

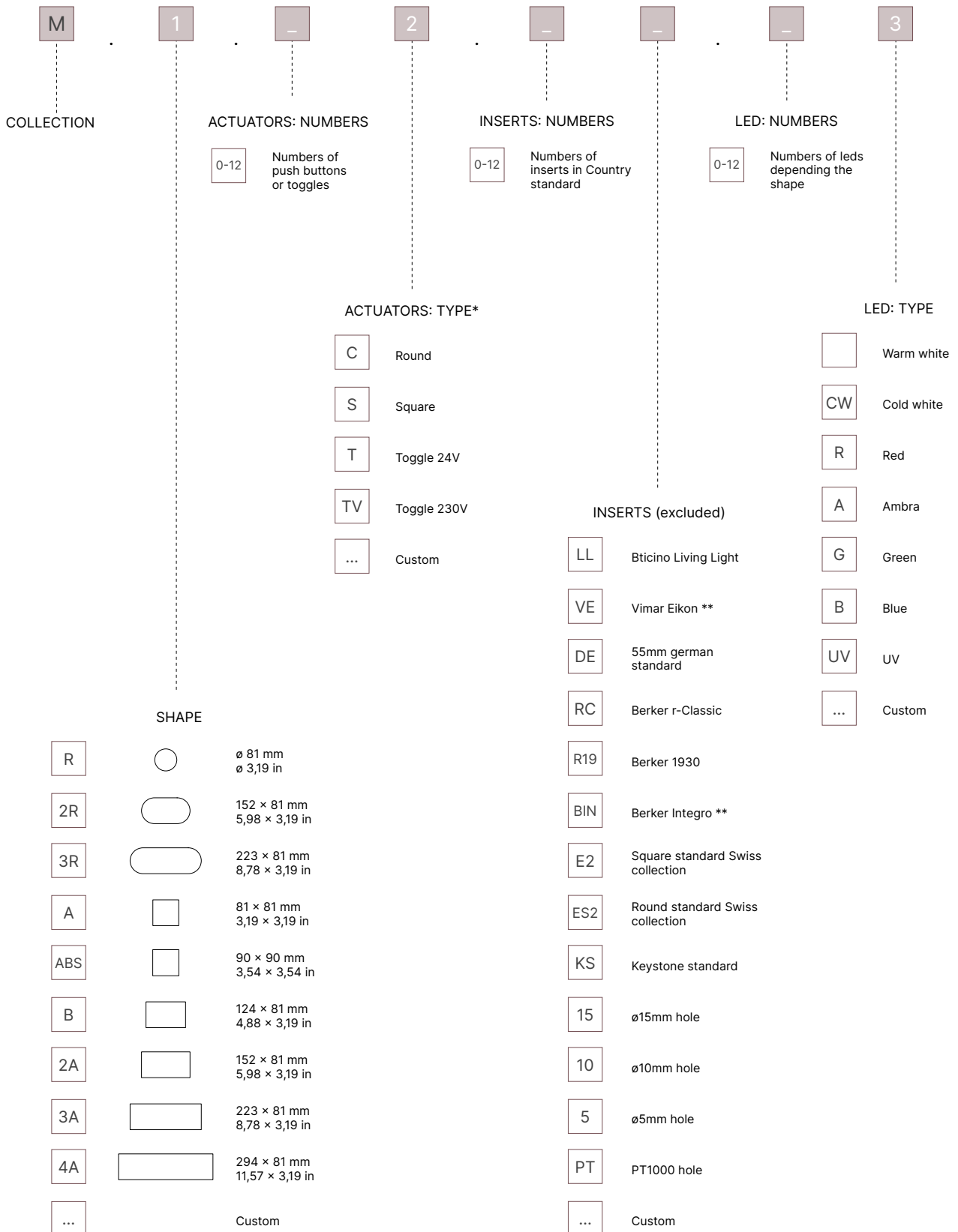


MakeUp does not disappear:  
it wants to be seen.

The MakeUp collection has  
been designed to emerge  
within the decorative project  
of the house and beyond,  
qualifying itself as an element  
for its enhancement.



M.R.1C.0.0



(\*) When using toggles indicate the way of orientation and for main tension the kind (switch, 2 way switch or intermediate switch).

Contact PLH® for different types of toggles.

(\*\*) on request

DESCRIPTION

Keypad in solid metal material (6082 aluminum alloy, brass) machined by CNC machine, from a single sheet, 10mm thickness (8mm + 2mm of shadow gap), in round, square or rectangular format for main voltage and low voltage control devices and standard inserts, for **indoor use only**

ENVIROMENT

**Environment specification**

- Ambient Operating Temperature:
- Relative Humidity:

0-40 °C (32-104 °F)  
less than 90%, non-condensing

SHAPES OF THE KEYPADS AND WALLBOXES

The keypads are designed to be used for commercial and standard wallboxes following the bottom specifications

