4-1825136-9 Product Details

Share Print Email

4-1825136-9
(A101SYZQ04)
TE Internal Number: 4-1825136-9
Active

View 3D PDF

Toggle Switches

Always EU RoHS/ELV Compliant
(Statement of Compliance)

Product Highlights:

- Gemini A Series
- Single Pole - Double Throw Configuration (Pole-Throw)
- Current Rating = 5 A
- Mount Style = Solder
- Termination Type = Wire Lugs

View all Features

Quick Links

- Pricing & Availability
- Search for Tooling
- Product Feature Selector
- Contact Us About This Product

Add to My Part List Request Sample Find Similar Products

Buy Product

Documentation & Additional Information

Product Drawings:

- GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE, 2 POSITI... (PDF, English)

Catalog Pages/Data Sheets:

- SWITCHES_CORE_PROGRAM_CATALOG (PDF, English)
- GEMINI_SERIES_SWITCHES_QUICK_REF_GUIDE_2-1773458-5 (PDF, English)

Product Specifications:

- None Available

Application Specifications:

- None Available

Instruction Sheets:

- None Available

CAD Files: (CAD Format & Compression Information)

- 2D Drawing (DXF, Version A)
- 3D Model (IGES, Version A)
- 3D Model (STEP, Version A)

List all Documents

Additional Information:

- Product Line Information

Additional Product Images:

- Product Photo

Related Products:

- Tooling

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- Series = Gemini A
- Termination Type = Wire Lugs

Electrical Characteristics:

- Current Rating (A) = 5

Termination Features:

- Seal Type = Terminal Seal (epoxy)

Body Features:

- Mount Style = Solder
- Bushing Style = Threaded
- Bushing Type = 1/4-40

Housing Features:

- Toggle Actuation = Vertical
- Toggle Style = Baton Long
- Toggle Length (mm [in]) = 10.40 [0.410]
- Process Sealed = No

Configuration Features:

- Configuration (Pole-Throw) = Single Pole - Double Throw
- Operating Function = On On

Industry Standards:

- RoHS/ELV Compliance = RoHS compliant, ELV compliant
- Lead Free Solder Processes = Wave solder capable

Contact Features:

- Contact Plating = Silver

to 260°C, Wave solder capable to 240°C, Wave solder capable to 265°C

- RoHS/ELV Compliance History = Always was RoHS compliant

Other:

- Brand = Alcoswitch

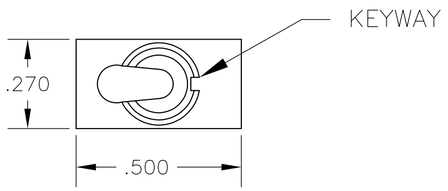
© 2013 Tyco Electronics Corporation, a TE Connectivity Ltd. company. All Rights Reserved

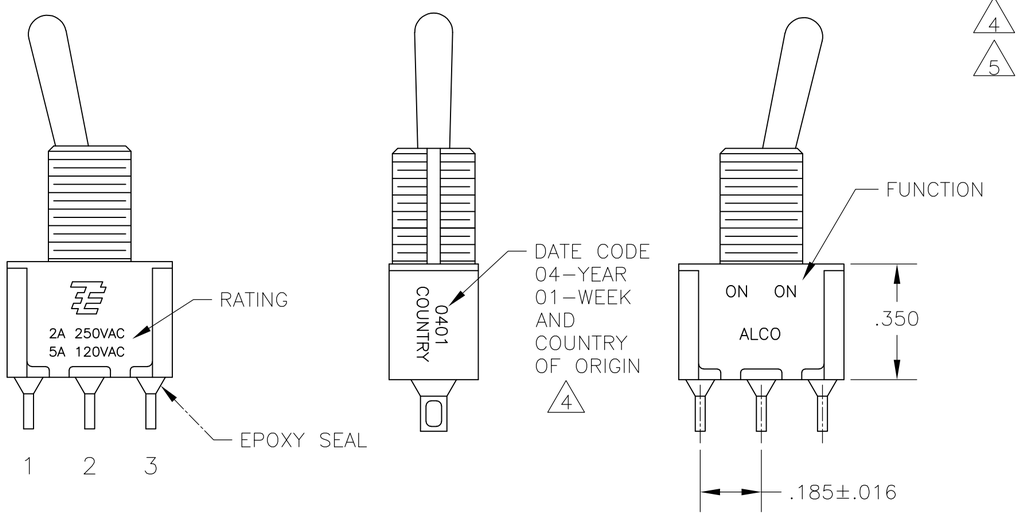
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION – ,– .
© COPYRIGHT – By – ALL RIGHTS RESERVED.

