cable entries:           | 2 x M20x1.5 down facing and 1 x M20x1.5 side<br>Can be rotated to provide 2 x top facing and 1 x side entries<br>Cable entries adaptable to 1/2"NPT, 3/4"NPT & M25 |                             |
| Stopping plugs:          | 2 x Stopping plugs as standard<br>Brass, Nickel plated or Stainless Steel                                                                                          |                             |
| Terminals:               | DIN rail 8 × 2.5mm² SAK2.5 or<br>Termination board featuring 6 × 2.5mm² terminals plus 4 x<br>dedicated EOL & Series terminals                                     |                             |
| Earth:                   | External M5 earth connection                                                                                                                                       |                             |
| Relative Humidity:       | R.H. 95% @ 20°C                                                                                                                                                    |                             |
| MTBF:                    | 479.6 years / 4,201,680 hours ÷ MIL 217                                                                                                                            |                             |
| Weight:                  | 2.1Kg/4.63lbs                                                                                                                                                      |                             |
| Supply voltage:          | 24Vdc Nominal 30Vdc Maximum via barriers                                                                                                                           |                             |
| Input safety parameters: | Ui                                                                                                                                                                 | 30V                         |
|                          | Ii                                                                                                                                                                 | 500mA                       |
|                          | Pi                                                                                                                                                                 | 1100mW                      |
|                          | Ci                                                                                                                                                                 | 0                           |
|                          | Li                                                                                                                                                                 | 0                           |
| Component:               | Value:                                                                                                                                                             | Max current:                |
| End-of-Line Resistor     | min. 470R / 2W or<br>min. 2k2 / 0.5W                                                                                                                               | n/a – limited by barrier    |
|                          | 5% Max. tolerance.<br>Min. size: Ø3.5 × 9.0mm 2W or Ø2.6 × 6.8mm 0.5W                                                                                              |                             |
| End-of-Line Diode        | 2W                                                                                                                                                                 | 59.13mA – limited by system |
|                          | Type 1N5401. Min. size: Ø4.8 × 7.2mm                                                                                                                               |                             |
| Series Resistor          | min. 470R / 2W or<br>min. 2k2 / 0.5W                                                                                                                               | n/a – limited by barrier    |
|                          | 5% Max. tolerance.<br>Min. size: Ø3.5 × 9.0mm 2W or Ø2.6 × 6.8mm 0.5W                                                                                              |                             |
| Series Diode             | 2W                                                                                                                                                                 | 59.13mA – limited by system |
|                          | Type 1N5401. Min. size: Ø4.8 × 7.2mm                                                                                                                               |                             |
| Series Zener Diode       | 3V3                                                                                                                                                                | 230mA – limited by system   |
|                          | 4V7                                                                                                                                                                | 162mA – limited by system   |
| Type 1N53xB              | 5V1                                                                                                                                                                | 149mA – limited by system   |
| Ø3.3 × 8.4mm             | 5V6                                                                                                                                                                | 136mA – limited by system   |
| Min component size       | 6V2                                                                                                                                                                | 122mA – limited by system   |
|                          | 6V8                                                                                                                                                                | 112mA – limited by system   |
|                          | 10V                                                                                                                                                                | 76mA – limited by system    |
|                          | 12V                                                                                                                                                                | 63mA – limited by system    |
| Spares:                  |                                                                                                                                                                    |                             |
| SP70-0001                | Replacement break glass elements (Pack of 50)                                                                                                                      |                             |
| SP70-0040                | STxCP8-BG Test Key                                                                                                                                                 |                             |
| Accessories:             |                                                                                                                                                                    |                             |
| SP65-0001-A4             | Pole Mount Bracket Kit St/St A4 (316)                                                                                                                              |                             |
| SP65-0002-A4             | Sunshade – St/St A4 (316)                                                                                                                                          |                             |
| SP70-0065                | Break glass hammer with chain                                                                                                                                      |                             |

### Part Codes

| Version:                         | Part references: | Description:                                                                                                                                                                                                                                                                                 |
|----------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product type:                    | GNExCP7PB        | IS Dual action push button                                                                                                                                                                                                                                                                   |
| Switch Type: [s]                 | S<br>D           | SPCO/SPDT<br>DPCO/DPDT                                                                                                                                                                                                                                                                       |
| Terminals: [t]                   | D<br>P           | DIN Rail 8 x SAK2.5<br>PCBA termination: 6 x 2.5mm <sup>2</sup> plus 4 x EOL & Series terminals<br>NOTE:<br>D option only available if no EOL, series or LED are required<br>P option only available if EOL, series or LED are required to be factor fitted or installed during installation |
| Lift flap: [l]                   | N                | Lift flap not available                                                                                                                                                                                                                                                                      |
| Cable Entry Type: [e]            | A                | 3 x M20x1.5mm                                                                                                                                                                                                                                                                                |
|                                  | B                | 2 x 1/2" NPT – adaptors                                                                                                                                                                                                                                                                      |
|                                  | C                | 2 x 3/4" NPT – adaptors                                                                                                                                                                                                                                                                      |
|                                  | D                | 2 x M25x1.5mm – adaptors                                                                                                                                                                                                                                                                     |
|                                  | E                | 1 x 1/2" NPT – adaptor                                                                                                                                                                                                                                                                       |
