

# Product Manual

Block divider  
progressiv

SSVA



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R01	Updated and order key adjusted	12.03.25/HB	12.02.25/RJ

# Legal disclosure

## Manufacturer

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## Training courses

To provide a maximum of safety and economic viability, Lubmann GmbH carries out detailed training courses. It is recommended that the training courses are attended. For more information, please contact Lubmann GmbH.

## Copyright

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## Warranty and extent of warranty

Inappropriate intervention will rule out your warranty claim!

Warranty regarding operational safety, reliability and performance of the lubricating pump is only accepted by the manufacturer under the following conditions:

- Assembly, connection, setting, maintenance and repair are carried out by authorized and specialized staff.
- The limits stipulated in the technical data must never be exceeded.
- Only original components or components approved by the manufacturer may be used for repair and maintenance work.

All guarantees and warranties expire for damages to central lubrication systems that are caused by operation with improper lubricants (e.g., piston wear, piston jamming, plugins, embrittled sealings).

Lubmann does not assume liability on damages caused by lubricants, even if these lubricants have been tested and released by laboratory tests, as damages caused by lubricants (e.g., by expired or improper stored lubricants, batch variations etc.) can not be retraced to their root cause in retrospect.

## Service address

Kleiner Johannes 21, 91257, Pegnitz, Germany  
Tel.: +49 9241 80 89 87 00

## Disclaimer

The manufacturer shall not be held responsible for damages caused by:

- Non appropriate use faulty assembly, operation, setting, maintenance, repair or accidents
- Use of inappropriate lubricants
- Improper or late response to malfunctions
- Unauthorized modifications of the product
- Intent or negligence
- Use of non-original Lubmann spare parts
- Faulty planning or layout of the centralized lubrication system

Liability for loss or damage resulting from the use of our products is limited to the maximum purchase price. Liability for consequential damages of whatever kind is excluded.

# Safety instructions

## General information

Any safety-related faults must be eliminated without delay.

Below, please find fundamental instructions to be complied with, regarding assembly, operation and maintenance. The mechanical and the competent specialists / staff of the operating company must read the Operating Instructions on all accounts prior to starting assembly and commissioning. Moreover, the Operating Instructions must permanently be available on site.

Not only the safety instructions included under this item, but also the specific safety instructions appearing in other parts of this manual must be complied with.

## General risk information

All system components have been designed with operational safety and accident prevention in mind, in accordance with the applicable regulations for the design of technical work equipment.

It should be noted, however, that the use of these systems may present certain risks to the user of third parties, as well as to the technical equipment itself. Therefore, it is of the utmost importance that the system is only used for its intended purpose and in compliance with the relevant safety regulations and operating instructions, provided that the system is in a technically perfect condition.

## Explanation of symbols



Safety instructions which, if not complied with, may endanger persons, are marked specifically with the general hazard symbol:



This heading is used if inaccurate compliance or non-compliance with the Operating Instructions or specified work procedures etc. may result in damage



Points out Special Information

# Delivery, Returns and Storage

## Delivery

After receipt of the shipment, check the shipment for damage and completeness according to the shipping documents. Immediately report any transport damages to the forwarding agent. Keep the packaging material until any discrepancies are resolved. During in-house transport ensure safe handling.

## Returns

Clean all parts and pack them properly (i.e., following the regulations of the recipient country) before returning them. Protect the product against mechanical influences such as impacts. There are no restrictions for land, sea or air transport.

## Storage

Lubmann products are subject to the following storage conditions:

dry, dust- and vibration-free in closed premises  
no corrosive, aggressive materials at the place of storage (e. g. UV rays, ozone)  
protected against pests and animals (insects, rodents, etc.)  
possibly in the original product packaging  
shielded from nearby sources of heat and coldness  
in case of high temperature fluctuations or high humidity take adequate measures (e. g. heater) to prevent the formation of condensation water

## Storage conditions for parts filled with lubricant



The conditions mentioned in the following will have to be adhered to when storing products filled with lubricant,

## Storage period of up to 6 months

The filled products can be used without having to take further measures.

## Step for Storage period from 6 to 18 months - Divider

1. Remove all connection lines and closure screws
2. Connect the pump which has been filled with new lubrication grease suitable for the application purpose to the divider
3. Let the pump run until new lubricant leaks from the divider
4. Remove leaked lubricant
5. Reinstall closure screws and connection lines

# Commissioning

Connect the pump properly to the designated connections. Check the device for functionality and the presence of safety features.

Ensure that all warning labels are present, undamaged, and clearly visible. If this not the case, they must be replaced immediately.

