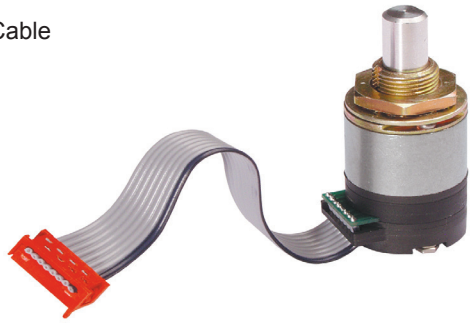
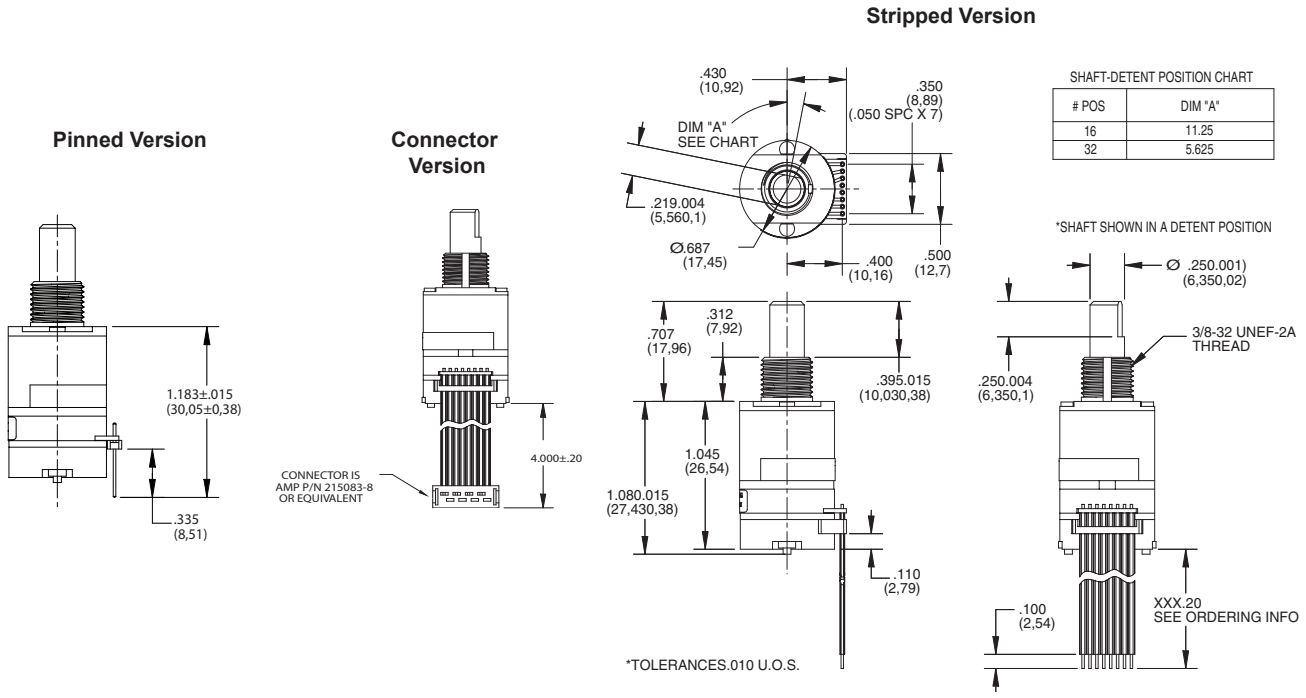
SERIES 62B
Push-Pull, High Torque

FEATURES
- Multiple Switching Functions Available in One Compact Device
- Push and Pull Travel Options
- Pull Shaft Resists Accidental Actuation
- High Rotational Torque for Positive Detent Feel and Superior Tactile Feedback
- Long Life, High Reliability
- CMOS, HCMOS, and TTL Compatible
- Pin, Cable and Connector with Cable Termination Options
- Custom Modifications Available

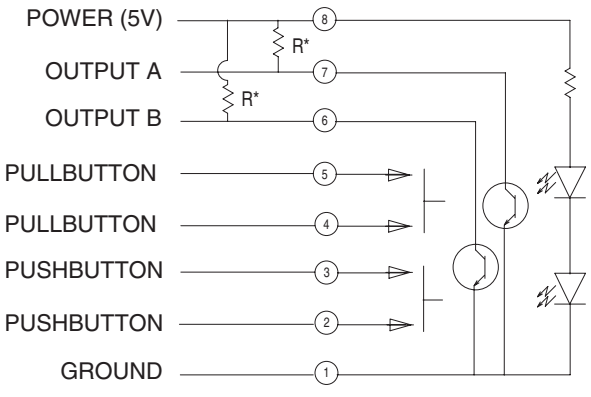
APPLICATIONS
- Use for Menu Scrolling or Function Selection
- Avionics
- Industrial
- Medical



DIMENSIONS in inches (and millimeters)

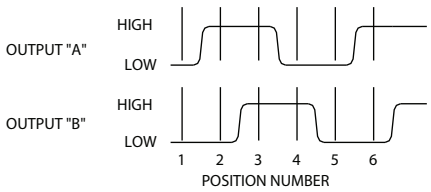


SWITCH SCHEMATIC, WAVEFORM, AND TRUTH TABLE



*EXTERNAL 2.2k Ω PULL-UP RESISTANCE REQUIRED FOR OPERATION.