LOC	DIST
AD	00

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A4	REVISED PER ECO–11–004587	11MAR11	RK	HMR





NOTES:

1 ALL MATERIALS AND FINISHES SHALL COMPLY WITH EU DIRECTIVE 2002/95/EC OF 27JAN2003 (ROHS).

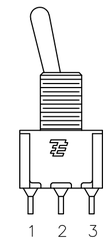
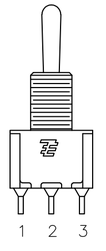
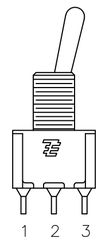
2 EACH SWITCH WITH THREDED BUSHINGS SUPPLIED WITH THE FOLLWING MOUNTING HARDWARE:
(2) HEX NUTS
(1) INTERNAL TOOTH LOCKWASHER
(1) LOCATING RING.

3 G CONTACT OPTION CAN BE USED FOR SIGNAL OR POWER LEVEL SWITCHING. IF SWITCH IS USED AT LEVELS EXCEEDING .4VA @ 20V AC/DC, SWITCH IS RENDERED FOR POWER SWITCHING ONLY DUE TO ARC REMOVAL OF GOLD PLATING. RATING STAMPED ON FRAME IS 2A 250VAC, 5A 120VAC.

△4 DATE CODE AND COUNTRY OF ORIGIN MAY APPEAR ON EITHER SIDE OF SWITCH.

△5 LENGTH OF TOGGLE REDUCED BY .020 WITH A, AV2, V30 OR V40 VERTICAL SUPPORT BRACKET OPTIONS.

FUNCTION CHART

FUNCTION	 1 2 3	 1 2 3	 1 2 3
01	ON	NONE	ON
08	ON	NONE	(ON)
TERMINALS CONNECTED	2–3	–––	1–2

None: No mechanical position
Off: Mechanical position with no electrical connection
(On): Momentary action

SPECIFICATIONS CHART

RATING, B CONTACTS	.4VA MAX @20V MAX. AC OR DC
RATING, G CONTACTS–SEE NOTE 3	.4VA MAX @20V MAX. AC OR DC OR
	5A @120 VAC OR 28 VDC (RESISTIVE)
	2A @250 VAC (RESISTIVE)
RATING, Q CONTACTS	5A @120 VAC OR 28 VDC (RESISTIVE)
	2A @250 VAC (RESISTIVE)
ELECTRICAL LIFE	6,000 CYCLES AT RATED LOAD
CONTACT RESISTANCE	10 MILLIOHMS MAX INITIAL @ 2–4VDC, 100ma
INSULATION RESISTANCE	1,000 MEGOHMS MIN
DIELECTRIC WITHSTANDING VOLTAGE	1,000 V RMS AT SEA LEVEL
OPERATING TEMPRATURE	–30C TO 85C

PART NUMBER SEQUENCE CHART

MODEL	FUNCTION	TOGGLE	BUSHING	TERMINAL	CONTACT	RoHS
A1	01	K	CW	A	B	04
	08	K1	D	AV2	G	
		L	D9	C	Q	
		L1	H	V30		
		L2	Y	V40		
		M	Y9	W		
		P3		W4		
		S		Z		
		T		Z3		
		T1				

EXAMPLE: A101SYCQ04

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± –
2 PLC ± –
3 PLC ± .010
4 PLC ± –
ANGLES ± 2°

MATERIAL –
FINISH –

DWN B.S.VISWESWARA 14APR05
CHK M.ZITTO –
APVD P.BROUILLETTE –
PRODUCT SPEC —
APPLICATION SPEC —
WEIGHT —

TE Connectivity

NAME GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE, 2 POSITION FUNCTIONS (01 & 08)
—

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A2	00779	C-1825136	—

CUSTOMER DRAWING | SCALE 3:1 | SHEET 1 OF 4 | REV A4

1825136

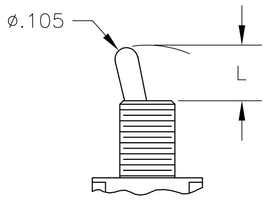
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION -,- .
© COPYRIGHT - By - ALL RIGHTS RESERVED.