## Deviating from Intended Use is strictly Prohibited

Please adhere to the technical specifications provided in the manual and do not exceed the specified limits. Improper use is strictly prohibited. Only use lubricants intended for this purpose. Make sure to use the product exclusively within its designated area of use.

## Accompanying Documents

In addition to this manual, the following documents must be considered by the respective target audience:

- 1) Operational instructions and release regulations

If applicable:

- 2) Safety data sheet for the lubricant used
- 3) Project documentation
- 4) Supplementary information regarding special configurations of the pump. These can be found in the specific system documentation.
- 5) Instructions for additional components for the assembly of the central lubrication system.

# Lubricant

The system has been designed for commercially available multi-purpose greases of NLGI class 2 for operation in summer and winter.

- Use greases with high-pressure additives (EP greases).
- Only use greases of the same saponification type.
- Lubricants containing solid contents must not be used (lubricants like graphite or MoS<sub>2</sub> on request).
- Observe the vehicle manufacturer's specifications, when you select the lubricant.



## Hazards to environment cause by lubricants

The lubricants which are recommended by the manufacturer of your vehicle, system or machine correspond in their composition to the common safety regulations. Mineral oils and greases are generally hazardous to ground water and their storage, processing and transport requires special precautions.

## Inadmissible methods of operation



Operational security of the plant is only guaranteed if it is operated in accordance with the operating instructions. The limit values stated in the technical data must not be exceeded under any circumstances.

## Transport and storage of the divider

The dividers of the series SVA are packed commercially, according to the regulations of the recipient country and to the wish of the customer. There are no limitations with respect to land, air or sea transport. Store in a dry place at a temperature of -5° C to +35° C.

# Overview

The SSVA progressive block divider works on the principle that the internal pistons are moving in sequence by hydraulic pressure, then each grease outlet discharges the grease to the different lubricating points following this sequence.

The internal accesses in the SSVA progressive block divider can be combined by blocking the corresponding outlets to achieve a variety of different combinations and ratios of grease output, to provide the required amount of grease for the different lubrication points.

A piston stroke is only executed after the previous piston has reached the end position (complete piston stroke).

An optional divider monitoring sensor can be installed to monitor the piston movement.

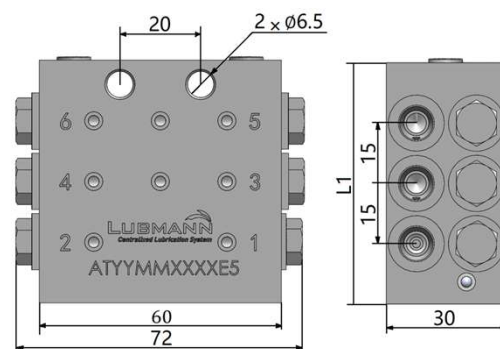
## Technical data

Max. operating pressure:	350 bar
Min. operating pressure:	20 bar
Operating temperature:	-35°C to 70°C
Lubricant:	Oil-fluid grease- Grease up to NLGI-Kl. 0-2
In-/ Outlet thread:	M10 x 1
Number of outlets:	6 - 20
Delivery quantity: (cm <sup>3</sup> / stroke)	0,2



*Note when mounting:  
Vertical installation position  
(Piston of the divider in horizontal position)*

Divider Series	Number of outlets	L1 mm	Weight (kg)
SSVA 6	6	62	0,761
SSVA 8	8	77	0,953
SSVA 10	10	92	1,147
SSVA 12	12	107	1,342
SSVA 14	14	122	1,535
SSVA 16	16	137	1,729
SSVA 18	18	152	1,920
SSVA 20	20	167	2,108



