



- Different types of actuators: metal, flat metal and chrome finished plastic
- Simple and snap on installation
- Highly conductive contacts
- Robust for severe ambient conditions
- Contact operation: double breaking action, direct opening operation and self cleaning
- Plastic and metal enclosure.

PLatinum series

	SERIES SEC.	LPS - PAGE	LPF PAGE	LPC PAGE
Pushbutton actuators, spring return and push-push	7 -	6	16	24
Mechanical reset button, spring return	7 -	7	-	25
Pushbutton actuators with symbol, spring return	7 -	7	17	25
Mushroom-head pushbutton actuators	7 -	8	-	26
Double and triple-touch button actuators, spring return	7 -	9	-	27
Selector switch actuators, lever and key	7 -	10	18	28
Selector switch actuator knobs	7 -	11	19	29
Illuminated pushbutton actuators, spring return and push-push	7 -	12	20	30
Illuminated mushroom-head pushbutton actuators	7 -	12	-	30
Double-touch button actuators, spring return with indicator	7 -	13	-	31
Illuminated selector actuators.....	7 -	13	21	31
Pilot light heads	7 -	14	22	32
USB and RJ45 communication interfaces	7 -	-	23	32
Joysticks	7 -	15	-	-
Monoblock LED pilot lights, steady light	7 -	-	-	33
Monoblock potentiometers	7 -	-	-	34
Monoblock buzzers	7 -	-	-	34
Pushbutton actuators, spring return with symbol	7 -	35		
Mounting adapters	7 -	36		
Contact elements	7 -	37		
LED and test elements	7 -	39		
Accessories, spare parts and labels	7 -	44		
Plastic control stations	7 -	52		
Palm switches	7 -	59		
Metal control stations and enclosures	7 -	60		
Dimensions	7 -	62		
Wiring diagrams	7 -	69		



BUTTON ACTUATORS

- Spring return flush, extended and shrouded
- Push-push flush and extended
- Mushroom-head
- Mechanical reset
- Illuminated.



DOUBLE AND TRIPLE-TOUCH ACTUATORS

- Double-touch with or without indicator
- Triple-touch.



SELECTOR SWITCHES

- Short lever
- Long lever
- Key
- Knob
- Illuminated.



PILOT LIGHTS Ø22mm

- Monoblock LED.

MONOBLOCK BUZZERS Ø22mm

- Continuous or pulse tone.

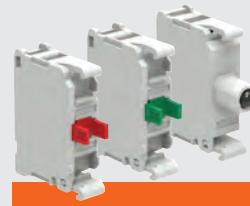
COMMUNICATION INTERFACES

- USB.
- RJ45.



POTENTIOMETERS Ø22mm

- Potentiometer included in the product with graduated scale
- Potentiometer drives with:
 - graduated scale
 - variable index.



ADD-ON ELEMENTS, ACCESSORIES AND SPARE PARTS

- Mounting adapters
- Contact elements
- Lamp holders
- LED integrable elements
- Labels, label holders, protections, etc.



JOYSTICKS Ø22mm

- 2 directions
- 4 directions
- 2 directions with mechanical interlock
- 4 directions with mechanical interlock
- Complete with contact elements.



PLASTIC CONTROL STATIONS

- 1 to 6 holes option without actuators
- Complete versions from 1 to 3 actuators in various combinations.



METAL CONTROL STATIONS

- Without actuators (from 1 to 16 holes)
- Version without holes.

A COMPLETE SERIES AT YOUR FINGERTIPS!



PLatinum

- **HIGH DEGREE OF PROTECTION IP66, IP67 and IP69K**

The actuators have been tested to guarantee a degree of protection per IEC/EN IP66, IP67, IP69K and per UL Type 4X, appropriate for use even in extreme ambient conditions.

- **ELEGANT STYLE AND ERGONOMIC DESIGN**

All the series elements have an ergonomic design and, at the same time, particular care has been given to the finest detail aesthetics.

- **LONG ACTUATOR MECHANICAL LIFE**

High performance characteristics assure 5,000,000 cycle mechanical life for spring return actuators, 1,000,000 for double and triple touch units and 300,000 for emergency-stop types.

- **MATERIALS RESISTANT TO OILS, SOLVENTS AND HYDROCARBONS**

- **CUSTOMIZATION**

To facilitate warehouse management, it is possible to purchase spring return or push-push button actuators without caps or lenses and at the same time caps and lenses as spare parts. This allows for custom buttons to be completed from stock.



