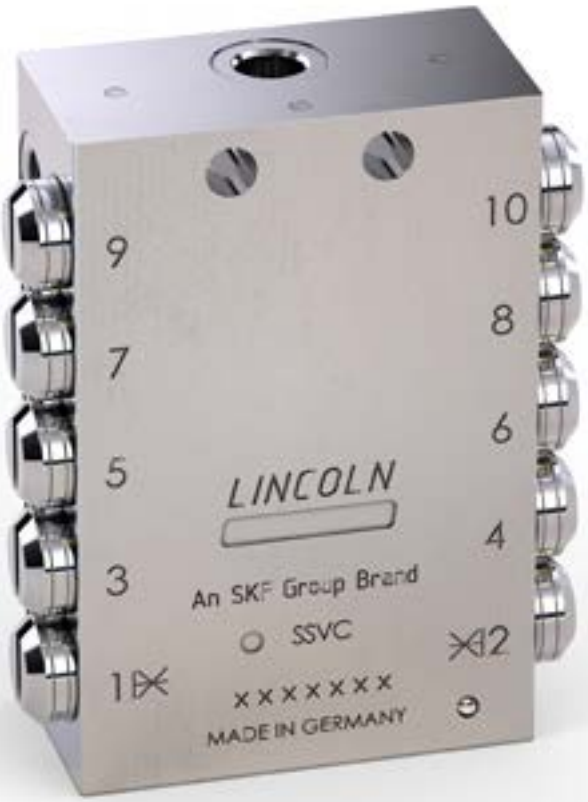
Metering device SSVC

Progressive metering device for oil and grease
with flexible internal cross-porting options

CURRENTLY ONLY AVAILABLE IN STAINLESS STEEL DESIGNS, CARBON STEEL DESIGNS COMING SOON



- Oil and grease up to NLGI 2
- up to 350 bar *(5 075 psi)*
- –40 to +120°C *(–40 to 248°F)*
- 0.2 cm^3 (*0.01 in^3*) per stroke/outlet
- 6–22 outlets

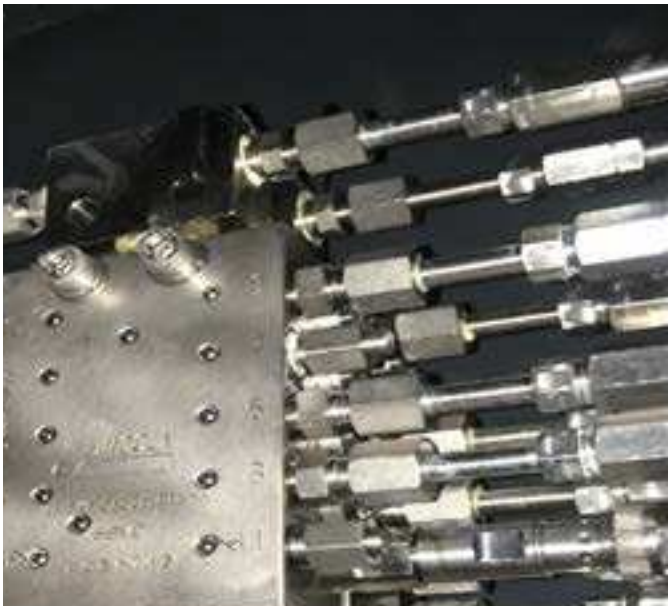
Applications

- Food and beverage machines
- Farm and forestry machinery
- Chemical process machines
- Construction and mining
- Renewable energies
- Industrial equipment
- Automotive industry
- Marine industry
- Harbor cranes

Gain machine reliabililty, flexibility and productivity

Did you know that there is a connection between higher process speeds and lubrication?

In many cases the only way to increase productivity with existing machinery is to increase process speed or machine uptime. But both results in higher friction and wear. This means that reliable lubrication is required to adequately meet these challenges. SKF progressive systems with SSVC metering devices allow the quantities of lubricant to be quickly and easily adjusted to actual requirements using a smart control system.