LOC	DIST
AD	00

REVISIONS

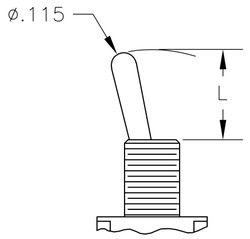
P	LTR	DESCRIPTION	DATE	DWN	APVD
	-	SEE SHEET 1	-	-	-

TOGGLES



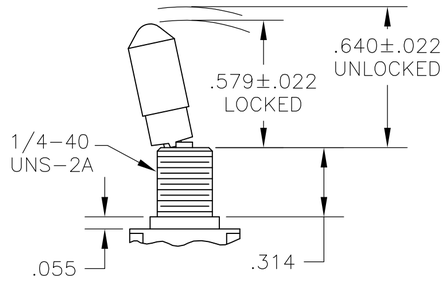
M SHORT

DIM L	BUSHING TYPE
.200	Y, H
.270	D, D9

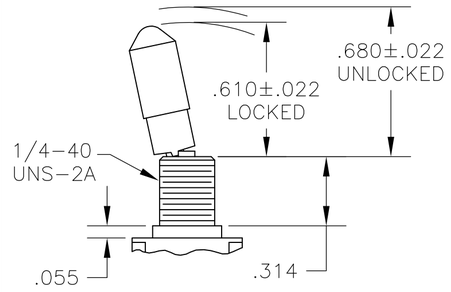


S STANDARD

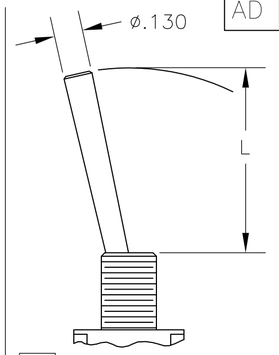
DIM L	BUSHING TYPE
.410	Y, H
.480	D, D9



K NO BUSHING OPTION NEEDED

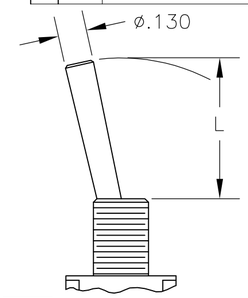


K1 NO BUSHING OPTION NEEDED



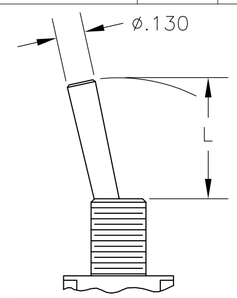
L LEVER

DIM L	BUSHING TYPE
.840	Y, H
.910	D, D9



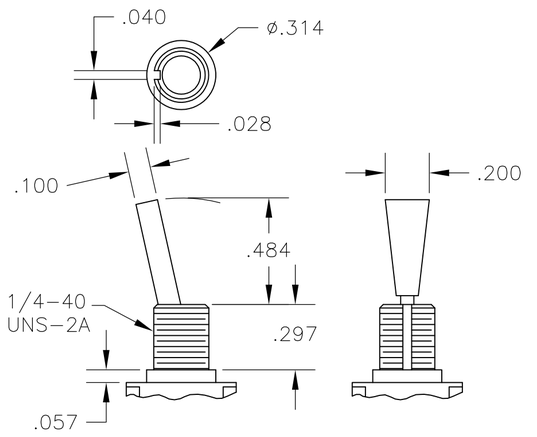
L1 LEVER

DIM L	BUSHING TYPE
.640	Y, H
.710	D, D9

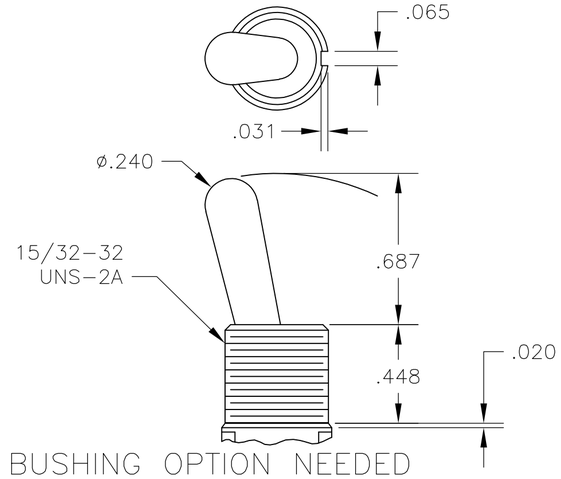


L2 LEVER

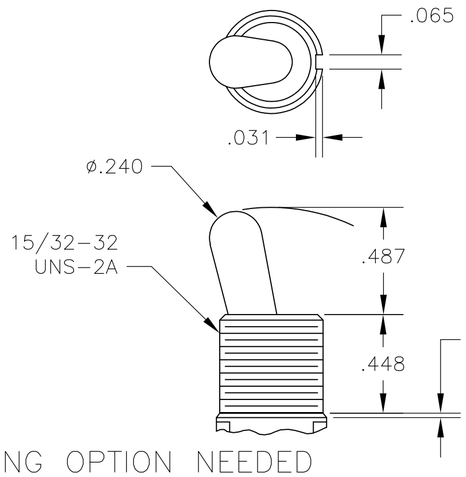
DIM L	BUSHING TYPE
.550	Y, H
.620	D, D9



