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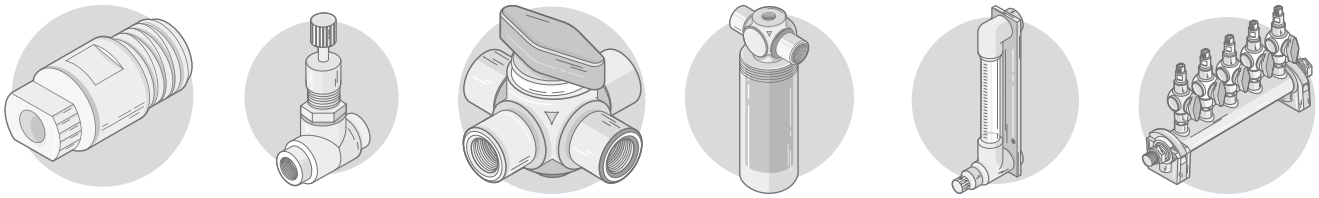


EN

Manifolds 8B

Assembly and Operation Instructions

Contents

1. General information

1.1 Introduction

- These instructions apply to series 8B Manifolds, also referred to below as fittings.
- Read the instructions completely before using our products to prevent injuries, material damage and malfunctions!
- Save the instructions for later reference.
-

1.2 Warnings

- Warnings are always identified by a signal word. The following signal words or hazard levels are used:

Danger	**Danger:** Failure to follow instructions will lead to serious injuries or death. High risk level of endangerment.
Warning	**Warning:** Failure to follow instructions may lead to serious injuries or death. Moderate risk level of endangerment.
Caution	**Caution:** May lead to slight or moderate injuries. Low risk level of endangerment.
	Note: Refers to an instruction that must absolutely be followed.
	Information: Gives useful tips and recommendations..

1.3 Special Hazards

Danger

- It must be ensured that the fitting is resistant for the media and temperatures that will be used. The resistance of the fitting with aggressive media depends in individual cases on many variables (such as the temperature, concentration ratio of the medium, material, environment, tube material etc.). The person ordering the fitting is responsible for checking for the specific application. In case of doubt install the fitting on a trial basis.

Warning

- Always comply with the safety data sheets or the safety requirements for the media you are using!

Warning

- Before removing the fitting it must be ensured that there is no more medium in the flexible tube/pipe system and the pressure has completely dissipated. Exercise caution for toxic, corrosive or hot media residue flowing out of the line or remaining in dead spaces.

1.4 General Safety Instructions

- The fitting must be properly connected to the flexible tube/pipe system.
- Before installing the fitting make certain that external mechanical effects such as thrust and bending forces are not acting on the flexible tube/pipe system.
- Installation, commissioning, operation, installation, maintenance, troubleshooting and disassembly must only be performed by qualified specialists with due consideration of accident prevention regulations. Personnel must be capable based on their technical training and experience of performing assembly tasks, following technical specifications and recognizing possible dangers.
- Personnel with deficient knowledge must be trained and instructed.
- Areas of responsibility and responsibilities must be precisely regulated and personnel must be monitored.

These safety instructions do not take into consideration any:

- Coincidences and events that could occur at the customer location during assembly, operation and maintenance.
- Local safety requirements, for which the operating company is responsible to ensure compliance, including assembly personnel who are used.

1.5 Designated Use

Danger

- Operate the valve only within the permissible operating ranges for pressure and temperature.
- Only the operating media specified in the documentation may flow through the valve.
- Operate the valve only if it is in perfect technical condition.
- Do not operate the valve in partially assembled condition.
- If other operating modes are not named in the documentation, they must be approved with the manufacturer.

1.6 Reasonably Foreseeable Misuse

- Any usage other than designated use.
- Do not make any modifications to the product by yourself!
- Components should only be retrofitted after consultation with the manufacturer.

2 Manufacturer's Specification

2.1 Description

The 8B standard manifolds are available in various designs and materials. Due to the special design, several manifolds can be easily connected in series. Depending on the application, the media can be either distributed directly or shut off as required using the appropriate fittings.

