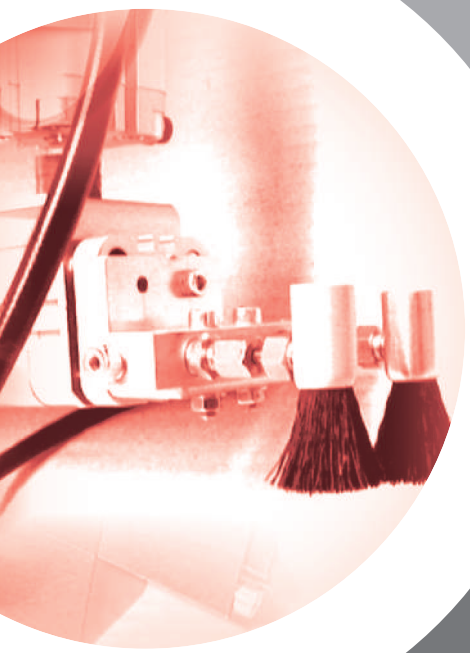
As little as possible – as much as needed.
Always measured out properly.



Metering systems

TEKAWE
Tribo- und Industrietechnik GmbH

Technology for metering / lubrication / controlling

43- Metering Systems

edition: 11.02.16

43- Metering Systems

*43-**70**..*	***Metering valves***
43-70**20**	Mini-metering valve with hand grip PEN 1-200 mm³
43-70**30**	Metering valve with assembling unit
	Metering valve for direct mounting
43-70**50**	Metering valve with grip horizontal / vertical
43-70**60**	Metering valve for major quantities 100-1000 cm³

*43-**75**..*	***Metering units for grease cartridges***
43-75**05**	Cartridge metering unit 0-2 cm³
43-75**40**	Metering unit with external control (3/2-way / 5/2-way)
43-75**50**	Pneumatic metering gun for grease cartridges
	Grease cartridge, empty
43-75**70**	Greasing tools for metering units

*43-**82**..*	***Bleeder valves / Spraying valves***
43-82**10**	Bleeder valve
43-82**50**	Hand-discharge unit "TEKA-Brush" / "TEKA-Line"
43-82**70**	Grease discharging valves / Grease spraying valves
	Electropneumatical hand-discharge valve
43-82**80**	Spraying valve mini / Spraying system "TEKA exacto Spray"

edition: 11.02.16

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...it depends on the correct amount!

Exact dosages, reliable feeding and accurate dispensing mean clean, correct lubrication.

The correct dosage increases the quality of your product, the produktivity and process-safety of the production and reduces your consumption of lubricant.

The nowadays used high powered lubricants have to be brought - according to the rules of tribology impeccable and carefully - to the individual points.

The correct amount at the correct time to the correct place - can be achieved with our metering units.

It´s enough?

43e-0010-1

At the following leaflets you find informations about this items:

Delivery
- grease press / barrel press
- container lift systems
- grease discharge unit

Metering / Spraying
- volumetrical metering units
- metering units for major quantities
- cartridge metering units
- discharge valves / Spraying valves

Controlling
- filter / manometer / pressure valves
- control sensor for metering-syst.
- Control units
- accessories

Application
For problems of all kind, like e.g. the "contact-lubrication" of individual surfaces, bores, shafts, etc., we develop, construct and produce special metering-units and application-units.

Consistency-class / Delivering of lubricants

The penetration (consistency) is one of the most important issue for the delivering of lubricants. The higher the penetration NLGI-class* the stiffer the lubricant (grease).
NLGI-Klasse 000 is one of the lowest class, i.e. one of the softest lubricant.

The apparent dynamical viscosity is indicated by certain manufacturers. If it goes beyond 5.000 Pa.s = N*s/mm², a pumping by conventional lubricant pumps or systems is complicated.

At the same time the surrounding temperature as well as the length an diameter of the conduits or hoses is also important.
If the part of solid content in the lubricant is to big, especial points are to be observe.

NLGI-Class	worked penetration according DIN ISO 2137 [unit = 0,10 mm]	Remarks
000	445 - 475	floating
00	400 - 430	poor floating
0	355 - 385	semifluid
1	310 - 340	very soft
2	265 - 295	soft
3	220 - 250	mid solid
4	175 - 205	solid
5	130 - 160	very solid
6	85 - 115	stiff

* NLGI-class = classification of lubricant, determinded by National Lubricating Grease Institute.

edition: 20.04.11

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Pneumatic low pressure press 10:1 / 5:1

