



22 Chapman Way
Tunbridge Wells, Kent
TN2 3EF England

Tel: +44 (0) 1892 516277

Fax: +44 (0) 1892 516279

Email: sales@westlockuk.com

Website: www.westlockuk.com

Small Zytel Accutrak Valve Position Monitor — Marketing Release March 2008





Purpose of Document

From Monday 17th March 2008 all Small Zytel Valve Position Monitors that are for Intrinsically Safe applications (EExia – ATEX/Exia – IEC) will be supplied as the 3000 Series Accutrak Model (See attached 3000 Series Coding). This will include the Rhodium Contact Magnum XT90 as the standard switch offering for the Magnum variation.

For Non-Hazardous Applications (i.e. Safe Area) all Small Zytel Valve Position Monitors will be supplied as the 3200 Series Accutrak Model (See attached 3200 Series Coding).

Index

	Page Numbers
Overview of Changes	3
Magnum Rhodium Switch	4
3000 Series Intrinsically Safe Monitor	5/6
3200 Series Non Hazardous Monitor	7/8
3000 Series Part Number Matrix	9
3200 Series Part Number Matrix	10
Part Number Examples	11

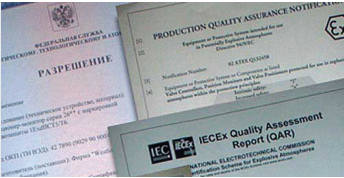


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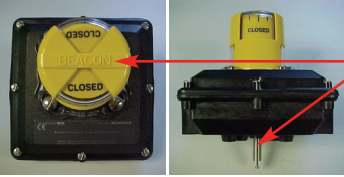
Overview of Changes

- **Certification**



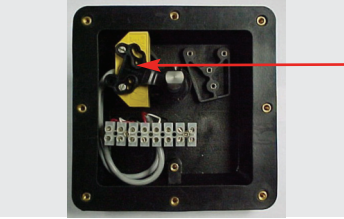
Due to the change in the ATEX/IEC Harmonised Standards for Intrinsic Safety, it has been necessary to create a specific part number for IS Certified (3000 Series) product compared to Non Hazardous (3200 Series) equipment.

- **Shaft Rationalisation:**



Along with a global shaft rationalisation strategy the Small Zytel shafts have been updated to include double O-Ring positions as standard. In line with customer requests the Namur 'Tang' has also been rotated 90° so the Beacon can be fitted in a standard orientation for most conventional applications.

- **Centralisation Plate:**



Standard supply of a centralising plate for two switch products offers a product improvement with regards to the linearity of the Shaft/Cam arrangement in line with the Switch/Sensor triggering position. This will allow more accurate setting of switches by fixing the shaft position while setting occurs and cover bearing is removed.

- **Inductive Proximity Cam Assembly:**



With the above centralisation plate, tolerances allow an improvement to the Cam arrangement for the Inductive Proximity sensor option within the Small Zytel range of products. This has incorporated a metallic 'Slug' with an increased diameter and density that is located within the Cam to allow for improved accuracy when setting the sensors.



Magnum Rhodium Switches

Subject:

Adoption of Rhodium 'Low Power' Switches in all 'IS' certified Westlock product supplied with Magnum switches.

Proposal:

The Rhodium contact Magnum is designed for, and fully capable of handling all low power and 'IS' circuit applications, and Westlock Controls believe the adoption of this switch in all certified IS products will be a major product improvement.

Comparison of relevant Properties:

