# MA SERIES - MICRO-LIMIT SWITCHES

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE










## FEATURES

- **Ratings: 16 Amps 250 VAC (resistive load). 4 Amps 250 VAC (motor load) or 3 Amps 250 VAC (resistive load). 0.1 Amps 250 VAC (motor load).**
- **Single pole CO (change-over or alternate action), NC (normally closed momentary) and NO (normally open momentary) configurations.**
- **Close tolerance switching action with long life (10,000,000 mechanical cycles min.).**
- **Pin plunger, hinge lever or roller lever actuator options.**

## MATERIALS

| | |
|---|---|
| **Contacts:** | Stationary: Nicker silver Shorting: Beryllium copper |
| **Actuator:** | FS 161 (UL94V-O) |
| **Case & cover:** | PBT (UL94V-O) |
| **Terminals:** | Silver plated copper/zinc |

## AGENCY RECOGNITION

NRTL

Approval pending.

## SPECIFICATIONS

| | |
|---|---|
| Operating force: | ≤ 12.59 oz. (343 grams) approx. for 16 Amp models |
| | ≤ 0.72 oz. (20 grams) approx. for 3 Amp models |
| Pretravel: | ≤ .047" (1.2mm) |
| Overtravel: | ≥ .059" (1.5mm) min. |
| Movement differential: | ≤ .016" (0.4mm) |
| Free position: | ≤ .649" (16.5mm) |
| Operating position: | .578" ± .020" (14.7mm ± 0.5mm) |
| Operating temperature: | -40°C to +85°C |
| Contact gap: | less than .118" (3mm) |
| Tracking resistance: | > PTI 175 |





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# MA SERIES - MICRO-LIMIT SWITCHES

## ORDER FORMAT

**M A A 6 B**

**Series**

MA

**Circuit & quick-connect terminals**

- **A** Normally open (standard) .031 x .248" (0.8x6.3mm)
- **B** Normally closed (standard) .031 x .248" (0.8x6.3mm)
- **C** Change-over (standard) .031 x .248" (0.8x6.3mm)
- **D** Normally open, .031 x .248" (0.8x6.3mm), spacing .197" (5mm)
- **E** Normally closed, .031 x .248" (0.8x6.3mm), spacing .197" (5mm)
- **F** Change-over, .031 x .248" (0.8x6.3mm), spacing .197" (5mm)
- **G** Normally open, .020 x .189" (0.5x4.8mm)
- **H** Normally closed, .020 x .189" (0.5x4.8mm)
- **I** Change-over, .020 x .189" (0.5x4.8mm)
- **J** Normally open, .031 x .189" (0.8x4.8mm)
- **K** Normally closed, .031 x .189" (0.8x4.8mm)
- **L** Change-over, .031 x .189" (0.8x4.8mm)

**Switch rating**

- **6** 16(4)A 250 VAC
- **7** 3(0.1)A 250 VAC

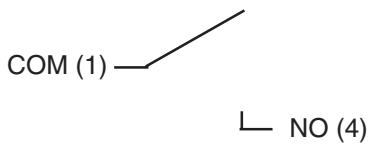
**Actuator style**

- **A** Pin actuator
- **B** Hinge actuator
- **C** Roller actuator

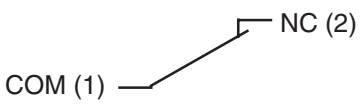
## STANDARD MODELS

| Quick-connect terminal | | .031x.248" (0.8x6.3mm) | | .031x.248" (0.8x6.3mm) pin spacing - .197"(5mm) | .020x.189" (0.5x4.8mm) | | .031x.189" (0.8x4.8mm) | |
|---|---|---|---|---|---|---|---|---|
| Switching capacity | | 16(4)A | 3(0.1)A | 16(4)A | 16(4)A | 3(0.1)A | 16(4)A | 3(0.1)A |
| Pin plunger | NO | MAA6A | MAA7A | MAD6A | MAG6A | MAG7A | MAJ6A | MAJ7A |
| | NC | MAB6A | MAB7A | MAE6A | MAH6A | MAH7A | MAK6A | MAK7A |
| | CO | MAC6A | MAC7A | MAF6A | MAI6A | MAI7A | MAL6A | MAL7A |
| Hinge lever | NO | MAA6B | - | MAD6B | MAG6B | - | MAJ6B | - |
| | NC | MAB6B | - | MAE6B | MAH6B | - | MAK6B | - |
| | CO | MAC6B | - | MAF6B | MAI6B | - | MAL6B | - |
| Roller lever | NO | MAA6C | - | MAD6C | MAG6C | - | MAJ6C | - |
| | NC | MAB6C | - | MAE6C | MAH6C | - | MAK6C | - |
| | CO | MAC6C | - | MAF6C | MAI6C | - | MAL6C | - |

