

## PUSHBUTTON SWITCHES

### MINIATURE METAL PANEL SEALED PUSHBUTTON

This rugged panel sealed pushbutton is made of a special high creep strength non-spark zinc alloy suitable for use in mining or other potentially explosive atmospheres where dust and moisture are problematic.

#### APPLICATIONS

- Communications
- Instrumentation
- Data processing
- Process controls
- Transportation/ Material handling

#### KEY FEATURES:

- Panel sealed to IP67
- Momentary action
- Non-spark material
- 500,000 life cycles @ max power
- Impact resistant
- Gold contacts
- Wide temperature range: -55°C to +125°C

#### ORDERING INFORMATION:

| Part Number | Bezel Style | Button Color* |
|-------------|-------------|---------------|
| 59-111      | Round       | Black         |
| 59-112      | Round       | Red           |
| 59-113      | Round       | Green         |
| 59-211      | Square      | Black         |
| 59-212      | Square      | Red           |
| 59-213      | Square      | Green         |
| 59-311      | High Round  | Black         |
| 59-312      | High Round  | Red           |
| 59-313      | High Round  | Green         |

\*Consult factory for additional colors.

#### STANDARDS / AGENCY / RATINGS:



[www.itwswitches.com](http://www.itwswitches.com)

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Contact an Authorized Distributor or Factory for Pricing

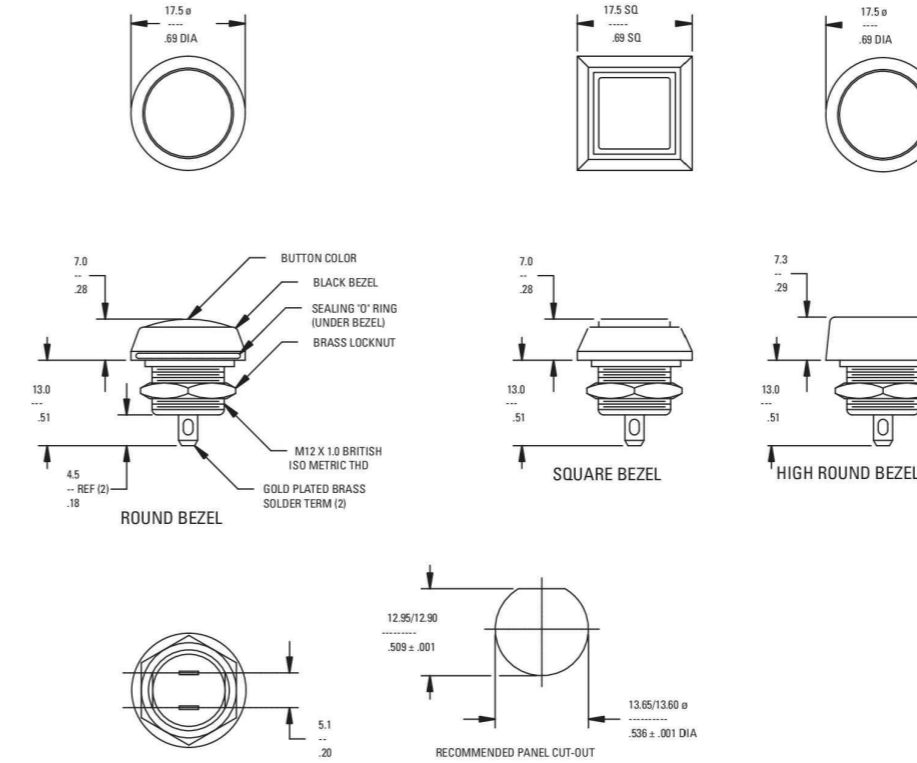
## Series 59



ACTUAL SIZE

## SERIES 59: MINIATURE PANEL SEALED METAL

### PRODUCT DRAWINGS



### PANEL MOUNTING AND CONSTRUCTION INFORMATION

The series 59 mounts easily into panels of minimum 1.5mm (.060 in.) and maximum 3mm (.118 in.) thickness. Front panel sealing to IP67 is achieved by a sealing "O" ring fitted into a premachined groove on the body of the switch before it is inserted into the panel hole cut-out. It is held onto the panel by means of a brass hex nut tightened down by a 14mm spanner, to a torque of between 1.5Nm to 3.0Nm to achieve the correct sealing pressure. A "D" flat is provided to prevent rotation.

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Designs and specifications are subject to change without notice due to product improvement.

