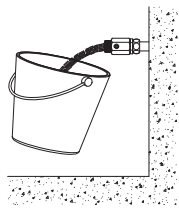


**GB** Mechanical mixers for washbasins, sinks, showers and shower/baths



**GB** Thoroughly flush the pipes to remove any impurities before installing and commissioning the product.



**INSTALLATION**

**GB**

- Supply with cold water and hot water at a maximum temperature of 50°C (we recommend 45°C), and balance the pressure between the hot and cold water ( $\Delta P < 1$  bar). In the UK and Ireland a thermostatic mixing valve should be installed to provide anti-scald, safe hot water temperature control.
- Maximum supply pressure is 10 bar maximum (we recommend 0.5 to 5 bar dynamic pressure).

**INSTALLING THE MIXERS**

- Deck-mounted, single hole washbasin or sink mixers** (Fig. A) :
  - Mount the mixer body on the washbasin or sink (hole Ø34 mm) and tighten the two nuts on the threaded rods.
  - Connect using the stainless steel, braided flexibles F3/8\*.
  - Ensure a suitable waterproof seal between the mixer and the work plan appropriate to the type of installation.
- Wall-mounted mixers for sinks, showers or shower/baths** (Fig. B) :
  - Wall-mounted sink, shower and shower/baths: 2 off-set connectors (sold separately) enable adjustable pipe-centres (150mm +/- 20).
  - Exposed shower/bath: mount the shower/bath mixer body on the bath (hole Ø22mm), centres 150mm.

**ANTI-POLLUTION PROTECTION**

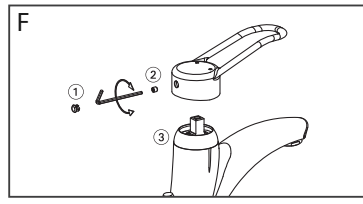
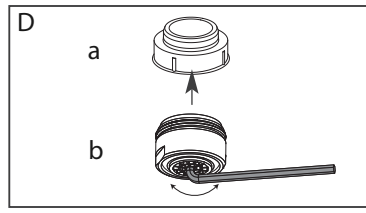
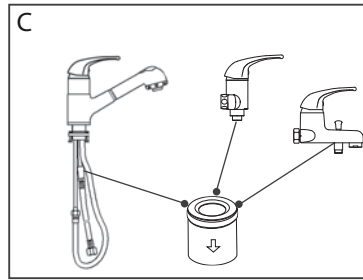
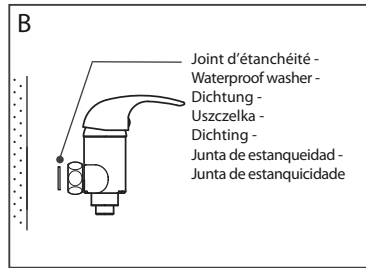
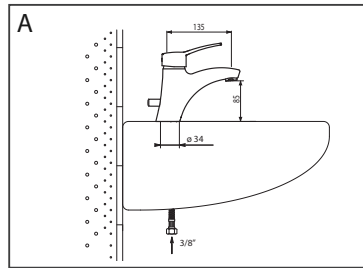
- In accordance with the European standard EN 1717
- Our mixers for showers, shower/baths and retractable shower heads have non-return valves to prevent dirty water flowing back into the system (see above Fig. C). These should not be removed.
- The sink, shower and shower/bath mixers should be installed in accordance with the Water Supply (Water Fittings) Regulations 1999 and in accordance with local health or other appropriate regulations (Department of Health, directives, technical memoranda, etc.).

