

STAHL

PanSiG Series Features:

- Suitable for hazardous and corrosive locations.
- Installation is easy and precise.
- Devices fit into a standard 30.5mm, 1.2" knock-out.
- Tightening the retainer nut makes installation complete.
- Available with cage clamp terminals or leads for easy connection.



Control Devices E-E10

PanSiC 8003 Series Panel Mounted Control DevicesE1-E4
PanSiC 8013 Series Panel Mounted LED Pilot LightsE5
PanSiC 8018 Series Panel Mounted Illuminated Push ButtonsE6
8415 Series Panel Mounted LED Pilot Light AssemblyE9
8703 Series Panel Mounted Push Button AssemblyE10

Our products are updated to the newest standard developments and technologies which makes it necessary to reserve the right to product changes without notice.



8003 PUSHBUTTONS AND CONTROL SWITCHES



CLASSIFICATIONS

NEC & CEC

- Class I, Zone 1 & 2, AEx de IIC T6
- Class I, Zone 1 & 2, Ex de IIC T6
- Class I, Division 2, Groups A,B,C,D

Environmental Protection 4, 4X, IP66, Front, depending on enclosure (see table – “Enclosure Type Rating For Installation”)



Gas Explosion Protection

- 8003/1•1 and 8003/1•3
- II 2 G Ex de IIC T6

8003/1•2

- II 2 G Ex de IIC

Dust Explosion Protection

- 8003/1••
- II 2 D IP66 T80°C

Certificates for Gas and Dust Protection

- Explosion Protection
- 8003/1•1 and 8003/1•3
- PTB 02 ATEX 1057 X

Certificate for Gas Explosion Protection

- 8003/1•2
- PTB 02 ATEX 1080 U

Ambient Temperature Range:

- +60°C (+140°F) Max.
- 30°C (-22°F) Min.

FEATURES

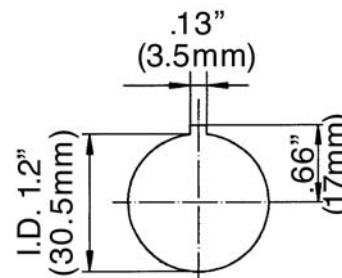
The 8003 pushbutton and control switch series are typically mounted in an electrical panel or enclosure, for custom control applications. They come with different actuators, contact arrangements and connection options as indicated on pages E2, E3 and E4.

Installation is easy and precise. To install, simply snap through a standard 30.5mm (1.20”) pushbutton knockout. Hand tightening of the retainer nut makes the installation complete. The pushbuttons are suitable for hazardous (classified) locations in conjunction with the appropriate enclosure type (see above table for “Enclosure Type Rating For Installation”).

Technical Data

Enclosure Material	Polyamide
Contact Material	Silver-Nickel
Mechanical/Electrical Life	10 ⁶ Operations
Terminal Wire Capacity	2 x 18 to 2 x 12 AWG
Wire Leads	4 Core, 18 AWG
Contact AC switching capacity	UL A 600 (600VAC 10A)
Contacts DC switching capacity	110V Max. 1 Amp. Max.
Lowest Energy	12V AC/DC, 50 mA*

*For lower energy use gold plated contacts, available on request.



Knockout for 8003

Enclosure Type Rating For Installation

Area Classification Of Use	Pushbutton with Cap 8003/1•1 or with Cap and Lead 8003/1•3	Pushbutton with Cage Clamps 8003/1•2 (without Cap)
Class I Zone 1	Enclosure Type [Ⓛ] 1, 2, 3, 3R, 4, 4X, 12, 13	Enclosure AEx e, Ex e
Class I Division 2 Groups A, B, C, D	Enclosure Type 1, 2, 3, 3R, 4, 4X, 12, 13	




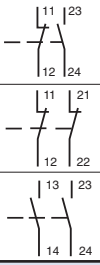
[Ⓛ]Terminate in “Increased Safety” Enclosure.



