

# VTB Pick-to-Light Optical Touch Button



Ergonomic optical touch button for pick-to-light applications



- Microcontroller-based photoelectric touch buttons
- A cost-effective and easy-to-install alternative to capacitive touch switches and mechanical push buttons for errorproofing and parts-verification applications
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; requires no physical pressure to operate
- Illuminated base provides a bright, easy-to-see job light in one or two colors, depending on model
- LED power and output indicators
- NPN or PNP output, depending on model
- Immune to ambient light, EMI and RFI interference
- High excess gain cuts through heavy airborne contamination to function in almost any environment; optional protective field cover available
- 12 to 30V dc operation

One-Color Job Light Models						
Job Light Color			Cable*	Upper Housing	Output Type	Job Light Input
Green	Red	Blue				
VTBN6	VTBN6R	VTBN6B	2 m 4-wire cable	Polysulfone	NPN	0V dc
VTBN6Q	VTBN6RQ	VTBN6BQ	4-pin Euro QD			
VTBN6L	VTBN6RL	VTBN6BL	2 m 4-wire cable	Polycarbonate		
VTBN6LQ	VTBN6RLQ	VTBN6BLQ	4-pin Euro QD			
VTBP6	VTBP6R	VTBP6B	2 m 4-wire cable	Polysulfone	PNP	+10 to 30V dc
VTBP6Q	VTBP6RQ	VTBP6BQ	4-pin Euro QD	Polycarbonate		
VTBP6L	VTBP6RL	VTBP6BL	2 m 4-wire cable			
VTBP6LQ	VTBP6RLQ	VTBP6BLQ	4-pin Euro QD			

Two-Color Job Light Models				
Green and Red (see Wiring)	Cable*	Upper Housing	Output Type	Job Light Input
VTBN6GR	2 m 5-wire cable	Polysulfone	NPN	0V dc
VTBN6GRQ	5-pin Euro QD			
VTBN6GRL	2 m 5-wire cable	Polycarbonate		
VTBN6GRLQ	5-pin Euro QD			
VTBP6GR	2 m 5-wire cable	Polysulfone	PNP	+10 to 30V dc
VTBP6GRQ	5-pin Euro QD	Polycarbonate		
VTBP6GRL	2 m 5-wire cable			
VTBP6GRLQ	5-pin Euro QD			

Standard 2 m (6.5 ft) cable models are listed. To order the 9 m (30 ft) cable model, add suffix "W/30" to the cabled model number. (For example, VTBN6 W/30.) Models with a QD connector require a mating cable. (See [Quick Disconnect \(QD\) Cables](#) on page 5).





### **WARNING: Not To Be Used for Personnel Protection**

**Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death.** This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

## Overview

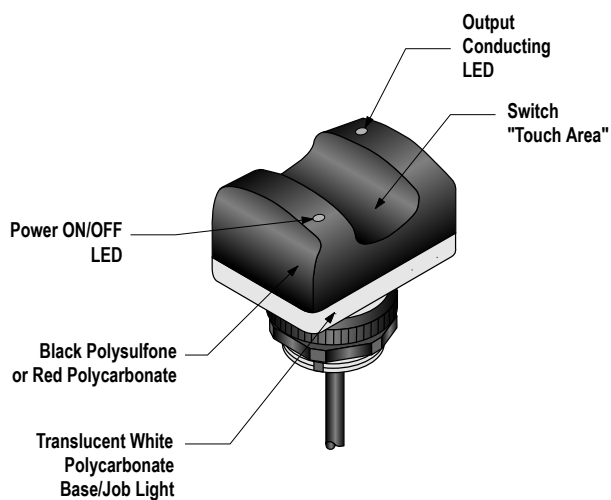
Banner VTB Series touch buttons are ergonomically designed to eliminate the hand, wrist, and arm stresses associated with mechanical push buttons. They require absolutely no physical pressure to operate. LED indicators light when power is on and outputs are activated.

The interfaces to a system controller, which is pre-programmed for a specific sequence of tasks. Mounted in or near each bin in an assembler's work station, the sensor job light signals the assembler which bins contain items to be picked in a given operation and in what order they should be picked.

As the assembler takes a part in sequence, then reaches a finger into the yoke of the corresponding Touch Button, the sensor senses that the part was removed and it sends an output signal to the controller. The controller then verifies if the correct part was taken and may respond by turning that job light OFF, activating the job light of the next bin in the sequence.

All models are immune to EMI, RFI, and ambient light interference. VTBs have either a black polysulfone or red polycarbonate upper housing (depending on model) and a translucent white polycarbonate base. Environmental considerations for use of the two upper housing types differ; see specifications. The entire base section lights to provide a bright job light where a task is to be performed. The 30 mm threaded base on all models provides easy mounting.

## Indicators



### **Power ON/OFF (red):**

Steady ON when power is applied

### **Output Conducting (red):**

Steady ON when button is activated

OFF when button is not activated

### **Job Light:**

Steady ON or flashing\* when a task is to be performed

\* Flashing job light is dependent on wiring. Color is dependent on model and wiring.