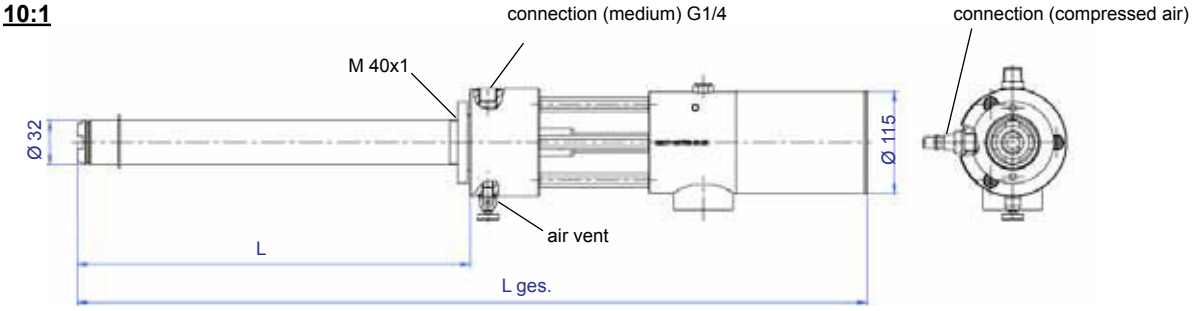
The air-operated grease-supply-systems 10:1 are ideal for feeding lubricants (also silicone grease) of class NLGI 3.
The grease supply-system 5:1 is suited especially for lubricants of class NLGI 1 - it is not suited for silicon grease.

Technical Data

	10 : 1	**5:1**
pressure transformation		
input pressure (min./max.)	2 / 10 bar	2 / 10 bar
output pressure (6 bar on the engine)	60 bar	27 bar
max. air consumption	150 l/min.	150l/min.
max. discharge flow	16 cm³	20 cm³
max. flow rate on the engine	1720 cm³ /min.	1500 cm³ /min.
min./max. temperature	10° C / 40°C	10°C / 40°C
all connection threads	G 1/4	G 1/4

Other details on request

10:1



Denomination	Weigth	for container	L [mm]	L ges. [mm]	Item no.
pneumatic low pressure press 10:1	3,6 kg	1 - 5 kg	288	288	**on request**
	4,3 kg	1 - 5 kg	402	693	**on request**
	4,6 kg	14 - 18 kg	370	661	**on request**
	5,0 kg	20 - 25 kg	473	764	**on request**
	6,0 kg	50 kg	620*	911	**1.51 64.1***
	6,2 kg	50 kg	720	1011	**1.51 82.1**
	6,5 kg	180 kg	845	1136	**1.51 65.1**
pneumatic low pressure press 10:1 complete with connections	3,6 kg	1 - 5 kg	288	288	**on request**
	4,3 kg	1 - 5 kg	402	693	**on request**
	4,6 kg	14 - 18 kg	370	661	**on request**
	5,0 kg	20 - 25 kg	473	764	**on request**
	6,0 kg	50 kg	620*	911	**1.51 63.1***
	6,2 kg	50 kg	720	1011	**1.51 83.1**
	6,5 kg	180 kg	845	1136	**1.51 62.1**

* back version - only for replacement and on request.

Other designs on request.
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43e-1010-1

edition: 07.04.15

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Grease supply-system MINI
1-5 kg

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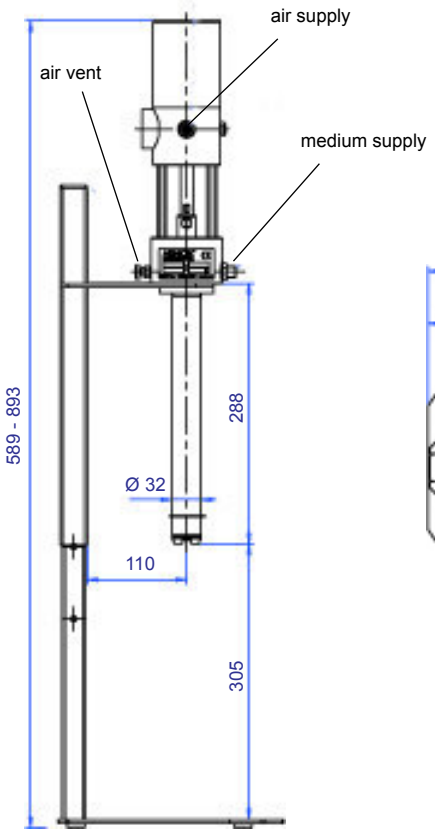
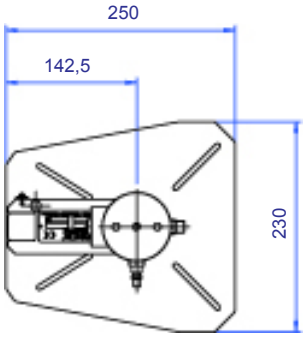
The air operated grease supply-system MINI are ideal for feeding expensive lubricants from small containers or dispensing small quantities of lubricants. This pump allows by means of a high pressure pipe with integrated air supply line a quick and easy connection to metering valves.
The system is consisting of an air-operated grease pump and a frame. Separate to the grease supply-system the selection of the follower plate will be made according to the container size.