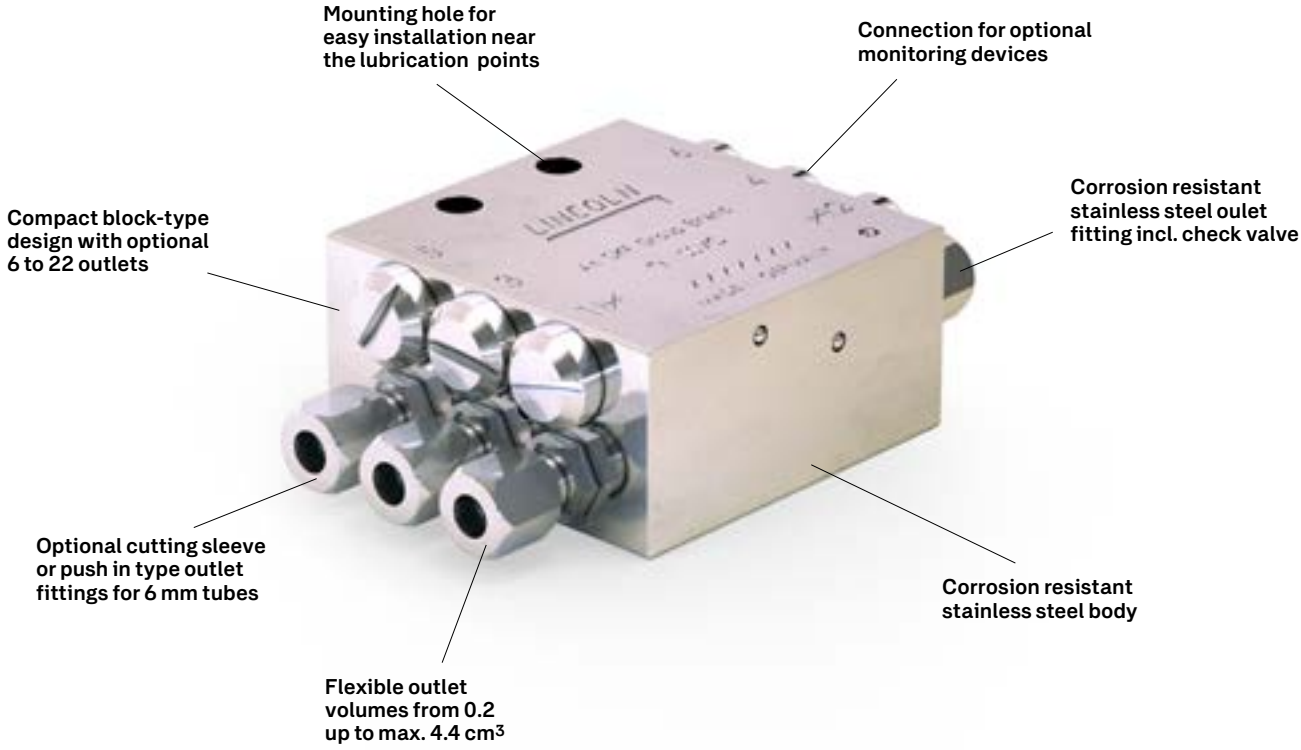
Did you know that a lack of flexibility means increasing costs?

The installation conditions of machine parts do not always correspond to the specifications of the planners and engineers. Limited space and difficult access can quickly lead to production delays and extended maintenance times. It's nice if it's possible to build on solutions that allow for flexible use because they offer the opportunities to adapt to changing requirements. SSVC progressive distributors are highly flexible in use thanks to their unique design that offers a wealth of internal cross-porting options. The SSVC is currently one a view progressive block metering devices in the world that allows all lubrication lines to exit from just one outlet side of the device.

Do you face issues caused by corrosion, friction and wear?