**ADJUSTING THE FLOW RATE**

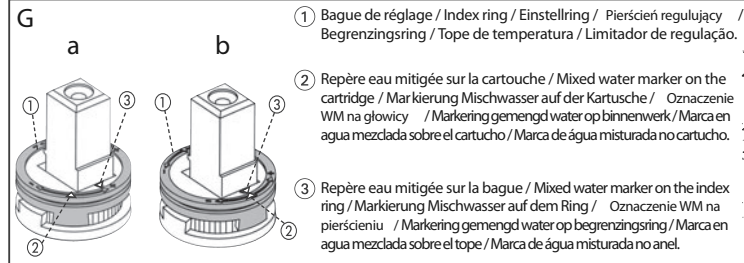
- Ceramic cartridge Ø40
- Washbasin mixers** : Flow rate set at 5 lpm. Remove the regulator cap if a higher flow rate is required (Fig. D-a) . NB: Cartridges with base plates are supplied with an extension to hold the flow rate regulator cap in place.
- Shower mixers** : Flow rate set at 8 lpm.
- Sink and shower/bath mixers** : Flow rate is not pre-set and can be adjusted by the installer.
- Ceramic cartridge Ø40 with pressure balancing "EP" (see operation principles (Fig. E) . **Washbasin and sink mixers** : An ECO flow straightener (DELABIE patented) delivers a flow rate of 3 lpm at 3 bar (Fig. D-b) . The flow rate can be adjusted using a 2.5mm Allen key directly on the flow straightener: Notch n°1 = 3 lpm / Notch n°2 = 4 lpm / Notch n°3 = 5 lpm.

**TEMPERATURE ADJUSTMENT**

- Temperature limiter:
  - All hospital mixers are fitted with a maximum temperature limiter pre-set at the factory. For the UK and Ireland we recommend installing an appropriate, approved thermostatic mixing valve to provide safe, anti-scald hot water.



<b>FR</b>	a: EC / b: EF
<b>GB</b>	a: HW / b: CW
<b>DE</b>	a: TWW / b: TW
<b>PL</b>	a: WC / b: WZ
<b>NL</b>	a: WW / b: KW
<b>ES</b>	a: AF / b: AC
<b>PT</b>	a: AQ / b: AF



- Where thermostatic mixing valves are installed the temperature limiter **MUST BE REMOVED** from all point-of-use mixers .
- Recommended maximum temperature settings for healthcare applications are: bidets 38°C, washbasins and showers 41°C. For all other countries please refer to the relevant hot water safety guidelines.
- > Removing the mixed water limiter:
  - The index ring is located on the cartridge (see Fig. G) , sited underneath the lever (Fig. F) .
  - Remove the cover cap ①, unscrew the grub screw ② using a 2.5mm Allen key, and pull lever upwards.
  - Unscrew and remove the chrome-plated mixer body cover ③; re-fit the lever control, re-tighten the grub screw and replace the covering cap ①.
- > Adjusting the mixed water limiter:
  - To adjust the pre-set, unclip and reposition the index ring. The position of the index ring will limit the water temperature at the mixer outlet.
  - To change the hot water (HW) setting (Fig. G-a) , unclip the index ring ① and turn clockwise to lower the temperature, or anti-clockwise to increase it. Replace the index ring and check the temperature at the mixed water outlet to achieve the desired maximum temperature.
  - To return to the maximum hot water position (Fig. G-b) , align the marker on the index ring ② with the marker on the cartridge ③.
  - For the following models 2516, 2517, 2536, 2537 and 2538, change the setting of the hot water as follows: unclip the index ring ① from its initial setting (Fig. G-a) and turn anti-clockwise to reduce the hot water temperature, or clockwise to increase the temperature.

**MAINTENANCE**

- Check the operation of the pressure balancing cartridge at least once a year, and more frequently if necessary. In case of malfunction, replace the cartridge.

**CLEANING & SERVICING**

- Cleaning chrome : Do not use abrasive, chlorine or any other acid-based cleaning products. Clean with soapy water using a cloth or a sponge.
- The hygienic flow straightener requires limited servicing since there is no retention of impurities.
- Flow straighteners, aerators and shower/bath divertors should be checked and serviced regularly.
- Frost protection: Drain the pipes and operate the mixer several times to drain any remaining water.

**REMEMBER :**

- Our mixers/taps must be installed by professional installers in accordance with current regulations and recommendations in your country, and the specifications of the fluid engineer.
- Sizing the pipes correctly will avoid problems of flow rate, pressure loss and unwanted noise.
- Protect the installation with filters, water-hammer absorbers and pressure reducers to reduce the frequency of maintenance (recommended pressure from 0.5 to 5 bars maximum).
- Install stopcocks close to the mixer to facilitate maintenance.
- The pipe work, stopcocks, bib taps and all sanitary fittings should be checked at least once a year, and more frequently if necessary.

After Sales Care and Technical Support

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 web: www.macdonaldindustries.co.nz

\* For 15mm compression fitting options please contact Technical Support (see below).