

OPERATOR'S MANUAL

OPM01

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1. Introduction

This chapter provides preliminary information concerning the OPM01 operator's panel and an overview of the applications it contains.

1.1. Preliminary information

The OPM01 is an operator's panel designed by Logomat over time with the specific aim of creating a valid connection between the automatic machine and the operator controlling it. The OPM01 combines all the components pertaining to machine warnings and controls.

The operator's panel is able to:

- Display the machine status.
- Manage the Menus.

1.2. Outside interface

The machine status is displayed on a 4-line LCD (twenty characters per line) 9mm high.

The messages are written with a specific software (see *Editor OPM software manual*).

1.3. Menu

The OPM01 is capable of managing menus that include a series of utilities (counter manager, selector manager, etc.).

2. Machine status display


This chapter describes the procedures to see the display messages.

2.1. Display

Upon switching on, the display carries out a series of internal tests. If they are successful, the display passes to the machine status display function. The message on the display depends on the bit coding 3.0÷3.6 (input port 3).

A message can be displayed either fixed or flashing.

The message can also display some counters.

Press the  key to display an additional help message.


3. Menu

This chapter describes how to access the different menus and functions.

The available basic menus are:

- Main menu.
- Size.
- Selectors.
- Counters.
- Counters reset.
- Language selection.
- Information.
- Transfer.
- End.

3.1. Main menu

Use the  . Press the key to access the "Main menu" . From here it's possible to access a series of submenus or exit this mode by pressing "End".

Use the   keys to scroll the menu. When the  arrows points to the desired function/submenu, press  .




If the  symbol precedes the key, activate the hardware key before pressing  .



3.2. Size

Select "Size" on the main menu to access a menu containing two items:

- SET SIZE
- LOAD SIZE


3.2.1 Set size



Set size contains the list of the size names. By selecting the desired size with , the positions of the selector/timers concerning that particular size will be memorized.

To scroll the list use the   keys.

Press  on "end" to return to the Main menu.


3.2.2 Load size





Load size contains the list of the size names. By selecting the desired size with , different selectors will be set as they were memorized.



To scroll the list use the   keys.


Press  on "end" to return to the Main menu.

3.3. Selectors

The selector/push button list enables to change their status. To modify the status of a selector/push button, select it and  press .



In the case of a push button the corresponding output will remain 1 as long as the  key is hold pressed. Whereas for a selector, its status will change every time the key is  pressed. To change the selector/timer status, the   keys can be used.

To scroll the list use the   keys.

Press  on "end" to return to the Main menu.

3.4. Counters



The counter list enables to see the value of all the counters set, except the counter concerning the machine speed.

To scroll the list use the   keys.

Press  on "end" to return to the Main menu.

3.5. Counters reset



This list contains all the counters that can be reset by the user.

To scroll the list use the   keys.

Press  on "end" to return to the Main menu.

3.6. Language selection

This list contains all the languages available for the customer.

To scroll the list use the   keys.

Press  on "end" to return to the Main menu.




If a wrong language is selected, press  on the message preceded by * to return to language selection.

3.7. Information

This menu item contains the software version and the checksum of the display management program.

3.8. Data Transfer

This function enables the serial port to establish a PC connection. Press  to disable the function and return to the Main menu.

3.9. End

Select "End" to return to the machine status display function.

4. Hardware description

This chapter describes the operator's panel technical features.

