PLCs

IDEC

**Magnetic: DPRI** 

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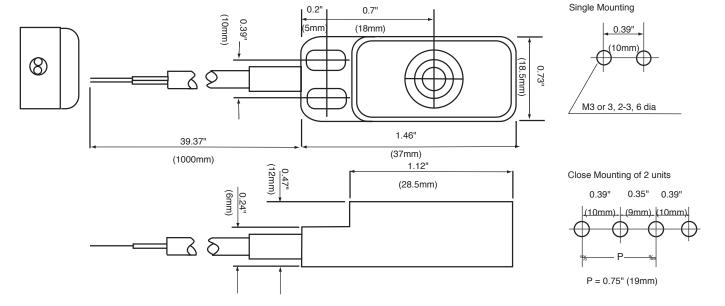
## **Magnetic Proximity Switches**



- Lightweight, compact design reduces mounting space requirements
- Compact size allows units to be mounted in close proximity to each other
- Sealed reed contact can be used in dusty locations
- · Long life and high reliability

The DPRI magnetic proximity switch incorporates a sealed reed switch and four magnets inside a compact housing. This self-contained proximity switch requires no external power supply and can detect the presence of magnetic objects without contact.

#### **Dimensions**



USA: 800-262-IDEC Canada: 888-317-IDEC 227

## **Specifications**

**Magnetic: DPRI** 

			DPRI-01
Normal Switching Distance		5mm ±10%	V
Operating Distance		0 to 4mm	<b>V</b>
Release Distance		Over switching distance, 9mm (maximum)	V
Repeat Error ON		0.05mm (maximum)	√
Repeat Error OFF		0.15mm (maximum)	√
Temperature Error (–10 to 50°C)		±0.5mm or less (20°C as standard)	√
Response Speed		300Hz or less (bounce 0.4ms or less)	√
Output	Contact Configuration	1NO	√
	Switching Capacity	AC: 10VA (maximum) DC: 10W (maximum)	√
	Operating Voltage	AC: 100V (maximum) DC: 100V (maximum)	√
	Operating Current	AC: 0.25A (maximum) DC: 0.25A (maximum)	√
	Initial Contact Resistance	0.35Ω (maximum)	√
Shock Resistance		20G or less	√
Ambient Temperature Range		−10 to +50°C	√
Sensing Object		Magnetic materials: Fe, Ni, Cu, Ferrite, etc.	√
Standard Sensing Object		30 x 20 x 1mm, Ferromagnetic soft iron plate	√
Life Expectancy	Electrical	20,000,000 operations	√
	Mechanical	1,000,000,000 operations	√
Lead Wire		Cable type: 5mm 2-core vinyl cabtyre cable, 3-1/3' (1m) long	V
Weight		Approximately 40g	√

#### **Part Number**

Description	Part Number
Magnetic Proximity Switch	DPRI-01

For information on accessories, see page 229.

### **Operation Principle**

The DPRI magnetic proximity switch incorporates a sealed reed switch and four magnets inside a compact housing. This self-contained proximity switch requires no external power supply and can detect the presence of magnetic objects without contact.