

Quantum™ Rotary Control Monitors

Increased Safety/Encapsulation – ATEX/IEC

WESTLOCK
CONTROLS

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 | Choice of 1.1, 3.5 |
| Materials | Aluminum and stainless steel |

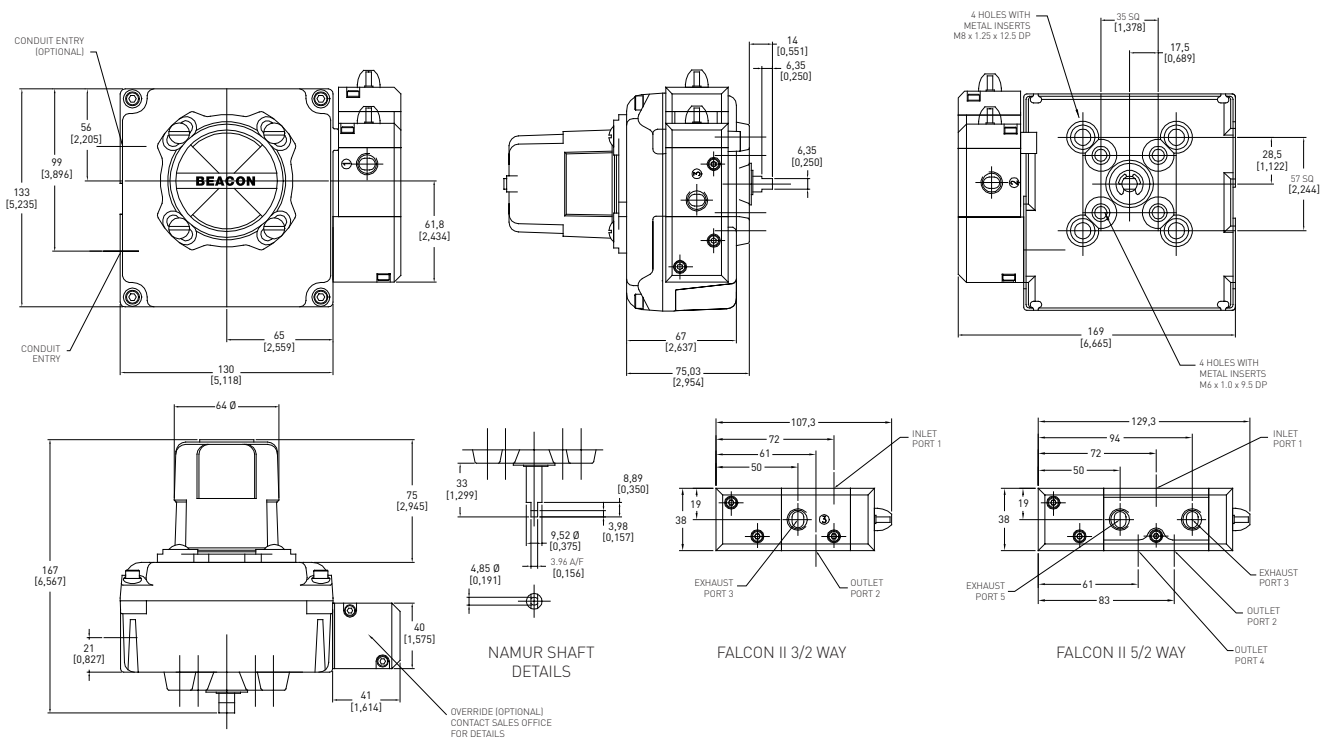
Features

- 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 and 5 way Falcon solenoid valves.
- Solenoid valves with a choice of C_v ratings and coil voltage.
- Strong durable Beacon™ offers 360° visual indication available 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 with generous working space for ease of use.
- Additional conduit for easy field wiring and mounting accessories as standard.
- Switch stabilization plate.
- 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 yet lightweight; allows broad operating temperatures and provides exceptional chemical, UV and impact resistance.
- Aluminum enclosures with ultra-low copper content (0.2% maximum) ensure robust performance in corrosive environments.
- Robust stainless steel enclosure option.
- IP rated plugs certified where applicable.

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3700 Series resin enclosure dimensions



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

Technical specifications

Materials of construction

| | |
|-------------------------|------------------|
| Enclosure | Engineered resin |
| Shaft and hardware | Stainless steel |
| Bushing | Nylon |
| Beacon visual indicator | Co-polyester |

Drive shaft

| | |
|----------|-----------------------------|
| Standard | Double-D with 1/4" A/F |
| Option | NAMUR standard VDI/VDE 3845 |

Available switches

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

Please consult your sales office for any other requirements

Notes

Conduit entries

Quantum control monitors are available with a choice of conduit entries. Please see the selection guide for standard entries.