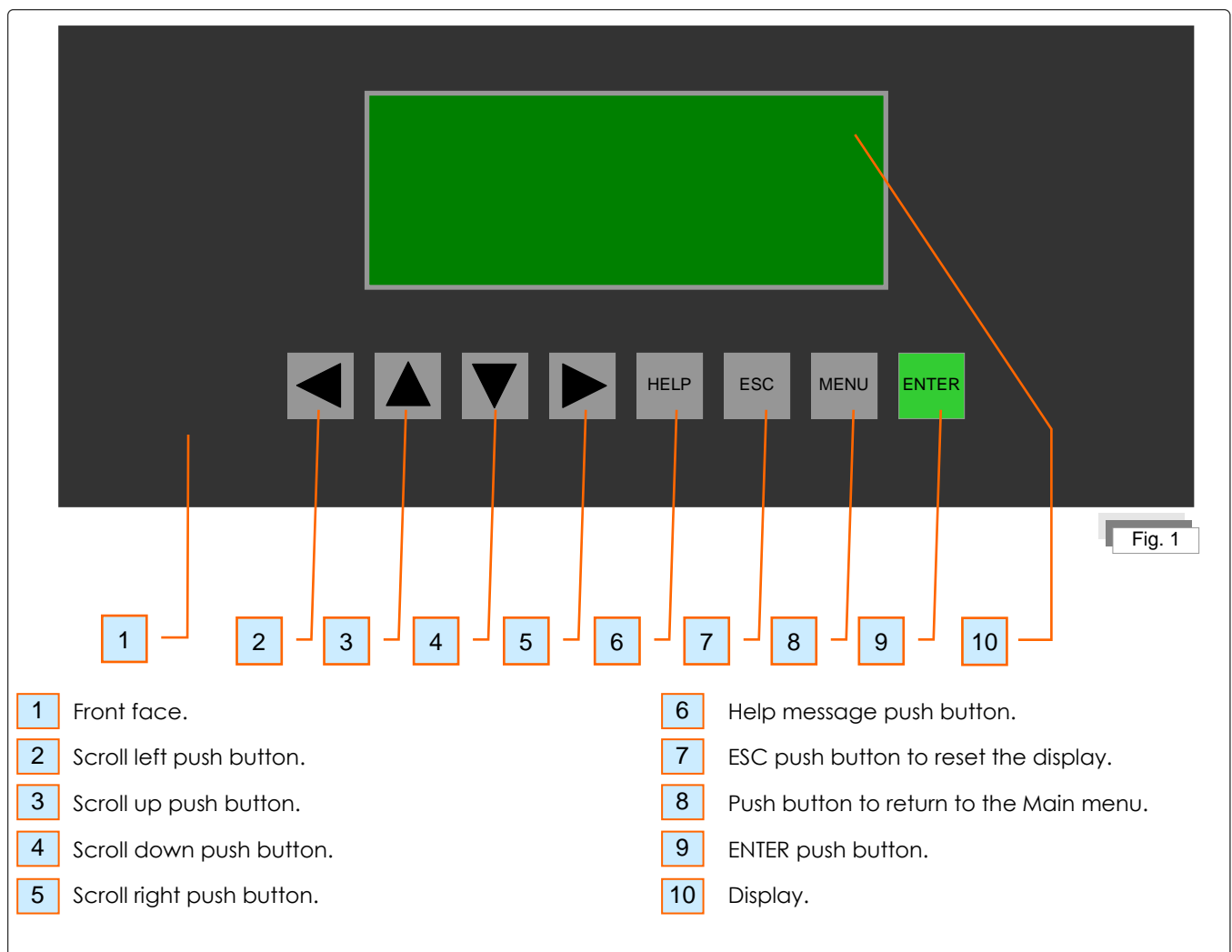
4.1. Face

The OPM01 operator's panel has two faces:

1. Front
2. Back

4.1.1 Front face

The front face is the panel side visible to the operator that contains the display and the function keys.



4.1.2 Back face

The back face (Fig. 2) has 4 well-defined areas:

