

ORIGINAL OPERATING MANUAL

DIVIDER DIN 17407



DIVIDER WITH SCREW DOWN VALVE
DIVIDER WITH BALL VALVE SHUT-OFF

AWG

Dividers are used to distribute the extinguishing agent from one supply line to several hose lines.

Each line can be shut off individually by a shut-off device.

FOREWORD

Applicable standards and regulations

The AWG divider was designed and manufactured according to the relevant provisions of these directives and harmonised standards or is based on this directive, depending on the series:

- DIN EN 174072020:11
Portable equipment for projecting extinguishing agents supplied by fire fighting pumps – Siamese couplings and dividers PN 16

Conversions and modifications

Unauthorised conversions or modifications to the dividers are prohibited without written consent from the manufacturer.

AWG Fittings GmbH accepts no liability for damage caused by conversions or modifications, improper handling by the customer or by third parties commissioned by the customer, or caused by non-compliance with these instructions.

Other relevant documents

Apart from this manual, no other applicable documents are required for the safe handling of the AWG dividers.

The data sheet for this device can be downloaded for information purposes from the Internet: www.awg-fittings.com

Copyright

This operating manual apply to the following devices:

AWG divider, supply line size B or size C, with 2, 3 or 5 outlets, versions with screw-down valve or ball valve.

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This document may not be copied or reproduced in whole or in part without the written permission of AWG Fittings GmbH. The document is intended for persons using the device described and must not be passed on to third parties.

Subject to technical changes and errors.

These instructions and the applicable documents are not subject to any automatic change service. The latest version can be obtained from the manufacturer.

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1 INTRODUCTION

This manual contains important information regarding your personal safety. This manual must be read and understood by all persons who handle or use the device during any phase of its life cycle.

The manual must be close at hand at the place of use throughout the device's life cycle. All persons handling the device must be able to consult the manual at any time. The manual must be handed over along with the device when the device is sold.

1.1 Key to the symbols

- ✓ This check mark indicates a prerequisite that must be fulfilled before a task can be carried out.

1. These numbered items list all the steps making up a task.

1.1.1 Safety Information



DANGER

Red signal bar and the signal word DANGER

Hazard with a high degree of risk, *resulting* in death or serious injury if not avoided.



WARNING

Orange signal bar and the signal word WARNING

Hazard with a high degree of risk that *may result* in death or serious injury if not avoided.



CAUTION

Yellow signal bar and the signal word CAUTION

Hazard with a low degree of risk that may result in minor injuries if not avoided.

1.1.2 General information

ATTENTION

Blue signal bar and the signal word **IMPORTANT**

Instructions on how to avoid damage to property. These instructions are not related to potential physical injuries.



INFORMATION

This info box contains general information and tips for using the device.

1.2 Figures

The illustrations in this manual are given by way of example. Differences between a technical illustration and the actual state of affairs are therefore possible.

The text contains a reference to an illustration with the item number in brackets: (Fig. 2/4) refers to Item 4 in Figure 2.

2 SAFETY INFORMATION

The AWG dividers described here are in line with the state of the art as well as the recognised safety regulations. The safety and health protection requirements have been met. Nevertheless, their use may give rise to hazards for the user or third parties or cause damage to the device itself or other material assets.

2.1 General safety instructions

- The device may only be operated in accordance with these instructions and in perfect condition.
- The operators must have received the necessary training to be able to handle the device properly.
- Unauthorised modifications or the installation of additional components not approved by the manufacturer endanger the proper functioning of the device.
 - Modifications to the device are prohibited
 - Only use accessories approved by the manufacturer
- The operator is responsible for safety in the vicinity of the device, in particular for compliance with the general safety regulations. This includes ensuring, before using the device, that all protective devices are fully in place and functional.

2.2 Safety during operation

- Observe all safety rules and protective measures applicable for use at the place of use.
- Make sure the device does not get damaged during transport, installation, commissioning, operation or maintenance.
- The safety regulations laid down in the country-specific service regulations for fire-fighters (for example in Germany the Feuerwehrdienstvorschrift FwDV) or the corresponding internal company regulations must be observed.

2.3 Qualifications of the operators

Persons handling or using the divider must be technically qualified and trained. They must be aware of all risks involved in handling the device.

The divider may only be used by persons who have been trained and instructed in the operation of the device in accordance with the country-specific fire service regulation (in Germany: FwDV) or corresponding internal company regulations.

Different qualifications are required for personnel performing the different types of activity.

