

Metering Units and Piston Distributors with Quick Connector System

1-5015-US

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



Group 320:
0.01 - 0.16 ccm for oil
0.03 - 0.1 ccm for fluid grease



Group 340:
0.01 - 0.16 ccm for oil
0.03 - 0.1 ccm for fluid grease



Group 350:
0.05 - 0.6 ccm for oil
0.1 - 0.3 ccm for fluid grease

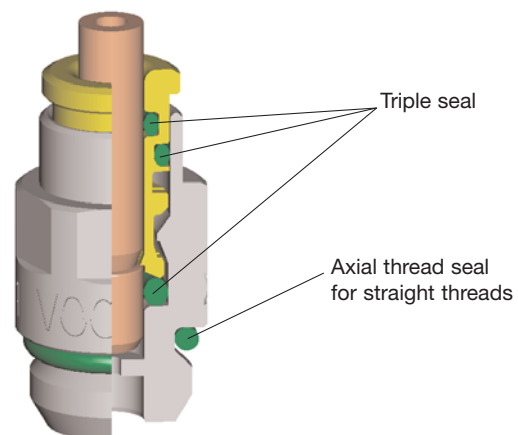
Metering units and piston distributors are also available with VOGEL's quick connector system – as a supplement to the time-proven tapered-sleeve unions in use for decades now.

The universal quick connector system from VOGEL – 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 per connection 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

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.



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VOGEL®
Central
Lubrication

VOGEL

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Im Folgenden finden Sie Informationen zu einem Teil unseres Leistungs- und Serviceportfolios.

Sollten Sie hierzu oder zu anderen Produkten Fragen haben, treten Sie jederzeit gern in Kontakt mit uns:

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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-US (Single-line Central Lubrication Systems for Oil)

1-0015-US (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 on a synthetic basis FPM (Viton®)

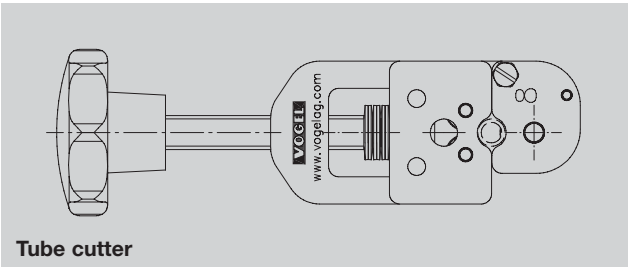
Connection detachable

Material:

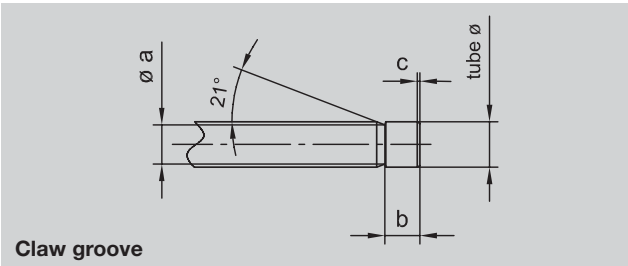
- for oil bright brass
- for fluid grease nickel-plated brass

Suitable for steel tubing with claw groove and for plastic tubing.

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

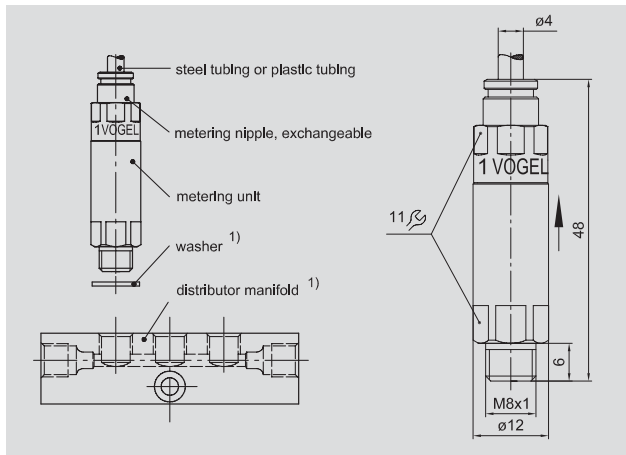


for tube ø	Tube cutter Order No.	Cutting wheel Order No.
4	169-000-336	844-330-006
6	169-000-337	844-330-007
8	169-000-338	844-330-007



for tube ø	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

Metering units, group 320 **for oil** 0.01 – 0.16 ccm **for fluid grease, NLGI grades 000, 00** 0.03 – 0.1 ccm



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

For oil:

Metering units

Order No.	Rated metered quantity [ccm]	Marking on metering unit	Metering nipple Bright brass 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	0.1	10	995-994-110-VS
320-416-3-VS	0.16	16	995-994-116-VS

For fluid grease, NLGI grades 000, 00:

Metering units

Order No.	Rated metered quantity [ccm]	Marking on metering unit	Metering nipple Nickel-plated brass 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	0.1	10	341-860-VS

The metering units can only be used together with distributor manifolds or tee pieces (cf. leaflet 1-0103-US, "Fittings and Accessories").