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Code	Shape	Dim.	Single box	Eu standard	Notes
R		ø 81 mm ø 3,19 in			Round wallboxes with screws 60mm installation opening
2R		152 × 81 mm 5,98 × 3,19 in			2 round wallboxes joined (71 mm installation opening)
3R		223 × 81 mm 8,78 × 3,19 in			3 round wallboxes joined (2×71 mm installation opening)
A		81 × 81 mm 3,19 × 3,19 in			Round or square wallboxes with screws 60mm installation opening
ABS		90 × 90 mm 3,54 × 3,54 in			British standard or Swiss standard wallboxes with screws
B		124 × 81 mm 4,88 × 3,19 in			503E Italian standard or USA 1-GANG JBox
2A		152 × 81 mm 5,98 × 3,19 in			504E Italian standard or 2 round/square wallboxes joined (71 mm installation)
3A		223 × 81 mm 8,78 × 3,19 in			506L Italian standard or 3 round/square wallboxes joined (2×71 mm installation)
4A		294 × 81 mm 11,57 × 3,19 in			4 round/square wallboxes joined (3×71 mm installation opening)

MATERIALS, TREATMENTS, NUANCE

**Aluminium (6082 alloy)**

G0021 (A) Tumbled not protected	F0019 (A) Anodized brushed silver	F0007 (A) Anodized brushed black	F0001 (A) Anodized brushed inox	F0090 (A) Anodized brushed bronze	F0130 (A) Anodized brushed dark grey	F0022 (D) Sputtering Metal Bronze not prot.	F0024 (D) Sputtering Metal Zinc not protected
F0003 (A) Painted Matte RAL 9003	F0491 (B) Painted Cerakote® Black	F0501 (B) Painted Cerakote® Gun Metal	F0511 (B) Painted Cerakote® Silver	F0509 (B) Painted Cerakote® Rose gold	F0503 (B) Painted Cerakote® Light Gold	F0510 (B) Painted Cerakote® Dark Grey	

**Brass**

G0063 (C) Tumbled not protected	F0013 (C) Brushed protected	F0005 (C) Polished Chrome	F0002 (D) DeCastelli Delabre' F2	F0014 (D) DeCastelli Delabre' Striato G7

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ACTUATORS

**Electrical and mechanical specification**

C S

- Push-Button type: SMD Tactile switch MOM - OFF
- Rated current / Rated voltage: 20mA - 24V DC (\*)
- Withstanding voltage (1 min): 250V (AC)
- Actuator and frame flammability rating: UL94 V-0
- Operation force: 260 g
- Electrical life: 500.000 cycles
- Stroke: 0,25 mm
- Terminals: SMD terminal block 24÷18AWG

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- Push-Button type: Miniature toggle switch MOM - OFF - MOM
- Rated current / Rated voltage: 4A - 30V DC
- Insulation resistance: 1.000 MΩ min. at 500V (DC)
- Case flammability rating: UL94 V-0
- Paddle flammability rating: UL94 HB
- Electrical life (full load): 50.000 cycles
- Mechanical life: 100.000 cycles
- Terminals: 150 mm precutted wires 18÷19 AWG

Tv

- Type: S → Switch DPDT - Pattern 1  
2 → 2 way Switch DPDT - Pattern 6  
I → Intermediate Switch DPDT - Pattern 7  
P → Push Button (MOM - OFF - MOM) SPDT - Pattern 4
- Rated current / Rated voltage: 10A - 240V AC
- Withstanding voltage (1 min): 1.500V (AC)
- Insulation resistance: 200 MΩ min. at 500V (DC)
- Contact resistance: 1 A 20 mΩ max 2-4V (DC)
- Electrical life (full load): 10.000 cycles make-and-break cycles
- Mechanical life: 10.000 cycles
- Terminals: 50 mm precutted wires 15 AWG with splicing connectors

**Regulatory Compliance**

C S

The PCB included in the MakeUp keypads has been tested for Electromagnetic compatibility (EMC) in conformity with the essential requirements of the EN61000-6-2 (2016) - EN61000-6-3 (2007) +A1 (2011).

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PLH Products must be installed according to the specifications, and in extra low tension systems. For this reason all PLH products are not UL LISTED and do not fall under 2006/95/EC Directive.

The normally open push buttons are designed to be installed only by DC safety transformers with maximum 24V and DO NOT directly control the load. Do not connect high-voltage power to low-voltage terminals. Improper wiring can result in personal injury or damage to the control or to other equipment.

Tv

**Regulatory Compliance**

The keypad using the components with the pattern number 1, 6, 7 o 4 and all the combinations for the Model and Variants indicated in the declaration of conformity attachment, are in conformity with the essential requirements of the IEC 60669-1:1998 (Third Edition) + A1:1999 + A2:2006.

The Notified Body IMQ S.p.A. performed all the test and produced the Test Report Reference No MI20-0048284-01.

Moreover all PLH components must be installed as described in the technical specification on equipment manufactured in compliance with the regulations, according to the latest safety rules, using certified materials and suitable to the characteristics of the environment and pose.

Installation and verification of compliance are not PLH responsibility.

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LED

**Electrical and mechanical specification**

C S

- Feedback led (\*\*): 0,5 ≤ I ≤ 5 mA (\*\*\*)
- Positional Led (\*\*): 10 mA ≤ 30 V (DC)
- Terminals: SMD terminal block 24÷18AWG

(\*) Inductive load ARE NOT ALLOWED

(\*\*) Multiples led are with the common connected to - (minus polarity)

(\*\*\*) without any limitation of the current. Limitation need to be a part of the interface connect to our led

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