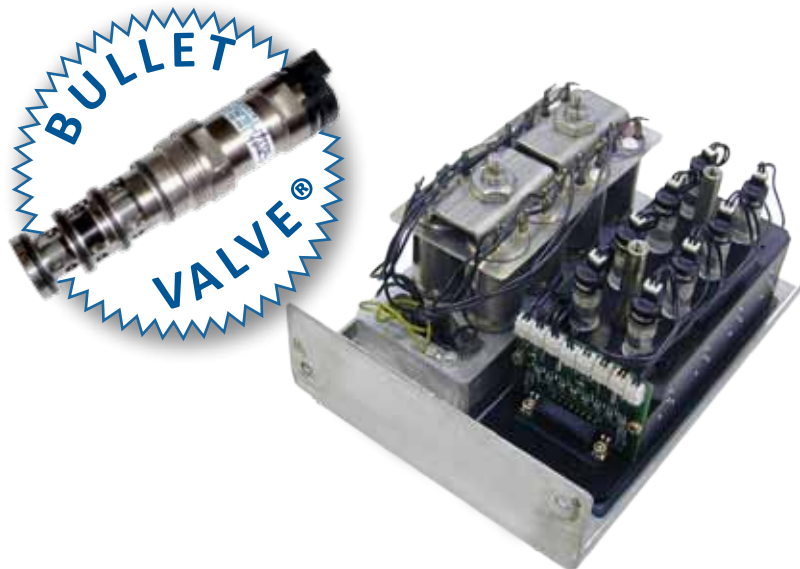


## 100% DROP-IN SOLUTIONS FOR SOLENOID VALVES ON VOLUMETRIC FILLERS

MAC Valves, Inc. is pleased to present 100% drop-in solutions for OEM supplied solenoid valves on volumetric fillers.



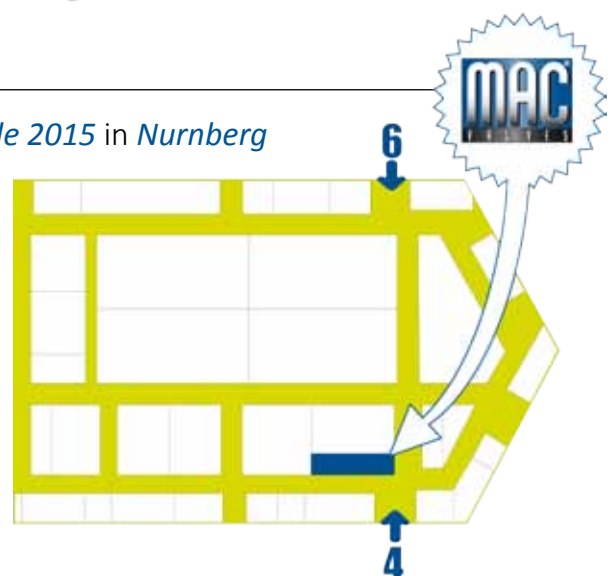
### 14 DAYS TO BRAUBEVIALE

We will be pleased to welcome you during *Brau Beviale 2015* in *Nurnberg* from *November 10<sup>th</sup> to 12<sup>th</sup> 2015*.

## BrauBeviale2015

Raw Materials | Technologies | Logistics | Marketing

**Hall 5 – Stand 448**



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If you read the MAC BEVERAGE GAZETTE #1, you already know that the MAC performances provide to all volumetric filling equipment users a better filling accuracy on average, which means huge savings at the end of the year. If it is not done yet, we strongly advise you to have a look at this BEVERAGE GAZETTE #1 in order to better understand the MAC advantages.

So you know that MAC provides high advantages and improvement to the filling process, but it is also important for filler users to understand how easy it is to implement these solutions.

### 1-TO-1 REPLACEMENT FOR EACH SOLUTION

The policy of MAC Valves is to make sure that all the solutions provided are direct replacements, which means that absolutely no change has to be made on the customer's machine.

