

## QUANTUM™ ROTARY CONTROL MONITORS

INCREASED SAFETY/ENCAPSULATION – ATEX/IEC

Fully integrated and encapsulated rotary valve control monitors. Simple to install, they offer a wide range of single or dual coil Falcon solenoid valves



### TECHNICAL DATA

#### Agency approvals

Area classification (ATEX/IEC)

Ex II 2GD  
Ex mb e IIC T\* Gb  
Ex tb IIIC T\*°C Db IP6X

Enclosure standards (IEC)

3700/8700 series

IP66/67

#### Switches

3700/8700 series

Magnum SPDT (hermetically sealed proximity type) switches

#### Enclosures

3700/8700 series

Engineered resin  
Aluminum  
Stainless steel

#### Falcon solenoid valves

C<sub>v</sub>

Materials

Choice of 1.1, 3.5  
Aluminum and stainless steel

### FEATURES

- Increased Safety/Encapsulation design meeting a wide range of worldwide approvals.
- Cost effective alternative to Exd units in specific applications.
- Quantum enclosures integrate position sensors and low power solenoid valves into a single unit.
- Solenoid coils integrated within Quantum housing.
- Choice of factory pre-wired 3/2 and 5/2 way Falcon solenoid valves.
- Strong durable Beacon™ offers 360° visual indication in a choice of styles and colors.
- 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 for ease of use.
- Additional conduit for easy field wiring and mounting accessories as standard.
- Wide range of switches and sensors.
- Standardized mounting pattern for easy adaptation to common bracketry.
- Range of drive shaft options.
- Engineered resin enclosure is robust, lightweight and provides exceptional chemical, UV and impact resistance.
- Aluminum enclosures with ultra-low copper content (0.2% maximum) suitable for corrosive environments.
- Robust stainless steel enclosure option.
- IP rated plugs certified where applicable.