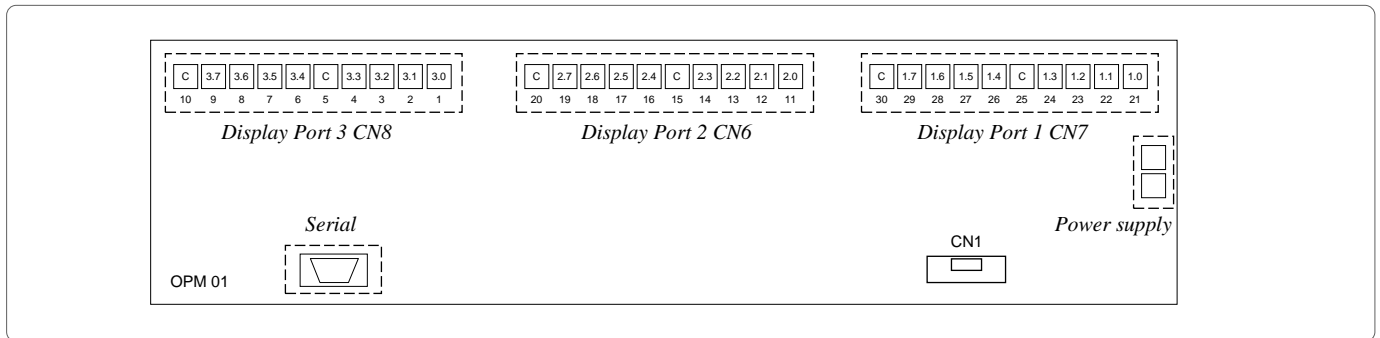


Fig. 2

- Port 1. It comprises 10 terminals for coded output signals. The port coding corresponds to the value "1.X" where 1 indicates the port and X identifies one of the connectors whose value range is between 0 and 7. The two connectors marked with "C" must be connected to the common.

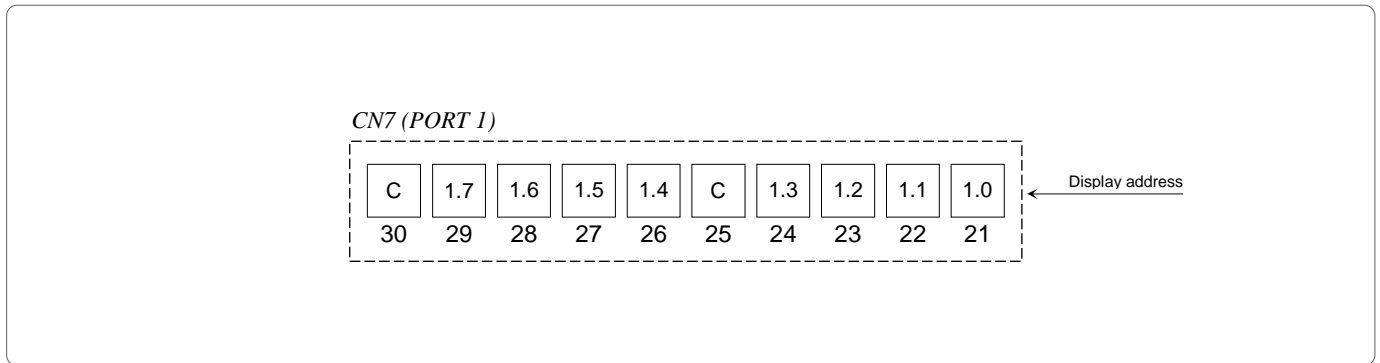


Fig. 3

- Port 2. It comprises 10 terminals for coded input signals. The port coding corresponds to the value "2.X" where 2 indicates the port and X identifies one of the connectors whose value range is between 0 and 7. The two connectors marked with "C" must be connected to the common.