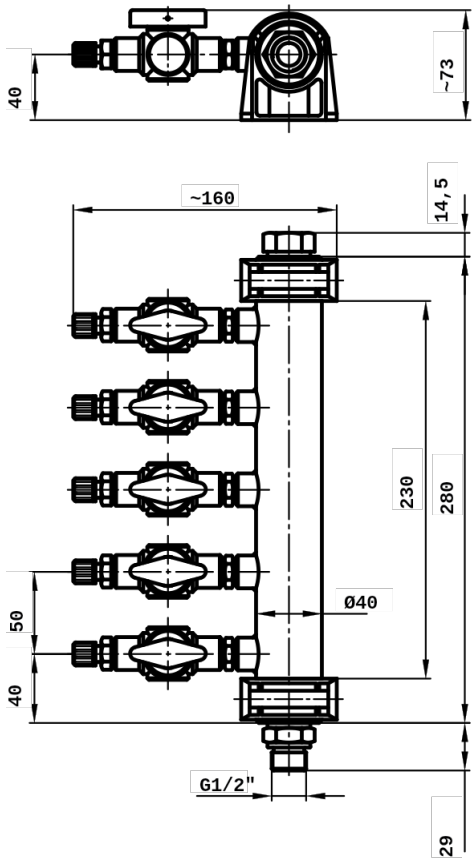
2.2 Transport and Storage

Warning

- The fitting must be protected against mechanical damage, moisture, dirt and dust. The storage temperature range is 10 – 40°C.
- Avoid UV radiation and direct sunlight.
- Leave the fitting in its original packaging to ensure the best possible protection.
- Dispose of the packaging material according to disposal requirements/environmental protection regulations.

3 Technical Data

3.1 Dimensions 8B105BT

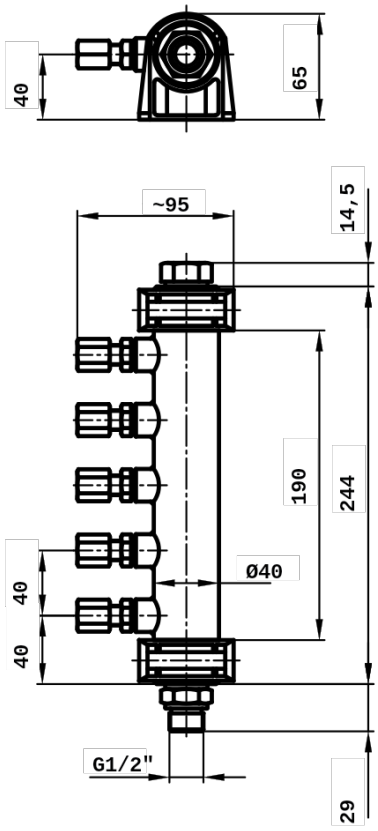


Outlets	G	L	L2	L4	L3
5	1/2"	230	29	14,5	280
10	1/2"	480	29	14,5	534
15	1/2"	730	29	14,5	780

Outlets	ØD	B1	~B2	~H	h	h1
5	40	40	73	160	40	50
10	40	40	73	160	40	50
15	40	40	73	160	40	50