Instructed personnel:

Transport / use / cleaning as well as "Basic" functional testing

Technical personnel:

Maintenance as well as "Standard" and "Advanced" functional testing

2.4 Personal protective equipment

When using the AWG divider, personal protective equipment must be worn, in accordance with the country-specific fire service regulation (e.g. in Germany: FwDV) or with internal company regulations, in action.

3 DESCRIPTION

3.1 Function

With a divider according to DIN EN 17407: 2020-11, the extinguishing water arriving from the supply line is distributed over several hose lines or, under certain conditions, collected when flowing in the opposite direction.

Ball valves or valves serve as shut-off devices, which must be operable up to 16 bar in the intended flow direction and up to 6 bar when used as a Siamese coupling.

The dividers are available with different numbers of outlets (2, 3 or 5 outlets).

The dividers with ball valve can be opened and closed more quickly than the dividers with valves, and the OPEN or CLOSED position can be recognised quickly from the position of the control lever. This design enables a passage with low pressure loss which is favourable for the flow. To avoid pressure surges when opening or closing the ball valves, the control levers may only be opened and closed slowly.

In the case of the dividers with valves, due to the design, there are no pressure surges due to the slow opening and closing of the valves.

In order to avoid damage to the dividers, the dividers must not be used permanently as Siamese couplings against the intended flow direction.

3.2 Intended use

- Dividers are used to distribute the extinguishing agent from one supply line to several hose lines

Only use the device in technically sound condition and in accordance with the intended purpose and with safety and potential dangers in mind.

3.3 Foreseeable misuse

- Use beyond the country-specific fire brigade regulations (in Germany: FwDV)
- Continuous operation against the direction of flow
- Continuous operation without any connected hose
- Conversion or modification
- Operation in technically unsound condition
- Operation outside the approved characteristic values
- Fitting of spare parts that are not approved or not suitable for the operating conditions

3.4 Characteristic values

Max. operating pressure	16 bar (PN16)
Operating temperature	-20 °C* to +60 °C * with running water



Technical data

You can find additional key data in the product information for the relevant divider in the AWG catalogue or on the Internet at www.awg-fittings.com/products/fittings/dividers.

3.5 Overview

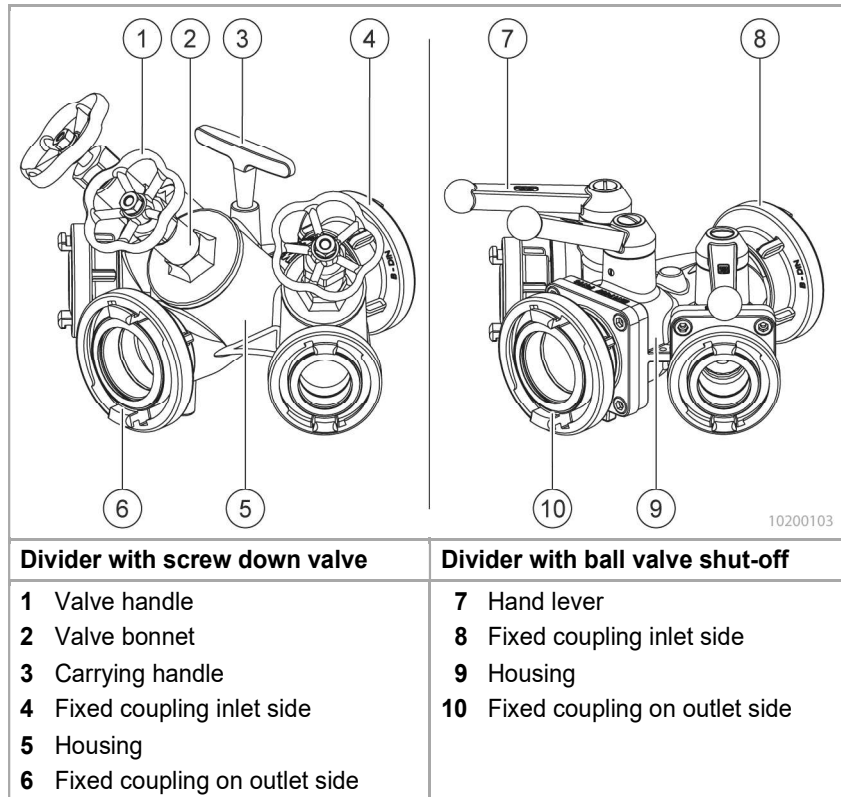


Fig. 1 Overview of the divider (examples)

4 DELIVERY, TRANSPORT, STORAGE

4.1 Delivery

The divider has been carefully packaged at AWG Fittings GmbH.