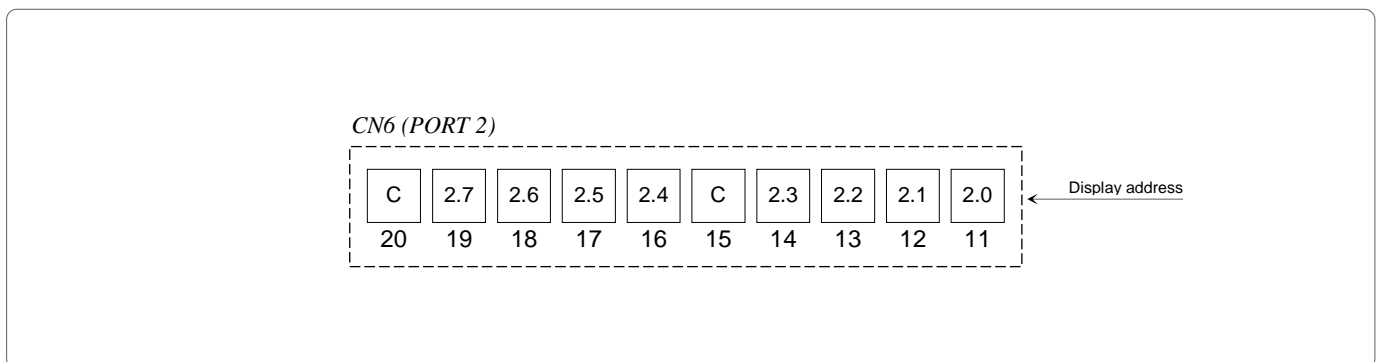


Fig. 4

- Port 3. It comprises 10 terminals for the display message loading input. The port coding corresponds to the value "3.X" where 3 indicates the port and X identifies one of the connectors whose value range is between 0 and 7. The two connectors marked with "C" must be connected to the common.

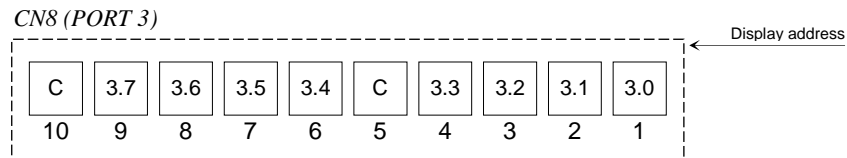


Fig. 5

- Serial port. **The serial port connection is not standard.** Therefore use an adequate adapter for the OPM01 and the PC. The communication takes place by means of a RS232 port.

4.1.3 I/O display card (optional)

The I/O display card named CN1 comprises three groups of LEDs. Each group is associated with an input/output port. The LEDs turn on every time there is a signal on the input/output linked to it.

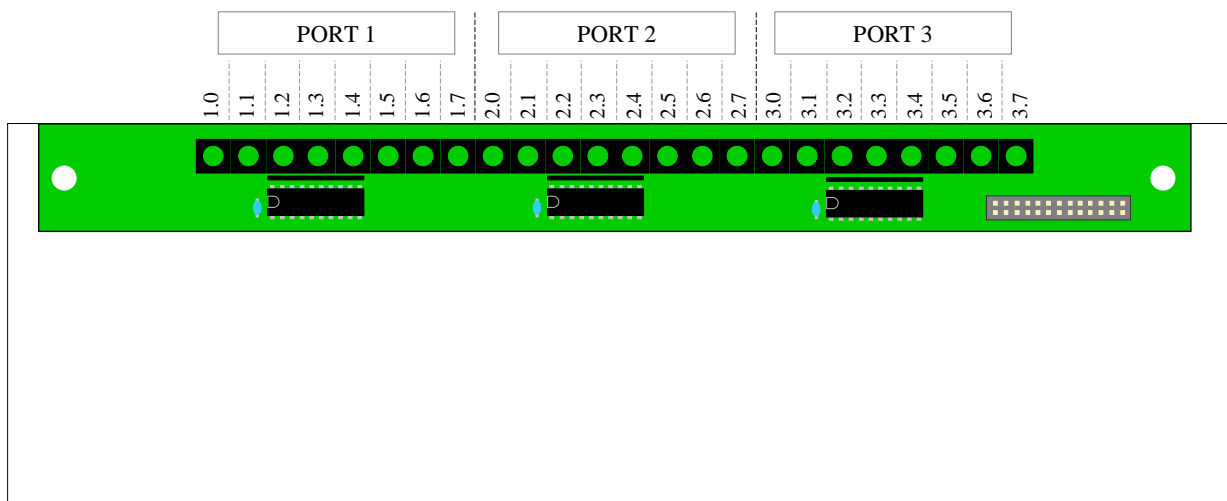


Fig. 6

4.2. Memories

The OPM01 has three different internal memories:

