

# ACCUTRAK™ ROTARY POSITION MONITORS MODELS 2007/9479/360/366

EXPLOSIONPROOF/FLAMEPROOF

Fully integrated and encapsulated rotary valve position monitors that are certified for use in explosive atmospheres.



#### **FEATURES**

- Touch set cams are hand adjustable, spring loaded and self-locking providing quick calibration of position switches and sensors.
- Terminal strips are pre-wired and numbered with generous working space for ease of use.
- Strong durable Beacon™ offers 360° visual indication in a choice of styles and colors.
- Additional conduit for easy field wiring and mounting accessories as standard.
- Standardized mounting pattern for easy adaptation to common bracketry.
- NAMUR shaft output compliant to VDI/VDE 3845 available.
- Analog position transmitter options.
- Eliminator option for easy integration of external solenoid valve.
- Aluminum enclosures with ultra-low copper content (0.2% maximum) ensure robust performance in corrosive environments.
- Rugged stainless steel enclosures.

#### **TECHNICAL DATA**

## Agency approvals

Explosionproof/flameproof Models 2007/9479

Intertek ATM:103627517CRT-001 Cl. I, Div. 1, Groups C & D; T\* Cl. II, Div. 1, Groups E, F & G; T\* Tamb: -\*°C to +\*°C $^1$ 

IP66/67

II 2 G Ex db IIB+H2 T\* Gb Ta= -\*°C to +\*°C II 2 D Ex td IIIC T\* Db Ta= -\*°C to +\*°C, IP6X

ITS12ATEX17472X IECEx ETL17.0008X NCC 16.0122X

Intertek ATM: 104050146CRT-001 Cl. I, Div. 1, Groups A<sup>2</sup>, B, C & D; T\* Class II/III, Division 1, Groups E, F & G; T\* NI, Cl. I, Div. 2, Groups A, B, C, D; T\*

6P

Type 4, 4X

Model 360/366

Enclosure standards All enclosures **Switches\*\*** 

Magnum/MagPAC V3 (SPDT) & DPDT mechanical Pepperl + Fuchs model NJ2-V3-N

**Enclosures** Aluminum Stainless steel

#### **GENERAL APPLICATION**

AccuTrak position monitors are ideal for manual and automated rotary valves. They provide consistent and accurate valve monitoring in a compact unit which can be mounted directly or via a valve actuator.

#### NOTES

<sup>1</sup>This information can change depending on the construction, refer to the certification.

<sup>2</sup> Solenoid option not available

\*Ambient temperature depend on configuration, see product certificate for details

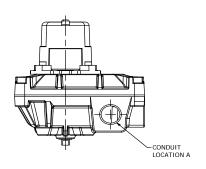
\*\*Refer to ordering guides for switch options

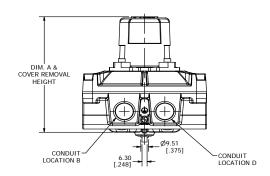
# **ACCUTRAK™** ROTARY POSITION MONITORS

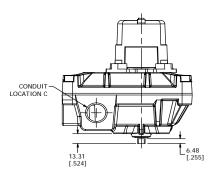
# EXPLOSIONPROOF



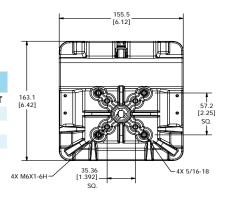
## MODELS 2007/9479 DIMENSIONS

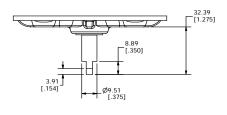






	HOUSING DIMENSIONS					
COVER TYP	<b>COVER TYPE</b>	DIM. A	COVER REMOVAL HEIGHT			
	HI COVER	211.1 [8.31]	332.3 [13.08]			
	STD. COVER	157.8 [6.21]	247.2 [9.73]			
	FLAT COVER	88.4 [3.48]	111.3 [4.38]			