Switches and sensors

For further information see our switches and sensors data sheet.

Solenoid valves

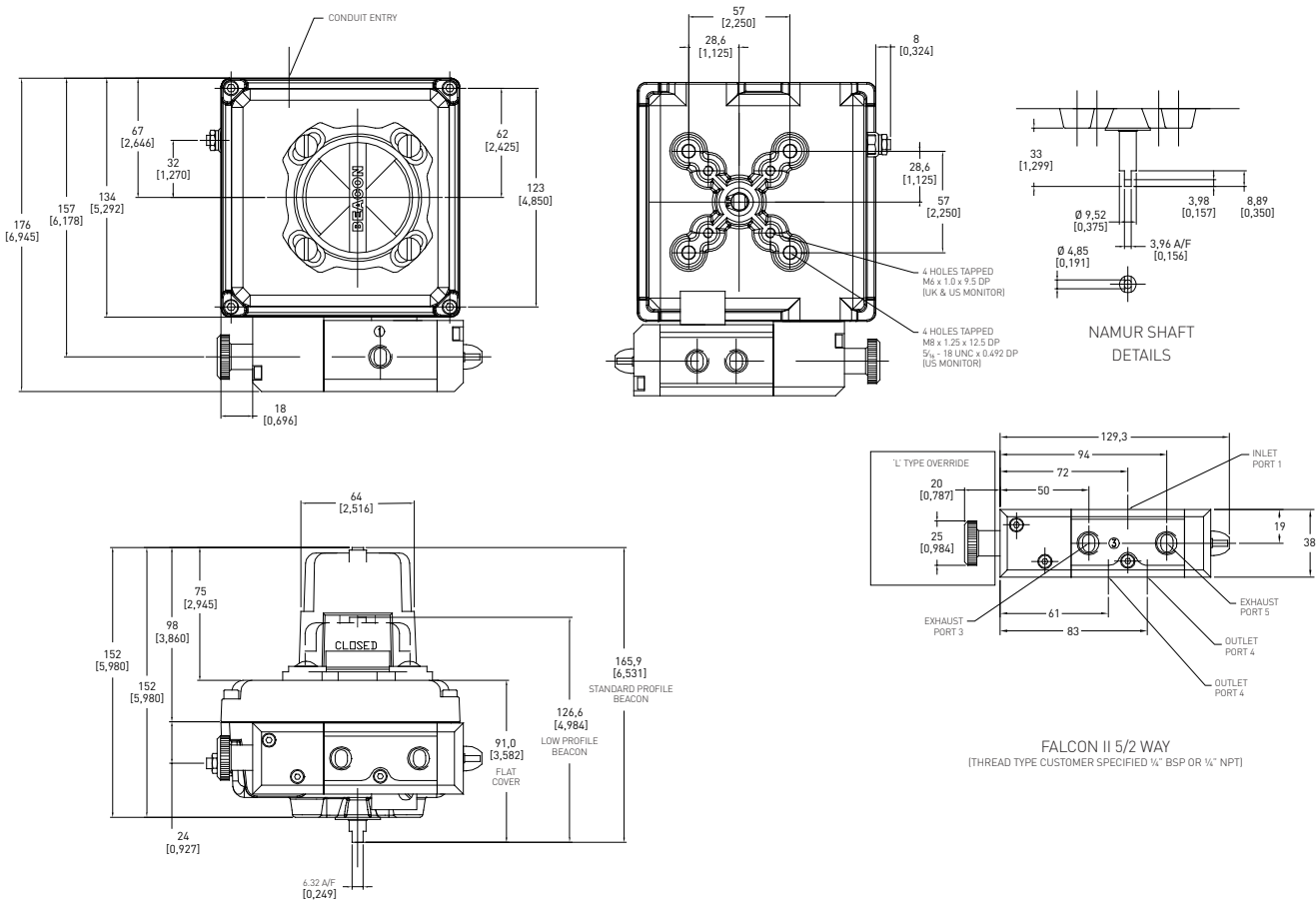
The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and C_v to best suit your application. See the Falcon II data sheet for more information.