Technical Data

pressure transformation	**10:1**	**25:1**	**60:1**
input pressure (min./max.)	2-10 bar	2-10 bar	2-10 bar
output pressure (6 bar on the engine)	60 bar	140 bar	310 bar
delivery rate pro double stroke	16 cm³	17 cm³	6 cm³
max. flow rate on the engine	1720 cm³ /min.	1295 cm³ /min.	465 cm³ /min.
specification for operation medium	<--- NLGI 3 / 5000 mPa.s --->		
min. / max. temperature	10°C / 40°C	10°C / 40°C	10°C / 40°C
all connection threads	G 1/4	G 1/4	G 1/4

43e-1010-2





Denomination	for container	pressure ratio	Item no.
grease supply-system MINI	1 - 5 kg	10:1	**1.51 74.6**
		25:1	**1.51 74.7**
		60:1	**1.51 74.8**

Recommendation:

We recommend using a maintenance unit when air supplying device contains humidity.
Use the original container and fit the right follower plate, if possible with air vent. This will avoid air pockets.

Other designs on request.
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Mini-Lift-System
with control system and lifting device

This single-column Mini-Lift system for 1-5 kg container is equipped with a pneumatic lift device and enables an optimum suction, air-free conveying and complete drainage of the container with a follower plate.

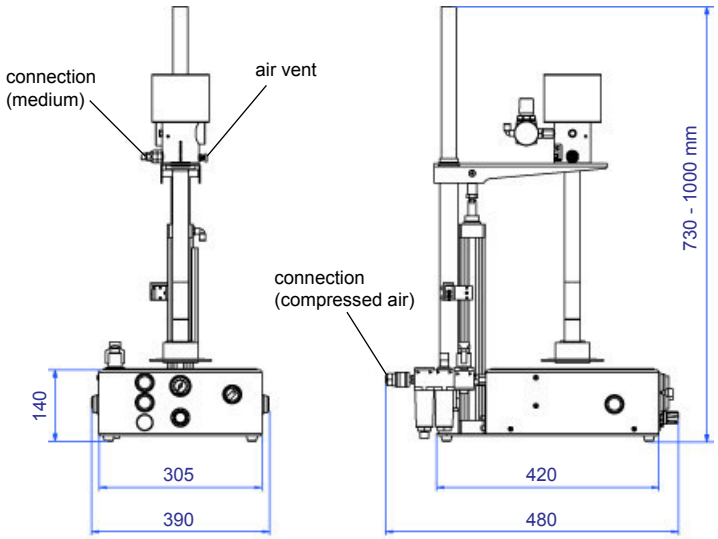
NEW

An empty state detector serves to switch off the pump when the low fill level has been reached, thus preventing the aspiration of air.
Thereafter the pump can be powered up and the container can be replaced.
Moreover a controller for follow-up plates with keylock is built-in.

Technical Data*

pressure transformation	**10 : 1**	**25:1**	**60:1**
input pressure (min./max.)	2 / 10 bar	2 / 10 bar	2 / 10 bar
output pressure (6 bar on the engine)	60 bar	140 bar	310 bar
max. air consumption	150 l/min.	217 l/min.	217 l/min.
delivery rate pro double stroke	16 cm³	17 cm³	6 cm³
max. flow rate on the engine	1720 cm³ /min.	1295 cm³ /min.	465 cm³ / min.
specification for operation medium	<--- NLGI 4 / 1.000.000 mPa.s --->		
min./max. temperature	10°C / 40°C	10°C / 40°C	10°C / 40°C
connection thread grease outlet	G 1/4	G 1/4	G 1/4

* Specifications are subject to change



Denomination	for container	pressure ratio	Item no.
Mini-Lift-System with control system	1 - 5 kg	10:1	**1.52 05.1**
		25:1	**1.52 00.1**
		60:1	**1.52 07.1**

Other designs on request.
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edition: 07.04.15

43e-1010-3

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Low pressure press 10-80

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The pneumatic low pressure press discharges all usual lubricants and grease (minimal value of the grease neutral penetration: 200, during working temperature), which are used in machine and vehicle servicing.

Technical Data

type	singe-level, double action axial piston pump
fitting postion	preferable vertical
comressed air connection	quick release coupling with tube mandrel 6 mm
compressed air	filtered and oiled, max. 10 bar
ambient air temperature	+5°C bis +60°C
noise pressure level	ca. 70 dB (A)
standpipe diameter	48 mm
standpipe length	628 mm; 990 mm
transmission ratio	1 : 10
displaced volume	80 cm³/double stroke
flow rate	Determined by employment of the charging press with tube, 2,25m long, ball-valve straight filing tube 10 mm Ø, without pipe, temperature + 20°C

Air pressure [bar]	gear oil SAE 140 [kg/min]	Medium consistency of grease [kg/min]	Medium consistency of ball bearing-grease [kg/min]
3	1,400	0,700	0,600
5	2,850	1,850	0,950
6,5	3,200	2,200	1,100

Application range
The ND-charging presses are employed on the assembly line or on the work bench. Cases, lairs etc. are charged with oil, grease or similar lubricants. Working with paste-like materials ist possible inasmuch as they have "gliding characteristics" (there is no lubrication in the charging part). Aggressive components (e.g. solvents) or solids (frictional properties) are not processable. For repeated charges of constant amounts (0,5-2.500 cm³) one can combine the ND-presses with TEKAWE-metering units (q.v. metering units). The connection with a grease distribution system is possible.