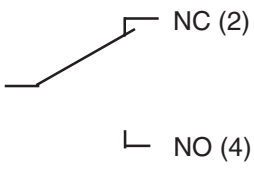
NO = NORMALLY OPEN:




NC = NORMALLY CLOSED:




CO = CHANGE-OVER:




SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

H

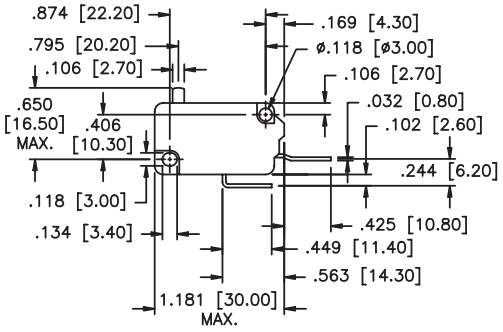

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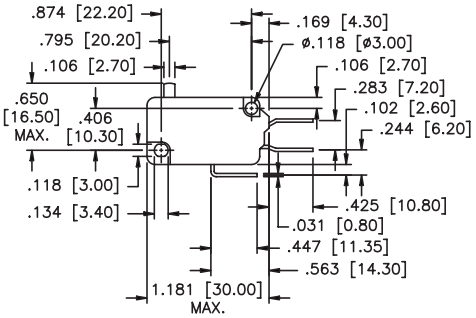
## MECHANICAL OUTLINES

### Models with quick-connect terminal .031x.248" (0.8x6.3mm)

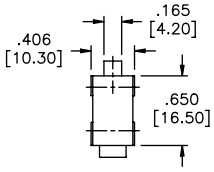
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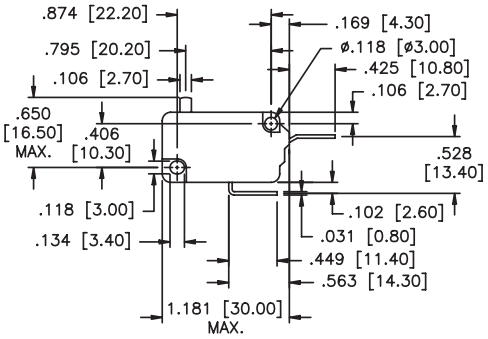

Normally open



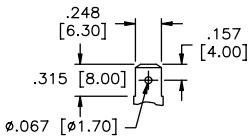

Change-over



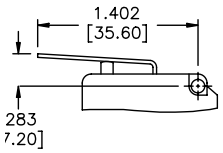

Side view



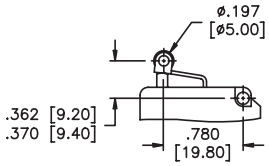

Normally closed




Quick-connect terminal




Hinge lever




Roller lever

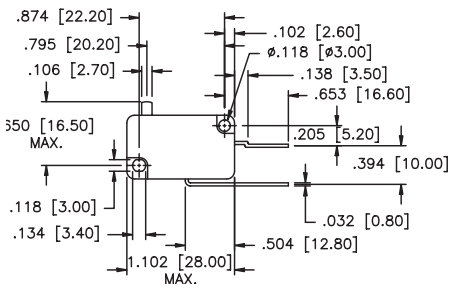
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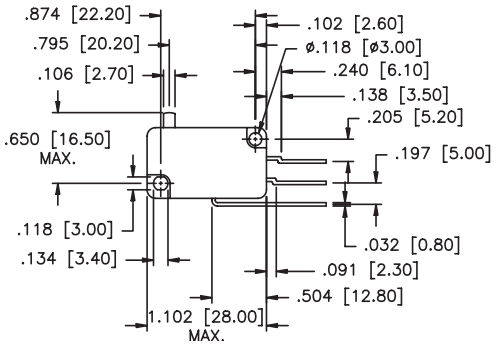
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## MECHANICAL OUTLINES

