GENERAL DESCRIPTION

The **Optical Sensor Switch** is a noninvasive means for detection of a HI or LOW flow. This sensor is ideal for signaling an alarm, cutoff valve, or other device when the float passes the detector (alarm, valve etc. not included). Helps protect your processes and equipment from damage caused by extreme flow rates.

It's compact design and ease of operation make it a nonobtrusive simple to use addition to your flowmeter. Perfect for OEM applications. Use whenever maximum or minimum flow levels need to be monitored automatically. Also can be used in conjunction with a control relay to power alternate equipment or monitoring devices.

PRINCIPLE OF OPERATION

A small LED sensor and receiver are mounted on one side of the flowmeter. The float inside the flowtube is detected as it passes across the beam of light. Sensor can be used to detect float passage beyond the setpoint of the sensor, or also can be set to monitor float position at specific level, signalling when float is outside of the range of the sensor light beam.

SPECIFICATIONS	
MODE OF DETECTION	Red LED beam break.
POWER REQUIREMENTS	10 to 30 Vdc @ 50 mA max.
OUTPUT TRANSISTORS	NPN (1) and PNP (1) output transistors provided.
NPN	Sink up to 100 mA.
PNP	Source up to 100 mA.
RESPONSE TIME	500 msec.
LIGHT IMMUNITY	Pulse modulated to provide extremely high immunity to ambient light.
AMBIENT TEMPERATURE	-30 + 70 degree C operating range.
SENSOR CONSTRUCTION	High impact polycarbonate housing. Epoxy encapsulated for mechanical strength.
LIGHT SOURCE	LED
WAVELENGTH	High intensity red = 650 nm connections.

Used in conjunction with P, S and T Style Flowmeters

P Style Meter with Optical Sensor Switch

OPTICAL SENSOR SWITCH CONNECTION	
WIRE LEAD COLOR	CONNECTION
BLACK	Positive Power Lead (+10 to 30 VDC)
WHITE	Negaive Power Lead
GREEN*	PNP (Current Source) - to Positive of Load
WHITE*	NPN (Current Sink) - to Positive of Load
BLUE	Connect to Red Lead + Power

ORDERING INFORMATION FOR OPTICAL SENSOR SWITCH	
PART NUMBER	DESCRIPTION
OSS-6-P	Optical Sensor Switch for 65mm P Style Meter
OSS-1-P	Optical Sensor Switch for 150mm P Style Meter
OSS-6-S	Optical Sensor Switch for 65mm S Style Meter
OSS-1-S	Optical Sensor Switch for 150mm S Style Meter
OSS-6-T	Optical Sensor Switch for 65mm T Style Meter
OSS-1-T	Optical Sensor Switch for 150mm T Style Meter