Friction and wear occur across the entire value chain. Corrosion and wear reduce machines' service lives and create unplanned down time. The result is associated undesirable loss of sales and increasingmainteance costs. Moving machine components need in respect to lubrication a special treatment. Market proven lubrication systems build of robust components offered by expertised supplier make a huge difference here. SKF lubrication systems are made to make all moving parts of your machines automatically supplied with the right amount of the right lubricant at the right time, allowing the machine to operate almost continuously and almost smoothly. SSVC metering devices are core elements of SKF's reliable, automatic progressive lubrication systems - made of stainless steel for applications with contact to high humidity, chemicals or sea water.

Product information



Description

SSVC are block-type progressive metering devices that divide the incoming lubricant reliably into preset individual volumes. With these devices, opposite outlets are separated from each other by set screws. By removing these screws and using special outlet fittings, outlets can be combined internally to increase outlet volumes. This unique “cross-porting” concept allows for a maximum number of possible outlet combinations. SSVC metering devices are designed for oil and grease systems with a maximum operating pressure of 350 bar. They are made in nine different designs with 6 to 22 outlets. Operation monitoring is possible by using an indicator pin for visual system monitoring or piston detectors for electrical system monitoring. SSVC outlet fittings are combined with check-valves to achieve optimal operational performance even with demanding applications.

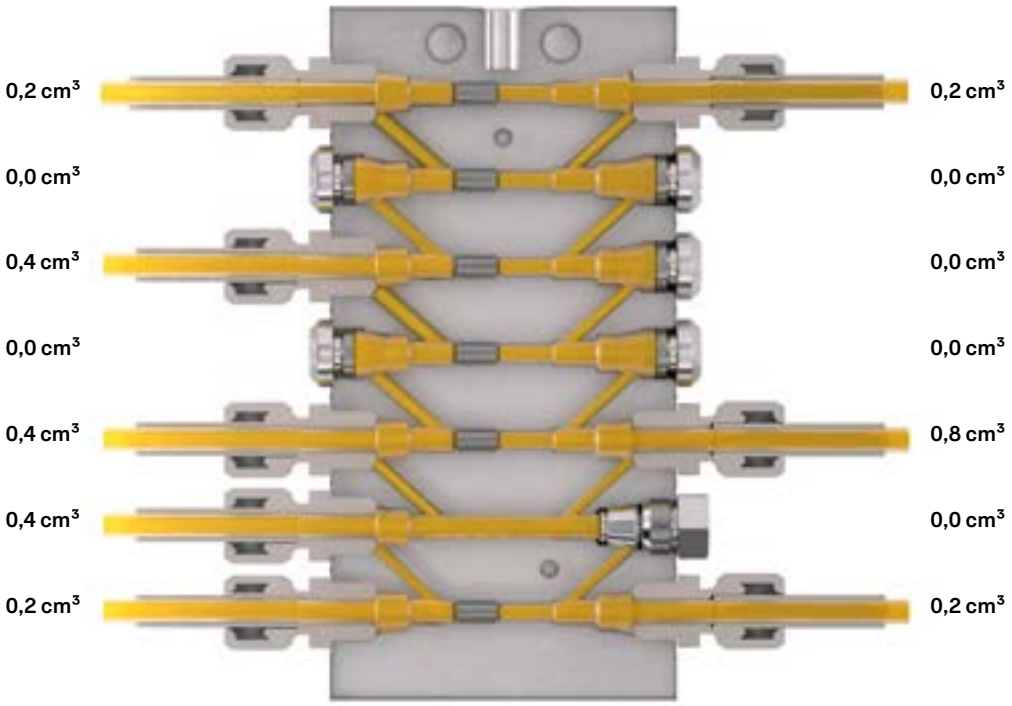
Features and benefits

- 6 to 22 outlets designs
- Made from stainless steel
- Easy to install and customize
- A variety of cross-porting options
- Several reliable monitoring options
- Suitable for oil and grease applications
- Operation also with high backpressures
- Lubrication line connection on only one SSVC outlet side possible