Dimensions in inches, where available metric dimension (mm) in parentheses

# TECHNICAL SPECIFICATIONS

Materials of construction		
Enclosure	Aluminum with powder coat finish	
Shaft and hardware	Stainless steel	
Bushing	Oil impregnated bronze	
Beacon visual indicator	Co-polyester	
Drive shaft		
Westlock standard	Double-D with 1/4" A/F	
NAMUR standard	NAMUR standard VDI/VDE 3845	
Available switches		
	V3 mechanical switches, SPDT	
	DPDT (Form CC) mechanical switches	
	Pepperl + Fuchs model NJ2-V3-N	
	Magnum (hermetically sealed proximity type)	
	MagPAC bifurcated switch pack (9479 ONLY)	
Options		
	Stainless steel enclosure	
	4-20 mA position transmitter	

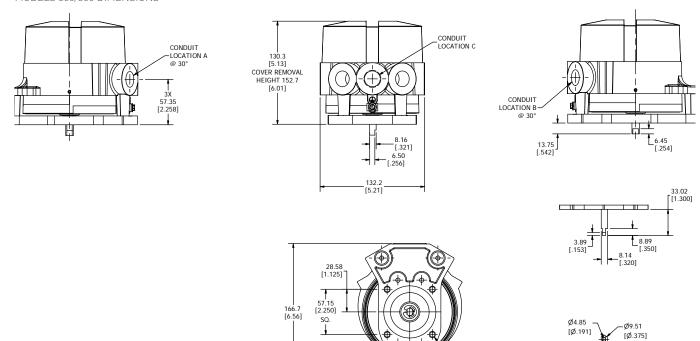
## NOTES

- 1. See selection guide for standard conduit entries
- 2. See switches & sensors data sheet for further information
- 3. A specialist eliminator fitting is available for the mounting of an aftermarket solenoid valve
- ${\it 4.} \quad {\it Please consult your sales of fice for any other requirements}$





## MODELS 360/366 DIMENSIONS



Dimensions in inches, where available metric dimension (mm) in parentheses

## **TECHNICAL SPECIFICATIONS**

Materials of construction	
Enclosure	
Model 360	Aluminum with powder coat finish
Model 366	Stainless steel with electropolished finish
Shaft and hardware	Stainless steel
Bushing	Oil impregnated bronze
Beacon visual indicator	Co-polyester
Drive shaft	
Westlock standard	Double-D with 1/4" A/F
NAMUR standard	NAMUR standard VDI/VDE 3845
Available switches	
	V3 mechanical switches, SPDT
	DPDT (Form CC) mechanical switches
	Magnum, SPDT hermetically sealed switches, with tungsten contacts
	Magnum, SPDT hermetically sealed switches, with rhodium contacts
Options	
Models 360/366	4-20 mA position transmitter

# Notes

- 1. See selection guide for standard conduit entries
- 2. See switches & sensors data sheet for further information
- 3. A specialist eliminator fitting is available for the mounting of an aftermarket solenoid valve
- 4. Please consult your sales office for any other requirements