As explained in the next points, this policy has been implemented on fillers also. MAC Valves provides solutions with the same size, the same footprint and the same connector as the original ones. **So no change is necessary on the filler to install MAC solutions.**

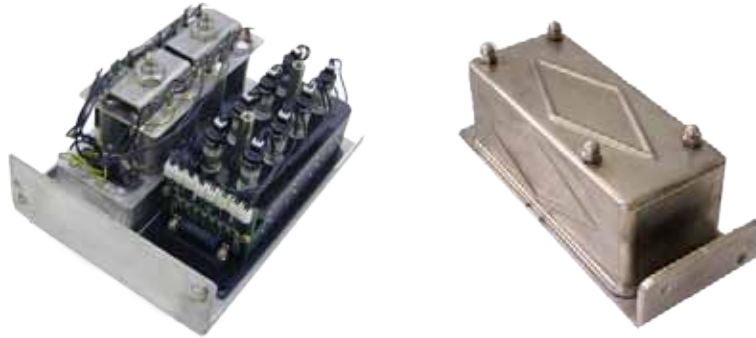
### REPLACEMENT SOLUTIONS IN DETAIL

- a. Replacement of the 8-station «round valve» manifold  
or  
the 16-station «round valve» manifold*



If your solenoid valves look like this, you may already have been contacted by the OEM to switch to an updated home made solution. The disadvantage of that proposal is that further changes have to be implemented on the machine, this is not a 1-to-1 replacement.

**MAC Valves provides solutions that perfectly fit to the OEM sub-base and with the existing cover, no change required on the machine - See picture on next page.**



You can find the drawing of the MAC solution in the Appendix 1.

### ***b. Replacement of the 16-station “round valve” manifold***

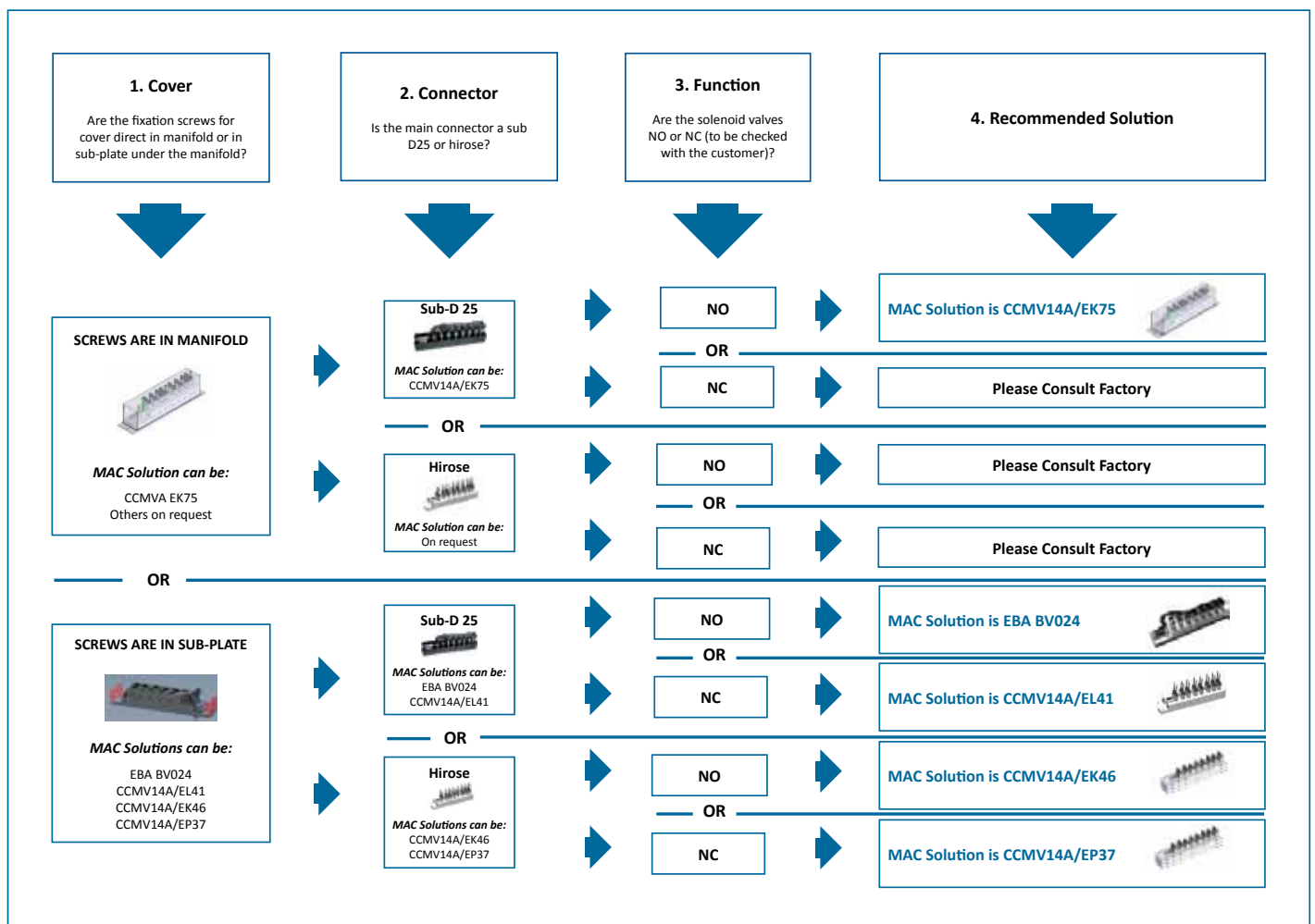
The OEM using the type of manifold illustrated below is also proposing to switch to an updated home-made solution, but without offering a 1-to-1 replacement. MAC Valves has an easy-to-install solution that is suitable for all original configurations, with much better performances improving the filling accuracy.



