THE scoop

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PLEASE CIRCULATE!

THE scoop
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4B Components, Ltd. Newsletter

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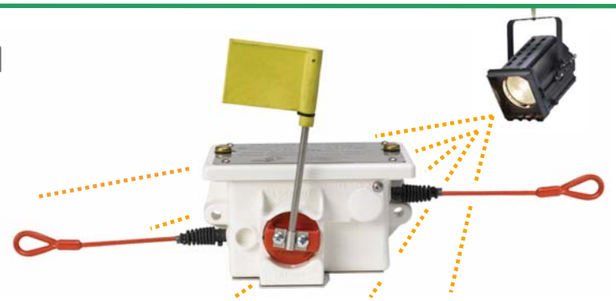
Product Spotlight - Pullswitch

The PST1000C Pullswitch is a reliable "Taut Wire" failsafe emergency stop system for installation along the length of a conveyor. Approved for use in dust hazard locations (Class 2 Div. 1 Groups E, F, G), the switch is installed at 200 ft intervals with a taut cable installed between switches. Any pull on the cable will automatically shutdown the conveyor. On long conveyors, a standard cats eye along with an optional flag indicator, provide quick location of the tripped switch. Unlike similar switches which have slack wires connected between them, the PST1000C uses a tight wire system which means that any pull on the cable will automatically shutdown the conveyor in an emergency. Weather proof construction with a heavy duty polycarbonate and stainless steel body will ensure that the switch will provide years of protection in even the most extreme and corrosive environments.



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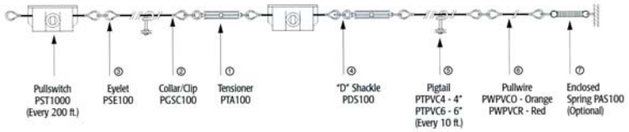
Pictured Below: Diagram of Typical Pullswitch Setup



News Flash

Equipment Manufacturers Council

AFIA
American Feed Industry Association

EMC 2007 Conference
"Safety, Security and Disaster Recovery"

This year's Equipment Manufacturers Conference will be held at the Point South Mountain Resort in Phoenix AZ, November 1st - 3rd. Visit www.afia.org for more information and to register for the conference.

AND THE WINNER IS…

The winner of the Cruzin Cooler give-away at this years GEAPS Expo in Grapevine, TX was Ronnie Haley of ConAgra Foods in Saginaw, TX

Congratulations Ronnie and Enjoy!

Spanish Version Now Available!
"¡Versión Disponible en Español!"

www.go4b.com

EMPLOYEE PROFILE

Brian Knapp
Electronics Engineer

I am a graduate from the University of Illinois with a major in Computer Engineering. My degree is beneficial both for the electronics we sell, and the software that drives them.

In the year and a half that I have been working at 4B Components, I have had the pleasure of working with many other intelligent and qualified employees and customers in the US, and other countries around the world.

On a personal note, I am a baseball fan. I root for the Braves, but enjoy catching a game at any ballpark.

At this time next year I will be married to my fiancé, Erin. The wedding date is set for June 21, 2008.

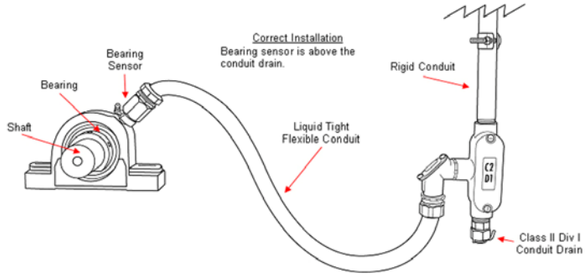
SPARKY'S SHOCKERS

Brian Knapp
Electronics Engineer

Conduit Drains

Even professionally installed conduit is susceptible to water infiltration. Whether from an unsealed junction box or just normal condensation, water will get into conduit and accumulate at the lowest point.

Low point conduit drains should be installed to allow this water to escape. Proper installation of the conduit drain is using a T style junction box, with the wiring looped down, preventing the possibility of water channeling along the cable to the sensor. The sensor is installed higher than the conduit drain so that even condensation on the cable will channel to the T junction and drain. An example of a good installation is shown below.



Lack of a low point conduit drain can cause corrosion to sensors and wiring. This can shorten the lifetime of the sensors and also cause shorts in wiring. Just like any piece of equipment, conduit drains should be regularly inspected and cleaned of dust/debris during routine maintenance.

EXPORTING OUT OF THE U.S. ???

ECCN Questions & Answers

There is a process for determining the proper ECCN for your items. The Bureau of Industry and Security (BIS) Office of Exporter Services (202-482-4811) in Washington, D.C. will guide you in attempting to determine your ECCN using the Commercial Control List.

ECCN, stands for Export Control Classification Number. An ECCN is an alpha-numeric classification used in the Commercial Control List to identify items for export control purposes. An ECCN is different from a Schedule B number, which is used by the Bureau of Census to collect trade statistics. It is also different from the Harmonized Tariff System Nomenclature, which is used to determine import duties.