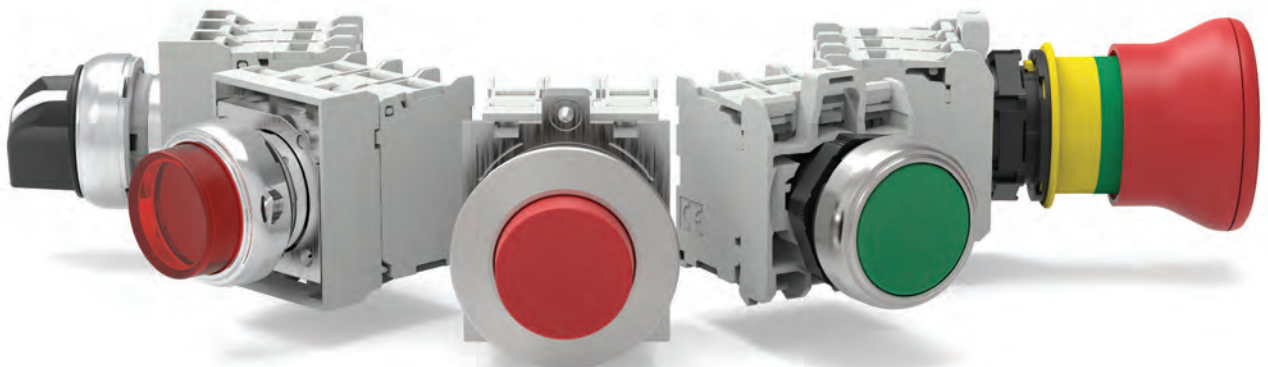
- **HIGH STANDARDIZATION**

Contact elements, LED light elements and a wide range of accessories are common to all types of the series.

- **USAGE AT EXTREME TEMPERATURE CONDITIONS**

Operation temperature range between -25° and +70°C.

- **CERTIFICATIONS: cULus, EAC, RINA and CCC.**



Ø30MM FLAT METAL LPF



- OPERATORS MADE OF ALUMINIUM AND ZINC ALLOY
- ACTUATOR PROFILE OF ONLY 4mm
- HIGH STRENGTH
- ERGONOMIC AND FUNCTIONAL
- SCREW PANEL FIXING
- TYPES
 - spring return and push-push button actuators
 - lever, key and knob selectors
 - illuminated spring return and push-push button actuators
 - illuminated lever selectors
 - USB and RJ45 communication interfaces.

Ø22MM METAL LPS



- OPERATORS MADE OF ALUMINIUM AND ZINC ALLOY
- HIGH STRENGTH AND IMPACT RESISTANCE
- SCREW PANEL FIXING
- TYPES
 - spring return and push-push button actuators
 - spring return mechanical reset button actuators
 - mushroom head push button actuators
 - spring return double and triple-touch button actuators
 - lever, key and knob selector switch actuators
 - illuminated spring return, push-push and mushroom-head actuators
 - spring return double-touch button actuators with indicator
 - illuminated lever selectors
 - joysticks.

Ø22MM CHROMED PLASTIC LPC

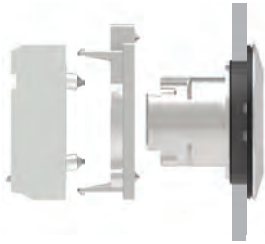


- ACTUATORS MADE OF POLYAMIDE WITH EXTERNAL CHROME RING
- SNAP-ON FAST INSTALLATION OF THE MOUNTING BASE AND CONTACT ELEMENTS
- PANEL FIXING BY THREADED RING
- TYPES
 - spring return and push-push button actuators
 - spring return mechanical reset button actuators
 - mushroom head push button actuators
 - spring return double and triple-touch button actuators
 - lever, key and knob selector switch actuators
 - illuminated spring return, push-push and mushroom-head actuators
 - spring return double-touch button actuators with indicator
 - illuminated lever selectors
 - monoblock LED pilot lights
 - monoblock potentiometers and buzzers
 - USB and RJ45 communication interfaces.

QUICK AND EASY ACTUATOR INSTALLATION

Ø30mm FLAT METAL

- The operator fits into the Ø30mm panel hole with an adapter that retains it securely by two screws.



- The operator has a seal with rubber grommets which ensure stable fitting.



Ø22mm METAL

- The operator fits into the Ø22mm panel hole with an adapter that retains it securely by two screws.