Technical data

Function principle	block-type progressive metering device
Lubricants	
Grease	up to NLGI 2
Oil	at least 40 mm^2/s
Number of outlets	6 to 22
Metering quantity per outlet	0.2 cm^3; *0.01 in^3*
Operating temperature	−40 to +120 °C; *−40 to +248 °F*
Operating pressure	min. 20 bar; *min. 290 psi*
	max. 350 bar; *max. 5 075 psi*
Material	stainless steel 1.4305
Connection inlet	G1/8 or NPTF1/8
Connection outlet	M10×1
Weight	0.8 to 2.4 kg; *1.76 to 5.29 lbs*
Dimensions (min. and max.)	
SSVC 6	60 × 60 × 30 mm *2.36 × 2.36 × 1.18 in*
SSVC 22	180 × 60 × 30 mm *7.08 × 2.36 × 1.18 in*
Mounting position	any

Design example



Internal cross-porting

Standard closing plug:
Single unneeded outlets can be closed by means of the standard closing plug. The lubricant volume is increased at the next lower open outlet by the lubricant volume of the closed outlet.

Cross-porting closing plug:
By removing the corresponding set screw the connection between two opposite outlets becomes opened. By afterwards closing one of these outlets with a cross-porting closing plug the output on the opposite side becomes increased by the lubricant volume of the closed outlet.

Combinations of cross-porting and standard closing plug:
By combining cross-porting closing plugs and standard closing plugs, the lubricant volumes become even further increased on open outlets. For large metering volumes as many outlets as wanted can be cross-ported to one outlet.

Standard closing plug (Enables outlet combination with the next lower level)

Outlet fitting incl. check valve (Enables normal lubricant outlet as well as outlet combination with the next higher level)

Cross-porting closing plug (Enables combination of outlets on one level)

Set screw (M4×8) (Separates the outlets of one level)

Monitoring options

Universal piston detector

The universal piston detector is a position sensor that is screwed into a metering device together with the relevant pressure-resistant adapter. The sensor detects the piston by means of the closed adapter without coming into direct contact with it. It adjusts itselves independently after several distribution strokes. The universal piston detector automatically detects the customer's plug or cable assignment, 2-wire or 3-wire version (with cable break protection). The signal voltage can be applied to either pin 1 or pin 4.
This sensor can be used for many industrial and mobile applications such as vehicles or agricultural and construction machinery.

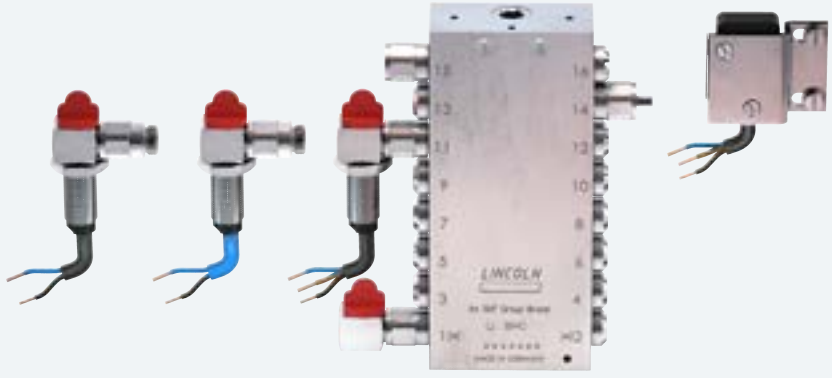
Features and benefits

- Timer setting on external controller detects operational function signal
- Suitable for standard applications
- SKF's so-called inductive piston detector is suitable for applications with strong magnetic fields

Factory set monitoring options

- visual monitoring via indicator pin
- electric monitoring via indicator pin and limit switch
- 0-230 V potential free dry contact no/nc
- electric monitoring via indicator pin with proximity switch adapter
- electric monitoring via indicator pin with proximity switch (2 wires), AC 110-230 V
- electric monitoring via indicator pin with proximity switch (3 wires), DC 10-36 V, PNP
- electric monitoring via indicator pin with proximity switch (EX design), applications in hazardous areas