- After unpacking, check the delivery for damage and verify completeness.
- Any damage must be immediately reported to the carrier.
- If parts are missing, immediately inform the responsible specialist dealer or AWG Fittings GmbH.
- The packaging material is recyclable, please dispose of it in an environmentally-friendly manner.

The divider is delivered ready to be connected and is immediately ready for use in an extinguishing system after connecting with a suitable coupling.

4.2 Transport in a vehicle, storage

- ✓ The divider has run dry.

The divider can be transported and stored in any position.

Especially during transport inside a vehicle, the divider must not fall over. If necessary, secure the divider using a belt. During transport, the divider must not be damaged by other heavy equipment.

To ensure proper functioning, the divider may only be stored in a clean condition.

5 USE

5.1 Notes



WARNING

Attach adapters correctly

Danger of injury due to loosening of adapter connections.

- Pay attention to the direction of flow when coupling (indicated by an arrow on the valve on some devices).
- Always insert the adapters up to the stop and couple them fully.



WARNING

Risk of injury from strong pressure surges

In the case of dividers with a ball valve, strong pressure surges can occur when the control lever is opened or closed quickly, depending on the pressure and the flow rate. Safe handling must be ensured.

- Always open and close the control lever of the divider slowly.
- Use a pressure relief valve if necessary.
- Ensure that the divider is stable.



WARNING

Perform the specified inspections

To avoid serious injury, the specified inspections to be carried out to detect damage must be observed.

- The fixed coupling and the rotatable clamp fitting must be firmly screwed onto the divider.

5.2 Handling



Coupling and uncoupling

The coupling torques are such that the divider can also be fitted without the use of a coupling spanner using only manual force.

Observe the country-specific service regulations and/or internal company regulations.

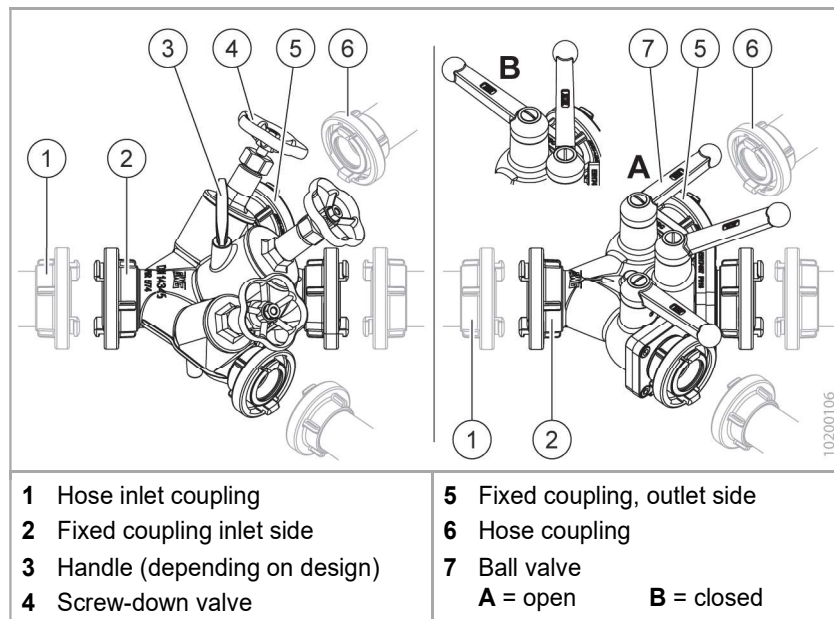


Fig. 2 Handling

- ✓ The water hose coupling is present on the inlet side.
- ✓ Water hoses with the appropriate couplings for the required outlet connections are available.
- ✓ The pipes / nozzles on the outlet side are closed.
- ✓ Personal protective equipment was donned.

Coupling

1. Connect the coupling of the inlet side hose (Fig. 2/1) to the coupling on the inlet side (Fig. 2/2) of the divider by hand or using a coupling spanner.

Attention Observe the direction of flow.
Couplings must be fully engaged.

2. Connect the couplings of the required hoses on the output side (Fig. 2/6) to the corresponding couplings on the output side (Fig. 2/5) of the divider by hand or a coupling wrench.
3. Open water supply.
4. Open the screw-down valve (Fig. 2/4) or ball valve (Fig. 2/7) (A).

Attention To avoid a pressure surge, slowly open a ball valve.