Quantum™ Rotary Control Monitors

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3700 Series aluminium and stainless steel enclosure dimensions



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

| Technical specifications | |
|----------------------------------|--|
| Materials of construction | |
| Enclosure | Aluminum with powder coat finish Stainless steel with electropolished finish |
| Shaft and hardware | Stainless steel |
| Bushing | PTFE (stainless steel enclosure) Oil impregnated bronze (aluminum enclosure) |
| Beacon visual indicator | Co-polyester |
| Drive shaft | |
| Standard | Double-D with 1/4" A/F |
| Option | NAMUR standard VDI/VDE 3845 |
| Available switches | |
| | Magnum, SPDT hermetically sealed magnetic proximity switches, with tungsten contacts |

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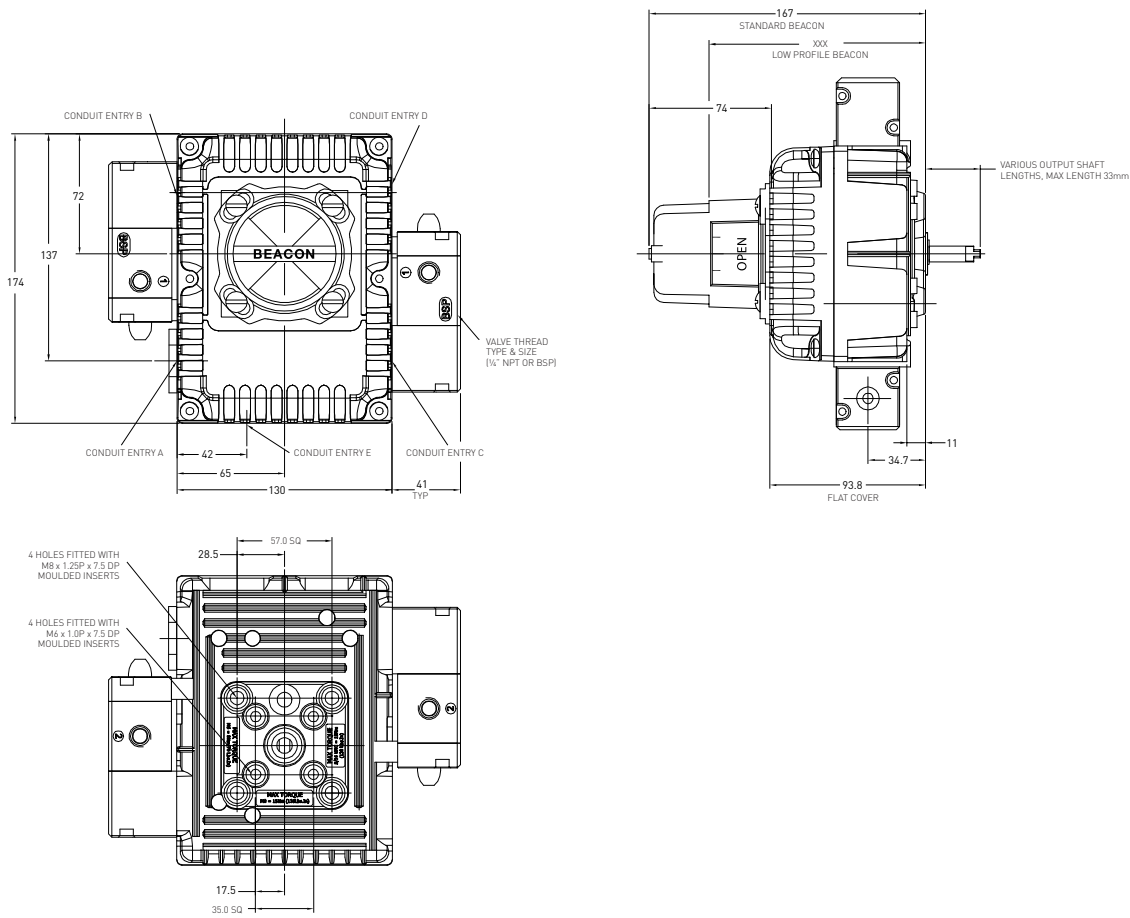
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Quantum™ Rotary Control Monitors

Increased Safety/Encapsulation – ATEX/IEC

8700 Series resin enclosure dimensions



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

Technical specifications

| | |
|----------------------------------|--|
| Materials of construction | |
| Enclosure | Engineered resin |
| Shaft and hardware | Stainless steel |
| Bushing | Nylon |
| Beacon visual indicator | Co-polyester |
| Drive shaft | |
| Standard | Double-D with 1/4" A/F |
| Option | NAMUR standard VDI/VDE 3845 |
| Available switches | |
| | Magnum, SPDT hermetically sealed magnetic proximity switches |