All dimensions in mm

3.2 Dimensions 8B105P

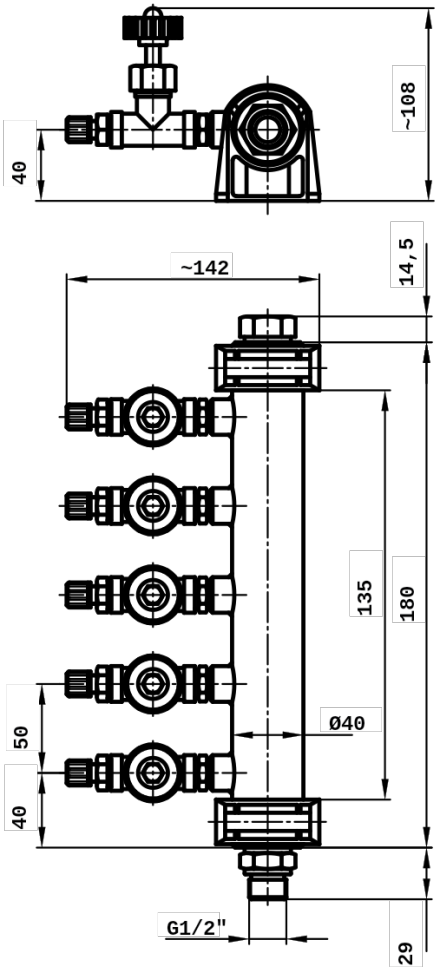


Oulets	G	L	L2	L4	L3
5	1/2"	190	29	14,5	244
15	1/2"	590	29	14,5	644

Outlets	ØD	B2	B1	~H	h	h1
5	40	65	40	95	40	40
15	40	65	40	95	40	40

All dimensions in mm

3.3 Dimensions 8B105VT

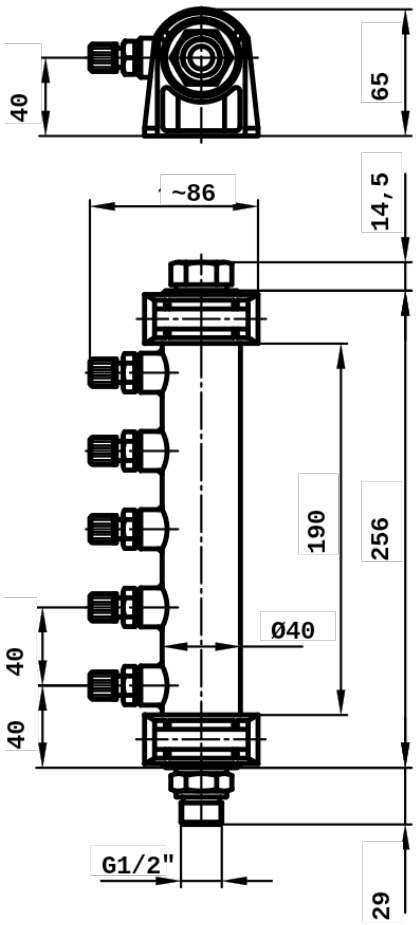


Outlets	G	L	L2	L4	L3
3	1/2"	135	29	14,5	180
5	1/2"	230	29	14,5	280
8	1/2"	376	29	14,5	430
9	1/2"	446	29	14,5	500
10	1/2"	480	29	14,5	550

Outlets	ØD	B1	~B2	~H	h	h1
3	40	40	108	142	40	50
5	40	40	108	142	40	50
8	40	40	108	142	40	50
9	40	40	108	142	50	50
10	40	40	108	142	50	50

All dimensions in mm

3.4 Dimensions 8B105T



Outlets	G	L	L2	L4	L3
5	1/2"	190	29	14,5	256
10	1/2"	390	29	14,5	444
15	1/2"	590	29	14,5	644

Outlets	ØD	B2	B1	~H	h	h1
5	40	65	40	96	40	40
10	40	65	40	86	40	40
15	40	65	40	86	40	40

All dimensions in mm

Missing dimensions can be found on our homepage under the following link: www.em-technik.com

Special sizes can be asked via info@em-technik.com

3.5 Operating Medium

- Neutral, gaseous and liquid media that do not negatively affect the physical and chemical properties of the relevant housing and sealing material.
- If you have questions about resistance please contact **em**technik.

3.6 Maximum Media Temperature

As the temperature rises, the effectiveness of the fitting falls, as shown by this table.

Material	PP	PVDF
Pressure Stage	**PN 10**	**PN 10**
-40°C		75%
-20°C		100%
5°C	100%	100%
20°C	100%	100%
30°C	80%	80%
40°C	70%	70%
50°C	60%	60%
60°C	50%	50%
70°C	40%	45%
80°C	30%	40%
90°C	20%	35%
100°C		35%
110°C		30%
120°C		25%
130°C		25%
140°C		10%

4 Assembly and Operation

4.1 Assembly Instructions

- Make certain the fitting is suitable for the relevant application. The fitting must be suitable for the operating conditions of the pipeline system (medium, concentration, temperature and pressure) as well as the relevant ambient conditions.

