

# Control and signalling units Ø 22 mm (fixing)

Type XB2-B, with chromium plated metal bezel

## Characteristics

### Environment

<b>Conforming to standards</b>	EN 947-5-1
<b>Ambient air temperature</b>	Operation : - 25...+ 70 °C
<b>Degree of protection</b>	IP 65 : Double-headed pushbuttons : IP 40 (IP 65 with sealing boot ZB2-BW008)

### Contact block characteristics

<b>Rated operational characteristics</b>	~ AC-15 : A600 or $U_e = 240 \text{ V}$ and $I_e = 3 \text{ A}$ --- DC-13 : Q600 or $U_e = 250 \text{ V}$ and $I_e = 0.27 \text{ A}$ conforming to IEC 947-5-1 Appendix A
<b>Positive operation</b>	Safety units (mushroom head "Emergency stop" pushbuttons) : N/C contact with positive opening operation conforming to IEC 947-5-1 Section 3
<b>Short-circuit protection</b>	10 A cartridge fuse type gI
<b>Electrical reliability</b>	Failure rate < 1 fault for 100 million operating cycles (programmable controller inputs, 24 V d.c.) Minimum switching capacity 24 V 10 mA
<b>Cabling</b>	- Screw and captive cable clamp terminals. Capacity max. with cable end : 2 x 1.5 mm <sup>2</sup>

### Pilot lights with integral LED

<b>Power consumption</b>	<b>XB2-BV121●</b> : 0.7 W, <b>XB2-BV122●</b> : 0.35 W (--- 12 V), 1.5 W (--- and ~ 48 V) <b>XB2-BV124●</b> : 0.72 VA (~ 24 V), 7.7 VA (~ 220 V)
<b>Voltage limits</b> including ripple (on ---)	<b>XB2-BV121●</b> : $0.8 U_n \leq U \leq 1.1 U_n$ , <b>XB2-BV122●</b> : --- 10.8...53 V, ~ 19.2...53 V <b>XB2-BV124●</b> : 21.5... 264 V

- World leading ø 22 mm range
- Robust metal construction for industrial applications
- Extensive range to satisfy all man-machine interface functions
- Screw fixing ensuring rotary operators conform with latest standards
- Trigger action emergency stops available with 2 N/C + 1 N/O auxiliary contacts

For ordering select : - operating head  
- body/contact assembly  
- legend plate

# Control and signalling units Ø 22 mm (fixing)

Control units type XB2-B, with chromium plated metal bezel  
Adaptable sub-assemblies : body/contact assemblies

## References, dimensions

Characteristics :  
page 5/2



ZB2-BZ101



ZB2-BZ102



ZB2-BE101

### Body/contact assemblies

Description	Contact	Scheme	Reference	Weight kg
<b>For pushbuttons and 2 position selector and key switches</b>	1 contact	N/O	<b>ZB2-BZ101</b>	0.040
		N/C	<b>ZB2-BZ102</b>	0.040
<b>For pushbuttons and 2 or 3 position selector and key switches</b>	2 contacts	N/O + N/O	<b>ZB2-BZ103</b>	0.055
		N/C + N/C	<b>ZB2-BZ104</b>	0.055
	N/C + N/O	<b>ZB2-BZ105</b>	0.055	
	Make before break N/O + N/C	<b>ZB2-BZ106</b>	0.055	
	Break before make N/O + N/O	<b>ZB2-BZ107</b>	0.055	

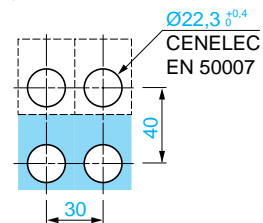
### Additional/replacement contact blocks

<b>Maximum of 6 contact blocks</b> except trigger action "Emergency stop" mushroom types ZB2-BS8●● ZB2-BS9●●	N/O	<b>ZB2-BE101</b>	0.015
	N/C	<b>ZB2-BE102</b>	0.015
<b>For</b> ZB2-BS8●● ZB2-BS9●●	2 N/C + 1 N/O	<b>ZB2-BZ141</b>	0.015

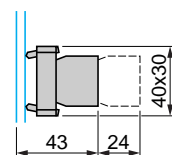
Contact block for low power switching < 24 V < 10 mA **ZB2-BE10●6**

**Other versions** Body/contact assemblies and additional contact blocks with 6.3 mm. Faston connectors.  
Please consult your Regional customer centre.

**Panel cut-out**  
(thickness 1 to 6 mm)



**Control units with circular operating head**  
ZB2-BZ10●, BZ10●6 (1)



(1) Body/contact assembly.

# Control and signalling units Ø 22 mm (fixing)

XB2-B, with chromium plated metal bezel  
Adaptable sub-assemblies : operating heads

References, dimensions

Characteristics :  
page 5/2

## Operating heads for pushbuttons, spring return



ZB2-BA●



ZB2-BA●8



ZB2-BL●



ZB2-BP●



ZB2-BC●



ZB2-BB●

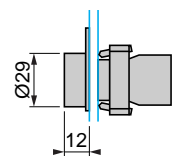
Description	Marking	Colour	Reference	Weight kg
<b>Flush pushbutton</b>		White	ZB2-BA1	0.030
		Black	ZB2-BA2	0.030
		Green	ZB2-BA3	0.030
		Red	ZB2-BA4	0.030
<b>Flush pushbutton with transparent push for use with legend plate ZB2-BY1●●●</b>		Green	ZB2-BA38	0.030
		Red	ZB2-BA48	0.030
		Yellow	ZB2-BA58	0.030
<b>Projecting pushbutton</b>		White	ZB2-BL1	0.030
		Black	ZB2-BL2	0.030
		Green	ZB2-BL3	0.030
		Red	ZB2-BL4	0.030
<b>Booted pushbutton</b>		White	ZB2-BP1	0.025
		Black	ZB2-BP2	0.025
		Green	ZB2-BP3	0.025
		Red	ZB2-BP4	0.025
<b>Transparent booted pushbutton for use with legend plate ZB2-BY1●●●</b>		Green	ZB2-BP38	0.030
		Red	ZB2-BP48	0.030
		Yellow	ZB2-BP58	0.030
<b>Flush pushbutton with function symbol on push</b>	I	White	ZB2-BA131	0.030
		Green	ZB2-BA331	0.030
	II	White	ZB2-BA136	0.030
		Green	ZB2-BA336	0.030
	↑ or →	White	ZB2-BA334	0.030
		Black	ZB2-BA335	0.030
	↓ or ⇐	Black	ZB2-BA232	0.030
		Red	ZB2-BA432	0.030
Stop	Black	ZB2-BA234	0.030	
	Red	ZB2-BA434	0.030	
<b>Projecting pushbutton</b>	O	Black	ZB2-BL232	0.030
		Red	ZB2-BL432	0.030
	Stop	Black	ZB2-BL234	0.030
		Red	ZB2-BL434	0.030
<b>Mushroom head pushbutton Ø 40 mm</b>	Black	ZB2-BC2	0.045	
	Red	ZB2-BC4	0.045	

## Wobblestick

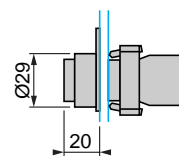
Pastic coated, metal rod	Black	ZB2-BB2	0.070
--------------------------	-------	---------	-------

Other operators, colours and version with matt black bezels available on request.

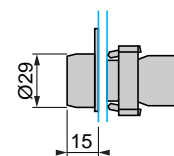
XB2-BA●●, BA●3●●  
ZB2-BA●, BA●3●



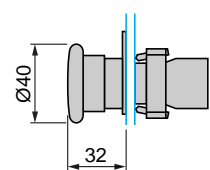
XB2-BL●●, BL●3●●  
ZB2-BL●, BL●3●



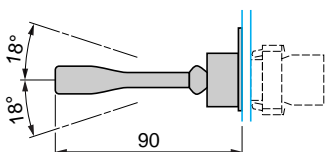
XB2-BP●●  
ZB2-BP●



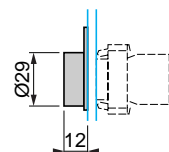
XB2-BC●●, BS5●  
ZB2-BC●



ZB2-BB2



ZB2-BA●8



# Control and signalling units Ø 22 mm (fixing)

XB2-B, with chromium plated metal bezel  
Adaptable sub-assemblies : operating heads

