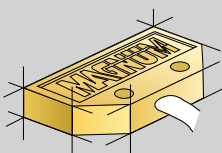
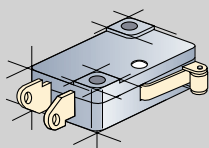


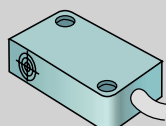


Rotary to Linear Convertors for AccuTrak™ and Eliminator™ Configurations

Standard Sensor Options



Magnum and Proximity Sensors Only
For low power ($P \leq 240$ mW) and/or high DI card capacitance ($C \geq 0.01$ mfd.) applications refer to the Reference Section Bulletin No. WD-13.02 or specify the MagPAC sensor module.

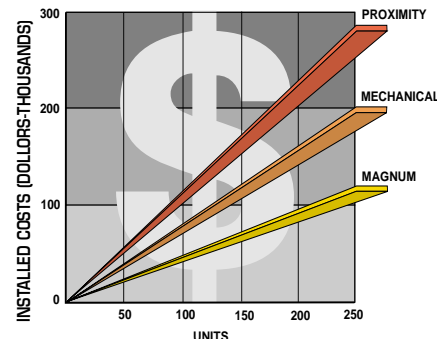


AccuTrak™ Position Monitors

All Classes & Groups

Westlock Valve Position Monitors, in both AccuTrak™ and Eliminator™ configurations, are available for the monitoring of linear valves as well as rotary valves. Integration of components into one cost-effective unit is rapidly becoming the system of choice by major industrial users of process controls.

By combining sensors, solenoids, junction housings and local visual position monitors in one compact unit suitable for weatherproof and hazardous location service, Westlock offers an extremely efficient method of both monitoring and controlling linear valves. Additionally, the economic advantages offered by the National Electrical Code, through utilization



CONVENTIONAL METHOD vs WESTLOCK MAGNUM

of hermetically sealed Magnum™ sensors, are reflected in major cost savings by the elimination of hazardous location seal fittings, wiring, conduit and their associated labor costs. (see comparative cost analysis)

Micro-Switch V3

AMPS	SPDT (V3)		DPDT (Licon)		
	VAC	VDC	AMPS	VAC	VDC
15	125		10	125	
15	250		10	250	
6		24	10		28
.5		125			
.25		250			

MAGNUM™ Proximity Sensors

UL, CSA (Hermetically Sealed)

SPST/SPDT					
Rhodium			Tungsten		
Amps	VAC	VDC	Amps	VAC	VDC
0.295	120		3	120	
0.15	240		1.5	240	
1		24	2		24

P+F, NJ2-V3-N

Proximity Type (Solid State), Intrinsically Safe, PTB, FM, CSA, CE

Sensing Range	2mm
Electrical Version	D.C. Voltage 2 wire in accordance with EN 60947-5-6 (NAMUR)
Hysteresis	3-15% (5% typical)
Switching Frequency	1 KHz
Input Voltage Range	5-25 VDC
Output/Current Consumption	Cam Trigger Present: ≤ 1 mA Cam Trigger Absent: ≥ 3 mA (15 mA max)
Operating Temp.	-10°C to +100°C

AccuTrak™ Position Monitors

DESIGN FEATURES

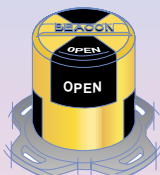
■ Available for on-off linear valves, modulating control valves and knife gate valves.

■ Switch options include Micro-Switch®, Magnum™, GO®, P&F®, and Effector®.

■ 0-100% position transmitters in either resistive or current (4-20mA) configurations.

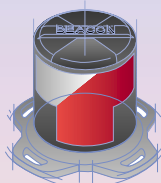
■ NEMA 4, 4X, 7, 9, UL, CSA, FM, listings for Hazardous Area applications.

■ Housings in aluminum, engineered resin and stainless steel configurations.



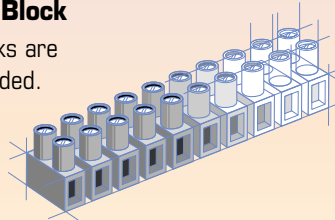
Beacon™

An impact and corrosion resistant valve position monitor capable of displaying exact valve position from any quadrant at distances of up to 150 feet.



