

Metering Units and Piston Distributors

with Quick Connector System

for single-line total-loss lubrication systems (oil or fluid grease)



Metering units and piston distributors are also available with SKF's quick connector system – as a supplement to the time-proven tapered-sleeve unions in use for decades now.

The universal quick connector system from SKF – for plastic and steel tubing.

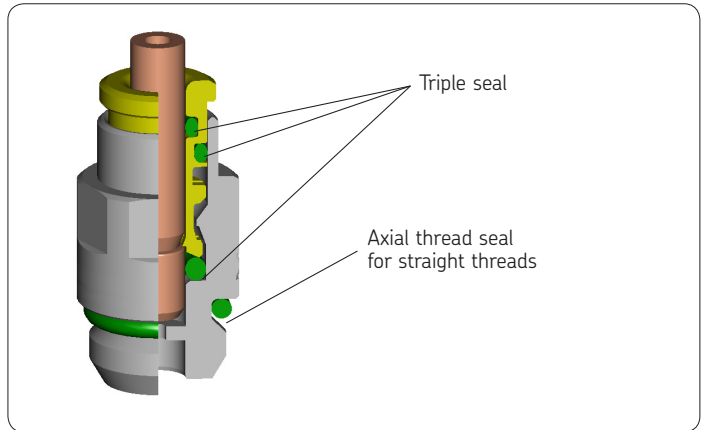
The advantages of this quick connector system are plain to see:

- **Greatly simplified installation** – high cost-cutting potential (roughly 45 seconds saved perconnection point)
- **Lower storage costs** – as many as 4 assembly components saved on
- **Universal connector system** – can be used for plastic as well as steel tubing
- **Simplified logistics** – no further parts to be purchased
- **Reliable technology** – no leakage thanks to triple seal, no dirt
- **Easy to disconnect** – time saved when modifications or repairs are made

Metering units and piston distributors with quick connector system

The novel seal and locking concept meets the “zero leakage” requirements of industrial users, is insensitive to dirt, easy to install and can be disconnected at the touch of a finger.

Here too – as with conventional techniques – it’s easy to change the metered quantity thanks to the combination metering nipple and quick connector unit.



Please, see also important product usage information on the back cover.

Please note

The following remain unaffected by the quick connector system

- the piston distributors functions
- the planning of a system
- the routing of a system.

Please consult the following leaflets

1-5001-EN (Single-line Central Lubrication Systems for Oil)

1-0015-EN (Single-line Central Lubrication Systems for Fluid Grease)

Technical data

related to the use of metering units and piston distributors

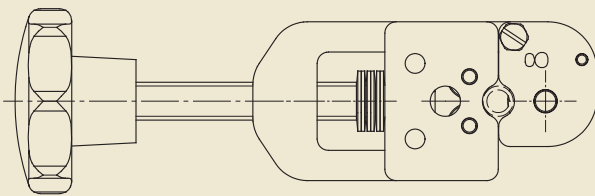
Operating pressure max. 45 bars
 Temperature range 0 to +80 °C
 Fluid oil, 5 to 2500 mm²/s
 fluid grease, NLGI grades 000, 00

Seal material:

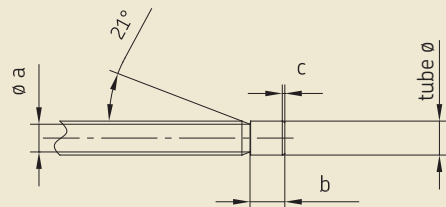
- for oil and fluid grease based on mineral oil . . . NBR
- for oil and fluid grease based on synthetic basis . . . FKM (FPM)
- Connection detachable

Tools for the preparation of claw grooves on the ends of steel tubes

Tube cutter



Claw groove



for tube ϕ	Tube cutter Order No.	Cuting wheel Order No.
4	169-000-336	844-330-006
6	169-000-337	844-330-007
8	169-000-338	844-330-007

for tube ϕ	a ^{+0.3}	b ^{±0.2}	c
4	3.1	5.0	0.3 ... 0.7
6	4.9	6.2	0.4 ... 0.9
8	6.9	6.2	0.5 ... 0.9

Accessories

Locking pin for quick connector (tube ϕ 4), order No. 450-204-002

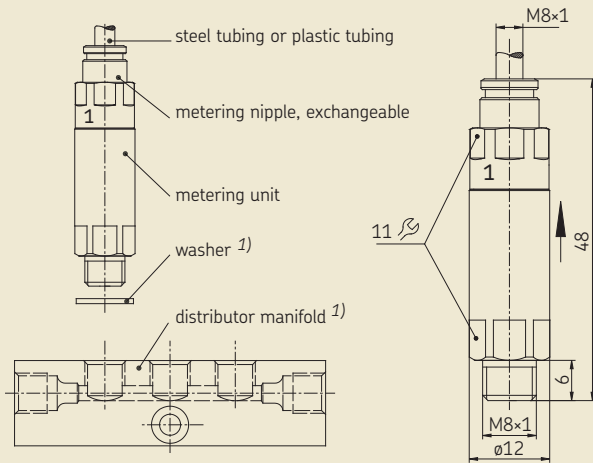
Further accessories see brochure

1-0103-EN “Fittings and Accessories”