References, dimensions

Characteristics :  
page 5/2

## Double-headed pushbuttons, spring return



ZB2-BT●



ZB2-BS54



ZB2-BS844

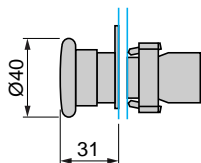
Description	Colour of operators	Marking	Reference	Weight kg
<b>2 flush pushbuttons</b> Degree of protection to IP 40	Green Red	Without	<b>ZB2-BA8134</b>	0.050
		I O	<b>ZB2-BA8234</b>	0.050
	White Black	Without	<b>ZB2-BA8112</b>	0.050
		I O	<b>ZB2-BA8212</b>	0.050
<b>2 flush pushbuttons</b> Degree of protection to IP 65	Green Red	Without	<b>ZB2-BA9134</b>	0.050
		I O	<b>ZB2-BA9234</b>	0.050
	White Black	Without	<b>ZB2-BA9112</b>	0.050
		I O	<b>ZB2-BA9212</b>	0.050
<b>Sealing boot</b> For degree of protection to : IP 65 (for IP 40 switches) IP 66 (IP 65 switches)	Clear silicone		<b>ZB2-BA008</b>	0.004

## Latching pushbutton heads

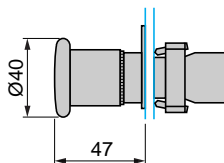
Description	Diameter	Colour	Reference	Weight kg
<b>Mushroom head pushbutton</b> Push-pull	Ø 40 mm	Red	<b>ZB2-BT4</b>	0.075
<b>Mushroom head pushbutton</b>	Ø 40 mm	Red	<b>ZB2-BS54</b>	0.055
<b>Mushroom head pushbutton with trigger action</b> Turn to release ("Emergency stop")	Ø 40 mm	Red	<b>ZB2-BS844</b>	0.060
<b>Mushroom head pushbutton</b> Key release (Ronis n° 455)	Ø 40 mm	Red	<b>ZB2-BS14</b>	0.090
<b>Mushroom head pushbutton with trigger action</b> Key release (Ronis n° 455) ("Emergency stop")	Ø 40 mm	Red	<b>ZB2-BS944</b>	0.080

Other operators, colours and version with matt black bezels available on request.

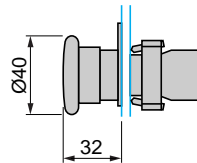
XB2-BT●2  
ZB2-BT4



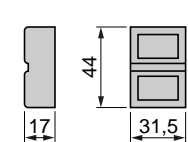
XB2-BS8445  
ZB2-BS844



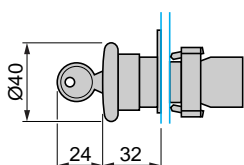
ZB2-BS54



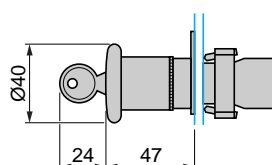
ZB2-BA008



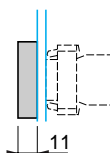
XB2-BS1●2  
ZB2-BS12



XB2-BS9445  
ZB2-BS944



ZB2-BA8●●●  
ZB2-BA9●●●



# Control and signalling units Ø 22 mm (fixing)

XB2-B, with chromium plated metal bezel  
Adaptable sub-assemblies : operating heads

References, dimensions

Characteristics :  
page 5/2



ZB2-BJ●



ZB2-BG●

## Selector switch heads

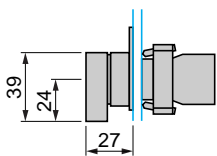
Description	Type	Operator	Reference	Weight kg
<b>2 position</b>	Stay put	Standard handle	<b>ZB2-BD2</b>	0.045
	1 spring return from right to left	Standard handle	<b>ZB2-BD4</b>	0.045
<b>3 position</b>	Stay put	Standard handle	<b>ZB2-BD3</b>	0.045
	2 spring return to centre	Standard handle	<b>ZB2-BD5</b>	0.045
	1 spring return from right to centre	Standard handle	<b>ZB2-BD8</b>	0.045
	1 spring return from left to centre	Standard handle	<b>ZB2-BD7</b>	0.045
		Long handle version available	<b>ZB2-BJ●</b>	

## Key switch heads (Ronis key n° 455)

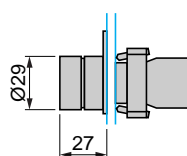
Description	Type	Key withdrawal	Reference	Weight kg
<b>2 position</b>	Stay put	Left hand position	<b>ZB2-BG2</b>	0.070
		Left and right hand position	<b>ZB2-BG4</b>	0.070
	1 spring return from right to left	Left hand position	<b>ZB2-BG6</b>	0.070
<b>3 position</b>	Stay put	Centre position	<b>ZB2-BG3</b>	0.070
		Left and right hand position	<b>ZB2-BG5</b>	0.070
		Left hand position	<b>ZB2-BG9</b>	0.070
		Right hand position	<b>ZB2-BG09</b>	0.070
		All 3 positions	<b>ZB2-BG0</b>	0.070
	2 spring return to centre	Centre position	<b>ZB2-BG7</b>	0.070
	1 spring return from left to centre	Right hand position	<b>ZB2-BG1</b>	0.070
	1 spring return from right to centre	Centre position	<b>ZB2-BG8</b>	0.070

For operating heads with black metal bezel add suffix 7 to the above reference. Example ZB2-BD2 becomes ZB2-BD27.

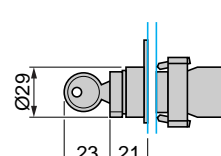
ZB2-BG● (1)



ZB2-BD● (1)



ZB2-BJ●



# Control and signalling units Ø 22 mm (fixing)

Signalling units type XB2-B, with chromium plated metal bezel  
Pilot light heads and bodies

## References, dimensions

Characteristics :  
page 5/2



ZB2-BV6

### Pilot light bodies

Supply	Scheme	Supply voltage	Reference	Weight kg
<b>Direct</b> bulb not included (1)		≤ 400 V	<b>ZB2-BV6</b>	0.045
<b>Direct</b> BA 9s, 24 V bulb included		24 V	<b>ZB2-BV624</b>	0.046
<b>Direct through resistor</b> BA 9s, 130 V bulb included		230-240 V	<b>ZB2-BV7</b>	0.055
<b>Via integral transformer</b> 1.2 VA BA 9s, 6 V bulb included		110 V/50 Hz	<b>ZB2-BV3</b>	0.110
		110-120 V/60 Hz	<b>ZB2-BV4</b>	0.110
		230 V/50 Hz	<b>ZB2-BV94</b>	0.110
		240 V/50 Hz	<b>ZB2-BV94</b>	0.110
		220-240 V/60 Hz	<b>ZB2-BV93</b>	0.110
415 V/50 Hz	<b>ZB2-BV93</b>	0.110		

### Pilot light bodies with "Test" function

Supply	Scheme	Supply voltage	Reference	Weight kg
<b>Direct</b> bulb not included (1)		≤ 400 V	<b>ZB2-BV156</b>	0.050
<b>Direct through resistor</b> BA 9s, 130 V bulb included		230-240 V	<b>ZB2-BV157</b>	0.060

(1) Bulb types for use with direct supply units : BA 9s base fitting incandescent U ≤ 130 V, maximum power 2.6 W. Neon bulb or LED light source, maximum Ø 11 mm, maximum length 28 mm (DL1-C●●●, see page 5/11).

### Pilot light heads

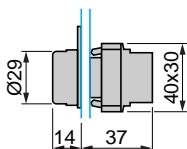


ZA2-BV00●

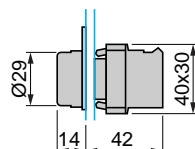
Description	Colour	Reference	Weight kg
<b>For use with incandescent bulbs</b>	White	<b>ZB2-BV01</b>	0.025
	Green	<b>ZB2-BV03</b>	0.025
	Red	<b>ZB2-BV04</b>	0.025
	Yellow	<b>ZB2-BV05</b>	0.025
	Blue	<b>ZB2-BV06</b>	0.025
	Clear	<b>ZB2-BV07</b>	0.025
	<b>High contrast for use with incandescent bulbs, neon bulbs or LED's (2)</b>	White	<b>ZB2-BV0103</b>
Green		<b>ZB2-BV033</b>	0.025
Red		<b>ZB2-BV043</b>	0.025
Yellow		<b>ZB2-BV053</b>	0.025
Blue		<b>ZB2-BV063</b>	0.025
Clear		<b>ZB2-BV073</b>	0.025

(2) Only suitable for use with green, red or yellow LED's.

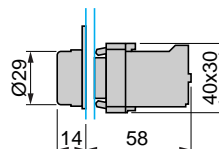
ZB2-BV6 (1)  
ZB2-BV00● (2)



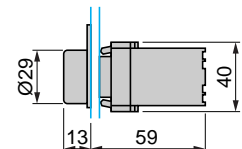
ZB2-BV7 (1)  
ZB2-BV00● (2)



ZB2-BV3, BV4, BV9● (1)  
ZB2-BV00● (2)



ZB2-BV1●●● (1)  
ZB2-BV● (2)



(1) Body or body/contact assembly.  
(2) Lens assembly or operating head.

