

# Operator's manual FC10



1	Decl	aration of conformity	. 3
2	Caut	ion	. 4
3		eral information	
	3.1	Unpacking and inspection	
4	Insta	Ilation	. 5
5	Ope	ration	. 6
	5.1 <sup>.</sup>	Adjusting the height	
	5.2	External torque adjustment	
	5.3	Changing the screw head	
	5.4	Change of bottle grip	. 7
6	Daily	/ use	. 8
7	Acce	essories	. 9
8	Clea	ning and maintenance	. 9
	8.1	Cleaning	
	8.2	Maintenance	
9	Tech	nical specifications	. 9
10	Disp	osal	10



#### **Declaration of conformity** 1

We

Watson-Marlow Flexicon A/S Frejasvej 2-6 DK-4100 Ringsted

Declare on our sole responsibility that the product:

WATSON MARLOW Flexicon	Made in Denmark
Model	FC10
Serial No.	yyww xxxx
Part No.	хх-ххх-ххх
Supply:	xx V / xx Hz / xx watt

FlexCap 10 - FC10

To which this declaration relates is in conformity with the following standard(s):

DS/EN ISO 12100	Safety of machinery - Basic concepts, general
	principles of design
DS/EN 60204	Safety of machinery – Electrical equipment of
	machines

According to the provisions in the Directives:

2006/42/EC	On the approximation of the laws of the Member States relating to machinery
2006/95/EC	On the harmonization of the laws of Member
	States relating to electrical equipment designed for use within certain voltage limits
2004/108/EC	On the approximation of the laws of the Member States relating to electromagnetic compatibility

Signature:

March 2010

Jørn O Jeppesen

Ringsted, Denmark

Development Manager



#### 2 Caution

This manual should be read before using the FlexCap 10.

Explanations to the pictograms:

"Warning against touching"/ "Warning against dangerous part of the machine":



"Warning against high voltage":



When adjusting the machine makes sure that the gab between the screw head and bottle cap is less than 3 mm.

The mains switch is used for emergency stopping.

FlexCap 10 should only be used for capping bottles.

The FlexCap 10 must be placed on a stable bedplate and in such a way, that it is not exposed to great humidity, high temperatures or other abnormal operating-environments. It is not to be used in explosion hazardous environments.

It is prohibited to maintain or clean the FlexCap 10, when it is connected to the power supply.

It is prohibited for unauthorised personnel to open the cover of the FlexCap 10 's electrical parts. Always remember that the FlexCap 10 must be earthed by way of the switch.



#### 3 General information

#### 3.1 Unpacking and inspection

FlexCap 10 is a semiautomatic screw capping for bottles. By changing the screw head and bottle grip, different bottles can be capped with different cap sizes.

Please check that all items listed on the packing list have been received, and that no items were damaged during transport. In case of any defects or shortcomings, please contact Watson-Marlow Flexicon or your local supplier immediately.

When ordering spare parts or accessories for the FlexCap 10, please state serial number. The serial number is stamped on a label on the rear of FlexCap 10.

#### 4 Installation

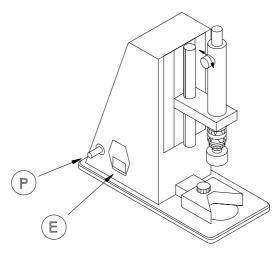


Fig. 4.1

Please check that, the machine is made for your local power supply. The sign on the machine indicates the value of power (110/120 VAC or 220/240 VAC). The frequency has no influence.

If the delivered power cable does not match your plug, the power cable is mounted in the right plug. The cable must be mounted as following:

Brown	Phase
Blue	Neutral
Yellow/Green	Earth

#### Tab. 4.1

REMEMBER that the machine must always via the power plug be connected to the earth and connected to CLEAN and DRY compressed air.

Due to the safety it is imperative that the earth connection is correctly established.

The plug box (E) contains 2 pcs of fuses. When the cover of fuse box is removed 1 more fuse is found inside the machine.

Connect the 5-7 clean and dry compressed air to the pipe stub (P). Connect the power to the plug box (E) and the machine is ready for use.

FC10 OM 1.02 EN



#### 5 Operation

#### 5.1 Adjusting the height

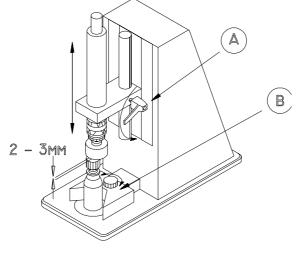


Fig. 5.1

When the power and air is connected, the screw unit with screw head is in the upper position. Place a bottle with cap (the cap just pre screwed as during operation) on the foot of the machine. By loosening the finger screw (A) the position of the screw unit can be adjusted. Make sure that the screw head is just 2 - 3 mm above the cap. The bottle grip (B) must be adjusted, so the unit gets activated, when the bottle is under the centre of the screw unit.