- 1 32-KBYTE FLASHEPROM
- 1 256-KBYTE FLASHEPROM
- 1 8-KBYTE BUFFER RAM

4.3. Dimensions

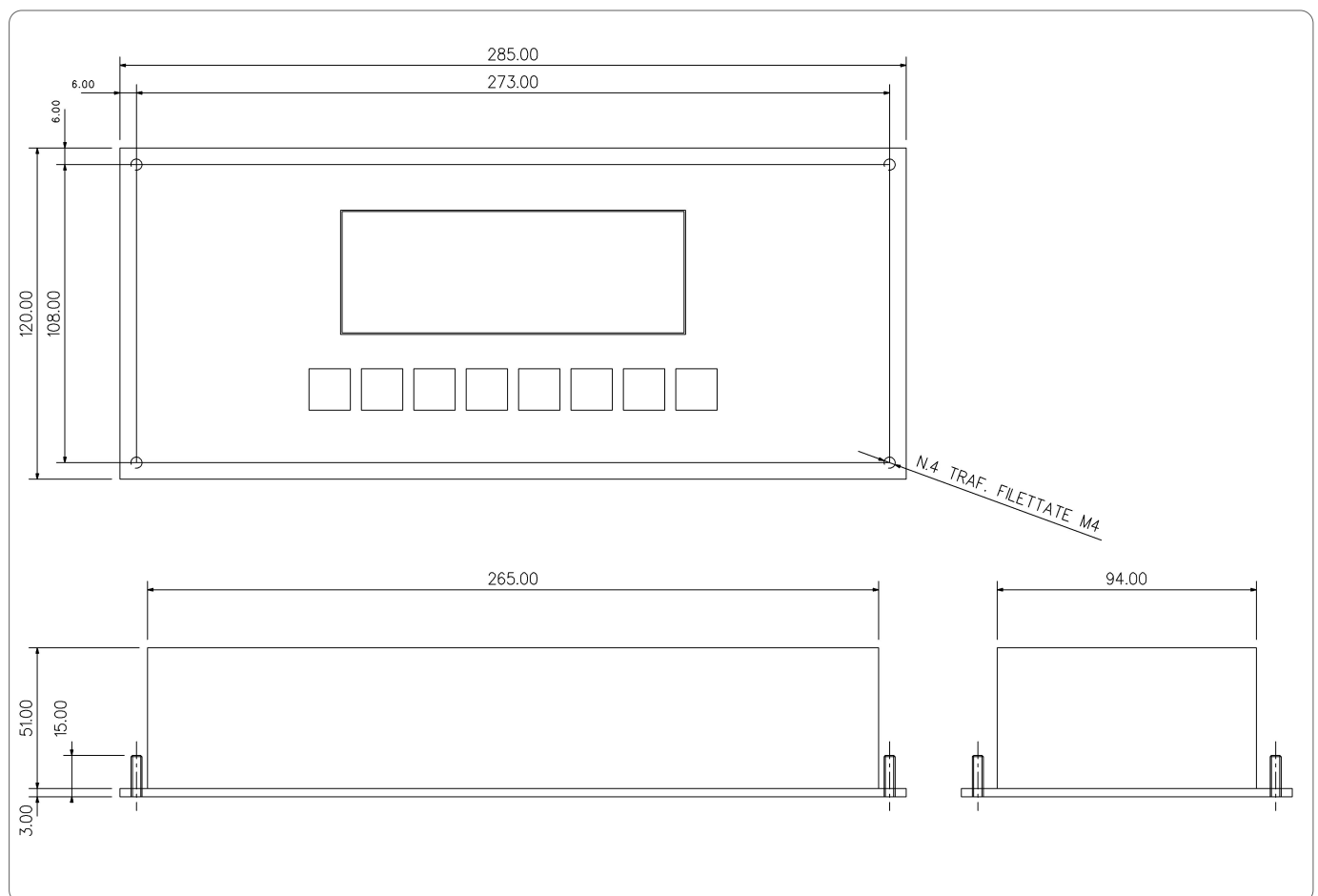



Fig. 7

4.4. Power supply

2-pole power connector			
	L	12-24Vac/Vdc power input	(the poles are interchangeable also in dc current powering)
	N	12-24Vac/Vdc power input	