# Control and signalling units Ø 22 mm (fixing)

Signalling units type XB2-B, with chromium plated metal bezel

Characteristics :  
page 5/2

## References, dimensions



ZB2-BW3●

### Body/contact assemblies (screw clamp connections)

Supply	Scheme (1)	Supply voltage	Contact	Reference	Weight kg
Direct bulb not included		≤ 400 V	N/O	ZB2-BW061	0.060
Direct bulb included		24 V	N/O	ZB2-BW06241	0.075
Direct through resistor		230-240 V	N/O	ZB2-BW071	0.065
Via integral transformer transformer		110 V/50 Hz	N/O	ZB2-BW031	0.120
		110-120 V/60 Hz	N/O	ZB2-BW041	0.120
		230 V/50 Hz	N/O	ZB2-BW041	0.120
		240 V/50 Hz	N/O	ZB2-BW0941	0.120
		220-240 V/60 Hz	N/O	ZB2-BW051	0.120
400 V/50 Hz	N/O	ZB2-BW0931	0.120		
415 V/50 Hz	N/O	ZB2-BW0931	0.120		



ZB2-BW13

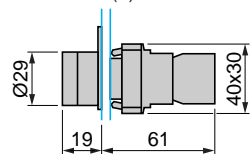
### Illuminated pushbutton heads

Description	Application	Colour	Reference	Weight kg
Flush pushbutton, spring return	For incandescent bulbs	Green	ZB2-BW33	0.025
		Red	ZB2-BW34	0.025
		Yellow	ZB2-BW35	0.025
		Blue	ZB2-BW36	0.025
Projecting pushbutton, spring return	For incandescent bulbs	Green	ZB2-BW13	0.030
		Red	ZB2-BW14	0.030
		Yellow	ZB2-BW15	0.030
		Blue	ZB2-BW16	0.030
Projecting pushbutton, spring return (High contrast)	For incandescent bulbs, neon bulbs or LED's (1)	Green	ZB2-BW133	0.030
		Red	ZB2-BW143	0.030
		Yellow	ZB2-BW153	0.030
		Blue	ZB2-BW163	0.030
Booted pushbutton, spring return	For incandescent bulbs	Green	ZB2-BW53	0.040
		Red	ZB2-BW54	0.040
		Yellow	ZB2-BW55	0.040
		Blue	ZB2-BW56	0.040

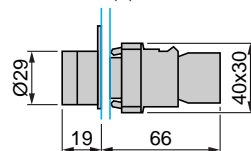
### Illuminated selector switch heads

Description	Type	Colour	Reference	Weight kg
2 position	Stay put	Red	ZB2-BK124	0.035
		Red	ZB2-BK144	0.035
3 position	Stay put	Red	ZB2-BK134	0.035
		Red	ZB2-BK154	0.035
		Red	ZB2-BK174	0.035
		Red	ZB2-BK184	0.035
		Red	ZB2-BK184	0.035

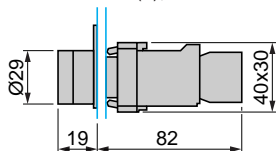
ZB2-BW06● (1)  
ZB2-BW3● (2)



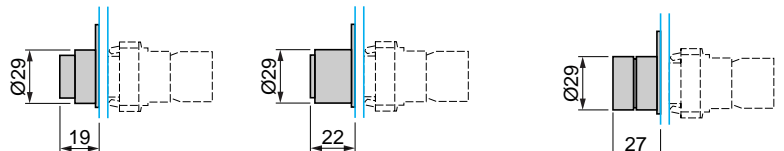
ZB2-BW07● (1)  
ZB2-BW3● (2)



ZB2-BW03●, BW04●, BW05● (1)  
ZB2-BW094● (1), ZB2-BW3● (2)



ZB2-BK1●●



(1) Operating head. (2) Body/contact assembly.

# Control and signalling units Ø 22 mm (fixing)

Type XB2-B, with chromium plated metal bezel

References of accessories and spare parts

## Legend plates, 30 x 40 mm

"Start" functions : white characters on black background. "Stop" functions : white characters on red background.

Text	Unit reference	Weight kg	Text	Unit reference	Weight kg
------	----------------	-----------	------	----------------	-----------

### Blank (sold in lots of 10)

Black or red background	<b>ZB2-BY2101</b>	0.001	White or yellow background	<b>ZB2-BY4101</b>	0.001
-------------------------	-------------------	-------	----------------------------	-------------------	-------

### Standard texts

For pushbuttons and pilot lights

Auto	<b>ZB2-BY2115</b>	0.001	Reset	<b>ZB2-BY2323</b>	0.001
Close	<b>ZB2-BY2314</b>	0.001	Reverse	<b>ZB2-BY2306</b>	0.001
Down	<b>ZB2-BY2308</b>	0.001	Right	<b>ZB2-BY2309</b>	0.001
Emergency stop	<b>ZB2-BY2330</b>	0.001	Slow	<b>ZB2-BY2327</b>	0.001
Fast	<b>ZB2-BY2328</b>	0.001	Start	<b>ZB2-BY2303</b>	0.001
Forward	<b>ZB2-BY2305</b>	0.001	Stop	<b>ZB2-BY2304</b>	0.001
Hand	<b>ZB2-BY2316</b>	0.001	Up	<b>ZB2-BY2307</b>	0.001
Inch	<b>ZB2-BY2321</b>	0.001			
Left	<b>ZB2-BY2310</b>	0.001			
Off	<b>ZB2-BY2312</b>	0.001			
On	<b>ZB2-BY2311</b>	0.001			
Open	<b>ZB2-BY2313</b>	0.001			
Phase/Phase	<b>ZB2-BY2196</b>	0.001			
Power on	<b>ZB2-BY2326</b>	0.001			

For selector switches

Auto-Hand	<b>ZB2-BY2364</b>	0.001	Off-On	<b>ZB2-BY2367</b>	0.001
Auto-O-Hand	<b>ZB2-BY2385</b>	0.001			

### Universal symbols

O	<b>ZB2-BY2146</b>	0.001	O-I	<b>ZB2-BY2178</b>	0.001
I	<b>ZB2-BY2147</b>	0.001	I-II	<b>ZB2-BY2179</b>	0.001
II	<b>ZB2-BY2148</b>	0.001	I-O-II	<b>ZB2-BY2186</b>	0.001

## Legend plates, 30 x 50 mm

### Blank (sold in lots of 10)

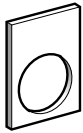
Black or red background	<b>ZB2-BY6101</b>	0.001	White or yellow background	<b>ZB2-BY6102</b>	0.001
-------------------------	-------------------	-------	----------------------------	-------------------	-------

### Circular legend plates (for mushroom head pushbuttons)

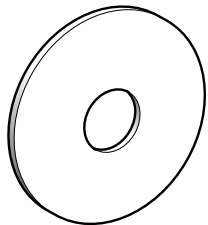
Text	Colour	Diameter	Reference	Weight kg
Blank	White or yellow background	Ø 60 mm	<b>ZB2-BY9101</b>	0.006
		Ø 90 mm	<b>ZB2-BY8101</b>	0.008
"Emergency stop"	Black characters on yellow background	Ø 60 mm	<b>ZB2-BY9330</b>	0.006
		Ø 90 mm	<b>ZB2-BY8330</b>	0.008

### Other versions

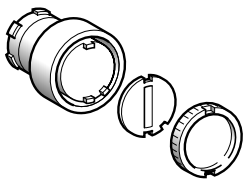
Legend plates with special texts or texts in other languages. Please consult your Regional customer centre.



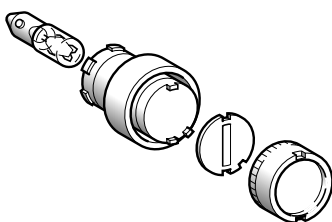
ZB2-BY2000  
ZB2-BY4000



ZB2-BY101



Flush transparent pushbutton



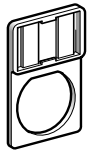
Projecting illuminated pushbutton



# Control and signalling units Ø 22 mm (fixing)

Type XB2-B, with chromium plated metal bezel

References of accessories and spare parts



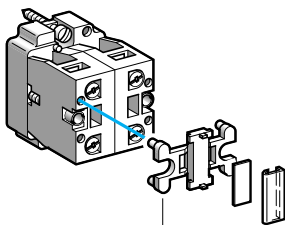
ZB2-BZ33



ZA2-BY5

## Circular legend plates (for use with transparent pushbuttons, pilot lights and illuminated pushbuttons)

ZB2-BY1101	ZB2-BY1146	ZB2-BY1147	ZB2-BY1148	ZB2-BY1149	ZB2-BY1115	0.001
ZB2-BY1303	ZB2-BY1304	ZB2-BY1912	ZB2-BY1912	ZB2-BY1912	ZB2-BY1912	0.001



ZB2-BZ001

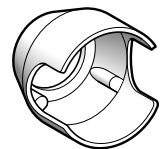
## Legend plate carrier for 18 x 27 mm "snap-in" legend plates