To select the appropriate solution for your equipment, 3 points must be checked:

- The position of the fixation points for the cover***
- The type of connector***
- The function of the solenoid valves on the manifold (NO or NC)***

Once the previously listed points are clarified, you can follow the flow of the chart hereafter to codify the appropriate solution to replace the existing solenoid valves and manifolds without any change on the machine.



An example of the solution is in appendix 2, in order to give an idea of the dimensions.  
Don't hesitate to ask your MDN associate to provide you with the drawing of your solution.

### c. Replacement of the 4 & 5-station "round valve" manifold.

The OEM supplying the original solution shown below is also promoting an updated solution to his customers. The updated solution also requires additional changes on the filler.



As usual, the MAC solution doesn't require any change on the machine and provides better results as far as filling accuracy is concerned



Drawing and dimensions are available in the Appendix 3.

### d. Replacement of the 16-station manifold with small pilots.



This OEM supplied filling valve control manifold is made of a small solenoid valve driving a spool that is directly built in the manifold. Such a design is prone to leakages, variations in filling levels and the solution has a poor lifetime.

Moreover, the common electrical plate is not easy to connect once a solenoid is changed.

The MAC solution is a 1 to 1 drop-in solution that does not have such disadvantages.



All info relating to MAC dimensions are available in the Appendix 4.



**e. Replacement of the 16-station manifold with white solenoid valves and green electrical board on top**

This solution is using piloted valves, causing fluctuations in the filling levels. The common electrical plate is also creating difficulties when trying to reconnect.



The MAC solution perfectly replaces this solution, both in form and function, with a better design and an excellent repeatability.



If you want to know the dimensions of this solution, just have a look at the Appendix 5.

**f. Replacement of the 6-station with 4, 5 or 6 black solenoid valves**



The old design of the solenoid valves generates slow and inconsistent response times. It may even slow down the speed of the machine and of course alter overall filling accuracy.

MAC provides again a 1-to-1 replacement with much better performances.



The dimensions of this solution can be found in Appendix 6.

