

**AUTOMATION
TECHNOLOGY**

INTERFERENCE SENSING MODULE



...intelligent solutions for automated movement™



- Ever get your hand caught in a door?
- Have elevator doors close on you without opening up?
- Have you seen damaged goods in a conveyor?

Hoerbiger-Origa's **NEW** Interference Sensing Module solves all these problems and more. It is designed to automatically reverse the direction of a pneumatic cylinder when it detects an obstruction.

What are the benefits of this technology?

Benefits:

- Clean, simple design — *Eliminates complex circuitry.*
- Cost effective — *Compared to alternative systems.*
- Versatile — *Controls all types of cylinders (AZ AZV, NZK, OSP-P, R, ROV) ranging from 8 mm to 80mm.*
- Sensitive — *Controls loads ranging from 2 ounces to over 400 lbs.*
- High flow rates — *C_v of 1.3*
- Wide variety of voltages — *9 volt battery to 220 VAC*

Applications:

- Automatic Doors/Door Guards
- Flying Knives
- Pallet Handling
- Automatic Feed & Conveyor Systems
- Variable Height Pick & Place
- Elevator Systems
- Case Packaging

How the system works. (see Figure 1.)

Momentary input from the start button shifts the valve to extend the cylinder (rodless or rod-type). Once the cylinder reaches the full extended position a momentary input signal from the retract button shifts the valve to retract the cylinder.

Loss of back pressure, caused by an obstruction, triggers the pressure switch to shift the valve and retract the cylinder. A reed switch overrides the detection at the cylinder's full extended position. If the normally closed reed switch is not used, the the cylinder will automatically retract after reaching the full extended position.

System Setup:

1. Load.

The supply pressure should be adjusted (regulated) to satisfy the load requirement of the system.

- The supply pressure range can be adjusted with a standard regulator.
- The supply pressure range of the IS module is between 22 and 116 PSI.

2. Speed.

The flow controls on the IS module should be adjusted to satisfy the speed requirement of the system.

- The exhaust throttle flow control can be adjusted with a flat head screw driver.

3. Sensitivity.

The pressure switch should be adjusted to meet the sensitivity requirement of the system.

- The pressure switch can be adjusted with a 5mm allen wrench.
- A clockwise adjustment results in more sensitivity.
- A counter-clockwise adjustment results in less sensitivity.

Ordering Instructions

Voltage	Part Number
12 VDC	IS0250-0133
24 VDC	IS0250-0233
110 VAC	IS0250-5733
220 VAC	IS0250-6133

Component Characteristics

Description	Units	Value
Medium		air
Filtration	μ	40
Lubrication		None
Supply Pressure (min.) (max.)	PSI	22 116
Flow	C _v l/min	1.3 1300
Ambient Temperature (min.) (max.)	°F	14 140
Fluid Temperature (min.) (max.)	°F	14 158

Power Consumption

Inrush	AC		DC
	50 Hz	60 Hz	
12	—	—	2.8 W
24	8.5 VA	8.5 VA	2.5 W
110	8.5 VA	8.5 VA	2.7 W
220	8.5 VA	8.5 VA	3.5 W
Holding	AC		DC
	50 Hz	60 Hz	
12	—	—	2.8 W
24	8.5 VA	8.5 VA	2.5 W
110	8.5 VA	8.5 VA	2.7 W
220	8.5 VA	8.5 VA	3.5 W

Continuous Duty Solenoid Coils

Figure 1.
System Setup Diagram.