Dimensions	Sold in lots of	Unit reference	Weight kg
30 x 50 mm	10	ZB2-BZ33	0.001

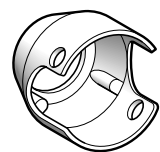
## "Snap-in" legend plates, 18 x 27 mm

Blank	Black or red background	10	ZA2-BY5101	0.001
	White or yellow background	10	ZA2-BY5102	0.001

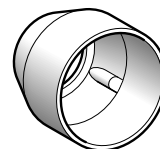
## Accessories



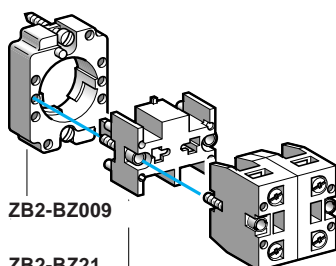
ZB2-BZ17



ZB2-BZ18



ZB2-BZ16



ZB2-BZ009

ZB2-BZ21

Description	Unit reference	Weight kg
Blanking plug, Ø 22 mm (black)	(Sold in lots of 10) ZB2-SZ3	0.020
"Snap-in" legend plate carrier for marking an XB2-B unit	(Sold in lots of 10) ZB2-BZ001	0.003
Adaptor plate for mounting XB2-B unit in Ø 30 mm hole. Supplied with seal and back washer.	(Sold singly) ZB2-BZ4	0.020
Protective guard for Ø 40 mm mushroom head pushbuttons, not recommended for emergency stop function (Sold singly)	Push-pull operation Blue	ZB2-BZ1701 0.050
	Black	ZB2-BZ1702 0.050
	Red	ZB2-BZ1704 0.050
	Yellow	ZB2-BZ1705 0.050
Push-pull operation, with 4 x Ø 7 mm holes for padlocking	Blue	ZB2-BZ1801 0.050
	Black	ZB2-BZ1802 0.050
	Red	ZB2-BZ1804 0.050
	Yellow	ZB2-BZ1805 0.050
Spring return operation or locking, with key release	Blue	ZB2-BZ1601 0.050
	Black	ZB2-BZ1602 0.050
	Red	ZB2-BZ1604 0.050
	Yellow	ZB2-BZ1605 0.050
Fixing base	(Sold in lots of 10) ZB2-BZ009	0.020
Add-on intermediate "Push-push to release" mechanism for use with pushbuttons and illuminated pushbuttons (2 contacts max.).	(Sold singly) ZB2-BZ21	0.008

# Control and signalling units Ø 22 mm (fixing)

Type XB2-B, with chromium plated metal bezel

References of accessories and spare parts

## Tools

Dimensions	Sold in lots of	Unit reference	Weight kg
<b>Bezel key</b> for transparent pushbuttons	(Sold singly)	<b>ZB2-BZ8</b>	0.006
<b>Bulb extractor</b> for BA 9s base fitting bulbs	(Sold singly)	<b>XBF-X13</b>	0.025

## Bulbs

Description	Voltage	Colour	Unit reference	Weight kg	
<b>BA 9s base fitting</b>	Incandescent (Sold in lots of 10)	6 V	–	<b>DL1-CB006</b>	0.002
		12 V	–	<b>DL1-CE012</b>	0.002
		24 V	–	<b>DL1-CE024</b>	0.002
		48 V	–	<b>DL1-CE048</b>	0.002
		130 V	–	<b>DL1-CE130</b>	0.002
	Neon (Sold in lots of 10)	120 V	–	<b>DL1-CF110</b>	0.002
		230-240 V	–	<b>DL1-CF220</b>	0.002
		400 V	–	<b>DL1-CF380</b>	0.002
	LED	= 24 V	Green	<b>DL1-CJ0243</b>	0.002
			Red	<b>DL1-CJ0244</b>	0.002
			Yellow	<b>DL1-CJ0245</b>	0.002
		= 28 V (for pilot light 110-130 V)	Green	<b>DL1-CJ0283</b>	0.002
			Red	<b>DL1-CJ0284</b>	0.002
			Yellow	<b>DL1-CJ0285</b>	0.002
		= 48 V	Green	<b>DL1-CJ0483</b>	0.002
Red			<b>DL1-CJ0484</b>	0.002	
Yellow			<b>DL1-CJ0485</b>	0.002	
~ 6 V for units with integral transformer	Green	<b>DL1-CD0063</b>	0.002		
	Red	<b>DL1-CD0064</b>	0.002		
	Yellow	<b>DL1-CD0065</b>	0.002		

# Control and signalling units Ø 22 mm (fixing)

DOMINO 22

Characteristics

References :  
pages 5/12 to 5/27  
Accessories :  
pages 5/17 to 5/24

## Environment

<b>Conforming to standards</b>	EN 60 947-5-1
<b>Ambient air temperature</b>	Operation : - 30...+ 60 ° C.
<b>Positive operation</b>	(Mushroom head "Emergency stop" pushbuttons) : N/C contact with positive opening operation conforming to IEC 947-5-1 Section 3
<b>Short-circuit protection</b>	Cartridge fuse type gl. 16 A for screw terminal models
<b>Rated operational characteristics</b> (conforming to IEC 947-5-1)	$\sim$ AC-15 : U <sub>e</sub> / I <sub>e</sub> 240 V / 8 A    400 V / 6 A    500 V / 4 A a DC-13 : U <sub>e</sub> / I <sub>e</sub> 110 V / 0.8 A    220 V / 0.3 A
<b>Electrical reliability</b>	Failure rate < 1 fault for 100 million operating cycles (programmable controller inputs, $\sim$ 24 V) Minimum switching capacity 24 V 100 mA
<b>Connections</b>	Screw and captive cable clamp terminals. Capacity : max., with cable end : 2 x 1.5 mm <sup>2</sup> .

## Universal operating heads Bezel finish : matt black

### CIRCULAR operator (1)

Description	Reference	Weight kg
<b>Flush (2)</b>	<b>D1A1U</b>	0.013
<b>Recessed (2)</b>	<b>D1A7U</b>	0.015

### Pushbutton operating heads fitted with protective cover

Description	Colour	Reference	Weight kg
<b>Circular operator with flexible protective cover</b> Booted (2) (Degree of protection IP 66)	Red	<b>D1A6R</b>	0.013
	Green	<b>D1A6G</b>	0.013
	Yellow	<b>D1A6Y</b>	0.013
	Blue	<b>D1A6B</b>	0.013
	Black	<b>D1A6S</b>	0.013
<b>Projecting (2)</b>	Red	<b>D1A3R</b>	0.018

### Pilot light heads (without lens caps) For colour lens caps see page 5/22.

Description	Reference	Weight kg
<b>For circular lens caps (2) (3)</b>	<b>D1V10</b>	0.011
	<b>D1Y10</b>	0.012

(1) Insert colours : Red, Green, Yellow, Blue, Black and White. For inserts with markings see page 5/25.

(2) Also available with matt chrome bezel.

To order : replace 1/2 with 2, i.e. **D1A6R** becomes **D2A6R**.

(3) Lens cap colours available : Red, Green, Yellow, Blue and White. See page 5/23.

## Pushbuttons

Operating heads

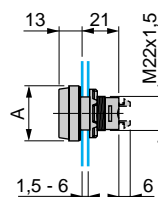
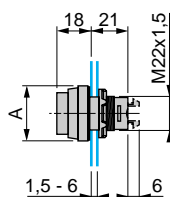
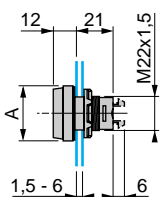
**D●A1●, D●A2●, D●A6●**

**D●A3●**

## Illuminated pushbuttons - spring return and "push-push"

Operating head/lens assemblies

**D●V1●, D●Y1●**



	A		A		A
<b>D1A1●</b>	∅ 30	<b>D1A3●</b>	∅ 30	<b>D1V1●, D1Y1●</b>	∅ 30
<b>D1A6●</b>	∅ 30				

# Control and signalling units Ø 22 mm (fixing)

DOMINO 22  
SQUARE bezel with SQUARE operator

Characteristics :  
page 5/12  
Accessories :  
pages 5/21 to 5/24

## References



D1A2U



D1A4U

Universal operating heads for spring return pushbuttons Bezel finish : matt black

### SQUARE operator

Description	Reference	Weight kg
Flush (1)	<b>D1A2U</b>	0.014
Recessed (2)	<b>D1A4U</b>	0.016

### Pushbutton operating heads with projecting operator

Description	Colour	Reference	Weight kg
<b>Projecting operator</b>	Red	<b>D1A5R</b>	0.023

Pilot light heads (without lens caps) For colour lens caps see page 5/22

Description	Reference	Weight kg
<b>Square lens caps (2)</b>	<b>D1V20</b>	0.011

Illuminated pushbutton heads (without lens caps) For colour lens caps see page 5/23

Description	Reference	Weight kg
<b>Flush operator (2)(3)</b>	<b>D1Y30</b>	0.012
<b>Projecting operator (2)(3)</b>	<b>D1Y20</b>	0.015

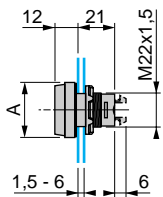
(1) Insert colours : Red, Green, Yellow, Blue, Black and White. For inserts with markings see page 5/24.