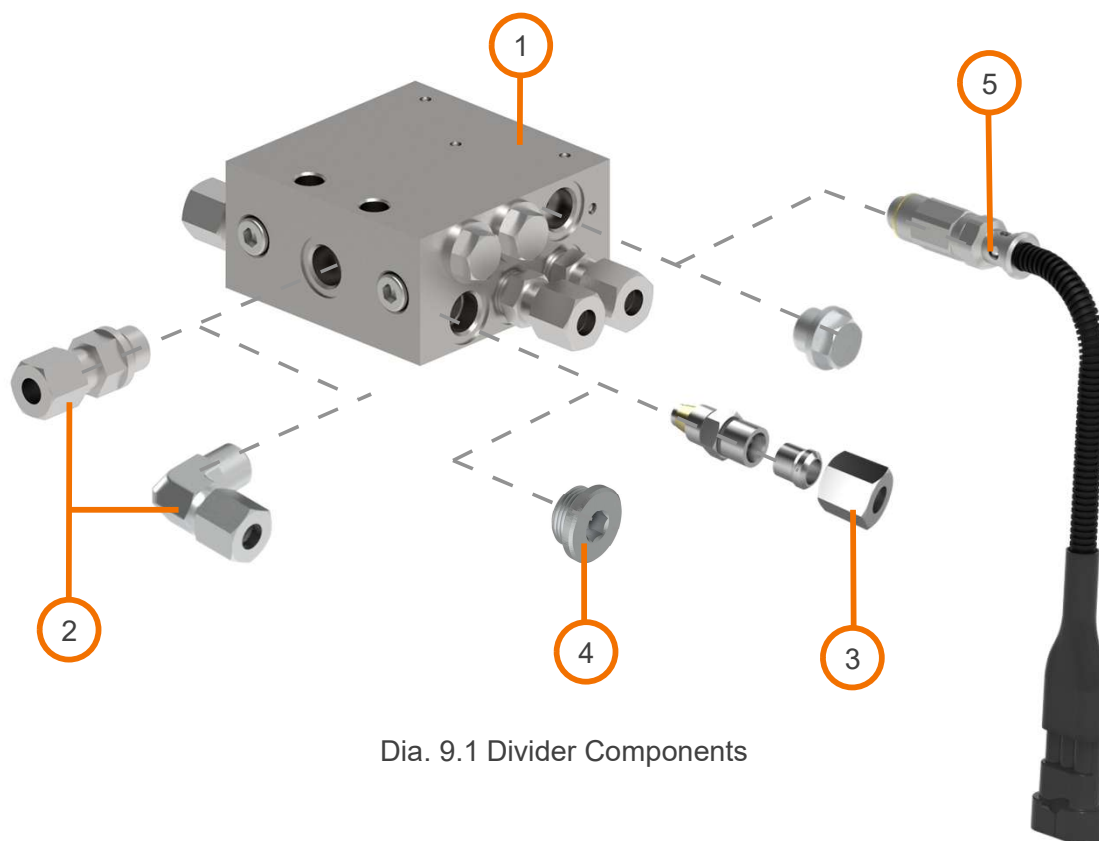


# Components

## Block divider with Attachments - Overview

The SSVA block divider can be used either as a main divider or as a secondary divider.

The lubricant quantity can be precisely metered for each outlet by fitting the outlet screw coupling or screw plugs accordingly.



Dia. 9.1 Divider Components

No.	Components	Page
1	Divider body	10
2	Inlet screw coupling	11
3	Outlet screw coupling	12 - 13
4	Screw plug	13
5	Divider monitoring	16-17

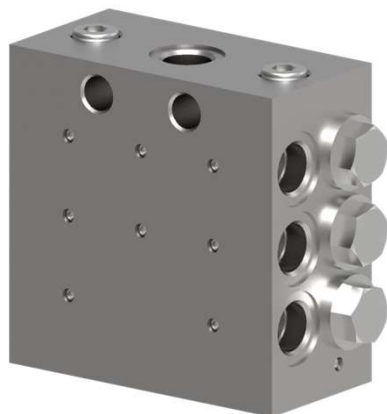
## Divider Body

The block divider is available in the following sizes.

They are prepared as standard for divider monitoring at the 1S# and 2S# outlets.

*For more information on divider monitoring, check page 16.*

Description	Possible for divider monitoring*	With in- and outlet connectors	Part No.
SSVA 6	Yes	No	2110001020
SSVA 8	Yes	No	2110001021
SSVA 10	Yes	No	2110001022
SSVA 12	Yes	No	2110001023
SSVA 14	Yes	No	2110001024
SSVA 16	Yes	No	2110001025
SSVA 18	Yes	No	2110001026
SSVA 20	Yes	No	2110001027



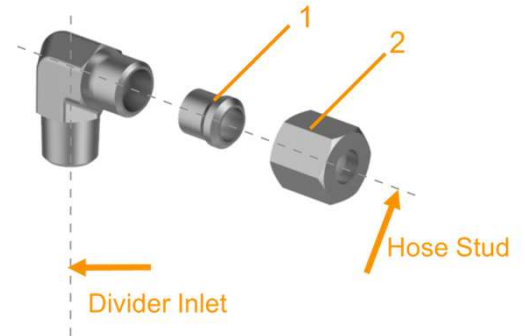
Dia. 10.1 Divider body

# Inlet screw couplings

All screw couplings with M10x1k threads can be directly used for the inlet connection of the SSVA divider. All screw couplings with M10x1 threads must be used together with a sealing ring (or ED sealed) for the inlet connection.