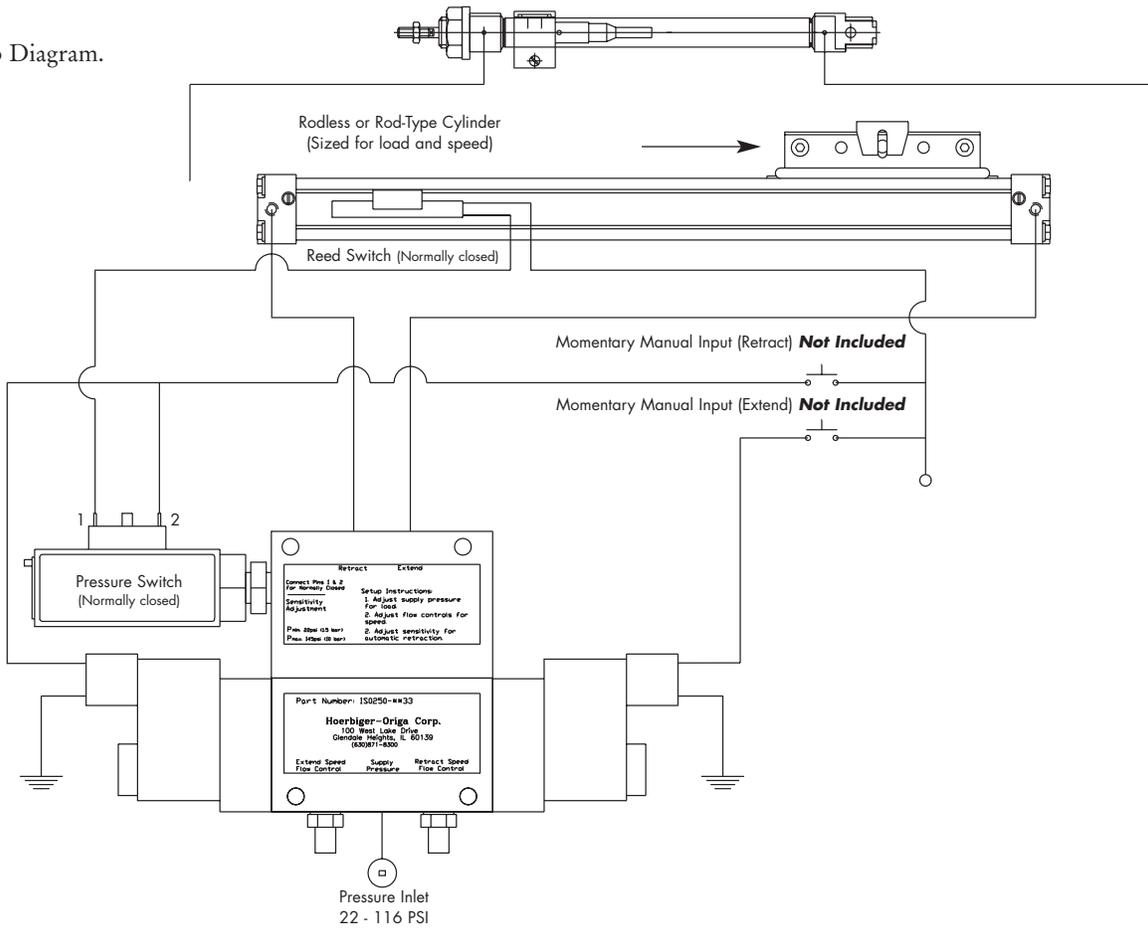
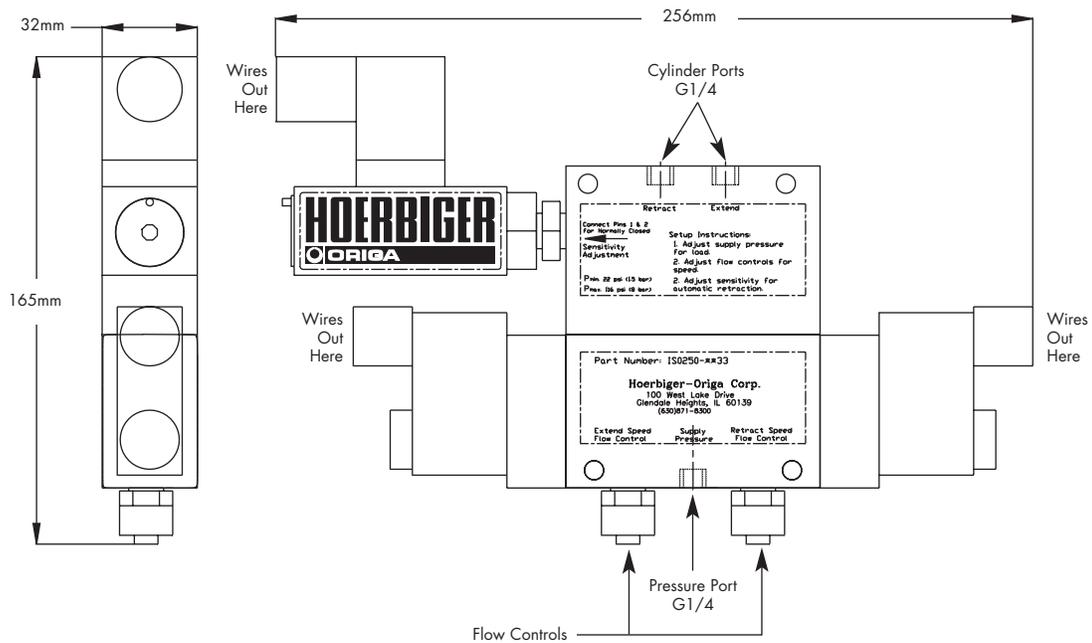
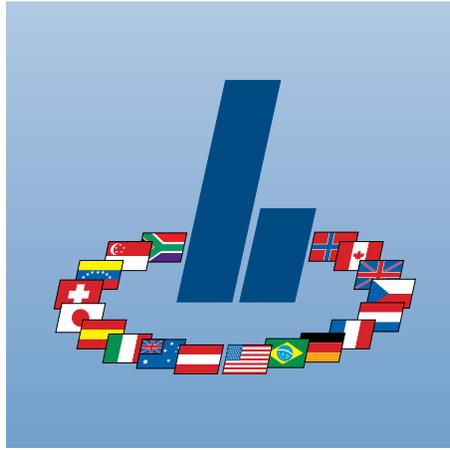


