

## Application

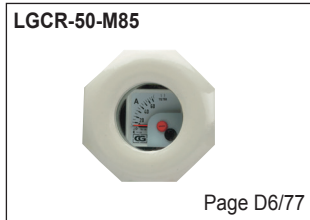
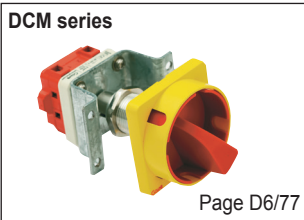
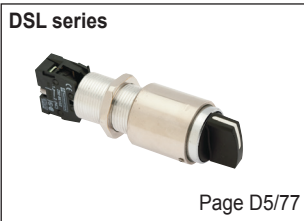
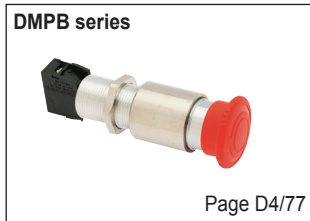
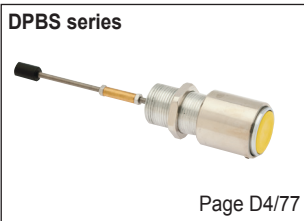
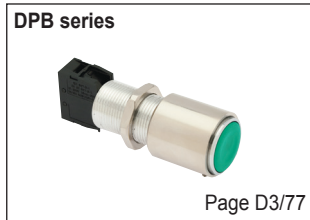
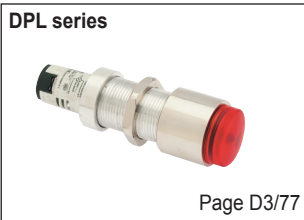
The panel mounted operating devices are designed for used with the flameproof enclosure and dust protection enclosure for controlling or indicating the status of electrical equipment such as motor starter, control equipment operation. They are suitable for Zone 1, 2 and Zone 21, 22 hazardous areas.

## Specification

Thread coupling, Shaft : Stainless steel, SUS 304  
 Thread bushing : Aluminium  
 Lock nut : Nickel-plated brass  
 Flush button : Plastic  
 O-ring : Neoprene

## Technical Data

<b>Hazardous Area</b>	<b>Gas</b>	<b>Dust</b>
<b>Zones</b>	<b>1 &amp; 2</b>	<b>21 &amp; 22</b>
<b>Equipment Group/Category</b>	<b>Ex II 2G</b>	<b>Ex II 2D</b>
<b>Symbol of Protection</b>	<b>Ex db IIB</b>	<b>Ex tb IIIB IP66</b>
<b>Certificate</b>	<b>Presafe 16 ATEX 8037 U</b> <b>IECEx PRE 16.0026 U</b>	
<b>Conformity to Standards</b>	EN 60079-0:2012+A11:2013, EN 60079-1:2007, EN 60079-31:2014 IEC 60079-0:2011, IEC 60079-1:2007-04, IEC 60079-31:2008	
<b>Ambient Temperature</b>	-20°C to +60°C	
<b>Index of Protection</b>	IP66	



## Electrical Rating

Pilot lights characteristics				
Current consumption	For all colours	24V.dc/ ac	20mA. (27 max)	
		120V.ac	18mA. (21 max)	
		230-240V.ac	16mA. (20 max)	
Voltage limit	At nominal voltage	24V.dc	19.2-30V.dc	
		24V.ac	26.1-26.4V.ac	
		120V.ac	100-132V.ac	
		230-240V.ac	195-264V.ac	
Service life	At nominal voltage and at an ambient temp. of 25°C		70,000Hrs.	

Contact Block ratings				
Rated operational current (EN/IEC 60947-5-1)	AC15	240V.	3A.	
		600V.	1.2A.	
	DC13	250V.	0.27A.	
600V.		0.1A.		
Rated thermal current				10A.
Rated insulation voltage	600V.			

Cam operated switches				
Rated operational current (EN/IEC 60947-3)	16A.	25A.	32A.	
	20A.	30A.	40A.	
	400V.	400V.	600V.	

# Control Station and Control Panel: Panel Mounted Operating Devices and Windows, IIB

Flameproof and Dust protection by enclosure

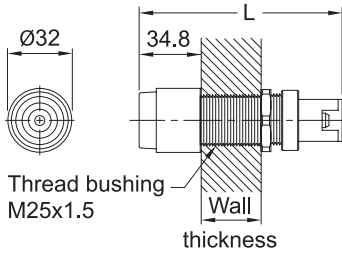
Zone 1 & 2 – 21 & 22



## Pilot Light, DPL series



Dimension in mm.