SHAFT DETAIL NAMUR OUTPUT

5/16-18 UNC - 2B

# **ACCUTRAK™** EXPLOSIONPROOF ROTARY POSITION MONITORS





2007	ΔΙιι	minu	m enclosi	ILE			
2007	, 100		t output				
		S D	Standard		-D with 1/4" systone F89 a		
			Beac	on			
			B3 BM3-3 B5 BM3-5 B7 BM3-7 B9 BM3-9 FC Flat cc Co 2E 4E 4F 4F EA 2N	BM2-Y BM2-R BM2-Y- BM2- Y BM3-1 BM3-3 BM3-5 BM3-7 Flat cov Cor 2B 4B 4E 4F	G (Red Close FE (French/ -LP (Low Pr (3-way B1 Fi (3-way B3 Fi (3-way B7 Fi (3-way B7 Fi (3-way B9 Fi (3-way	English) offile Star owpath) owpath) owpath) owpath) owpath) ilable wi  NPT (F) - NPT (F) NPT (F), C NPT (F) & NPT (F) &	
				4M	4M02 6M02 2M04	` '	
						Two SF Four SI Six SPI Two DF	PDT Mechanical Switches - 8 pt. Terminal Strip PDT Mechanical Switches - 16 pt. Terminal Strip PDT Mechanical Switches - 24 pt. Terminal Strip, High Cover, 4 Conduits PDT Mechanical Switches - 16 pt. Terminal Strip PDT Mechanical Switches - 24 pt. Terminal Strip PDT Mechanical Switches - 24 pt. Terminal Strip, High Cover, 4 Conduits
						Posi	tion Transmitter
						00 DS	None 4-20 mA Digital Signal Position Transmitter - <b>12 pt. Terminal Strip w/ 2M02 OR 16 pt. Terminal Strip,</b> <b>High Cover w/ 2M04, 4M02</b>
							Unit Specialty Codes (leave blank for standard builds)  M0000 INMETRO Certification 00124 316 Stainless Steel Enclosures 00692 **120 VAC Heater Resistor 10710 12 pt. Terminal Strip 00816 **24 VDC Heater Resistor 01351 SIL 3 - some resistrictions may apply; consult Sales
2007		N	ВҮ	2B	2M02	DS	= Model number 2007NBY2B2M0200DS

## ORDERING NOTES

<sup>\*</sup>Eliminator Fitting is 1/2" NPT (M) for the purpose of mounting an after market solenoid valve.

<sup>\*\*</sup>For INMETRO replace first digit of the speciality code with M; For e.g. 2007NBY2B2M02DS  $\mathbf{M}$ 0124

<sup>\*\*\*</sup>T Ratings for optional heater resistors changes to T2C.

## **ACCUTRAK™** EXPLOSIONPROOF ROTARY POSITION MONITORS

MODEL 9479 SELECTION GUIDE



#### Base model 9479 Aluminum enclosure Shaft output Standard (Double-D with 1/4" Flats) Direct mount to Keystone F89 actuators NAMUR VDI/VDE 3845 Beacon BY BM2-Y (Standard) BM2-RG (Red Closed/Green Open) RG BM2-Y-FE (French/English) FF LP BM2-Y-LP (Low Profile Standard) BM3-1 (3-Way B1 Flowpath) В1 BM3-3 (3-Way B3 Flowpath) В3 В5 BM3-5 (3-Way B5 Flowpath) BM3-7 (3-Way B7 Flowpath) B9 BM3-9 (3-Way B9 Flowpath) FC Flat cover - not available with switch options requiring high cover 2B Two 3/4" NPT (F) - not permitted with 6 SPDT or 4 DPDT switch options Four 3/4" NPT (F) 4R Two 3/4" NPT (F), One 1/2" NPT (F) & One 1/2" NPT (M) Global Eliminator Fitting\* 4F Two 3/4" NPT (F) & Two 1/2" NPT (M) Global Elimnator Fittings\* 4F Two 3/4" NPT (F) and Two 1/2" NPT (F) Two M20 (F) - not permitted with 6 SPDT or 4 DPDT switch options 4M Four M20 (F) Position Switches (see ordering notes) 2M06 Two SPDT Magnum Switches - 8 pt. Terminal Strip 2M08 Two P+F NJ2-V3-N NAMUR Inductive Proximity Sensors - 8 pt. Terminal Strip 2M12 Two SPDT Magnum Switches, Rhodium Contacts - 8 pt. Terminal Strip 2M13 MagPAC Module (Two SPST Bifurcated Reeds), Diagnostic LEDs - 12 pt. Terminal Strip 2M17 Two DPDT Magnum Cobra - 12 pt. Terminal Strip, High Cover, 4 Conduits 2M18 Two DPDT Magnum Cobra, Rhodium Contacts - 12 pt. Terminal Strip, High Cover 4 Conduits 4M06 Four SPDT Magnum Switches - 16 pt. Terminal Strip 4M08 Four P+F NJ2-V3-N NAMUR Inductive Proximity Sensors - 16 pt. Terminal Strip Four SPDT Magnum Switches, Rhodium Contacts - 16 pt. Terminal Strip Four DPDT Magnum Cobra, Rhodium Contacts - 24 pt. Terminal Strip, High Cover, 4 Conduits 4M12 4M17 Four DPDT Magnum Cobra, Rhodium Contacts - 24 pt. Terminal Strip, High Cover, 4 Conduits 4M18 Six SPDT Magnum Switches - 24 pt. Terminal Strip, High Cover, 4 Conduits Six P+F NJ2-V3-N NAMUR Inductive Proximity Sensors - 16 pt. Terminal Strip, High Cover 6M12 Six SPDT Magnum Switches, Rhodium Contacts - 24 pt. Terminal Strip, High Cover, 4 Conduits **Position Transmitter** 00 None DS 4-20 mA Digital Signal Position Transmitter - available only w/ 12 pt. TS and 2M06, 2M12, 2M08 OR w/ 16 pt. TS 4M06, 4M12, 4M08 and high cover Unit Specialty Codes (leave blank for standard builds) M0000 INMETRO Certification 00124 316 Stainless Steel Enclosure 00692 \*\*120 VAC Heater Resistor 00710 12 pt. Terminal Strip \*\*24 VDC Heator Resistor 01351 SIL 3 - some resistrations may apply; contact Sales 9479 BY 2B 2M12 DS = Model number 9479NBY2B2M12DS

