FLEX (indoor analog clock) for MOBALINE

Hint: Refer to leaflet for more detailed information.

Additional parts and options:

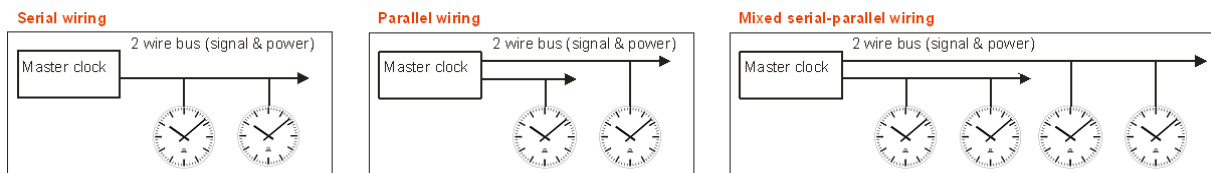|		
FL.*xx*.WM:	wall mounting ring for 25, 30 and 40 cm single face clock	
FL.*xx*.WS:	short suspension wall / ceiling mounting kit for 25, 30 and	40 cm double face clock
FL.*xx*.DS.LL	long suspension ceiling mounting kit for 25, 30 and 40 cm	double face clock
FL.*xx*.DS	ceiling mounting kit for 50, 60 and 80 cm double face clock	
FL.BA.*xx*:	blind clock for wall or ceiling kit (*xx*: 30 or 40 cm)	
FL.DD.*xx*:	Steam resistant model (IP55) (*xx*: 30, 40, 50,60 and 80 cm)	

The indoor analog **FLEX** slave clock, with hour & minute black hands and optional red second hand, is available in single or double face execution.

This is a round style clock, with a housing made of high quality white powder coated aluminium, fitted with a transparent flat mineral protective cover. The clock is available in dial's diameters of 25, 30, 40, 50, 60 and 80 cm with markers printed in black and optionally black numerals for hours. The clock can be manufacturer with different housing's options as: ball-throw resistant, plexiglas resistant protection cover or steam resistant (IP55).

Movement with MOBA*Line* interface:

The movement is synchronised and powered by Mobaline low voltage, noise immune modulated protocol over a simple 2-wires cable. The movement embedded microprocessor performs protocol analysis and diagnostics as well as the mechanical check of hand's position. In addition it has the capability to decode time zones protocol's information in order to be used for world time clock realisation.

The Mobaline bus allows versatile installation topology, clocks can be wired in serial, parallel or mixed serial-parallel configuration. Every single branch, starting from the master clock, can be up to 1600 meters long.

As an alternative, clocks with diameter of 50cm an over can also be manufactured to be powered through mains power supply (240 VAC).

ORDER REFERENCE:

FL . 1 . 2 . 3. 4. 5. 6. 7.   (see position description below)

1. **type of back-light illumination**
   a. without: **0**
   b. LED without (only for 25, 30 and 40 cm):   **2**

2. **dial diameter size**
   a. 25 cm: **25**
   b. 30 cm: **30**
   c. 40 cm: **40**
   d. 50 cm: **50**
   e. 60 cm: **60**
   f. 80 cm: **80**

3. **housing:**
   a. round single face: **R1**

4. **synchronization and hands specification:**
   (for dial from 50 cm an over):
   a. Mobaline hour and minute hands: **M03**
   b. Mobaline hour, minute and second hands   **M07**
   c. Mobaline hour, minute and second hands (240 VAC): **M11**
   (for dial up to 40 cm):
   d. Mobaline hour and minute hands: **M20**
   e. Mobaline hour, minute and second hands :   **M21**
   f. Mobaline hour and minute hands - low noise: **M22**
   g. Mobaline hour, minute and second hands - low noise: **M23**

5. **numeral type**
   a. markers only (bold) special: **100**
   b. markers only (bold):   **300**
   c. markers and numbers (bold):   **315**
   d. markers only :   **360**
   e. markers and numbers: **310**

