

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_v

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.

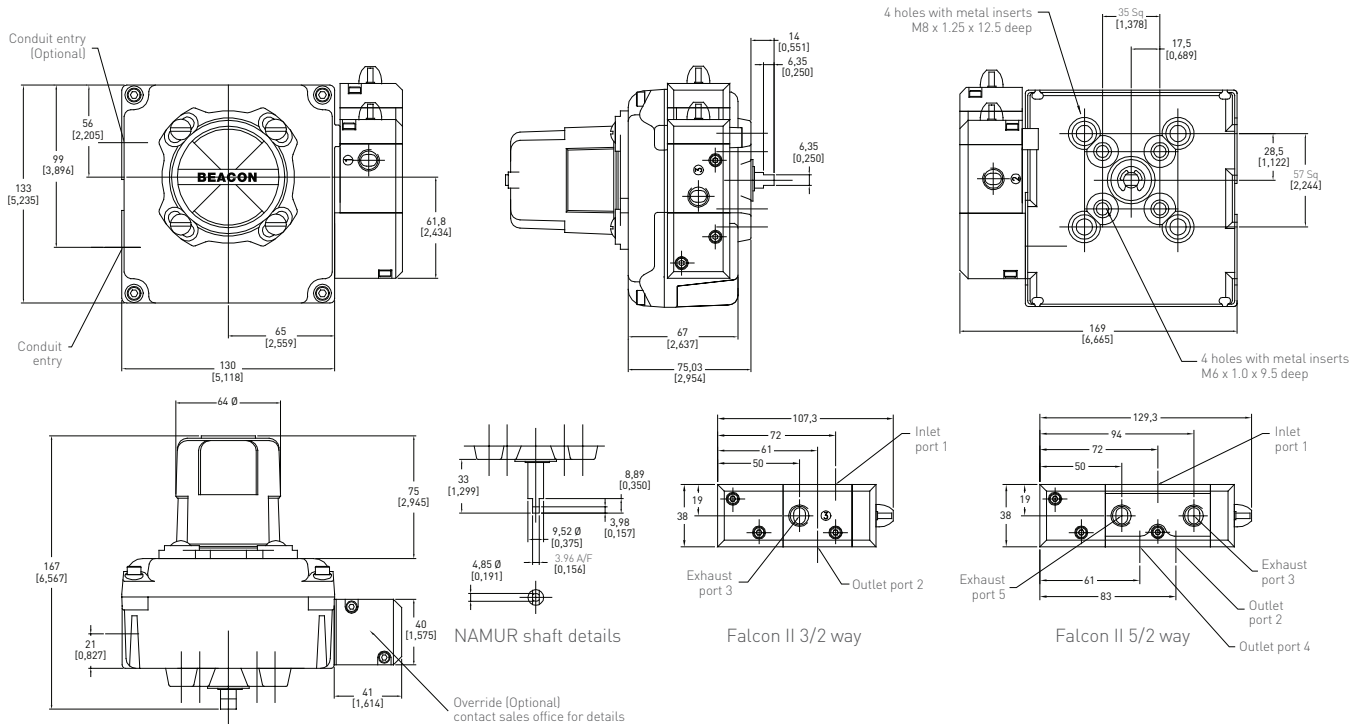
GENERAL APPLICATION

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
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SOLENOID VALVES