(2) Also available with matt chrome bezel.

To order : replace 1/2 with 2, i.e. **D1A5R** becomes **D2A5R**.

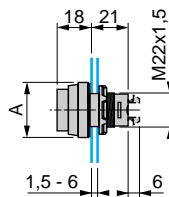
(3) Lens cap colours available : Red, Green, Yellow, Blue and White. See page 5/22.

D●A1●, D●A2●, D●A6●

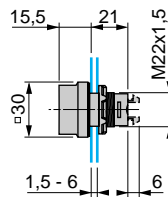


D1A2● A  
∅ 30

D●A3●

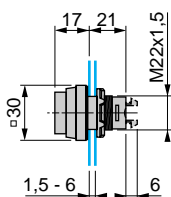


D●A4●

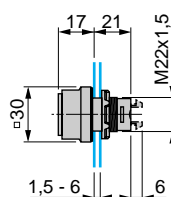


D1A4● A  
∅ 30

D1Y2●, D2Y2●



D1Y3●, D2Y3●



# Control and signalling units Ø 22 mm (fixing)

DOMINO 22  
SQUARE bezel with CIRCULAR operator

Characteristics :  
page 5/12  
Accessories :  
pages 5/21 to 5/24

## References



D1C3R



D1G2S



D1G3S

### “Mushroom head” pushbutton heads Bezel finish : matt black

Description	Colour	Reference	Weight kg
<b>Diameter 27 mm latching Turn to release</b>	Red	<b>D1C2R</b>	0.048
<b>TRIGGER ACTION emergency stop Diameter 40 mm latching Turn to release</b>	Red	<b>D1C3R</b>	0.043

### Selector switch heads Bezel finish : matt black

Operation	Colour	Reference	Weight kg
<b>2 position stay put</b>	Black	<b>D1G2S</b>	0.022
<b>2 position spring return from right to left</b>	Black	<b>D1G7S</b>	0.022
<b>3 position stay put</b>	Black	<b>D1G3S</b>	0.022
<b>3 position spring return from left and right to centre</b>	Black	<b>D1G4S</b>	0.022
<b>3 position spring return from right to centre</b>	Black	<b>D1G5S</b>	0.022
<b>3 position spring return from left to centre</b>	Black	<b>D1G6S</b>	0.022

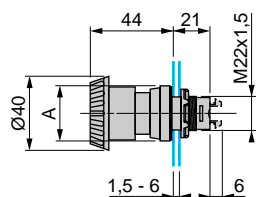
### Key operated selector switch heads Bezel finish : matt black

Operation	Key withdrawal	Reference	Weight kg
<b>2 position stay put</b>	Left hand position	<b>D1L10</b>	0.047
	Right hand position	<b>D1L20</b>	0.047
	Left hand and right hand positions	<b>D1L30</b>	0.047
<b>3 position stay put</b>	Left hand position	<b>D1L40</b>	0.047
	Right hand position	<b>D1L50</b>	0.047
	Centre position	<b>D1L60</b>	0.047
	Left hand and right hand positions	<b>D1L70</b>	0.047
	All 3 positions	<b>D1L80</b>	0.047
<b>3 position spring return from left</b>	Centre position	<b>D1L90</b>	0.047

Illuminated selector switches available on request.

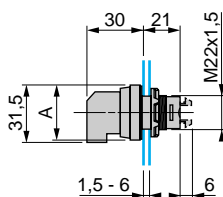
(1) Also available with matt chrome bezel. To order replace 1 with 2, i.e. **D1G2S** becomes **D2G2S**.

D1C3●



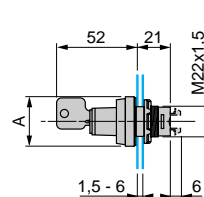
D1C3●	A
	∅ 30

D1G●●



D1G●●	A
	∅ 30

D1L●0



D1L●0	A
	∅ 30

# Control and signalling units Ø 22 mm (fixing)

DOMINO 22  
Circular bezel with CIRCULAR operator

Characteristics :  
page 5/12  
Accessories :  
pages 5/21 to 5/24

## References

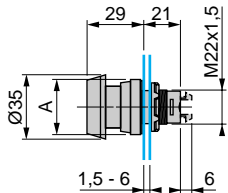


D3C3R

“Mushroom head” Bezel finish : matt black

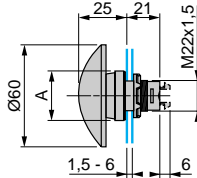
Description	Colour	Reference	Weight kg
Diameter 35 mm spring return	Red	<b>D3B1R</b>	0.025
Diameter 60 mm spring return	Red	<b>D3B2R</b>	0.035
<b>TRIGGER ACTION</b> emergency stop Diameter 40 mm latching Turn to release	Red	<b>D3C3R</b>	0.041

D3B1●



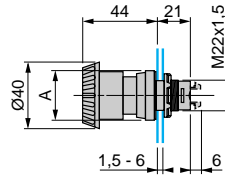
	A
<b>D3B1●</b>	Ø 29

D3B2●



	A
<b>D3B2●</b>	Ø 29

D3C3●



	A
<b>D3C3●</b>	Ø 29

# Control and signalling units Ø 22 mm (fixing)

DOMINO 22  
CIRCULAR bezel with CIRCULAR operator

Characteristics :  
page 5/12  
Accessories :  
pages 5/21 to 5/24

## References



D3G2S

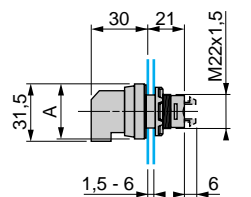
### Selector switch heads Bezel finish : matt black

Operation	Reference	Weight kg
2 position stay put	<b>D3G2S</b>	0.021
2 position spring return from right to left	<b>D3G7S</b>	0.021
3 position stay put	<b>D3G3S</b>	0.021
3 position spring return	<b>D3G4S</b>	0.021
3 position spring return from right to centre	<b>D3G5S</b>	0.021
3 position spring return from left to centre	<b>D3G6S</b>	0.021

### Key operated selector switch heads Bezel finish : matt black

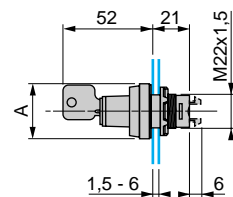
Operation	Key withdrawal	Reference	Weight kg
2 position stay put	Left hand position	<b>D3L10</b>	0.047
	Right hand position	<b>D3L20</b>	0.047
	Left hand and right hand positions	<b>D3L30</b>	0.047
3 position stay put	Left hand position	<b>D3L40</b>	0.047
	Right hand position	<b>D3L50</b>	0.047
	Centre position	<b>D3L60</b>	0.047
	Left hand and right hand positions	<b>D3L70</b>	0.047
	All 3 positions	<b>D3L80</b>	0.047
3 position spring return from left and right to centre	Centre position	<b>D3L90</b>	0.047

D3G●●



D3G●● A  
Ø 29

D3L●0



D3L●0 A  
Ø 29

# Control and signalling units Ø 22 mm (fixing)

Control units DOMINO 22  
Adaptable sub-assemblies : body/contact assemblies  
with screw terminals

Characteristics :  
page 5/12  
Accessories :  
pages 5/21 to 5/24

## References

### Body/contact assemblies for spring return pushbuttons and selector switches

Screw terminal connections, fixing from the front

Description	Contact(s)	Reference	Weight kg	
<b>1 contact</b>	N/O	<b>DA10</b>	0.025	
	N/C	<b>DA01</b>	0.025	
<b>2 contacts</b>	N/O + N/C	<b>DA11</b>	0.025	
	N/O + N/O	<b>DA20</b>	0.025	
	N/C + N/C	<b>DA02</b>	0.025	
	N/O + N/C make before break	<b>DA1U</b>	0.025	
<b>Supplementary contact blocks for 1 or 2 contact bodies</b>	DA10, DA11 DA20, DA02	N/O	<b>DB10</b>	0.020
	DA01, DA11 DA02	N/C	<b>DB01</b>	0.020
	DA11, DA02	N/O + N/C	<b>DB11</b>	0.020
	DA11, DA20 DA02	N/O + N/O	<b>DB20</b>	0.020
	DA02	N/C + N/C	<b>DB02</b>	0.020
<b>4 contacts</b>	2N/O + 2N/C	<b>DC22</b>	0.045	
	4N/O	<b>DC40</b>	0.045	
	4N/C	<b>DC04</b>	0.045	