Wall thickness of enclosure (□)	Length (L)
A (15-30mm.)	99.0
B (31-45mm.)	119.0

## Catalogue Number Logic

<b>DPL</b> - □ ■■■ ■	□	■■■	■
<b>Series</b>	<b>Wall thickness of enclosure</b>	<b>Voltage</b>	<b>Colour of lens</b>
A	15-30 mm.	D02 24V.dc	G Green B Blue
B	31-45 mm.	A12 120V.ac	R Red C Clear
		A22 220-230V.ac	Y Yellow

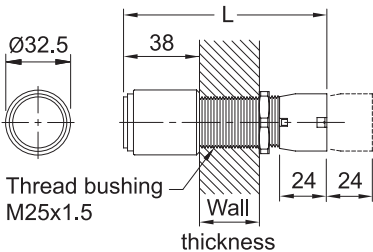
## Ordering Requirements

Operating Voltage	Diagram (Integral LED)	Colour of Lens	Cat. No.	Approx. Weight (kgs.)
24V.dc/ ac ~	X1 ⊗ X2	Green ●	DPL-□ D02G	0.145
		Red ●	DPL-□ D02R	
		Yellow ●	DPL-□ D02Y	
		Blue ●	DPL-□ D02B	
		Clear ●	DPL-□ D02C	
120V.ac ~	X1 ⊗ X2	Green ●	DPL-□ A12G	0.145
		Red ●	DPL-□ A12R	
		Yellow ●	DPL-□ A12Y	
		Blue ●	DPL-□ A12B	
		Clear ●	DPL-□ A12C	
220-230V.ac 50/60Hz. ~	X1 ⊗ X2	Green ●	DPL-□ A22G	0.145
		Red ●	DPL-□ A22R	
		Yellow ●	DPL-□ A22Y	
		Blue ●	DPL-□ A22B	
		Clear ●	DPL-□ A22C	

## Push Button, DPB series



Dimension in mm.



Wall thickness of enclosure (□)	Length (L)
A (15-30mm.)	96.0
B (31-45mm.)	116.0

## Catalogue Number Logic

<b>DPB</b> - □ ■■ ■	□	■■	■
<b>Series</b>	<b>Wall thickness of enclosure</b>	<b>Contact</b>	<b>Colour of button</b>
A	15-30 mm.	10 1NO 20 2NO	G Green B Black
B	31-45 mm.	01 1NC 02 2NC	R Red W White
		11 1NO-1NC	Y Yellow

## Ordering Requirements

Type of Function	Contact Symbol	Colour of Button	Cat. No.	Approx. Weight (kgs.)
Momentary	E ⊗ 13 14	Green ●	DPB-□ 10G	0.215
		Red ●	DPB-□ 10R	
		Yellow ●	DPB-□ 10Y	
		Black ●	DPB-□ 10B	
		White ●	DPB-□ 10W	
	E ⊗ 11 12	Green ●	DPB-□ 01G	0.215
		Red ●	DPB-□ 01R	
		Yellow ●	DPB-□ 01Y	
		Black ●	DPB-□ 01B	
		White ●	DPB-□ 01W	
E ⊗ 13 11 14 12	Green ●	DPB-□ 11G	0.230	
	Red ●	DPB-□ 11R		
	Yellow ●	DPB-□ 11Y		
	Black ●	DPB-□ 11B		
	White ●	DPB-□ 11W		
E ⊗ 13 23 14 24	Green ●	DPB-□ 20G	0.230	
	Red ●	DPB-□ 20R		
	Yellow ●	DPB-□ 20Y		
	Black ●	DPB-□ 20B		
	White ●	DPB-□ 20W		
E ⊗ 11 21 12 22	Green ●	DPB-□ 02G	0.230	
	Red ●	DPB-□ 02R		
	Yellow ●	DPB-□ 02Y		
	Black ●	DPB-□ 02B		
	White ●	DPB-□ 02W		

# Control Station and Control Panel: Panel Mounted Operating Devices and Windows, IIB

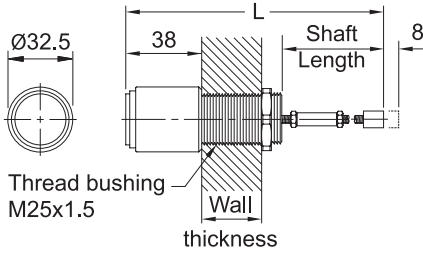
Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

## Push Button Shaft, DPBS series



Dimension in mm.