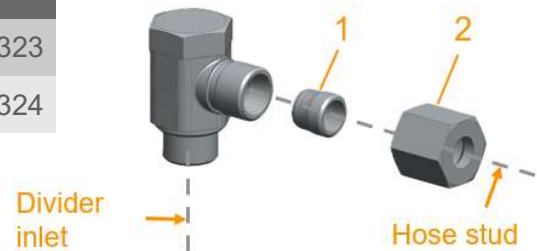
## Elbow screw Coupling

Description	Part No.
WE-D6LL-M10x1k-ST-ZnNi	9900147
WE-D8LL-M10x1k-ST-ZnNi	9900149



## Elbow swivel connector

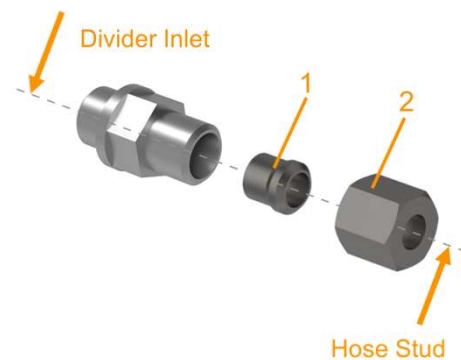
Description	Part No.
WS-D6LL-M10x1-(DK)-ST-ZnNi	9900323
WS-D8LL-M10x1-(DK)-ST-ZnNi	9900324



## Straight screw coupling

Description	Part No.
GE-D6LL-M10x1k-ST-ZnNi *	9900111
GE-D8LL-M10x1k-ST-ZnNi *	9900112
GE-D6LL-M10x1 (SW14-ED)-ST-ZnNi	3050100890
GE-D8LL-M10x1-(ED)-ST-ZnNi	3050104830

\* Standard



Spare parts	Part NO.
Pos. 1 – Cutting ring-single edge	
SRE-D6LL-ST-ZnNi	9900209
SRE-D8LL-ST-ZnNi	9900211
Pos. 2 – Union nut	
ÜM-D6LL-ST-ZiNi	9900199
ÜM-D8LL-ST-ZiNi	9900202

# Outlet Screw Couplings

The SSVA progressive divider can be used as either a main divider or a secondary divider.

From the main divider to the secondary divider, a screw coupling with non-return valve is mainly used as the outlet fitting of the main divider for the connection with a high-pressure hose and hose stud with outer diameter 6mm. From the secondary divider to the greasing points, a screw coupling with or without non return valve is mainly used as the outlet fitting of the secondary divider for the connection with a polyamide pipe with diameter 6x1.5mm or steel pipe with a diameter 6x1mm.

All screw couplings (including non-return valve and coupling, without non-return valve Push-in coupling) with M10x1k threads can be directly used for the inlet connection of the SSVA divider. All screw couplings with M10x1 threads can be used together with a sealing ring for the input connection.



For construction machinery application like excavators, wheel loaders, please use non return valves for all divider outlets due to the high back pressure from the greasing points.



Type of couplings	High pressure hose ø 6 mm	Steel pipe ø 6 mm	PA Hose ø 6 mm
RGE	✓ with hose stud Y	✓	✓
RGES	✓ with hose stud Y1 / N	✗	✓

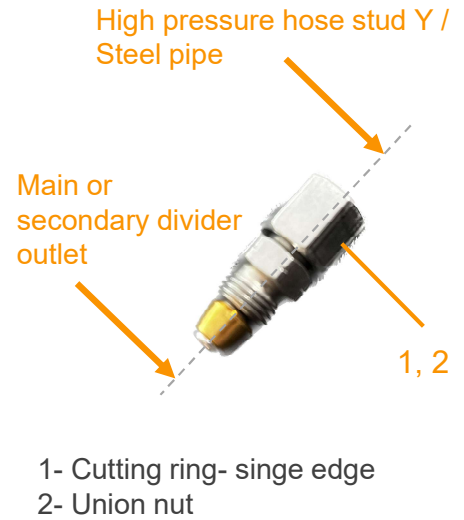
For hose stud description pls check accessories catalogue.