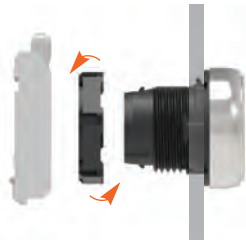


- The operator has a seal with rubber grommets to ensure stable fitting.



Ø22mm CHROMED PLASTIC

- The operator mounts to the Ø22mm panel hole with a threaded ring. The mounting base snaps onto the back of the operator itself.



- The operator has a seal with rubber grommets to ensure stable fitting.
- The anti-rotation lug on the operator collapses into the seal to enable installation even to round holes without an anti-rotation notch.
- The mounting plate and operators have clearly visible reference marks to facilitate snapping the operators onto the base.



CONTACT ELEMENTS

- Common to all Platinum series operators.
- Miniaturised size
- High electric conductivity - 5V 1mA
- Up to 9 contact elements can be installed
- Versions with screw, spring-clamp (push-in), Faston and base mount contact blocks for use with LPZP control stations
- Contact operation: double breaking action, direct (positive) action operation and wiping effect.
- Electrical contact and LED elements are snapped onto the mounting adapter.
- The activation of the middle contact is standard supplied on all non-illuminated spring return and push-push button or selector switch actuators.



CONTACT AND LED ELEMENTS WITH SPRING-CLAMP (PUSH-IN) TECHNOLOGY

- PUSH-IN technology reduces the time required to connect stiff cables and cables with crimped terminals. The wire simply inserts into the clamp for a secure, sealed connection - no screwdriver needed!
- The clamping force is long-lasting and unaffected by vibration and impact.

Push-in technology



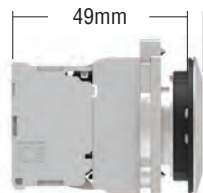
HIGH-LUMINOSITY LED ELEMENTS

- Miniaturised size
- Long electrical life: 100,000h
- Versions with screw, spring-clamp (push-in) and for bottom of LPZP control stations
- Overvoltage protection
- Withstand vibrations
- Protection against stray currents in wiring
- Flickering phenomenon reduction
- Steady and flashing light versions
- Supply voltages: 12...30VAC/DC, 85...140VAC, 185...265VAC
- Test elements installed alongside and connected with the relative LED element allow checking if all LED elements of the installation are working properly.

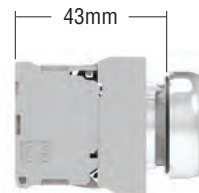


LOW PROFILE OPERATORS AND COMPACT FOOTPRINT

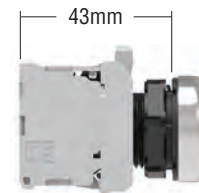
- The operator's external collar has a low profile and reduced front depth.
- The total depth from the panel surface to the first contact element is just 43mm for the Ø22mm metal/plastic type, and 49mm for the Ø30mm flush-mounting metal type.



Ø30mm flat metal



Ø22mm metal



Ø22mm chromed plastic

DOUBLE AND TRIPLE-TOUCH ACTUATORS



- IEC IP66, IP67, IP69K and UL Type 4X degree of protection
- Double-touch button actuators, with 2 flush or 1 flush and 1 extended buttons
- Triple-touch button actuators with 2 flush and middle extended buttons
- Versions with or without indicator.

MECHANICAL RESET BUTTONS



- Rod adjustment directly on actuator front (1...4mm/0.04...0.16")



- Up to 6 contact elements can be mounted.

EMERGENCY STOP ACTUATORS



- Actuator structure suitable to warrant direct opening operation with mechanical latching for emergency stopping per ISO 13850 and IEC/EN/BS 60947-5-5
- There is a green line around the actuator body to spot when the emergency stop is at rest or activated
- Use of **Ronis key**
- Various accessories available (e.g. yellow E-stop disks, padlockable protection, rubber actuator boots, label holders and labels)
- Auto-monitor contact elements are available with functions to:
 - Constantly control the correct installation (mounting adapter and NC contact with the actuator) and proper operation of the NC contact
 - Open the circuit in the case of malfunctions (e.g. the contact detaches from the mounting adapter due to strong vibrations or shock).



SELECTOR SWITCH ACTUATORS



- Lever design assures excellent grip
- Option to differentiate the actuation of the central contact



- **High visibility** on front or side and actuator inscription shows exact switch position



- Use of **Ronis key**



- **Activation of the middle contacts is standard supplied** on 2 and 3 position selector switches.