PUSHBUTTONS

Ordering Information



Connection Options Actuator Options				
	With Cage Clamps & Cap	With Cage Clamps	With Cap & 20' Lead	
Descriptions	C A T A L O G N U M B E R			Contacts
Momentary Pushbutton 1.5" (38mm) O.D. With two legend disks START STOP.②	8003/111-001	8003/112-001	8003/113-001-6	NC/NO
	8003/121-001	8003/122-001	8003/123-001-6	NC/NC
	8003/131-001	8003/132-001	8003/133-001-6	NO/NO
Emergency Stop Red Mushroom 1.5" (38mm) O.D. Maintained action. Key-to-Release from maintained position.①	8003/111-009	8003/112-009	8003/113-009-6	NC/NO
	8003/121-009	8003/122-009	8003/123-009-6	NC/NC
Mushroom Black 1.5" (38mm) O.D. Maintained action. Key-to-Release from maintained position.	8003/111-006	8003/112-006	8003/113-006-6	NC/NO
	8003/121-006	8003/122-006	8003/123-006-6	NC/NC
	8003/131-006	8003/132-006	8003/133-006-6	NO/NO
Emergency Stop Red Mushroom Pushbutton 1.5" (38mm) O.D. Maintained action. Turn-to-Release.①	8003/111-010	8003/112-010	8003/113-010-6	NC/NO
	8003/121-010	8003/122-010	8003/123-010-6	NC/NC
Emergency Stop (Jumbo) Red Mushroom Pushbutton 2.16" (55mm) O.D. Maintained action. Turn-to-Release.①	8003/111-015	8003/112-015	8003/113-015-6	NC/NO
	8003/121-015	8003/122-015	8003/123-015-6	NC/NC
Mushroom Pushbutton Maintained Black with Red Legend Disk 1.5" (38mm) O.D. Maintained action. Turn-to-Release.②	8003/111-012	8003/112-012	8003/113-012-6	NC/NO
	8003/121-012	8003/122-012	8003/123-012-6	NC/NC
	8003/131-012	8003/132-012	8003/133-012-6	NO/NO
Mushroom Pushbutton Black 1.5" (38mm) O.D. Momentary action. With black snap-in legend disk.②	8003/111-003	8003/112-003	8003/113-003-6	NC/NO
	8003/121-003	8003/122-003	8003/123-003-6	NC/NC
	8003/131-003	8003/132-003	8003/133-003-6	NO/NO

① Yellow plastic washer for E-STOP function is enclosed.
 ② Other legend disks must be ordered separately. See Page E7.

8003 SELECTOR SWITCHES

CATALOG NUMBER	CONTACT ARRANGEMENTS	CATALOG NUMBER	CONTACT ARRANGEMENTS
8003/11□-□□□-2-r maintained maintained		8003/14□-□□□-2-r maintained maintained	
8003/11□-□□□-2-t maintained spring return		8003/14□-□□□-2-t maintained spring return	
8003/12□-□□□-2-r maintained maintained		8003/11□-□□□-3-rr maintained maintained maintained	
8003/12□-□□□-2-t maintained spring return		8003/11□-□□□-3-rt maintained maintained spring return	
8003/13□-□□□-2-r maintained maintained		8003/11□-□□□-3-tr spring return maintained maintained	
8003/13□-□□□-2-t maintained spring return		8003/11□-□□□-3-tt spring return maintained spring return	



8003 SELECTOR SWITCHES

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Standard:
Key removable in all positions.
Key type: MS 1

Special:
Non-removable key positions need to be specified.
Other key types than MS 1 available.



