

INSTRUCTION MANUAL

COLOR CHANGER

Manual: 1504 573.186.112

Date: 22/04/15 - Supersede: 19/10/11 Modif.: + Version Airmix® GT 200 bar / 2900 psi

TRANSLATION FROM THE ORIGINAL MANUAL

IMPORTANT: before assembly and start-up, please read and clearly understand all documents relating to this equipment (professional use only).

PICTURES AND DRAWINGS ARE NON CONTRACTUAL. WE RESERVE THE RIGHT TO MAKE CHANGES WITHOUT PRIOR NOTICE.

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ADDITIONAL DOCUMENTATIONS:

| EC declaration of conformity | 578.050.130-UK |
|------------------------------|----------------|
| | |
| | Spare parts |
| Color changer | 573.187.050 |
| CTM valve | 573.188.050 |

Dear Customer,

You are the owner of our new color changer and we would like to take this opportunity to thank you.

To make sure your investment will provide full satisfaction, special care has been taken by KREMLIN REXSON during all designing and manufacturing processes.

To obtain the best result, safe and efficient operation of your equipment, we advice you to read and make yourself familiar with this instruction and service manual. Indeed, the non-compliance with instructions and precautions stated in this manual could reduce the equipment working-life, result in operating trouble and create unsafe conditions.

1. GENERAL SAFETY INSTRUCTIONS

- The personnel involved in operating and servicing this equipment must be aware of all safety requirements stated in this manual. The workshop supervisor must be certain that the personnel has perfectly understood the safety instructions and complies with them.
- Use the equipments only in a well-ventilated area to prevent from serious body injuries, fire and explosion hazards.
- Spraying of some materials may result in hazardous working conditions. To protect the operator, respirator mask, hand cream and glasses are required.
- The operating pressure of these equipments are particularly high. Consequently, some precautions must be taken in order to prevent from accidents and from unsafe working conditions.

2. DESCRIPTION

The color changer is composed of several stackings modules.

It enables a quick color change without material handling. As a result, costs through down time and solvent consumption are dramatically reduced.

Thre is no dead volume thus allowing a full flushing.

It is used on automatic installations and also on optimized manual installation. A color changer consists of :

- 1 end module (inlet),
- x intermediate modules,
- 1 outlet flange,
- 2 tie-rods.

The end module and the intermediate modules are fitted with two air operated valves. Each valve feeds the central fluid passage with the selected color.

Select the appropriate modules and valves according to the application :

- airspray (low pressure),
- AIRMIX (medium pressure 120 bar / 1740 psi),
- AIRMIX (high pressure 200 bar / 2900 psi).

With the required color valves, add a solvent valve for the flushing and, if necessary, an additional valve to provide compressed air to speed up the flushing process.

On a color changer, the number of valves is **always** an even number.

3. ASSEMBLING

The modules are stacked together and secured by tie-rods suitable for the number of modules.

If required two wall mounting brackets (use screws \emptyset 6 mm) can be installed on both side of the color changer.

It is compulsory to fit the solvent valve on the end module, on the opposite side of the fluid outlet.

4. TECHNICAL FEATURES

Modula rand versatile.

Ease of maintenance (the valves can be removed without dismantling the fluid hoses). Designed for fluid circulation.

Supplied with valve opening indicator.

| | Airspray | AIRMIX 120 bar / 1740 psi | AIRMIX 200 bar / 2900 psi | AIRMIX GT 200 bar / 2900 psi | AIRMIX® 200 bar / 2900 psi (stainless steel 316 L) | | |
|--------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------------------------------|--|--|--|
| Maximum fluid pressure | 8 bar / 116 psi | 120 bar / 1740 psi | 200 bar / 2900 psi | 200 bar / 2900 psi | 200 bar / 2900 psi | | |
| Central fluid passage diameter | 8 mm / 5/16" | 6 mm / / 1/4" | 6 mm / 1/4" | 6 mm / 1/4" | 6 mm / 1/4" | | |
| Air control fitting (ind. 5) | For hose 2,7 x 4 | | | | | | |
| Fluid inlet fitting (ind. 4) | F 1/4" NPS | | | | | | |
| Fluid outlet fitting (ind. 6) | itlet fitting (ind. 6) F 1/4" NPS | | | | | | |
| Wetted parts | Stainless steel PTFE seals | Stainless steel PTFE seals | Stainless steel PTFE seals | Stainless steel GT seals | Stainless steel 316L PTFE seals | | |

1 → end module (inlet)