Magnum Type

Contact Protection

Min Switching capacity

Max Switching capacity

Max contact Resistance

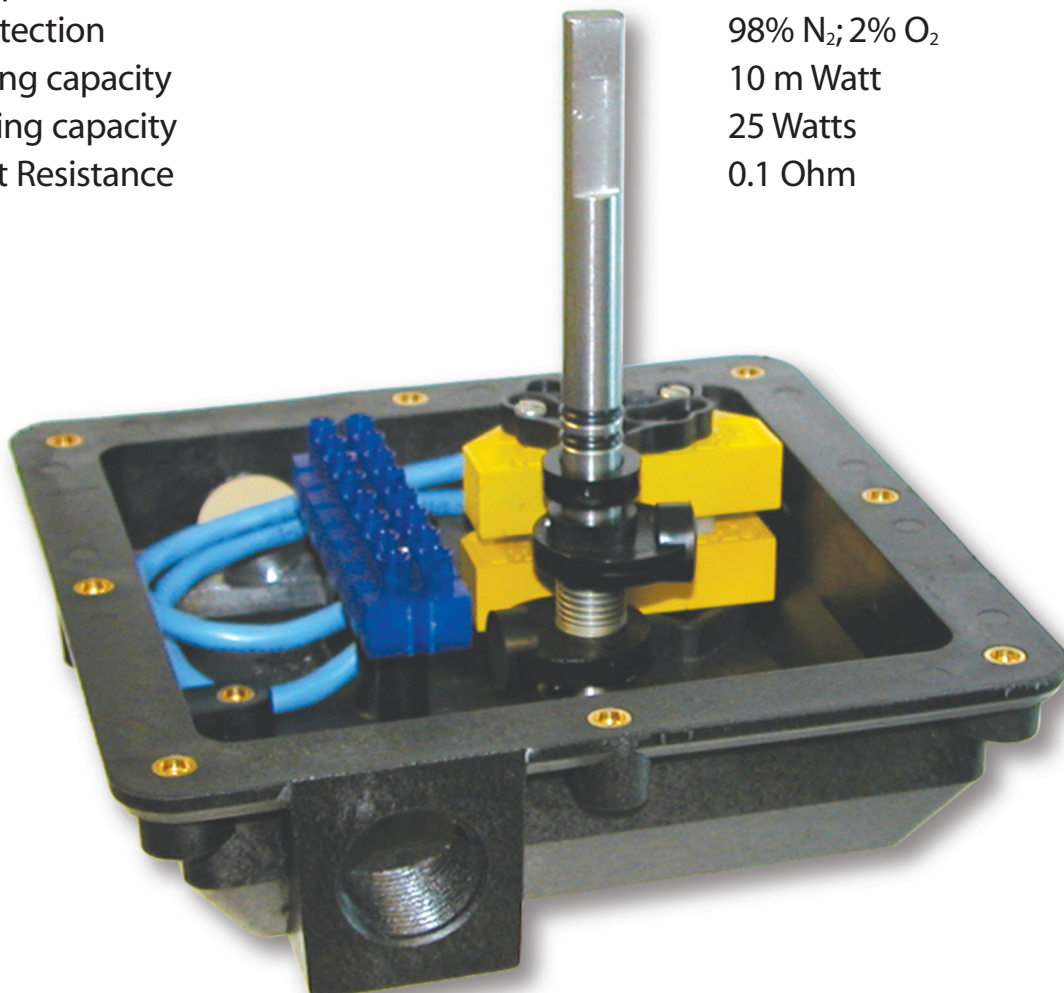
Rhodium Contact

98% N₂; 2% O₂

10 m Watt

25 Watts

0.1 Ohm





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Technical Information

Accutrak 3000 Series – Zytel Resin EExia Intrinsically Safe

High performance polyamide resins offer a viable alternative to metal enclosures for applications where caustics wash downs, chloride atmospheres and salt water environments are a daily occurrence. The Accutrak 3000 Series combines chemical resistance with high impact strength and immunity to weathering. Unaffected by electrolytic corrosion and high concentrates of alkalis, the 3000 Series is remarkably resistant to attack from bacteria and fungi; a feature especially important in food and beverage processing plants.

The 3000 Series is certified ATEX/IECEX to latest intrinsically safe harmonised standards.

