# Lubricant distributors

Product series AB, 341, 340, 351, 350, 391, 390, VR, 321, VN, 370, 361

For oil, fluid grease, and grease For use in SKF MonoFlex single-line centralized lubrication systems







SKF MonoFlex single-line distributors are utilized in intermittently operated single-line centralized lubrication systems.

They distribute and meter the lubricant fed by an intermittently operated centralized lubrication pump unit in SKF MonoFlex single-line centralized lubrication systems. In each lubrication cycle, a precisely metered quantity of lubricant, ranging from a minimum of 0,01 to a maximum of 1,5 cm³, is fed to the connected lubrication points.

The product group of SKF MonoFlex single-line distributors includes a total of 11 different product series consisting of three different functional types (prelubrication, relubrication, and dynamic distributors) for various applications. Comprehensive accessories complete the product range.

Depending on the design, SKF MonoFlex single-line distributors are approved for oils with viscosities from 20 to 2 000 mm²/s, for fluid greases of NLGI Grade 000, 00, and 0, and greases up to NLGI Grade 2. The permissible operating pressures range from 8 to 315 bar, and the relief pressures range from 1 to 70 bar.

In addition to the standard designs, several designs are also available in stainless steel. Further, several designs are also certified by Germanischer Lloyd with regard to corrosion resistance.

Due to the variety of available products, SKF MonoFlex single-line distributors can be used in numerous applications, including machine tools and the wind, print, textile, and vehicle and construction industries.



Important information on product usage SKF and Lincoln lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

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# Product overview

## SKF MonoFlex prelubrication distributors

















## SKF MonoFlex relubrication distributors





SKF MonoFlex prelubrication distributors for direct connection to the lubrication point













SKF MonoFlex dynamic distributors



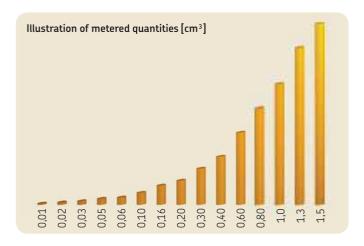
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## Selection table

Product	Lubricant	Distributor type	Elastomer	Number of				Me	tere	d qu	ıant	ity [	cm <sup>3</sup>	3]			Pag
series			material	metering points	pressure ≤[bar]	0,01	0,03	0,05	0,00	0,16	0,20	0,50	0,60	0,80	1,00	1,30	
AB	Oil Fluid grease <sup>2)</sup>	Prelubrication distributor Prelubrication distributor	FKM (FPM) FKM (FPM)	1	3 3	• •	•	•	•		•	•	•				2
341	Oil Fluid grease <sup>2)</sup>	Prelubrication distributor Prelubrication distributor	NBR/FKM (FPM) NBR/FKM (FPM)		1 (3) <sup>1)</sup>	• •	•		•	٠							4
340	Oil Fluid grease <sup>2)</sup>	Prelubrication distributor Prelubrication distributor	NBR/FKM (FPM) NBR	2, 3, 5 2, 3, 5	1 (3) <sup>1)</sup>	• •	•		•	•							
351	Oil Fluid grease <sup>2)</sup>	Prelubrication distributor Prelubrication distributor	NBR/FKM (FPM) NBR/FKM (FPM)		1 3			•	•		•	•	•				
350	Oil Fluid grease <sup>2)</sup>	Prelubrication distributor Prelubrication distributor	NBR/FKM (FPM) NBR/FKM (FPM)	2, 3, 5 2, 3, 5	1 3			•	•		•	•	•				
391	Oil Fluid grease	Prelubrication distributor Prelubrication distributor	NBR/FKM (FPM) NBR	1	1 7				•		•	•	•		•	•	
390	Oil Fluid grease	Prelubrication distributor Prelubrication distributor	NBR/FKM (FPM) NBR	2, 3 2, 3	1 7				•		•	•	•		•	•	
VR	Fluid grease Grease	Prelubrication distributor Prelubrication distributor	FKM (FPM) FKM (FPM)	1-12 1-12	30/70 30/70				•		•	•	•	•	•	•	
321 G	Oil/fluid grease 2)	Prelubrication distributor	NBR	1	3	•	•		•								
321 T	Oil/fluid grease 2)	Prelubrication distributor	NBR	1	3	•	•	•	•								
321 W	Oil/fluid grease 2)	Prelubrication distributor	NBR	1	3	•	•	•	•								
321 Module	Oil/fluid grease 2)	Prelubrication distributor	NBR	1	3	•	•	•	,								
321 G4	Oil/fluid grease 2)	Prelubrication distributor	NBR	1	3		•	•	•								
321 G7	Oil/fluid grease 2)	Prelubrication distributor	NBR/FKM (FPM)	1	3		•	•	•	•							
VN	Fluid grease 2)	Relubrication distributor	NBR	2, 4, 6	1			•	•			•	•		•		
370	Oil	Relubrication distributor	NBR	2, 3, 5	1			•	•		•	•	•		•	•	
361	Oil Fluid grease <sup>2)</sup>	Dynamic distributor Dynamic distributor	NBR NBR	1	1 3		•	•	•		•						

The table above will help you quickly find more information on the SKF MonoFlex single-line distributor that is required. You can quickly find the product series for your specific application according to feature. The product series are divided into three different functional types (prelubrication, relubrication, and dynamic distributors). The various product series are listed on the left margin. The metered quantities can be selected based on the required properties such as lubricant, distributor type, elastomer material, and number of metering points. The page numbers shown on the right margin refer to additional technical details for the product series in question. The individual metered quantities are visualized in relation to one another in the illustration to the right.



# SKF MonoFlex single-line distributors

## Description of functional types

#### Introduction

SKF MonoFlex single-line distributors are utilized in intermittently operated SKF MonoFlex centralized lubrication systems. Single-line centralized lubrication systems are total-loss lubrication systems.

These systems feed clean lubricant (oil, fluid grease, or grease) to one or more lubrication points at specific intervals during the lubrication cycle (timer-controlled or cycle-controlled). The lubricant fed to the lubrication point is partially consumed during operation due to aging, evaporation, and leaks. SKF MonoFlex single-line centralized lubrication systems generally consist of a lubrication unit, the single-line distributors, and the lubrication lines. The sequence of a lubrication cycle depends on the functional type of single-line distributors in use.

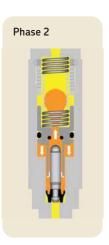
In single-line distributors, a differentiation is made between prelubrication, relubrication, and dynamic distributors. Single-line distributors of the prelubrication and dynamic distributor functional type deliver the metered quantity of lubricant at the same time that pressure is built up in the main line. Single-line distributors of the relubrication distributor functional type supply the metered quantity of lubricant after the pressure has been relieved in the procedure in the main line. The individual functional types are described below.

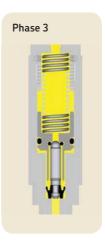
#### Prelubrication distributor

On SKF MonoFlex single-line distributors designed as prelubrication distributors, the quantity of lubricant is fed to the lubrication point while pressure is being built up in the main line, i.e., during the lubrication unit's run time. On prelubrication distributors, the expelling pressure can be set so it is approximately equal to the maximum permissible pressure of the pressure regulating valve on the lubrication unit.

After the lubrication unit is switched on, the lubricant is drawn out of the lubricant reservoir by the lubricant pump and fed through the main line to the prelubrication distributor via the pressure relief valve and the pressure regulating valve. The pressure built up in the centralized lubrication system causes the metering piston to move toward the outlet (2), expelling the lubricant (1) that is upstream of the metering piston from the metering chamber and to the lubrication point through the lubrication point line. After the lubrication unit is turned off, pressure in the centralized lubrication system is relieved, which relieves pressure in the main line. In this process, spring tension causes the metering piston to return to its normal position. At the same time, the lubricant is moved from the metering chamber into the spring chamber (3). The prelubrication distributor is ready for the next lubrication cycle.







#### Area of application

Prelubrication distributors are used in applications where the lubricant needs to be delivered to the lubrication point immediately. Especially in the case of long lubrication point lines and high bearing back pressures, increasing the pressure in the main line can provide reliable lubrication of the bearing, as the expelling pressure approximately equals the pressure in the main line. Fields where prelubrication distributors are widely used is with machine tool, textile, and packaging machine lubrication.

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# SKF MonoFlex single-line distributors

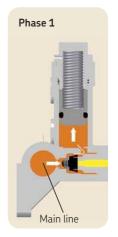
## Description of functional types

#### Relubrication distributor

On SKF MonoFlex single-line distributors designed as relubrication distributors, the quantity of lubricant is fed to the lubrication point only during or after pressure relief in the main line, i.e., after the lubrication unit is switched off.

The pressures with which lubricant can be expelled to the lubrication point are determined by the spring tension in the piston area, and they are lower than the maximum expelling pressure of the prelubrication distributors. The relubrication distributor thus has the function of a spring accumulator.

After the lubrication unit is switched on, the lubricant is drawn out of the lubricant reservoir by the lubricant pump and fed through the main line to the relubrication distributor via the pressure relief valve and the pressure regulating valve. The pressure built up in the centralized lubrication system causes the collar (shuttle valve) to close the outlet to the lubrication point, which feeds the lubricant into the storage chamber. The lubricant below the spring-loaded metering piston is stored (1). After the lubrication unit is turned off, pressure in the centralized lubrication system is relieved, which relieves pressure in the main line. The lubricant under preload below the springloaded metering piston now pushes the collar back toward the main line (2). This closes the main line and opens the outlet to the lubrication point. The lubricant can now be metered from the storage chamber and delivered to the lubrication point (relubrication effect). After the lubricant has been completely expelled to the lubrication point, the relubrication distributor is ready for the next lubrication cycle (**3**).







#### Area of application

Relubrication distributors are used in applications where an excessively high and sudden pressure at the lubrication point is undesirable, for example, when lubricating slideways on grinding machines. Such pressure at the lubrication point can lead to undesirable rough grinding results. The expelling time of the relubrication distributor depends on the back pressures in the lubrication point lines. If, for example, the lubrication points are under heavy load during the lubrication cycle, the lubricant will be stored in the relubrication distributor and only fed upon movement or when pressure on the lubrication point is relieved. For commercial vehicle lubrication, this mode of operation is a significant advantage over manual lubrication which cannot always be performed on pressure-loaded bearings.

# SKF MonoFlex single-line distributors

## Description of functional types

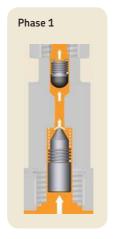
#### Dynamic distributor

On SKF MonoFlex single-line distributors designed as dynamic distributors, the quantity of lubricant is fed to the lubrication point while pressure is being built up in the main line, i.e., during the lubrication unit's run time. On dynamic distributors, the expelling pressure can be set approximately equal to the maximum permissible pressure of the pressure regulating valve on the lubrication unit.

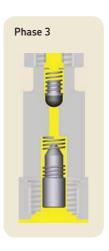
After the lubrication unit is switched on, the lubricant is drawn out of the lubricant reservoir by the lubricant pump and fed through the main line to the dynamic distributor via the pressure relief valve and the pressure regulating valve. The unit's principle of operation requires that pressure be built up in the main line within a period < 1 s, i.e., pressure build-up in the main line must be sudden (dynamic). The pressure build-up dynamically in the centralized lubrication system causes the metering piston to move toward the check valve (2), expelling the lubricant (1) that is upstream of the metering piston. The check valve opens and the lubricant is expelled in the direction of the lubrication point until the lower valve seat closes. The lubricant continues to be fed toward the lubrication point until the check valve closes again. After the lubrication unit is turned off, pressure in the centralized lubrication system is relieved. In this process, the metering piston under spring preload returns to its normal position. At the same time, the lubricant is moved through the annular gap between the metering piston and piston chamber. The upper check valve prevents the lubricant from flowing back into the metering chamber from the lubrication point line. The dynamic distributor is ready for the next lubrication cycle (3).

The clearance between the piston and piston chamber must be sized to allow lubricant to flow through the annular gaps. This is also the reason for dynamic operation of dynamic distributors. If pressure were to build up slowly (statically) in the lubrication line, an unsteady state would occur in which the lubricant would flow to the lubrication point via the annular gap during the entire runtime of the lubrication unit. This would result in excessive lubrication of the lubrication point.

To increase the lubrication frequency, single-line centralized lubrication systems with dynamic distributors can be equipped with a 4/2 directional control valve. The single-line centralized lubrication system must be designed such that the main line is preloaded to approx. 6 bar when the lubrication unit is running. For the lubrication procedure, the 4/2 directional control valve is switched so that the dynamic distributors are suddenly pressurized. This layout allows a significant increase in the lubrication frequency, as required, for example for chain lubrication when using small chain links or at high chain speeds. This allows lubrication cycle frequencies of up to 5 cycles/second to be achieved using low-viscosity lubricants.







#### Area of application

Dynamic distributors are used in applications where the lubricant needs to be delivered to the lubrication point almost immediately. An important application for dynamic distributors is the lubrication of chains in machinery and conveyor belts.

# SKF MonoFlex system structure

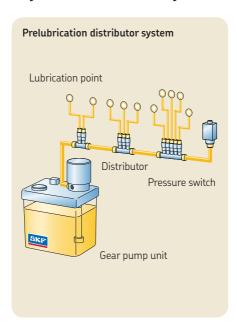
## Prelubrication, relubrication, and dynamic distributor system

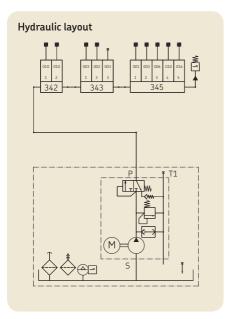
SKF MonoFlex single-line centralized lubrication systems with single-line distributors generally consist of a lubrication unit, the single-line distributors, and the lubrication lines. The pressure regulating valve and pressure relief valve required for the single-line centralized lubrication system's operation are normally integrated into the lubrication unit.

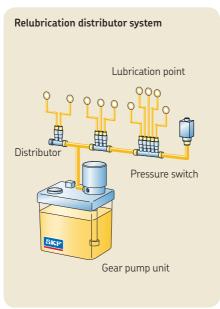
If pressure losses of greater than 10 bar are expected in the single-line centralized lubrication system, for example due to expansion of the system or due to the viscosity of the lubricant (depending on the ambient temperature), a pressure switch should be mounted to monitor the system at the end of the main line, if possible. The pressure switch monitors whether the required pressure build-up occurs in the single-line centralized lubrication system during the lubrication cycle.

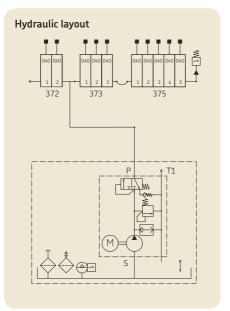
The lubrication unit run time specified by the control unit or machine control unit ensures pressure build-up in the single-line centralized lubrication system. Pressure in the main line must be relieved after the lubrication unit is switched off to ensure proper functioning of the single-line distributors. This is performed by the pressure relief valve integrated into the lubrication unit.

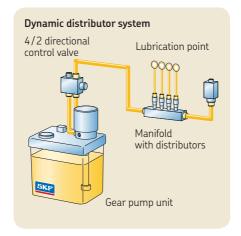
See the following illustration for examples of single-line centralized lubrication systems with prelubrication, relubrication, and dynamic distributors.

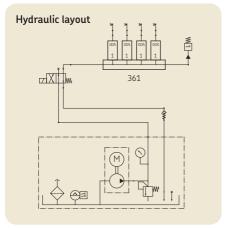












# SKF MonoFlex system structure

## Important notes

## **MARNING**

Leaking lubricant is hazardous due to the risk of slipping and injury. Before using the equipment, fix any system where lubricant is leaking during assembly, operation, maintenance, and repair.

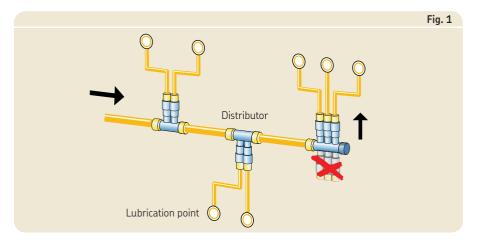
Lubricants can contaminate soil and bodies of water. Lubricants must be used and disposed of properly. Observe the local regulations and laws regarding the disposal of lubricants.

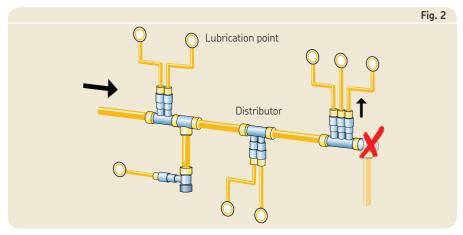
When arranging the main lines and lubrication point lines, observe the following instructions so that the entire lubrication system functions smoothly.

The main line must be dimensioned in accordance with the maximum pressure losses occurring in the lubrication unit used and the displacement of that lubrication unit. If possible, the main line should rise upward from the lubrication unit and be ventable at the highest point on the lubrication line system.

Lubricant distributors at the end of the main line should be installed such that the outlets of the lubricant distributors point upwards. If the system configuration requires that the lubricant distributors be arranged below the main line, they should not be placed at the end of the main line (**Fig. 1**). If lubrication lines must lead to lubricant distributors that are lower than the main line, proceed as shown in **Figure 2**.

The pipelines, hoses, shutoff valves and directional control valves, fittings, etc. that will be used must be designed for the maximum operating pressure of the lubrication unit, the permissible temperatures, and the lubricants that will be delivered.





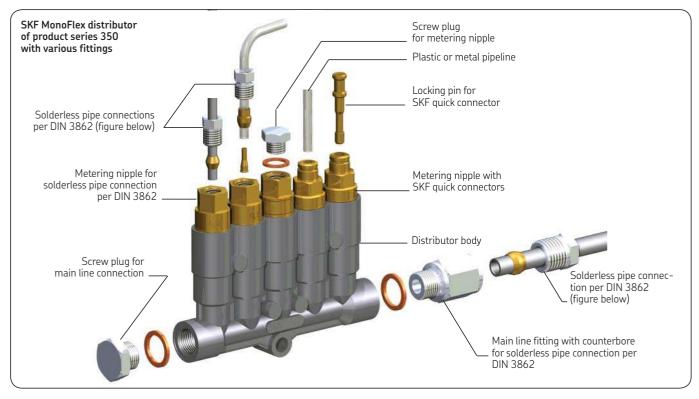
The lubrication line system also needs to be protected from excessive pressure by means of a pressure-limiting valve that is mounted separately or integrated into the lubrication unit. All components of the lubrication line system such as pipelines, hoses, shutoff valves and directional control valves, fittings, etc. must be carefully cleaned before assembly. No seals in the lubrication line system should protrude inward in a way that disrupts the flow of the lubricant and could allow contaminants to enter the lubrication line system. Lubrication lines should always be arranged so that air pockets cannot form anywhere. Avoid changes in the cross-section of the lubrication line from small to large cross-sections in the direction of flow of the lubricant. Vent plugs are recommended at appropriate places within the centralized lubrication system.