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### MECHANICAL / ELECTRICAL CHARACTERISTICS:

- Travel (nom):** 2.3mm (.090 in.)
- Life (max):** 1,000,000 cycles
- Operating force (nom):** 3N / 306 grams
- Contact bounce (nom):** 1 millisecond
- Panel thickness (max):** 3mm (.118 in.)
- Dielectric strength:** 1000 VAC
- Insulation resistance:** 1 GΩ
- Contact resistance (initial):** 50 mΩ (Max)
- Current rating (typical):** 400mA at 32 VAC resistive  
100mA at 50 VDC resistive  
125mA at 125 VAC resistive
- Shock:** 100G
- Operating temp range:** -55°C to +125°C  
(-67°F to +257°F)
- Body material:** zinc alloy, black
- Button material:** PBT thermoplastic
- Contacts:** gold plated palladium nickel
- Terminals:** gold plated brass

**ITW Switches**  
SENSORS, SWITCHES, ELECTRONIC CONTROLS

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|                      |          |
|----------------------|----------|
| FIRMA PARÇA NUMARASI | 59-113   |
| RENK                 | YESİL    |
| CERCEVE STILI        | YUVARLAK |

| Gerekli maddelerin numarasını yazın.<br>(Write numbers of required items.) | Dokuman no<br>(Document no) |
|--|-----------------------------|
| Diğer dokümanlar<br>(Other documents)                                      | ---                         |
| EEC Direktifleri<br>(EEC Directives)                                       | ---                         |
| ECE Regülasyonları<br>(ECE Regulations)                                    | ---                         |
| TSE Standartları<br>(TSE standards)  | ---                         |

KONU İLE İLGİLİ BÖLÜMLERİN ONAYI OLMADAN PARÇA ÜZERİNDE DEĞİŞİKLİK YAPILAMAZ.  
(DO NOT MODIFY ANY ITEMS WITHOUT PRIOR AUTHORISATION BY RELEVANT DEPARTMENTS.)

| KRITİK/<br>CRITICAL   | ÖNEMLİ/<br>IMPORTANT | ÜST LİMİT/<br>UPPER LIMIT | ALT LİMİT/<br>LOWER LIMIT | CİZGİ YOKSA HER İKİ LİMİT/<br>NO LINE APPLIES TO BOTH LIMITS |
|---|----------------------|---------------------------|---------------------------|--|
|   |                      |                           |                           |  |
| Aksi belirtilmedigi sürece aşağıdaki bilgiler kullanılır<br>Unless otherwise specified the general notes shall be applied |                      |                           |                           |  |
| Döküm toleransları? / Casting tolerances  |                      |                           |                           |  |
| Genel işleme tol. / General machining tol.  |                      |                           |                           |  |
| Çelik Kesme toleransları/Steel Stamping tol.  |                      |                           |                           |  |
| Kaynak standardı / Welding standard   |                      |                           |                           |  |
| Markalama standardı / Marking standard  |                      |                           |                           |  |
| Delik-mil geçme / Shaft-hole fits   |                      |                           |                           |  |
| İç köşe radyusları / Fillet radii   |                      |                           |                           |  |
| Dış köşe radyusları / Edge radii  |                      |                           |                           |  |
| Konik açısı / Draft angle   |                      |                           |                           |  |
| Et kalınlığı / Wall thickness   |                      |                           |                           |  |
| Dövme, Döküm no / Forging, Casting no   |                      |                           |                           |  |
| Parça simetriklik, Eksen /The part is sym. Axis   |                      |                           |                           |  |
| Yüzey pürüzlülüğü / Surface roughness   |                      |                           |                           |  |
| Isıl işleme / Heat treatment  |                      |                           |                           |  |
| Çapak ve keskin köşe olmamalıdır<br>Must be free of burrs and sharp edges   |                      |                           |                           |  |

| METRİK<br>METRIC   | RESİM ÜZERİNDEN ÖLÇÜ ALINMAZ<br>DO NOT SCALE THIS DRAWING |                |                          |                          |                    |
|--|---|----------------|--------------------------|--------------------------|--------------------|
| Malzeme :<br>Material  | ---   |                |                          |                          |                    |
| Yüzey Koruma :<br>Surface Protection   | ---   |                |                          |                          |                    |
| Faydalanılan Resim No :<br>Similar Drawing no  | ---   | 1              | SERİ İMALAT İCİNDİR      | 55/000029-011            | S.A.               |
| Parça Ağırlığı :<br>Part Weight  | ---   | Baskı<br>Issue | Değişiklikler / Changes  | Değiştiren<br>Changed by | Tarih<br>Date      |
| Çizen<br>Drawn by  | YILMAZ SATILMIS   | 17.11.2017     | Parça adı /Item name:    | KIRPI 400                |                    |
| Kontrol<br>Checked by  | G.GUNAY   |                | KOSELI METAL BUTON YESİL |                          |                    |
| Kontrol<br>Checked by  |   |                | Resim no /Drawing no:    | 55RS865324               |                    |
| Onay<br>Approved by  | S.AKTAS   |                | Ölçek / Scale:           | ---                      | Sayfa /Page: 1 / 1 |
| BMC Otomotiv Sanayi ve Ticaret A.Ş.<br>Kemalpaşa Cad. No: 288<br>35050 Pinarbaşı, İZMİR - TÜRKİYE  |   |                |                          |                          |                    |
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