1-0103-1-EN “Connection System – Quick Connectors”

Metering units, group 320 0.01–0.16 cm³ (oil)
0.03–0.10 cm³ (fluid grease, NLGI grades 000, 00)

Metering units, group 320



1) Please order washer (DIN7603-A8x11.5-CU) and distributor manifold separately.

Metering units for oil

Order No.	Rated metered quantity [cm ³]	Marking on metering unit	Metering nipple Order No.
320-401-3-VS	0.01	1	320-041-VS
320-403-3-VS	0.03	3	995-994-103-VS
320-406-3-VS	0.06	6	995-994-106-VS
320-410-3-VS	0.10	10	995-994-110-VS
320-416-3-VS	0.16	16	995-994-116-VS

Metering units for fluid grease, NLGI grades 000, 00

Order No.	Rated metered quantity [cm ³]	Marking on metering unit	Metering nipple Order No.
321-403-2-VS	0.03	3	341-853-VS
321-406-2-VS	0.06	6	341-856-VS
321-410-2-VS	0.10	10	341-860-VS

Distributor manifolds with main line port M10x1

See brochure 1-0103-EN "Fittings and Accessories"

Order No.	Number of ports
322-561	2
323-561	3
324-561	4
325-565	5
326-562	6
327-564	7
328-561	8
329-561	10

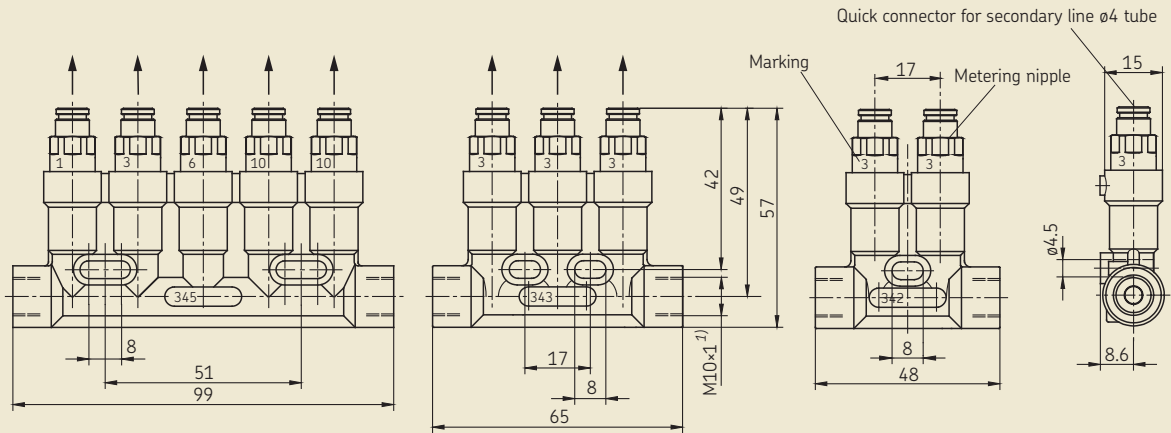
Quick connector fittings for main line

for steel tubing with claw groove or plastic tubing

Tube ø	Adapter Order No.	Elbow Order No.	Banjo fitting Order No.
6	406-004-VS	506-510-VS	506-140-VS
8	408-004-VS	–	–

Piston distributors, group 340 0.01–0.16 cm³ (oil) 0.03–0.10 cm³ (fluid grease, NLGI grades 000, 00)

Piston distributors group 340



1) Main line port tapped for solderless ø 6 tube connection or quick connector fitting

Piston distributors for oil available only with metering nipples installed

Order No.	Number of lube points	Seal material
342-1...-000	2	NBR
343-1...-00	3	NBR
345-1...-...	5	NBR
342-8...-000-VS	2	FKM
343-8...-00-VS	3	FKM
345-8...-...-VS	5	FKM

Metering nipples with O-ring, exchangeable

Order No.	Rated metered quantity [cm ³]	Order code	Marking on the metering nipple	Seal material
Metering nipple not exchangeable	0.01	1	1	NBR
995-994-103-VS	0.03	2	3	NBR
995-994-106-VS	0.06	3	6	NBR
995-994-110-VS	0.10	4	10	NBR
995-994-116-VS	0.16	5	16	NBR
341-453-S8-VS	0.03	2	3	FKM
341-456-S8-VS	0.06	3	6	FKM
341-460-S8-VS	0.10	4	10	FKM
341-466-S8-VS	0.16	5	16	FKM

To order

To complete the order No. supplement it with the order code in keeping with the desired metered quantities.