*RGE*      *Non return valve with sealing cone*

*RGES*      *Non return valve-straight screw coupling-push in*

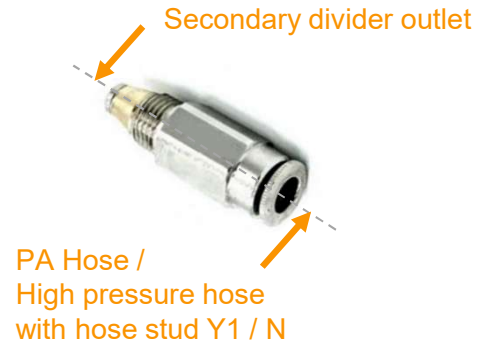
Non return valve with sealing cone

Description	Part No.
RGE-6LL-M10x1-with sealing cone (MS)-ST-ZnNi	3050101710
Spare Part 1 – Cutting ring-single edge	
SRE-D6LL-ST-ZnNi	9900209
Spare Part 2 – Union nut	
ÜM-D6LL-ST-ZiNi	9900199



Non return valve-straight screw coupling-push in

Description	Part No.
RGES-D6-M10x1-with sealing cone (MS)-150 bar-MS-Ni	9900243



## Screw plug divider outlet

The function of the blind plug of SSVa divider is to achieve a double or multiple flow rate by direct blinding one or more outlets continuously on one side of the divider.

\* More details regarding the working principle please check on page 14-15.

Description	Part no.
Screw plug-DIN910-M10x1-ST-ZnNi	3010401940
Sealing ring-DR-DIN7603 A-10x14x1-Cu	3010401930



## Divider External Combination Principle

To meet the volume demand of the different greasing points under various application environment, sometimes it is necessary to combine the outlets of the divider internally to achieve more possibilities of the flow rate combination.

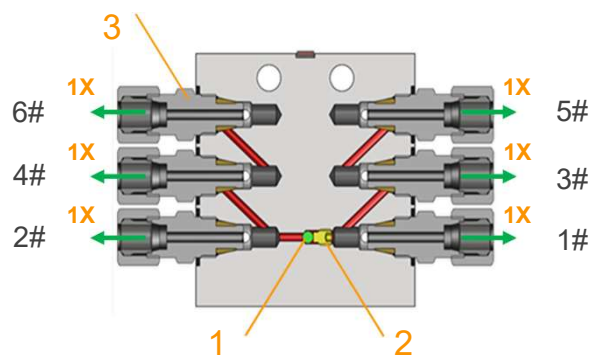
### Divider without combination

As shown in Dia. 14.1, the red slanted holes represent the channel connecting the two adjacent grease outlets; each SSVVA divider valve body is only installed with a sealing screw and a sealing steel ball at the bottom piston (for outlets 1# and 2#) of the divider body, which in the farthest part from the fixing hole.

For a divider with sealing screw and sealing steel ball, none of the outlets 1# and 2# can be blocked by a blind plug.



Description	Part no.
Sealing steel ball for divider outlet separation-D3-ST	3049000450
Sealing screw for divider outlet separation-M4-ST	3040102550
Non return valve with sealing cone (brass)-RGE-6LL-M10x1-ST-ZnNi	3050101710



- 1- Sealing steel ball
- 2- Sealing screw
- 3- Non return valve with sealing cone

Dia. 14.1 Divider without combination

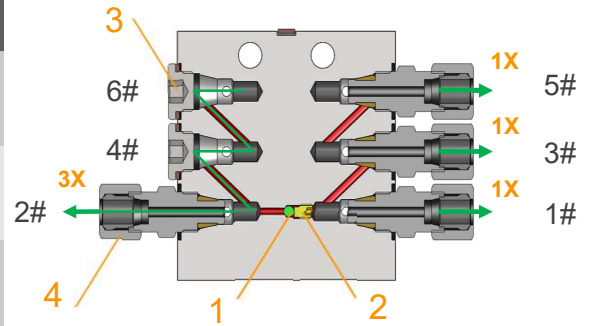
### Divider with combination (combination one side)

As shown in Dia. 15.1, after the outlet is blocked by a blind plug, the outlets will be merged downward with the adjacent outlet. The non-adjacent outlets cannot be jump merged. For example: when the outlet 6# is blocked, the grease flows into outlet 4#, and the flowrate of discharged grease from 4# is twice as before; when the outlet 6# and outlet 4# are blocked at the same time, the grease flows into the 2# and grease is discharged from outlet 2# and the flowrate of the discharged grease from 2# is trebled.

For a divider with sealing screw and sealing steel ball, none of the outlets 1# and 2# can be blinded by a blind plug.