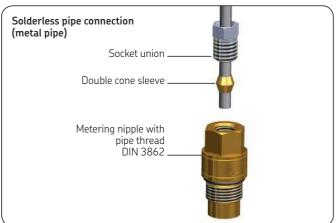
The flow of lubricant in the lubrication lines should not be impeded by the incorporation of sharp bends, angle valves, or flap valves. Unavoidable changes in the cross-section in lubrication lines must have smooth transitions. Sudden changes of direction should be avoided, if possible.

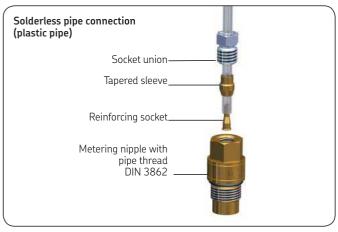
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## Overview







SKF Lubrication Systems offers a comprehensive product range of the most common fittings as well as pipelines made of metal or plastic pipe, or hose lines with metal pipe connectors for use in SKF MonoFlex single-line centralized lubrication systems.

For SKF MonoFlex single-line centralized lubrication systems with pressures up to 45 bar, SKF quick connectors or fittings for solder-less pipe connections conforming to DIN 3862 can be used. For higher pressures, fittings with SKF quick connector systems (up to 300 bar) or cutting-sleeve screw unions (up to 250 bar) conforming to DIN 2353 are used.

Depending on the application, SKF MonoFlex single-line distributors can be equipped with different fittings on the connection for the main line and lubrication point lines. The overview in the figure above shows which fittings and pipelines SKF MonoFlex single-line distributors can be equipped with. Product series 350 is shown as an example. See the individual pages of the product series descriptions for details on the fittings available for the particular product

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## SKF quick connectors

The SKF quick connector system for plastic and metal pipelines allows reliable, fast, leak-free and inexpensive cable mounting in SKF MonoFlex single-line centralized lubrication systems. The system includes quick connectors for plastic and metal pipe diameters of 4, 6, and 8 mm in the common types of straight, elbow, or banjo fittings, as well as metering nipples for MonoFlex single-line distributors.

The SKF quick connector system is resistant to dirt and is suitable for industrial use as well as for year-round operation in all types of construction and road vehicles. For especially dirty ambient conditions, rubber protective caps are available for pipe diameters of 4 mm and 6 mm for SKF quick connectors.

The SKF quick connector system utilizes a 3 0-ring system, which makes it specially adapted to the high requirements and system pressures in SKF MonoFlex single-line centralized lubrication systems.

Inside, a collet with a locking claw acts on a claw groove in the metal pipe or directly onto the mounted plastic pipe. This keeps the mounted pipelines securely supported in the SKF quick connector even at pressures of 300 bar.

SKF quick connectors are suitable for constructing the entire lubrication system, from the lubrication unit to the single-line distributors, pressure switches, etc. to the lubrication points.

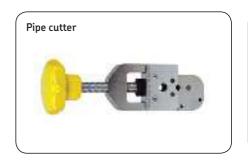
# Rubber protective caps for SKF quick connectors Line diameter [mm] Order number 4 898-110-077 6 898-110-082

SKF quick connectors - Technical data				
Lubricant	Oil, fluid grease, grease			
Operating pressure	max. 300 bar			
Temperature range	−40 to +80 °C			
Seal material	NBR or FKM (FPM)			

## SKF pipe cutters

A pipe cutter can be used to cut the metal pipe to length in one step and to produce the exact geometric shape of the claw groove.

The pipe cutters available from SKF are listed below by pipe diameter.





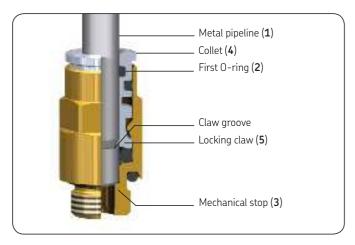
Claw groove	°. /		١
Ø a +0,3	77	C	Pipe diameter
		b ±0,2	1

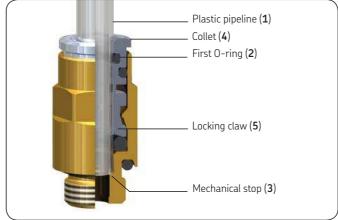
Ordering information for pipe cutter						
Pipe diameter [mm	n] 4	6	8			
Order number Pipe cutter	169-000-336	169-000-337	169-000-338			
Order number Cutting ring	844-330-006	844-330-007	844-330-007			

Claw groove dimensions						
Pipe diameter [mm]	4	6	8			
Α	3,1	4,9	6,9			
В	5,0	6,2	6,2			
С	0,3 – 0,7	0,4 – 0,9	0,5 – 0,9			

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## SKF quick connectors





#### Metal pipeline assembly

The metal pipe can be assembled with or without a claw groove. The claw groove securely fastens the metal pipe in the quick connector, which prevents the metal pipe from slipping out of the SKF quick connector. The claw groove does not need to be used if an appropriate fastening material (e.g., mounting clips) is used to prevent the metal pipe from slipping out of the SKF quick connector.

Cut the metal pipe (1) to length using a special pipe cutter. Manually insert the metal pipe (1) fully into the collet (4) of the SKF quick connector until it clears the first 0-ring (2) and the locking claw (5) of the collet (4) and reaches the mechanical stop (3). Clearing the first 0-ring (2) and the locking claw (5) of the collet (4) is indicated by significant resistance.

If a claw groove is not used, fix the metal pipe using an appropriate fastening material (e.g., mounting clips) to prevent the metal pipe from slipping out of the SKF quick connector.

To disassemble the metal pipe (1), press the collet (4) inward into the SKF quick connector. The metal pipe (1) can now be pulled out of the collet (4) of the SKF quick connector.

#### **!** WARNING

High pressure hazard! Depressurize system before disassembling SKF quick connectors and srew unions.

#### Plastic pipeline assembly

The plastic pipe is mounted directly in the SKF quick connector. The locking claw of the collet secures the plastic pipe in the SKF quick connector, which prevents the pipe from accidentally slipping out. Cut the plastic pipe (1) straight to length using a suitable hose cutter. Manually insert the plastic pipe (1) fully into the collet (4) of the SKF quick connector until it clears the first 0-ring (2) and the locking claw (5) of the collet (4) and reaches the mechanical stop (3). Clearing the first 0-ring (2) and the locking claw (5) of the collet (4) is indicated by significant resistance.

To disassemble the plastic pipe (1), press the collet (4) inward into the SKF quick connector. To do this, press the plastic pipe (1) inward into the SKF quick connector, which releases the collet (4) from the plastic pipe (1). The plastic pipe (1) can now be pulled out of the collet (4) of the SKF quick connector.

Before reassembling, shorten the end of the plastic pipe by at least 7 mm so that the locking claw of the collet functions properly.

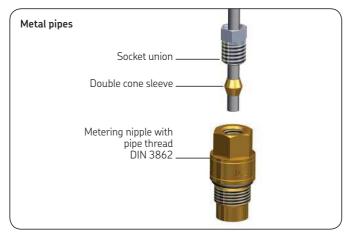
## Solderless pipe connections per DIN 3862

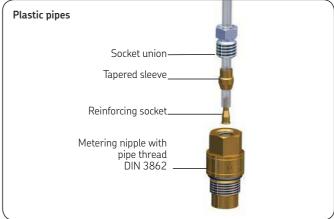
Solderless pipe connections from SKF that conform to DIN 3862 allow fast and easy assembly and disassembly of lubricant lines made of metal pipes and plastic. They are suitable for oil, fluid grease, and grease lubricants at pressures up to 45 bar and operating temperatures from  $-25\,^{\circ}\text{C}$  to  $+80\,^{\circ}\text{C}$ .

#### Technical data

Lubricant Oil, fluid grease, grease

Operating pressure  $\max$  . 45 bar Temperature range -25 to +80 °C





### Initial assembly

Cut the metal pipe straight to length using a suitable tool, e.g., a pipe cutter. Push the socket union and the double cone sleeve onto the end of the metal pipe. Insert the end of the metal pipe into the depression until the stop and then tighten the socket union fingertight. Then tighten the socket union by a max. of 1 1/2 revolutions.

### Repeat assembly

After each time the screw union is loosened, the socket union must be firmly retightened (with the same force) as in the initial assembly.

#### Initial assembly

Cut the plastic pipe straight to length using a suitable tool, e.g., a hose cutter. Insert the reinforcing socket into the end of the plastic pipe to stabilize the end of the plastic pipe being assembled. This prevents the plastic pipe from being constricted during assembly. Push the socket union and the tapered sleeve onto the end of the plastic pipe. Insert the end of the plastic pipe into the depression until the stop and then tighten the socket union finger–tight. Then tighten the socket union by a max. of 1 1/2 revolutions.

#### Repeat assembly

Each time after the screw union is loosened, the socket union must be firmly retightened (with the same force) as in the initial assembly.

## **!** WARNING

High pressure hazard! Depressurize system before disassembling SKF quick connectors and srew unions. PUB LS/P2 11213 EN · 1-5001-EN

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## Pipe and hose lines







Depending on the application, SKF Mono-Flex single-line centralized lubrication systems can be equipped with lubrication lines made of metal pipe, plastic pipe, and/or rubber hose lines. The choice of the internal diameter of the lubrication line (main, secondary, or lubrication point line) depends on the lubricant selected for feeding (oil, fluid grease, grease) and the pressure losses that

will be encountered. Larger expected pressure losses result from a smaller internal diameter of the lubrication line, a lower ambient temperature, and a higher oil/ NLGI Grade of the fluid grease or grease. Further, the pressure losses are higher when the length of the lubrication line is increased.

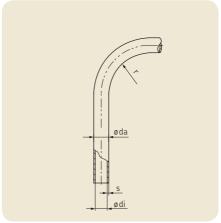
External pipe diameters of 6, 8, 10 mm and larger are typically used for main lines and secondary lines; external pipe diameters of 2,5 and 4 mm are used for lubrication point lines.

Туре	Operating temperature [°C]	Permissible operation pressure [bar] <sup>1)</sup>
Steel pipelines	–25 to +80	Up to 500
Plastic pipelines	-60 to +80	Up to 70
Low-pressure hose lines	-40 to +100	Up to 45
High-pressure hose lines	-40 to +100	Up to 225

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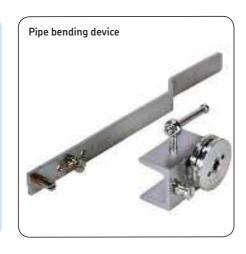
# Steel pipes





Steel pipes						
Order number	ø da [mm]	s [mm]	ø di [mm]	Minimum bend radius r <sup>1)</sup> [mm]	Permissible oper. pressure [bar]	Burst pressure [bar]
Steel pipe galvanized, Cr6-free WV-R06×0.7 VERZI WV-R08×0.7 VERZI WV-R010×0.7 VERZI	6 ±0.05 8 ±0.05 10 ±0.05	0.7 0.7 0.7	4.6 ±0.11 6.6 ±0.11 8.6 ±0.13	12 19 27	320 230 180	850 675 550
Steel pipe acc. to EN10305-4, galvanize 982-120-041 982-120-040 982-120-060 982-120-080 982-120-120 982-120-150 982-120-180	ed, Cr6-free 4 ±0.05 4 ±0.08 6 ±0.08 8 ±0.08 10 ±0.08 12 ±0.08 15 ±0.08 18 ±0.08	0.7 1.0 1.0 1.0 1.0 1.5 1.5	2.6 ±0.10 2 ±0.15 4 ±0.12 6 ±0.10 8 ±0.08 9 ±0.10 12 ±0.08 15 ±0.08	12 12 18 24 30 36 45 54	368 500 372 288 248 303 248 209	952 1 360 963 723 612 765 612 510
Stainless steel pipe (material 1.4571) D1127R02.5x0.5+A46 DIN2462-R04×1+A46 DIN2462-R06×1+A46 DIN2462-R08×1+A46 DIN2462-R010×1+A46	2.5±0.03 4 ±0.1 6 ±0.1 8 ±0.1 10 ±0.1	0.5 1 1 1 1	1.5 ±0.05 2 ±0.2 4 ±0.2 6 ±0.2 8 ±0.2	7.5 12 18 24 30	386 466 347 269 231	1 664 2 080 1 473 1 105 936
Temperature range –25 to +80 °C  1) For cold bending with bending device or by hand w 2) Dynamic load according to DIN 2413	ith grooved disk.					

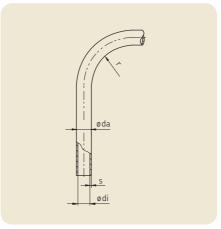
Pipe bending device					
ø steel pipeline [mm]	Order number				
4, 6, 8, 10	248-803.20				
12 (special grooved disk) 1)	248-803.17				
4 (Retro fitting set) <sup>2)</sup>	248-803.16				
To bend pipes with 12 mm diameter, the special grooved disk 248-803.17 must be ordered in addition to pipe bending device 248-803.20     Retro fitting set with grooved disk for older pipe bending devices 248-803.20					



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## Plastic pipes





Suitable bending devices can be used to achieve extremely small radii when bending plastic pipes. This requires that the pipe be heated to approx. 150 °C, with a maximum heating time of 20 seconds.

#### Plastic pipes WVN715, semirigid (unplasticized)

Order number <sup>2)</sup>	ø da [mm]	S [mm]	ø di +0,15 [mm]	Minimum ber freely bent	nd radius r [mm] with device	Permiss. oper. pressure <sup>1)</sup> at 23 °C [bar]	Burst pressure [bar]
WVN715-R02.5×0.5 WVN715-R04×0.85 WVN715-R06×1 WVN715-R06×1.25 WVN715-R08×1.25 WVN715-R010×1.5 WVN715-R012×1 WVN715-R012×1,5	2,5 ±0,1 4 ±0,1 6 ±0,1 6 ±0,1 8 ±0,1 10 ±0,15 12 ±0,15 12 ±0,15	0,5 0,85 1 1,25 1,25 1,5 1	1,5 2,3 4 3,5 5,5 7 10 9	25 38 63 63 76 89 110 110	9 14 21 21 28 35 45	66 72 53 70 49 47 24	198 216 159 210 147 141 72

#### Plastic pipes WVN716, flexible (plasticized)

Order number <sup>2)</sup>	ø da <sup>±0,1</sup> [mm]	s [mm]	ø di +0,15 [mm]	Minimum ben freely bent	d radius r [mm] with device	Permiss. oper. pressure <sup>1)</sup> at 23°C [bar]	Burst pressure [bar]
WVN716-R04×0.85	4	0,85	2,3	38	14	36	108
WVN716-R06×1.25	6	1,25	3,5	63	21	35	105
WVN716-R08×1.25	8	1,25	5,5	80	30	25	75

<sup>1)</sup> The permissible operating pressure is lower at higher temperatures (→ the Pressure utilization factor table).
2) If resistance to light-aging is desired, add the word "BLACK" in the order number (example = WVN716-R08x1,25x50M BLACK).

#### Pressure utilization factor

Max. temperature up to [°C]	Pressure utilization factor [%]
30	83
40	72
50	64
60	57
70	52
80	47

#### Technical data

WVN715	PA 12 H Polyamide, semirigid, unplasticized as per DIN 73378, stabilized against heat and aging
WVN716	PA 12 PH Polyamide, flexible, plasticized as per DIN 73378, stabilized against heat and aging
Temperature range	−60 to +80 °C

## PA 12 HL (black)

Polyamide, semirigid, unplasticized as per DIN 73378, stabilized against light, heat, and aging

## PA 12 PHL (black)

Polyamide, flexible, plasticized as per DIN 73378, stabilized against light, heat, and aging

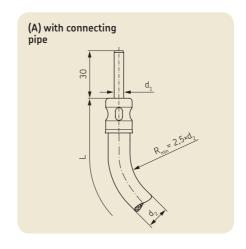
−60 to +80 °C

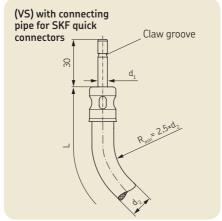
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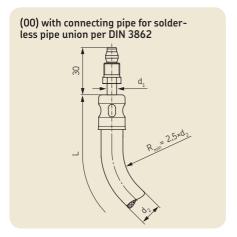
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<sup>&</sup>lt;sup>1)</sup> The permissible operating pressure is lower at higher temperatures (→ the Pressure utilization factor table).
<sup>2)</sup> If resistance to light-aging is desired, add the word "BLACK" in the order number (example = WVN715-R08x1,25x50M BLACK).