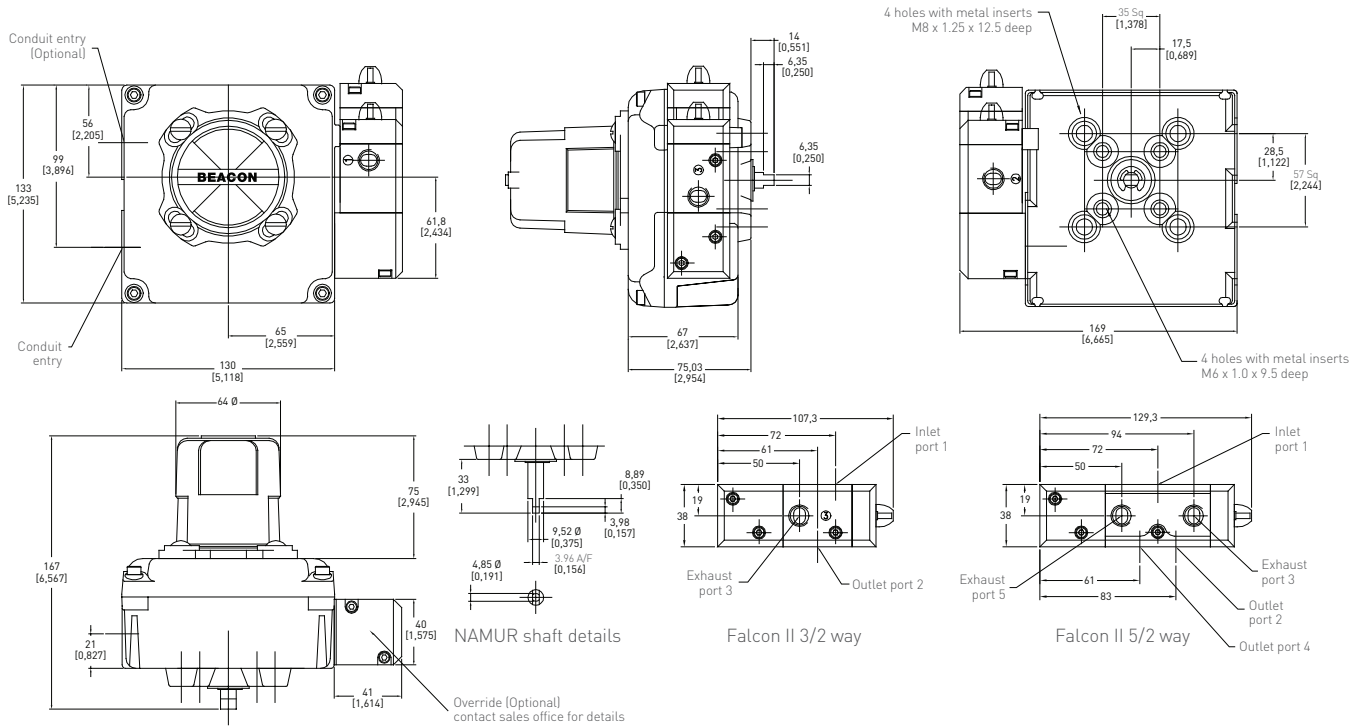
### GENERAL APPLICATION

Quantum control monitors combine consistent and accurate valve monitoring with the control of automation process valves using integrated position sensors and low power solenoid valves in a single compact unit.

# QUANTUM™ ROTARY CONTROL MONITORS

## INCREASED SAFETY/ENCAPSULATION – ATEX/IEC

### 3700 SERIES RESIN ENCLOSURE DIMENSIONS



Dimensions in mm, imperial dimensions (inches) in parenthesis

### TECHNICAL SPECIFICATIONS

#### Materials of construction

Enclosure	Engineered resin
Shaft and hardware	Stainless steel
Bushing	Nylon
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

	Magnum, SPDT hermetically sealed magnetic proximity switches, with tungsten contacts
--	--

### SOLENOID VALVES

The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and C<sub>v</sub> to best suit your application. See the Falcon II data sheet for more information.

