

# ZE175□, ZE275□

## 3-lead Wire PNP Output Type Solid State Sensor Switches

Products compliant  
with the EMC Directive



### Applicable cylinders

●Mini bit cylinders ●Jig cylinders C series ●Jig cylinders JC series ●Mini guide sliders ●Jig cylinders with guides ●Twin rod cylinders B series ●Rod sliders ●Multi sliders ●Z sliders ●WS ●WT ●ACY<sup>Note 2</sup> ●ACZ<sup>Note 2</sup> ●Flat rodless cylinders<sup>Note 2</sup> ●ORV<sup>Note 2</sup> ●ORS, MRS<sup>Note 2</sup> ●ORW, MRW<sup>Note 2</sup> ●NHC1 series ●Air Hands NHB ●Wide type Air Hands WHDP<sup>Note 3</sup> ●Flat type Air Hands ●RAG ●RAT ●Three-finger Hands

Notes: 1. Because the same conductor as the robot cable is used, it exhibits superior bending resistance.  
2. Horizontal lead wire only  
3. Vertical lead wire only

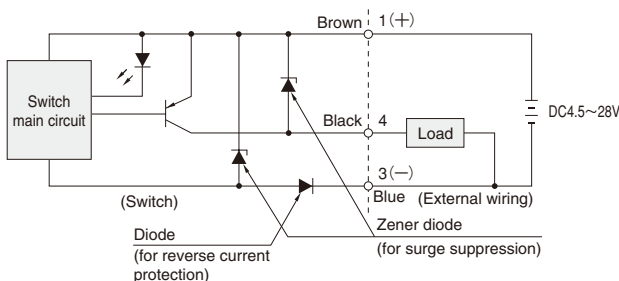
### Specifications

Item	Model	ZE175□	ZE275□
Wiring type		3-lead wire PNP output	
Lead wire direction		Horizontal	Vertical
Power supply voltage		DC4.5~28V	
Load voltage		DC4.5~28V	
Load current		50mA MAX.	
Consumption current		10mA MAX. (DC24V)	
Internal voltage drop <sup>Note 1</sup>		0.5V MAX. (10V or less at 20mA)	
Leakage current		50 μA MAX. (DC24V)	
Response time		1ms MAX.	
Insulation resistance		100MΩ MIN. (At DC500V Megger, between case and lead wire end)	
Dielectric strength		AC500V (50/60Hz) in 1 minute (Between case and lead wire end)	
Shock resistance <sup>Note 2</sup>		294.2m/s <sup>2</sup> [30G] (Non-repeated shock)	
Vibration resistance <sup>Note 2</sup>		88.3m/s <sup>2</sup> [9G] (Total amplitude 1.5mm [0.06in.], 10~55Hz)	
Environmental protection		IP67 (IEC standard), JIS C0920 (Water-proof type)	
Operation indicator		When ON: Red LED indicator lights up	
Lead wire <sup>Note 3</sup>		PCCV 0.15SQ×3-lead (Brown, blue, and black) ×ℓ	
Ambient temperature		0~60°C [32~140°F]	
Storage temperature range		-10~70°C [14~158°F]	
Mass		15g [0.53oz.] (For lead wire length A: 1000mm [39in.]), 35g [1.23oz.] (For lead wire length B: 3000mm [118in.]), 15g [0.53oz.] (For lead wire length G: 300mm [11.8in.] with M8 connector)	

Notes: 1. The internal voltage drop depends on load current.  
2. Measured by Koganei test standard.  
3. Lead wire length ℓ : A; 1000mm [39in.], B; 3000mm [118in.], G; 300mm [11.8in.] with M8 connector

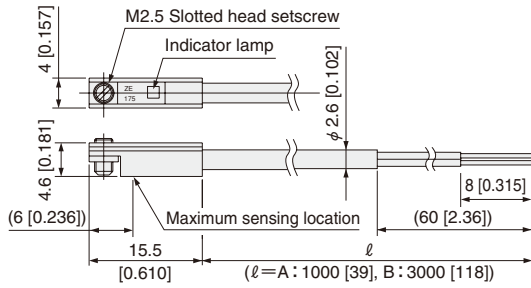
### Internal Circuit

#### ZE175□, ZE275□

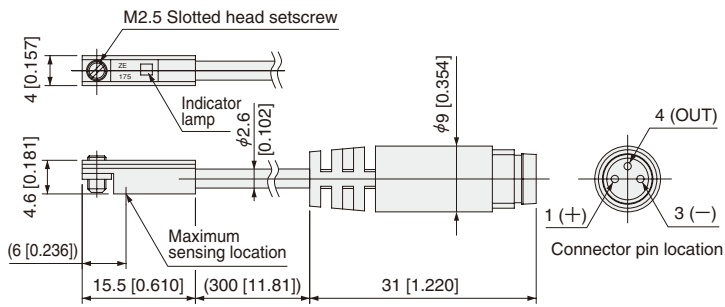


● Horizontal Lead Wire

**ZE175A**  
**ZE175B**

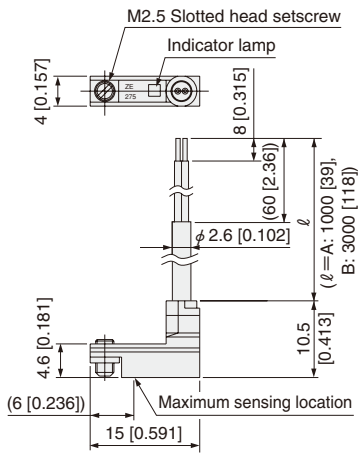


**ZE175G**



● Vertical Lead Wire

**ZE275A**  
**ZE275B**



**ZE275G**