Functional description
The ND-cask presses are intended for the application in 50 kg- and 200 kg-barrels respectively. The device has to be connected to the air duct.

required minimum pressure:	2 bar
maximal allowable delivery pressure:	100 bar

When there are greases or other paste-like materials in use, you need a stripping cover for proper airless charging from the original container. The application area of the ND-cask press was extended by a new steering with positively controlled flat gate valve and a standard exhaust air silencer. From this construction arise determining advantages e.g. accurate rerouting during slow-going operation, small control periods during fast mode and low noise handling in every situation.

43e-1010-4

edition: 07.04.15

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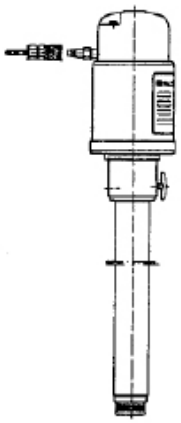
Low pressure press 10-80

Item overview

Denomination	for containers up to [kg]	Total height [mm]	Mass [kg]	Item No.
Füllpresse	50	933	11	**1.32 53 01.2**
	200	1295	12	**1.32 54 01.2**



Technical facilities

The 50 kg-charging press (1.32 53 01.2) can be extended with the following equipment:

Remarks	Pressure reduce	(*)	Other equipment	for containers up to [kg]	total height [mm]	roundly sheet metal-covering [mm]	cap, outside [mm]	Mass [kg]	Item No.
Filling pipe Ø 16 mm ("Haken-röhrchen" Ø16)	with manometer	+	cap, chassis	**50**	1078	462 Ø outside, useable height of cover 586, total height 780	472	30	**1.32 58 01.2**
Equipment for the dispensing with pipe-distri-butor	with manometer	-	cap	**50**	940	462 Ø outside, 460 Ø inside, useable height of cover 586, total height 640	472	20	**1.32 64 01.2**

(*) 2,25 m Filling hose and ball valve

The 200 kg-charging press (1.32 54 01.2) can be extended with the following equipment:

Remarks	Pressure reduce	(*)	Other equipment	for containers up to [kg]	total height [mm]	roundly sheet metal-covering [mm]	cap, outside [mm]	Mass [kg]	Item No.
Equipment for the dispensing with pipe-distributor	with manometer	**+**	cap	**200**	1295	**-**	641	14	**1.32 65 01.2**

(*) 2,25 m Filling hose and ball valve

edition: 07.04.15

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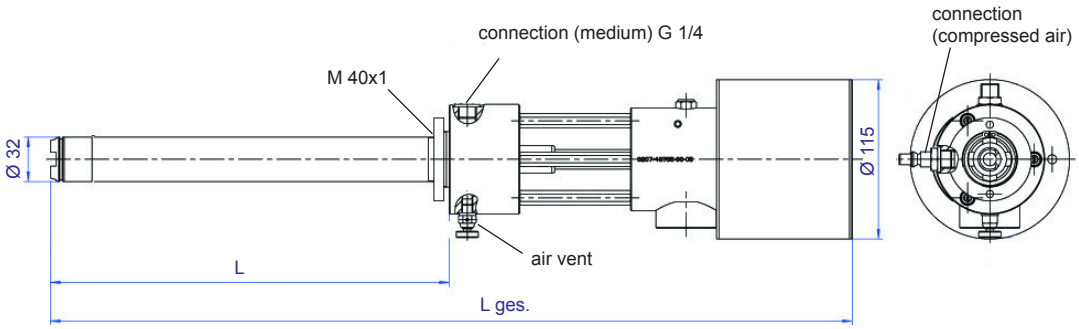
Pneumatic medium pressure press 25:1

The air-operated grease-supply-systems are ideal for feeding lubricants (also silicone grease) of class NLGI 3.

Technical Data

pressure transformation	25 : 1
input pressure (min./max.)	2 / 10 bar
output pressure (6 bar on the engine)	140 bar
max. air consumption	217 l/min.
max. discharge flow	17 cm³/ double stroke
max. flow ate on the engine	1295 cm³ /min.
Ø suction pipe	32 mm
Min./Max. temperature	10° C / 40°C
all connection theads	G 1/4