### NOTES

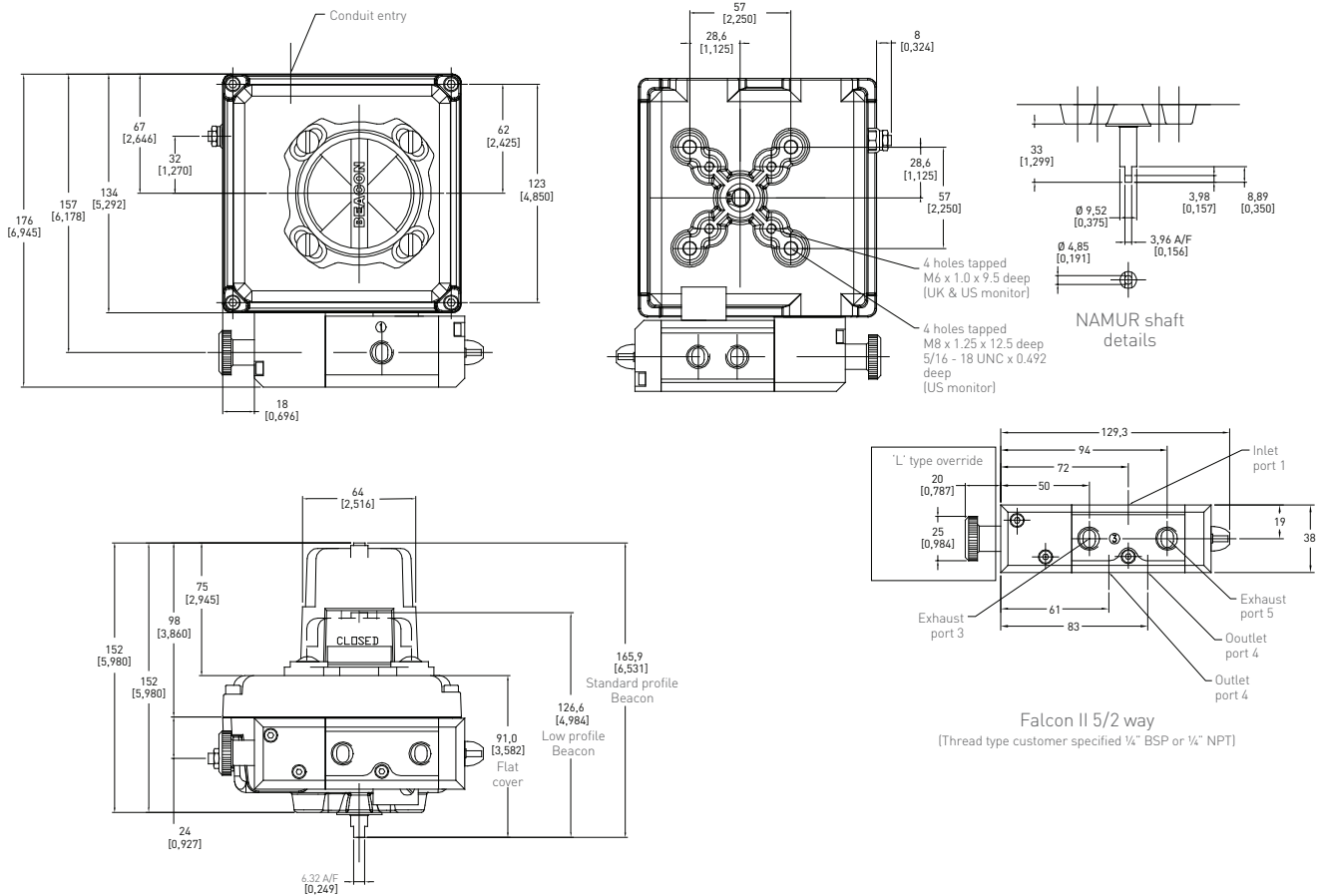
1. See selection guide for standard conduit entries
2. See switches & sensors data sheet for further information
3. Please consult your sales office for any other requirements



# QUANTUM™ ROTARY CONTROL MONITORS

## INCREASED SAFETY/ENCAPSULATION – ATEX/IEC

### 3700 SERIES ALUMINIUM AND STAINLESS STEEL ENCLOSURE DIMENSIONS



Dimensions in mm, imperial dimensions (inches) in parenthesis

### TECHNICAL SPECIFICATIONS

#### Materials of construction

Enclosure	Aluminum with powder coat finish Stainless steel with electropolished finish
Shaft and hardware	Stainless steel
Bushing	Oil impregnated bronze (aluminum enclosure) PTFE (stainless steel enclosure)
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

	Magnum, SPDT hermetically sealed magnetic proximity switches, with tungsten contacts
--	--

### NOTES

1. See selection guide for standard conduit entries
2. See switches & sensors data sheet for further information
3. Please consult your sales office for any other requirements