5. Open the fittings connected on the outlet side.

Uncoupling

1. End the discharge of the extinguishing agent on the outlet side.
2. Shut off the water supply.
3. Close screw-down valve (Fig. 2/4) or ball valve (Fig. 2/7) (B).
4. Shut off the water supply and, by hand or using a coupling spanner, detach the inlet and outlet side couplings from the fixed couplings.

Attention Water may emerge when the coupling is released.



Use of the divider in connection with an elevated rescue vehicle / a riser

For feeding into elevated rescue vehicles, we recommend using a divider with a ball valve shut-off

- Also note the manufacturer's instructions for the elevated rescue vehicle.

5.3 Visual inspection after each use

✓ The divider is disconnected from the water supply.

1. Clean the divider and check for visible damage.

Important Do not continue to use damaged components!
If you discover any damage, this must be reported to the person or department responsible.

6 FUNCTIONAL TEST

6.1 Prerequisites

All testing of the AWG divider must be carried out in accordance with the manufacturer's technical documentation and must be documented if necessary.

The following inspections are defined for the dividers:

- Mandatory BASIC Inspection after each use
- Mandatory STANDARD Inspection every 12 months
- Optional ADVANCED Inspection every 12 months

The STANDARD and ADVANCED inspections may only be carried out by qualified personnel who have been trained for these inspections:

- Fire-fighters who have received training as fire fighting equipment maintenance technicians or persons with equivalent qualifications
- Or, if desired, directly by the manufacturer

Inspection by the manufacturer

AWG Fittings GmbH offers an inspection as part of its service offering. Send us your dividers and you will receive the inspected device back by the agreed date. You will find a return delivery form on our website www.awg-fittings.com. If required, a rental device can also be provided.



Documenting the inspection result

To meet the requirements for occupational safety and accident prevention, the test results for each test must be documented. Please observe the country-specific regulations.

In Germany, the guidelines of the DGUV (Deutsche Gesetzliche Unfallversicherung e.V. [German Statutory Accident Insurance]) apply. A product specific test chart in accordance with the DGUV can be downloaded from www.awg-fittings.com

- Keep the documented test result as proof.

6.2 Performing the inspection



CAUTION

Performing the inspection safely

Some inspection steps are performed with pressurised systems.

- Observe the safety regulations.
- Wear personal protective equipment.
- Do not put other persons in danger.

6.2.1 BASIC Inspection after each use

1. Check the divider for visible damage, loose parts and dirt.
2. Check the fixed couplings or rotatable clamp fittings with threaded connectors (option) by hand for tightness.
3. Divider with spring-loaded valves:
With the screw-down valve open, check the seat of the spring-loaded valve disc on the sealing surface (depressurised).

6.2.2 STANDARD Inspection every 12 months

1. Static pressure test in the direction of flow at 10 bar inlet pressure (duration 2 minutes; tightness of the valve and the couplings).
2. Static pressure test against the direction of flow at 10 bar inlet pressure (duration 2 minutes; tightness of the outlet side and couplings).
3. Divider with valves:
Check the lock nut of the screw-down valves for tight fit.

6.2.3 ADVANCED Inspection every 12 months

- Check the coupling torque of the Storz adapter:

Threshold value	Storz 25 (D): 1.5 Nm	Storz 110 (A): 3.0 Nm
	Storz 52 (C): 1.5 Nm	Storz 125: 4.0 Nm
	Storz 75 (B): 2.5 Nm	Storz 150: 4.0 Nm

If the coupling torque is below the applicable threshold value, the adapter must be replaced.

- Threaded version: Check the thread for heavy wear and tear. Replace device if worn.

7 MAINTENANCE

7.1 Inspection and maintenance

Apart from the visual inspection and cleaning of the AWG dividers, no regular maintenance work is required.

7.2 Repair

Repair work on the AWG dividers may only be performed by the AWG Fittings GmbH customer service or by an authorised specialist workshop.

If you need technical support, please contact our Service Centre:

AWG Fittings GmbH
Service Centre
D-89177 Ballendorf

Telephone: +49 (0) 73 40 / 91 88 98 880

Email: awg-service@idexcorp.com

We will accept devices in need of repair or maintenance, discuss with you the quickest and cheapest solution, create cost estimates, take care of the execution of the repair work and are at your disposal for any questions.

