

- Botões de comando para painel com furações de Ø22mm
- Diversas cores e modelos
- Grau de proteção IP40
- Certificado UL
- Push button switches for panels with Ø22mm holes
- Various colors and types
- IP40 protection degree
- UL approval



Código de compra / How to order

M20 IC R 2 - R 2 - 1A

Furo para fixação / Mounting hole

M20 - Ø22 mm Corpo metálico / Metallic body
P20 - Ø22 mm Corpo plástico / Plastic body

Tipo / Type

AF - Cabeçote plano (faceado) / Flush button
RR - Cabeçote com ressalto (não faceado) / Non flush button
IG - Cabeçote plano iluminado / Illuminated flush button
AM - Cabeçote cogumelo Ø40mm / Mushroom button Ø40mm
AK - Cabeçote cogumelo Ø40mm c/ trava e giro p/ destravar
Mushroom button Ø40mm push-lock twist-to-release
AC - Cabeçote cogumelo Ø40mm c/ trava e chave p/ destravar
Mushroom button Ø40mm push-lock and key-to-release
BY - Cabeçote cogumelo Ø60mm c/ trava e giro p/ destravar
Mushroom button Ø60mm push-lock twist-to-release
BE - Cabeçote cogumelo Ø40mm c/ trava e puxa p/ destravar
Mushroom button Ø40mm push-lock pull to release
AX - Cabeçote cogumelo Ø30mm c/ trava e giro p/ destravar
Mushroom button Ø30mm push-lock twist-to-release
AP - Duplo toque* / Twin-touch*
IT - Duplo toque iluminado* / Illuminated twin-touch*
ID - Duplo toque iluminado* / Illuminated twin-touch*
SC - Seletor c/ knob curto / Selector with short lever
SL - Seletor c/ knob longo / Selector with long lever
KN - Seletor c/ chave e remoção em 0
Selector switch with key operation withdrawable in 0 position
IC - Seletor c/ knob curto iluminado / Illuminated selector with short lever
P - Sinalizador (alimentação direta) / Indicator (direct supply)

Formato / Shape

R - Redondo / Round
L - Retangular / Rectangular

Contatos / Contacts

Em branco / Nil - Sinalizador / Indicator
1A - 1 NA / NO
1B - 1 NF / NC
1C - 1NA+1NF / NO+NC
2A - 2 NA / NO

Outros arranjos sob consulta
Other arrangements on inquiry

Alimentação do LED / LED power supply

Em branco / Nil - 220VCC/VCA / VDC/VAC
7 - 24VCC/VCA / VDC/VAC

Apenas modelos iluminados
Only illuminated model

Cor / Color

Em branco / Nil - Botão AP ou IT / Button AP or IT
B - Preto / Black
R - Vermelho / Red
G - Verde / Green
BL - Azul / Blue
Y - Amarelo / Yellow
W - Branco / White

Posição / Position

Branco / Nil - Botão pulsador ou sinalizador / Push button or Indicator
2 - 2 pos. fixas 90° / fix ₁ ₂
3 - 2 pos. retorno 90° / return ₁ ₂
4 - 3 pos. fixas 45° / fix ₁ ₂ ₃
5 - 3 pos. 45° retorno direita, esquerda fixa ₁ ₂ ₃
right returns and left fix
6 - 3 pos. 45° retorno esquerda, direita fixa ₁ ₂ ₃
left returns and right fix
7 - 3 pos. retorno da direita, esquerda 45° ₁ ₂ ₃
with left and right returns

Obs.: Nem todos os códigos possíveis estão disponíveis. Para todos os casos, blocos de contatos podem ser adicionados. (No máximo 8 blocos).

Todos os botões possuem modo de operação pulsador momentâneo, exceto botões de emergência (AK, BY, BE e AX), chaves seletoras e sinalizadores.

*Os botões de duplo toque têm como padrão os atuadores com as cores Verde / Vermelho, devendo-se assim indicar no momento da composição do código a opção em branco.

Not all possible codes are available. It is possible to add contact blocks for all types. (Max. 8 blocks).

All buttons have momentary pushbutton operation mode except emergency buttons (AK, BY, BE and AX), selector switches and indicators.

*Actuators of twin touch switches are standard as Green / Red. Please specify "Nil" in the code.