### g. Others

MAC Valves proposes a series of replacement solutions for other applications on different types of fillers and is also able to adapt existing products to replace solenoid valves installed at your facility! Are you willing to check? Do not wait and ask your local MDN Distributor!

## LIFETIME

The MAC design allows reaching excellent performances over the life cycle with a superior reliability. With the MAC solenoid valves, you will forget that your filling valves are controlled by solenoids! You want to know more about the MAC design? Just ask your local MDN Distributor!

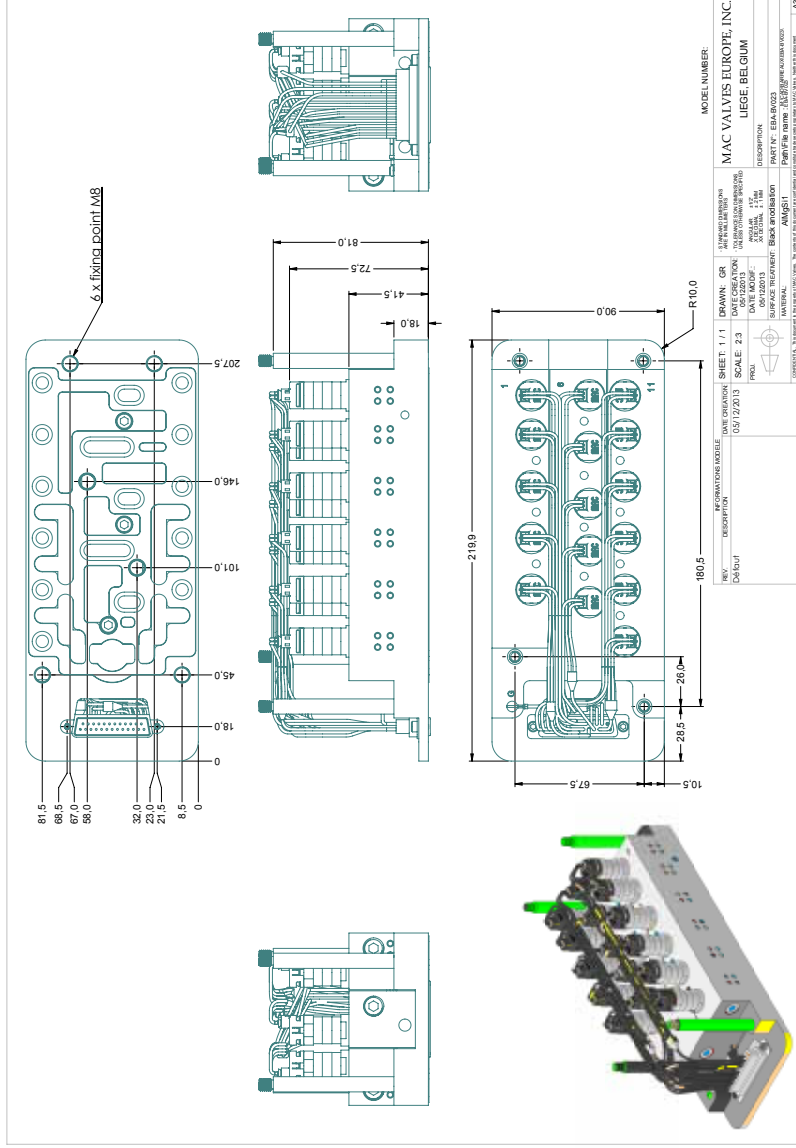
## MAC CUSTOMER PROFIT REINFORCEMENT (CPR®)



*CPR® is a proprietary ROI process utilized by MAC and the MDN (MAC Distributor Network) to maximize customer profitability. The CPR® process has been utilized with hundreds of customers to propose over \$150 million in real bottom line savings (implementing \$105 million) since 2010.*

All MDN members are able to support you by calculating and providing you with a document detailing the financial benefits of using MAC Valves on your filler, with your own figures. Don't wait, contact your MDN support to build your own CPR®.