PILOT LIGHTS



- Protection rating IP66, IP67, IP69K and UL Type 4X for LED monoblock pilot lights and pilot light heads
- Long life and low consumption
- Supply voltages:
 - 110...120VAC, 230VAC, 380...415VAC
 - 110...125VDC, 220VDC
 - 12VAC/DC, 24VAC/DC, 48VAC/DC.

MONOBLOCK POTENTIOMETERS



- Potentiometer included in the product
- Protection rating IP66, IP67 and IP69K and UL Type 4X
- Resistance values from 1 to 500kΩ.

ADAPTER FOR Ø30MM HOLES



- Allows installation of Ø22mm operators in Ø30mm holes
- Two versions; one for buttons and selector switches and one for emergency buttons.

MONOBLOCK BUZZERS



- Continuous or pulse-tone monoblock buzzers in a single product
- IP40 version (90dB/10cm) and IP66, IP67, IP69K and UL Type 4X, version (80dB/10cm) available.

COMMUNICATION INTERFACES



- Protection rating IP65, UL Type 4X
- USB and RJ45 for Ethernet types with data transmission in both directions
- USB type 3.0 (backward compatible with USB 2.0)
- Versions complete with cable.

JOYSTICKS



- Complete with contact elements
- **2 and 4 directions** available versions with or without mechanical interlock.

ACCESSORIES



- DIN rail adapter
- Label holders and labels
- Rubber operator hoods
- Padlockable protection
- Protective covers.

PLASTIC CONTROL STATIONS



- Protection rating IP66, IP67, IP69K and Type 4X per UL
- 1 to 6 hole empty versions
- Complete 1 to 3 operator versions in a variety of combinations
- Quick installation and easy cabling of the contacts and LED elements with mounting to the bottom (snap mounting to the base)
- Option to also install screw-in and spring-mounting LED elements together with the operator inside the cover panel.

MOUNTING THE CONTACTS TO THE BOTTOM OF THE CONTROL STATION



- The use of contact and LED lamp holder elements that snap mount to the bottom of the control station makes for easier cabling.

YELLOW CONTROL STATION WITH ACTUATOR SHROUD



- Protective cover integrated into the button panel cover
- Protection rating IP66, IP67, IP69K and UL Type 4X
- 4 knockout holes for cable wiring
- Kit of 4 caps to protect the screws.

METAL CONTROL STATIONS



- Protection rating IP66, IP67 and UL Type 4X
- From 1 to 16 holes version
- 1 hole version with actuator protection
- Version without holes.

Joysticks



LPSJ4...
(without mechanical interlock)

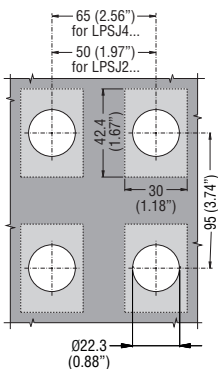


LPSJ2...
(with mechanical interlock)

Accessories



LPXAU101



new

new

Order code	Type of positions	N° auxiliary elements	Qty per pkg	Wt
		NO	n°	[kg]

Without mechanical interlock. Complete with auxiliary contact. Label holder excluded.

LPSJ200		2	1	0.082
LPSJ201		2	1	0.082
LPSJ400		4	1	0.104
LPSJ401		4	1	0.104

With mechanical interlock in centre position. Complete with auxiliary contact. Label holder excluded.

LPSJ210		2	1	0.082
LPSJ211		2	1	0.082
LPSJ410		4	1	0.104
LPSJ411		4	1	0.104

Order code	Description	Qty per pkg	Wt
		n°	[kg]
LPXAU101	2-4 directional holder for adhesive legends	1	0.004

See page 7-48 for the complete list of available labels.

Operational characteristics

- Any mounting position allowed
- LPSJ2... types can be used with LPZ... control stations
- Ambient conditions:
 - Operating temperature: -25...+60°C
 - Storage temperature: -40...+70°C
- Degree of protection:
 - Per IEC/EN: IP66
 - Per UL: Type 1, 2, 3R, 4, 4X, 12, 12K
 - IP20 for contact elements.

Materials

An aluminium and zinc alloy (zama) is used for the metal parts whereas plastic parts are made of polyamide and polycarbonate. The sealing boot is made of NBR rubber.

Mechanical endurance

Mechanical life: 1,000,000 cycles.