Especificações / Specifications

Grau de proteção / Protection degree	IP 40
Tensão de operação Ue / Operation voltage Ue	380V
Tensão de isolamento Ui / Insulation voltage Ui	660V
Umidade / Humidity	45% ~ 85% sem condensação 45% ~ 85% without condensation
Temperatura / Temperature	-5 ~ 40°C
Corrente nominal Ie / Nominal current Ie	5A
Corrente térmica Ith / Thermal current Ith	10A
Resistência de contato inicial / Initial contact resistance	<50mΩ
Vida elétrica / Electrical life	500 x 10 ³ operações / operations
Vida Mecânica / Mechanical life	10 ⁶ operações / operations

Acessórios / Accessories

Blocos de contato / Contact blocks M20-1A 1NA 5A/380V 1NO 5A/380V M20-1B 1NF 5A/380V 1NC 5A/380V		M20-RT Bloco para função alternada Alternate function block Para modelos For models M20AF P20AF M20AR P20AR M20IG P20IG M20AM P20AM No máximo 2 blocos de contato podem ser adicionados Up to contact blocks can be added	P20-TF Tapa furo Ø22mm Ø22mm hole closer 	P20-ADP30 Usado em pares Used in pairs Adaptador para furo Ø30mm Ø30mm hole adaptor	P20-ID Identificador com porta etiqueta Identifier with label holder 2 11 31,8 29,5 25 Ø22
P20-PA Protetor plástico amarelo para botão de emergência Yellow plastic protector for emergency button 55,5 47,5 Ø22 39,6		Capa protetora de silicone Silicone protective cover P20-CAP1 Para modelos For models M20/P20AF M20/P20IG P20-CAP2 Para modelos For models M20ITL		P20-IDEM Amarelo com gravação vermelha Yellow with red writing Identificador de emergência Emergency identifier Ø60	P20-ID123 Preto com gravação branca Black with white writing Identificador p/ chave seletora 3 posições Identifier for 3 positions selector switch 38 18 28 Ø22

Instruções / Instructions

Dimensões do atuador Button dimensions Para botões normais For standard buttons	Dimensões dos blocos Block dimensions Para botões iluminados For illuminated buttons	Dimensões do atuador+blocos Button+Blocks dimensions A+B+C A+B+D+C	A dimensão total dos botões de comando é sempre composta pelo tamanho do atuador (A) + suporte de fixação (B) + bloco(s) de contato (C) + bloco de alimentação do LED (D) Full dimension of mounted push buttons is composed by actuator (A) + mounting bracket (B) + contact block(s) (C) + LED power supply unit (D) Veja dimensões na página 118 e 119 See dimensions at page 118 and 119
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Dimensões / Dimensions (mm)

Instalação / Installation

 30 40 Ø22 Exceto botão cogumelo >Ø30mm Except mushroom button >Ø30mm	 40 40 Botão cogumelo Ø40mm Mushroom button Ø40mm	 60 60 Botão cogumelo Ø60mm Mushroom button Ø60mm
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M20 - Metálico / Metallic		P20 - Plástico / Plastic	
Não iluminado / Non-illuminated	Iluminado / Illuminated	Não iluminado / Non-illuminated	Iluminado / Illuminated
 40 30 11 6 24 29 15	 40 11 6 18 24 29	 40 11 6 24 29 15	 40 11 6 18 24 29