CLASSIFICATIONS

For types 8013/31•
 NEC- Class I, Zone 1, AEx dem IIC T6
 Class I, Division 2, Groups A,B,C, & D

US File No. E182378

CEC- Class I, Zones 1 & 2, Ex dem IIC T6
 Class I, Division 2, Groups A,B,C, & D

II 2G Ex mde IIC (T6)
 II 2D IP66 T80°C
 8013/311 and 8013/313
 PTB 02 ATEX 2131X
 8013/312
 PTB 02 ATEX 2130U

CLASSIFICATIONS

For I. S. versions 8013/32•
 NEC- Class I, Zone 0, AEx ia IIB T4
 Class I, Zone 1, AEx ia IIC T4
 Class I, Division 1, Groups A,B,C, & D
 CEC- Class I, Zone 0, Ex ia IIB T4
 Class I, Zone 1, Ex ia IIC T4
 Class I, Division 1, Groups A,B,C, & D

Environmental Protection 3, 4, 4X; IP66 Front,
 depending on enclosure (see table – “Enclosure
 Type Rating For Installation”)

Ambient Temperature Range:
 +60°C (+140°F) Max.
 -30°C (-22°F) Min.

II 2G Ex md ia IIC (T6)
 8013/321 & 8013/323
 PTB 02 ATEX 2131X
 8013/322
 PTB 02 ATEX 2130U

FEATURES:

The 8013/3 Series of Pilot Lights are available for standard – and I.S. application. The Pilot Lights for standard application 8013/31•-al are capable to work on volt-ages between 12V up to 254V AC/DC.

The types 8013/32•-al are for connection with intrinsically safe circuits only and operate safely within the values stated in the above table “Intrinsic Safety Ratings Entity Parameters”.

The installation should be in accordance with ANSI/ISA RP 12. 06. 01.
 Recommended Barrier: 9002/13-252-121-041

All these pilot lights come with a clear, color-neutral bezel and can be colored with one snap-on lens. There are five lenses included in the package, colored red, amber, green, blue and white for the user to choose from.

8013/3 LED PILOT LIGHTS

Technical Data

Material - Enclosure	Polyamide
Material - Bezel/Lens	Polyamide
Mechanical/Electrical Life	10 ⁶ Output Hours
Rated Voltage - Standard	12V to 254V AC or DC 0-60 Hz
Rated Voltage - I. S.	10.8V to 28V AC or DC
Rated Current	14 mA at 24V DC
Rated Power	0.6W
Colors	red, amber, green, blue and white
Wire Leads	2 Core, 18 AWG
Terminal Capacity	2 x 18 to 12 AWG per terminal
Enclosure Knock-out	30.5 mm or 1.2" I.D.



Intrinsic Safety Ratings Entity Parameters	
V max	28V
I max	150 mA
P max	1W
Li	0
Ci	0

Enclosure Type Rating For Installation

Area Classification of Use	Pilot Light I.S. 8013/32•	Pilot Light with Cap 8013/3•1 or with Cap & Lead 8013/3•3	Pilot Light with Cage Clamps 8013/3•2 (without Cap)
Class I, Div. 1, I.S. Class I, Zone 0, I.S.	Enclosure Types 4, 4X, 12 or 13		
Class I, Zone 1		Enclosure Types ^① 1, 2 ,3, 3R, 4, 4X, 12 or 13	Increased Safety Enclosure
Class I, Division 2 Groups A,B,C & D		Enclosure Types 4, 4X, 12 or 13	

①Terminate in “Increased Safety” Enclosure.

Ordering Information

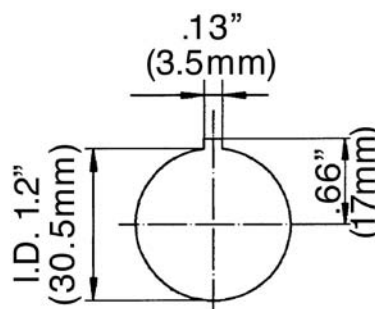
Connection Options			
	With Cage Clamps & Cap	With Cage Clamps	With Cap & 20' Lead
Applications	CATALOG NUMBER		
Standard - 12V to 254V AC/DC	8013/311-al	8013/312-al	8013/313-al-6
For I.S. Circuits 10.8V to 28V AC/DC	8013/321-al	8013/322-al	8013/323-al-6

