

# Toggle Clamps

Side Push (Flange Base) / Smooth Stroke (Flange Base)

# Toggle Clamps

Welding Clamps (Flange Base, Straight Base)

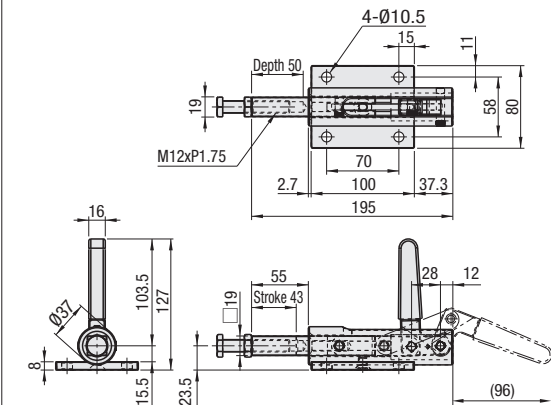
■Features: MC07-14, MC07-15 and MC07-16 can be used for welding and machining fixtures.

## Side Push (Flange Base)



| Part Number             | MC07-14                                         |
|-------------------------|-------------------------------------------------|
| Material                | Main Body / Attaching Portion: EN 1.1191 Equiv. |
| Surface Treatment       | * Chemical Conversion Coating                   |
| Stroke (mm)             | 43                                              |
| Tightening Force (N)    | 3000                                            |
| Weight (g)              | 1600                                            |
| Handle Open-Close Angle | 115°                                            |
| Accessory               | Steel Bolt                                      |
| Unit Price              |                                                 |

## MC07-14

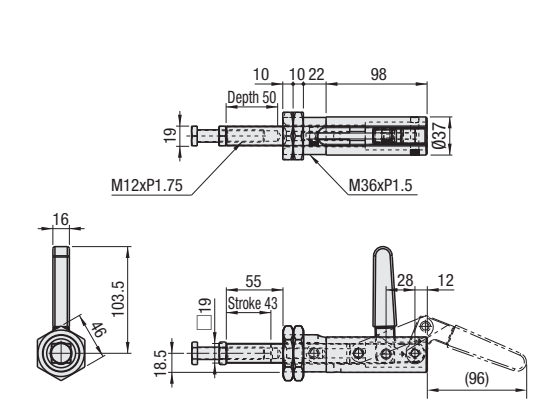


## Side Push (Flange Base)



| Part Number             | MC07-15                                         |
|-------------------------|-------------------------------------------------|
| Material                | Main Body / Attaching Portion: EN 1.1191 Equiv. |
| Surface Treatment       | * Chemical Conversion Coating                   |
| Stroke (mm)             | 43                                              |
| Tightening Force (N)    | 3000                                            |
| Weight (g)              | 1280                                            |
| Handle Open-Close Angle | 115°                                            |
| Accessory               | Steel Bolt                                      |
| Unit Price              |                                                 |

## MC07-15

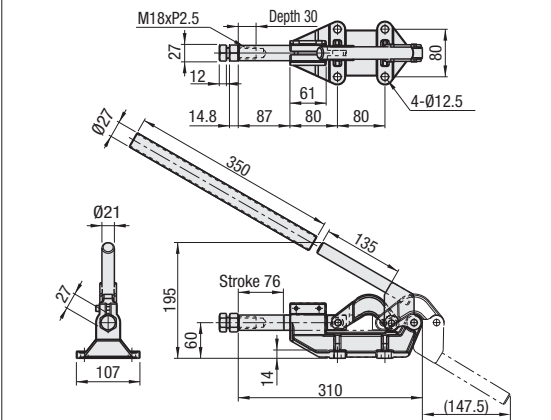


## Side Push (Flange Base)

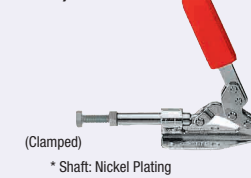


| Part Number             | MC07-16                                                                          |
|-------------------------|----------------------------------------------------------------------------------|
| Material                | Main Body: EN 1.0038 Equiv. / Attaching Portion: EN-1040 Equiv.                  |
| Surface Treatment       | Main Body: * Trivalent Chromate / Attaching Portion: Chemical Conversion Coating |
| Stroke (mm)             | 76                                                                               |
| Tightening Force (N)    | 16000                                                                            |
| Weight (g)              | 4360                                                                             |
| Handle Open-Close Angle | 180°                                                                             |
| Accessory               | Steel Bolt, Tube                                                                 |
| Unit Price              |                                                                                  |

## MC07-16

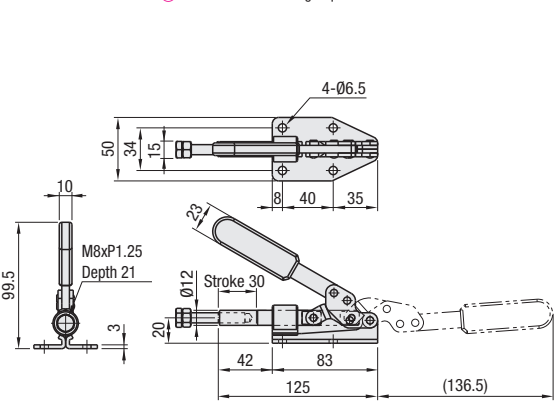


## Smooth Stroke (Flange Base)

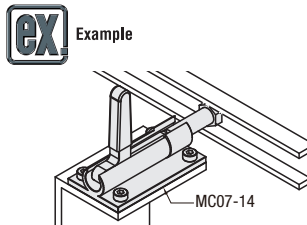


| Part Number             | MC08-1               |
|-------------------------|----------------------|
| Body Material           | EN 1.0038 Equiv.     |
| Surface Treatment       | * Trivalent Chromate |
| Oil Free Bushing        | MDZB12-20: 1 pc.     |
| Stroke (mm)             | 30                   |
| Tightening Force (N)    | 1960                 |
| Handle Open-Close Angle | 140°                 |
| Weight (g)              | 380                  |
| Accessory               | Steel Bolt           |
| Unit Price              |                      |