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



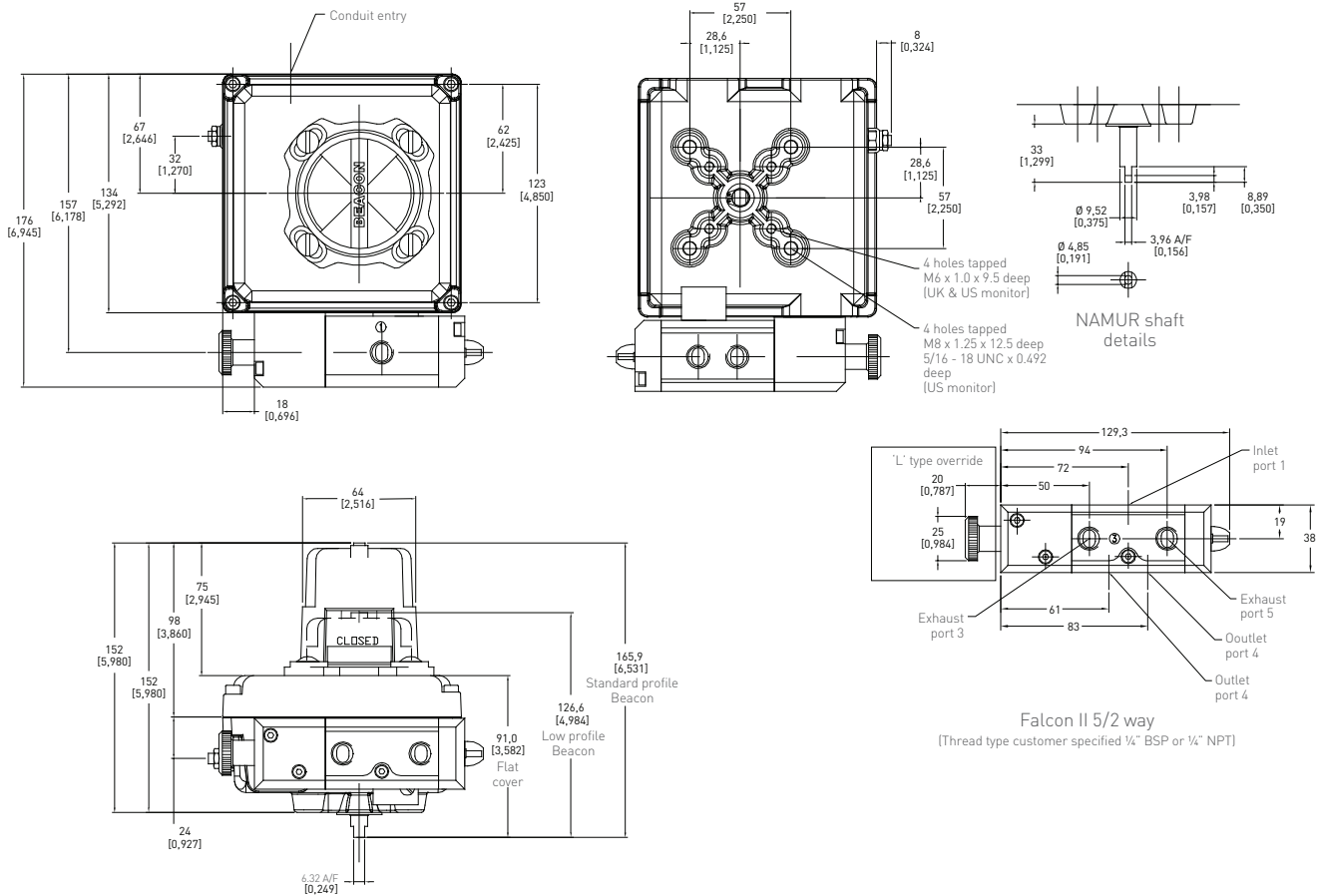
NOTES

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
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SOLENOID VALVES