### SOLENOID VALVES

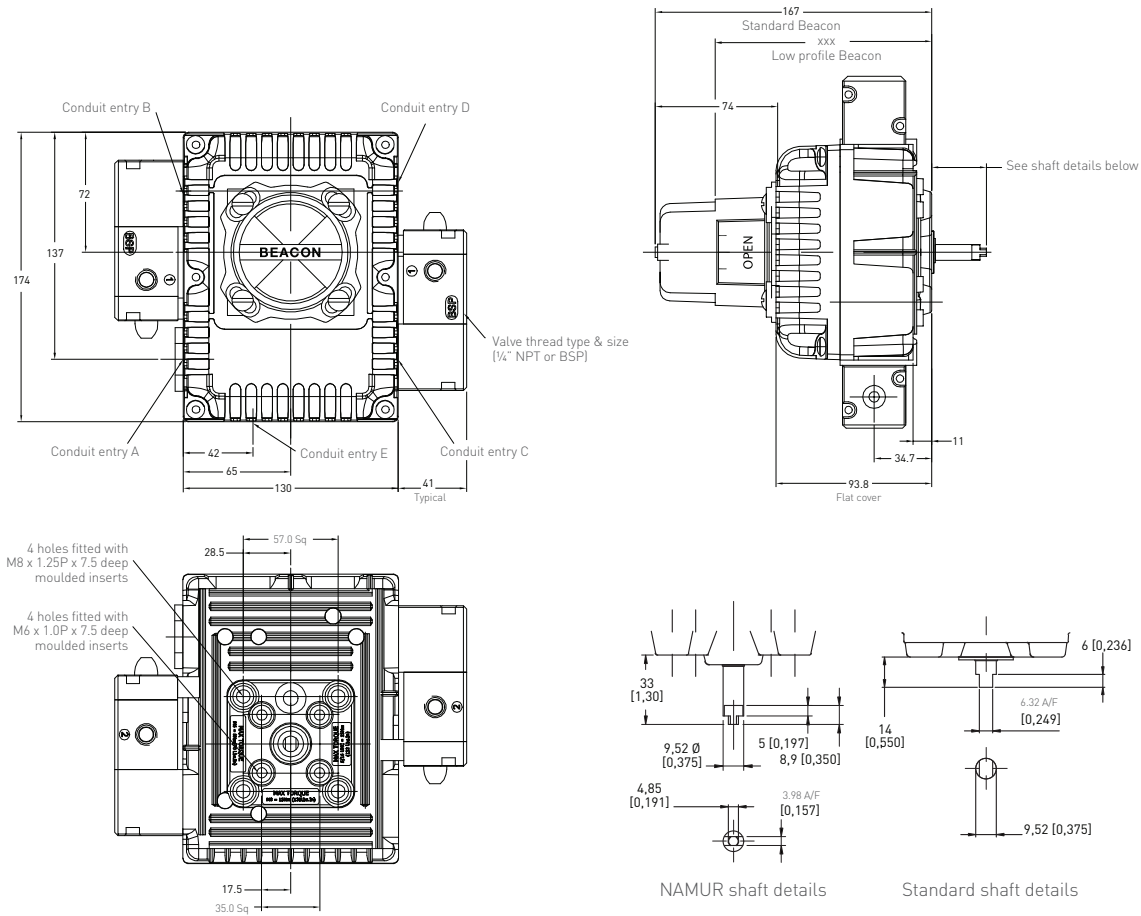
The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and C<sub>v</sub> to best suit your application. See the Falcon II data sheet for more information.



# QUANTUM™ ROTARY CONTROL MONITORS

## INCREASED SAFETY/ENCAPSULATION – ATEX/IEC

### 8700 SERIES RESIN ENCLOSURE DIMENSIONS



Dimensions in mm, imperial dimensions (inches) in parenthesis

### TECHNICAL SPECIFICATIONS

#### Materials of construction

Enclosure	Engineered resin
Shaft and hardware	Stainless steel
Bushing	Nylon
Beacon visual indicator	Co-polyester
<b>Drive shaft</b>	
Westlock standard	Double-D with 1/4" A/F
NAMUR standard	NAMUR standard VDI/VDE 3845

#### Available switches

Magnum, SPDT hermetically sealed magnetic proximity switches

### SOLENOID VALVES

The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and Cv to best suit your application. See the Falcon II data sheet for more information.