8018/3 ILLUMINATED PUSHBUTTONS

Technical Data

ENCLOSURE	
Material - Enclosure	Polyamide
Material - Bezel	Polyamide
Colors	red, amber, green, blue and white
Wire Leads	6 Core, 18 AWG, 20' Length
Enclosure Knock-out	30.5 mm or 1.2" I.D.
CONTACTS	
Material	Silver-Nickel
Contact Life	10 ⁶ Operations
Lowest Energy	12V AC/DC, 50 mA*
Contact Switching Capacity	AC – A600 (600V AC, 10A) DC – 110V Max. 1 Amp Max.
LED PILOT LIGHT	
LED Life	10 ⁶ Output Hours
Rated Voltage	12V to 254V AC/DC 0-60 Hz
Rated Current	14 mA at 24V DC
Rated Power	0.6W

*For lower energy use gold plated contacts, available on request.



Knockout for 8018

Enclosure Type Rating For Installation

Area Classification of Use	Illuminated Pushbutton with Lead
Class I Zone 1	Enclosure Type [Ⓛ] 1, 2, 3, 3R, 4, 4X, 12 or 13
Class I Division 2 Groups A, B, C, & D	Enclosure Type 1, 2, 3, 3R, 4, 4X, 12 or 13

[Ⓛ]Terminate in "Increased Safety" Enclosure.

Ordering Information

Description	Wire Connections	CATALOG NUMBER
Illuminated Pushbutton Spring Return 1 NC and 1 NO		8018/3113-al-6
Illuminated Pushbutton Spring Return 2 NC		8018/3123-al-6
Illuminated Pushbutton Spring Return 2 NO		8018/3133-al-6



CLASSIFICATIONS

NEC- Class I, Zone 1, AEx dm IIC T6
Class I, Division 2, Groups A,B,C,D

CEC- Class I, Zones 1 & 2, Ex dm IIC T6
Class I, Division 2, Groups A,B,C,D

File No. E182378

Environmental Protection 3, 4, 4X; IP66 depending on enclosure (see table – "Enclosure Type Rating For Installation")

II 2 G Ex dm IIC T6
II 2 D IP66 T80°C
PTB 02 ATEX 2129X
IP66 depending on enclosure

Ambient Temperature Range:
+55°C (+131°F) Max.
-30°C (-22°F) Min.





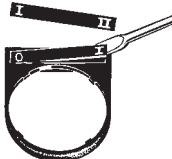

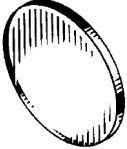

FEATURES:

The illuminated Pushbutton for panel mounting Series 8018/3 combines control and indicating functions. One actuator operates two contacts and simultaneously can indicate their actual operating status by means of an LED. All illuminated Pushbuttons are spring return action and come with a clear bezel and five colored snap-in filter disks, red, amber, green, blue and white. All disks are included in the package for the user to choose from.