2 → intermediate module

3 → outlet flange

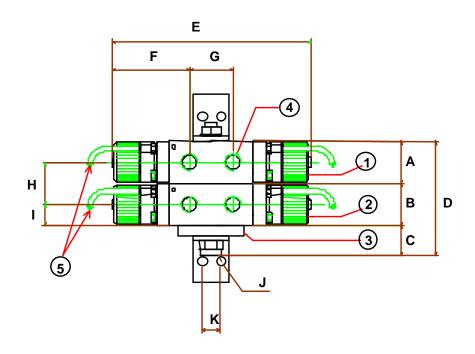
Refer to drawing next page

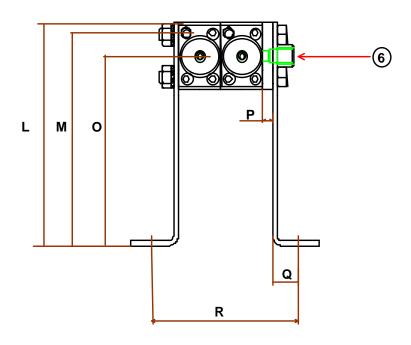
Dimensions:

| Ind. | Α | В | С | D * | E | F | G | H * | I | J | K | L |
|------|------|------|----|-------------------|------|------|------|--------|------|-------|------|------|
| mm | 35 | 35 | 25 | 60 + (N x 35) | 165 | 64,5 | 36 | N x 35 | 17,5 | Ø 6,5 | 15 | 185 |
| " | 1.38 | 1.38 | 1 | 2.36 + (N x 1.38) | 6.50 | 2.54 | 1.42 | Nx1.38 | 0.69 | 0.26 | 0.59 | 7.28 |

| Ind. | М | 0 | Р | Q | R * |
|------|-------|-------|------|------|-------------------|
| mm | 176,5 | 157,5 | 8 | 21,5 | 86 + (N x 35) |
| " | 6.95 | 6.20 | 5/16 | 0.85 | 3.38 + (N x 1.38) |

^{*} N = Number of intermediate module

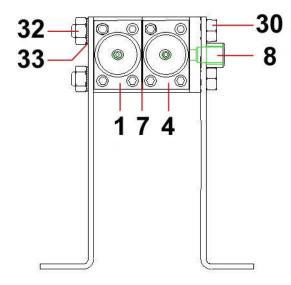




5. DISASSEMBLY - ASSEMBLY

Prior to removing a component shut off air and material supplies. Depressurize the system.

■ NEW MODULE INSTALLATION (OR MODULE REPLACEMENT) (REFER TO DOC. 573.187.050)



Unscrew nuts (32).

Remove washers (33).

Carry out the same operation for the second tie-rod.

Remove both tie-rods (30).

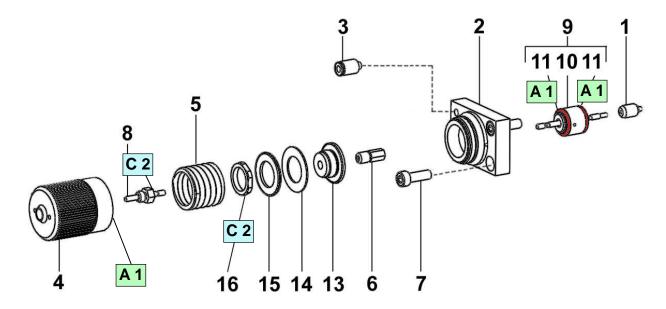
Mount the new module (be certain seal (7) is installed between two modules).

Slide the appropriate tie-rods through the modules, from fluid outlet flange to the end module.

Be careful when positioning tie-rods (30, tie-rods head against fluid outlet flange (8).

Install washers (33) and then screw nuts (32).

■ CARTRIDGE OF A FLUID VALVE (IND. 9) (REFER TO DOC. 573.188.050)



Unscrew the 3 screws (7).

Extract the valve from the module body.

Unscrew the needle (1).

Unscrew the cylinder (4).

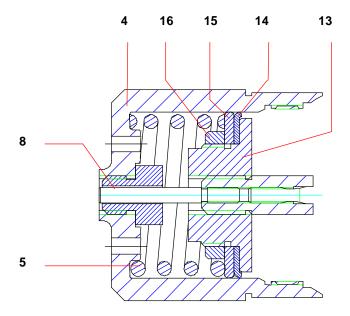
Hold rod carrier (6), unscrew the needle rod and remove cartridge with rod assembly (9). Remove the seals.

When reassembling:

Change the seals (11), lubricate them then install new cartridge (9) in cylinder support (2) by pushing it until the cartridge shoulder comes to lean against the cylinder support shoulder. Then reinstall all the components in the reverse order of disassembly.

Install the valve in front of the module body.

Centre the cartridge (9) on the module body and reinstall screws (7).



Unscrew the cylinder (4).

Remove the spring (5).

Unscrew the valve opening indicator (8).

Unscrew the nut (16).

Remove the support washer (15) and the packing (14).

Clean the parts and replace them if it is necessary.

Prior to their reassembly on piston (13), packing lip (14) must be shaped by hand as shown as above (packing turned up on the piston).

Glue the nut (16) on the piston (13) with a light coating of glue (eg: Loctite 222).

| Index | Instruction | Description | Part number |
|-------|-----------------------------------|------------------------------------|-------------|
| A 1 | PTFE grease | PTFE grease (10 ml / 0.026 US gal) | 560.440.101 |
| C 2 | Low strength - Aneorobic Adhesive | Loctite 222 (50 ml / 0.013 US gal) | 554.180.010 |