### NOTES

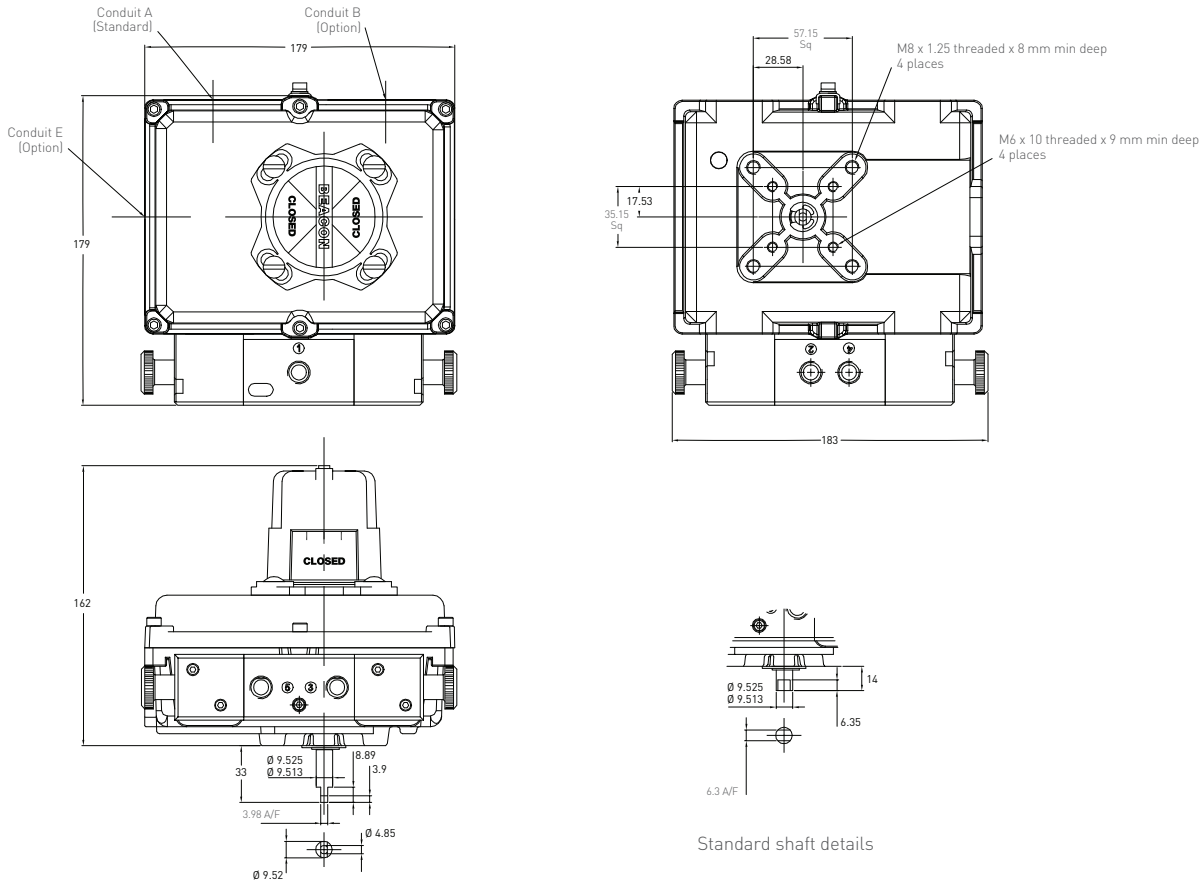
1. See selection guide for standard conduit entries
2. See switches & sensors data sheet for further information
3. Please consult your sales office for any other requirements



# QUANTUM™ ROTARY CONTROL MONITORS

## INCREASED SAFETY/ENCAPSULATION – ATEX/IEC

### 8700 SERIES ALUMINIUM AND STAINLESS STEEL ENCLOSURE DIMENSIONS



Standard shaft details

Dimensions in mm, imperial dimensions (inches) in parenthesis

### TECHNICAL SPECIFICATIONS

#### Materials of construction

Enclosure	Aluminum with powder coat finish Stainless steel with electropolished finish
Shaft and hardware	Stainless steel
Bushing	Oil impregnated bronze (aluminum enclosure) PTFE (stainless steel enclosure)
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

	Magnum, SPDT hermetically sealed magnetic proximity switches
--	--

### SOLENOID VALVES

The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and C<sub>v</sub> to best suit your application. See the Falcon II data sheet for more information.