Certified Options Available

- Beacon or Flat Covers
- Standard Height - Black / Yellow, Red / White, Blue / White, Green / White, 3 Way Flow Path Beacon Indicators, Various Languages
- Low Profile – Black / Yellow, Red / White, Blue / White, Green / White
- M20, M25, 1/2"NPT and 3/4"NPT Conduit Entry Options
- 2 Position Conduit Entries
- 1 or 2 x V3 Mechanical Switches SPDT Contacts Gold Plated
- 1 or 2 x V3 Inductive Proximity Sensors
- 1 or 2 x Magnum XT90 Hermetically Sealed Proximity SPDT Rhodium Contacts
- Namur or Westlock Standard Shaft
- Terminal Strips – Blue Weco 8pt Max

Technical Specifications

● ENCLOSURE

Material Specification Zytel Glass Filled Nylon 6

Finish Natural

● BEACON INDICATOR

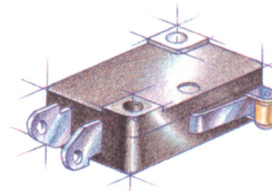
Material Specification Ektar Copolyester

● SHAFT

Material Specification 303 Stainless Steel

● SENSORS/SWITCHES

– V3 Mechanical Switches SPDT Gold Plated Contacts



Electrical Rating (SPDT):

15amps / 125/250VAC

.5amps / 125VDC

6amps / 24VDC

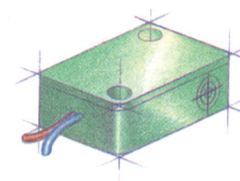
.25amps / 250VDC

5amps / 125VAC

Hysteresis:

3%

– Pepperl & Fuchs (NJ2-V3-N)



Input Voltage Range:

5 – 25VDC

Output / Current Consumption:

≥ 1 mA - ≤ 3 mA

Nominal Voltage:

8VDC

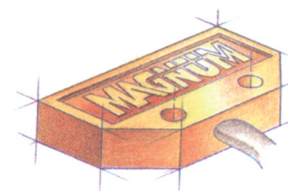
Switching Frequency:

1 KHz

Hysteresis:

1%

– Magnum XT90 Hermetically Sealed Rhodium Contacts



Electrical Rating:

0.295amps / 120VAC

0.15amps / 240VAC

1amps / 24VDC

Hysteresis:

6%



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Technical Information Continued

Accutrak 3000 Series – Zytel Resin EExia Intrinsically Safe

● TERMINAL STRIP

- Type	WECO Series 300 type 302 HDS
- Colour	Blue
- Material Specification	Polymide
- Nominal Cross Section	1.5mm ²
- Wire Tripping Length	5mm

● O-RINGS/GASKETS

- Material Specification	Buna N
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● E CLIPS & FASTENERS

- Material Specification	Stainless Steel
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● CERTIFICATION APPLICABLE



ATEX

Certificate Number:	SIRA 05 ATEX 2242X
Approval Detail: 3045, 3047, 3049	II 2 GD T*°C EEx ia IIC T* (Tamb = -20°C to +40°C) ExiaD 21T*°C *T6 = 80°C; T5 = 90°C; T4 = 120°C Note: T5 and T4 option 3047 only (See certificate schedule)

● CERTIFICATION APPLICABLE



IECEX

Certificate Number:	IEC EX SIR 05.0049X
Approval Detail: 3045, 3047, 3049	Exia IIC T* (Tamb = -20°C to +40°C) (For zone 1 gases) ExiaD 21T*°C, IP67 (For zone 1 Dusts) (*See certificate schedule)



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Technical Information

Accutrak 3200 Series – Zytel Resin Non Hazardous

High performance polyamide resins offer a viable alternative to metal enclosures for applications where caustics wash downs, chloride atmospheres and salt water environments are a daily occurrence. The Accutrak 3200 Series combines chemical resistance with high impact strength and immunity to weathering. Unaffected by electrolytic corrosion and high concentrates of alkalis, the 3200 Series is remarkably resistant to attack from bacteria and fungi; a feature especially important in food and beverage processing plants.

Certified Options Available

- Beacon or Flat Covers
- Standard Height - Black / Yellow, Red / White, Blue / White, Green / White, 3 Way Flow Path Beacon Indicators, Various Languages
- Low Profile – Black / Yellow, Red / White, Blue / White, Green / White
- M20, M25, 1/2"NPT and 3/4"NPT Conduit Entry Options
- 2 Position Conduit Entries
- 1 or 2 x V3 Mechanical Switches SPDT Contacts
- 1 or 2 x V3 Inductive Proximity Sensors (Contact Sales Office for Options)
- 1 or 2 x Magnum XT90 Hermetically Sealed Proximity SPDT Tungsten Contacts
- Namur or Westlock Standard Shaft
- Terminal Strips – Weco 8pt Max