#### ORDERING NOTES

- \*Eliminator Fitting is 1/2" NPT (M) for the purpose of mounting an after market solenoid valve.
- \*\*For INMETRO replace first digit of the speciality code with M; For e.g. 9479NBY2B2M12DS **M**0124

## POSITION SWITCH APPLICATION NOTES

For 120 VAC service, M13 (MagPAC) is recommended.

For 24 VDC service below 1 watt, M12 (Rhodium Magnum Switches) or M13 (MagPAC) is recommended.

For 24 VDC service above 1 watt, M06 (Tungsten Magnum Switches) or M13 (MagPAC) is recommended.

<sup>\*\*\*</sup>T Ratings for optional heater resistors changes to T2C.

## **ACCUTRAK™** EXPLOSIONPROOF ROTARY POSITION MONITORS

MODEL 360/366 SELECTION GUIDE



## Base Model Aluminum enclosure 366 Stainless steel enclosure Shaft Output Standard (double-D with 1/4" Flats) NAMUR Beacon BY Black/Open - Yellow/Closed (Standard) RG Red/Closed - Green/Open Conduit 2B Two 3/4" NPT (F) Three 3/4" NPT (F) One 3/4" NPT (F) & One 1/2" NPT (M) Eliminator Fitting\* Two 3/4" NPT (F) & One 1/2" NPT (M) Eliminator Fitting **Position Switches** 2M02 Two SPDT Mechanical Switches - 10 pt. Terminal Strip 2M04 Two DPDT Mechanical Switches - 14 pt. Terminal Strip 2M06 Two SPDT Magnum Switches - 10 pt. Terminal Strip 2M12 Two SPDT Magnum Switches with Rhodium Contacts - 10 pt. Terminal Strip 2M17 Two DPDT Magnum Cobra Switches - 14 pt. Terminal Strip 2M18 Two DPDT Magnum Cobra Switches with Rhodium Contacts - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M10 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M110 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M12 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M13 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M14 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M15 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M16 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M17 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M18 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 2M19 Four SPDT Magnum Switches - 14 pt. Terminal Strip 4M12 Four SPDT Magnum Switches with Rhodium Contacts - 14 pt. Terminal Strip **Position Transmitter** 4-20 mA Digital Signal Position Transmitter - 10 pt. Terminal Strip - available only w/ 2M02, 2M06, 2M12 switch options = Model number 360NBY2B2M1200 360 2B 2M12

### ORDERING NOTES

# Shop Flo-Tite for all Your Actuation Requirements







<sup>\*</sup>Eliminator Fitting is 1/2" NPT (M) for the purpose of mounting an after market solenoid valve.



www.flotite.com