SSVC factory set monitoring options



Order information

SSVC designs

SSVC designs

Order number	Number of outlets	Designation	Inlet thread	Outlet thread	Weight	
					kg	*lbs*
619-78154-1	6	MET.DEV. SSVC 6 (VA 1.4305)	G1/8	M10×1	0.8	*1.76*
619-78155-1	8	MET.DEV. SSVC 8 (VA 1.4305)	G1/8	M10×1	1.0	*2.20*
619-78156-1	10	MET.DEV. SSVC10 (VA 1.4305)	G1/8	M10×1	1.2	*2.64*
619-78157-1	12	MET.DEV. SSVC12 (VA 1.4305)	G1/8	M10×1	1.4	*3.08*
619-78158-1	14	MET.DEV. SSVC14 (VA 1.4305)	G1/8	M10×1	1.6	*3.52*
619-78159-1	16	MET.DEV. SSVC16 (VA 1.4305)	G1/8	M10×1	1.8	*3.96*
619-78160-1	18	MET.DEV. SSVC18 (VA 1.4305)	G1/8	M10×1	2.0	*4.40*
619-78161-1	20	MET.DEV. SSVC20 (VA 1.4305)	G1/8	M10×1	2.2	*4.85*
619-78162-1	22	MET.DEV. SSVC22 (VA 1.4305)	G1/8	M10×1	2.4	*5.29*

Fittings

Order number	Descripton	Thread	Tube Ø
			mm
226-10622-8	Inlet push-in fitting GEKM 6510-6-1/8-S01	R1/8	6
223-13614-9	Inlet cutting sleeve fitting GE 6 LLR 1/8 K (1.4571)	R1/8	6
226-14091-4	Outlet push-in fitting RV-6-M10x1-S01	M10×1	6
504-31705-1	Outlet cutting sleeve fitting (1.4571)	M10×1	6