Technical Specifications

● ENCLOSURE

Material Specification	Zytel Glass Filled Nylon 6
Finish	Natural

● BEACON INDICATOR

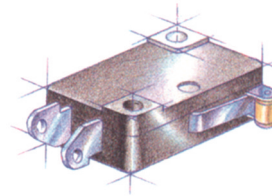
Material Specification	Ektar Copolyester
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● SHAFT

Material Specification	303 Stainless Steel
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● SENSORS/SWITCHES

– V3 Mechanical Switches SPDT



Electrical Rating (SPDT):

15amps / 125/250VAC

.5amps / 125VDC

6amps / 24VDC

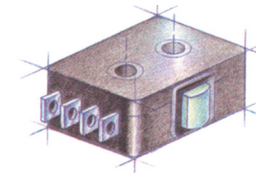
.25amps / 250VDC

5amps / 125VAC

Hysteresis:

3%

– DPDT Mechanical Switch



Electrical Rating (DPDT):

10amps / 125VAC

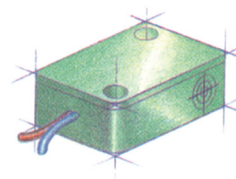
10amps / 250VAC

Hysteresis:

5%

– Inductive Proximity Sensors

Contact Sales Office for Options





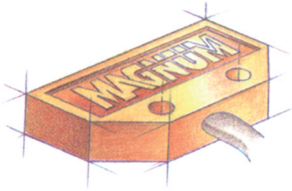
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Technical Information Continued

Accutrak 3200 Series – Zytel Resin Non Hazardous

– Magnum XT90 Hermetically Sealed Tungsten Contacts



Electrical Rating:
3amps / 120VAC

1.5amps / 240VAC

2amps / 24VDC

Hysteresis:

6%

● TERMINAL STRIP

– Type	WECO Series 300 type 302 HDS
– Colour	Natural
– Material Specification	Polymide
– Nominal Cross Section	1.5mm ²
– Wire Tripping Length	5mm

● O-RINGS/GASKETS

– Material Specification	Buna N
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● E CLIPS & FASTENERS

– Material Specification	Stainless Steel
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● NORTH AMERICAN EQUIVALENT UNITS