Figure 2.
Dimensional Diagram.



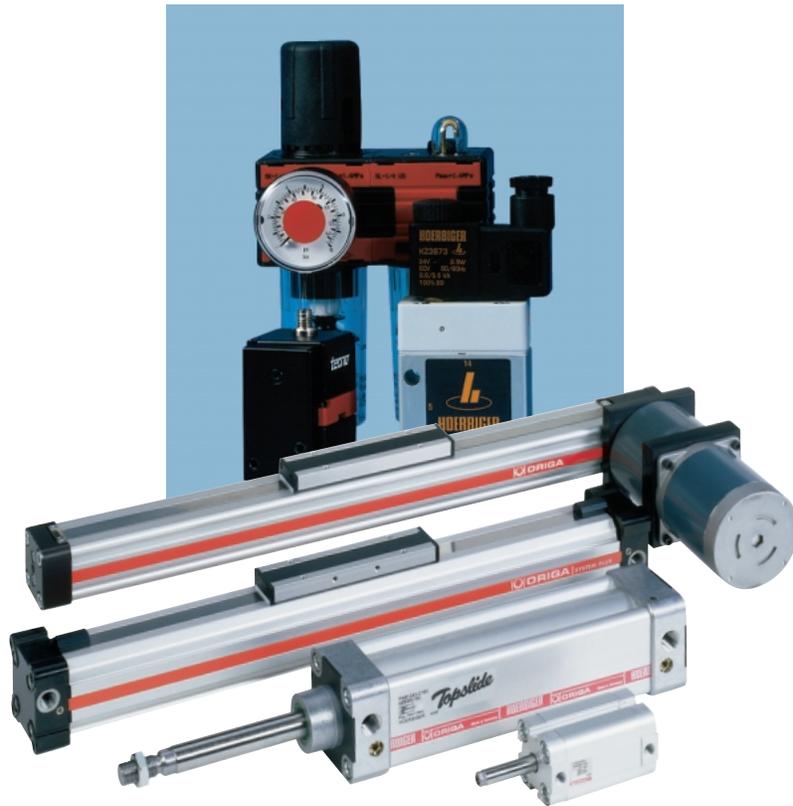


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