|                                  | F                | 1 x 3/4" NPT – adaptor                                                                                                                                                                                                                                                                       |
| Stopping plug material: [m]      | G                | 1 x M25x1.5mm – adaptor                                                                                                                                                                                                                                                                      |
|                                  | B                | Brass                                                                                                                                                                                                                                                                                        |
|                                  | P                | Nickel Plated Brass                                                                                                                                                                                                                                                                          |
| Duty label / Equipment tag: [d]: | S                | Stainless Steel                                                                                                                                                                                                                                                                              |
|                                  | 1                | No Duty label, no Equip. tag                                                                                                                                                                                                                                                                 |
|                                  | 2                | Duty label Stainless Steel                                                                                                                                                                                                                                                                   |
|                                  | 3                | Duty label St/St + Equip. tag                                                                                                                                                                                                                                                                |
|                                  | 4                | Duty label Metalised Polyester                                                                                                                                                                                                                                                               |
|                                  | 5                | Duty label M. Poly. + Equip. tag                                                                                                                                                                                                                                                             |
|                                  | 6                | Equip. tag only                                                                                                                                                                                                                                                                              |
| Product version: [v]             | 7                | Special label requirement                                                                                                                                                                                                                                                                    |
|                                  | I                | UL, cUL, IECEx, ATEX, DNV                                                                                                                                                                                                                                                                    |
| Product option: [o]              | 1                | Standard product                                                                                                                                                                                                                                                                             |
|                                  | R                | With EOL, series and/or LED devices                                                                                                                                                                                                                                                          |
|                                  | W                | Alternate EOL wiring                                                                                                                                                                                                                                                                         |
| Enclosure colour: [x]            | R                | Red                                                                                                                                                                                                                                                                                          |
|                                  | B                | Blue                                                                                                                                                                                                                                                                                         |
|                                  | N                | Green                                                                                                                                                                                                                                                                                        |
|                                  | Y                | Yellow                                                                                                                                                                                                                                                                                       |
|                                  | V                | Red/White                                                                                                                                                                                                                                                                                    |
|                                  | S                | Yellow/Black                                                                                                                                                                                                                                                                                 |
|                                  | K                | Black                                                                                                                                                                                                                                                                                        |
|                                  | M                | Magenta                                                                                                                                                                                                                                                                                      |
| LED indicator: [u]               | Z                | Red/Black                                                                                                                                                                                                                                                                                    |
|                                  | N                | No LED required                                                                                                                                                                                                                                                                              |
|                                  | L                | LED with 1.5K ballast resistor                                                                                                                                                                                                                                                               |
|                                  | C                | LED without ballast resistor                                                                                                                                                                                                                                                                 |
| E.O.L.Module: [e] optional       | ExxxR            | Resistor value in Ohms e.g. E470R = 470 Ohm                                                                                                                                                                                                                                                  |
|                                  | ED1              | Diode IN4007 = ED1                                                                                                                                                                                                                                                                           |
|                                  | ExxxZ            | Zener diode e.g. E5V1Z = 5.1V                                                                                                                                                                                                                                                                |
| Series Module: [s] optional      | SxxxR            | Resistor value in Ohms e.g. S1K5R = 1.5K Ohm                                                                                                                                                                                                                                                 |
|                                  | SD1              | Diode IN4007 = SD1                                                                                                                                                                                                                                                                           |
|                                  | SxxxZ            | Zener diode e.g. S5V1Z = 5.1V                                                                                                                                                                                                                                                                |