Model Numbers	1040, 1065
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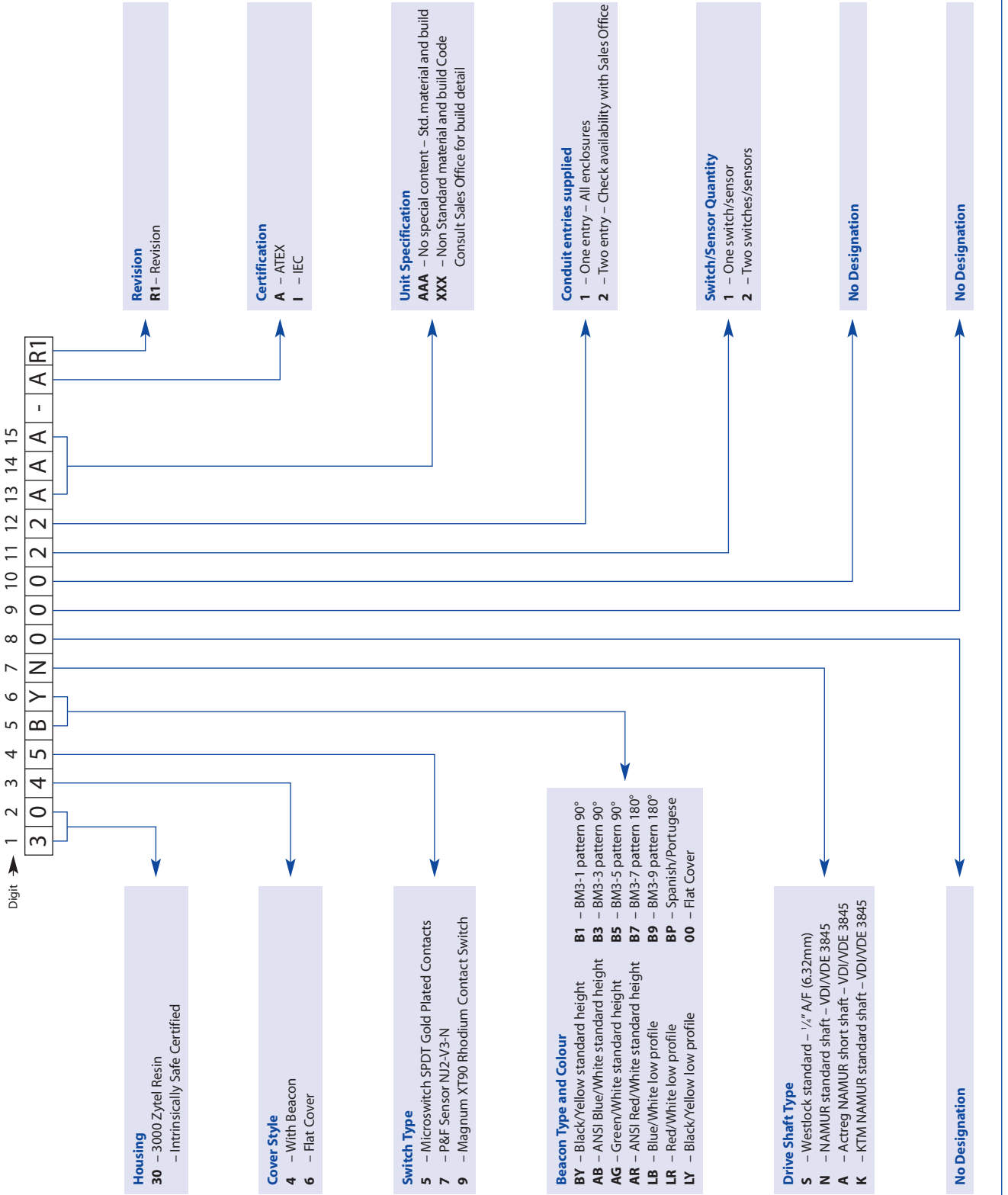
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3000 Series Accutrak Coding





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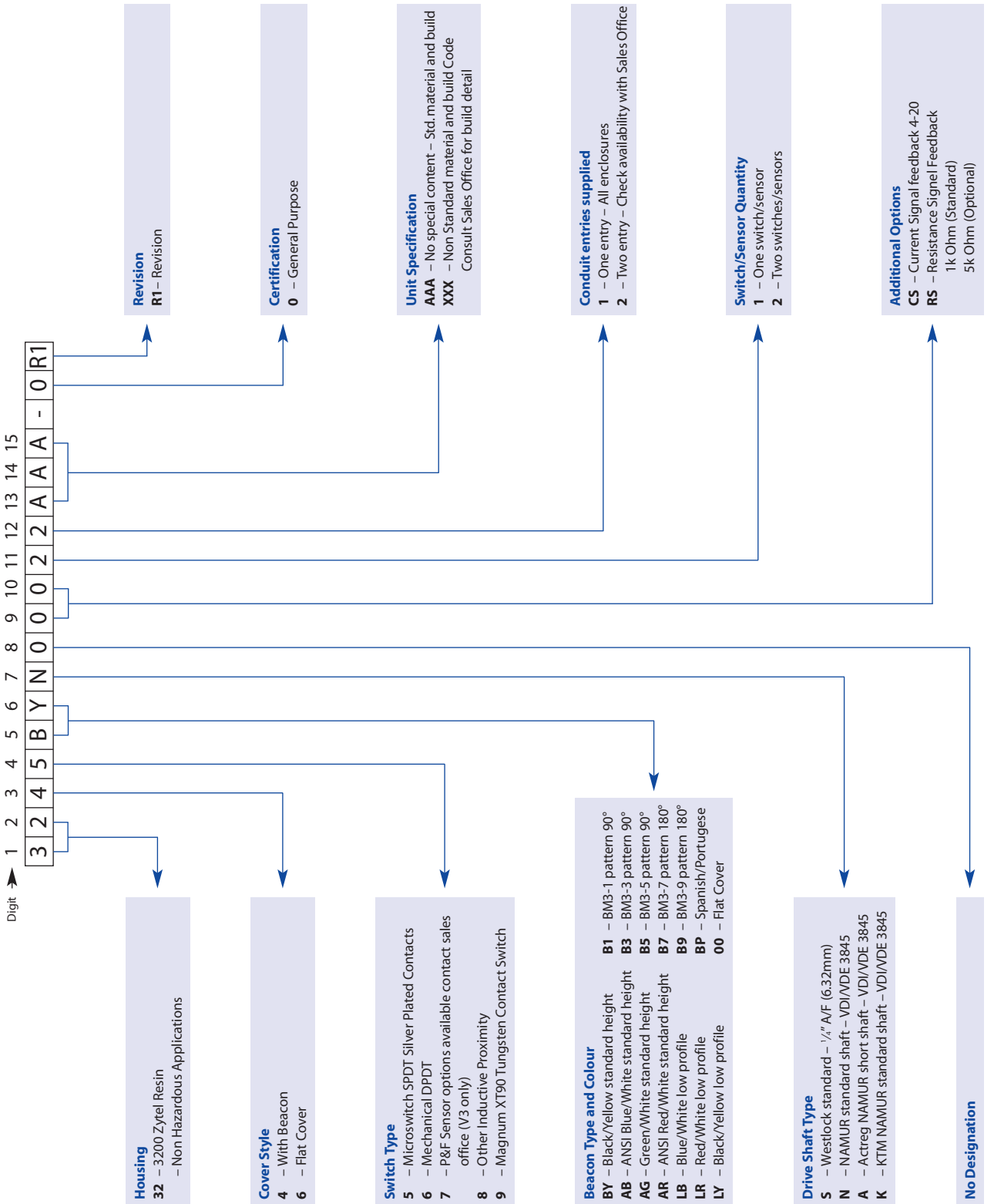
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3200 Series Accutrak Coding