P3 NO BUSHING OPTION NEEDED

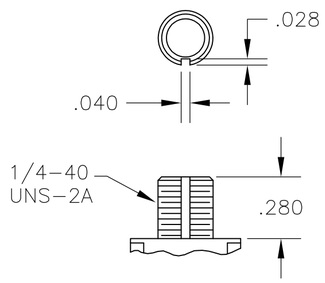


T NO BUSHING OPTION NEEDED

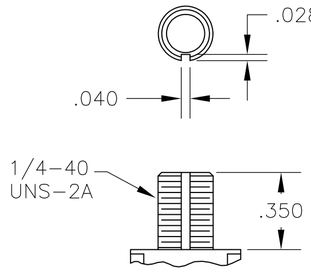


T1 NO BUSHING OPTION NEEDED

BUSHINGS

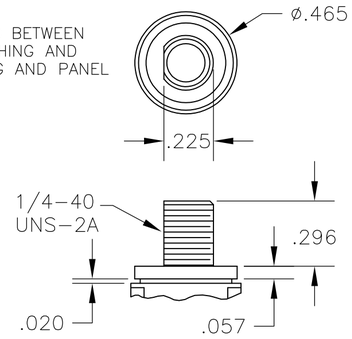


D THREADED
D9 UNTHREADED

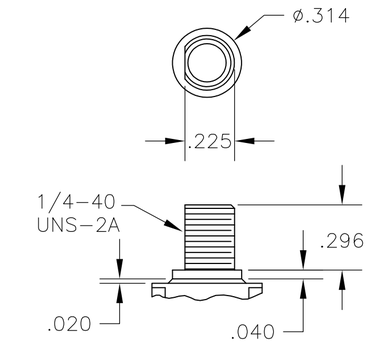


Y THREADED
Y9 UNTHREADED

CONTAINS O-RING BETWEEN TOGGLE AND BUSHING AND BETWEEN BUSHING AND PANEL



CW THREADED SPLASHPROOF



H HIGH TORQUE

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± -
1 PLC ± -
2 PLC ± -
3 PLC ± .010
4 PLC ± -
ANGLES ± 2°

MATERIAL -
FINISH -

DWN	B.S.VISWESWARA 14APR05
CHK	M.ZITTO -
APVD	P.BROUILLETTE -
PRODUCT SPEC	-
APPLICATION SPEC	-
WEIGHT	-

TE Connectivity

NAME
GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE, 2 POSITION FUNCTIONS (01 & 08)
-