DA20

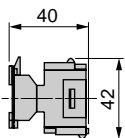


DB10

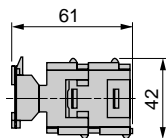


DC04

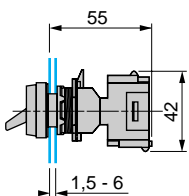
DA●●



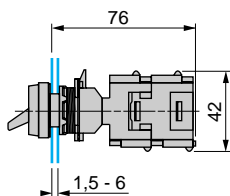
DC●●



Head + 1 body



Head + 2 bodies





# Control and signalling units Ø 22 mm (fixing)

Signalling units DOMINO 22  
Adaptable sub-assemblies : bodies  
with screw terminals

Characteristics :  
page 5/12  
Accessories :  
pages 5/21 to 5/24

## References

### Pilot light bodies



DFSN



DS2N



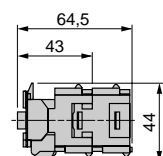
DS2F

Screw terminal connections, fixing from the front

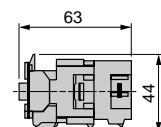
Supply Type and scheme	Voltage	Reference	Weight kg
<b>Direct</b> Bulb : 2 W max. (1) x1 ♂ — ⊗ — ♀ x2	250 V max.	<b>DFSN</b>	0.021
<b>Direct with diode and "test" function</b> Bulb : 2 W max. (1), (2) x1 ♂ — ⊗ — ♀ x2 x5 ♂	250 V max.	<b>DS2N</b>	0.028
<b>Direct with 2 diodes</b> Bulb : 2 W max. (1), (2) x5 ♂ — ⊗ — ♀ x2 x1 ♀	250 V max.	<b>DS2F</b>	0.028
<b>With resistor</b> Bulb : 130 V - 2.6 W (1) x1 ♂ — ⊗ — ♀ x2 x1 ♀	230 V, 50/60 Hz	<b>DWSM</b>	0.045
<b>With resistor and diode</b> Bulb : 60 V - 1.2 W (1) x1 ♂ — ⊗ — ♀ x2 x1 ♀	230 V, 50/60 Hz	<b>DS2W</b>	0.028
<b>With resistor, diode and "test" function</b> Bulb : 60 V - 1.2 W (1) x5 ♂ — ⊗ — ♀ x2 x1 ♀	230 V, 50/60 Hz	<b>DS2P</b>	0.028
<b>With transformer, 6 V</b> Bulb : 6 V - 1.2 W (1) x1 ♂ — ⊗ — ♀ x2	110/120 V 220/240 V 380/420 V 500 V	<b>DTSC</b> <b>DTSD</b> <b>DTSE</b> <b>DTSG</b>	0.082 0.082 0.082 0.082
<b>With transformer, 24 V</b> Bulb : 24 V - 1.2 W (1) x1 ♂ — ⊗ — ♀ x2	220/240 V	<b>DTSK</b>	0.082

(1) Bulb not included. BA 9s base fitting type required, see page 5/21.  
(2) The bulb voltage rating must equal that of the supply voltage to the pilot light.

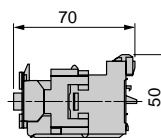
DFSN



DS2N, DS2F  
DS2P, DS2W



DTS●, DWSM●●



# Control and signalling units Ø 22 mm (fixing)

Signalling units DOMINO 22  
Adaptable sub-assemblies : body/contact assemblies  
with screw terminals

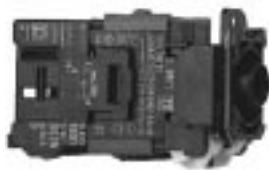
Characteristics :  
page 5/12  
Accessories :  
pages 5/22 to 5/25

## References

### Body/contact assemblies for spring return illuminated pushbuttons



DFSN20



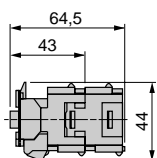
DS2N11

Screw terminal connections, fixing from the front

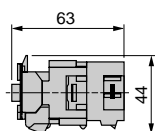
Supply Type and scheme	Voltage	Contact(s)	Contact scheme	Reference	Weight kg
<b>Direct</b> Bulb : 2 W max. (1) X1 $\circ$ $\otimes$ $\circ$ X2	250 V max.	N/O		<b>DFSN10</b>	0.033
		N/C		<b>DFSN01</b>	0.033
		N/O + N/C		<b>DFSN11</b>	0.033
		N/O + N/O		<b>DFSN20</b>	0.033
		2N/O + 2N/C		<b>DFSN22</b>	0.054
<b>Direct with diode and "test" function</b> Bulb : 2 W max. (1), (2) X1 $\circ$ $\otimes$ $\circ$ X2 X5 $\circ$	250 V max.	N/O + N/C		<b>DS2N11</b>	0.049
		2N/O		<b>DS2N20</b>	0.049
<b>Direct with 2 diodes</b> Bulb : 2 W max. (1), (2) X1 $\circ$ $\otimes$ $\circ$ X2 X5 $\circ$	250 V max.	N/O + N/C		<b>DS2F11</b>	0.049
<b>With resistor</b> Bulb : 130 V - 2.6 W (1) X1 $\circ$ $\otimes$ $\circ$ X2	230 V 50/60 Hz	N/O + N/C		<b>DWSM11</b>	0.066
		2N/O		<b>DWSM20</b>	0.066

(1) Bulb not included. BA 9s base fitting type required, see page 5/21.  
(2) The bulb voltage rating must equal that of the supply voltage to the illuminated pushbutton.

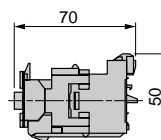
DFSN●●



DS2N●●, DS2F●●



DWSM●●



# Control and signalling units Ø 22 mm (fixing)

Signalling units DOMINO 22  
Adaptable sub-assemblies : body/contact assemblies  
with screw terminals

Characteristics :  
page 5/12  
Accessories :  
pages 5/21 to 5/24

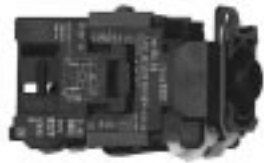
## References

### Body/contact assemblies for spring return illuminated pushbuttons (continued)

#### Screw terminal connections, fixing from the front (continued)



DS2W11

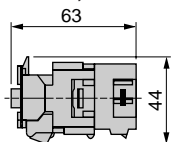


DS2P20

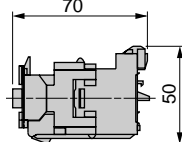
Supply Type and scheme	Voltage	Contacts	Contact scheme	Reference	Weight kg
<b>With resistor and diode</b> Bulb : 60 V - 1.2 W (1)	230 V	N/O + N/C		<b>DS2W11</b>	0.049
	50/60 Hz				
 <b>2N/O</b>	230 V	N/O + N/C		<b>DS2W20</b>	0.049
	50/60 Hz				
<b>With resistor, diode and "test" function</b> Bulb : 60 V - 1.2 W max. (1)	230 V	N/O + N/C		<b>DS2P11</b>	0.049
	50/60 Hz				
 <b>2N/O</b>	230 V	N/O + N/C		<b>DS2P20</b>	0.049
	50/60 Hz				
<b>With transformer, 6 V</b> Bulb : 6 V - 1.2 W max. (1)	110/120 V	N/O + N/C		<b>DTSC11</b>	0.103
 <b>2N/O</b>	110/120 V	N/O + N/C		<b>DTSC20</b>	0.103
 <b>2N/O</b>	220/240 V	N/O + N/C		<b>DTSD11</b>	0.103
<b>2N/O</b>	220/240 V	N/O + N/C		<b>DTSD20</b>	0.103
<b>380/420 V</b>	380/420 V	N/O + N/C		<b>DTSE11</b>	0.103
<b>500 V</b>	500 V	N/O + N/C		<b>DTSG11</b>	0.103
<b>With transformer, 24 V</b> Bulb : 24 V - 1.2 W max. (1)	220/240 V	N/O + N/C		<b>DTSK11</b>	0.103
	220/240 V	N/O + N/C			

(1) Bulb not included. BA 9s base fitting type required, see page 5/21

DS2P●●, DS2W●●



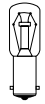
DTS●●●



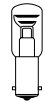
# Control and signalling units Ø 22 mm (fixing)

## Control and signalling units DOMINO 22

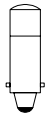
### References of accessories and spare parts Bulb selection table



Z25



Z30



Z110R

#### Bulbs

Description	Supply voltage	Power	Colour	Sold in lots of	Unit reference	Weight kg
<b>Incandescent</b> BA 9s base fitting	6 V	1.2 W	Clear	10	Z25	0.002
	12 V	1.2 W	Clear	10	Z26	0.002
	24 V	1.2 W	Clear	20	Z27	0.002
	48 V	1.2 W	Clear	10	Z28	0.002
	60 V	1.2 W	Clear	20	Z29	0.002
	130 V	2.6 W	Clear	20	Z32	0.002
<b>Neon</b> BA 9s base fitting	110 V		Clear	10	Z30	0.003
	220 V		Clear	20	Z31	0.003
<b>LED light source</b> BA 9s base fitting	~ or --- 24 V	0.5 W	Red	5	Z97R	0.003
			Green	5	Z97G	0.003
			Yellow	5	Z97Y	0.003
<b>LED flashing light source</b> BA 9s base fitting	--- 24 V	0.5 W	Red	5	Z110R	0.003
			Green	5	Z110G	0.003
			Yellow	5	Z110Y	0.003