Part Number Examples

3000 Series Small Zytel Monitor

Description: Westlock Small Zytel, 3000 Series Monitor, Black/Yellow Beacon Indicator, Namur Shaft, 2 x M20 Conduit Entries, 2 x Magnum XT90 Hermetically Sealed Proximity Switches with Rhodium SPDT Contacts pre-wired to 8 Point Blue Terminal Strip. Unit ATEX Certified Ex II 2 G D – EExia IIC T6.

Part Number: 3049-BY-N-000-22AAA-AR1.

Description: Westlock Small Zytel, 3000 Series Monitor, Black/Yellow Beacon Indicator, Namur Shaft, 2 x M20 Conduit Entries, 2 x Pepperl & Fuchs Inductive Proximity Sensors NJ2-V3-N pre-wired to 8 Point Blue Terminal Strip. Unit IECEx certified – Exia IIC T6.

Part Number: 3047-BY-N-000-22AAA-IR1.

Description: Westlock Small Zytel, 3000 Series Monitor, Black/Yellow Beacon Indicator, Namur Shaft, 2 x M20 Conduit Entries, 2 x V3 Mechanical Switches with Gold Plated SPDT Contacts pre-wired to 8 Point Blue Terminal Strip. Unit ATEX Certified Ex II 2 G D – EExia IIC T6.

Part Number: 3045-BY-N-000-22ABM-AR1

3200 Series Small Zytel Monitor

Description: Westlock Small Zytel, 3200 Series Monitor, Black/Yellow Beacon Indicator, Namur Shaft, 2 x M20 Conduit Entries, 2 x Magnum XT90 Hermetically Sealed Proximity Switches with Tungsten SPDT Contacts pre-wired to 8 Point Terminal Strip. Unit for use in a Non Hazardous Area.

Part Number: 3249-BY-N-000-22AAA-OR1.

Description: Westlock Small Zytel, 3000 Series Monitor, Black/Yellow Beacon Indicator, Namur Shaft, 2 x M20 Conduit Entries, 2 x V3 Mechanical Switches with Silver Plated SPDT Contacts pre-wired to 8 Point Terminal Strip. Unit for use in a Non Hazardous Area.

Part Number: 3245-BY-N-000-22AAA-OR1.