## MC08-1



Ordering Example  
Part Number  
MC07-14  
MC08-1



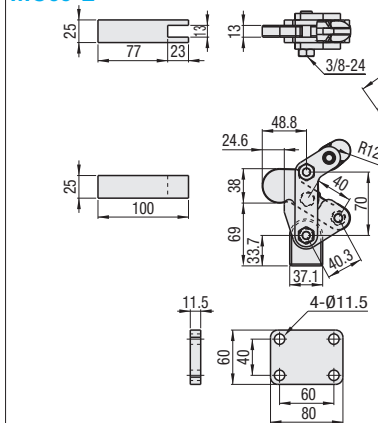
■Features: MC09-2S is Straight Base Type of Welding Clamp MC09-2.

## Weld-On Clamps (Flange Base)

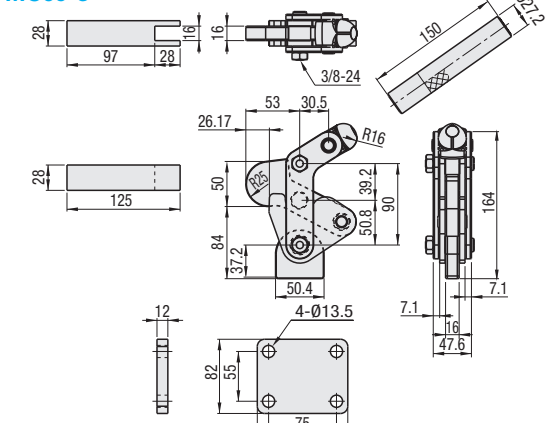


| Part Number           | MC09-1                                   | MC09-2 | MC09-3 |
|-----------------------|------------------------------------------|--------|--------|
| Body Material         | EN 1.0038 Equiv. (with Hardened Bushing) |        |        |
| Weight (g)            | 845                                      | 2130   | 4100   |
| Tightening Force (N)  | 1960                                     | 4900   | 9800   |
| Handle Movement Angle | 122°                                     | 122°   | 128°   |
| Arm Movement Angle    | 196°                                     | 191°   | 197°   |

## MC09-2



## MC09-3



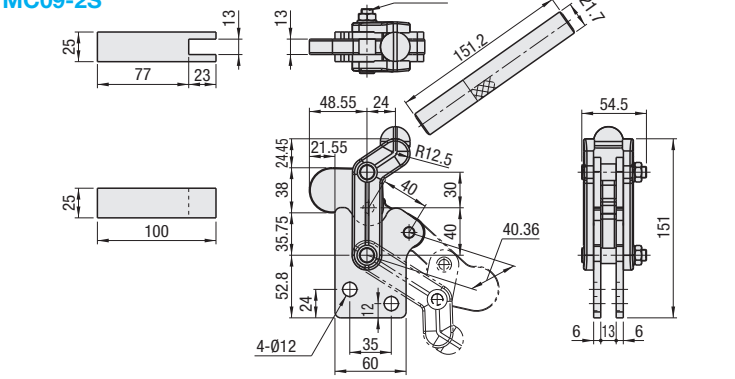
## Weld-On Clamps (Straight Base)



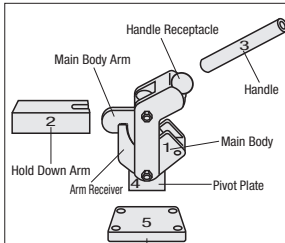
| Part Number           | MC09-2S                                  |
|-----------------------|------------------------------------------|
| Body Material         | EN 1.0038 Equiv. (with Hardened Bushing) |
| Weight (g)            | 2500                                     |
| Tightening Force (N)  | 5000                                     |
| Handle Movement Angle | 122°                                     |
| Arm Movement Angle    | 191°                                     |

Ordering Example  
Part Number  
MC09-1  
MC09-2S

## MC09-2S



## How to Use Welding Clamps for Various Applications



Weld-On Clamps are composed of 4 parts shown to the left; handle, main body, base and arm.  
① Determine the mounting position of the main body.  
② Determine the length of the control arm, then connect to the body arm by welding.  
③ Given space from the fixture for clamp mounting, determine the height of the handle, and weld the handle and the body handle receiver.  
④ Determine the angle between the main body and the supporting plate, and weld them together.  
⑤ Determine how to mount a clamp on to the fixture. If the base is used, weld the base and the supporting plate together.  
Assemble a Weld-On clamp as described above.  
· Welding Clamps can be flexibly assembled depending on different working situations, thus can be used in wide range of applications.  
· Heat treatment (hardness 60HRC) ensures abrasion-resistant assembly of the pin constituting the supporting point, and the surrounding bushing. The clamps are best for fixtures that require frequent use or accuracy.

| Part Number | Unit Price |
|-------------|------------|
| MC09-1      |            |
| MC09-2      |            |
| MC09-3      |            |
| MC09-2S     |            |