#### Bulb selection related to the application

Bulb type	Supply voltage	Average life	Illuminosity	Resistance to vibration
<b>Incandescent</b>	6 V	20 000 h	Good	Good
	12 V	15 000 h		
	24 V	10 000 h		
	48 V	5000 h		
	60 V	3000 h		
	130 V	2000 h		
<b>Neon</b>	≥ 110 V	20 000 h	Weak	Very good
<b>LED light source</b>	24 V	60 000 h	Good	Very good

#### Selection of the bulb and associated body

Bulb type	Type of supply	Body type
<b>Incandescent</b>	Direct	DFSN
	Direct with 2 diodes	DS2F
	With transformer	DTS, DTN
	With resistor	DWSM
	Direct with diode and "test" function	DS2N
	With resistor and diode	DS2W
	With resistor, diode and "test" function	DS2P
<b>Neon</b>	Direct 110 or 220 V	DFSN
<b>LED light source</b>	Direct 24 V	DFSN

# Control and signalling units Ø 22 mm (fixing)

## Control and signalling units DOMINO 22

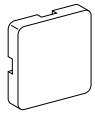
### References of accessories and spare parts

#### Colour inserts for pushbuttons See page 5/24 for marked versions



Z40●

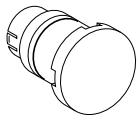
Description	Sold in lots of	Colour	Unit reference	Weight kg
<b>CIRCULAR without marking</b>	20	Red	<b>Z40R</b>	0.002
		Green	<b>Z40G</b>	0.002
		Yellow	<b>Z40Y</b>	0.002
		Blue	<b>Z40B</b>	0.002
		Black	<b>Z40S</b>	0.002
		White	<b>Z40W</b>	0.002



Z41●

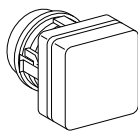
<b>SQUARE without marking</b>	10	Red	<b>Z41R</b>	0.002
		Green	<b>Z41G</b>	0.002
		Yellow	<b>Z41Y</b>	0.002
		Blue	<b>Z41B</b>	0.002
		Black	<b>Z41S</b>	0.002
		White	<b>Z41W</b>	0.002

#### Colour lens caps for illuminated pushbuttons See page 5/24 for marked versions



Z22●

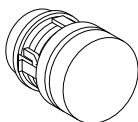
Description	Sold in lots of	Colour	Unit reference	Weight kg
<b>CIRCULAR without marking</b>	5	Red	<b>Z22R</b>	0.003
		Green	<b>Z22G</b>	0.003
		Yellow	<b>Z22Y</b>	0.003
		Blue	<b>Z22B</b>	0.003
		White	<b>Z22W</b>	0.003



Z23●

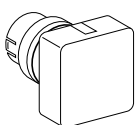
<b>SQUARE without marking</b>	5	Red	<b>Z23R</b>	0.003
		Green	<b>Z23G</b>	0.003
		Yellow	<b>Z23Y</b>	0.003
		Blue	<b>Z23B</b>	0.003
		White	<b>Z23W</b>	0.003

#### Colour lens caps for pilot lights See page 5/24 for marked versions



Z19●

Description	Sold in lots of	Colour	Unit reference	Weight kg
<b>CIRCULAR without marking</b>	5	Red	<b>Z19R</b>	0.003
		Green	<b>Z19G</b>	0.003
		Yellow	<b>Z19Y</b>	0.003
		Blue	<b>Z19B</b>	0.003
		White	<b>Z19W</b>	0.003



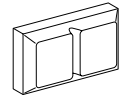
Z20●

<b>SQUARE without marking</b>	5	Red	<b>Z20R</b>	0.003
		Green	<b>Z20G</b>	0.003
		Yellow	<b>Z20Y</b>	0.003
		Blue	<b>Z20B</b>	0.003
		White	<b>Z20W</b>	0.003

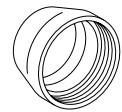
# Control and signalling units Ø 22 mm (fixing)

## Control and signalling units DOMINO 22

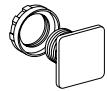
### References of accessories and spare parts



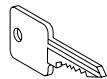
Z96



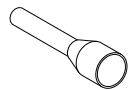
Z106●



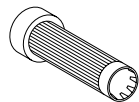
Z03



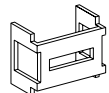
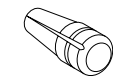
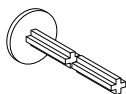
Z07



Z02

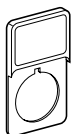


Z01

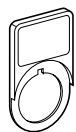


Z36

Z05



Z15



Z16

### Protective covers

Description	For use with :	Colour	Sold in lots of	Unit reference	Weight kg
<b>Boot</b> Degree of protection IP 65	Double headed pushbuttons	Transparent	5	<b>Z96</b>	0.006
<b>Silicone protective caps</b> Degree of protection IP 66		Red	5	<b>Z106R</b>	0.010
		Black	5	<b>Z106S</b>	0.010
		Green	5	<b>Z106G</b>	0.010
		Transparent	5	<b>Z106W</b>	0.010

### Blanking plugs

Description	Colour	Sold in lots of	Unit reference	Weight kg
<b>Square headed</b> Degree of protection IP 65	Grey	10	<b>Z03</b>	0.006
	Black	10	<b>Z33</b>	0.006
<b>Circular headed</b> Degree of protection IP 65	Grey	10	<b>Z04</b>	0.006
	Black	10	<b>Z34</b>	0.006

### Keys

For lock type	Sold in lots of	Unit reference	Weight kg
<b>4A 185</b>	2	<b>Z07</b>	0.007
<b>8D1</b>	2	<b>Z18</b>	0.007

### Accessories

Description	Sold in lots of	Unit reference	Weight kg
<b>Fixing nut</b>	10	<b>Z08</b>	0.002
<b>Bulb extractor</b>	5	<b>Z02</b>	0.035
<b>Bezel tightening key</b>	5	<b>Z01</b>	0.020
<b>Extended pushbutton operator kit</b> (overload reset for example) Maximum extension : 150 mm	1	<b>Z36</b>	0.009
<b>Marker holder</b> for bodies	100	<b>Z05</b>	0.001

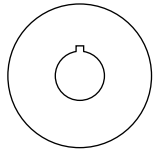
### Legends and holders

Description	Sold in lots of	Unit reference	Weight kg
<b>Self-adhesive legends, 19 x 27 mm</b> (metallic finish, without marking)	25	<b>01W</b>	0.002
<b>Legend holder for square operating heads</b> (without legend)	25	<b>Z15</b>	0.003
<b>Legend holder for circular operating heads</b> (without legend)	25	<b>Z16</b>	0.003

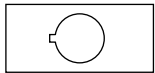
# Control and signalling units Ø 22 mm (fixing)

## Control and signalling units DOMINO 22

### References of accessories and spare parts



Z09



Z10

### Yellow contrast plates for emergency stop pushbuttons

Dimensions	For head	Marking	Sold in lots of	Unit reference	Weight kg
Ø 65 mm	D●B1● D●C2● D●C3● D3B1GR	Without marking	5	Z09	0.004
		EMERGENCY STOP	1	Z09E	0.004
68 x 30 mm	D●B1● D●C1●, D●C2● D●C3● D●D1● D3B1GR	Without marking	5	Z10	0.003
		EMERGENCY STOP	1	Z10E	0.003



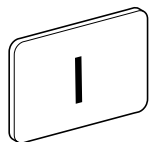
Z40G62T

### Pushbutton inserts and lens caps with English markings

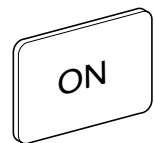
Marking	Reference (1)	Marking	Reference (1)
CLOSE	65T	ON	62T
DOWN	77T	OPEN	64T
EMERG. STOP	82T	OUT	73T
FAST	78T	RAISE	70T
FORWARD	66T	RESET	68T
HIGH	80T	REVERSE	67T
IN	72T	RUN	75T
INCH	74T	SLOW	79T
JOG	69T	START	17T
LOW	81T	STOP	18T
LOWER	71T	UP	76T
OFF	63T		

### Legends 27 x 19 mm, with universal markings (2)

Marking	Sold in lots of	Unit reference	Weight kg	Marking	Sold in lots of	Unit reference	Weight kg
Without	25	01W	0.002				
o	1	02W	0.002	II	1	04W	0.002
I	1	03W	0.002	O I	1	05W	0.002



03W



62W

### Legends 27 x 19 mm, with English markings (2)

Marking	Unit reference	Weight kg	Marking	Unit reference	Weight kg
CLOSE	65W	0.002	OFF ON	85W	0.002
DOWN	77W	0.002	ON	62W	0.002
EMERG. STOP	82W	0.002	OPEN	64W	0.002
FAST	78W	0.002	OUT	73W	0.002
FORWARD	66W	0.002	RAISE	70W	0.002
HAND AUTO	21W	0.002	REVERSE	67W	0.002
HAND O AUTO	24W	0.002	RUN	75W	0.002
HIGH	80W	0.002	SLOW	79W	0.002
IN	72W	0.002	START	17W	0.002
INCH	74W	0.002	STOP	18W	0.002
JOG	69W	0.002	STOP START	90W	0.002
LOW	81W	0.002	TEST	84W	0.002
LOWER	71W	0.002	UP	76W	0.002
OFF	63W	0.002			

(1) Suffix to be added to the references of the colour inserts and lens caps (shown on page 5/22) or the complete operating heads.