Low-pressure hose lines for main lines and secondary lines







Ordering infor	mation								
Permissible oper. pressure [bar]	Operati temper min	ing rature [°C] max	d <sub>1</sub> ø connecting pipe [mm]	d <sub>2</sub> ø hose outside [mm]	ø hose internal [mm]	Length L* ±5 [mm]	Order number Design A	Design VS	Design 00
45	-40	100	4	11	3,2	180 260 300 400 500 600	714-180 714-260 714-300 714-400 714-500 714-600	714-180-VS 714-260-VS 714-300-VS 714-400-VS 714-500-VS 714-600-VS	714-180-K 714-260-K 714-300-K 714-400-K 714-500-K 714-600-K
			6	13	4,5	180 260 300 400 500 600	716-180 716-260 716-300 716-400 716-500 716-600	716-180-VS 716-260-VS 716-300-VS 716-400-VS 716-500-VS 716-600-VS	716-180-K 716-260-K 716-300-K 716-400-K 716-500-K 716-600-K
			8	15	6,5	180 260 300 400 500 600	718-180 718-260 718-300 718-400 718-500 718-600	718-180-VS 718-260-VS 718-300-VS 718-400-VS 718-500-VS 718-600-VS	718-180-K 718-260-K 718-300-K 718-400-K 718-500-K 718-600-K
* Additional lengths	on request								



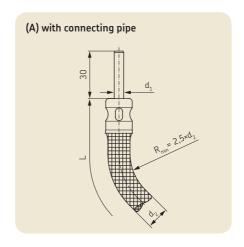
Material	
Hose	Chloroprene – mineral oil- resistant inner liner, two braided rayon inserts, outer liner partially oil-resistant, resistant to sun-cracking, and ozone-resistant
Connecting pipe ends	Steel pipe, galvanized, Cr6-free

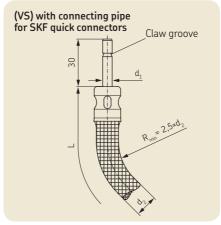
Volume increa	se	
At pressure [bar]	Volume increase [cm³]/m]	
80	2,5 3,6 4,4	

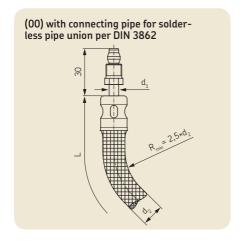
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Low-pressure hose lines with cover braid for main lines and secondary lines







Ordering infor	Ordering information									
Permissible oper. pressure [bar]	Operati temper min	ng ature [°C] max	d <sub>1</sub> ø connecting pipe [mm]	d <sub>2</sub> ø hose outside [mm]	ø hose internal [mm]	Length L* ±5 [mm]	Order number Design A	Design VS	Design 00	
45	-40	100	4	12	3,2	180 260 300 400 500 600	714-180-M 714-260-M 714-300-M 714-400-M 714-500-M 714-600-M	714-180-M-VS 714-260-M-VS 714-300-M-VS 714-400-M-VS 714-500-M-VS 714-600-M-VS	714-180-M-K 714-260-M-K 714-300-M-K 714-400-M-K 714-500-M-K 714-600-M-K	
			6	14	4,5	180 260 300 400 500 600	716-180-M 716-260-M 716-300-M 716-400-M 716-500-M 716-600-M	716-180-M-VS 716-260-M-VS 716-300-M-VS 716-400-M-VS 716-500-M-VS 716-600-M-VS	716-180-M-K 716-260-M-K 716-300-M-K 716-400-M-K 716-500-M-K 716-600-M-K	
			8	16	6,5	180 260 300 400 500 600	718-180-M 718-260-M 718-300-M 718-400-M 718-500-M 718-600-M	718-180-M-VS 718-260-M-VS 718-300-M-VS 718-400-M-VS 718-500-M-VS 718-600-M-VS	718-180-M-K 718-260-M-K 718-300-M-K 718-400-M-K 718-500-M-K 718-600-M-K	
* Additional lengths	on request									

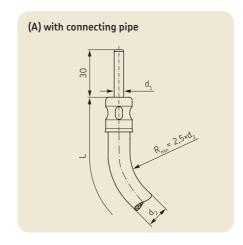


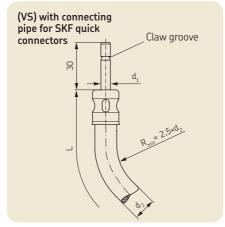
Material	
Hose	Chloroprene - mineral oil- resistant inner liner, two braided rayon inserts, outer liner partially oil-resistant, resistant to sun-cracking, and ozone-resistant
Metal braid	Steel wire, galvanized, Cr6-free
Connecting pipe ends	Steel pipe, galvanized, Cr6-free

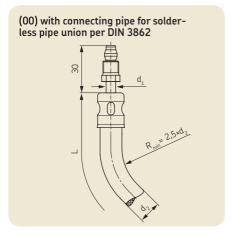
Volume increa	Volume increase								
At pressure [bar]	Volume increase [cm³/m]								
80	2,5 3,6 4,4	_							

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## Low-pressure hose lines for lubrication point lines







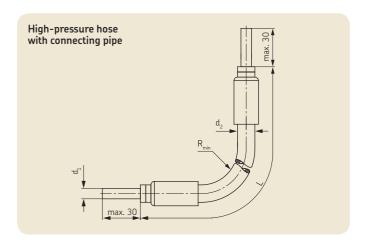
Permissible oper. pressure [bar]	Operati temper min	ng ature [°C] max	d <sub>1</sub> ø connecting pipe [mm]	d <sub>2</sub> ø hose outside [mm]	ø hose internal [mm]	Length L* ±5 [mm]	Order number Design A	Design VS	Design 00
15	-40	70	4	8,8	3,2	180 260 300 400 500 600	734-180 734-260 734-300 734-400 734-500 734-600	734-180-VS 734-260-VS 734-300-VS 734-400-VS 734-500-VS 734-600-VS	734-180-K 734-260-K 734-300-K 734-400-K 734-500-K 734-600-K



Material	
Hose	Chloroprene - mineral oil- resistant inner liner, a braided rayon insert, outer liner partially oil-resistant, resistant to sun-cracking, and ozone-resistant
Connecting pipe ends	Steel pipe, galvanized, Cr6-free

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# High-pressure hose lines



Ordering inform	mation							
Permissible oper. pressure [bar]	Operat temper min	ing rature [°C] max	d <sub>1</sub> ø connecting pipe [mm]	Minimum bend radius R <sub>min</sub> [mm]	d <sub>2</sub> ø hose outside [mm]	ø hose internal [mm]	Length L* ±5 [mm]	Order number
175	-40	100	10	44	14,5	7,9	180 250 300 400 500 600 700 800	SLH10-180 SLH10-250 SLH10-300 SLH10-400 SLH10-500 SLH10-600 SLH10-700 SLH10-800
210	-40	100	8	32	13	6,3	180 250 300 400 500 600 700 800	SLH8-180 SLH8-250 SLH8-300 SLH8-400 SLH8-500 SLH8-600 SLH8-700 SLH8-800
225	-40	100	6	19	11	4,8	180 250 300 400 500 600 700 800	SLH6-180 SLH6-250 SLH6-300 SLH6-400 SLH6-500 SLH6-600 SLH6-700 SLH6-800
* Additional lengths o	on request							



Material	
Inner hose	Polyester elastomers
Reinforcement	High-tensile synthetic fiber braid
Outer hose	Polyurethane
Connecting pipe ends	Steel pipe, galvanized, Cr6-free

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#### General

SKF MonoFlex single-line distributors of product series AB are single-port prelubrication distributors for MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation in manifolds. The combination of these single-line distributors with 1- to 6-port manifolds provides flexible options for designing the lubrication system on the machine/system requiring lubrication. Manifolds customized for product series AB are available in aluminum and stainless steel designs.

The available metered quantities are in the range from 0,01 to 0,60 cm<sup>3</sup>. The metering elements have a mark indicating the metered quantity. The lubrication point line is connected using solderless pipe unions (DIN 3862). Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm. The metering cannot be modified later.

The components made of elastomers inside the single-line distributors are made of FKM (FPM).

The distributor body is available in steel (galvanized, Cr6-free) and stainless steel designs. Depending on the design, a copper sealing ring or a stainless steel ring is used to seal the internal thread for mounting the single-port single-line distributor in a manifold.

See the following pages for further information on product series AB. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.





The configurator on the following page does **not** allow specification of manifolds and distributors in a single order code. The manifolds are listed under Accessories and must be ordered separately.

## Technical data

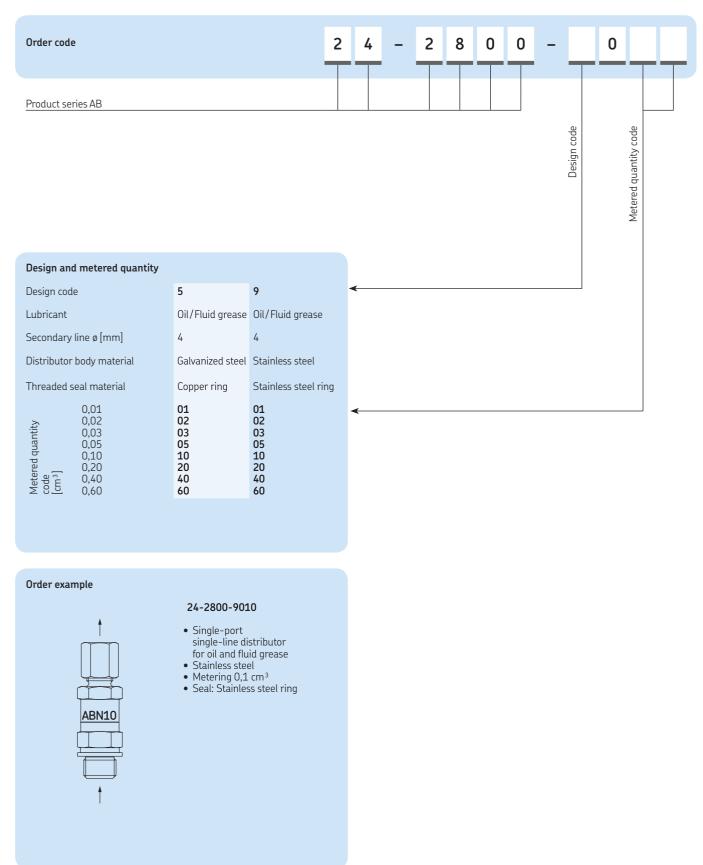
Product series AB					
Lubricant	Metering [cm³]	Opera press min.	ure [bar]	Relief pressure [bar]	Operating temperature [°C]
Mineral and synthetic oil 20 to 1 000 mm <sup>2</sup> /s; compatible with FKM (FPM), brass, steel	0,01 – 0,60	18	50	Max. 3	0 – 80
Fluid grease of NLGI Grade 000, 00 compatible with FKM (FPM), brass, steel	0,01 – 0,60	18	50	Max. 3	0 – 80

Tightening torque for assembly
--------------------------------

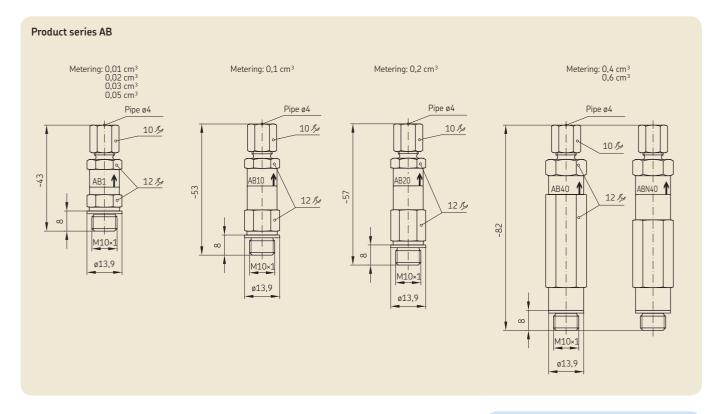
distributor	Gasket	Tightening torques [Nm]
AB	Copper ring	10
AB	Stainless steel ring	10

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## Configurator

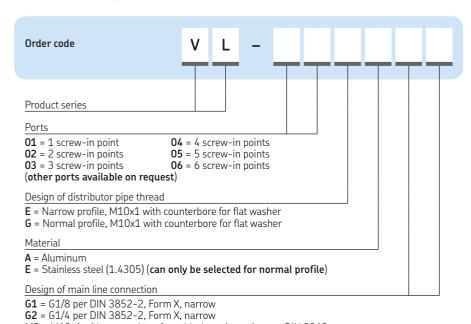


## **Dimensions**



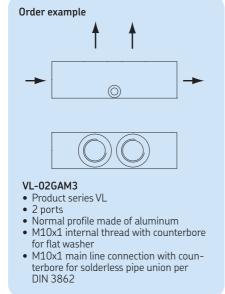
Mark		
Matarina	Design ma	rk
Metering [cm³]	Galvanized	steel Stainless steel
0,01	AB1	ABN1
0,02 0,03	AB2 AB3	ABN2 ABN3
0,05	AB5	ABN5
0,10	AB10	ABN10
0,20 0.40	AB20 AB40	ABN20 ABN40
0,40	AB40 AB60	ABN60
-,		

## Manifolds for product series AB

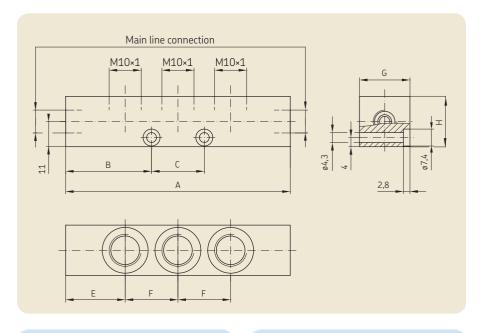


M3 = M10x1 with counterbore for solderless pipe union per DIN 3862 M4 = M14x1.5 with counterbore for solderless pipe union per DIN 3862

(can only be selected for normal profile)



## **Dimensions**



2 3 4 5 6	57 74 91 108 125	28,5 28,5 28,5	17 34 51	20 20 20	1×17 2×17 3×17 4×17 5×17	22 22 22	22 22 22 22 22 22		
Normal profile G Main line connection M14x1.5 Dimensions [mm]									
Ports	A	В	C	E	F	G	H 		
1 2 3	52 69 86	26 34,5 34.5		26	- 1×17 2×17		22 22 22		

103 34,5 34 26 3×17 22 128 34,5 51 26 4×17 22 137 34,5 68 26 5×17 22

G H

Normal profile G

Α

Ports

Main line connection M10x1
Dimensions [mm]

В

20

C

20 -

Narrow profile E Main line connection M10x1 Dimensions [mm] Ports A B C E F G H									
1 2 3 4 5 6	92	29 37,5 29 29	51	20,5 20,5 20,5 20,5	- 1×17 2×17 3×17 4×17 5×17	18 18 18 18	20 20 20		

	Normal profile G Main line connection G1/8 Dimensions [mm]									
Ports	Α	В	С	E	F	G	H			
1 2 3 4 5 6	34 51 68 85 102 119	25,5 25,5 25,5	- 17 34 51	17 17 17 17	- 1×17 2×17 3×17 4×17 5×17	22 22 22 22 22	22 22			

Normal profile G Main line connection G1/4 Dimensions [mm]									
Ports	Α	В	С	Ē	F	G	Н		
1 2 3 4 5	46 63 80 97 114 131	31,5 31,5 31,5	- 17 34 51	23 23 23	- 1×17 2×17 3×17 4×17 5×17	22 22 22	22 22 22 22 22 22 22 22		

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#### General

SKF MonoFlex single-line distributors of product series 341 are single-port prelubrication distributors for SKF MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation in manifolds. The combination of these single-line distributors with 1- to 6-port manifolds provides flexible options for designing the lubrication system on the machine/system requiring lubrication. Manifolds customized for product series 341 are available in aluminum and stainless steel designs.

The available metered quantities are in a range from 0.01 - 0.16 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. To better distinguish between different designs, metering nipples for oil are made of brass and metering nipples for fluid grease are made of nickel-plated brass. Metering nipples made of stainless steel are untreated. The lubrication point line can be connected to the metering nipple using SKF quick connectors or solderless pipe connections (DIN 3862) depending on the selected metered quantity. Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected can be either 2.5 mm or 4 mm.

The lubrication point outlet can be closed using a locking pin (SKF quick connector) or a screw plug with a flat washer (solderless pipe connection). Metering nipples for metered quantities above 0,03 cm<sup>3</sup> can be replaced later to yield different metered quantities.

The components made of elastomers in the interior of the single-line distributors are made of NBR or FKM (FPM) depending on the design. The distributor body is available in aluminium and stainless steel designs. The seal of the internal thread for mounting the single-port single-line distributor in a manifold is available in soft-sealing (with Oring) and flat washer designs.

See the following pages for further information on product series 341. Details on manifolds and accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

The configurator on the following page **does not** allow specification of manifolds and distributors in a single order code. The manifolds are listed under Accessories and must be ordered separately.