7.3 Disposal

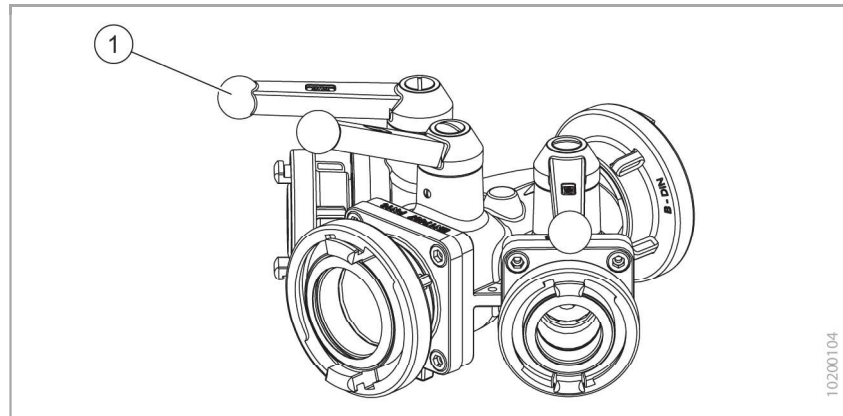
Observe the local regulations regarding proper waste recycling or disposal.

Materials

All designs	Body:	Powder-coated aluminium
	Seals:	NBR
Ball valve	Ball:	Anodised aluminium / aluminium
	Hand lever:	Aluminium
Valve	Upper part of the valve, hand wheel	Aluminium
	Handle:	Aluminium, anodised

8 ACCESSORIES / SPARE PARTS

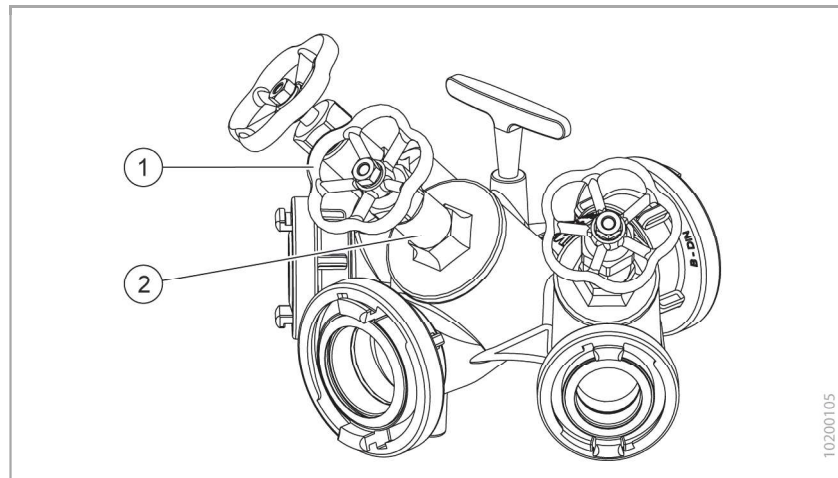
Divider with ball valve shut-off



Item	Designation	Article number
-	Divider gasket kit KH size 1 for dividers with ball plug (2x20, 1x32), (2x20)	62060080
	Divider gasket kit KH size 2 for dividers with ball plug (2x32, 1x40), (2x32) and (2x40)	62060180
	Divider gasket kit KH size 3 for dividers with ball plug (2x40, 1x50), (2x50) and (3x50)	62060280
1	control lever size 14x150 Wrench size 14, swan neck 60°, length 150 mm	40320732
	control lever size 14x147 B-outlet Wrench size 14, angle 25°, length 147 mm	40204032
	control lever size 14x140 C-outlet Wrench size 14, angle 2°, length 140 mm	40204232
	control lever size 14x150 Wrench size 14, swan neck 60°, length 165 mm	80041332
	control lever size 22x260 Wrench size 22, swan neck 60°, length 260 mm	30226932

Fig. 3 Spare parts for divider with ball valve shut-off

Divider with screw down valve



Item	Designation	Article number
–	Sealing kit for divider valve (all dividers with valve shut-off)	62059980
1	Handwheel D100x11 DIN390 AL (suitable for valve bonnet 2" and 2 ½")	50079932
2	Valve bonnet 1" Valve bonnet 2" Valve bonnet 2 ½"	40222633 40248933 40248833
–	Valve bonnet 2" seal kit Valve bonnet 2 ½" seal kit	40248980 40248880

Fig. 4 Spare parts for divider with screw down valve



Anyone who saves lives and protects material assets every day must be able to rely on their tools. Many of you choose products from AWG and Alco.

Two brands that together offer one of the widest ranges of premium equipment for rescue services. An overview can be found on our website.

www.awg-fittings.com



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