Description	Part no.
Sealing steel ball for divider outlet separation-D3-ST	3049000450
Sealing screw for divider outlet separation-M4-ST	3040102550
Screw plug-DIN910-M10x1-ST-ZnNi	3010401940
Sealing ring-DR-DIN7603 A-10x14x1-Cu	3010401930
Non return valve with sealing cone (brass)-RGE-6LL-M10x1-ST-ZnNi	3050101710



- 1- Sealing steel ball
- 2- Sealing screw
- 3- Outlet blind plug
- 4- Screw plug

Dia. 15.1 Divider with combination

Divider with combination (combination both sides)

When the combined outlets on one side cannot meet the flowrate requirements, the sealing screw and sealing steel ball (Dia. 15.2) can be removed from the outlet 1# and implement with a blind plug either on 1# or 2#, and the grease on the opposite side can be merged in. For example, a 6 outlets divider needs 4 outlets to be combined and discharge 4 times of the flowrate as usual from the 2# outlet, then 1#, 4#, and 6# need be blocked with a blind plug and remove the sealing screw and sealing steel ball.

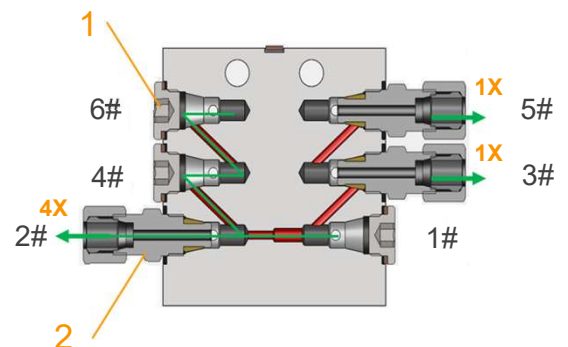
For a divider without sealing screw and sealing steel ball, outlets 1# and 2# cannot be blocked at the same time.



The merging of the outlets in different sides can only be realized through the outlets 1# and 2#.



Description	Part no.
Screw plug-DIN910-M10x1-ST-ZnNi	3010401940
Sealing ring-DR-DIN7603 A-10x14x1-Cu	3010401930
Non return valve with sealing cone (brass)-RGE-6LL-M10x1-ST-ZnNi	3050101710



- 1- Screw plug
- 2- Non return valve with sealing cone

Dia. 15.2 Divider with combination

# Divider monitoring

The SSVA block divider can be monitored using a sensor.

Magnet pins are installed in the piston at outlet 1S# und 2S#.

Here a sensor can be mounted at the outlet on the right or left as required. The sensor is damped by the piston movement.

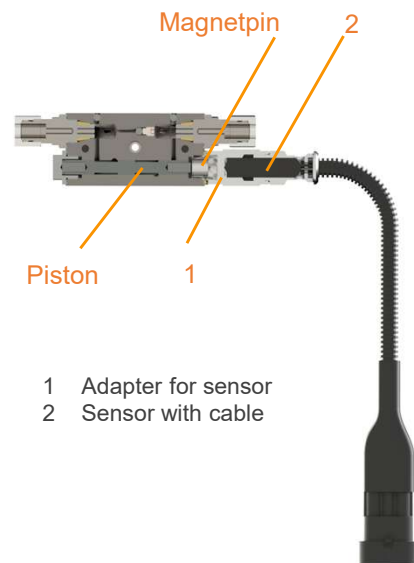
The sensor sends the signals to the grease lubrication pump control unit. If the divider blocks, the grease lubrication pump control unit detects that no signals are being sent via the sensor.

**Sensor:**

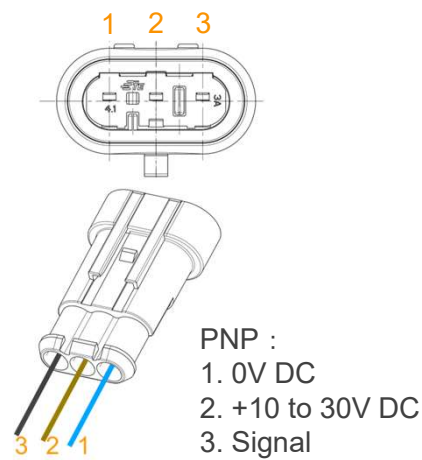
PNP (Standard for ALP-Series):                      Switching output Closer NO (+).

	<b>Part number:</b>
Kit-sensor-divider monitoring-SSVA_SSVD-M10x1-AMP_M_3P-PNP	2111000147

<b>Technical data:</b>	
Working principle:	solenoid
Thread of divider connection:	M10x1
Plug of sensor:	AMP_M_3P
Switching output:	PNP
Operating current Ie:	200 mA
Operating voltage Ub:	10 to 30 VDC
Temperature range:	-25 °C bis +85 °C
Visual display:	LED
Housing material:	Stainless steel
Protection type:	IP 67
Approval/Conformity:	cULus / CE / WEEE / EAC



Dia. 16.1 Divider with kit-sensor-divider monitoring right



Dia. 16.2 Pin assignment sensor

For the Part No. of Kit-divider monitoring sensor, the sensor connector and sensor with cable are included (Dia. 16.1).