226-10622-8

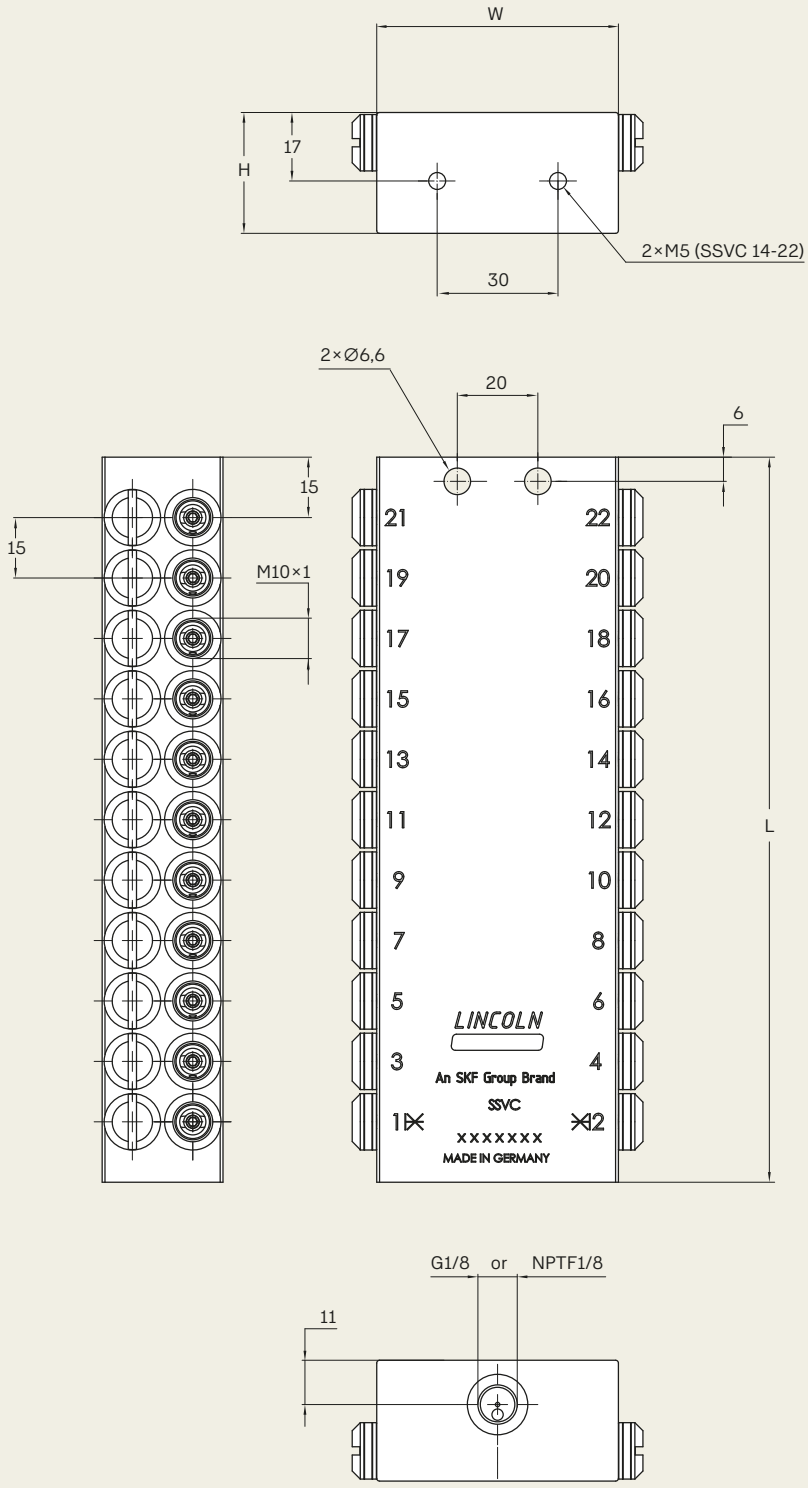
223-13614-9

226-14091-4

504-31705-1

Installation information

SSVC installation drawings



SSVC dimensions

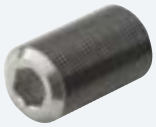
Design	Number of outlets	L	W	H
		mm	mm	mm
SSVC 6	6	60	60	30
SSVC 8	8	75	60	30
SSVC 10	10	90	60	30
SSVC 12	12	105	60	30
SSVC 14	14	120	60	30
SSVC 16	16	135	60	30
SSVC 18	18	150	60	30
SSVC 20	20	165	60	30
SSVC 22	22	180	60	30

Accessories

303-19346-2

2260-00000087

2040-00000005



Cross-porting elements

Order number	Designation	Material
303-19346-2	PLUG,CLOS.6-SOCK. M10X1.0X 4.5	stainless steel 1.4571
2260-00000087	PLUG,CLOSURE-HEX. 2611-M10x1-S.. DG	CW510L, nickel plated
2040-00000005	SET SCREW M4x8 SI F.SSVC	carbon steel

519-85224-1

Monitoring devices [1)]

Order number	Description
Universal piston detector	
519-85224-1	universal piston detector 10–36 V DC, 2 and 3 wire (PNP/NPN) with adapter for SSVC
M12 sockets	
237-13442-4	M12 socket, 5 pole, straight
237-13442-6	M12 socket, 5 pole, 90° with cable 5 m *(16.5 ft)*
236-10022-7	M12 socket, 5 pole, straight with cable 10 m *(33 ft)*
Universal piston detector with cable (end sleeve)	
664-85282-6	universal piston detector with adapter and cable; 2 m *(6 1/2 ft)*
664-85282-7	universal piston detector with adapter and cable; 3 m *(10 ft)*
664-85282-8	universal piston detector with adapter and cable; 5 m *(16.5 ft)*
Universal piston detector with cable and bayonet plug	
664-85242-2	universal piston detector with adapter and cable; 3 m *(10 ft)*
664-85242-5	universal piston detector with adapter and cable; 7 m *(23 ft)*

1) For standard applications we recommend the universal piston detector for monitoring SSVC metering devices. When exposed to magnetic fields, alternative monitoring devices such as inductive piston detectors or factory set monitoring options as described in this brochure should be used.

skf.com | skf.com/ssvc | skf.com/lubrication

PUB LS/P2 19837 EN · January 2026