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A2	00779	C-1825136	-

CUSTOMER DRAWING | SCALE 2:1 | SHEET 2 OF 4 | REV A4

1825136

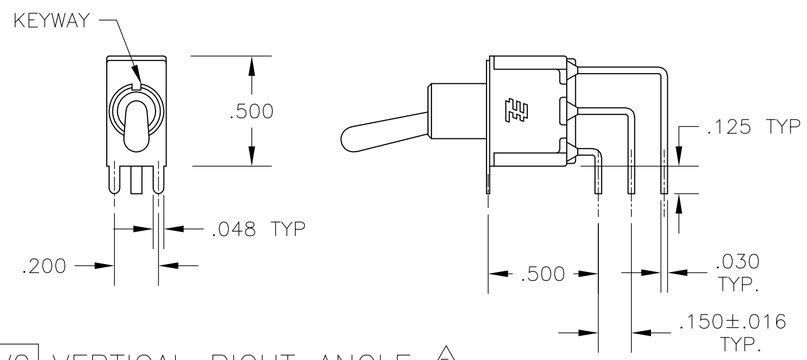
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION – ,– .
© COPYRIGHT – By – ALL RIGHTS RESERVED.

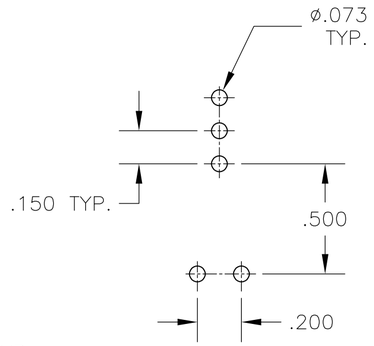
LOC	DIST
AD	00

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	–	SEE SHEET 1	–	—	—

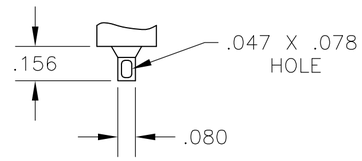
AV2 VERTICAL RIGHT ANGLE ⚠5





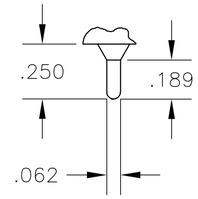
RECOMMENDED PCB LAYOUT

Z WIRE LUG



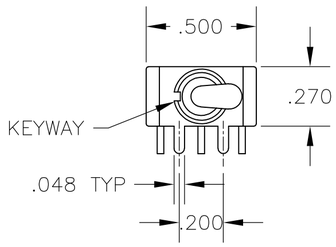
.030 THK.

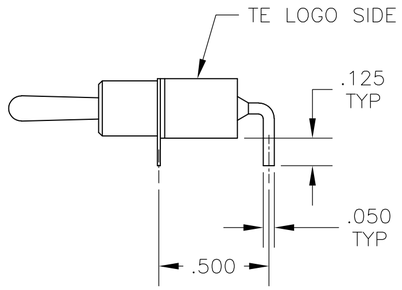
Z3 QUICK CONNECT

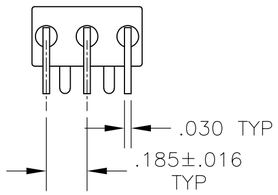


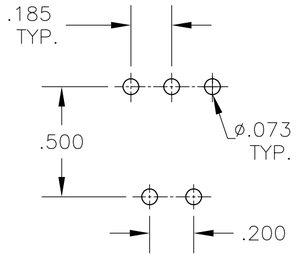
.030 THK.