## APPENDIX 1



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### TECHNICAL BULLETIN

### APPENDIX 2

**NOTE:**  
 - E-B0015: ROUTE WIRES APPROX. AS SHOWN  
 USE WIRE TIES WHERE NEEDED.  
 - USE #AF-1641 TO AIR TEST ASSEMBLY.

REVISION	DATE	BY	CHK	APPR	DESCRIPTION
1	10/26/15	MAC	MAC	MAC	ISSUE FOR AIR TEST ASSEMBLY
2	10/26/15	MAC	MAC	MAC	ISSUE FOR AIR TEST ASSEMBLY
3	10/26/15	MAC	MAC	MAC	ISSUE FOR AIR TEST ASSEMBLY

SCALE	DATE	BY	CHK	APPR	DESCRIPTION
1:1	10/26/15	MAC	MAC	MAC	ISSUE FOR AIR TEST ASSEMBLY
1:1	10/26/15	MAC	MAC	MAC	ISSUE FOR AIR TEST ASSEMBLY
1:1	10/26/15	MAC	MAC	MAC	ISSUE FOR AIR TEST ASSEMBLY

MAC VALVES, INC.  
 10 Station BV014 Series manifold - KHS  
 Part Number: EBA-BV024  
 Drawing Title: EBA-BV024

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Liège, October 26<sup>th</sup> 2015