43e-1020-1

Denomination	Weigth	for container	L [mm]	L ges. [mm]	Item no.
pneumatic medium pressure press 25:1	2,5 kg	1 - 5 kg	288	579	**on request**
	3,2 kg	1 - 5 kg	402	693	**on request**
	3,5 kg	14 - 18 kg	370	661	**1.51 70.1**
	4,0 kg	20 - 25 kg	473	764	**1.51 88.1**
	4,5 kg	50 kg	620*	911	**1.51 54.1***
	5,0 kg	50 kg	720	1011	**1.51 70.1**
	5,0 kg	180 kg	845	1136	**1.51 55.1**
pneumatic medium pressure press 25:1 complete with connections	2,5 kg	1 - 5 kg	288	579	**on request**
	3,2 kg	1 - 5 kg	402	693	**on request**
	3,5 kg	14 - 18 kg	370	661	**1.51 71.1**
	4,0 kg	20 - 25 kg	473	764	**1.51 89.1**
	4,5 kg	50 kg	620*	911	**1.51 58.1***
	5,0 kg	50 kg	720	1011	**1.51 81.1**
	5,0 kg	180 kg	845	1136	**1.51 59.1**

* back version - only for replacement and on request.

Other designs on request.
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edition: 29.05.18

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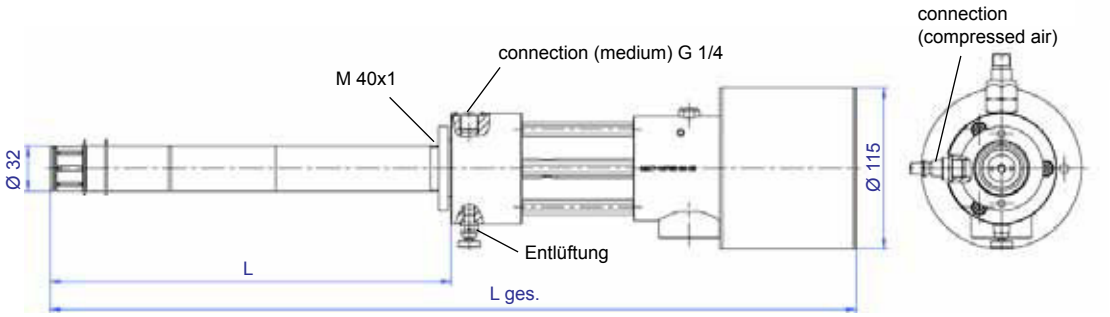
Pneumatic high pressure press 60:1

The air-operated grease-supply-systems are ideal for feeding lubricants (also silicone grease) of class NLGI 3.

Technical Data

pressure transformation	60 : 1
input pressure (min./max.)	2 / 10 bar
output pressure (6 bar on the engine)	310 bar
max. air consumption	217 l/min.
max. discharge flow	6 cm³/ Doppelhub
max. flow ate on the engine	465 cm³ /min.
Ø suction pipe	32 mm
Min./Max. temperature	10° C / 40°C
all connection theads	G 1/4



Denomination	Weigth	for container	L [mm]	L ges. [mm]	Item no.
pneumatic high pressure press 60:1	4,0 kg	1 - 5 kg	288	579	**on request**
	4,5 kg	1 - 5 kg	402	693	**on request**
	4,8 kg	14 - 18 kg	370	661	**on request**
	5,2 kg	20 - 25 kg	473	764	**1.51 72.1**
	6,2 kg	50 kg	620*	911	**1.51 60.1***
	6,5 kg	50 kg	720	1011	**1.51 84.1**
	6,7 kg	180 kg	845	1136	**1.51 61.1**
pneumatic high pressure press 60:1 complete with connections	4,0 kg	1 - 5 kg	288	579	**on request**
	4,5 kg	1 - 5 kg	402	693	**on request**
	4,8 kg	14 - 18 kg	370	661	**1.51 77.1**
	5,2 kg	20 - 25 kg	473	764	**1.51 73.1**
	6,2 kg	50 kg	620*	911	**1.51 56.1***
	6,5 kg	50 kg	720	1011	**1.51 85.1**
	6,7 kg	180 kg	845	1136	**1.51 57.1**

* back version - only for replacement and on request.

Other designs on request.

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43e-1030-1

edition: 20.04.11

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pneumatic high pressure press
50 kg / 200 kg