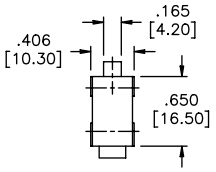
### Models with quick-connect terminal .031x.248" (0.8x6.3mm) & pin spacing .197" (5mm)



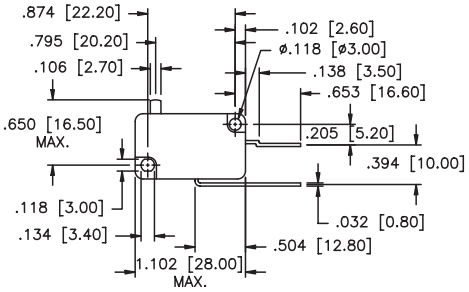

Normally open



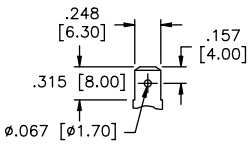

Change-over



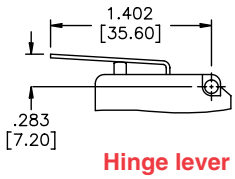

Side view




Normally closed

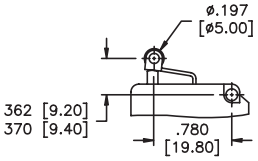



Quick-connect terminal

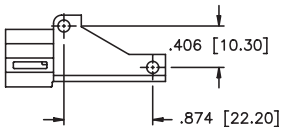



Hinge lever






Roller lever




Adaptor element

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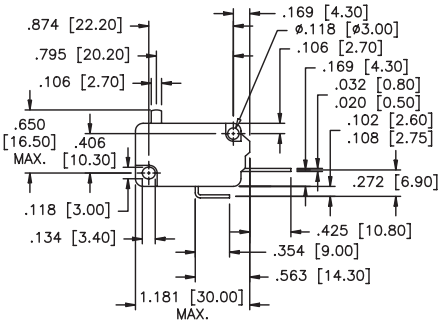
H



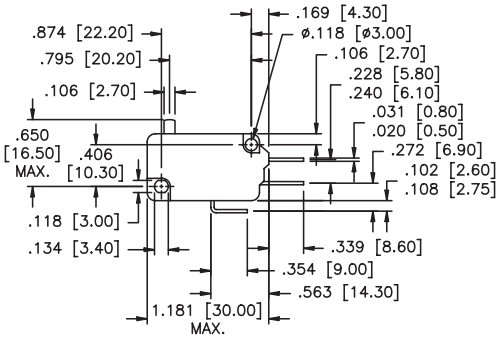
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## MECHANICAL OUTLINES

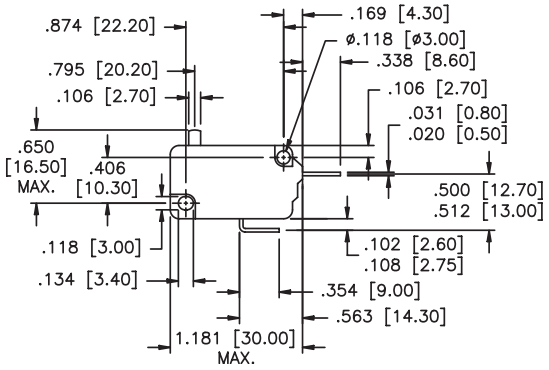
### Models with quick-connect terminal .020 or .031x.248" (0.8 or 0.8x6.3mm)



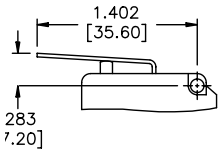

Normally open



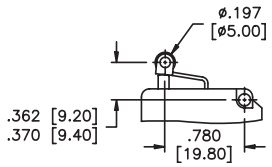

Change-over



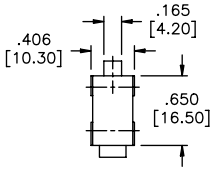

Normally closed



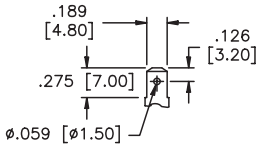

Hinge lever




Roller lever




Side view




Quick connect terminal

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