Type 300   Type 310   Type 315   Type 360   ZB 100

6. **cover glass**
   a. mineral glass: **0**
   b. ball throw resistant: **1**
   c. plexi glass resistant : **3**

7. **housing options:**
   a. default: **00**
   b. steam resistant: **02**
   c. ball throw resistant: **03**

FLEX (indoor analog clock) for NTP

Hint: Refer to leaflet for more detailed information.
Additional parts and options:

FL.*xx*.WM:	wall mounting ring for 25, 30 and 40 cm single face clock	
FL.*xx*.WS:	short suspension wall / ceiling mounting kit for 25, 30 and	40 cm double face clock
FL.*xx*.DS.LL	long suspension ceiling mounting kit for 25, 30 and 40 cm	double face clock
FL.*xx*.DS	ceiling mounting kit for 50, 60 and 80 cm double face clock	
FL.BA.*xx*:	blind clock for wall or ceiling kit (*xx*: 30 or 40 cm)	
FL.DD.*xx*:	Steam resistant model (IP55) (*xx*: 30, 40, 50,60 and 80 cm)	
MOBA-NMS:	configuration, management and supervision software	

The indoor analog **FLEX** slave clock, with hour & minute black hands and optional red second hand, is available in single or double face execution.
This is a round style clock, with a housing made of high quality white powder coated aluminium, fitted with a transparent flat mineral protective cover. The clock is available in dial's diameters of 25, 30, 40, 50, 60 and 80 cm with markers printed in black and optionally black numerals for hours. The clock can be manufacturer with different housing's options as: ball-throw resistant, plexiglas resistant protection cover or steam resistant (IP55).

NTP- synchronised movement with 10/100 Mbit/s (baseT-8P8C) Ethernet interface:
The clock embeds a microprocessor based movement performing communication analysis and diagnostics as well as the mechanical check of hand's position.
The movement synchronised by NTP protocol is able to sustain unicast (with up to 4 NTP referenced servers) and multicats communication modes. In addition it has the capability to decode NTP frame containing time zones information in order to be used for world time clock realisation.
The configuration, management and supervision of more than 1000 movements can be done through network remote access by MOBA-NMS software which provides a friendly user graphic interface under windows or LINUX OS environment.
The movement configuration can also be fully and autonomously achieved by DHCP protocol under server management. The movement supports also the SNMP protocol and is able to manage alarm and alive messages straps.

Powering is performed by PoE (power over Ethernet) via standard RJ-45 Ethernet interface or by low voltage 24 VDC via a dedicated connector. Clocks with a dial diameter over 40 cm can also be powered through mains power supply (110 - 240 VAC) with optional built-in add-on converter.

ORDER REFERENCE:

FL . *1 . 2 . 3. 4. 5. 6. 7.*   (see position description below)

1.   type of back-light illumination
   a.   without: **0**
   b.   LED without (only for 25, 30 and 40 cm):   **2**

2.   dial diameter size
   a.   25 cm: **25**
   b.   30 cm: **30**
   c.   40 cm: **40**
   d.   50 cm: **50**
   e.   60 cm: **60**
   f.   80 cm: **80**

3.   housing:
   a.   round single face: **R1**

4.   synchronization and hands specification:
   (for dial from 50 cm an over):
   a.   Ethernet – NTP / power - PoE / hour and minute hands: **N10**
   b.   Ethernet – NTP / power - PoE / hour, minute and second hands: **N12**
   c.   Ethernet – NTP / power – 110-240 VAC / hour and minute hands: **N00**
   d.   Ethernet – NTP / power – 110-240 VAC / hour, minute and second hands: **N02**
   (for dial up to 40 cm):
   e.   Ethernet – NTP / power - PoE / hour and minute hands: **N20**
   f.   Ethernet – NTP / power - PoE / hour, minute and second hands: **N21**
   g.   Ethernet – NTP / power - PoE / hour and minute hands - low noise: **N22**
   h.   Ethernet – NTP / power - PoE / hour, minute and second hands - low noise: **N23**

5.   numeral type
   a.   markers only (bold) special: **100**
   b.   markers only (bold):   **300**
   c.   markers and numbers (bold):   **315**
   d.   markers only :   **360**
   e.   markers and numbers: **310**

Type 300   Type 310   Type 315   Type 360   ZB 100

6.   cover glass
   a.   mineral glass: **0**
   b.   ball throw resistant: **1**
   c.   plexi glass resistant :   **3**

7.   housing options:
   a.   default: **00**
   b.   steam resistant: **02**
   c.   ball throw resistant: **03**

FLEX (indoor analog clock) for Wireless

Hint: Refer to leaflet for more detailed information.