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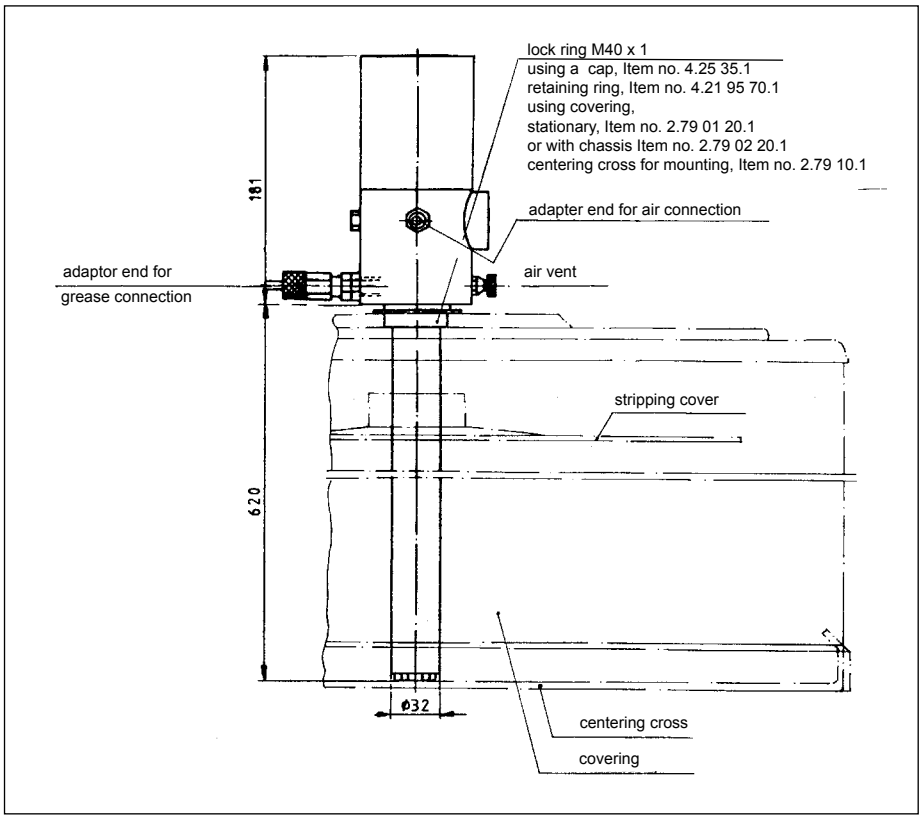
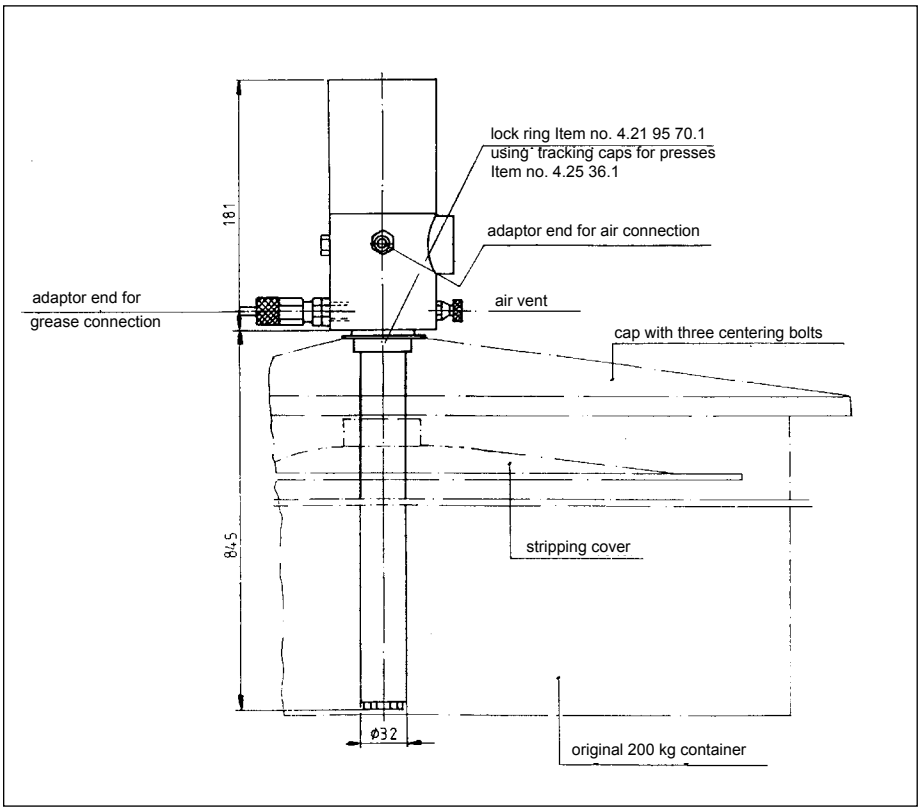
Any press from our range of products can be used:

Subsequent 2 examples of use:



model with 50 kg-container



model with 200 kg-container

43e-1030-2

edition: 20.04.11

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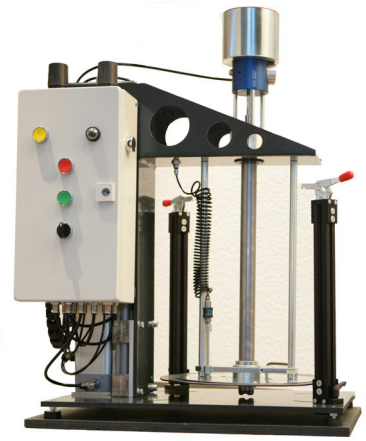
Container lift systems

for containers 10-30 kg and 10-50 kg

General notes

NEW VERSION



Container lift systems serve the quick and trouble-free change of containers for paste-like media (e.g. grease, oil, adhesive, etc.).
The pedantically manual lifting of the stripping cover and the barrel press is effected pneumatically.