Wall thickness of enclosure (□)		Length (L)
50mm. shaft length	A (15-30mm.)	122.0
	B (31-45mm.)	142.0
100mm. shaft length	A (15-30mm.)	172.0
	B (31-45mm.)	192.0

## Catalogue Number Logic

DPBS -	□	■ ■	■
Series	Wall thickness of enclosure	Shaft length	Colour of button
A	15-30 mm.	50 50mm.	G Green B Black
B	31-45 mm.	1X 100mm.	R Red W White
			Y Yellow

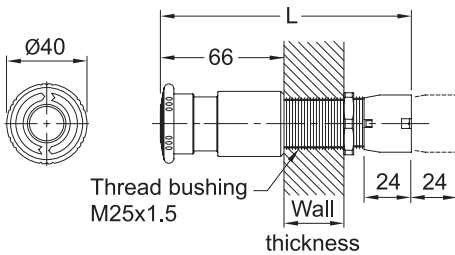
## Ordering Requirements

Type of Function	Shaft Length	Colour of Button	Cat. No.	Approx. Weight (kgs.)	
Momentary	50mm.	Green ●	DPBS-□ 50G	0.215	
		Red ●	DPBS-□ 50R		
		Yellow ●	DPBS-□ 50Y		
		Black ●	DPBS-□ 50B		
	100mm.	White ●	DPBS-□ 50W		
		Green ●	DPBS-□ 1XG		0.235
		Red ●	DPBS-□ 1XR		
		Yellow ●	DPBS-□ 1XY		
Black ●	DPBS-□ 1XB				
White ●	DPBS-□ 1XW				

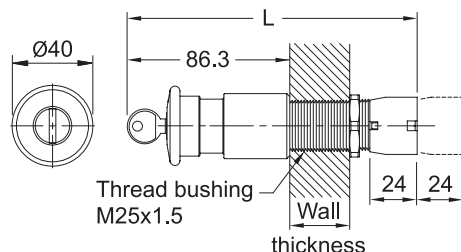
## Mushroom-Head Push Button, DMPB series



Dimension in mm.



Wall thickness of enclosure (□)		Length (L)
Push-pull	A (15-30mm.)	125.0
	B (31-45mm.)	145.0
Push-Lock, Turn to release	A (15-30mm.)	122.5
	B (31-45mm.)	142.5



## Catalogue Number Logic

DMPB -	□	■	■ ■ R
Series	Wall thickness of enclosure	Type of function	Contact
A	15-30 mm.	1 Push-pull	10 1NO 20 2NO
B	31-45 mm.	2 Push-lock, Turn to release	01 1NC 02 2NC
		3 Push-lock, Key to release	

## Ordering Requirements

Type of Function	Contact	Colour of Button	Cat. No.	Approx. Weight (kgs.)
Push-pull	1NO	Red ●	DMPB-□ 110R	0.254
Push-lock, Turn to release			DMPB-□ 210R	0.254
Push-lock, Key to release			DMPB-□ 310R	0.255
Push-pull	1NC	Red ●	DMPB-□ 101R	0.254
Push-lock, Turn to release			DMPB-□ 201R	0.254
Push-lock, Key to release			DMPB-□ 301R	0.255
Push-pull	2NO	Red ●	DMPB-□ 120R	0.269
Push-lock, Turn to release			DMPB-□ 220R	0.269
Push-lock, Key to release			DMPB-□ 320R	0.270
Push-pull	2NC	Red ●	DMPB-□ 102R	0.269
Push-lock, Turn to release			DMPB-□ 202R	0.269
Push-lock, Key to release			DMPB-□ 302R	0.270

## Push-Lock, Key to release

Wall thickness of enclosure (□)	Length (L)
Push-Lock, Key to release	A (15-30mm.) 145.5
	B (31-45mm.) 165.5

# Control Station and Control Panel: Panel Mounted Operating Devices and Windows, IIB

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



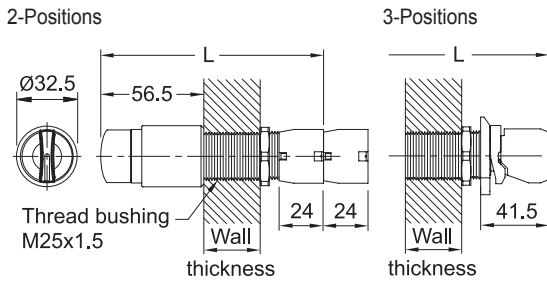
## Catalogue Number Logic

Series		Wall thickness of enclosure	Position	Contact		Function	
DSL	Selector Switch	A 15-30 mm. B 31-45 mm.	2 2-Positions 3 3-Positions	10 1NO 11 1NO-1NC	20 2NO	S Spring return R Spring return from Right	

## Selector Switch, DSL series



Dimension in mm.