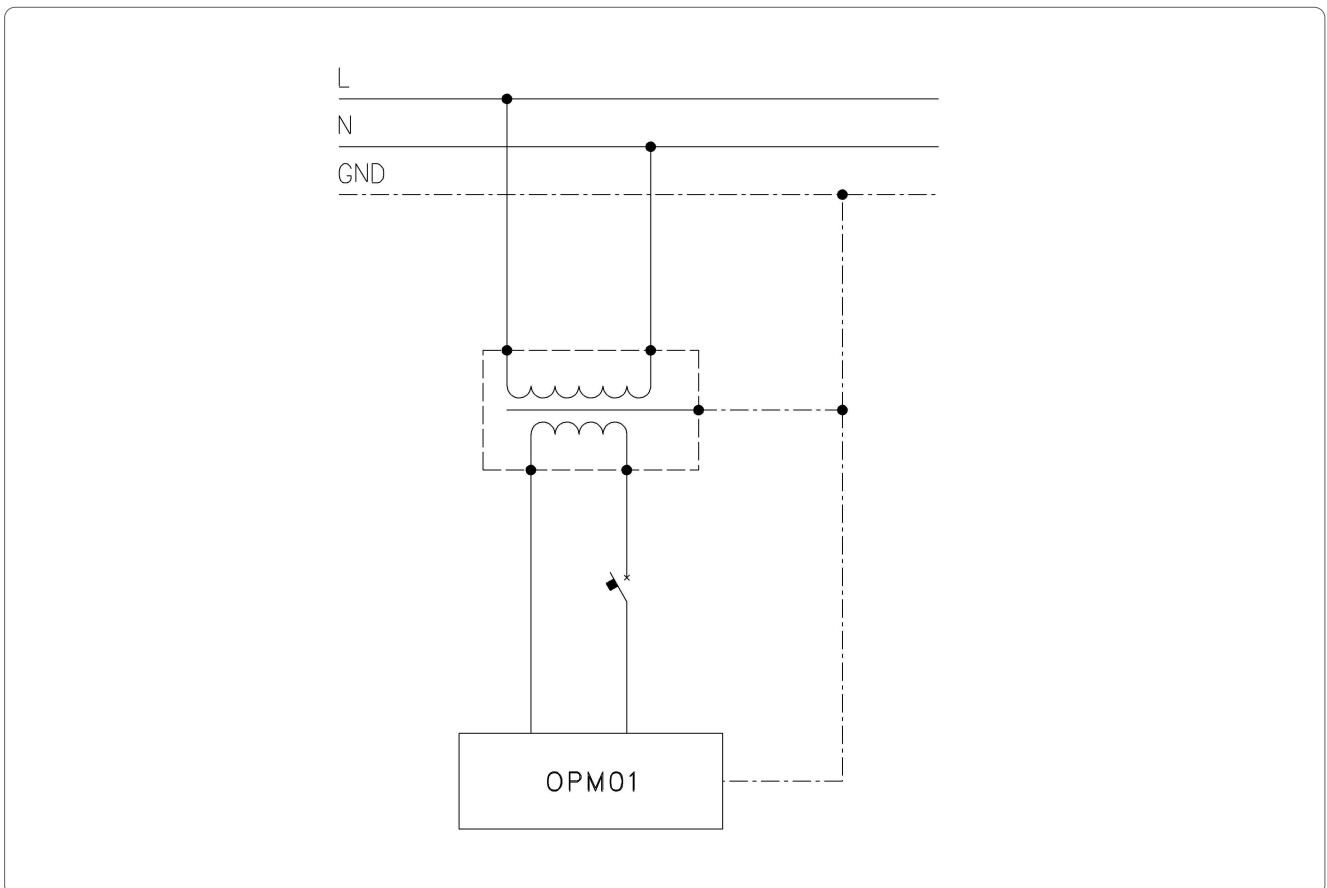


Fig. 8

4.5. Interface ports

The OPM01 is equipped with:

- 1 RS232C serial port
- 16 two-way 24Vdc inputs
- 8 two-way 24Vdc / 150mA outputs (resistive load)

The RS232C serial port is used for the communication between PC and OPM01.

The two-way inputs are used to acquire information in the form of electric signals. If the input is used as a revolution counter, it shall have a signal with a logic state over 550 μ sec. (maximum speed that can be reached at 850 RPM). If it is used as a counter, the signal shall have a logic state over 4 msec.