The connecting cable between sensor and pump are NOT included.

More information for cables please check on the next page.

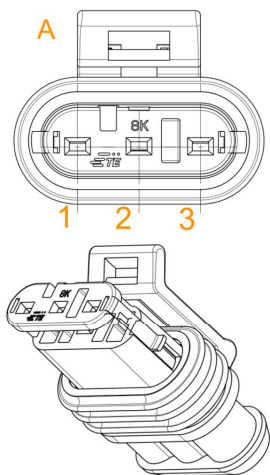


## Divider monitoring - Cables



Depends on the various application, the sensor cable has to be ordered separately as following description.

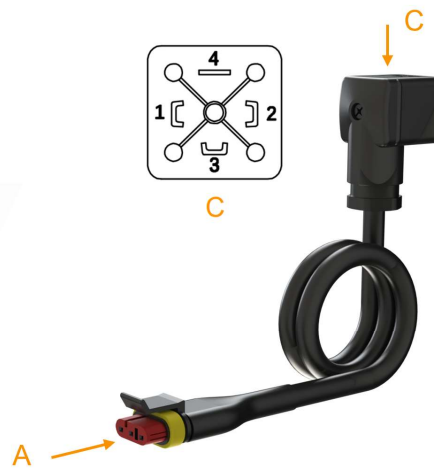
	Cable kit-divider monitoring-with BD-Plug	Cable kit-divider monitoring-with HSC-Plug
Length: 5,0 m	2110012410	2110010539
Length: 7,5 m	2110012409	2110002734
Plug to divider:	TE - AMP Super Seal 1.5 SRS. 3P Plug (IEC 529 and ISO 20653)	
Plug at the grease lubrication pump	RD24 Serie 693	Divice plug GDM 3011 J (DIN EN 175 301-803-A)



Dia. 17.1  
Plug of divider



Dia. 17.2  
Cable kit-divider monitoring-  
with BD-plug



Dia. 17.3  
Cable kit-divider monitoring-  
with HSC-Plug

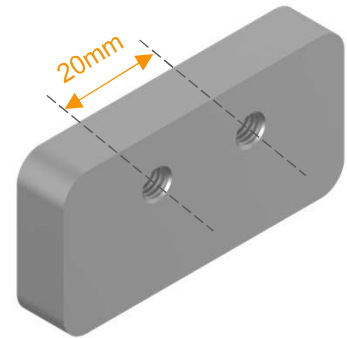
# Divider Accessories

## Divider mounting bracket

As an important accessory of the divider, the divider bracket is widely used in the installation of automatic lubrication systems. Especially when customers prefer that the installers do not drilling on their equipment.

In our accessories catalogue you can find many more types of divider mounting brackets.

**Attention:** When selecting a suitable divider bracket, please note that the brackets of the JPQ1 and SSVa series dividers have different mounting distance between the mounting holes.



Dia. 18.1 Divider mounting bracket

## Banjo with grease nipple

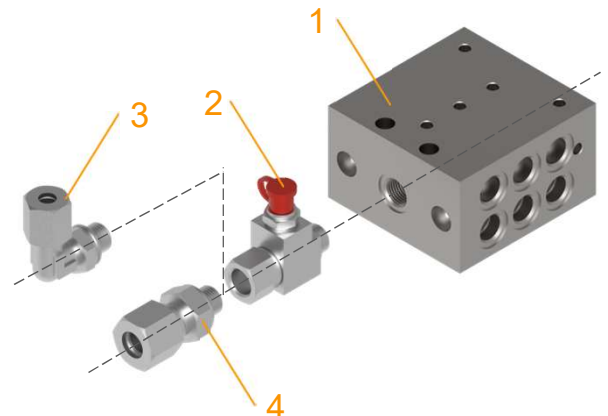
As an option, a banjo with grease nipple is provided to using a manual or hydraulic pump to refill the grease directly from the inlet connection of the divider when the automatic lubrication pump does not work.

**Attention:** Please check the hoses between the banjo and the pump before starting refilling Grease from the banjo!



If the hose is broken, please use a non-return valve to replace the inlet coupling.

If the hose is in good situation, please do not disconnect the hose between the pump and banjo.



