

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Panel Actuators and Indicators Type PB Long-handle Selector Switches







- Self-hold or spring return
- Knob colour choice
- Two and three positions
- cULus and CE
- IEC/EN 60947-5-1, UL 508, IEC/EN 60073, IEC/EN 60529

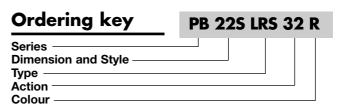


Product description

Selector switches are mechanical switches that can be turned right, center or left to open or to close the electric contacts. They are mostly used to start/stop devices or

to switch between two/three electric circuits.

They should be ordered in parts (operator + holder + contact block) and installed in an enclosure.



Approvals







Dimensions and styles

22S = Ø22mm (Ø0.87") Standard style **22B** = Ø22mm (Ø0.87") Bezel style

Type

LRS = Long-handle selector switch

Actions (the arrows indicate the spring return function)

21 = Two positions L R 22 = Two positions L C	32 = Three positions L [*] 33 = Three positions L [*]	C ™ C R
23 = Two positions C *R 31 = Three positions L C R	34 = Three positions L	

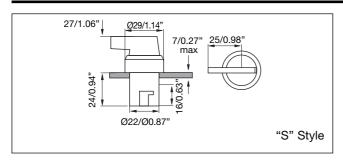
Colours

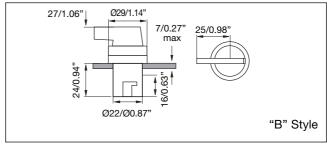
R = Red K = Black Y = Yellow G = Green

General data

Peripheral of actuator	AL
Actuator	Pa
Mechanical life	≥30 x 10⁴ cycles
Operating temperature	-25 to +70°C (-13 to +158°F)
Storage temperature	-30 to +80°C (-22 to +176°F)
Degree of protection	IP 65

Dimensions - Push Buttons mm/inches





Panel Actuators and Indicators Type PA2 Contact Block





- High switching power
- Double switch
- Industrial applications
- 10A switching capacity
- Up to 500VAC
- Modular mounting (up to 3 elements)
- Screw terminals
- High reliability
- cULus and CE
- According to EN ISO 13850 (only NC slow action)
- IEC/EN 60947-5-1, IEC/EN 60947-5-5, UL 508

Product description

Switching element equipped with two independent elements. Available in different switching configurations. Pole and throw configurations can be single

pole single throw (SPST) or double pole single throw (DPST).

Elements can be snapped to each other on the bottom, up to 3.

Ordering key

PA 2 110 / 1

	_ •
Type —	
Number of contacts ———	
Contact code —]
Options ($1 = Snap action -$	

2 = Slow action with forced opening \(\to \) NC contact)

Approvals







Technical data

Contact resistance	≤ 50m Ω
Travel	5.8 ± 0.2mm (2.28" ± 0.08")
Rated insulation Voltage U _i	660VAC/DC (acc. to IEC 60947-5-1) 600VAC/DC (acc. to UL508)
Rated imp. withstand voltage U _{imp}	2500VAC 50Hz 1min.
Minimum switching power Min Current Min Voltage	100mA 24V
Switch housing	PC
Contact parts	Cu
Contact material	
Standard Optional Optional for aggressive atmospheres	Hard silver Gold/silver Silver/palladium
Operating temperature	-25 to +70°C (-13 to +158°F)
Storage temperature	-30 to +80°C (-22 to +176°F)

Contact code

Contact configuration	Contact code		
2 NO contacts (DPST)	200		
2 NC contacts (DPST)	020		
1 NC contact (SPST)	010		
1 NO contact (SPST)	100		
1 NC + 1 NO contacts (DPST)	110		