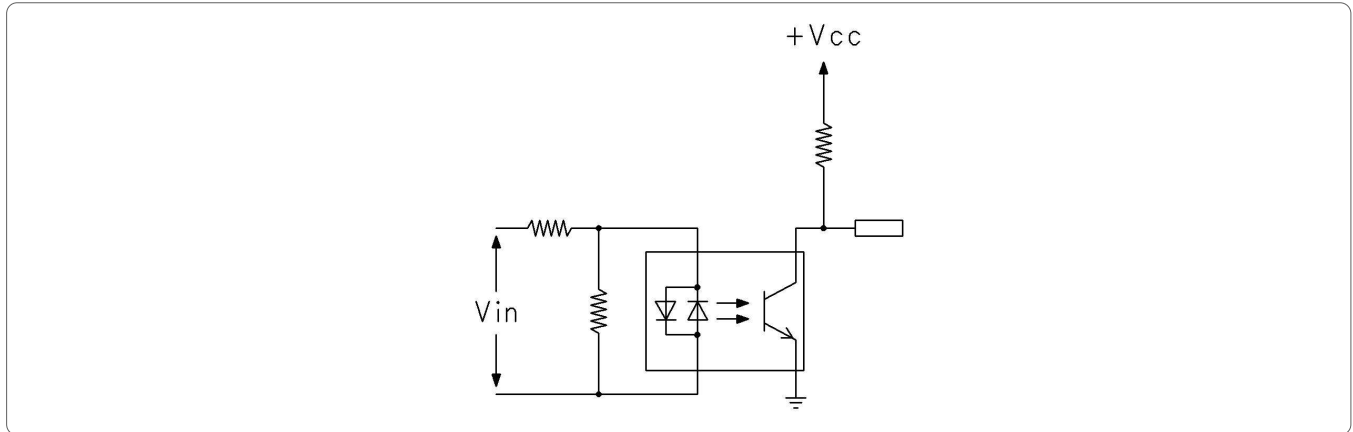


Fig. 9

The outputs are used to export information in the form of electric signals. Bits from 3.0 to 3.6 are used for the message coding. A selector or an hour-counter can be connected to bit 3.7.

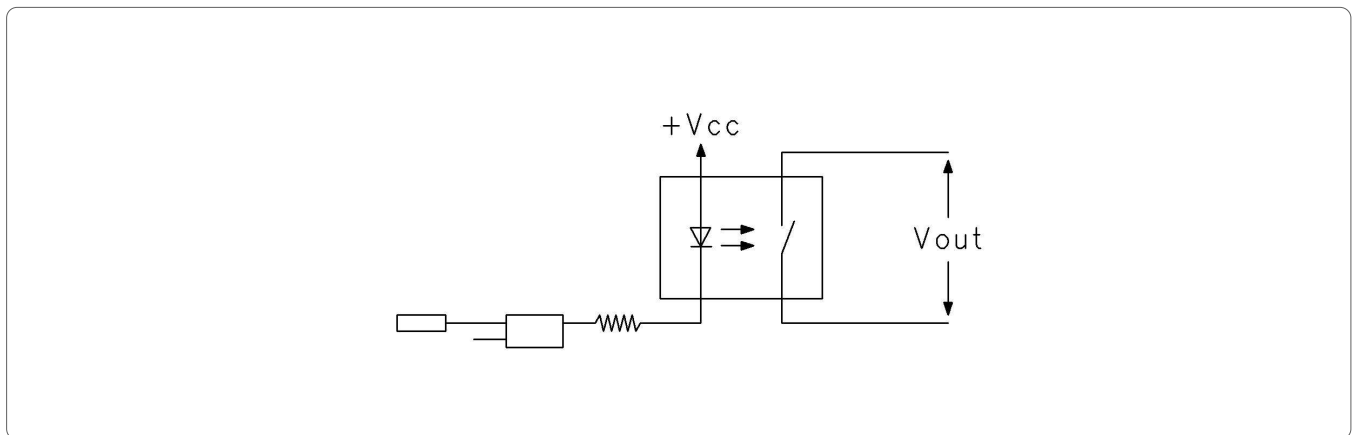


Fig. 10

Selectors / counters / hour counters / speed indicators can be connected to Port 2 bits.

