

Choosing the Right Panel Mount Indicator

A practical specification guide for engineers and OEM designers

Panel Mount Indicators (PMIs) are among the most visible components on any control panel and among the most consequential for operator safety and machine usability. A PMI combines a **bezel, lens, light source** (LED, incandescent, or neon) and a **wire / terminal interface** into a single status light that must stay clear and obvious, often in direct daylight. VCC builds PMIs in single-color, bi-color configurations, in diameters from **0.16”(3.98 mm) to 0.88” (22 mm)** , plus custom sizes.

Specifying the right PMI early in the design cycle prevents costly rework later. This guide outlines the eight details VCC’s engineering team recommends documenting before you select a standard part or request a custom quote.

Eight specifications to consider before selecting a PMI

#	SPECIFICATION	WHAT TO CAPTURE	WHY IT MATTERS
1	Mounting hole diameter	The exact panel cutout diameter (Ø).	Determines which bezel and body family will fit and seal correctly.
2	Mounting method	Front mount, rear mount, press-fit, speed-nut, or threaded with hex nut.	Drives installation speed, retention strength, and line tooling.
3	Power requirements	Operating voltage and current.	Confirms drive compatibility. VCC FLEX VOLT™ models accept a wide range to simplify your BOM.
4	Operating environment	Regular, daylight, outdoor, high-moisture, or dusty.	Sets the IP rating, lens, and sealing required – e.g., IP67 for washdown or outdoor use.
5	Bezel type	Plastic or metal.	Balances cost, weight, ruggedness, and aesthetic requirements.
6	Light color	Single, bi-color (e.g., red/green)	Defines your status-coding scheme and affects stock and lead time.
7	Lens shape, viewing angle & finish	Dome or flat; wide or narrow angle; clear or diffused.	Controls how visible and uniform the indication is at the operator’s eye position.
8	Brightness	High- or low-intensity (mcd).	Ensures readability for the ambient light level of the application.

Pro Tip: Capturing all eight specifications up front lets VCC quote a drop-in standard part or fast-track a custom design in a single pass, with no back-and-forth.

Featured VCC PMI series

CNX722 RUGGEDIZED PMI	PML50 IP67 PMI	CNX718 RUGGEDIZED PMI
FLEX VOLT™ 0.87” (22 mm) mounting hole 5–28VDC, 120VAC - Wire leads, screw block, or tab terminals - Fast-pitch threads for quick install - Direct sunlight visibility - Colors: red, green, yellow, blue, white - IP67 · vibration resistant · RoHS - Long-life LED	FLEX VOLT™ 0.668” (17.5 mm) mounting hole 5–28VDC - Unique low-profile optical lens - Bi-color red/green available - Wire leads - Direct sunlight visibility - Colors: red, green, yellow, blue, white - IP67 · vibration resistant · RoHS	0.688” (17.47 mm) mounting hole 5VDC / 12VDC / 28VDC, 120VAC - Dome lens, water-clear with Fresnel pattern - Wide viewing angle - Wire leads, tab terminals - Colors: red, amber, green, white - Protects panel from dust & moisture - Vibration resistant · RoHS