Distributor manifolds with main line port M10x1

See leaflet 1-0103-US "Fittings and Accessories"

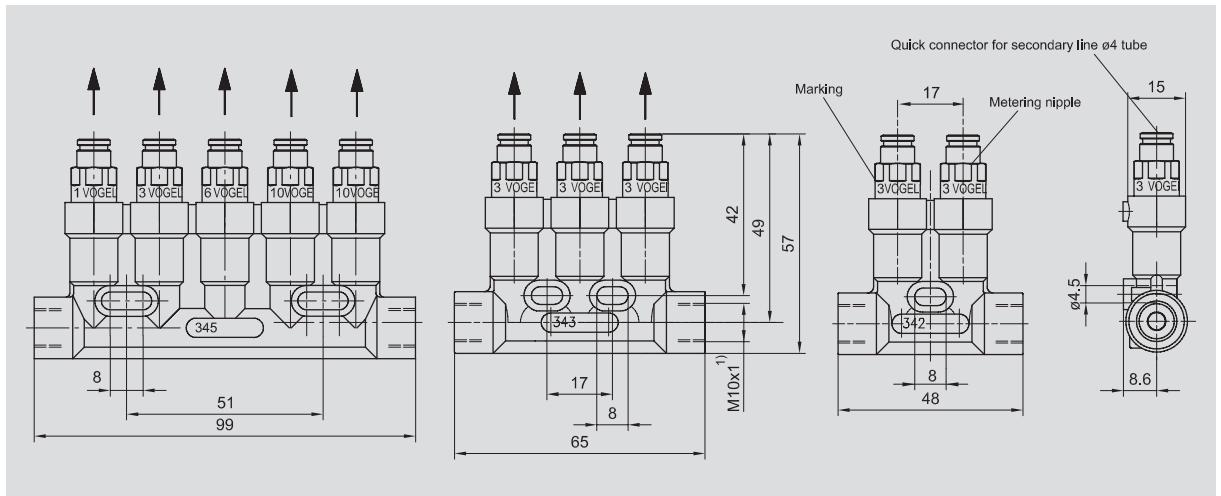
Order No.	Number of ports
322-561	2
323-561	3
324-561	4
325-565	5
326-562	6
327-564	7
328-561	8
329-561	10

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	506-142-VS
8	408-004-VS	—	508-142-VS

Piston distributors, group 340 for oil 0.01 – 0.16 ccm for fluid grease, NLGI gr. 000, 00 0.03 – 0.1 ccm



¹⁾ Main line port tapped for solderless $\varnothing 6$ tube connection or quick connector fitting

For oil:

Piston distributor

(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	FPM (Viton®)
343-8..-00-VS	3	FPM (Viton®)
345-8..-...-VS	5	FPM (Viton®)

For oil:

Metering nipple with O-ring, exchangeable

Bright brass	Rated metered quantity [ccm]	Order code	Marking on the metering nipple
Order No.			
Metering nipple not exchangeable	0.01	1	1
995-994-103-VS ¹⁾	0.03	2	3
995-994-106-VS ¹⁾	0.06	3	6
995-994-110-VS ¹⁾	0.1	4	10
995-994-116-VS ¹⁾	0.16	5	16
341-453-S8-VS ²⁾	0.03	2	3
341-456-S8-VS ²⁾	0.06	3	6
341-460-S8-VS ²⁾	0.1	4	10
341-466-S8-VS ²⁾	0.16	5	16

For fluid grease, NLGI grades 000, 00:

Piston distributor

(available only with metering nipples installed)

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

For fluid grease, NLGI grades 000, 00:

Metering nipple with O-ring, exchangeable

Nickel-plated brass	Rated metered quantity [ccm]	Order code	Marking on the metering nipple
Order No.			
341-853-VS	0.03	2	3
341-856-VS	0.06	3	6
341-860-VS	0.1	4	10

