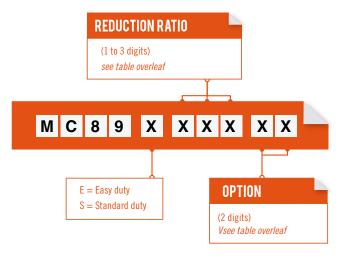


# BATTERY POWERED PORTABLE MC89

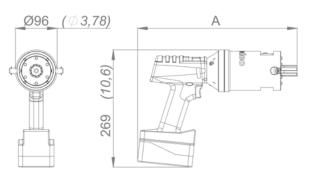




Although it is **super light and compact**, the MC89 Portable **Valves Actuator delivers a 850 Nm** (620 lb.ft) maximum torque. This makes it the perfect tool for any **« Easy » or « Standard » duty job**, for any valve type, indoor or outdoor, with a great autonomy. Its two **18V Lithium-Ion batteries** allow to use it continuously during **up to one hour**. For an even more intensive usage, use the **main power connection kit** that plugs on the actuator just like a battery and provides an **unlimited autonomy**.

Designed for any type of operation, the MC89 comes with 3 models only that cover a **0 to 450 rpm speed** range and a **850 Nm maximum torque**. No need to say that even the most stubborn valves can be operated! No worry though, the **integrated electronic torque limiter** will easily prevent any damages for your valve or the tool itself.

## LAYOUT



| LAYOUT      | Weight (kg) | Length "A"<br>(mm) |
|-------------|-------------|--------------------|
| MC89E - 007 | 5,1         | 354                |
| MC89S - 035 | 5,1         | 354                |
| MC89S - 054 | 5,4         | 367                |
| Battery     | 0,7         |                    |

| Watt -> Horse power       | Newton meter -> Foot pound                          | Millimeter 🔶 inch  | Kv 🔶 Cv        |
|---------------------------|---|--------------------|----------------|
| $W \ge 0.001341 = cv$     | Nm x 0,7376 = lb.ft                                 | mm x 0,03937 = in  | Kv x 0,07 = Cv |
| Bar 🔶 pound / square inch | Normo liter / minute -> Standard cube feet / minute | Kilogramme 🔶 Pound |                |
| Bar x 14,5 = psi          | NL / min x 0,03531 = scfm                           | Kg x 2,205 = Ib    |                |

# **BATTERIES AND CHARGERS**

| Batteries technical data                    | BAT143  | BAT144  |
|---|---------|---------|
| Voltage                                     | 18      | 3V      |
| Capacity                                    | 5,20 Ah | 6,20 Ah |
| Autonomy*                                   | 24 mn   | 29 mn   |
| Charging times with standard charger BAT145 | 45 mn   | 53 mn   |
| Charging times<br>with quick charger BAT146 | 33 mn   | 40 mn   |
| Weight (kg)                                 | 0,7 kg  | 0,7 kg  |

| Charger technical data     | BAT145         | BAT146 |
|----------------------------|----------------|--------|
| Power supply (input)       | 220-24         | 10V AC |
| Mains frequency            | 50 / 60 Hz     |        |
| Charging voltage (output)  | 10,8 - 18 V DC |        |
| Quick charging             | Max 6A         | Max 8A |
| Charging temperature range | -5 à +55°C     |        |
| Safety class               | II             |        |
| Weight (kg)                | 0,8 kg         | 1,1 kg |

\*Autonomy measured at 50% of the maximum load

The main power connection kit (ref BAT147) connects any main power plug to the actuator (in place of the battery) and provides an unlimited autonomy.

### **SPEED CONTROLER & ELECTRONIC TORQUE LIMITER**

The MC89 comes with an embedded **speed control and torque limiter electronic system** for an optimal **people and material protection** as well as a **perfect adaptation** to different constraints and environments. By adjusting the speed control trigger (4 positions) and the max torque scroll wheel (13 positions), you can set the required torque limit and / or rotation speed. When reaching the torque limit, the actuator will stop and sound a beep. The speed control trigger allows to set 4 different speeds and for each of these speeds, the torque scroll wheel allows to set 13 different torque limits.



#### **OPTIONS AND ACCESSORIES**

| <b>OPTIONS</b> (page 5)    |    |    |
|----------------------------|----|----|
| Digital revolution counter |    |    |
| CODE                       | 00 | 02 |

Check the technical data sheet to see which options and accessories are capable of withstanding the torque created by the actuator !

| ACCESSORIES             | Page  |
|-------------------------|-------|
| Drive head              | 6     |
| Adaptors and interfaces | 7-14  |
| Torque reaction systems | 15-17 |
| Other accessories       | 20    |

#### PERFORMANCE

| Straight or with<br>RA30 | Free speed<br>(rpm) | Max torque<br>(Nm) | Options available |
|--------------------------|---------------------|--------------------|-------------------|
|                          |                     |                    | 02                |
| MC89E-007                | 450                 | 115                |                   |
| MC89S-035                | 94                  | 550                |                   |
| MC89S-054                | 61                  | 850*               |                   |



Warning !

Do not use the RA30 right angle head when the torque is higher than 600 Nm (440 lb.ft) or set the torque limit to 600 Nm before use. Read user's manual for more information.

| With banjo head<br>BJH01 | Free speed<br>(rpm) | Max torque<br>(Nm) |
|--------------------------|---------------------|--------------------|
| MC89E-007                | 113                 | 460                |
| MC89S-035                | 24                  | 600*               |
| MC89S-054                | 14                  | 600*               |

| With banjo head<br>BJH02 | Free speed<br>(rpm) | Max torque<br>(Nm) |
|--------------------------|---------------------|--------------------|
|                          |                     |                    |
| MC89E-007                | 150                 | 350                |
| MC89S-035                | 31                  | 1000*              |
| MC89S-054                | 20                  | 1000*              |

\* Warning ! The maximum acceptable torque for the BJH01 is 600 Nm (440 lb.ft). Do not use the BJH01 if the torque required is higher than 600 Nm (440 lb.ft), use the torque limiter to limit the input torque to 150 Nm (110 lb.ft) (see stickers on the actuator and table hereafter).

\* Warning ! The maximum acceptable torque for the BJH02 is 1000 Nm (740 lb.ft). Do not use the BJH02 if the torque required is higher than 1000 Nm (740 lb.ft), use the torque limiter to limit the input torque to 330 Nm (240 lb.ft) (see stickers on the actuator and table hereafter).





#### IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