All ECCN's will have 5 characters. There are 10 categories on the Commercial Control List. The first number of the ECCN identifies the category to which it belongs.

There are 3 ways to determine the ECCN for your product:

1. Determine the classification yourself - reviewing the alphabetical index to the Commercial Control List (CCL)
2. Go to the source – Ask the manufacturer, producer or developer of the item
3. Get an official classification from the Bureau of Industry and Security (BIS) www.bis.doc.gov/Forms/AskaCounselor.html

Other helpful sites: www.export.gov and www.census.gov

ROGER'S REVIEW

Roger Bruère
Technical Sales Engineer

Capacity Calculating

With the increase in demand for more and more throughput, maximizing your bucket elevators capacity has become crucial in order to survive in today's competitive market. Here are some handy formulas for you to use:

♦ Bucket Elevator Capacity = (Bucket Water Level Capacity) X (# of Bucket Rows) X (# of Buckets per Foot) X (Belt Speed) X (60 min/hr) ÷ (1,728)
Cubic Feet per Hour — Cubic Inches — 12 ÷ Spacing (Inches) — Feet per Min.

♦ Belt Speed = (3.1416) X (Head Pulley Diameter) X (RPM) ÷ (12 in/ft)
Feet per Min. — Inches

♦ Horsepower at Head Shaft = (Bucket Elevator Capacity) X (Density of Product) X (Elevator Height) ÷ (33,000)
Cubic Ft/Hr — Lbs/Cubic Ft. — Feet

Converting Cubic Feet per Hour to:

1. Bushels per Hour = Multiply by 0.8037
2. Short Tons per Hour = Multiply by the Product's Density (Lbs/Cubic Ft.) and Divide by 2,000
3. Metric Tons per Hour = Multiply by the Product's Density (Lbs/Cubic Ft.) and Divide by 2,205

And now the final and most important formula: Better Buckets, Belting, & Bolts =

Important: The formulas shown above yield *theoretical* results only and must **not** be used for engineering purposes. Please contact 4B for reliable assistance on bucket elevator design.

ELEVATOR BELT FASTENERS

4B offers a diverse number of belt joining solutions, ranging from bar to mechanical splicing devices, all of which provide safe and efficient long term service. 4B can also assistance your business by helping you select the proper solution for your individual application.

4B "Gripwell" – Angle bar splice for lightweight belts – PVC up to 250 PIW tensile and Rubber up to 220 PIW tensile – Offered in a variety of lengths, this tough aluminum bar splice will grip with its serrations, providing excellent holding strength.

4B "Supergrip" – Offered in 50mm segments in four versions up to 900 PIW, with high tensile strength bolts and self locking nuts. Each assembly is comprised of two half joints. The segmental fastener system gives the belt the release it requires for crowned head pulleys.

4B "Maxi-Splice" – Offered in two versions – CI or AB three piece construction – The CI kit is made of ferrous and moderately high tensile metal designed for use up to 600 PIW tensile – the AB kit is made of non-ferrous very high tensile strength metal for use up to 1200 PIW tensile and is non-sparking, non-corroding.

4B "BC Series: Belt Fastener Clamp for Steel Web Belts" – Extreme duty steel web belt fastener manufactured as a system using very high tensile strength and abrasion resistant steel and shackle system for web cables, using high tensile bolts for fastening. This type of fastener is found in the use of cement, glass and other heavy industrial applications.

For more information and assistance, contact your material handling component specialists at 4B.

CUSTOMER SPOTLIGHT

Tom Keigley, Alan Lee, Bob Auerbach

Keigley & Company offers complete design and equipment supply for conveying any agricultural or industrial material. We started our business in 1977 primarily in the grain industry, providing conveying equipment in Washington, Idaho, Oregon and Montana.

My first encounter with 4B was in 1985 when we successfully upgraded some bucket elevator legs with 4B bottomless buckets. We continue today, increasing capacity in existing legs that have limited trunking size with closely spaced 4B Starco low profile poly buckets.

In 1988, Jim Mawson of 4B helped us design bucket elevator legs to convey rice hulls weighing 8.5 Lbs/Cu Ft at 60 Tph for the Wadham Energy Power Plant in Williams, CA. We ended up using 18 X 8-1/2 12 gauge pressed steel low profile buckets. It was a successful job and a pleasure to get to know Jim.

Our customer base has expanded into industrial applications. Recently we successfully conveyed hot ash with a drag conveyor using 4B forged chain for Potlatch Corporation's Co-Gen plant in Lewiston, ID.

Check out our web site at www.keigleyco.com

PRODUCT TESTIMONIAL

Bolt 'N' Go

Special thanks to Bill Hoffer, Head of Maintenance for CHS Inc. in Superior WI. Bill sent a letter praising 4B's Bolt 'N' Go system which makes flight installation and chain assembly easy. To read Bill's letter, and to find out how 4B's Bolt 'N' Go system can help your business, please visit our website at:

www.go4b.com/usa/forgedchain.asp

click on the product testimonial link under Bolt 'N' Go.