Metering nipple 00 (for solderless pipe connection per DIN 3862)





## Technical data

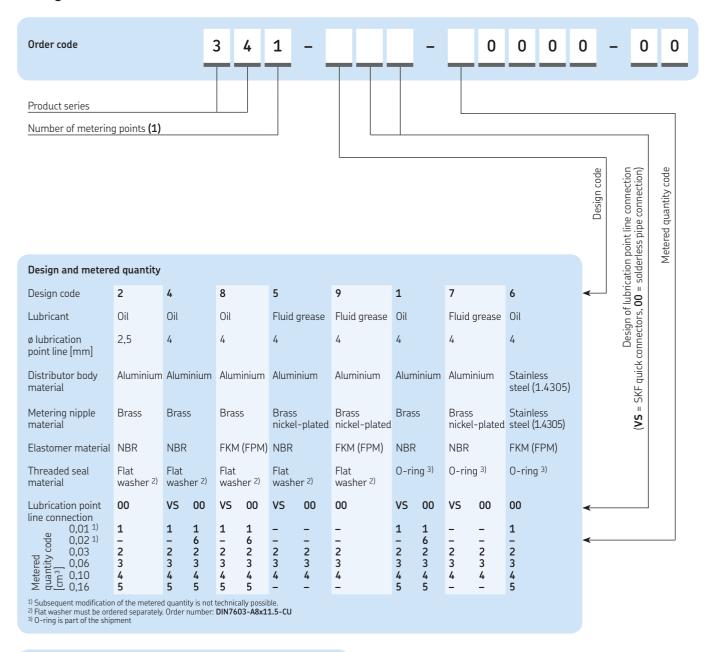
Product series 341  Lubricant	Metered quantity [cm <sup>3</sup> ]	Metering nipple	Operat pressu min.	ing re [bar] max.	Relief pressure [bar]	Operating temperature [°C]
Mineral and synthetic oil 20 – 2 000 mm²/s; compatible with steel, FKM (FPM)/NBR,	0,01 – 0,02	00 VS	12 12	45 80	max. 3 max. 3	0 – 80 0 – 80
brass	0,03 – 0,16	00 VS	6 6	45 80	≤1 ≤1	0 – 80 0 – 80
Fluid grease of NLGI Grade 000, 00; compatible with steel, FKM (FPM)/NBR, brass	0,03 – 0,10	00 VS	12 12	45 80	max. 3 max. 3	0 – 80 0 – 80

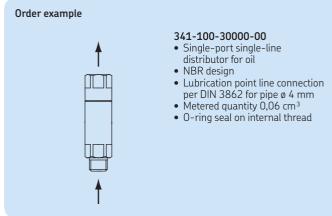
Tightening torque for assembly Tightening torques									
Distributor	Seal	[Nm]							
341-xxx-x0000-00	0-ring	2,5							
341-xxx-x0000-00	Flat washer	6							

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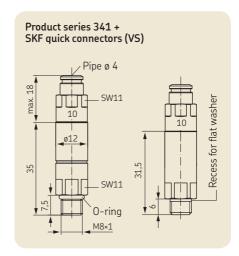
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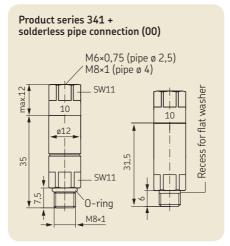
## Configurator





## **Dimensions**





Mark on metering  Metered quantity	пірріе
[cm <sup>3</sup> ]	Mark
0,01	1
0,02 0,03	2 3
0,06	6
0,10 0,16	10 16

## Accessories

Order numbers for metering nipples for oil (replaceable)										
ø lubrication point line [mm]	Metering nipple material	Elastomer material	Metering nipple	Metered quantity [cr 0,03	m³] 0,06	0,10	0,16			
2,5 4 4 4 4	Brass Brass Brass Brass Stainless steel (1.4305)	NBR NBR NBR FKM (FPM) FKM (FPM) FKM (FPM)	00 VS 00 VS 00 00	995-994-003 995-994-103-VS 995-994-103 341-453-S8-VS 341-453-K-58 341-453-K-581	995-994-006 995-994-106-VS 995-994-106 341-456-K-S8 341-456-K-S8 341-456-K-S81	995-994-010 995-994-110-VS 995-994-110 341-460-S8-VS 341-460-K-S8 341-460-K-S81	995-994-016 995-994-116-VS 995-994-116 341-446-S8-VS 341-466-K-S8 341-466-K-S81			

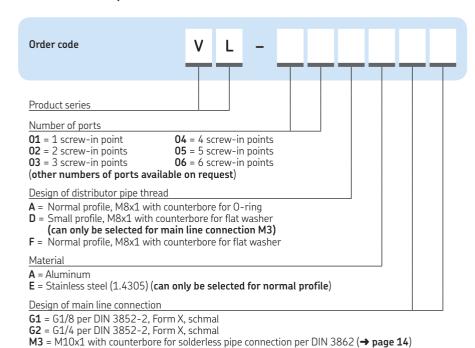
Order numbers fo	Order numbers for metering nipples for fluid grease (replaceable)										
ø lubrication point line [mm]	Metering nipple material	Elastomer material	Metering nipple	Metered quantity [cm³] 0,03	0,06	0,10					
4	Brass, nickel-plated	NBR	VS	341-853-VS	341-856-VS	341-860-VS					
4	Brass, nickel-plated	NBR	00	341-853-K	341-856-K	341-860-K					
4	Brass, nickel-plated	FKM (FPM)	00	341-853-K-S8	341-856-K-S8	341-860-K-S8					

Fittings for metering nipples	ø lubrication		Order number		
Description	point line [mm]	Pipe thread	A	В	С
Screw plug with flat washer for solderless pipe connection	2,5 4	M6x0,75 M8x1	402-011.U1 404-011.U1	- -	=
Locking pin (A) for SKF quick connectors	4	-	450-204-002	-	-
Solderless pipe connection for metal pipeline* consisting of socket union (A) and double cone sleeve (B)	2,5 4	M6x0,75 M8x1	402-002 404-002	402-001 404-001	- -
Solderless pipe connection for plastic pipe* consisting of socket union (A), reinforcing socket (B), and tapered sleeve (C)	2,5 4	M6x0,75 M8x1	402-612 404-612	402-603 404-603	402-611 404-611
* For more information, → page 14.					

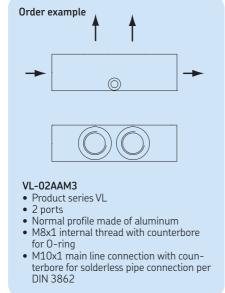
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## Manifolds for product series 341

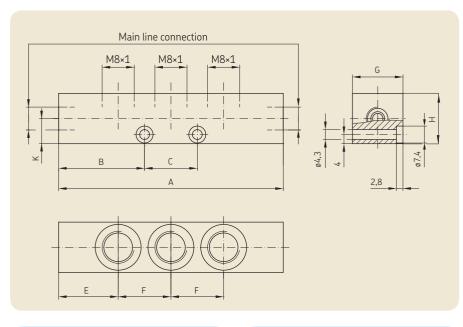
(can only be selected for normal profile)



M4 = M14x1,5 with counterbore for solderless pipe connection per DIN 3862 (→ page 14)



## **Dimensions**



Normal Main lin Number	ie co	nnect	ion					
of ports	Α	В	С	E	F	G	Н	K
1 2 3 4 5 6	55 70 85 100	27.5 27.5 27.5 27.5 27.5	- 15 30 45	20 20 20 20 20	- 1×15 2×15 3×15 4×15 5×15	22 22 22 22 22	22 22 22 22 22	11 11 11 11

Normal profile A/F Main line connection M14×1.5 Number Dimensions [mm]									
of ports	Α	В	C	Е	F	G	Н	K	
1 2 3 4 5 6	78 93 108	31.5 31.5 31.5 31.5	- 15 30 45	24 24 24 24 24	- 1×15 2×15 3×15 4×15 5×15	22 22 22 22 22	22 22 22 22 22	11 11 11 11	

#### Small profile D Main line connection M10x1 Number Dimensions [mm] G H K of ports A B CE 39 19.5 - 20.5 -13 17 10.5 2 52 20.5 1×13 13 17 10.5 32.5 - 20.5 2×13 13 17 10.5 4 78 39 - 20.5 3×13 13 17 10.5 91 45.5 - 20.5 4×13 13 17 10.5 104 26 52 20.5 5×13 13 17 10.5

Normal profile A/F Main line connection G1/8 Number Dimensions [mm]									
of ports	Α	В	C	Е	F	G	Н	K	
1	34				-				
2	49 64				- 2×15				
4 5	79 94				3×15 4×15				
6	, ,				5×15				

Normal profile A/F Main line connection G1/4 Number Dimensions [mm]									
of ports	Α	В	C	Е	F	G	Н	K	
1	46	23	_	23	_	22	22	11	
2	61				1×15				
3	76	30.5	15	23	2×15	22	22	11	
4	91	30.5	30	23	3×15	22	22	11	
5	106	30.5	45	23	4×15	22	22	11	
6	121	30.5	60	23	5×15	22	22	11	

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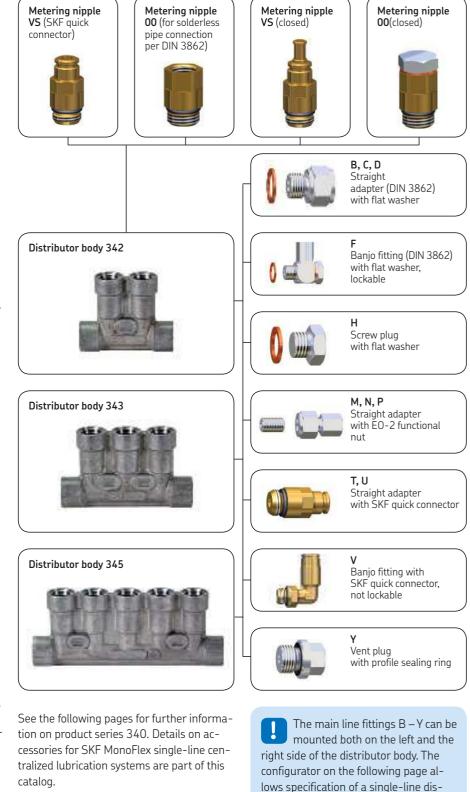
#### General

SKF MonoFlex single-line distributors of product series 340 are 2-, 3-, and 5-port prelubrication distributors for MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation directly on the machine/system requiring lubrication. SKF MonoFlex single-line distributors of product series 340 can be ordered with fittings for the main line connection. This can be indicated on the order by selecting the corresponding letter for the desired fitting in the order code.

The available metered quantities are in the range from 0.01 - 0.16 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. To better distinguish between different designs, metering nipples for oil are made of brass and metering nipples for fluid grease are made of nickel-plated brass. The lubrication point line can be connected to the metering nipple using SKF quick connectors or solderless pipe connections (DIN 3862) depending on the selected metered quantity. Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected can be either 2,5 mm or 4 mm. The lubrication point outlet can be closed using a locking pin (SKF quick connector) or a screw plug with a flat washer (solderless pipe connection). The metering nipples for metered quantities above 0,03 cm<sup>3</sup> can be replaced later to yield different metered quantities.

The components made of elastomers inside the multi-port single-line distributors are made of NBR or FKM (FPM) depending on the design.

The distributor body is made of zinc diecast. Holes to secure the multi-port singleline distributors to the machine/system are cast into the distributor body. The main line connection on the distributor body has a counterbore for mounting a solderless pipe connection for metal or plastic pipe diameter of 6 mm (M10x1 thread). Various fittings, from SKF quick connectors to screw plugs, that are matched to the thread size of the main line connection are available.



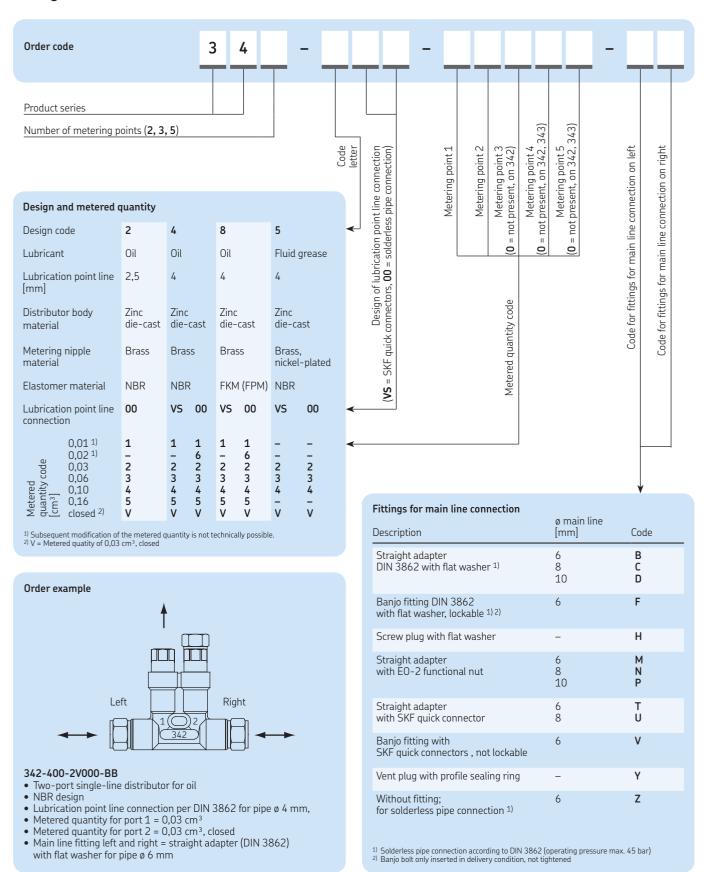
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tributor with main line fittings in a single

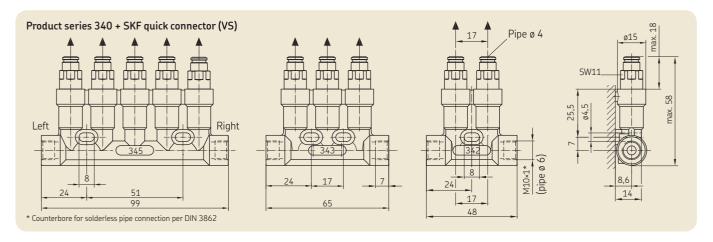
order code.

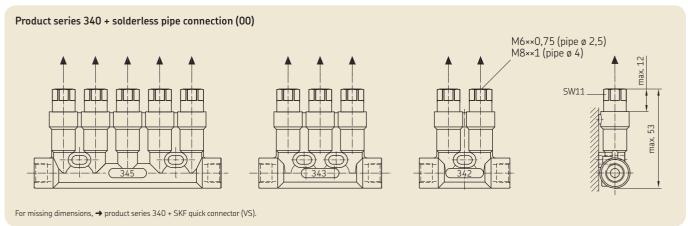
30 **5KF** 

## Configurator



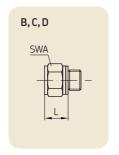
## **Dimensions**

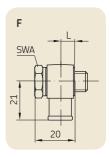


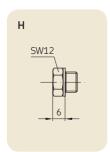


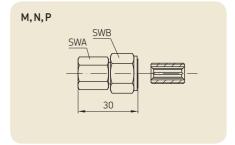
## Fittings for main line connection

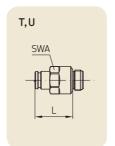
(→ page 26 for exact designation)

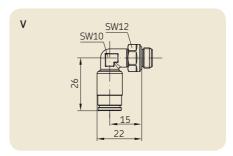


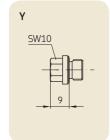












Widths across flats and lengths									
Code	В	С	D	F	М	Ν	Р	Т	U
ø main line [mm]	6	8	10	6	6	8	10	6	8
SWA	14	17	19	14	14	17	19	12	14
SW B	-	-	-	-	17	17	17	-	-
Length L [mm]	12	22	23	8	-	-	-	21	27

## Technical data

Product series 340						
Lubricant	Metered quantity [cm³]	Metering nipple	Operatir pressure min.		Relief pressure [bar]	Operating temperature [°C]
Mineral and synthetic oil 20 – 2 000 mm²/s; compatible with zinc die-cast, FKM (FPM)/	0,01 – 0,02	00 VS	12 12	45 80	max. 3 max. 3	0 – 80 0 – 80
NBR, brass, steel	0,03 – 0,16	00 VS	6 6	45 80	≤1 ≤1	0 – 80 0 – 80
Fluid grease of NLGI Grade 000, 00; compatible with zinc die-cast, NBR, brass, steel	0,03 – 0,10	00 VS	12 12	45 80	max. 3 max. 3	0 – 80 0 – 80

Mark
1
2 3
6
10 16

# Accessories

Order numbers	for metering nipp	les for oil (repla	ceable)				
ø lubrication point line [mm]	Metering nipple material	Elastomer material	Metering nipple	Metered quantity [cn 0,03	n³] 0,06	0,10	0,16
2,5 4 4 4 4	Brass Brass Brass Brass Brass	NBR NBR NBR FKM (FPM) FKM (FPM)	00 VS 00 VS 00	995-994-003 995-994-103-VS 995-994-103 341-453-S8-VS 341-453-K-S8	995-994-006 995-994-106-VS 995-994-106 341-456-S8-VS 341-456-K-S8	995-994-010 995-994-110-VS 995-994-110 341-460-S8-VS 341-460-K-S8	995-994-016 995-994-116-VS 995-994-116 341-466-S8-VS 341-466-K-S8

Order numbers for metering nipples for fluid grease (replaceable)									
ø lubrication point line [mm]	Metering nipple material	Elastomer material	Metering nipple	Metered quantity [cm³] 0,03	0,06	0,10			
4 4	Brass, nickel-plated Brass, nickel-plated	NBR NBR	VS 00	341-853-VS 341-853-K	341-856-VS 341-856-K	341-860-VS 341-860-K			

Fittings for metering nipples					
Description	ø lubrication point line [mm]	Pipe thread	Order number A	В	С
Screw plug with flat washer for solderless pipe connection	2,5 4	M6x0,75 M8x1	402-011.U1 404-011.U1	-	-
Locking pin (A) for SKF quick connectors	4	-	450-204-002	-	-
Solderless pipe connection for metal pipeline* consisting of socket union (A) double cone sleeve (B)	2,5 4	M6x0,75 M8x1	402-002 404-002	402-001 404-001	Ξ
Solderless pipe connection for plastic pipe* consisting of socket union (A), reinforcing socket (B), and tapered sleeve (C)		M6x0,75 M8x1	402-612 404-612	402-603 404-603	402-611 404-611
* For more information, → page 14.					

#### General

SKF MonoFlex single-line distributors of product series 351 are single-port prelubrication distributors for MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation in manifolds. The combination of these single-line distributors with 1- to 6-port manifolds provides flexible options for designing the lubrication system on the machine/system requiring lubrication. Manifolds customized for product series 351 are available in aluminum and stainless steel designs.

The available metered quantities are in a range from 0.05 - 0.60 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. To better distinguish between different designs, metering nipples for oil are made of brass and metering nipples for fluid grease are made of nickel-plated brass. Metering nipples made of stainless steel are untreated. The lubrication point line can be connected to the metering nipple using SKF quick connectors or solderless pipe connections (DIN 3862) depending on the selected metered quantity. Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm. The lubrication point outlet can be closed using a locking pin (SKF quick connector) or a screw plug with a flat washer (solderless pipe connection). The metering

nipples can be replaced later to yield different metered quantities. The components made of elastomers in the interior of the single-line distributors are made of NBR or FKM (FPM) depending on the design.

The distributor body is available in aluminum or stainless steel designs. The seal of the internal thread for mounting the singleport single-line distributor in a manifold is available in a flat washer design.

A sealing ring made of stainless steel will be used if a distributor body made of stainless steel is used.

See the following pages for further information on product series 351. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

Distributor body 351

Metering nipple

**VS** (SKF quick

connector)

Metering nipple

**00** (for solderless pipe connection

per DIN 3862)

The configurator on the following page **does not** allow specification of manifolds and distributors in a single order code. The manifolds are listed under Accessories and must be ordered separately.