General characteristics of contact elements

Wiping action and dual scraping-oscillating effect.
IEC rated insulation voltage: 690V
IEC rated thermal current I_{th}: 10A
UL/CSA and IEC/EN/BS 60947-5-1 designation: A300 Q300.
IEC/EN operational characteristics in AC15 category:

[V]	12	24	48	120	240
[A]	6	6	6	6	3

IEC/EN operational characteristics in DC13 category:

[V]	12	24	48	125	250
[A]	0.55	0.55	0.55	0.55	0.27

Short circuit protection fuse, max calibre: 10A gG/SC.

Contact resistance: ≤20mΩ.

Terminals: Clamp screw with washer

Maximum tightening torque: 1Nm/0.74lb.ft.

Mounting adapter and contact elements

The joystick is standard supplied with the mounting adapter and contact elements.

The adapter is fixed to the mounting surface by means of incorporated screws (T_{max} = 0.8Nm/0.59lb.ft).

The joystick latches onto the mounting adapter by simple rotation.

Contact elements snap onto the mounting adapter.

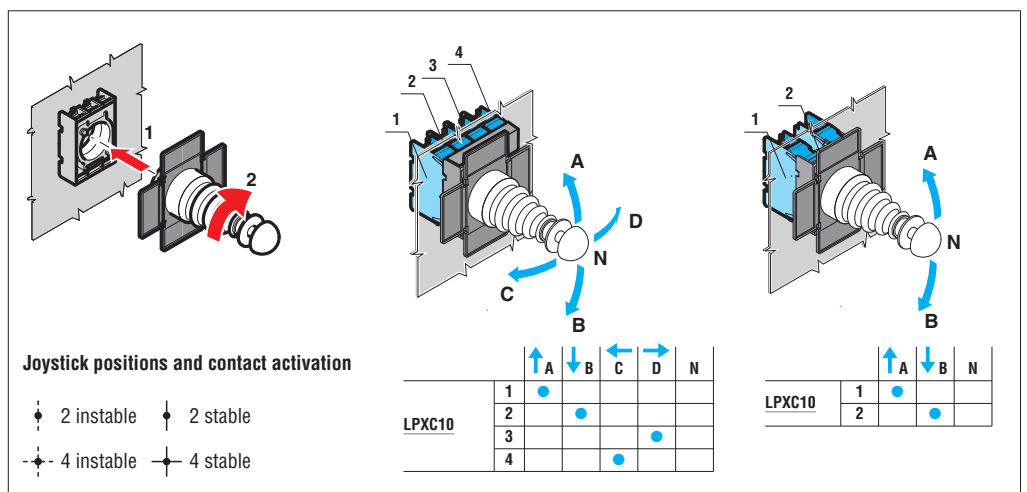
2 LPXC... contacts are mounted on joystick LPSJ2... type and 4 LPXC... contacts on LPSJ4... type.

The mounting adapter and contact elements of LPSJ2... types can be internally mounted on LPZ... control stations covers.

Certifications and compliance

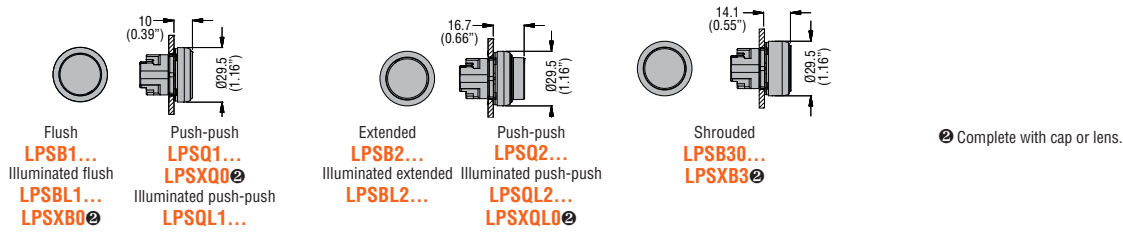
Certifications: cULus.

Compliant with standards: IEC/EN/BS 60947-1, IEC/EN/BS 60947-5-1, UL508, CSA C22.2 n° 14.