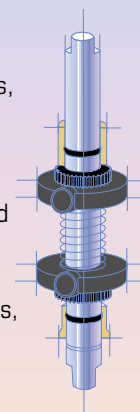
Prewired Terminal Block

Prewired terminal blocks are numbered and color-coded. Generous working space for wiring.



TouchSet™ Cams

Cams, secured by set screws, continually lose calibration due to vibration inherent in all pipelines. Self-locking TouchSet™ cams are fastened to a splined shaft and can be set by hand in seconds. Since there are no set screws, the cams will never slip out of adjustment.



COMPARATIVE COST ANALYSIS (Magnum Sensors)

NATIONAL ELECTRICAL CODE (1999):

Article 501-5(a) & (b). Conduit Seals, Class I, Division 1 & 2. In each conduit run entering an enclosure for switches which may produce arcs, seals shall be placed no more than 18 inches from such enclosures.

Exception: Conduit runs 1 1/2 inches and smaller entering an explosionproof enclosure for switches need not be sealed if the current-interrupting contacts are enclosed within a chamber hermetically sealed against the entrance of gases or vapors.

Note: For conformance to UL and CSA requirements, all conduit runs in Class I, Division 1 hazardous locations must have a sealing fitting connected within 18 inches of the enclosure.

Merging Technology with Economy

UL/CSA Listed Valve Position Monitors for Nema 4, 4X, 7, 9; Class 1, Groups C & D, Class II, Groups E, F & G, Divisions 1 & 2, Class I, Groups A & B, Division 2.

LINEAR CONTROL VALVE	CONVENTIONAL METHOD		WESTLOCK
	MECHANICAL SWITCHES	PROXIMITY SWITCHES	MAGNUM SENSORS
2 switches w/ bracketry	\$550	\$630	\$403
solenoid	\$100	\$100	\$100
junction box	\$50	\$50	N/R*
seal fittings	\$40	\$80	N/R*
wire, conduit	\$20	\$30	N/R*
labor	\$170	\$270	N/R*
TOTAL COST	\$830	\$1160	\$503
TOTAL COST (250 Valves)	\$207,500	\$290,000	\$125,750

*Not Required
Comparative costs were based upon list prices from major manufacturers.

Solenoid: Asco 8320A90



Position Transmitters for AccuTrak Linear Valve Position Monitors

AccuTrak™ Position Transmitters

All Classes & Groups

Westlock transmitter options combine local visual display with remote electronic signaling for continuous flow device status. Point-to-point limit switch signaling is integrated with on-site visual monitoring and full range analog position transmission in one compact NEMA 4, 4x, 7 & 9 enclosure.

Available in three separate configurations (analog resistive, analog current, or digital sensing with analog current output), Westlock transmitters offer complete travel range display for continuous remote monitoring. The RS, CS, and DT options monitor control valves throughout a 0-100% range. At full open or closed, switches will additionally confirm end position limit.

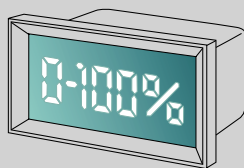


CS: A 4-20 mA or analog current output proportional to valve position. The CS current transmitter features the latest technology in solid state transmitter design and delivers one of the lowest operating voltages in the industry (6.5 VDC) with a maximum load resistance of 1650 ohms at 33 volts DC.



RS: A 1000 ohm or 10,000 ohm analog resistive output proportional to valve position.

0-100% Position Transmission



Resistive Output Signal	Current Output Signal
Standard Output Signal: 1000 ohms	Standard Output Signal: 4-20 mA DC, 2 wire
Power Rating at 70°C: 1 watt	Power Requirements: 6.55-33 VDC
Elements: Conductive Plastic	Max. Load Resistance at 24 VDC: 950 ohms
Rotational Life (no load): 100,000 cycles	Operating Temperature: -40°C TO 85°C

Note: For detailed transmitter specifications, see page A-41 of AccuTrak rotary section.