## Technical data

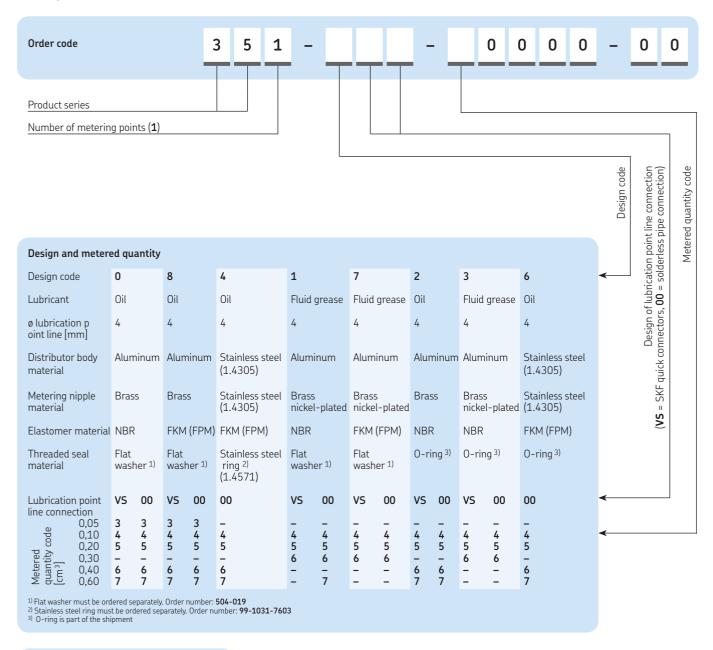
Product series 351						
Lubricant	Metered quantity [cm³]	Metering nipple	Operat pressu min.	ing re [bar] max.	Relief pressure [bar]	Operating temperature [°C]
Mineral and synthetic oil 20 – 2 000 mm²/s; compatible with aluminum, FKM (FPM)/NBR, brass, steel	0,05 – 0,60	00 VS	6	45 80	≤1 ≤1	0 – 80 0 – 80
Fluid grease of NLGI Grade 000, 00; compatible with aluminum, FKM (FPM)/NBR, brass	0,10 - 0,60	00 VS	12 12	45 80	max. 3 max. 3	0 – 80 0 – 80

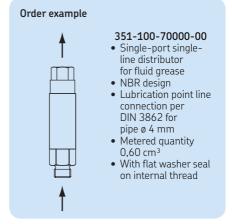
Tightening torque for assembly								
Distributor	Seal	Tightening torques [Nm]						
351-xxx-x0000-00	Flat washer	10						
351-xxx-x0000-00	Stainless steel ring	10						

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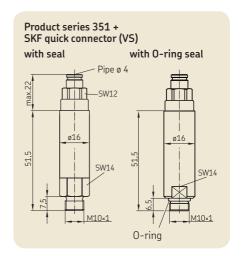
34 **5KF** 

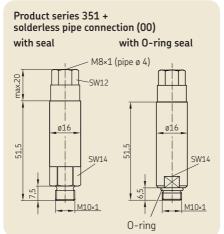
## Configurator





## **Dimensions**





Mark on metering nipple									
Metered quantity [cm³]	Mark								
0,05 0,10 0,20 0,30 0,40 0,60	0,05 0,1 0,2 0,3 0,4 0,6								

## Accessories

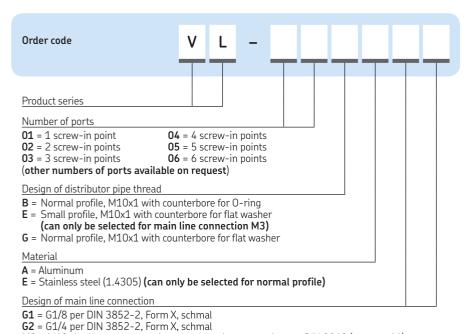
Order numbers for metering nipples for oil (replaceable)									
ø lubrication point line [mm]	Metering nipple material	Elastomer material	Metering nipple	Metered quantity [ 0,05	cm³] 0,10	0,20	0,40	0,60	
4 4 4 4	Brass Brass Brass Brass Stainless steel (1.4305)	NBR NBR FKM (FPM) FKM (FPM) FKM (FPM)	00 VS 00 VS 00	352-005-K 352-005-VS 352-005-K-S8 352-005-S8-VS	352-010-K 352-010-VS 352-010-K-S8 352-010-S8-VS 352-010-K-S3	352-020-K 352-020-VS 352-020-K-S8 352-020-S8-VS 352-020-K-S3	352-040-K 352-040-VS 352-040-K-S8 352-040-S8-VS 352-040-K-S3	352-060-K 352-060-VS 352-060-K-S8 352-060-S8-VS 352-060-K-S3	

Order numbers for metering nipples for fluid grease (replaceable)								
ø lubrication point line [mm]	Metering nipple material	Elastomer material	Metering nipple	Metered quantity [cm 0,10	1 <sup>3</sup> ] 0,20	0,30	0,60	
4 4 4 4	Brass, nickel-plated Brass, nickel-plated Brass, nickel-plated Brass, nickel-plated	NBR NBR FKM (FPM) FKM (FPM)	00 VS 00 VS	995-993-610 995-993-610-VS 352-010-K-S82 352-010-582-VS	995-993-620 995-993-620-VS 352-020-K-582 352-020-582-VS	995-993-630 995-993-630-VS 352-030-K-582 352-030-582-VS	995-993-660 - - -	

Fittings for metering nipples								
Description	ø lubrication point line [mm]	Pipe thread	Order number A	В	С			
Screw plug with flat washer for solderless pipe connection	4	M8x1	404-011.U1	-	-			
Locking pin (A) for SKF quick connectors	4	-	450-204-002	-	-			
Solderless pipe connection for metal pipeline* consisting of socket union (A) and double cone sleeve (B)	4	M8x1	404-002	404-001	-			
Solderless pipe connection for plastic pipe* consisting of socket union (A), reinforcing socket (B), and tapere sleeve (C)	M8x1	404-612	404-603	404-611				
* For more information, → page 14.								

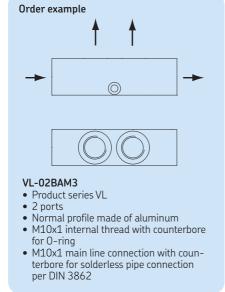
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#### Manifolds for product series 351

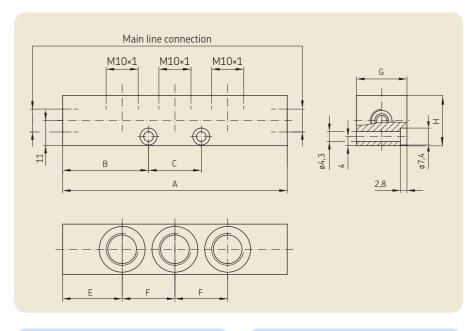


M3 = M10x1 with counterbore for solderless pipe connection per DIN 3862 ( $\rightarrow$  page 14) M4 = M14x1,5 with counterbore for solderless pipe connection per DIN 3862 ( $\rightarrow$  page 14)

(can only be selected for normal profile)



#### **Dimensions**



Normal p Main line Number of ports	<b>conn</b> Dime	ection ension	s [m	m]	F	G	Н
1 2 3 4 5	74 91 108	28,5 28,5 28,5 28,5 28,5	- 17 34 51	20 20 20 20 20	- 1×17 2×17 3×17 4×17 5×17	22 22 22 22 22	22 22 22 22 22

Normal profile B/G Main line connection M14x1,5 Number Dimensions [mm]										
of ports	Α	В	С	Е	F	G	Η			
1	52	26	_	26	_	22	22			
2	69	34,5	_	26	1×17	22	22			
3	86	34,5	17	26	2×17	22	22			
4	103	34,5	34	26	3×17	22	22			
5	128	34,5	51	26	4×17	22	22			
6	137	34,5	68	26	5×17	22	22			

Small promain line Number of ports	G	Н					
1 2 3 4 5	92 109	37,5 29	- 34 51	20,5 20,5 20,5 20,5	- 1×17 2×17 3×17 4×17 5×17	18 18 18 18	20 20 20

Normal profile B/G Main line connection G1/8 Number Dimensions [mm] of ports A B C E F G H										
1 2 3 4 5 6	51 68 85 102	25,5 25,5 25,5 25,5 25,5	- 17 34 51	17 17 17 17	- 1×17 2×17 3×17 4×17 5×17	22 22 22 22 22	22 22 22 22 22			

Normal p Main line Number of ports	F	G	Н				
1 2 3 4 5 6	63 80 97 114	31,5 31,5 31,5 31,5 31,5	- 17 34 51	23 23 23 23 23	- 1×17 2×17 3×17 4×17 5×17	22 22 22 22 22	22 22 22 22 22

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**5KF** 37

#### General

SKF MonoFlex single-line distributors of product series 350 are 2-, 3-, and 5-port prelubrication distributors for MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation directly on the machine/system requiring lubrication. SKF MonoFlex single-line distributors of product series 350 can be ordered with fittings for the main line connection. This can be indicated on the order by selecting the corresponding letter for the desired fitting in the order code.

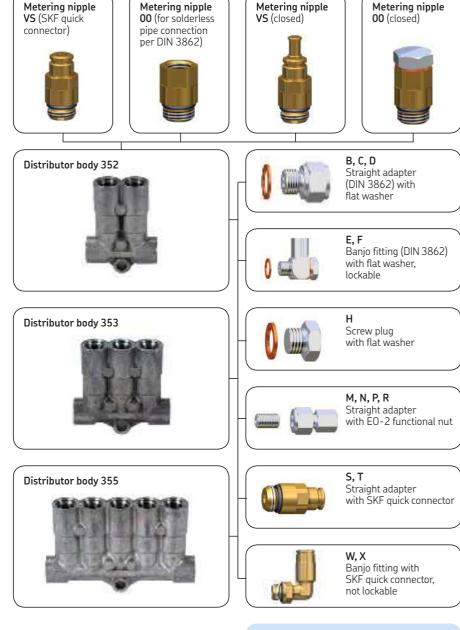
The available metered quantities are in a

range from  $0.05 - 0.60 \text{ cm}^3$ . The metering nipples have a mark indicating the metered quantity. To better distinguish between different designs, metering nipples for oil are made of brass and metering nipples for fluid grease are made of nickel-plated brass. The lubrication point line can be connected to the metering nipple using SKF quick connectors or solderless pipe connections (DIN 3862) depending on the selected metered quantity. Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm. The lubrication point outlet can be closed using a locking pin (SKF quick connector) or a screw plug with a flat washer (solderless pipe connection). The metering nipples can be replaced later to yield differ-

The components made of elastomers inside the multi-port single-line distributors are made of NBR or FKM (FPM) depending on the design.

ent metered quantities.

The distributor body is made of zinc diecast. Holes to secure the multi-port single-line distributors to the machine/system are cast in the distributor body. The main line connection on the distributor body has an M12x1 thread. Various fittings, from SKF quick connectors to screw plugs, that are matched to the thread size of the main line connection are available.

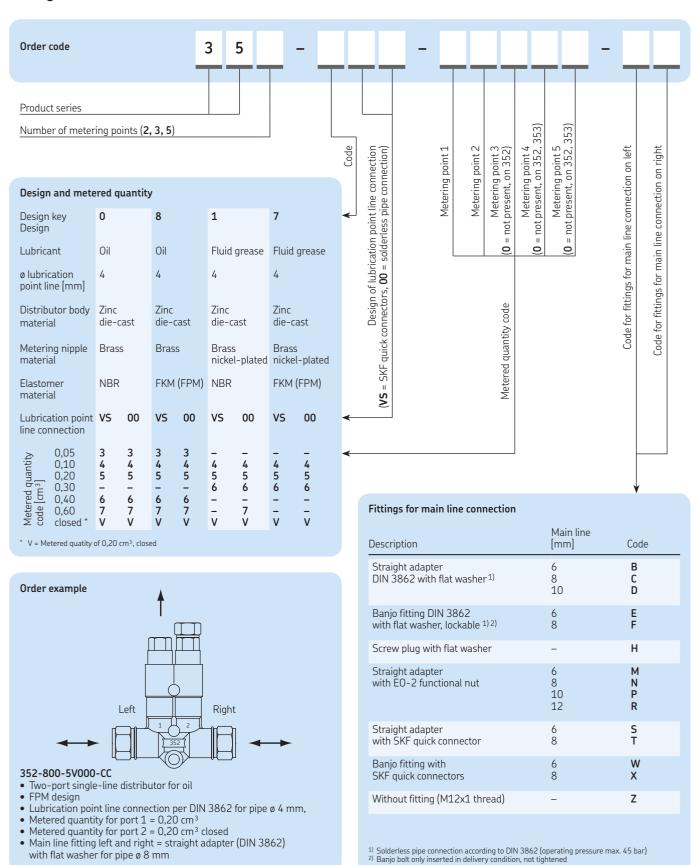


See the following pages for further information on product series 350. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

The main line fittings B – X can be mounted both on the left and the right of the distributor body. The configurator on the following page allows specification of a single-line distributor with main line fittings in a single order code.

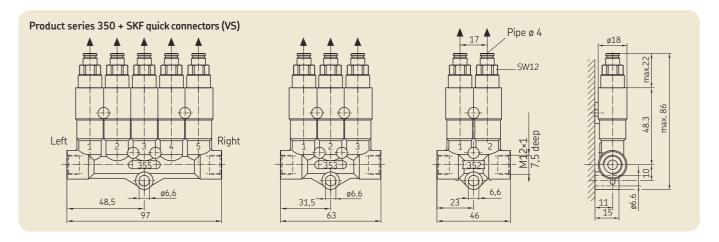
38 **5KF** 

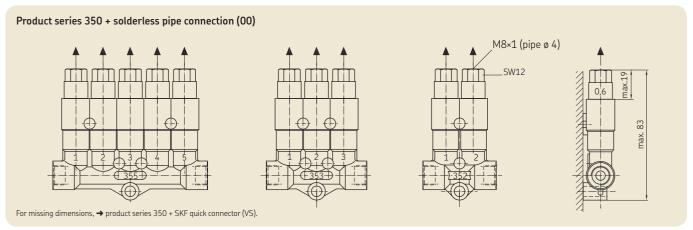
#### Configurator



with flat washer for pipe ø 8 mm

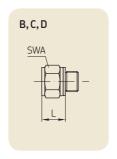
#### **Dimensions**

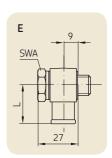


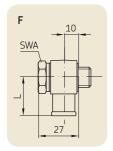


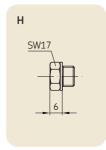
# Fittings for main line connection

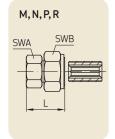
(→ page 34 for exact designation)

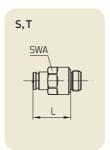


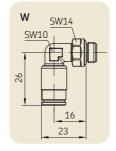


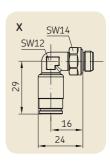












Widths across flats and lengths											
Code	В	С	D	Е	F	М	Ν	Р	R	S	Т
ø main line [mm]	6	8	10	6	8	6	8	10	12	6	8
SWA	17	17	19	17	17	14	17	19	22	14	14
SW B	-	-	-	-	-	19	19	19	19	-	-
Length L [mm]	10	20	22	25	27	32	32	31	31	21	26

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## Technical data

Product series 350  Lubricant	Metered quantity [cm³]	Metering nipple	Operati pressui min.	2	Relief pressure [bar]	Operating temperature [°C]
Mineral and synthetic oil 20 – 2 000 mm²/s; compatible with zinc die-cast, FKM (FPM)/ NBR, brass, steel	0,05 – 0,60	00 VS	6	45 80	≤1 ≤1	0 – 80 0 – 80
Fluid grease of NLGI Grade 000, 00; compatible with zinc die-cast, NBR, brass, steel	0,10 - 0,60	00 VS	12 12	45 80	max. 3 max. 3	0 – 80 0 – 80

Metered quantity [cm³]	Mark	
0,05 0,10 0,20 0,30 0,40 0,60	0,05 0,1 0,2 0,3 0,4 0,6	

## Accessories

Order numbers for metering nipples for oil* (replaceable)										
ø lubrication point line [mm]	Elastomer material	Metering nipple	Metered quantity (c 0,05	m³] 0,10	0,20	0,40	0,60			
4 4 4 4	NBR NBR FKM (FPM) FKM (FPM)	00 VS 00 VS	352-005-K 352-005-VS 352-005-K-S8 352-005-S8-VS	352-010-K 352-010-VS 352-010-K-S8 352-010-S8-VS	352-020-K 352-020-VS 352-020-K-S8 352-020-S8-VS	352-040-K 352-040-VS 352-040-K-S8 352-040-S8-VS	352-060-K 352-060-VS 352-060-K-S8 352-060-S8-VS			
* Metering nipples are made of brass.										

Order numbers	Order numbers for metering nipples for fluid grease* (replaceable)										
ø lubrication point line [mm]	Elastomer material	Metering nipple	Metered quantity [cm³] 0,10	0,20	0,30	0,60					
4 4 4 4	NBR NBR FKM (FPM) FKM (FPM)	00 VS 00 VS	995-993-610 995-993-610-VS 352-010-K-S82 352-010-S82-VS	995-993-620 995-993-620-VS 352-020-K-S82 352-020-S82-VS	995-993-630 995-993-630-VS 352-030-K-S82 352-030-S82-VS	995-993-660 - - -					
* Metering nipples are made of nickel-plated brass.											

Fittings for metering nipples					
Description	ø lubrication point line [mm]	Pipe thread	Order number A	В	С
Screw plug with flat washer for solderless pipe connection	4	M8x1	404-011.U1	-	-
Locking pin (A) for SKF quick connectors	4	-	450-204-002	-	-
Solderless pipe connection for metal pipeline* consisting of socket union (A) and double cone sleeve (B)	4	M8x1	404-002	404-001	-
Solderless pipe connection for plastic pipe* consisting of socket union (A), reinforcing socket (B), and tapered sleeve (C)	4	M8x1	404-612	404-603	404-611
* For more information, → page 14.					

#### General

SKF MonoFlex single-line distributors of product series 391 are single-port prelubrication distributors for MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation in manifolds. The combination of these single-line distributors with 1- to 6-port manifolds provides flexible options for designing the lubrication system on the machine/system requiring lubrication. Manifolds customized for product series 391 are available in an aluminum design.

The available metered quantities are a range from 0,10-1,5 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. To better distinguish between different designs, metering nipples for oil are made of brass and metering nipples for fluid grease are made of nickel-plated brass. The lubrication point line is connected to the metering nipple using a solderless pipe connection (DIN 3862). Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm. The lubrication point outlet can be closed using a screw plug with a flat washer. The metering nipples can be replaced later to yield different metered quantities. The components made of elastomers in the interior of the single-line distributors are

made of NBR or FKM (FPM) depending on the design.

The distributor body is available in an aluminum design. The seal of the internal thread for mounting the single-port single-line distributor in a manifold is available in a flat washer design.