The stripping cover on the full container is pneumatically adjusted, so that a stucking of the cap is prevented and specific reliability in ensured. This guarantees that no blebs develop in the container and that the press doesn't draw air.

The version suited for containers in plastic is vested with a holding-down clamp for centering device and fixation.

The lift system is available in a stronger, more stable version now! In addition, a PLC control is available as an option and the pump bracket is precisely adjustable.

Function

The grease gun is switched on by pressing the "Start"-button, after the stripper is plugged in by the two-hand control. If the container is nearly empty, the system is shut down automatically and an acoustic warning signal alarms temporarily.

The signal has to be switched off by the operator. This way it is warranted that the empty container is recognized consciuosly by the operator and it is avoided to let the system run empty.

Currently the press can be raised up per mode switch. In this positiona full container can be exerted and/or an empty container can be exchanged.

43e-1510-1

Technical Data*

	high pressure grease gun	medium pressure grease gun	low pressure grease gun
transmission ratio	1 : 60	1 : 25	1 : 10
discharge flow per double stroke	6 cm³	17 cm³	16 cm³
flow rate without back pressure	467 cm³ / min.	1296 cm³ / min.	1720 cm³ / min.
air consumption	150 L/min.	217 L/min.	150 L/min.
input pressure (min./max.)	2/10 bar		
working pressure of pump on 6 bar	310 bar	140 bar	60 bar
penetration	3		

* Information are subject to change.

edition: 29.05.18

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Container lift systems

for containers up to 200 kg

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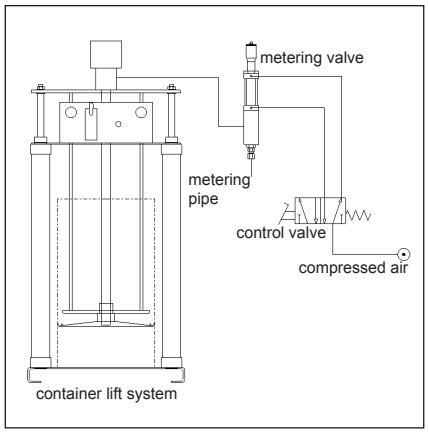
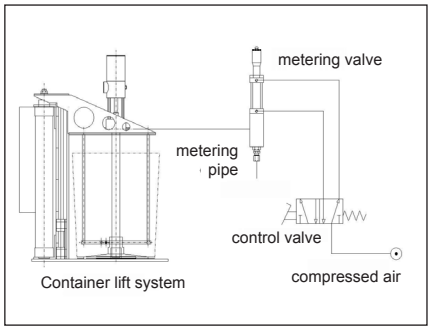
Tribo- und Industrietechnik GmbH

Example 1 up to 200 kg



Example 2 10 - 50 kg



43e-1510-2

Dimensions

Measures in mm	10-30 kg	10-50 kg	up to 200 kg
base plate (l x b)	620 x 390	715 x 490	945 x 620
height (extended)	ca. 1230	ca. 1730	ca. 2500
height (retracted)	ca. 820	ca. 1030	ca. 1500

Denomination	for containers	Item-No.
Container lift system single arm for containers 10-30 kg	plastic	**1.57 00.1**
	metal	**1.57 15.4**
Container lift system single arm for containers 10-50 kg	plastic	**on request**
	metal	**on request**
Container lift system single arm for containers up to 200 kg	metal	**1.57 40.1**

.Technical Data

	high pressure grease gun	medium pressure grease gun	low pressure grease gun
penetration	3 (250-220)	3 (250-220)	3 (250-220)
transmission ratio	60 : 1	20 : 1	10 : 1
discharge flow per stroke	7,5 cm³	5,1 cm³	16 cm³
flow rate without back pressure	500 cm³/min	945 cm³/min	1722 cm³/min
input pressure (min./max.)	2 - 7 bar	2 - 10 bar	2 - 10 bar
pressure of media on 7 bar	400 bar	115 bar	ca. 66 bar
air consumption	9 Nm³/h	13 Nm³/h	13 Nm³/h
connection thread	G 1/4 i.	G 1/4 i.	G 1/4 i.