Wall thickness of enclosure (□)		Length (L)
2-Positions	A (15-30mm.)	115.5
	B (31-45mm.)	165.5
3-Positions	A (15-30mm.)	132.0
	B (31-45mm.)	152.0

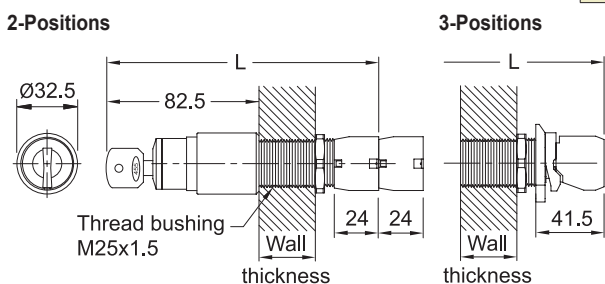
## Ordering Requirements

Type of Function	Contact	Cat. No.	Approx. Weight (kgs.)
<b>2-Positions</b>			
Stay put (or Maintained)	1NO	DSL-□ 210	0.230
	2NO	DSL-□ 220	0.245
	1NO-1NC	DSL-□ 211	0.245
Spring return	1NO	DSL-□ 210S	0.230
	2NO	DSL-□ 220S	0.245
	1NO-1NC	DSL-□ 211S	0.245
<b>3-Positions</b>			
Stay put (or Maintained)	2NO	DSL-□ 320	0.250
Spring return from right to centre	2NO	DSL-□ 320R	0.250

## Key Selector Switch, DSLK series



Dimension in mm.



## Ordering Requirements

Type of Function	Contact	Cat. No.	Approx. Weight (kgs.)
<b>2-Positions</b>			
Stay put (or Maintained)	1NO	DSLK-□ 210	0.235
	2NO	DSLK-□ 220	0.250
	1NO-1NC	DSLK-□ 211	0.250
<b>3-Positions</b>			
Stay put (or Maintained)	2NO	DSLK-□ 320	0.255

Wall thickness of enclosure (□)		Length (L)
2-Positions	A (15-30mm.)	141.5
	B (31-45mm.)	161.5
3-Positions	A (15-30mm.)	158.0
	B (31-45mm.)	178.0

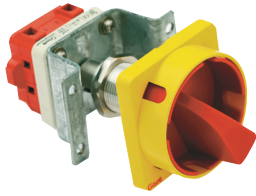


# Control Station and Control Panel: Panel Mounted Operating Devices and Windows, IIB

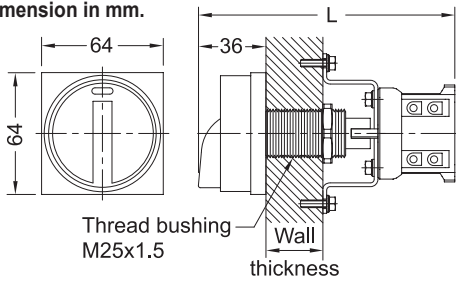
Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

## Cam Operated Switch, DCM series



Dimension in mm.



Wall thickness of enclosure (□)	Length (L)
A (15-30mm.)	128.0
B (31-45mm.)	148.0

## Catalogue Number Logic

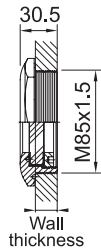
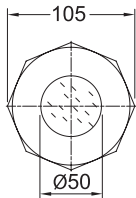
DCM - □ ■ ■■

Series	Wall thickness of enclosure	Type of function	Ampere
A	15-30 mm.	1 Single pole	16 16A.
B	31-45 mm.	2 Double poles	25 25A.
			32 32A.

## Ordering Requirements

Ampere	Connection	Cat. No.	Approx. Weight (kgs.)	
<b>2-Steps (Position 45°)</b>				
Single pole	16A.		0.318	
	25A.			DCM-□ 116
	32A.			DCM-□ 125
Double poles	16A.		0.350	
	25A.			DCM-□ 132
	32A.			DCM-□ 216
			DCM-□ 225	
			DCM-□ 232	

## Inspection Window (Round type)



## Ordering Requirements

Lens diameter * (mm.)	Cat. No.	Wall thickness	Approx. Weight (kgs.)
50	LGCR-50-M85	10-45mm.	0.515

\* Suitable for meters with maximum panel size of 48x48mm.