See the following pages for further information on product series 391. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

Metering nipple 00 (for solderless pipe connection per DIN 3862)



The configurator on the following page **does not** allow specification of manifolds and distributors in a single order code. The manifolds are listed under Accessories and must be ordered separately.



#### Technical data

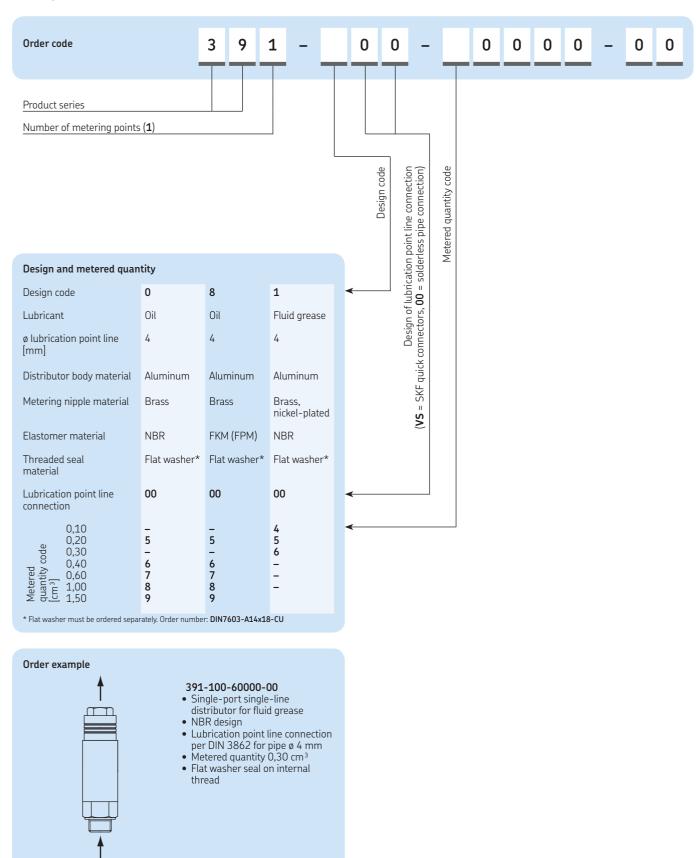
Product series 391						
Lubricant	Metered quantity [cm³]	Metering nipple	Operat pressu min.	ing re [bar] max.	Relief pressure [bar]	Operating temperature [°C]
Mineral and synthetic oil 20 – 2 000 mm²/s; compatible with aluminum, FKM (FPM)/ NBR, brass, steel	0,2 – 1,5	00	8	45	≤1	0 – 80
Fluid grease of NLGI Grade 000, 00, 0; compatible with aluminum, NBR, brass, steel	0,1 – 0,3	00	26	45	max. 7	0 – 80

Tightening torque for assembly							
Distributor	Seal	Tightening torques [Nm]					
391-8xx-x000-00	Flat washer	16					

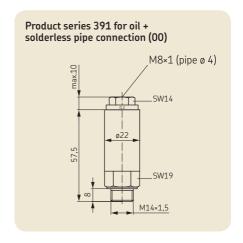
PUB LS/P2 11213 EN · 1-5001-EN

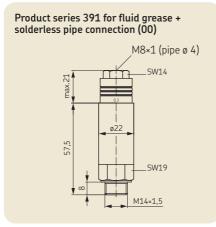
42 **5KF** 

#### Configurator



#### **Dimensions**





<b>3 nipple</b> Mark					
	_				
0,1					
0,2 0,3					
0,4					
1,0					
1,5					
	0,1 0,2 0,3 0,4 0,6 1,0				

#### Accessories

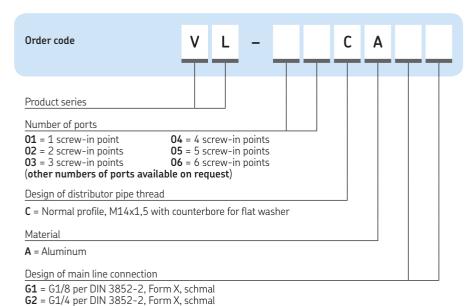
lubrication	Elastomer	Metering nipple	Metered quantity	[cm <sup>3</sup> ]			
point line [mm]	material	material	0,2	0,4	0,6	1,0	1,5
4	NBR FKM (FPM)	Brass Brass	391-020-K 391-020-K-S8	391-040-K 391-040-K-S8	391-060-K 391-060-K-S8	391-100-K 391-100-K-S8	391-150-K-S8 391-150-K-S8

Order numbers for	Order numbers for metering nipples made of nickel-plated brass for fluid grease (replaceable)							
ø lubrication point line [mm]	Elastomer material	Metering nipple material	Metered quantity [cm³] 0,1	0,2	0,3			
4	NBR	Brass, nickel-plated	391-010-K-S1	391-020-K-S1	391-030-K-S1			

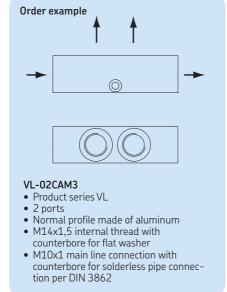
Fittings for metering nipples						
Description	ø lubrication point line [mm]	Pipe thread	Order number A	В	С	
Screw plug with flat washer for solderless pipe connection	4	M8x1	404-011.U1	-	-	
Solderless pipe connection for metal pipeline* consisting of socket union (A) and double cone sleeve (B)	4	M8x1	404-002	404-001	-	
Solderless pipe connection for plastic pipe* consisting of socket union (A), reinforcing socket (B), and tapered sleeve (C)	4	M8x1	404-612	404-603	404-611	
* For more information, → page 14.						

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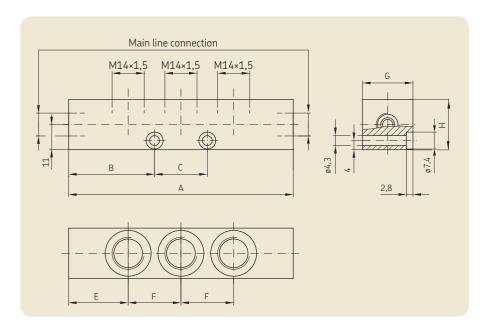
#### Manifolds for product series 391



M3 = M10x1 with counterbore for solderless pipe connection per DIN 3862 (→ page 14) M4 = M14x1,5 with counterbore for solderless pipe connection per DIN 3862 (→ page 14)



#### **Dimensions**



1 2 3 4 5 6	60 70 94 118 142 166	18 35 35 35 35 35	24 - 24 48 72 96	30 29 23 23 23 23		22 22 22	22 22 22 22 22 22 22
Normal p Main line Number of ports	<b>conn</b> Dime	ectio			<b>,5</b> F	G	Н
1 2 3 4 5	68 78 102 126 150	22 39 39 39 39	24 - 24 48 72	34 27 27 27 27	- 1×24 2×24 3×24 4×24	22 22 22 22 22 22	22 22 22 22 22 22

174 39 96 27 5×24 22 22

G H

Normal profile C

of ports A

Main line connection M10x1 Number Dimensions [mm]

В

Normal Main lin Number of ports	e conr Dime	nection ension			F	G	Н
1 2 3 4 5	54 64 88 112 136 160	32	24 - 24 48 72 96	20 20 20 20 20	JALI	22 22 22	22 22 22 22 22 22 22

Normal p Main line Number of ports	conn Dime	ecti ensio	ns [n		F	G	Н
1 2 3 4 5 6	64 76 100 124 148 172	38 38 38 38	24 48 72	26 26 26 26	- 1×24 2×24 3×24 4×24 5×24	22 22 22	22 22 22 22 22

#### General

SKF MonoFlex single-line distributors of product series 390 are 2- and 3-port prelubrication distributors for MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation directly on the machine/system requiring lubrication. SKF MonoFlex single-line distributors of product series 390 can be ordered with fittings for the main line connection. This can be indicated on the order by selecting the corresponding letter for the desired fitting in the order code.

The available metered quantities are in a range from 0,10-1,5 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. To better distinguish between different designs, metering nipples for oil are made of brass and metering nipples for fluid grease are made of nickel-plated brass. The lubrication point line is connected to the metering nipple using a solderless pipe connection (DIN 3862). Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm. The lubrication point outlet can be closed using a screw plug with a flat washer. The metering nipples can be replaced later to yield different metered quantities.

The components made of elastomers inside the multi-port single-line distributors are made of NBR or FKM (FPM) depending on the design.

The distributor body is made of zinc diecast. Holes to secure the multi-port singleline distributors to the machine/system are cast in the distributor body.

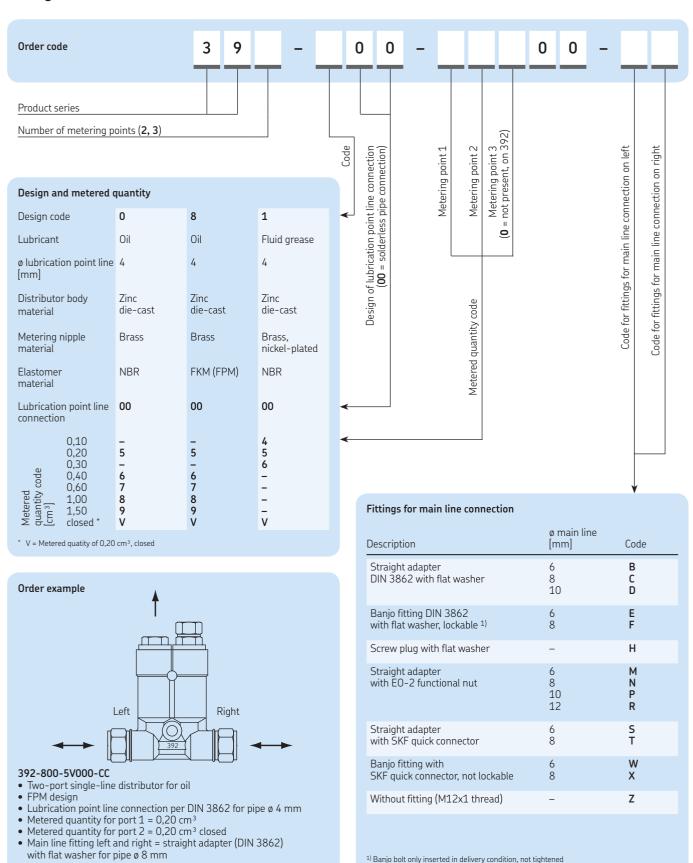


The main line connection on the distributor body has an M12x1 thread. Various fittings, from SKF quick connectors to screw plugs, that are matched to the thread size of the main line connection are available.

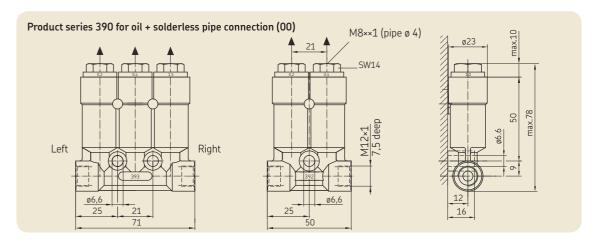
See the following pages for further information on product series 390. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

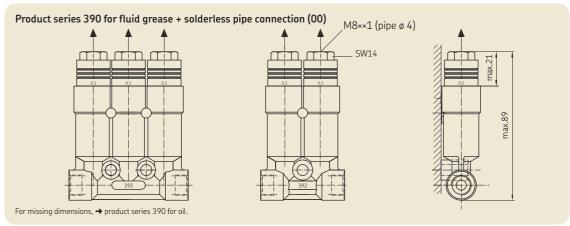
46 **5KF** 

#### Configurator



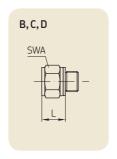
#### **Dimensions**

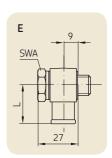


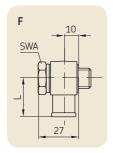


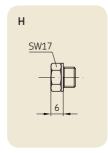
#### Fittings for main line connection

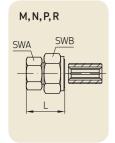
(→ page 42 for exact designation)

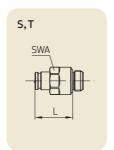


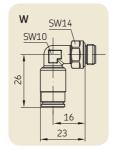


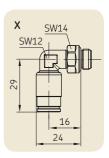












Widths across flats and lengths											
Code	В	С	D	Е	F	М	Ν	Р	R	S	Т
ø main line [mm]	6	8	10	6	8	6	8	10	12	6	8
SWA	17	17	19	17	17	14	17	19	22	14	14
SW B	-	-	-	-	-	19	19	19	19	-	-
Length L [mm]	10	20	22	25	27	32	32	31	31	21	26

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## Technical data

Product series 390  Lubricant	Metered quantity [cm <sup>3</sup> ]	Metering nipple	Operat pressu min.	ing re [bar] max.	Relief pressure [bar]	Operating temperature [°C]
Mineral and synthetic oil 20 – 2 000 mm²/s; compatible with zinc die-cast, FKM (FPM)/ NBR, brass, steel	0,2 – 1,5	00	8	45	≤1	0 – 80
Fluid grease of NLGI Grade 000, 00, 0; compatible with zindie-cast, NBR, brass, steel	0,1 – 0,3	00	26	45	max. 7	0 – 80

Mark on metering r	Mark on metering nipple				
Metered quantity [cm³]	Mark				
0,1 0,2 0,3 0,4 0,6 1,0 1,5	0,1 0,2 0,3 0,4 0,6 1,0 1,5				

## Accessories

Order numbers f	for metering ni	pples for oil (replac	ceable)				
ø lubrication point line [mm]	Elastomer material	Metering nipple material	Metered quantity [ 0,2	[cm³] 0,4	0,6	1,0	1,5
 4 4	NBR FKM (FPM)	Brass Brass	391-020-K 391-020-K-S8	391-040-K 391-040-K-S8	391-060-K 391-060-K-S8	391-100-K 391-100-K-S8	391-150-K 391-150-K-S8

Order numbers for metering nipples for fluid grease (replaceable)								
ø lubrication point line [mm]	Elastomer material	Metering nipple material	Metered quantity [cm³] 0,1	0,2	0,3			
4	NBR	Brass, nickel-plated	391-010-K-S1	391-020-K-S1	391-030-K-S1			

Fittings for metering nipples					
Description	ø lubrication point line [mm]	Pipe thread	Order number A	В	С
Screw plug with flat washer for solderless pipe connection	4	M8x1	404-011.U1	-	-
Solderless pipe connection for metal pipeline* consisting of socket union (A) and double cone sleeve (B)	4	M8x1	404-002	404-001	-
Solderless pipe connection for plastic pipe* consisting of socket union (A), reinforcing socket (B), and tapered sleeve (C)	4	M8x1	404-612	404-603	404-611
* For more information, → page 14.					

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**SKF** 49

#### General

SKF MonoFlex single-line distributors of product series VR are 1- to 12-port prelubrication distributors for MonoFlex singleline centralized lubrication systems for fluid grease and grease lubrication with greases up to NLGI Grade 2. SKF MonoFlex singleline distributors of product series VR are characterized by an innovative, compact, and sturdy design with SKF plug connector systems. With a high pressure resistance of up to 315 bar and selectable relief pressures of 30 or 70 bar, these single-line distributors allow use of single-line centralized lubrication systems, especially as an inexpensive alternative to dual-line centralized lubrication systems that are currently in use. These single-line distributors offer a broad range of possible applications due to their high level of functional reliability, especially when using greases of NLGI Grades 1 and 2, and at low ambient temperatures down to -25°C. SKF MonoFlex single-line distributors of product series VR are designed for corrosivity categories C3 and C5 per DIN EN ISO 12944 and are certified by Germanischer Lloyd. Typical applications are onshore and offshore wind energy systems, large construction machinery, the steel industry and heavy industry, as well as general mechanical engineering applications. The available metered quantities for SKF MonoFlex VR single-line distributors are in the range from 0,1 to 1,3 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. All metering nipples are equipped standard with an indicator pin that allows visual monitoring of the metering function. The lubrication point line is connected to the singleline distributor using SKF plug connectors or cutting-sleeve screw unions. In addition, a thread connection sized G1/8 is available for utilizing customer-specific fittings. The diameter of the connectable lubrication point line can be either 4 mm or 6 mm, depending on the design. Non-adjustable and adjustable meterings are available. For adjustable meterings, the metered quantity is in the range from 0,1 cm<sup>3</sup> to 1,1 cm<sup>3</sup> and is regulated by the engagement depth of the metering nipple. The adjustable meterings are factory-set to a metered quantity of  $1,1 \text{ cm}^3$ .



The components made of elastomers inside the single-line distributor are made of FKM (FPM). The distributor body is made from aluminum. The surface is anodized (black color) for long-term protection against corrosion.

The main line connection on the distributor body has a G 1/4 (DIN 3852-2 Form X) thread. SKF MonoFlex single-line distributors of product series VR can be equipped with fittings for the main line connection. Cutting-sleeve screw unions (DIN 2353) for pipe diameters of 8 mm or 10 mm or screw plugs that are matched to the thread size of the main line connection are available. This can be indicated on the order by selecting the corresponding letter for the desired combination of fittings in the order code.

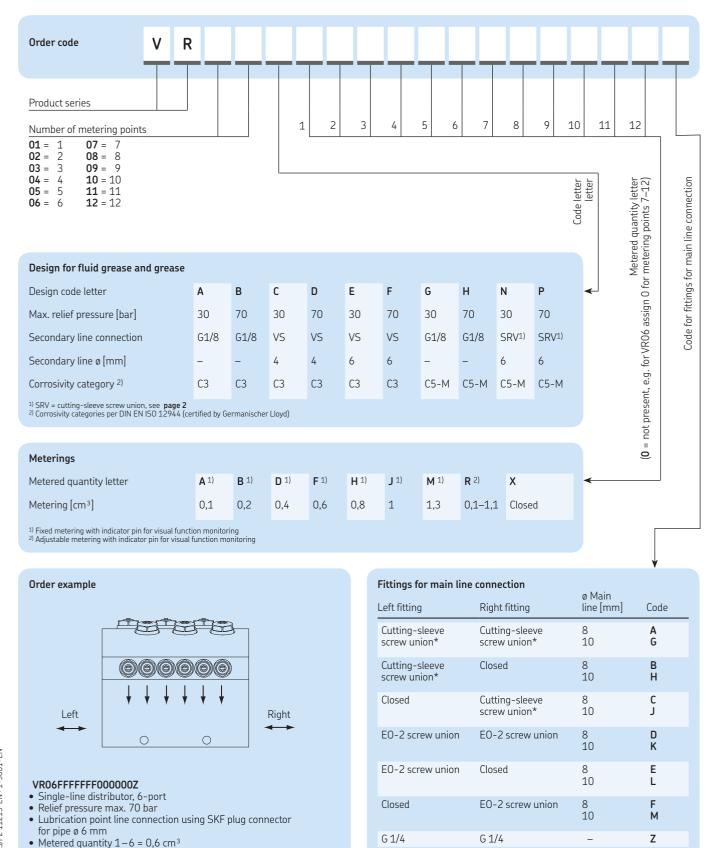
See the following pages for further information on product series VR. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

The configurator on the following page allows specification of a distributor of product series VR, complete with metering nipples and main line fittings in a single order code.