Warning

- Check the fitting for transport damage before installing it. If the fitting is damaged do not install it.
- The planner, the construction company or operating company are responsible for the positioning and installation of the fitting. Planning and installation errors can adversely affect the reliable functionality of the fitting and may represent a significant potential for hazard.

Warning

- After the fitting is installed perform a tightness and function check.

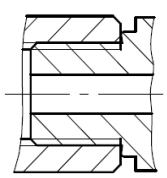
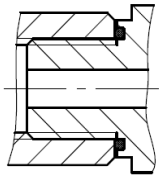
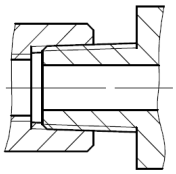
4.2 Tools Required

The tools required for installation and assembly are not included with delivery.

4.3 Connecting the Manifolds

The manifolds must be connected to the pipeline so it is free of mechanical stress.

- The manifolds have a male or female thread (ISO, DIN, ANSI) and can be connected with various connecting elements of the **em**technik system.
- Observe the flow direction from the bottom to the top.

Cylindrical thread		Conical thread
Sealing is provided by a sealing collar for Cylindrical threads (G, M or UNF). A version with an O-ring is also possible.		Sealing is provided by the thread itself for Conical threads (NPT).
Sealing Collar	**O-Ring**	**Thread**
		

- Each thread must always be connected with the same thread type.
- If a plastic fitting is used in combination with a metallic male fitting, additional sealing with Teflon® tape is recommended.
- Please use the assembly instructions 1A, 1C and 2N.

5 Commissioning

- Protect against leaks: Take protective measures against exceeding the maximum permitted pressure due to possible pressure surges.
- Check the tightness and function of the fitting.

Warning

- In new systems and after repairs, flush the line system to remove foreign materials.

6 Maintenance

- When used as designated, the fitting is practically wear-free and generally requires no maintenance.
- The operating company must perform regular visual inspections of the fitting according to the operating conditions to prevent leaks and damage.

7 Disposal

- When disposing of the fitting and packaging, comply with the relevant disposal requirements and environmental protection regulations.

Warning

- When disposing of fittings, pay careful attention to any residues of toxic or corrosive media.

8 Return Delivery

Do not return before consulting with **em**technik.

1. Please consult with **em**technik.
2. Empty the fitting properly.
3. Rinse and clean the fitting thoroughly, especially if the media is being conveyed are harmful, explosive, hot, or hazardous in some other way.
4. For fittings that have been operated with aggressive, corrosive, combustible, toxic or water polluting media, a completely filled in clearance certificate must always be included.

9 Troubleshooting/Fault Rectification

Error	Possible Cause	Error Rectification
Manifold leaking	Hose incorrectly mounted	Follow the installation instructions
No flow	Screw joint is clogged	Perform cleaning or replace

10 Manufacturer‘s Declaration

- Based on the fluid class, pressure and nominal diameter, series 8B manifolds fall under diagram 6 of PED 2014/68/EU. Because of the ratio of nominal diameter and pressure, they fall only under article 4 paragraph 3 and must be designed and manufactured according to applicable good engineering practice. They must not carry any CE marking.
- The warranty of the fitting is voided in the following cases: under usage conditions that are not in line with designated use or the technical specifications, if installation or assembly is not performed properly, in case of inappropriate use or if the fitting is removed or modified.

Warning

- Failure to observe information provided here may lead to injuries, material damage, malfunctions and impurities due to escaping medium.

11 Contact

In case of questions or suggestions please contact us:

EM-Technik GmbH
Industriestr. 2 Tel +49 6237 407-0
67133 Maxdorf Fax +49 6237 407-77
Germany info@em-technik.com

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