A RIGHT ANGLE ⚠5



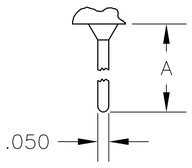






RECOMMENDED PCB LAYOUT

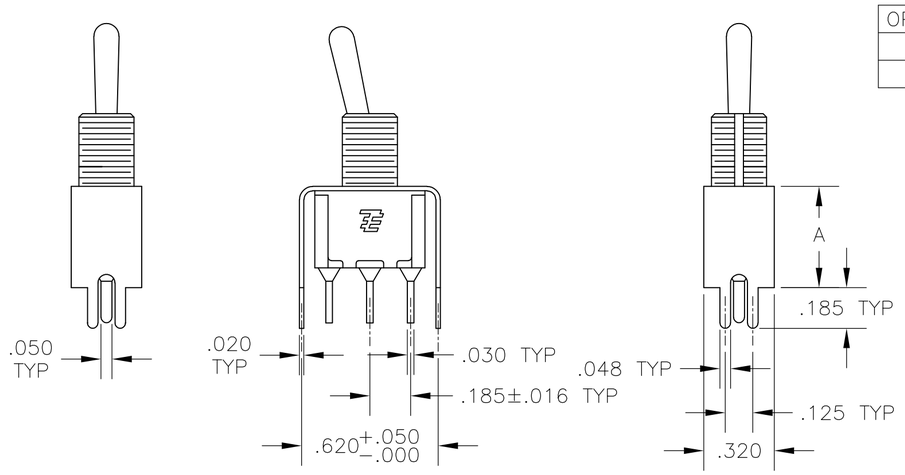
W W4 WIRE WRAP



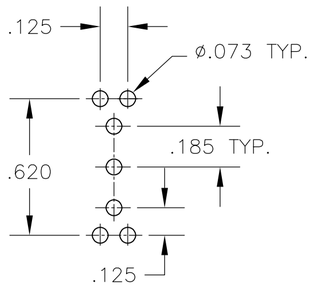
.030 THK.

OPTION	DIM A
W	.736
W4	1.062

V30 V40 ⚠5 VERTICAL SUPPORT BRACKET

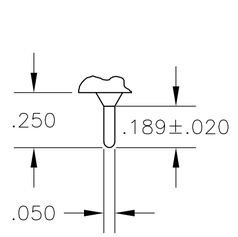


OPTION	DIM A
V30	.460
V40	.630

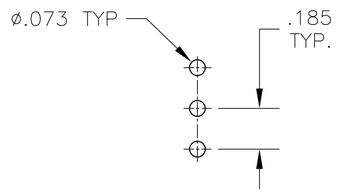


RECOMMENDED PCB LAYOUT

C PRINTED CIRCUIT



.030 THK.



RECOMMENDED PCB LAYOUT

THIS DRAWING IS A CONTROLLED DOCUMENT.	DWN B.S.VISWESWARA 14APR05	TE Connectivity	
DIMENSIONS: INCHES	CHK M.ZITTO –	NAME GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE, 2 POSITION FUNCTIONS (01 & 08) –	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± – ; 1 PLC ± – ; 2 PLC ± – ; 3 PLC ± .010 ; 4 PLC ± – ; ANGLES ± 2°	APVD P.BROUILLETTE –	SIZE A2	CAGE CODE 00779
	PRODUCT SPEC —	DRAWING NO C-1825136	RESTRICTED TO —
MATERIAL –	APPLICATION SPEC —		
FINISH –	WEIGHT —	CUSTOMER DRAWING	SCALE 2:1
		SHEET 3 OF 4	REV A4

1825136

THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION –,– .
© COPYRIGHT – By – ALL RIGHTS RESERVED.

LOC	DIST
AD	00

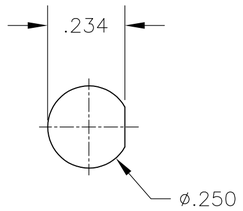
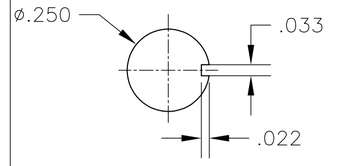
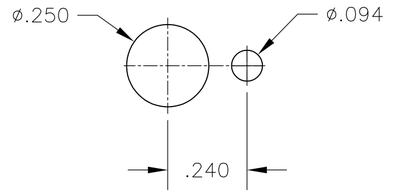
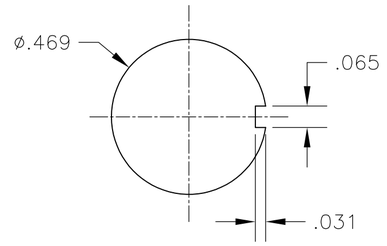
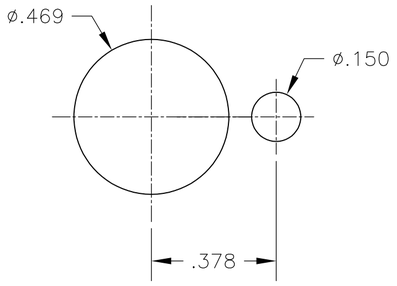
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	–	SEE SHEET 1	–	—	—