#### 5.2 External torque adjustment

The clutch casing sleeve (C) is pushed down, and the screw head is rotated until the hole in the adjustment lock plate is visible through the slot. The torque of the cap can then be increased by inserting a Phillips screw driver and rotating it clockwise. Rotating the screw driver counter clockwise will decrease the torque.

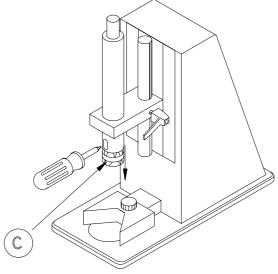


Fig. 5.2



#### 5.3 Changing the screw head

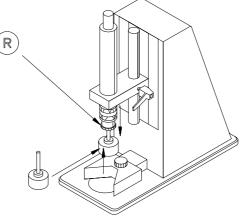


Fig. 5.3

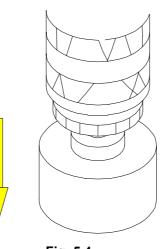


Fig. 5.4

Pull the spring-loaded release sleeve down, and pull at the same time the screw head down. The screw head will come off the quick change chuck.

For mounting the new screw head, press the head up in the quick change chuck. When the air supply is re-opened the unit is ready for operation with the new screw head, after adjustment of the height as described in sec. 5.1.

#### 5.4 Change of bottle grip

The bottle grip can be released by unscrewing the finger screw fix the bottle grip to the arm. The new bottle grip is mounted with the finger screw, and adjusted as described in section 5.1.



### 6 Daily use

The bottle with cap (the cap just pre screwed) is placed in the bottle grip.

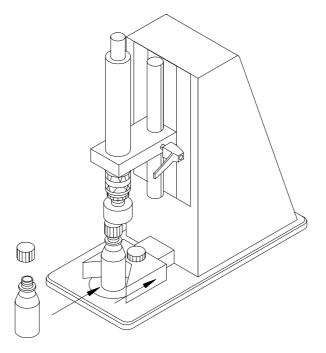


Fig. 6.1

When the bottle grip (B) is activated (by pushing it towards the rear of the machine), the screw unit go down and cap the bottle.

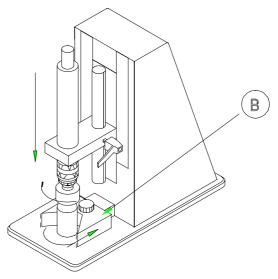


Fig. 6.2



#### 7 Accessories

For each cap and bottle size a customised screw head as well as bottle grip is needed. Watson-Marlow Flexicon manufactures the screw heads and grip according to bottle and cap samples.

Accesories	
Screw head	89-110-010
Grip	89-115-050

#### 8 Cleaning and maintenance

#### 8.1 Cleaning

Daily cleaning will not be necessary except for the normal routine cleaning of production equipment.

Correct cleaning is carried out by washing the FC32 with a firmly wrung cloth or paper towel, and subsequently the machine is wiped.

NOTE: The FC32 may not be cleaned by pouring or splashing liquids onto the machine.

#### 8.2 Maintenance

The screw capping air motor requires lubrication in order to function optimal. It is recommended to supply the air inlet with <u>one drop</u> of turbine oil before and after operation; this is done by removing the air hose at the top of the screw unit and then supplying the air inlet with one drop of oil.

Recommended oil: Rocol Foodlube Multi-Lube with PTFE.

All other movable parts in FlexCap 10 are maintenance-free, no maintenance is required apart from normal cleaning of the equipment.

If service should be needed, please contact your supplier or Watson-Marlow Flexicon A/S.

#### 9 Technical specifications

Power supply	110/240 VAC 50/60 Hz with earth
Power consume.	50 W max.
Air supply	5 to 7 bar
Air Capacity	150 l/min max.
Torque	Variable form 1 - 4 Nm
Cap Size	diameter. Ø50/Height 40 mm max.
Bottle	size diameter. Ø75/Height 180mm max.
Housing	Anodised aluminium
Ingress Protection	IP31
Weight	12 Kg
Order number	93-110-000 including one screwcapping head and one bottle grip.



#### 10 Disposal

The FF30-S is to be considered as electrical equipment, and should be disposed according to the European Community directive 2002/96/EC on waste electrical and electronic equipment (WEEE)

## COPYRIGHT

Copyright (c) 2010 Watson-Marlow Flexicon A/S. All rights to this manual belong to Watson-Marlow Flexicon A/S. Neither the complete manual nor parts of it may be translated, copied, printed or published in any form or by any means without permission in writing from Flexcion A/S

Watson-Marlow Flexicon A/S is convinced that the information of this manual is correct, but Watson-Marlow Flexicon A/S can not be held responsible for it.

Watson-Marlow Flexicon A/S reserves the right to update and amend this manual without previous notice. Watson-Marlow Flexicon A/S is under no obligation to update manuals already published.