Order example:

piston distributor, 3-port type, 343-1...-...
metered with (from left to right) 0.03 – 0.10 – 0.16 cm³

Order code: 2 4 5
Order No.: 343-124-500

Piston distributors for fluid grease, NLGI grades 000, 00 available only with metering nipples installed

Order No.	Number of lube points
342-9...-000	2
343-9...-00	3
345-9...-...	5

Metering nipples with O-ring, exchangeable

Order No.	Rated metered quantity [cm ³]	Order code	Marking on the metering nipple
Metering nipple not exchangeable	0.01	1	1
341-853-VS	0.03	2	3
341-856-VS	0.06	3	6
341-860-VS	0.10	4	10

Quick connector fittings for main line

for steel tubing with claw groove or plastic tubing

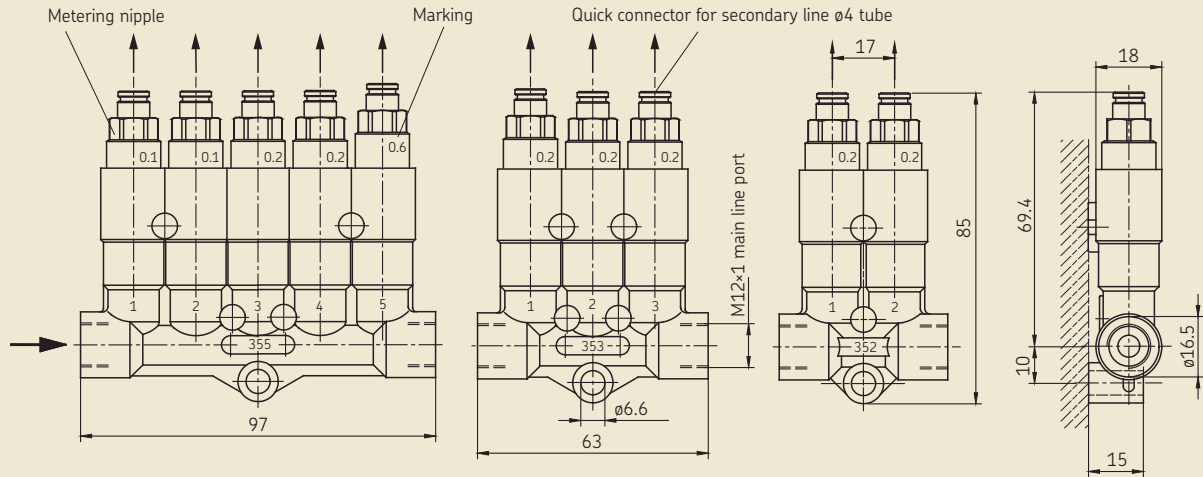
Tube ø	Adapter Order No.	Elbow Order No.	Banjo fitting Order No.	Seal material
6	406-004-VS	506-510-VS	506-140-VS	NBR
8	408-004-VS	–	–	NBR
6	406-004-S8-VS	–	506-140-S8-VS	FKM
8	408-004-S8-VS	–	506-140-S8-VS	FKM

Accessories

Locking pin for quick connector (tube ø4), order No. 450-204-002

Piston distributors, group 350 $0.05\text{--}0.6\text{ cm}^3$ (oil) $0.1\text{--}0.3\text{ cm}^3$ (fluid grease, NLGI grades 000, 00)

Piston distributors, Gruppe 350



Piston distributors for oil available only with metering nipples installed

Order No.	Number of lube points	Seal material
352-0..-000-VS	2	NBR
353-0..-.00-VS	3	NBR
355-0..-... -VS	5	NBR
352-8..-000-VS	2	FKM
353-8..-.00-VS	3	FKM
355-8..-... -VS	5	FKM

Metering nipples with O-ring, exchangeable

Order No.	Rated metered quantity [cm ³]	Order code	Marking on the metering nipple	Seal material
352-005-VS	0.05	3	0.05	NBR
352-010-VS	0.1	4	0.1	NBR
352-020-VS	0.2	5	0.2	NBR
352-040-VS	0.4	6	0.4	NBR
352-060-VS	0.6	7	0.6	NBR
352-005-S8-VS	0.05	3	0.05	FKM
352-010-S8-VS	0.1	4	0.1	FKM
352-020-S8-VS	0.2	5	0.2	FKM
352-040-S8-VS	0.4	6	0.4	FKM
352-060-S8-VS	0.6	7	0.6	FKM