Alco P/N	P/N
A101K1V30B04	1825136–1
A101KAB04	1825136–2
A101KAQ04	1825136–3
A101P3YV30B04	1825136–4
A101KCQ04	1825136–5
A101KD9AQ04	1825136–6
A101KZQ04	1825136–7
A101SYAV2B04	1825136–8
A101L1D9V30Q04	1825136–9
A101L1YZB04	1–1825136–0
A101LDZQ04	1–1825136–1
A101MD9AB04	1–1825136–2
A101MD9AG04	1–1825136–3
A101MD9AQ04	1–1825136–4
A101MD9AV2B04	1–1825136–5
A101MD9AV2G04	1–1825136–6
A101MD9AV2Q04	1–1825136–7
A101MD9V30B04	1–1825136–8
A101MDAQ04	1–1825136–9
A101MDAV2B04	2–1825136–0
A101MDCG04	2–1825136–1
A101MDZQ04	2–1825136–2
A101MYCQ04	2–1825136–3
A101MYZQ04	2–1825136–4
A103SYAV2B04	2–1825136–5
A101P3CB04	2–1825136–6
A101P3ZQ04	2–1825136–7
A101KAV2Q04	2–1825136–8
not assigned	2–1825136–9
A101SCWCQ004	3–1825136–0
A101SCWZQ04	3–1825136–1
A101SD9AB04	3–1825136–2
A101SD9AQ04	3–1825136–3
A101SD9AV2B04	3–1825136–4
A101SD9AV2Q04	3–1825136–5
A101SD9V30B04	3–1825136–6
A101SD9V30Q04	3–1825136–7
A101SDCQ04	3–1825136–8
A101SDZQ04	3–1825136–9
A101SHZQ04	4–1825136–0
A101SY9CQ04	4–1825136–1
A101SYAB04	4–1825136–2
A101SYAQ04	4–1825136–3
A101SYCB04	4–1825136–4
A101SYCQ04	4–1825136–5
not assigned	4–1825136–6
A101SYWQ04	4–1825136–7
A101SYZB04	4–1825136–8

Alco P/N	P/N
A101SYZQ04	4–1825136–9
not assigned	5–1825136–0
not assigned	5–1825136–1
A101T1ZB04	5–1825136–2
A101T1ZQ04	5–1825136–3
A101TCQ04	5–1825136–4
A101TZQ04	5–1825136–5
A108MD9AB04	5–1825136–6
not assigned	5–1825136–7
A108P3CQ04	5–1825136–8
A108P3ZQ04	5–1825136–9
A108SD9AQ04	6–1825136–0
A108SDZQ04	6–1825136–1
A108SYCB04	6–1825136–2
A108SYCQ04	6–1825136–3
A108SYZQ04	6–1825136–4
not assigned	6–1825136–5
A101SYAG04	6–1825136–6

RECOMMENDED PANEL CUT–OUTS

BUSHING SIZE	WITHOUT LOCKING RING		WITH STANDARD LOCKING RING
1/4			
15/32			

MATERIALS CHART

COMPONENT NAME	BASE MATERIAL	FINISH
CASE	DAP, RED, UL94 V–0	
FRAME	STAINLESS STEEL	
B TERMINALS & CONTACTS	COPPER	GOLD OVER NICKEL
G TERMINALS & CONTACTS	COPPER	GOLD OVER SILVER
Q TERMINALS & CONTACTS	COPPER	.000400 SILVER
ACTUATOR	PHENOLIC, BLACK, UL94 V–1	
LEVER	BRASS	CHROME
BUSHING	BRASS	NICKEL
SPRING	MUSIC WIRE	
SUPPORT BRACKET	BRASS	TIN
PIVOT PIN	STEEL	NICKEL
LOCK WASHER	STAINLESS STEEL	
LOCKING RING	STAINLESS STEEL	
NUTS	C3604BD BRASS	NICKEL
TERMINAL SEAL	EPOXY	

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± –
2 PLC ± –
3 PLC ± .010
4 PLC ± –
ANGLES ± 2°

MATERIAL –
FINISH –

DWN B.S.VISWESWARA 14APR05
CHK M.ZITTO –
APVD P.BROUILLETTE –
PRODUCT SPEC —
APPLICATION SPEC —
WEIGHT —

TE Connectivity

NAME GEMINI A SERIES TOGGLE SWITCH, SINGLE POLE, 2 POSITION FUNCTIONS (01 & 08)
–

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A2	00779	C–1825136	—

CUSTOMER DRAWING | SCALE 3:1 | SHEET 4 OF 4 | REV A4

1825136

1471–9 (3/11)