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 – 0.1 – 0.16 ccm

Order code: 2 4 5

Order No.: 343-124-500

Quick connector fittings for main line

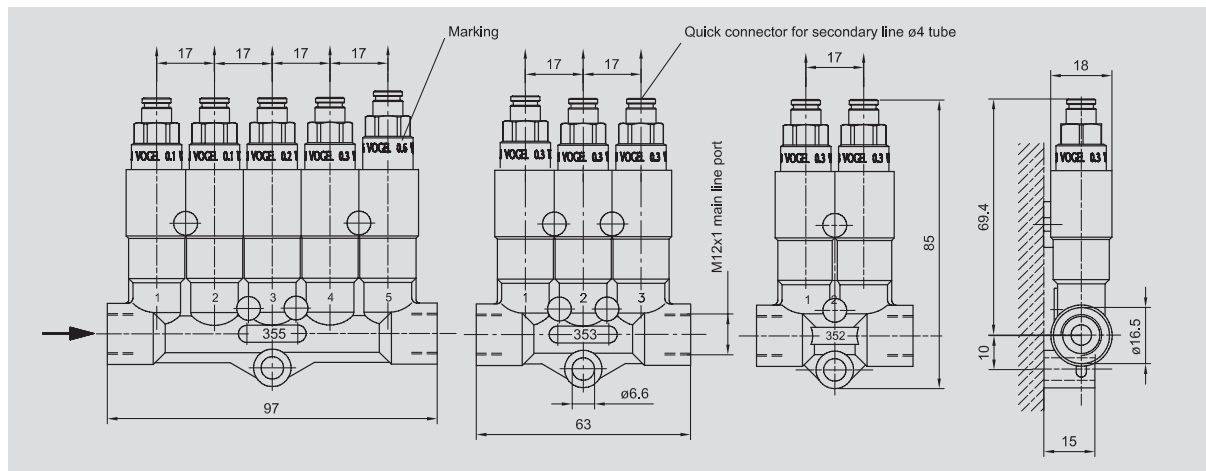
for steel tubing with claw groove or plastic tubing

Tube $\varnothing$	Adapter Order No.	Elbow Order No.	Banjo fitting Order No.
6	406-004-VS ¹⁾	506-510-VS ¹⁾	506-142-VS ¹⁾
8	408-004-VS ¹⁾	—	508-142-VS ¹⁾
6	406-004-S8-VS ²⁾	—	506-142-S8-VS ²⁾
8	408-004-S8-VS ²⁾	—	508-142-S8-VS ²⁾

¹⁾ seal material: NBR

²⁾ seal material: FPM (Viton®)

Piston distributors, group 350 for oil 0.05 – 0.6 ccm
for fluid grease, NLGI gr. 000, 00 0.1 – 0.3 ccm



For oil:

Piston distributor

(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	FPM (Viton®)
353-8...-.00 -VS	3	FPM (Viton®)
355-8...-... -VS	5	FPM (Viton®)

For oil:

Metering nipple with O-ring, exchangeable

Bright brass	Rated metered quantity [ccm]	Order code	Marking on the metering nipple
Order No.			
352-005-VS ¹⁾	0.05	3	0.05
352-010-VS ¹⁾	0.1	4	0.1
352-020-VS ¹⁾	0.2	5	0.2
352-040-VS ¹⁾	0.4	6	0.4
352-060-VS ¹⁾	0.6	7	0.6
352-005-S8-VS ²⁾	0.05	3	0.05
352-010-S8-VS ²⁾	0.1	4	0.1
352-020-S8-VS ²⁾	0.2	5	0.2
352-040-S8-VS ²⁾	0.4	6	0.4
352-060-S8-VS ²⁾	0.6	7	0.6

For fluid grease, NLGI grades 000, 00:

Piston distributor

(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	FPM (Viton®)
353-7...-.00 -VS	3	FPM (Viton®)
355-7...-... -VS	5	FPM (Viton®)

For fluid grease, NLGI grades 000, 00:

Metering nipple with O-ring, exchangeable

Nickel-plated brass	Rated metered quantity [ccm]	Order code	Marking on the metering nipple
Order No.			
995-993-610-VS ¹⁾	0.1	4	0.1
995-993-620-VS ¹⁾	0.2	5	0.2
995-993-630-VS ¹⁾	0.3	6	0.3
352-010-S82-VS ²⁾	0.1	4	0.1
352-020-S82-VS ²⁾	0.2	5	0.2
352-030-S82-VS ²⁾	0.3	6	0.3