Example : green circular insert Z40G with marking ON becomes Z40G62T

(2) Self-adhesive legends 27 x 19 mm with metallic finish and black markings.

For legend holders without legend and blank legends, see page 5/23.

#### Other versions

Coloured inserts, lens caps and self-adhesive legends available with special texts to order :

- circular inserts and lens caps : 1 line of 10 characters maximum or 2 lines of 9 characters maximum.

- square inserts and lens caps : 1 to 3 lines of 10 characters maximum.

- self-adhesive legends : 1 to 3 lines of 12 characters maximum.

Please consult your Regional customer centre.

# Control and signalling units Ø 22 mm (fixing)

## Control stations DOMINO 22 Enclosures

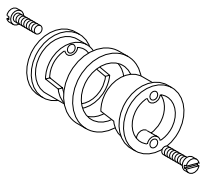
### References, accessories and dimensions

#### Enclosures

Description	Number of ways	Reference	Weight kg
<b>Metal enclosures</b> Cover : light grey (RAL 7035) Base : dark grey (RAL 7016)	1	<b>DMG1</b>	0.380
	2	<b>DMG2</b>	0.460
	3	<b>DMG3</b>	0.580
	4	<b>DMG4</b>	0.580
	5	<b>DMG5</b>	0.685
<b>Plastic enclosures</b> Cover : light grey (RAL 7035) Base : dark grey (RAL 7016)	1	<b>DMI1</b>	0.174
	2	<b>DMI2</b>	0.230
	3	<b>DMI3</b>	0.285
	4	<b>DMI4</b>	0.285
	5	<b>DMI5</b>	0.340
<b>Plastic enclosures</b> Cover : yellow (RAL 1021) Base : dark grey (RAL 7016)	1	<b>DMI1Y</b>	0.174

#### Accessories

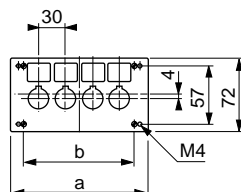
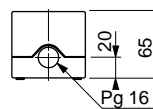
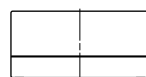
Description	Application	Sold in lots of	Unit reference	Weight kg
<b>Coupling for 2 different enclosure types</b>	Enclosures DMG●, DMI●	1	<b>Z06</b>	0.012
<b>Seal (degree of protection IP 65)</b>	Mounting XB2-B control and signalling units on enclosures DMG●	7	<b>ZB2-BZ004</b>	0.001



Z06

#### Dimensions

Enclosures  
**DMG●, DMI●, DMI1Y**



	a	b
<b>DMG1, DMI1</b>	90	74
<b>DMI1Y</b>	90	74
<b>DMG2, DMI2</b>	135	119
<b>DMG3, DMI3</b>	180	164
<b>DMG4, DMI4</b>	180	164
<b>DMG5, DMI5</b>	225	209



# Control and signalling units Ø 22 mm (fixing)

Control stations DOMINO 22  
Adaptable sub-assemblies : body/contact assemblies

## References



DG10

### Body/contact assemblies for spring return pushbuttons and selector switches (1)

Description	Contact(s)	Scheme	Reference	Weight kg
<b>1 contact</b>	N/O		<b>DG10</b>	0.026
	N/C		<b>DG01</b>	0.026
<b>2 contacts</b>	N/O + N/C		<b>DG11</b>	0.026
	N/O + N/O		<b>DG20</b>	0.026
	N/C + N/C		<b>DG02</b>	0.026
	N/O + N/C make before break		<b>DG1U</b>	0.026



DFGN11

### Body/contact assembly for spring return illuminated pushbuttons (1)

Supply Type and scheme	Voltage	Contacts	Contact scheme	Reference	Weight kg
<b>Direct</b> Bulb : 2 W max. (2)	250 V max.	N/O + N/C		<b>DFGN11</b>	0.034

### Pilot light bodies (1)

Supply Type and scheme	Voltage	Reference	Weight kg
<b>Direct</b> Bulb : 2 W max. (2) $X1 \text{ } \circ \text{ } \otimes \text{ } \circ \text{ } X2$	250 V max.	<b>DFGN</b>	0.022
<b>With resistor</b> Bulb : 130 V - 2.6 W (2) 	230 V, 50/60 Hz	<b>DWGM</b>	0.046
<b>With transformer, 6 V</b> Bulb : 6 V - 1.2 W (2) 	110/120 V	<b>DTGC</b>	0.083
	220/240 V	<b>DTGD</b>	0.083
	380/420 V	<b>DTGE</b>	0.083
	500 V	<b>DTGG</b>	0.083



DFGN



DTGD

(1) Screw terminal connections, fixing from the rear. For operating heads see pages 5/12 to 5/16.  
(2) Bulb not included. BA 9s base fitting type required, see page 5/21.

# Control and signalling units Ø 22 mm (fixing)

## Joystick controllers

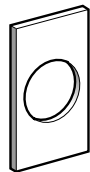
### References, dimensions

Characteristics :  
page 5/12

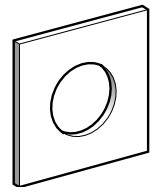


XD2-PA12

XD2-PA14



ZD2-GY2201



ZD2-GY4201

### Complete units type XD2-P, with circular chromium plated metal bezel

#### Compact, contact blocks non interchangeable

Description	Operation	Spring return to zero position	Bezel finish	Reference	Weight kg
<b>2 direction</b> 30 x 85 mm fixing centres 	1 notch 1 N/O contact per direction	Without	Chromium	<b>XD2-PA12</b>	0.115
		With	Chromium	<b>XD2-PA22</b>	0.115
<b>4 direction</b> 85 x 85 mm fixing centres 	1 notch 1 N/O contact per direction	Without	Chromium	<b>XD2-PA14</b>	0.145
		With	Chromium	<b>XD2-PA24</b>	0.145

#### Legend plates

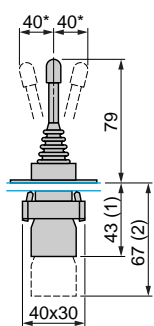
Description	Text	Colour	Reference	Weight kg
<b>2 direction</b> 30 x 48 mm	Without	Black one side, red reverse	<b>ZD2-GY2201</b>	0.002
		White one side, yellow reverse	<b>ZD2-GY2401</b>	0.002
	With (1) (specify when ordering)	Black letters, white background	<b>ZD2-GY2001</b>	0.002
<b>4 direction</b> 48 x 48 mm	Without	Black one side, red reverse	<b>ZD2-GY4201</b>	0.003
		White one side, yellow reverse	<b>ZD2-GY4401</b>	0.003
	With (1) (specify when ordering)	Black letters, white background	<b>ZD2-GY4001</b>	0.003

(1) 2 lines of 11 characters maximum per direction.

#### Other versions

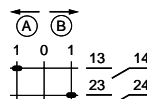
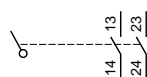
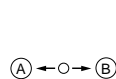
XD2-PA joystick controllers with :  
- contact blocks with Faston connectors,  
- gold flashed contacts for low power switching.  
Please consult your Regional customer centre.

#### Joystick controllers XD2-PA●●

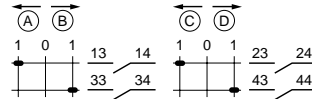
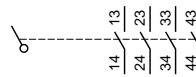
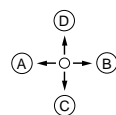


\* in each of the 4 directions  
(1) 2 direction  
(2) 4 direction

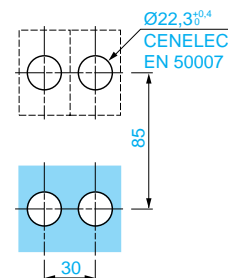
#### XD2-PA12 XD2-PA22



#### XD2-PA14 XD2-PA24



#### Panel cut-out (thickness 1 to 6 mm) XD2-PA (2 direction)



#### XD2-PA (4 direction)