AccuTrak™ Position Transmitters

DT: Westlock has merged absolute encoder sensing technology with loop-powered analog transmission to create the Spectrum DT full-range position monitor. Establishing a new performance standard, the communication mode continues to be the standard 4-20 mA analog signal while actual sensing is achieved by a true digital sensor.

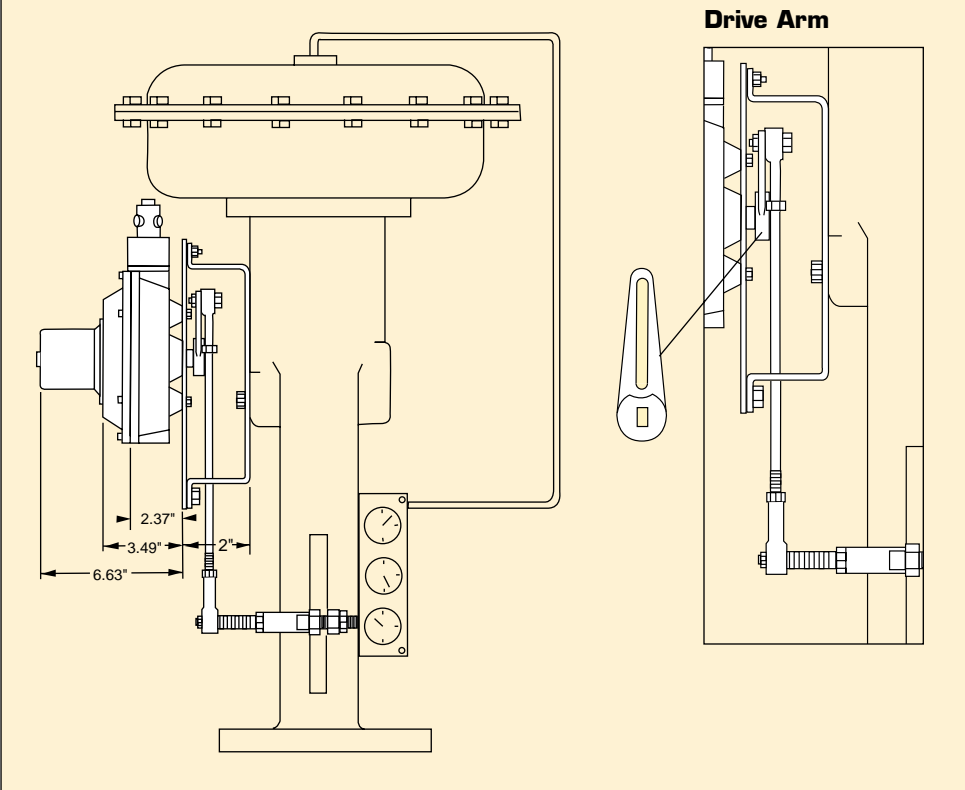


The Spectrum DT Position Transmitter derives its operating power from the 4-20mA loop itself, with no need for an external power connection. This is a high-level signal not easily affected by outside noise. In addition to the advantages of standardization, reduced field wiring costs and immunity from most electrical noise, the 4-20mA transmitter offers these benefits:

- Multiple transmitters may share the same power supply.
- A 4-20mA signal is a "live zero" signal, which distinguishes a process condition (4mA) from an open circuit condition (0mA).
- No position loss on power down.
- Operates in electrically noisy environments.

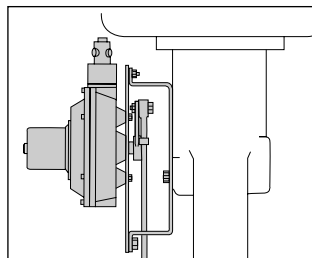
DIMENSIONS (inches/mm)

For Fisher Size 30 thru 87 Actuators



ORDERING GUIDE (Position Monitors & Transmitters)

ROTARY TO LINEAR CONVERTORS



Order standard AccuTrak/ Eliminator Models and specify Rotary to Linear Convertor.

Also, please specify Actuator Manufacturer and Model Number.