- 1- Divider body
- 2- Banjo Block with grease nipple
- 3- Elbow inlet screw coupling
- 4- Straight inlet screw coupling

Dia. 18.2 Banjo with grease nipple

Fault	Possible Cause	Solution
Lubrication points get no or insufficient lubricant	Lubrication pump is empty	Refill lubricant
	Clogged or broken lubrication hose	Replace lubrication hose
	Unsuitable lubricant	Replace lubricant
	Unsuitable or defective outlet fittings (non-return valve) at the divider outlets	Check outlet fittings and replace if necessary
	Blockage before the inlet of the main divider	Disconnect the hose from the pump to the main divider and check whether lubricant is leaking from the hose. If no lubricant is dispensed, the defect is from the hose to the main divider or the grease lubrication pump.
	Blockage on main divider	Disconnect the hose from the main divider to the secondary divider individually and check whether lubricant is leaking at the outlet of the main divider. If no lubricant is dispensed, the cause is from the main divider or the hose. Clean / replace the main divider if necessary.
	Blockage on secondary divider	Disconnect the hose from the secondary divider to the lubrication point individually and check whether lubricant is leaking at the outlet of the secondary divider. If no lubricant is dispensed, the cause is from the secondary divider or the hose. Clean / replace the secondary divider if necessary.
	Blockage of a lubrication point	Disconnect the hose from the secondary divider to the lubrication point individually and check whether lubricant is leaking at the outlet of the secondary divider. If lubricant is dispensed, the cause is from the lubrication point. Clean / replace the grease nipple if necessary.
A lubricant point gets too much or not enough lubricant	Incorrect pump setting	Check the pump working and pause time, and adjust if necessary.



Please also note the information on „Troubleshooting“ in the product manual for the grease lubrication pump used.

To check, the grease lubrication pump must be in operation and several lubrication cycles must have run so that the main divider and any secondary dividers are sufficiently supplied with lubricant.

# SSVA Order Key

SSVA - 12 / 7 - 131 - 2/7/8/11/12 - 0 . 000

Block divider SSVA-X	Number of outlets
6	= max. 6 divider outlets (3 pistons)
8	= max. 8 divider outlets (4 pistons)
10	= max. 10 divider outlets (5 pistons)
12	= max. 12 divider outlets (6 pistons)
14	= max. 14 divider outlets (7 pistons)
16	= max. 16 divider outlets (8 pistons)
18	= max. 18 divider outlets (9 pistons)
20	= max. 20 divider outlets (10 pistons)

No. of valid outlets
X

Fittings in divider inlets and outlets							
Outlet \ Inlet	None	GE D6 mm	GE D8 mm	WE D6 mm	WE D8 mm	WS D6 mm	WS D8 mm
	None	100	110	120	130	140	150
RGE	101	111	121	131	141	151	161
RGES	102	112	122	132	142	152	162

Positions of blinded outlets
X = Number of blinded outlets

ATTENTION: 0  $\hat{=}$  no blinded outlets; outlets 1S# and 2S# cannot be blinded at the same time

Special definition for piston at outlet 1S# and 2S#	
no additional (Standard with screw plug)	0
Outlet S1# with PNP divider monitoring sensor	1P
Outlet S2# with PNP divider monitoring sensor	2P

Special models	
Standard version	000
Customized version	XXX

**Sample order :**

**SSVA-12/7-131-2/7/8/11/12-0.000**

- 12/7  $\hat{=}$  Block divider-SSVA 12/7 (12 Outlets of which 7 are used)
- 131  $\hat{=}$  Elbow screw coupling  $\varnothing$  6, non-return valve with sealing cone at the outlets
- 2S/7/8/11/12  $\hat{=}$  Outlets #2S, #7, #8, #11 and #12 with screw plugs
- 0  $\hat{=}$  No additional at 1S# and 2S# (with screw plug)
- 000  $\hat{=}$  No special models

**The following flow rates are delivered by the block divider:**

- 1S#  $\rightarrow$  2 x 0,2 = 0,4 cm<sup>3</sup>
- 2S#  $\rightarrow$  blinded
- 3#  $\rightarrow$  0,2 cm<sup>3</sup>
- 4#  $\rightarrow$  0,2 cm<sup>3</sup>
- 5#  $\rightarrow$  2 x 0,2 = 0,4 cm<sup>3</sup>
- 6#  $\rightarrow$  2 x 0,2 = 0,4 cm<sup>3</sup>
- 7#  $\rightarrow$  blinded
- 8#  $\rightarrow$  blinded
- 9#  $\rightarrow$  2 x 0,2 = 0,4 cm<sup>3</sup>
- 10#  $\rightarrow$  2 x 0,2 = 0,4 cm<sup>3</sup>
- 11#  $\rightarrow$  blinded
- 12#  $\rightarrow$  blinded