Contact characteristics

Contact Rating AC1	10A @ 25	OVAC	
Contact Rating		AC15	DC13
(acc. to IEC 60947-5-1)	@ 24V	10A	6A
	@ 110V	8A	1A
	@ 220V	6A	0.5A
	@ 380V	4A	-
	@ 500V	2.5A	-
AC Contact Rating (acc. to UL 508)		A600	B600
B600 (all snap codes)	@ 120V	6A	3A
A600 (all slow codes)	@ 240V	3A	1.5A
	@ 480V	1.5A	0.75A
	@ 600V	1.2A	0.6A
DC Contact Rating (acc. to UL 508)		Q600	Q300
Q600 (all snap codes)	@ 125V	0.55A	0.55A
Q600 (100, 200 slow codes)	@ 250V	0.27A	0.27A
Q300 (010, 020, 110 slow codes)	@ 480V	0.10A	-
·	@ 600V	0.10A	-

ige is	al t, es	ı	Maximum current, amperes (acc. to UL508)				Maxi	mum			
Contact rating code designation	Thermal continous te current, Amperes	12	OV	24	·0V	48	OV	600V		volt-amperes	
rati des	confi	Make	Break	Make	Break	Make	Break	Make	Break	Make	Break
A600	10	60	6.00	30	3.00	15	1.5	12	1.2	7200	720
B600	5	30	3.00	15	1.50	7.50	0.75	6	0.6	3600	360
ating	al test it, es	Maximum make or break volt-amperes (acc. to UL508) Maximum make or break volt-amperes									
tact ra code signat	herm inous urrer nper	'	viaxiiiu	our	ont, an	iperes	(acc. to	ULJUG	'	volt-ar	nperes
Contact rating code designation	Thermal continous te current, Amperes		125V		25		`	01 to 6	· ·	@ 30	nperes IOV or ss
Contact r code designa	Therm continous 2: Amper				-	0V	`		00V	@ 30	OV or ss
	8		125V		25	0V 27	`	01 to 6	00V	@ 30 le	OV or ss 9

Terminals

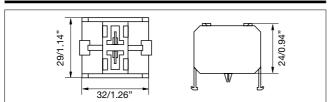
Screw terminals

Max. section sigle-core wire Max. section stranded wire Copper conductor wire

Terminal tightening torque

2 x 2.5mm² (0.004sq.inch) 2 x 1.5mm² (0.002sq.inch) 14 AWG @ 60°C or 75°C CU conductor 1.2Nm (10.6in.lb.)

Dimensions mm/inches



Wiring diagram

	19 414	9. 4	
2NO	13 23	2NC \(\bigc\) \(\big	1NC
1NO	13	1NO+1NC \(\frac{3}{4} \frac{111}{12} \)	



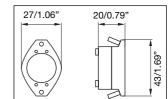
Holders



Holder type "M"

Code

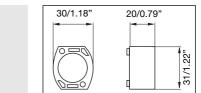
Material



Holder type "P"

Code

Material



Holder type "N"

Code

Material

PB MB N

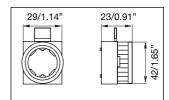
PB MB M

Zn + PBT

PB MB P

PBT

PC



Assembling and Mounting

It come easy to get a complete product. Just to choose the operator, the holder, the lamp element and the contact block (up to 3).















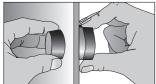
Operator

Holder

Contact block

Bezel Push Button with PA2

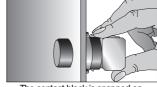
To install it, the only tool needed is a screwdriver. The same used to wiring the contact block can be used to fix the push-button.



The operator will be inserted into the panel.



The holder will be secured at the back by two screws or nut.



The contact block is snapped on.



Accessories for Panel Actuators

	Terminal shield			
	Installed behind the wiring screws of the contact block to avoid electric shock.	PC		PA 2 SHIELD
	Mounting ring Ø22mm (0.87")			
<u> </u>	Installed on plastic panel to strengthen mounting.	FE		PA MR 22
A	Mounting ring Ø25mm (0.98")			
	When the mounting hole is Ø25mm (0.98"), it should be add to the panel.	FE		PA MR 25
	Label frame			
	Hang it on the push button or pilot light, for symbol or text explanation.	PC	10mm/0.39" 18mm/0.71"	PA LBF 11 PA LBF 18
	Yellow protection ring			
	To protect button and to prevent strike or mistaking operation.	ABS Rubber	Ø40mm/Ø1.57" Ø60mm/Ø2.36"	PA YPR 4 PA YPR 6
	Panel hole cap Ø22mm (0.87")			
	For blocking up prepared or useless holes on the panels.	ABS		PA PHC 22