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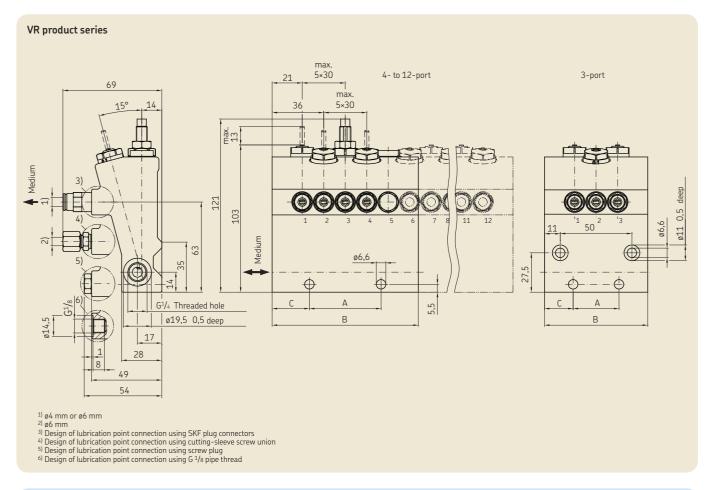
#### Configurator



\* For cutting-sleeve screw union, see page 2

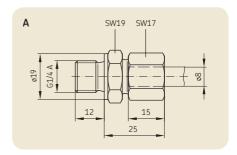
Without fitting for main line connection (G 1/4 thread)

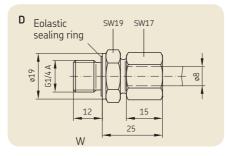
#### **Dimensions**

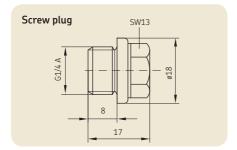


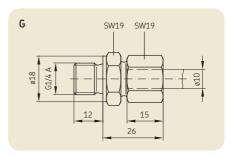
Dimensions												
Number of outlets	1	2	3	4	5	6	7	8	9	10	11	12
Dim. A [mm]	1 bore	on center	32	50	50	50	50	50	50	50	50	50
Dim. B [mm]	42	57	72	87	102	117	132	147	162	177	192	207
Dim. C [mm]	21	28,5	20	18,5	26	33,5	41	48,5	56	63,5	71	78,5

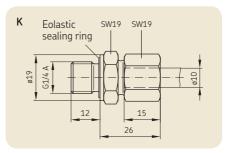
#### Dimensions - Fittings for main line connection











#### Technical data

#### Pressures and temperatures

Operating pressure min. 100 bar max. 315 bar

Relief pressure max. 30 bar selectable max. 70 bar

Lubricant Fluid greases and

greases up to NLGI Grade 2

Operating temperature -25 to +80°C

Distributor body

Anodized aluminum

Metering nipple

Anodized aluminum/ stainless steel

Indicator pin

tanness steet

mulcator pr

Stainless steel (1.4401)

Elastomers

FKM (FPM)

Mark on metering	nipple	
Metering [cm <sup>3</sup> ]	Mark	
0,1	0,1	
0,2	0,2	
0,4	0,4	
0,6	0,6	
0,8	0,8	
1,0	1,0	
1,3	1,3	

The 30-bar relief pressure should be selected in case of low flow pressure and low operating temperature of the lubricant, or when using a short main line or a large main line diameter.

The 70-bar relief pressure should be selected in case of high flow pressure and low operating temperature of the lubricant, and when using a long main line or a small main line diameter.

#### General







SKF MonoFlex single-line distributors of product series 321 are special types of single-port prelubrication distributors for SKF MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation directly in a lubrication point, which eliminates the feeding of lubricant to the lubrication point via a lubrication point line as well as the lubrication line at the lubrication point. This can be beneficial where, for example, space is limited. The single-line distributors are integrated directly into the main line of the MonoFlex single-line centralized lubrication system. A total of six special types are available that differ according to their intended application.

The available metered quantities are in the range from  $0.01-0.30~{\rm cm}^3$  depending on the special type. The single-line distributors have a mark indicating the metered quantity. The main line is connected to single-line distributor types G, T, and W using union nuts or socket unions combined with tapered sleeves. Main lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors.

The single-line distributor types G, T, and W are connected to lubrication points using a tapered threaded end; depending on the design, M8x1 taper, M10x1 taper, or R1/8 taper can be selected. See the following pages for details on lubricant feeding and the lubrication point connection on special types G4, G7 (small and large design) and Module. The components made of elastomers inside the single-line distributors are made of NBR. Several designs of type G7 are also available with elastomers made of FKM (FPM). The distributor body is made of steel (galvanized, Cr6-free) or brass depending on the type.

See the following pages for further information on product series 390. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

# Note on structure of a single-line centralized lubrication system:

Pressure buildup and reduction in main lines (connection between centralized lubrication unit and single-line distributor) can be monitored using pressure switches. In lubrication point lines (connection between single-line distributor and lubrication point), the operating pressure generated by the centralized lubrication unit does not appear immediately; the pressure therefore cannot be monitored using pressure switches. Nevertheless, to monitor lubrication point lines and thus lubrication of the bearing, the lubrication point lines must be turned into main lines. This is done using the single-port single-line distributor types G, T, and W. These single-line distributors are placed directly in the main line and feed lubricant directly into the lubrication point without utilizing a lubrication point line. By arranging the single-line distributors in the main line, pressure buildup in the main line can be monitored using pressure switches, which also allows the function of the single-line distributors to be monitored for each lubrication cycle.







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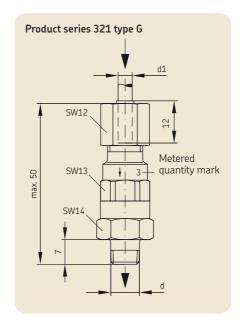
54 **SKF** 

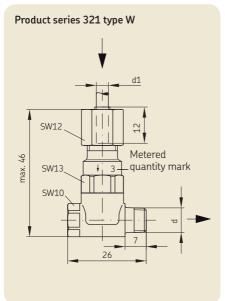
## Order numbers

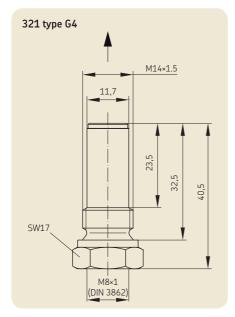
Product series 321	. – designs G, T, W*					
ø lubrication point line [mm]	Lubricant	Metered quantity [cm³]	Pipe thread of lubrication point line	321 G	321 T	321 W
4	Oil	0,01	M8×1 taper M10×1 taper R1/8 taper	321-401G1 321-401G2 321-401G3	- 321-401T2 -	- 321-401W2 -
4	Oil	0,03	M8×1 taper M10×1 taper R1/8 taper	321-403G1 321-403G2 321-403G3	321-403T1 321-403T2 321-403T3	321-403W1 321-403W2 321-403W3
4	Oil	0,06	M8×1 taper M10×1 taper R1/8 taper	321-406G1 321-406G2 321-406G3	321-406T1 321-406T2 321-406T3	321-406W1 321-406W2 321-406W3
4	Oil	0,10	M8×1 taper M10×1 taper R1/8 taper	321-410G1 321-410G2 321-410G3	321-410T1 321-410T2 321-410T3	321-410W1 321-410W2 321-410W3
6	Oil, fluid grease NLGI Grade 000, 00	0,01	M8×1 taper M10×1 taper R1/8 taper	321-601G1 321-601G2 -	- 321-601T2 321-601T3	321-601W1 321-601W2 321-601W3
6	Oil, fluid grease NLGI Grade 000, 00	0,03	M8×1 taper M10×1 taper R1/8 taper	321-603G1 321-603G2 321-603G3	321-603T1 321-603T2 321-603T3	321-603W1 321-603W2 321-603W3
6	Oil/Fluid grease NLGI Grade 000, 00	0,06	M8×1 taper M10×1 taper R1/8 taper	321-606G1 321-606G2 321-606G3	- 321-606T2 321-606T3	321-606W1 321-606W2 321-606W3
6	Oil, fluid grease NLGI Grade 000, 00	0,10	M8×1 taper M10×1 taper R1/8 taper	321-610G1 321-610G2 321-610G3	321-610T1 321-610T2 321-610T3	321-610W1 321-610W2 321-610W3
* Designs G, T, W elastome	er material NBR					

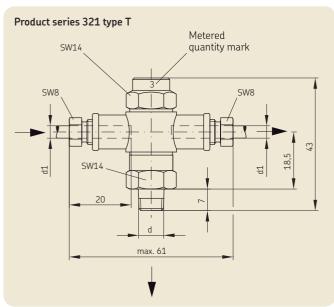
Product series 321 – designs G4, Module, G7						
Metered quantity [cm <sup>3</sup> ]	Lubricant	Elastomer material	321 G4	321 Module	321 G7 small	321 G7 large
0,01	Oil/fluid grease NLGI Grade 000, 00	NBR	-	321-101	321-401G7	-
0,03	Oil/fluid grease NLGI Grade 000, 00	NBR FKM (FPM)	321-403G4 -	321-103 -	321-403G7 321-403G7-58	Ξ
0,06	Oil/fluid grease NLGI Grade 000, 00	NBR FKM (FPM)	321-406G4 -	321-106 -	321-406G7 321-406G7-S8	Ī
0,10	Oil/fluid grease NLGI Grade 000, 00	NBR FKM (FPM)	321-410G4 -	-	321-410G7 321-410G7-58	321-610G7 -
0,16	Oil, fluid grease NLGI Grade 000, 00	NBR	-	-	-	321-616G7
0,20	Oil, fluid grease NLGI Grade 000, 00	NBR	-	-	-	321-620G7
0,30	Oil, fluid grease NLGI Grade 000, 00	NBR	-	-	-	321-630G7

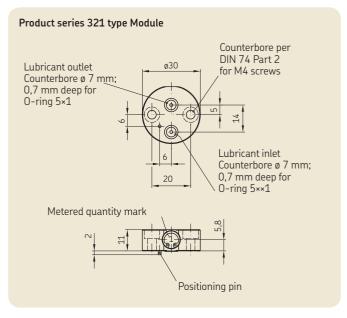
#### **Dimensions**

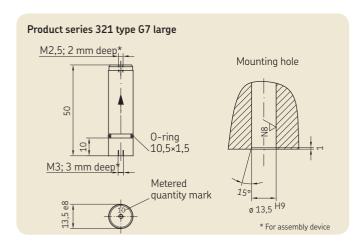


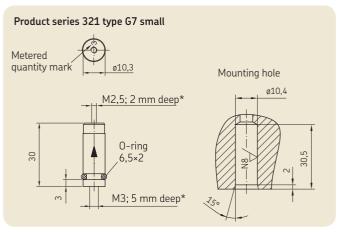












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#### Technical data

#### Pressures and temperatures

min. 12 bar Operating pressure

max. 45 bar

Relief pressure max. 3 bar

Mineral and synthetic oil Lubricant

 $20 - 2000 \text{ mm}^2\text{/s}$ ; compatible with NBR,

or

Fluid grease of NLGI Grade 000, 00; compatible with NBR (type G7 small: also FKM [FPM]), brass, steel

Operating temperature 0 to +80 °C

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#### General

SKF MonoFlex single-line distributors of product series VN are 2-, 4-, and 6-port relubrication distributors for MonoFlex single-line centralized lubrication systems for fluid grease lubrication. These single-line distributors are designed for installation directly on the vehicle/construction machine requiring lubrication. SKF MonoFlex single-line distributors of product series VN can be ordered with fittings for the main line connection. This can be indicated on the order by selecting the corresponding letter for the desired fitting in the order code.

The available metered quantities are in a range from 0.05 - 1.00 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. The metering nipples are made of brass. The lubrication point line can be connected to the single-line distributor using SKF quick connectors or solderless pipe connections (DIN 3862). Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm. The lubrication point outlet can be closed using a locking pin (SKF quick connector) or a screw plug with a flat washer (solderless pipe connection). The metering nipples can be replaced later to yield different metered quantities.

The components made of elastomers inside the multi-port single-line distributors are made of NBR.

The distributor body is made of zinc diecast. The surface of the distributor bodies is painted black for optimum corrosion protection. Holes to secure the multi-port relubrication distributors to the vehicle/construction machine are cast in the distributor body.

The main line connection on the distributor body has a counterbore for mounting a solderless pipe connection for metal or plastic pipe diameter of 10 mm (M16x1,5 thread). Various fittings, from SKF quick connectors to screw plugs, that are matched to the thread size of the main line connection are available.

See the following pages for further information on product series VN. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.



The following main line fittings A–S can be mounted both on the left and the right of the distributor body. The configurator on the following page allows specification of a single-line distributor with main line fittings in a single order code.





A, Straight adapter (DIN 3862) with flat washer



E, F, G Banjo fitting (DIN 3862) with flat washer, lockable





H Screw plug with flat washer



Straight adapter with SKF quick connector



Lubrication point line connection VS (SKF plug connector)



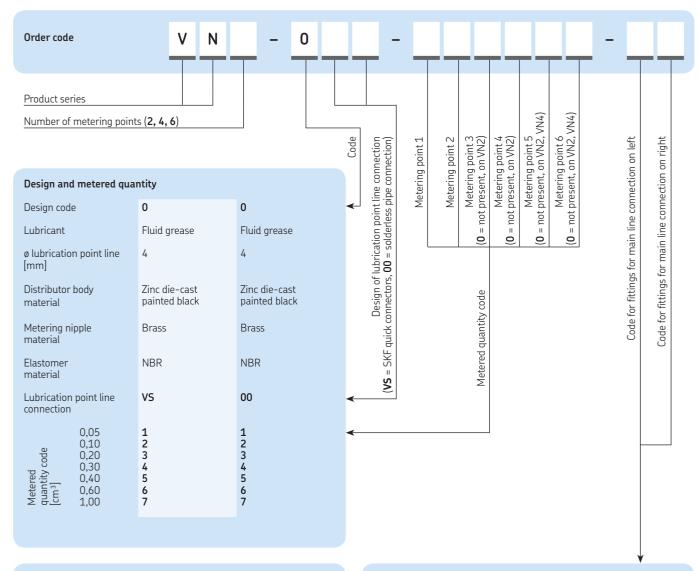
Lubrication point line connection 00 (for solderless pipe connection per DIN 3862)

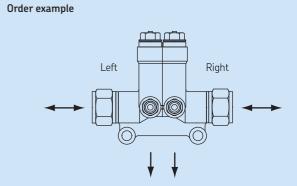


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#### Configurator





#### VN2-0VS-330000-AA

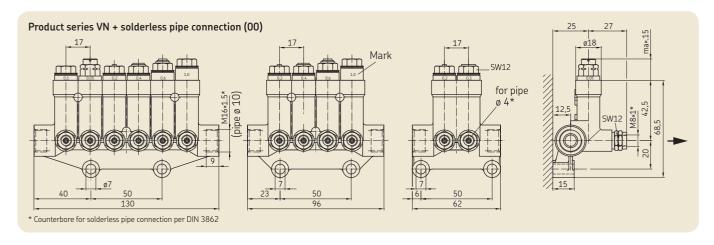
- Two-port single-line distributor for fluid grease
- NBR design
- Lubrication point line connection using SKF quick connector for pipe ø 4 mm,
- Metered quantity for ports 1 and 2 = 0,20 cm<sup>3</sup>
- Main line fitting left and right = straight adapter (DIN 3862) with flat washer for pipe ø 8 mm

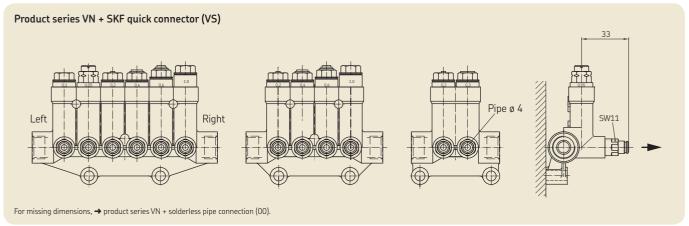
-:	c	11	
-ittings	ror mai	ın une	connection

Description	ø main line [mm]	Code
Straight adapter DIN 3862 with flat washer 1)	8	Α
Banjo fitting DIN 3862 with flat washer, lockable <sup>1) 2)</sup>	6 8 10	E F G
Screw plug with flat washer	-	Н
Straight adapter with SKF quick connector	10	S
Without fitting, solderless pipe connection 1)	-	Z

 $^{1)}$  Solderless pipe connection according to DIN 3862 (operating pressure max. 45 bar)  $^{2)}$  Banjo bolt only inserted in delivery condition, not tightened

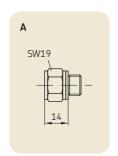
#### **Dimensions**

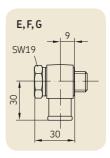


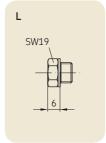


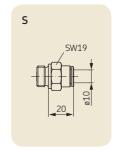
## Fittings for main line connection

(→ page 54 for exact designation)









## Technical data

Product series VN						
Lubricant	Metered quantity [cm³]	Lubrication point line connection	Operating p	pressure [bar] max.	Relief pressure [bar]	Operating temperature [°C]
Fluid grease of NLGI Grade 000, 00; compatible with zinc die-cast, NBR, brass, steel	0,05 – 1,00	00 VS	20 20	45 80	≤1 ≤1	-25 to +80 -25 to +80

## Accessories

Order numbers for metering nipples* (replaceable)										
ø Lubrication point line [mm]	Elastomer material	Metered quar 0,05	etered quantity [cm³] 05 0,10 0,20 0,30 0,40 0,60 1,00							
4	NBR	VKU005-K	VKU010-K	VKU020-K	VKU030-K	VKU040-K	VKU060-K	VKU100-K		

Fittings for metering nipples					
Description	ø lubrication point line [mm]	Pipe thread	Order number A	В	С
Screw plug with flat washer for solderless pipe connection	4	M8x1	404-011.U1	-	-
Locking pin (A) for SKF quick connectors	4	-	450-204-002	-	-
Solderless pipe connection for metal pipeline* consisting of socket union (A) and double cone sleeve (B)	4	M8x1	404-002	404-001	-
Solderless pipe connection for plastic pipe* consisting of socket union (A), reinforcing socket (B), and tapered sleeve (C)	4	M8x1	404-612	404-603	404-611
* For more information, → page 14.					