Redondos / Round



M20AFR-B-1A
M20AFR-R-1B
M20AFR-G-1A
M20AFR-Y-1A
M20AFR-BL-1A
M20AFR-W-1A



P20AFR-B-1A
P20AFR-R-1B
P20AFR-G-1A
P20AFR-Y-1A
P20AFR-BL-1A
P20AFR-W-1A



M20ARR-B-1A
M20ARR-R-1B
M20ARR-G-1A
M20ARR-Y-1A
M20ARR-BL-1A
M20ARR-W-1A



P20ARR-B-1A
P20ARR-R-1B
P20ARR-G-1A
P20ARR-Y-1A
P20ARR-BL-1A
P20ARR-W-1A



M20IGR-R□-1C
M20IGR-G□-1C
M20IGR-Y□-1C
M20IGR-BL□-1C
M20IGR-W□-1C



P20IGR-R□-1C
P20IGR-G□-1C
P20IGR-Y□-1C
P20IGR-BL□-1C
P20IGR-W□-1C

Iluminados / Illuminated

Cogumelo / Mushroom



M20AMR-B-1A
M20AMR-R-1B
M20AMR-G-1A
M20AMR-Y-1A



P20AMR-B-1A
P20AMR-R-1B
P20AMR-G-1A
P20AMR-Y-1A



M20AKR-R-1B
M20BYR-R-1B



P20AKR-R-1B
P20BYR-R-1B



M20BER-R-1B



M20AXR-R-1B



P20AXR-R-1B



M20ACR-R-1B



P20ACR-R-1B

com chave
with key

Retangulares / Rectangular

Iluminados / Illuminated



M20APL-1C
Acompanha capa protetora de silicone
With silicone protective cover



P20APL-1C



M20ITL-Y□-1C



P20IDL-Y□-1C

Sinalizadores / Indicators



M20PR-BL□
M20PR-G□
M20PR-R□
M20PR-W□
M20PR-Y□

Alimentação direta
Direct supply

Acompanha lâmpada LED
With LED lamp

Chaves Seletoras / Selector Switches

Iluminado / Illuminated



M20SCR2-B-1A
M20SCR3-B-1A
M20SCR4-B-2A
M20SCR5-B-2A
M20SCR6-B-2A
M20SCR7-B-2A



P20SCR2-B-1A
P20SCR3-B-1A
P20SCR4-B-2A
P20SCR5-B-2A
P20SCR6-B-2A
P20SCR7-B-2A



M20SLR2-B-1A
M20SLR3-B-2A
M20SLR4-B-2A
M20SLR7-B-2A



P20SLR2-B-1A
P20SLR3-B-2A
P20SLR4-B-2A
P20SLR7-B-2A



M20ICR2-R□-1A
M20ICR4-R□-2A
M20ICR2-G□-1A
M20ICR4-G□-2A
M20ICR2-Y□-1A
M20ICR4-Y□-2A



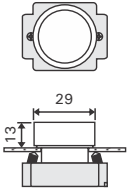
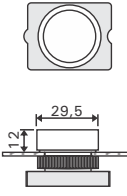
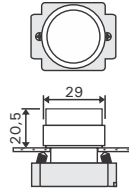
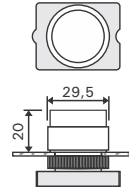
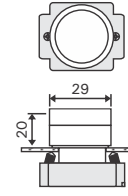
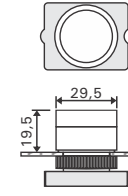
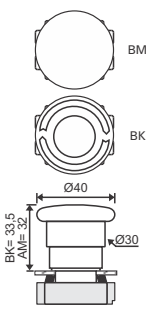
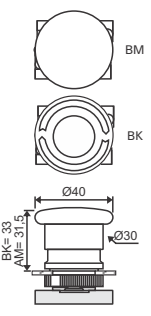
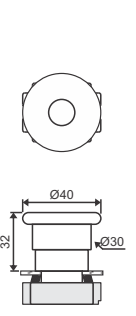
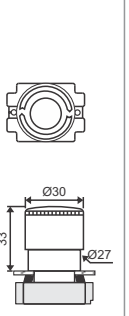
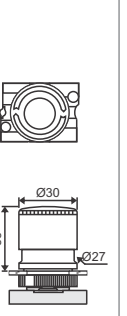
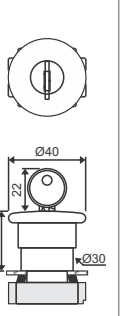
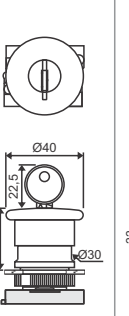
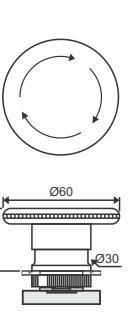
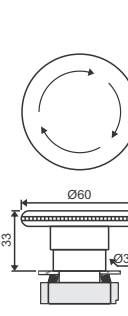
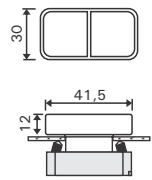
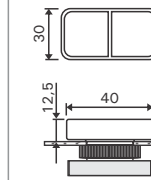
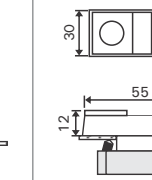
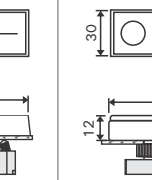
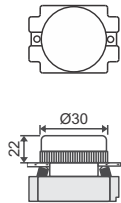
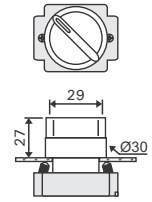
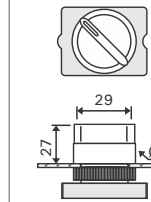
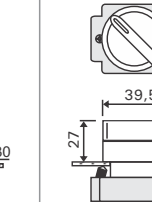
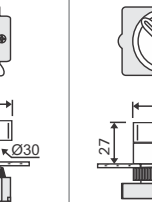
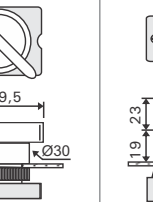
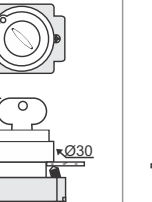
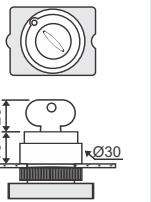
M20KNR2-B-1A
M20KNR4-B-2A



P20KNR2-B-1A
P20KNR4-B-2A

com chave
with key

Dimensões / Dimensions (mm)

Botões de comando / Push button switches									
Redondos / Round									
Iluminados / Illuminated									
 M20AF	 P20AF	 M20RR	 P20RR	 M20IG	 P20IG				
Cogumelo / Mushroom									
 M20AM M20AK	 P20AM P20AK	 M20BE	 M20AX	 P20AX	 M20AC	 P20AC	 P20BY	 M20BY	
Retangulares / Rectangular					Sinalizador / Indicators				
 M20AP	 P20AP	 M20IT	 P20ID	 M20PR					
Chaves Seletoras / Selector Switches									
 M20SC	 P20SC	 M20SL	 P20SL	 M20KN	 P20KN	 M20IC			