### APPENDIX 3

REV.	DESCRIPTION	INFORMATIONS MODELE	DATE ORATION	SHEET: 1 / 1	DRAWN: LW	STANDARD DIMENSIONS ARE IN MILLIMETERS	MODEL NUMBER:
Début			11/07/2015			THE DIMENSIONS AND DIMENSIONS ARE IN MILLIMETERS	MAC VALVES EUROPE, INC.
				SCALE: 1:2		ANGULAR DIMENSIONS ARE IN DEGREES	LIEGE, BELGIUM
				PROJ:		XX TECHNICAL 1:1000	
				DATE MODIF:			
				13/10/2015			
				SURFACE TREATMENT:			
				Anodisation noire			
				DESCRIPTION:			
				MATERIAL: A10GSI   PART N°:CCM14A-EK52			
				Part File name : MACBARREAU   COM14A-EK52			
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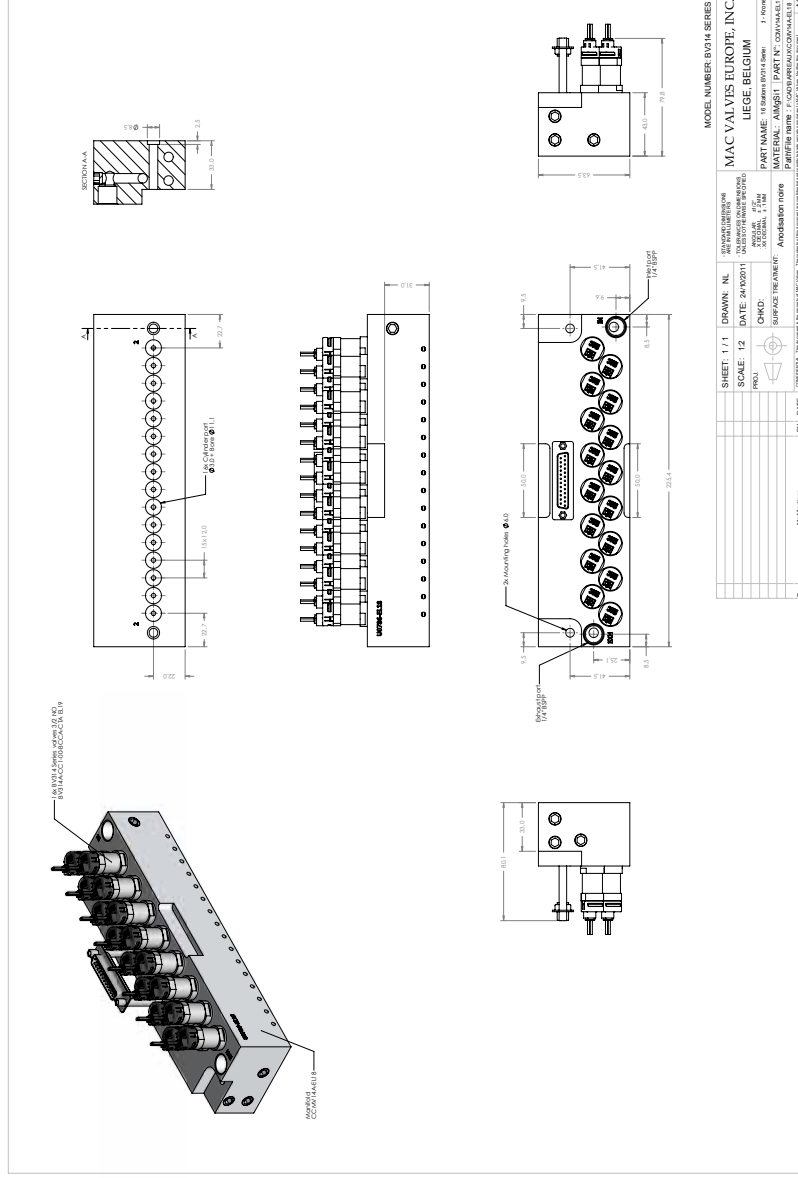
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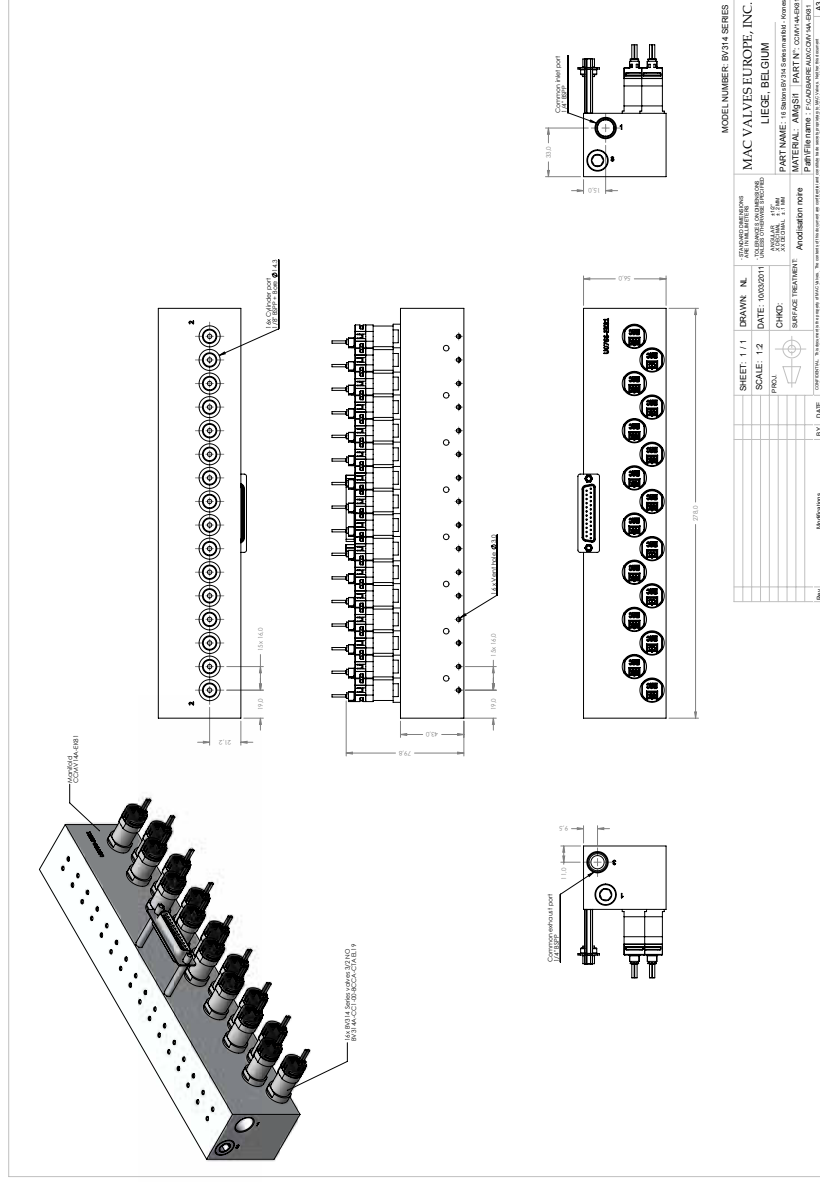
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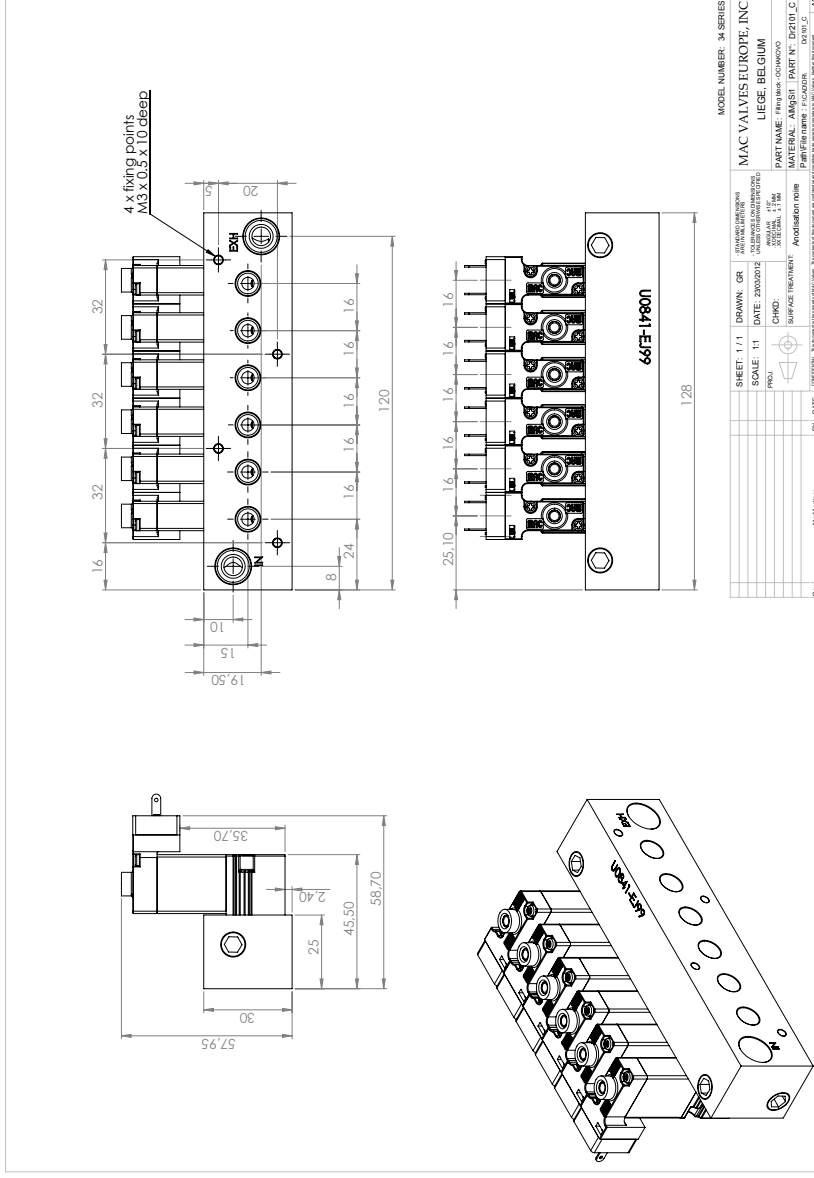
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