ACCESSORIES AND SPARE PARTS

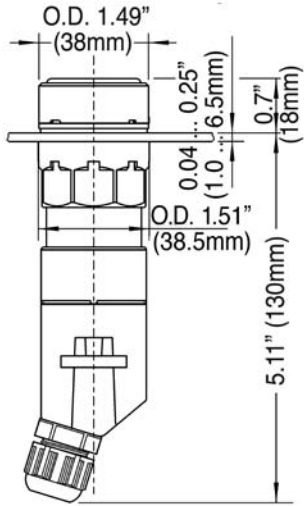


Ordering Information

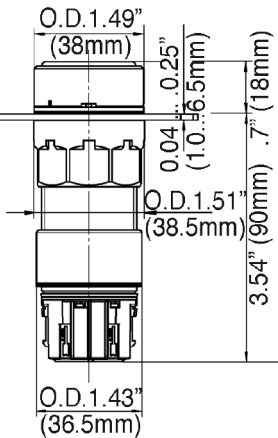
DESIGNATION	ILLUSTRATION	DESCRIPTION	CATALOG NUMBER
Spare Keys		For all key-operated buttons/ key-operated switches Standard version MS 1 Special key, specify number	3746050 3746060
Pushbutton Legend Disks		Blank, Legend Disk Blue Blank, Legend Disk Amber Blank, Legend Disk Red Blank, Legend Disk Green Blank, Legend Disk White Blank, Legend Disk Black Red, Legend Disk "STOP" Green, Legend Disc "START" Red, Legend Disk "OFF" Green, Legend Disk "ON" Green, Legend Disk "I" Green, Legend Disk "II" Red, Legend Disk "O" Red, Legend Disk Arrow Black, Legend Disk "UP" Black, Legend Disk "DOWN" Black, Legend Disk "RUN" Black, Legend Disk "SLOW" Black, Legend Disk "FAST" Black, Legend Disk "CLOSE" Black, Legend Disk "OPEN" Black, Legend Disk "AUTO" Black, Legend Disk "RIGHT" Black, Legend Disk "LEFT" Black, Legend Disk "HAND" Black, Legend Disk "RESET" Black, Legend Disk "OFF-ON" Black, Legend Disk Arrow Black, Legend Disk Arrow	86 029 34 85 6 86 029 35 85 6 86 029 30 85 6 86 029 31 85 6 86 029 33 85 6 86 029 32 85 6 86 029 03 84 0 86 029 09 84 0 86 029 05 84 0 86 029 06 84 0 86 029 07 84 0 86 029 08 84 0 86 029 02 84 0 86 029 01 84 0 86 029 32 85 0 "UP" 86 029 32 85 0 "DOWN" 86 029 32 85 0 "RUN" 86 029 32 85 0 "SLOW" 86 029 32 85 0 "FAST" 86 029 25 84 0 86 029 23 84 0 86 029 32 85 0 "AUTO" 86 029 32 85 0 "RIGHT" 86 029 32 85 0 "LEFT" 86 029 32 85 0 "HAND" 86 029 32 85 0 "RESET" 86 029 32 85 0 "OFF-ON" 86 029 11 84 0 86 029 12 84 0
Inserts		HAND 0 AUTO OFF • ON O/OFF I/ON blank 1 line text blank 2 lines text	86 029 09 85 0 86 029 08 85 0 86 029 01 85 0 86 029 10 85 0 86 029 24 85 0
Legend Frames		One-line Legend Frame Blank, One-line Insert Two-line Legend Frame Blank, Two-line Insert Three-line Legend Frame Blank, Three-line Insert	86 029 04 80 0 86 029 10 85 0 86 029 07 80 0 86 029 24 85 0 86 029 20 80 0 86 029 40 85 0
Actuator		for illuminated pushbutton (spring-return)	86 020 24 03 0
Color Filter		Snap-in Color Filters white red amber green blue	86 029 25 58 0 86 029 26 58 0 86 029 27 58 0 86 029 28 58 0 86 029 29 58 0
Close-up Plug		To close-up unused mounting holes I.D. 1.2" (30.5mm)	86 028 01 58 7



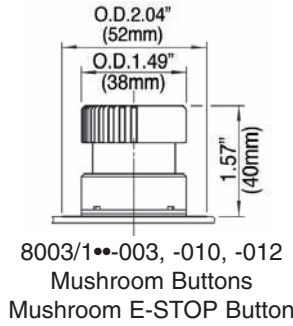
DIMENSIONS



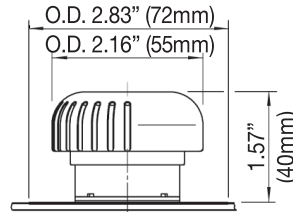
8003/1•1-001 Momentary Pushbutton with Cage Clamps & Cap



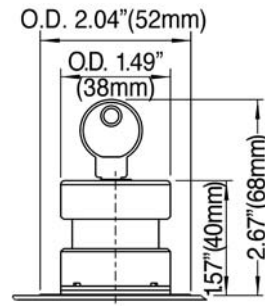
8003/1•2-001 Momentary Pushbutton with Cage Clamps



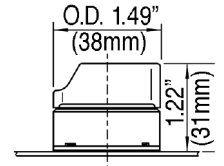
8003/1••-003, -010, -012 Mushroom Buttons
Mushroom E-STOP Button