Piston distributors for fluid grease, NLGI grades 000, 00 available only with metering nipples installed

Order No.	Number of lube points	Seal material
352-1..-000 -VS	2	NBR
353-1..-.00 -VS	3	NBR
355-1..-... -VS	5	NBR
352-7..-000 -VS	2	FKM
353-7..-.00 -VS	3	FKM
355-7..-... -VS	5	FKM

Metering nipples with O-ring, exchangeable

Order No.	Rated metered quantity [cm ³]	Order code	Marking on the metering nipple	Seal material
995-993-610-VS	0.1	4	0.1	NBR
995-993-620-VS	0.2	5	0.2	NBR
995-993-630-VS	0.3	6	0.3	NBR
352-010-S82-VS	0.1	4	0.1	FKM
352-020-S82-VS	0.2	5	0.2	FKM
352-030-S82-VS	0.3	6	0.3	FKM

To order

To complete the order No. supplement it with the **order code** in keeping with the desired metered quantities.

Order example:

piston distributor, 3-port type, 353-0..-.00-VS
metered with (from left to right) 0.1 – 0.4 – 0.2 cm³

Order code: 4 6 5

Order No.: 353-046-500-VS

Quick connector fittings for main line

for steel tubing with claw groove or plastic tubing

Tube ø	Adapter Order No.	Banjo fitting Order No.	Seal material
6	406-162-VS	506-142-VS	NBR
8	408-162-VS	508-142-VS	NBR
6	406-162-S8-VS	506-142-S8-VS	FKM
8	408-162-S8-VS	508-142-S8-VS	FKM

Overview of metering nipples with quick connector using the three-O-ring system

Order No.	Tube ø	Internal thread	Metering rate [cm ³]	used for
320-041-VS	4	M10×1	0.01	distributor 340, oil
995-994-103-VS	4	M10×1	0.03	distributor 340, oil
995-994-106-VS	4	M10×1	0.06	distributor 340, oil
995-994-110-VS	4	M10×1	0.1	distributor 340, oil
995-994-116-VS	4	M10×1	0.16	distributor 340, oil
320-041-S8-VS	4	M10×1	0.01	distributor 340, oil, FKM (FPM)
341-453-S8-VS	4	M10×1	0.03	distributor 340, oil, FKM (FPM)
341-456-S8-VS	4	M10×1	0.06	distributor 340, oil, FKM (FPM)
341-460-S8-VS	4	M10×1	0.1	distributor 340, oil, FKM (FPM)
341-466-S8-VS	4	M10×1	0.16	distributor 340, oil, FKM (FPM)
341-851-VS	4	M10×1	0.01	distributor 340, fluid grease NLGI grades 000, 00
341-853-VS	4	M10×1	0.03	distributor 340, fluid grease NLGI grades 000, 00
341-856-VS	4	M10×1	0.06	distributor 340, fluid grease NLGI grades 000, 00
341-860-VS	4	M10×1	0.1	distributor 340, fluid grease NLGI grades 000, 00
352-005-VS	4	M12×1	0.05	distributor 350, oil
352-010-VS	4	M12×1	0.1	distributor 350, oil
352-020-VS	4	M12×1	0.2	distributor 350, oil
352-040-VS	4	M12×1	0.4	distributor 350, oil
352-060-VS	4	M12×1	0.6	distributor 350, oil
352-005-S8-VS	4	M12×1	0.05	distributor 350, oil, FKM (FPM)
352-010-S8-VS	4	M12×1	0.1	distributor 350, oil, FKM (FPM)
352-020-S8-VS	4	M12×1	0.2	distributor 350, oil, FKM (FPM)
352-040-S8-VS	4	M12×1	0.4	distributor 350, oil, FKM (FPM)
352-060-S8-VS	4	M12×1	0.6	distributor 350, oil, FKM (FPM)
995-993-610-VS	4	M12×1	0.1	distributor 350, fluid grease NLGI grades 000, 00
995-993-620-VS	4	M12×1	0.2	distributor 350, fluid grease NLGI grades 000, 00
995-993-630-VS	4	M12×1	0.3	distributor 350, fluid grease NLGI grades 000, 00
352-010-S82-VS	4	M12×1	0.1	distributor 350, fluid grease NLGI grades 000, 00, FKM (FPM)
352-020-S82-VS	4	M12×1	0.2	distributor 350, fluid grease NLGI grades 000, 00, FKM (FPM)
352-030-S82-VS	4	M12×1	0.3	distributor 350, fluid grease NLGI grades 000, 00, FKM (FPM)

Order No. 1-5015-EN

Subject to change without notice! (07/2009)

Important product usage information

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems.

SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF 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 (1013 mbars) by more than 0.5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

Further brochures

1-9201-EN Transport of Lubricants in Centralized Lubrication Systems

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