4.6. Serial connection cable

The OPM01 is equipped with the following cable:

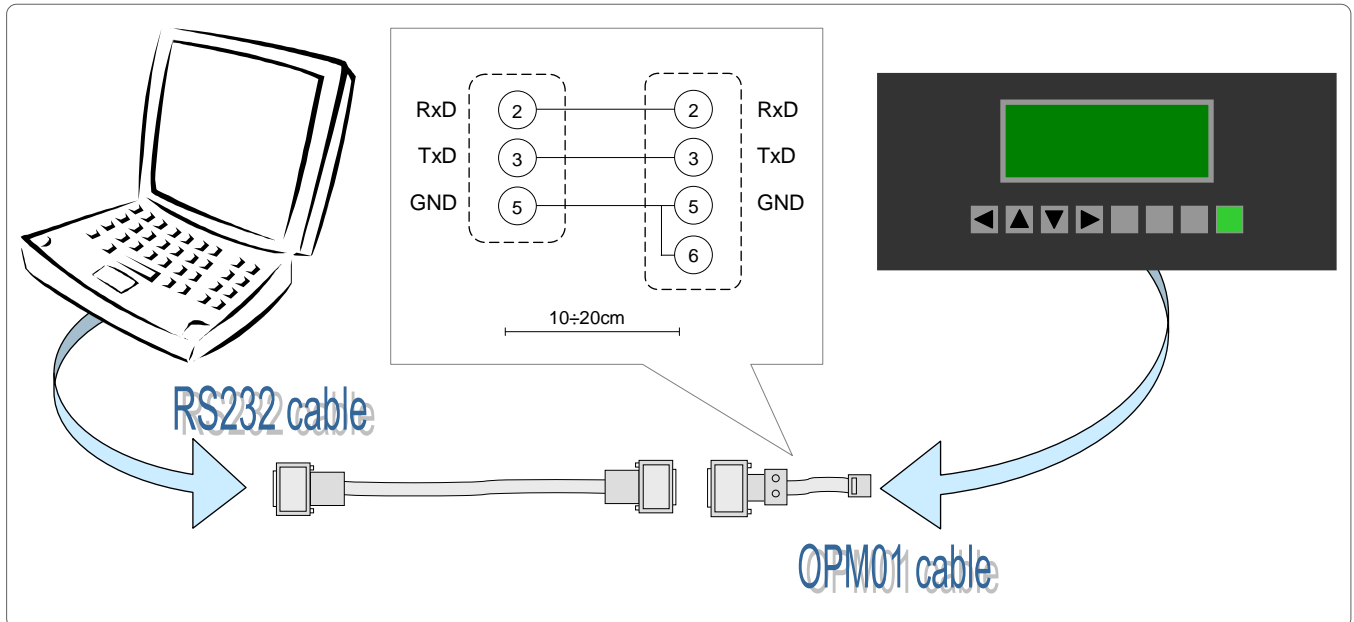


Fig. 11

4.7. Program updating

Please contact LOGOMAT S.r.l. to update the resident software (support.opm@logomat.it)

4.8. Failures

The following error messages can appear on the display:

1. REPROGRAM MESSAGE !
FLASH EPROM:
MISSING, EMPTY OR
DATA CORRUPTED

The message appears every time the program detects one of the following failures, when the display is switched on:

- Data Eprom missing.
- Data Eprom empty.
- Data Eprom corrupted.

2. KEY PRESSED:

The message indicates that, upon switching on, one of the keys is pressed. The key symbol will be displayed to indicate the pressed key: → ← ↑ ↓ M E

- →
- ←
- ↑
- ↓
- M for menu.
- E for enter.

3. No messages:

If no message appears on the display check:

- the power supply.
- if the ESC key remained pressed.

4. "Data Transfer" display upon switching on:

6. If, upon switching on, the display automatically sets to Data Transfer without showing any message before, check if the "HELP" key is blocked in pressed position. It automatically sets to Data Transfer if the message EEPROM is missing, empty or faulty.