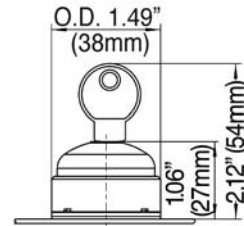
8003/1••-015 E-STOP Red Mushroom Pushbutton



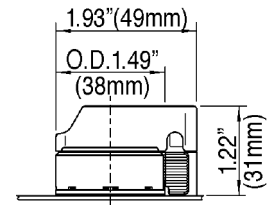
8003/1••-006, Mushroom Black Key Button
8003/1••-009, E-STOP Red Mushroom, Key Button



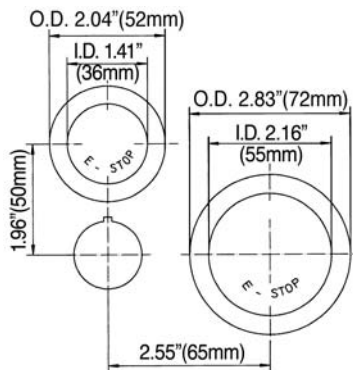
8003/1••-726, Control Switch Handle Non-Lockable



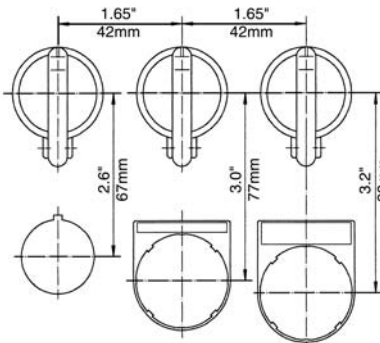
8003/1••-008 Key Operated Switch



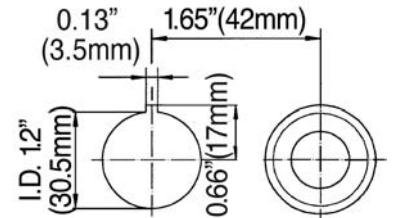
8003/1••-727, Control Switch Handle Pad-Lockable



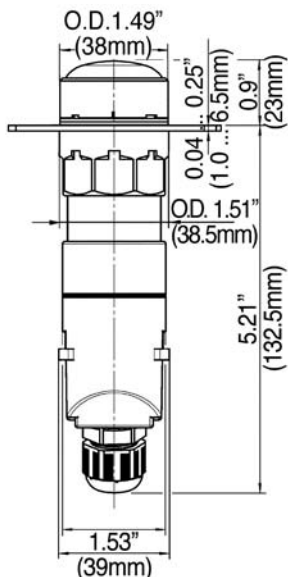
Standard Knock-out Distance for Jumbo E-STOP Button (8003/1••-015 Mushroom Maintained)



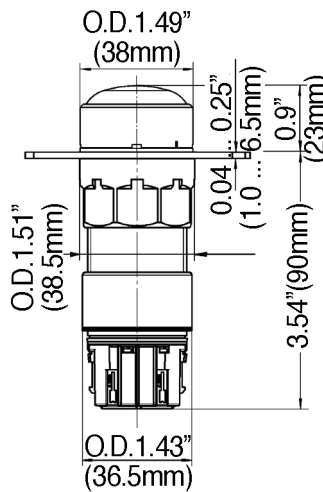
Standard Knock-out Distance with / without Legend Frame



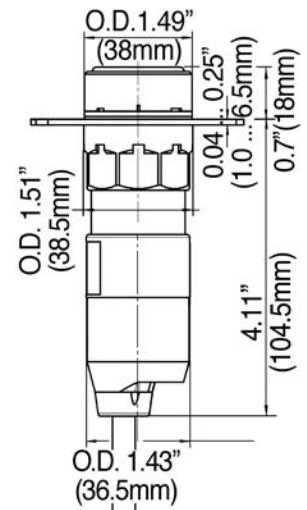
Knock-out Distance for Aligning Several devices with O.D. 1.49\"(38mm) in a Panel