### NOTES

1. See selection guide for standard conduit entries
2. See switches & sensors data sheet for further information
3. Please consult your sales office for any other requirements

# QUANTUM™ INCREASED SAFETY ROTARY CONTROL MONITORS

## 3700/8700 SERIES SELECTION GUIDE

<b>Housing</b>														
37	3700 with flanged lid (single coil)													
87	8700 with flanged lid (single and dual coil)													
<b>Cover style</b>														
4	With Beacon													
6	Flat cover													
<b>Switch type</b>														
9	Magnum proximity switch													
0	No switches fitted													
<b>Material</b>														
A	Aluminum													
R	Engineered resin													
S	Stainless steel													
<b>Beacon type and color</b>														
BY	Black/Yellow					B1	BM3-1 pattern 90°							
LY	Black/Yellow (low profile)					B3	BM3-3 pattern 90°							
AR	ANSI Red/White					B5	BM3-5 pattern 90°							
GR	Green/Red					B7	BM3-7 pattern 180°							
00	No Beacon fitted					B9	BM3-9 pattern 180°							
<b>Drive shaft type</b>														
S	Westlock standard – ¼" A/F (6,32 mm)													
N	NAMUR standard shaft – VDI/VDE 3845													
*	Non-standard (consult sales office)													
<b>Solenoid body material</b>														
A	Anodized aluminium													
E	Stainless steel													
<b>Solenoid coil voltage</b>														
C	24 V DC					H	90-120 V AC							
D	24 V AC					J	220-240 V AC							
<b>Solenoid valve specification</b>														
<b>[¼" BSP entry; 1.1 Cv]</b>														
K	3/2 way - fail closed					U	3/2 way - fail closed							
L	3/2 way - fail open					V	3/2 way - fail open							
Q	5/2 way - fail closed					1	5/2 way - fail closed							
S	5/2 way - dual coil fail last					3	5/2 way - dual coil fail last							
<b>[½" NPT entry; 1.1 Cv]</b>														
<b>Switch/sensor quantity</b>														
0	No switch/sensor fitted													
1	One switch/sensor													
2	Two switches/sensors													
3	Three switches/sensors (consult sales office)													
4	Four switches/sensors (consult sales office)													
<b>Conduit entries supplied</b>														
1	One entry (consult sales office)													
2	Two entries (consult sales office)													
3	Three entries (consult sales office)													
4	Four entries (consult sales office)													
<b>Unit specification</b>														
AAA	Standard build- M25 conduit entries													
ADZ	¾" NPT conduit entries													
DAV	M25 conduit entries													
FAN	½" NPT conduit entries													
***	Non-standard material – (consult sales office)													
<b>Certification</b>														
A	ATEX & IECEx													
*	Other options (consult sales office)													
<b>Revision</b>														
R*	Internal revision #													
87	4	9	A	BY	N	A	C	K	2	2	AAA	A	R1	= Model number <b>8749ABYNACK22AAA-AR1</b>

### NOTES

1. Please contact your sales office for guidance on selecting the best possible combination for your control and monitoring requirements.
2. See Hazardous area classification technical bulletin for further information on global standards.





---

**WESTLOCK CONTROLS**  
280 N. Midland Avenue, Ste 258  
Saddle Brook, NJ 07663  
United States

Crane Co., and its subsidiaries cannot accept responsibility for possible errors in catalogues, brochures, other printed materials, and website information. Crane Co. reserves the right to alter its products without notice, including products already on order provided that such alteration can be made without changes being necessary in specifications already agreed. All trademarks in this material are the property of the Crane Co. or its subsidiaries. The Crane and Crane brands logotype (WESTLOCK CONTROLS®) are registered trademarks of Crane Co. All rights reserved.