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 ccm

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.
6	406-004-VS ¹⁾	506-142-VS ¹⁾
8	408-004-VS ¹⁾	508-142-VS ¹⁾
6	406-004-S8-VS ²⁾	506-142-S8-VS ²⁾
8	408-004-S8-VS ²⁾	508-142-S8-VS ²⁾

¹⁾ seal material: NBR

²⁾ seal material: FPM (Viton®)

Overview of order numbers for metering nipples with quick connectors using the three-O-ring system

Order No.	Tube ø	Internal thread	Metering rate [ccm]	Body surface	used for
320-041-VS	4	M10x1	0.01	bright brass	distributor 340, oil
995-994-103-VS	4	M10x1	0.03	bright brass	distributor 340, oil
995-994-106-VS	4	M10x1	0.06	bright brass	distributor 340, oil
995-994-110-VS	4	M10x1	0.1	bright brass	distributor 340, oil
995-994-116-VS	4	M10x1	0.16	bright brass	distributor 340, oil
320-041-S8-VS	4	M10x1	0.01	bright brass	distributor 340, oil, FPM (Viton®)
341-453-S8-VS	4	M10x1	0.03	bright brass	distributor 340, oil, FPM (Viton®)
341-456-S8-VS	4	M10x1	0.06	bright brass	distributor 340, oil, FPM (Viton®)
341-460-S8-VS	4	M10x1	0.1	bright brass	distributor 340, oil, FPM (Viton®)
341-466-S8-VS	4	M10x1	0.16	bright brass	distributor 340, oil, FPM (Viton®)
341-851-VS	4	M10x1	0.01	nickel-plated brass	distributor 340, grease NLGI gr. 000, 00
341-853-VS	4	M10x1	0.03	nickel-plated brass	distributor 340, grease NLGI gr. 000, 00
341-856-VS	4	M10x1	0.06	nickel-plated brass	distributor 340, grease NLGI gr. 000, 00
341-860-VS	4	M10x1	0.1	nickel-plated brass	distributor 340, grease NLGI gr. 000, 00
352-005-VS	4	M12x1	0.05	bright brass	distributor 350, oil
352-010-VS	4	M12x1	0.1	bright brass	distributor 350, oil
352-020-VS	4	M12x1	0.2	bright brass	distributor 350, oil
352-040-VS	4	M12x1	0.4	bright brass	distributor 350, oil
352-060-VS	4	M12x1	0.6	bright brass	distributor 350, oil
352-005-S8-VS	4	M12x1	0.05	bright brass	distributor 350, oil, FPM (Viton®)
352-010-S8-VS	4	M12x1	0.1	bright brass	distributor 350, oil, FPM (Viton®)
352-020-S8-VS	4	M12x1	0.2	bright brass	distributor 350, oil, FPM (Viton®)
352-040-S8-VS	4	M12x1	0.4	bright brass	distributor 350, oil, FPM (Viton®)
352-060-S8-VS	4	M12x1	0.6	bright brass	distributor 350, oil, FPM (Viton®)
995-993-610-VS	4	M12x1	0.1	nickel-plated brass	distributor 350, grease NLGI gr. 000, 00
995-993-620-VS	4	M12x1	0.2	nickel-plated brass	distributor 350, grease NLGI gr. 000, 00
995-993-630-VS	4	M12x1	0.3	nickel-plated brass	distributor 350, grease NLGI gr. 000, 00
352-010-S82-VS	4	M12x1	0.1	nickel-plated brass	distributor 350, grease NLGI gr. 000, 00, FPM (Viton®)
352-020-S82-VS	4	M12x1	0.2	nickel-plated brass	distributor 350, grease NLGI gr. 000, 00, FPM (Viton®)
352-030-S82-VS	4	M12x1	0.3	nickel-plated brass	distributor 350, grease NLGI gr. 000, 00, FPM (Viton®)

Notice!

All products from VOGEL may be used only for their intended purpose. If operating instructions are supplied together with the products, the provisions and information therein of specific relevance to the equipment must be observed as well. In particular, we call your attention to the fact that hazardous materials of any kind, especially the materials classified as hazardous by EC Directive 67/548/EEC, Article 2, Par. 2, may only be filled into VOGEL central lubrication systems and components and

delivered and/or distributed with the same after consultation with and written approval from VOGEL.

All products manufactured by VOGEL are not approved for use in conjunction 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.



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