8013/3•1 Pilot Light with Cap



8013/3•2 Pilot Light without Cap



8018 Illuminated Pushbutton with Lead



CLASSIFICATIONS

For Pilot Light 8010/2 and Bezel 8602
 NEC- Class I, Zones 1 & 2, AEx de IIC T6
 Class I, Division 2, Groups A,B,C,D
 Class II, Division 2, Groups F,G
 Class III

File No. E182378

Class I, Zones 1 & 2, Ex de IIC T6
 Class I, Division 2, Groups A,B,C,D
 Class II, Divisions 1 & 2, Groups E,F,G
 Class III

Certified File No. LR99480

II 2G Ex de IIC
 PTB 01 ATEX 1160 U
 PTB 01 ATEX 1129 U

CLASSIFICATIONS

For I. S. Pilot Light 8010/3 and Bezel 8602
 NEC- Class I, Zone 0, AEx ia/ib IIB T4
 Class I, Zone 1, AEx ia/ib IIC T4
 Class I, Division 1, Groups A,B,C,D;

CEC- Class I, Zone 0, Ex ia/ib IIB T4
 Class I, Zone 1, Ex ia/ib IIC T4
 Class I, Division 1, Groups A,B,C,D;

File Nos. E81680 and E182378

II 2G Ex d ia/ib IIC
 PTB 01 ATEX 1160 U
 PTB 01 ATEX 1129 U

Ambient Temperature Range:
 +55°C (+131°F) Max.
 -25°C (-13°F) Min.

Environmental Protection 3, 4, 4X; IP66 front,
 depending on enclosure (see table –
 “Enclosure Type Rating For Installation”)

FEATURES:

The 8415 Pilot Light assembly consists of an LED/power pack 8010/3, one mounting bracket and one bezel/lens assembly. Five different colors are available: red, green, amber, white and blue.

The 8415 Pilot Light assemblies are available for power circuits – and intrinsically safe circuits. The types for power applications 8415/24 are capable to work on voltages between 12V up to 254V AC/DC.

The types 8415/24-50 are for connection with intrinsically safe circuits only, and operate safely within the values stated in the above table “Intrinsic Safety Rating Entity Parameters”.

The installation should be in accordance with ANSI/ISA RP 12. 06. 01. and control drawing 80 106 01 31 3.

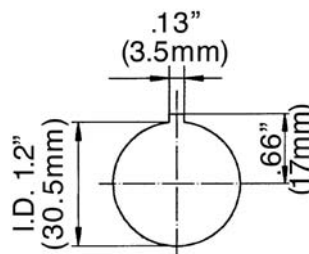
Recommended Barrier:
 9002/13-252-121-041.



8415 LED PILOT LIGHT ASSEMBLY

Technical Data

Mechanical/Electrical Life	10 ⁵ Output Hours
Rated Voltage - Standard	12V to 254V AC or DC 0-60 Hz
Voltage Tolerance	-10% +6%
Rated Voltage - I. S.	10.8V to 28V AC or DC
Rated Current	15 mA at 24V DC
Rated Power	1W max.
Colors	red, amber, green, blue and white
Terminal Capacity	2 x 12 AWG (2.5mm ²)
Enclosure Knock-out	30.5 mm or 1.2" I.D.
Enclosure/Lens Material	Polyamide



Knockout for 8415

Intrinsic Safety Ratings Entity Parameters	
V max	28V
I max	150 mA
P max	1W
Li	0
Ci	0

Enclosure Type Rating For Installation

Area Classification of Use	Pilot Light
Class I Zone 1	Enclosure AEx e/Ex e
Class I Div. 1, Zone 0 I.S.	Enclosure Type 1, 2, 3, 3R, 4, 4X, 12, 13
Class I Division 2 Groups A, B, C, D	Enclosure Type 1, 2, 3, 3R, 4, 4X, 12, 13
Class II Division 1 Groups E, G	Enclosure Type 3, 4, 4X, 9, 12, 13
Class II Division 2 Groups E, G	Enclosure Type 3, 4, 4X, 12, 13
Class III	Enclosure Type 3, 4, 4X, 12, 13