#### General

SKF MonoFlex single-line distributors of product series 370 are 2-, 3-, and 5-port relubrication distributors for MonoFlex single-line centralized lubrication systems for oil lubrication. These single-line distributors are designed for installation

directly on the machine/system requiring lubrication. SKF MonoFlex single-line distributors of product series 370 can be ordered with fittings for the main line connection. This can be indicated on the order by selecting the corresponding letter for the desired fitting in the order code.

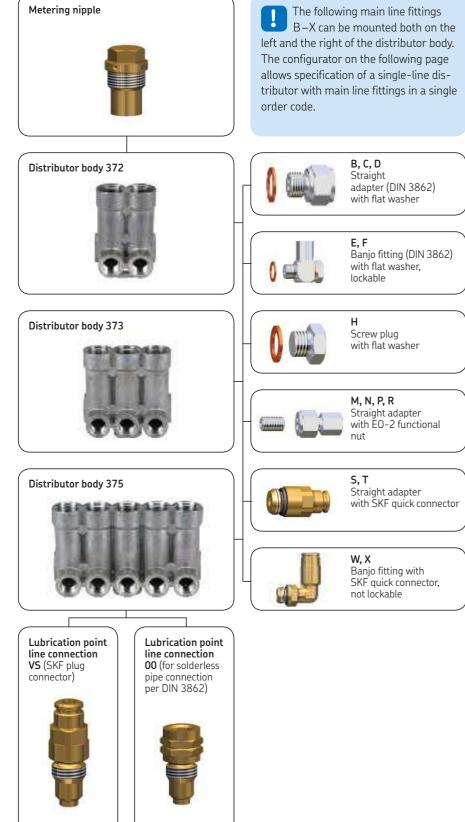
The available metered quantities are in a range from 0.05 - 1.50 cm<sup>3</sup>. The metering nipples have a mark indicating the metered quantity. The metering nipples are made of brass. The lubrication point line can be connected to the single-line distributor using SKF quick connectors or solderless pipe connections (DIN 3862). Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm. The lubrication point outlet can be closed using a locking pin (SKF quick connector) or a screw plug with a flat washer (solderless pipe connection). The metering nipples can be replaced later to yield different metered quantities.

The components made of elastomers inside the multi-port single-line distributors are made of NBR.

The distributor body is made of zinc diecast. Holes to secure the multi-port relubrication distributors to the machine/system are cast in the distributor body.

The main line connection on the distributor body has an M12x1 tapped bore. Various fittings, from SKF quick connectors to screw plugs, that are matched to the thread size of the main line connection are available.

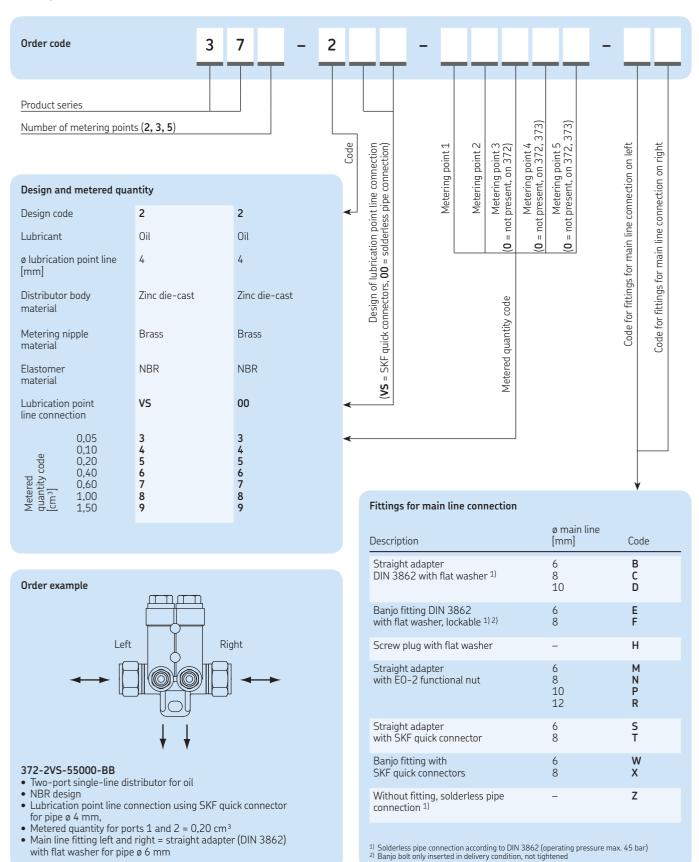
See the following pages for further information on product series 370. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.



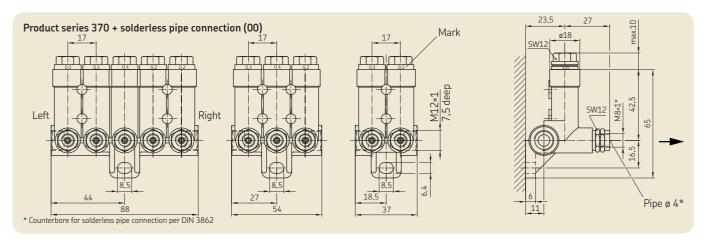
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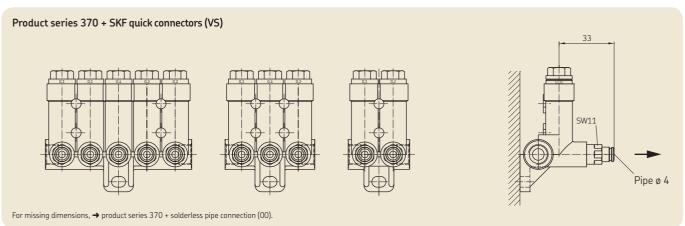
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#### Configurator



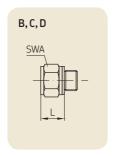
#### **Dimensions**

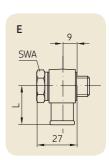


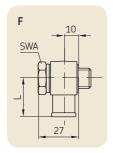


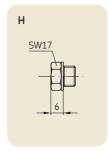
#### Fittings for main line connection

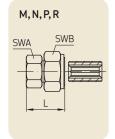
(→ page 58 for exact designation)

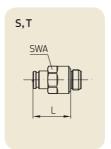


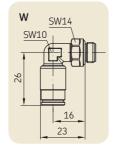


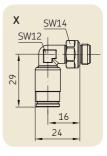












Widths across flats and lengths											
Code	В	С	D	Е	F	М	Ν	Р	R	S	Т
ø main line [mm]	6	8	10	6	8	6	8	10	12	6	8
SWA	17	17	19	17	17	14	17	19	22	14	14
SW B	-	-	-	-	-	19	19	19	19	-	-
Length L [mm]	10	20	22	25	27	32	32	31	31	21	26

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## Technical data

Product series 370						Operating
Lubricant	Metered quantity [cm³]	Lubrication point line connection	Operating pr min.	ressure [bar] max.	Relief pressure [bar]	temperature [°C]
Mineral and synthetic oil 20 – 2 000 mm²/s; compatible with zinc die-cast, NBR, brass, steel	0,05 – 1,5	00 VS	20 20	40 80	≤1 ≤1	-25 to +80 -25 to +80

Metered quantity [cm <sup>3</sup> ]	Mark
0,05	0,05
0,10	0,1
0,20	0,2
0,40	0,4
0,60	0,6
1,00	1,0
1,50	1,5

## Accessories

Order numbers for metering nipples* (replaceable)									
ø lubrication point line [mm]	Elastomer material	Metered quar 0,05	ntity [cm³] 0,10	0,20	0,40	0,60	1,00	1,50	
4	NBR	V72-005	V71-010	V71-020	V71-040	V71-060	V71-100	V71-150	

Fittings for metering nipples					
Description	ø lubrication point line [mm]	Pipe thread	Order number A	В	С
Screw plug with flat washer for solderless pipe connection	4	M8x1	404-011.U1	-	-
Locking pin (A) for SKF quick connectors	4	-	450-204-002	-	-
Solderless pipe connection for metal pipeline* consisting of socket union (A) and double cone sleeve (B)	4	M8x1	404-002	404-001	-
Solderless pipe connection for plastic pipes* consisting of socket union (A), reinforcing socket (B), and tapered sleeve (C)	4	M8x1	404-612	404-603	404-611
* For more information, → page 14.					

#### General

SKF MonoFlex single-line distributors of product series 361 are single-port dynamic distributors for MonoFlex single-line centralized lubrication systems for oil and fluid grease lubrication. These single-line distributors are designed for installation in manifolds. The combination of these single-line distributors with 1- to 6-port manifolds provides flexible options for designing the lubrication system on the machine/system requiring lubrication. Manifolds customized for product series 361 are available in an aluminum design.

The available metered quantities are in a range from 0.01 - 0.20 cm<sup>3</sup>. The distributor bodies have a mark indicating the metered quantity. Depending on the minimum actuating pressure, the single-line distributors can only be used for oil (minimum actuating pressure of 8 bar) or for oil and fluid grease (minimum actuating pressure of 25 bar). The lubrication point line is connected to the dynamic distributor using a tapered sleeve union consisting of a tapered sleeve and a union nut. Lubrication point lines can be connected that are made of metal pipe, plastic pipe, or hose lines with metal pipe connectors. The diameter of the lubrication point line that will be connected is 4 mm.

The components made of elastomers inside the single-port single-line distributor are made of NBR.





The distributor body of the design for oil is made of brass. The design for oil/fluid grease has a distributor body made of steel (galvanized, Cr6-free). The seal of the internal thread for mounting the single-port single-line distributor in a manifold is available in a flat washer design.

See the following pages for further information on product series 361. Details on accessories for SKF MonoFlex single-line centralized lubrication systems are part of this catalog.

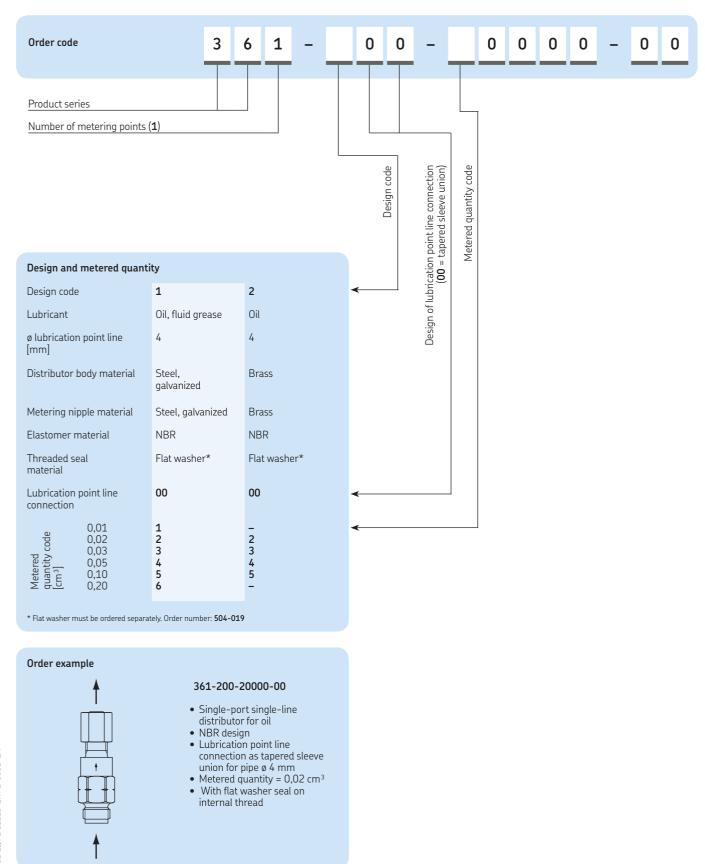
Note on structure of a single-line centralized lubrication system:

MonoFlex single-line centralized lubrication systems with dynamic distributors can be equipped with a 4/2 directional control valve. The single-line centralized lubrication system must be designed such that the main line is preloaded to approx. 6 bar when the lubrication unit is running. For the lubrication procedure, the 4/2 directional control valve is switched so that the dynamic distributors are suddenly pressurized. This layout allows a significant increase in the lubrication cycle frequency, as required, for example, for chain lubrication when using small chain links or at high chain speeds. This allows lubrication cycle frequencies of up to 5 cycles/second to be achieved using low-viscosity lubricants.

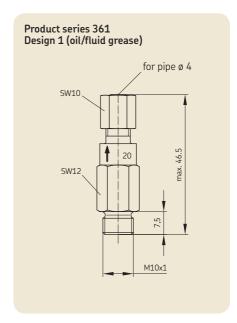
The configurator on the following of manifolds and distributors in a single order code. The manifolds are listed under Accessories and must be ordered separately.

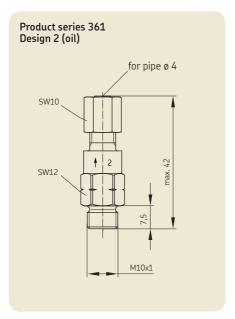
page **does not** allow specification

#### Configurator



#### **Dimensions**





#### Technical data

Product series 361											
Design	Lubricant	Metering quantity [cm³]	Operat pressu min.	ing re [bar] max.	Relief pressure [bar]	Operating temperature [°C]					
1	Mineral and synthetic oil 100 – 1 000 mm²/s and fluid grease of NLGI Grade 000, 00; compatible with NBR, brass, steel	0,01 – 0,20	25	80	≤1	0 – 80					
2	Mineral and synthetic oil 10 – 500 mm²/s; compatible with NBR, brass, steel	0,02 – 0,10	8	40	max. 3	0 – 80					

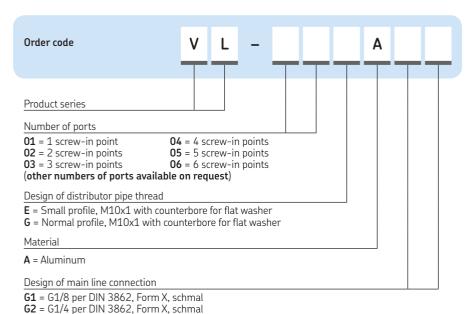
Mark on metering nipple							
Metered quantity [cm³]	Mark						
0,01 0,02 0,03 0,05 0,10 0,20	1 2 3 5 10 20						

Tightening torque for assembly								
Distributor	Seal	Tightening torques [Nm]						
361-xxx-x0000-00	Flat washer	10						

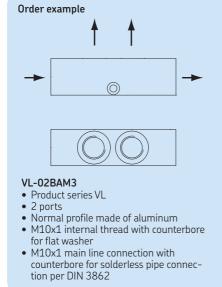
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#### Manifolds for product series 361

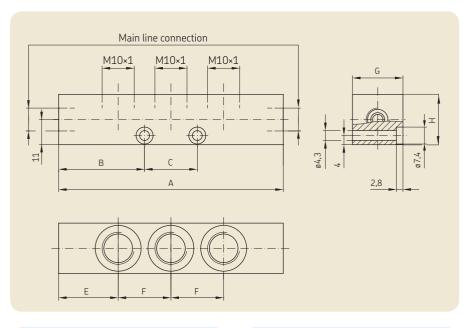
(can only be selected for normal profile)



M3 = M10x1 with counterbore for solderless pipe connection per DIN 3862 ( $\rightarrow$  page 14) M4 = M14x1 with counterbore for solderless pipe connection per DIN 3862 ( $\rightarrow$  page 14)



#### **Dimensions**



Normal p Main line Number	conr Maße	ection [mm]			_	6	
of ports	А	В	С	E	F	G	Н
1 2 3 4 5	74 91 108	28,5 28,5 28,5	- 17 34 51	20 20 20 20 20	- 1×17 2×17 3×17 4×17 5×17	22 22 22 22 22	22 22 22 22 22

Normal profile G Main line connection M14x1,5 Number Maße [mm]									
of ports			С	Е	F	G	Н		
1 2 3 4 5	86 103 128	34,5 34,5 34,5 34,5 34,5	- 17 34 51	26 26 26 26	- 1×17 2×17 3×17 4×17 5×17	22 22 22 22 22	22 22 22 22 22		

Small promain lin Main lin Number of ports	e con Maß	<b>nectio</b> e [mm	]		F	G	Н
1 2 3 4 5 6	41 58 75 92 109 126	20,5 29 37,5 29 29	- 34 51	20,5 20,5 20,5 20,5	- 1×17 2×17 3×17 4×17 5×17	18 18 18 18	20 20 20

Normal   Main line Number of ports	e conn Maße	ection [mm]		<b>/8</b>	F	G	Н
1 2 3 4 5 6	34 51 68 85 102 119	25,5 25,5 25,5	- 17 34 51	17 17 17 17	- 1×17 2×17 3×17 4×17 5×17	22 22 22	22 22 22 22 22

Normal Main line Number of ports	e conr Maße	ection [mm]	•	/ <b>4</b> E	F	G	Н
1 2 3 4 5 6	46 63 80 97 114 131	31,5 31,5 31,5	- 17 34 51	23 23 23 23 23	- 1×17 2×17 3×17 4×17 5×17	22 22 22	22 22 22 22 22

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These competence areas include bearings and units, seals, lubrication systems, mechatronics, and a wide range of services, from 3-D computer modelling to cloud-based condition monitoring and asset management services.

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#### Additional brochures for further information

1-0103-EN Fittings and Accessories
1-0116-EN Filters
1-1202-EN Gear pump units product series MFE
1-1203-EN Gear pump units product series MKx
1-1701-EN Pressure Switches Product series DSA, DSB, DSC, DSD
1-3030-EN Reservoir pump units of the KFG (S)(C) series
1-9201-EN Transport of Lubricants in Centralized Lubrication Systems

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