Please consult your sales office for any other requirements

Notes

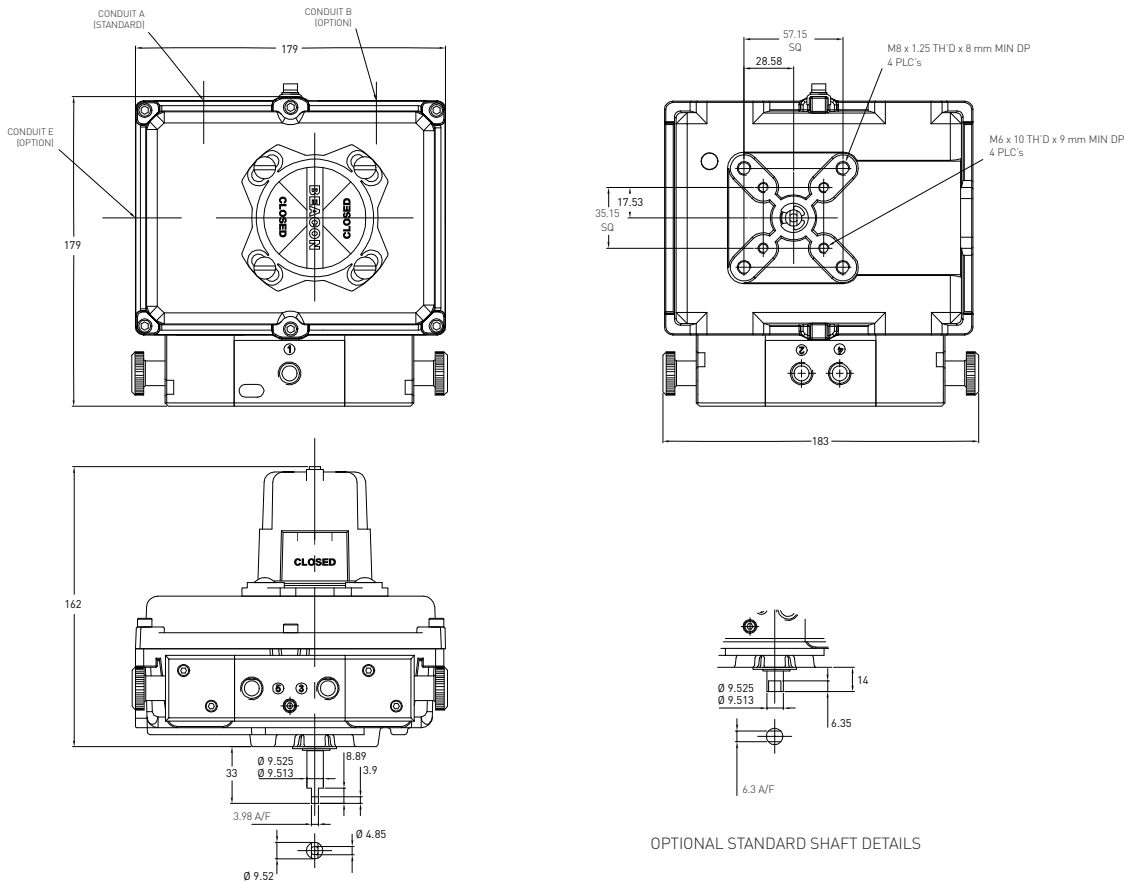
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8700 Series aluminium and stainless steel enclosure dimensions



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

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|----------------------------------|---|
| Materials of construction | |
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| Shaft and hardware | Stainless steel |
| Bushing | PTFE (stainless steel enclosure) Oil impregnated bronze (aluminum enclosure) |
| Beacon visual indicator | Co-polyester |
| Drive shaft | |
| Standard | Double-D with 1/4" A/F |
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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 material and build (consult sales office) | | | | | | | | | | | | |
| Solenoid body material | | | | | | | | | | | | | |
| A | Anodised aluminium | | | | | | | | | | | | |
| E | Stainless steel | | | | | | | | | | | | |
| Solenoid coil voltage | | | | | | | | | | | | | |
| C | 24 V DC | | | | | | | | | | | | |
| D | 24 V AC | | | | | | | | | | | | |
| H | 90-120 V AC | | | | | | | | | | | | |
| J | 220-240 V AC | | | | | | | | | | | | |
| Solenoid valve specification | | | | | | | | | | | | | |
| ½" BSP entry; 1.1 Cv | | | | | | ½" NPT 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 | | | | | | |
| 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- M20 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 | | | | | | | | | | | | |
| I | 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

Specifying your control monitor
 Specifying a control monitor is a complex process as there are many variables that affect each individual application. To ensure that you receive the best possible combination for your control and monitoring requirement, please contact your local sales office for advice and guidance from one of our experts.

Hazardous area classification
 Please see our data sheet for further information on the global standards affecting the specification and installation of equipment in hazardous areas.

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