Additional parts and options:

FL.*xx*.WM:	wall mounting ring for 25, 30 and 40 cm single face clock	
FL.*xx*.WS:	short suspension wall / ceiling mounting kit for 25, 30 and	40 cm double face clock
FL.*xx*.DS.LL	long suspension ceiling mounting kit for 25, 30 and 40 cm	double face clock
FL.*xx*.DS	ceiling mounting kit for 50, 60 and 80 cm double face clock	
FL.BA.*xx*:	blind clock for wall or ceiling kit (*xx*: 30 or 40 cm)	
FL.DD.*xx*:	Steam resistant model (IP55) (*xx*: 30, 40, 50,60 and 80 cm)	

The indoor analog **FLEX** slave clock, with hour & minute black hands and optional red second hand, is available in single or double face execution.

This is a round style clock, with a housing made of high quality white powder coated aluminium, fitted with a transparent flat mineral protective cover. The clock is available in dial's diameters of 25, 30, 40, 50, 60 and 80 cm with markers printed in black and optionally black numerals for hours. The clock can be manufacturer with different housing's options as: ball-throw resistant, plexiglas resistant protection cover or steam resistant (IP55).

Movement with Wireless receiver (WTD):

The movement is synchronised by a wireless protocol modulated in the 868 MHz frequency band in accordance with AFNOR NFS code 87500. In addition it has the capability to decode time zones protocol's information in order to be used for world time clock realisation.

The movement embedded microprocessor performs communication analysis and diagnostics as well as the mechanical check of hand's position.

The movements embedded in clocks with a dial up to 30 cm can be powered with two 1.5 V batteries (IEC LR6 type), higher dimensions can be powered by Lithium battery. Movements can also be powered through mains power supply (110 -240 VAC) with optional built-in add-on converter.

ORDER REFERENCE:

FL . *1 . 2 . 3. 4. 5. 6. 7.* (see position description below)

1. **type of back-light illumination**
   a. without: **0**
   b. LED without (only for 25, 30 and 40 cm): **2**

2. **dial diameter size**
   a. 25 cm: **25**
   b. 30 cm: **30**
   c. 40 cm: **40**
   d. 50 cm: **50**
   e. 60 cm: **60**
   f. 80 cm: **80**

3. **housing:**
   a. round single face: **R1**

4. **synchronization and hands specification:**
   (for dial from 40 cm an over):
   a. Wireless / power – Lithium battery / hour and minute hands: **R79**
   b. Wireless / power – 110-240 VAC / hour and minute hands: **R81**
   c. Wireless / power – 110-240 VAC / hour, minute and second hands: **R84**
   (for dial up to 30 cm):
   d. Wireless / power – AA LR-6 batteries / hour and minute hands: **R75**
   e. Wireless / power – 110-240 VAC / hour and minute hands: **R77**
   f. Wireless / power – AA LR-6 batteries / hour, minute and second hands: **R76**
   g. Wireless / power – 110-240 VAC / hour, minute and second hands: **R78**

5. **numeral type**
   a. markers only (bold) special: **100**
   b. markers only (bold): **300**
   c. markers and numbers (bold): **315**
   d. markers only : **360**
   e. markers and numbers: **310**

Type 300   Type 310   Type 315   Type 360   ZB 100

6. **cover glass**
   a. mineral glass: **0**
   b. ball throw resistant: **1**
   c. plexi glass resistant : **3**

7. **housing options:**
   a. default: **00**
   b. steam resistant: **02**
   c. ball throw resistant: **03**