WAVEFORM AND TRUTH TABLE Standard Quadrature 2-Bit Code



Clockwise Rotation		
Position	Output A	Output B
1		
2	•	
3	•	•
4		•

• Indicates logic high; blank indicates logic low.
Code repeats every 4 positions.

SPECIFICATIONS

Environmental Specifications

Operating Temperature Range: -40° C to 85° C
Storage Temperature Range: -55° C to 100° C
Humidity: 96 hours at 90-95% humidity at 40° C
Mechanical Vibration: Harmonic motion with amplitude of 15 g, within a varied frequency of 10 to 2000 Hz
Mechanical Shock:
Test 1: 100 g for 6 ms half-sine wave with a velocity change of 12.3 ft/sec
Test 2: 100 g for 6 ms sawtooth wave with a velocity change of 9.7 ft/sec

Rotary Electrical and Mechanical Specifications

Operating Voltage: 5.00±.25 Vdc
Supply Current: 30 mA maximum at 5 Vdc
Output: Open collector phototransistor, external pull-up resistors are required
Output Code: Two-bit quadrature, channel A leads channel B by 90° electrically during clockwise rotation of the shaft
Logic Output Characteristics:
Logic high signal shall be no less than 3.0 Vdc
Logic low signal shall be no greater than 1.0 Vdc
Minimum Sink Current: 2.0 mA
Power Consumption: 150 mW maximum
Mechanical Life: 1 million rotational cycles of operation. One cycle is a rotation through all positions and a full return
Average Rotational Torque: 16 position: 5.0 ± 1.5 in-oz, 32-position: 2.5 ±1 .5 in-oz. Torque shall be within 50% of initial value throughout life
Mounting Torque: 15 in-oz maximum
Shaft Push-Out Force: 45 lbs minimum
Shaft Pull-Out Force: 20 lbs minimum
Terminal Strength: 15 lbs minimum terminal pull-out force for cable or header termination
Solderability: 95% free of pin holes and voids

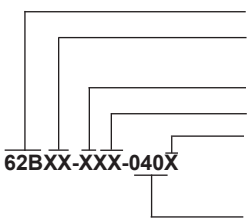
Pull-Button/Push-Button Electrical and Mechanical Specifications

Rating: 10 mA at 5 Vdc
Contact Resistance: <10 ohms
Life: 3 million actuations minimum
Contact Bounce: <4 ms make,<10 ms break
Actuation Force: 1700±450 g for both push and pull-button
Shaft Travel: .030±.010 standard travel. .050±.010 long travel

Materials and Finishes

Bushing: Zinc Diecast, Cadmium Plated per QQP-416, Class II, Type II
Shaft: Aluminum
Detent Cover: Powered Metal per SS-316N1-25
Through Bolts: 305 Stainless Steel
Through Bolts Nuts: 305 Stainless Steel
Shaft Travel Springs: Carbon Steel, Oil Dip Finish
Detent Ball: Stainless Steel
Detent Spring: Tinned Music Wire
Spacer/Push Dome Retainer: Ryton R-4
Push Actuator: Zytel 70G33L
Snap Dome: Stainless Steel
Printed Circuit Boards: Nema Grade FR4, Double Clad with Copper, Plated with Gold over Nickel
Infrared Light Emitting Diode Chips: Gallium Aluminum Arsenide
Silicon Phototransistor Chips: Gold and Aluminum Alloys
Resistor: Metal Oxide on Ceramic Substrate
Solder Pins: Brass, Plated with Tin
Code Rotor: Delrin 100
Code Housing: Hiloy-610
Pull Dome Retainer: Ryton R-4
Pull Actuator: Polyurethane, Isoplast 101 LGF40 Blk
Cover: Ryton R-4
Cable: Copper Standard with Topcoat in PVC Insulation (Cabled Versions Only)
Connector: PA4.6 with Tin over Nickel Plated Phosphor Bronze (Cable/Connector Versions)
Label: TT406 Thermal Transfer Cast Film
Solder: Sn/Ag/Cu, lead-free, no clean
Lubricating Grease: Nye Nyogel 774L
Mounting Hex Nut: Tin/Zinc Over 1/2 Hard Brass
Lockwasher: 8-18 Stainless Steel, Passivate Finish
Pin Header: Hi-Temp Glass Filled Thermoplastic UL94V-0, Phosphor Bronze (Pinned Versions Only)

ORDERING INFORMATION



Series
Angle of Throw: 22 = 22.5° For Code Change and 16 Detent Positions.
11 = 11.25° For Code Change and 32 Detent Positions.
Push/Pull-Button Travel: S = Standard Travel (.030" Both Directions). L = Long Travel (.050" Both Directions)
Push/Pull Option: P = Pull-Button Only. PP = Push and Pull-Button
Termination: C = .050" Pitch Ribbon Cable with Connector
S = .050" Pitch Ribbon Cable with Stripped End
P = .050" Pitch Pin Header
Cable Termination: 040 = 4.0in. Cable is terminated with Amp Connector P/N 215083-6.
See Amp Mateability Guide for mating connector details.
*Eliminate cable length if ordering pins (Ex: 62B22-SP-P)

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9