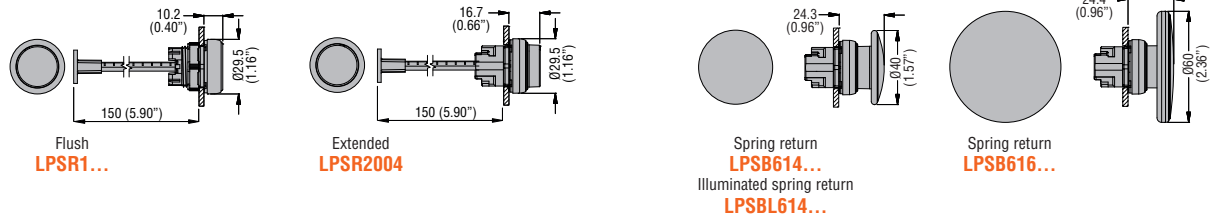


LPS TYPES

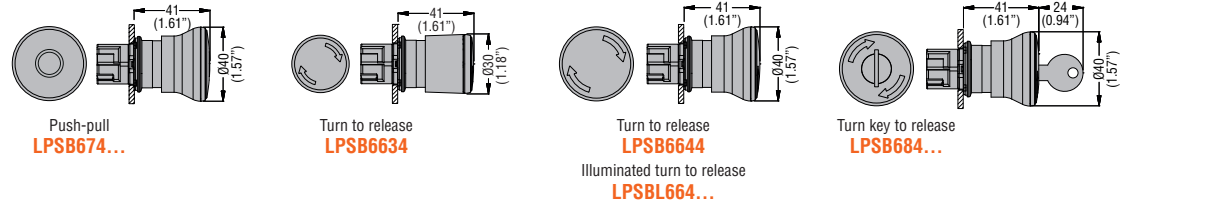
Spring-return and push-push buttons



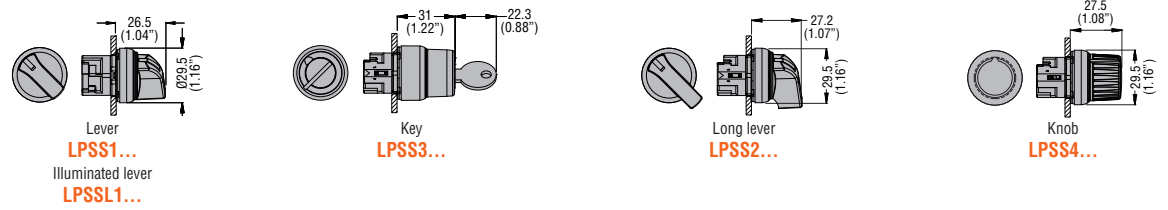
Mechanical buttons



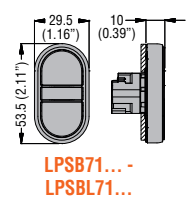
Mushroom-head latch button actuators



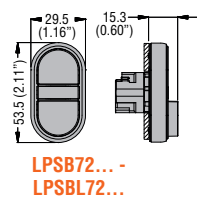
Selector switch actuators



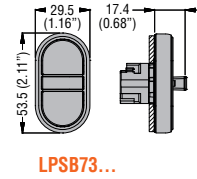
Flush double-touch buttons with or without light indicator



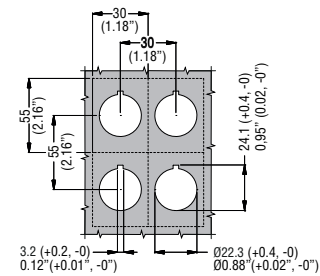
Double-touch buttons with an extended button with or without light indicator



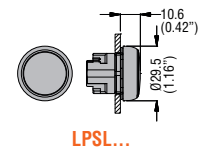
Triple-touch button with middle extended button



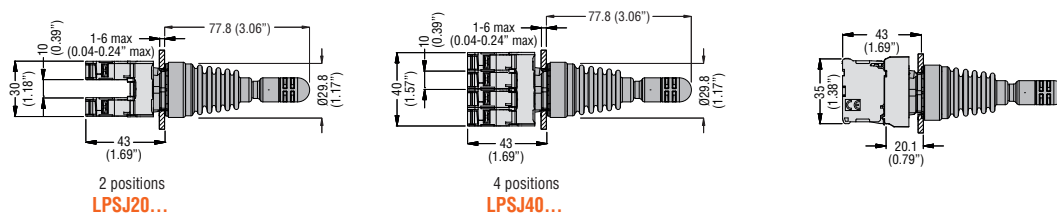
Drillings - Minimum recommended distances



Pilot light head



Joystick with free actuation lever



Joystick with mechanical latch lever