Ordering Information

APPLICATIONS	LENS COLORS	CATALOG NUMBER
Standard 12V – 10% to 254V + 6% AC/DC	red	8415/24-R-9
	green	8415/24-G-9
	amber	8415/24-A-9
	white	8415/24-W-9
	blue	8415/24-B-9
For I.S. Circuits 10.8-28V AC/DC	red	8415/24-50-R-9
	green	8415/24-50-G-9
	amber	8415/24-50-A-9
	white	8415/24-50-W-9
	blue	8415/24-50-B-9

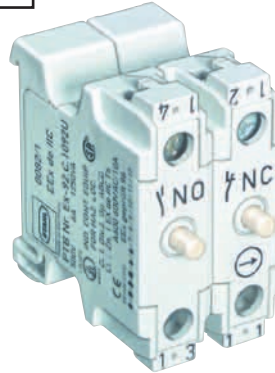
8703 PUSHBUTTON ASSEMBLY

Contact Block Information

DESCRIPTION	CONTACT SYMBOL		INDIVIDUAL ORDER CATALOG NUMBER
	IEC	NEMA	
Single contact block, 1 NC			8082/1-1-00
Single contact block, 1 NO			8082/1-2-00

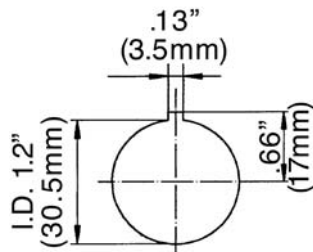
Technical Data of Contact Block

	NEC/CEC	IEC
Rated Voltage	600VAC	500VAC
Continuous Current	10A	6A
Terminals	12AWG	2.5mm ²
Mechanical Life	≥ 10 ⁶ operations	
Electrical Life	≥ 10 ⁶ operations	
Housing Material	polyamide	
Contact Material	silver plated	
Lowest Energy	50mA. @ 12V*	



Enclosure Type Rating For Installation

Area Classification of Use	Pushbutton 8703
Class I Zone 1	Enclosure AEx e/Ex e
Class I Division 2 Groups A, B, C, D	Enclosure Type 1, 2, 3, 3R, 4, 4X, 12, 13
Class II Division 2 Groups F, G	Enclosure Type 3, 4, 4X, 12, 13
Class III	Enclosure Type 3, 4, 4X, 12, 13



Knockout for 8703

Ordering Information

PUSHBUTTON CONTACTS	CATALOG NUMBER
1 NC	8703/01 - <input type="text"/> <input type="text"/> - 9
1 NO	8703/02 - <input type="text"/> <input type="text"/> - 9
1 NC / 1 NO	8703/12 - <input type="text"/> <input type="text"/> - 9
2 NC	8703/11 - <input type="text"/> <input type="text"/> - 9
2 NO	8703/22 - <input type="text"/> <input type="text"/> - 9

Fill out the blanks in the Catalog Number with the information found on pages F7 or F8 in the column "ACTUATOR CODE" (actuator code 23 not possible).



CLASSIFICATIONS for Contact Block 8082/1 and Actuator 8602

NEC- Class I, Zones 1 & 2 AEx de IIC T6
Class I, Division 2, Groups A,B,C,D
Class II, Division 2, Groups F,G
Class III
Environmental Protection 3, 4, 4X;
IP66 Front, depending on enclosure
(see table - "Enclosure Type Rating For Installation")

File No. E182378

CEC- Class I, Zones 1 & 2 Ex de IIC T6
Class I, Division 2, Groups A,B,C,D
Class II, Divisions 2, Groups F,G
Class III

CERTIFIED - FILE No. LR99480

II 2 G Ex de IIC
PTB 00 ATEX 1031 U
PTB 01 ATEX 1129 U

FEATURES:

The 8703 pushbutton assembly consists of contact block(s) 8082/1, one mounting bracket and one actuator 8602 - as listed on page F7.

The contact blocks have a single contact either 1 NC or 1 NO.

The terminals are accessible from the front, therefore the wires need to be connected before the contact block is snapped into the bracket.