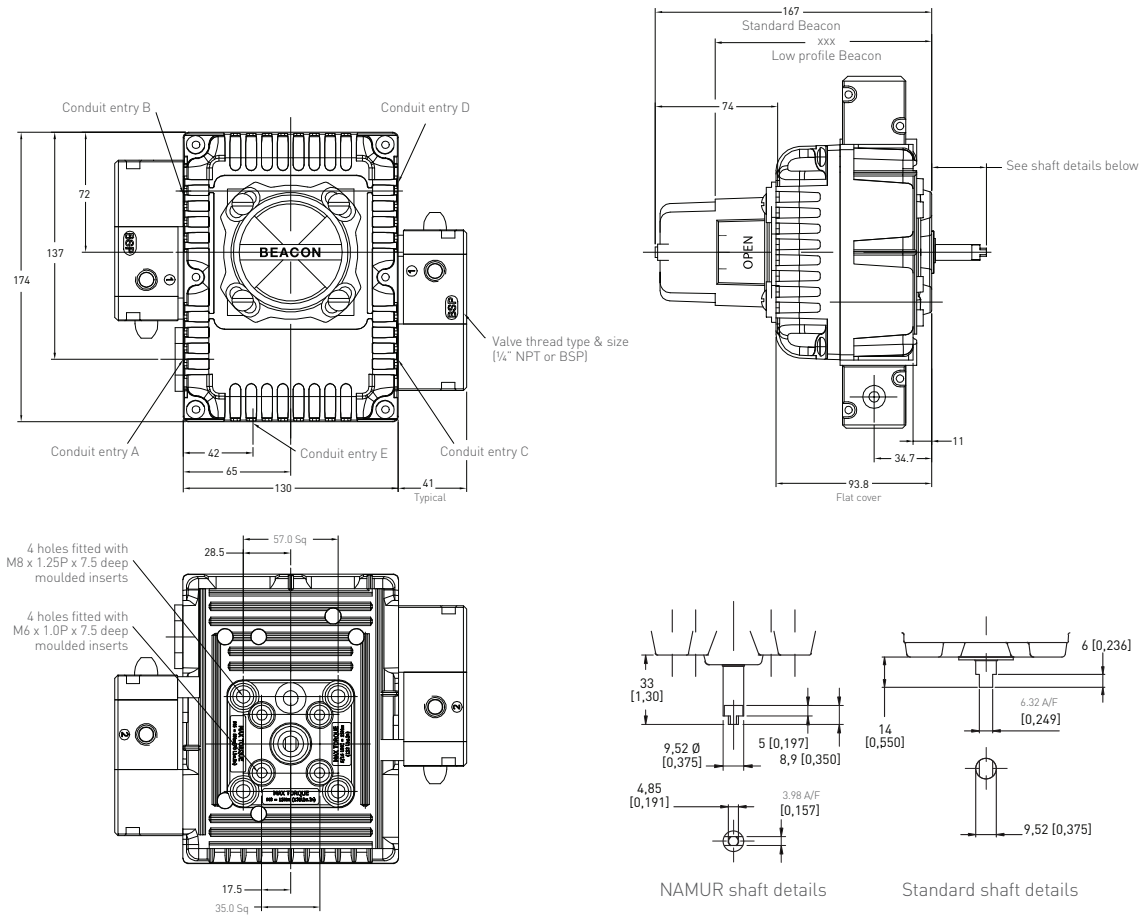
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QUANTUM™ ROTARY CONTROL MONITORS

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
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
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NOTES

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SOLENOID VALVES

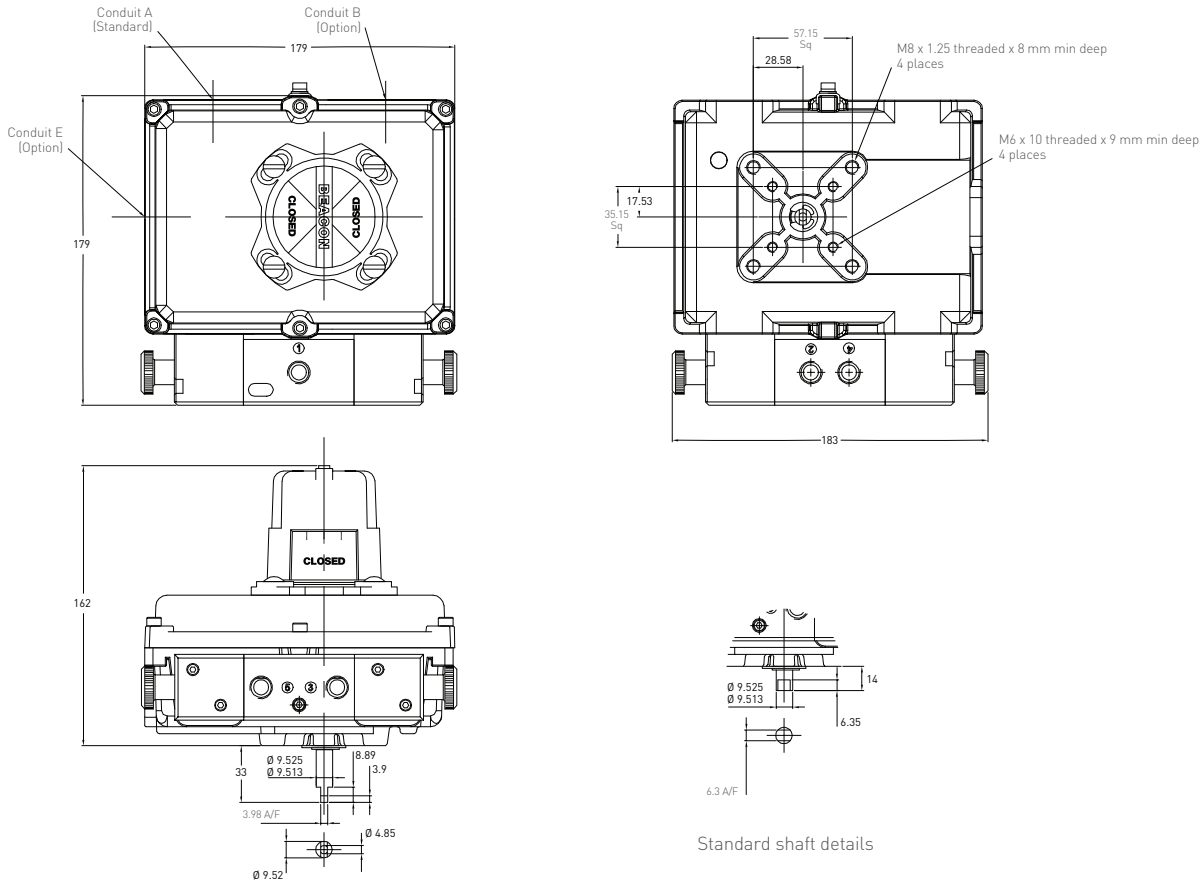
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QUANTUM™ ROTARY CONTROL MONITORS

INCREASED SAFETY/ENCAPSULATION – ATEX/IEC

8700 SERIES ALUMINIUM AND STAINLESS STEEL ENCLOSURE DIMENSIONS



Dimensions in mm, imperial dimensions (inches) in parenthesis

TECHNICAL SPECIFICATIONS

Materials of construction

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QUANTUM™ INCREASED SAFETY ROTARY CONTROL MONITORS

3700/8700 SERIES SELECTION GUIDE

Housing														
37	3700 with flanged lid (single coil)													
87	8700 with flanged lid (single and dual coil)													
Cover style														
4	With Beacon													
6	Flat cover													
Switch type														
9	Magnum proximity switch													
0	No switches fitted													
Material														
A	Aluminum													
R	Engineered resin													
S	Stainless steel													
Beacon type and color														
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°							
Drive shaft type														
S	Westlock standard – ¼" A/F (6,32 mm)													
N	NAMUR standard shaft – VDI/VDE 3845													
*	Non-standard (consult sales office)													
Solenoid body material														
A	Anodized aluminium													
E	Stainless steel													
Solenoid coil voltage														
C	24 V DC					H	90-120 V AC							
D	24 V AC					J	220-240 V AC							
Solenoid valve specification														
[¼" BSP entry; 1.1 Cv]														
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							
[½" NPT entry; 1.1 Cv]														
Switch/sensor quantity														
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)													
Conduit entries supplied														
1	One entry (consult sales office)													
2	Two entries (consult sales office)													
3	Three entries (consult sales office)													
4	Four entries (consult sales office)													
Unit specification														
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)													
Certification														
A	ATEX & IECEx													
*	Other options (consult sales office)													
Revision														
R*	Internal revision #													
87	4	9	A	BY	N	A	C	K	2	2	AAA	A	R1	= Model number 8749ABYNACK22AAA-AR1

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.