edition: 29.05.18

TEKAWE
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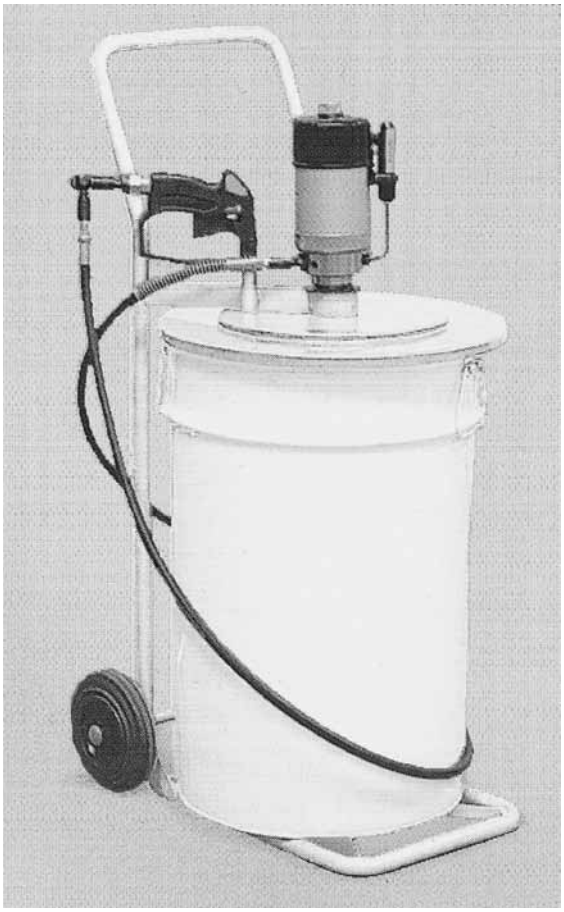
High pressure barrel-press for containers up to 50 kg
pneumatically drived

Chassis with two rubber-hooped wheels, holder and dust cover for 50 kg-containers.
High pressure tube (2,25m), with axial- and angle swivel joint, high pressure greasing gun with hydraulic coupling.

Technical Data

height	935 mm
max. diameter	520 mm
transmission ratio	1 : 70
grease pressure *)	max. 400 bar
necessary air pressure	4 - 7 bar
weight	15 kg
varnishing	white

*) annotation: The grease pressure has to be reduced to the adaequate maximum pressure of the powered systems.
A pressure reducing valve with appropriate pressure limitation is necessary.



43e-2020-1

Denomination	Irem-No.
high pressure barrel press, complete	**1.33 50 01.3**

Remark:
For this system any press can be used from our assortment.
Other types on request.

edition: 09.05.11

TEKAWE
Tribo- und Industrietechnik GmbH

Electric-operated grease supply system

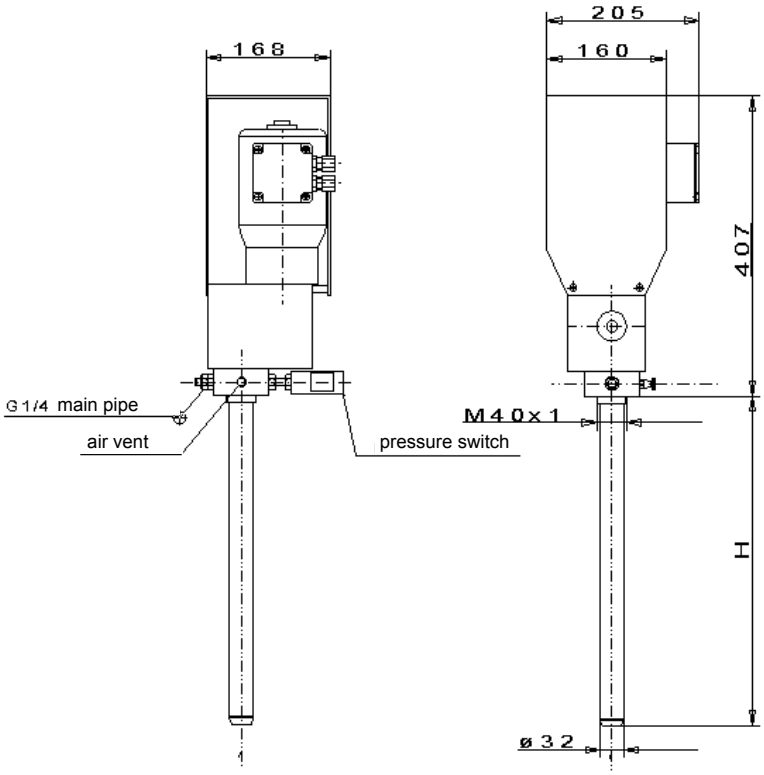
- basic version -

Electric-operated grease supply systems can be used as an alternative to air-operated grease-pumps.
For lubricants up to NLGI 3.

Technical data

power	400 W
protective system	IP 55
connection	230 V (50/60 Hz)
gear	worm gear
delivery rate *	ca. 280 cm³ / min
max. output pressure	200 bar
min. / max. temperature	10°C / 40°C

* metered at pump outlet (Medium NLGI2) by 200 bar counterpressure and by 20°C ambient temperatur.



Electric operated barrel press	H [mm]	for containers [kg]	Item-No.
AC 230 V 50/60 Hz	374	14 - 18	**1.55 10.1**
	477	20 - 25	**1.55 20.1**
	724	50	**1.55 30.1**
	849	180	**on request**

Other tensions, pressures and discharge flows on request.
All technical data and pictures are for information only and without responsibility. All design is subject to change without notice.

43e-2030-1
edition: 09.05.11

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Elektric operated grease system AX - 2000

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With these electric-operated grease supply systems a reliable and trouble free lubrication is warranted when ever no compressed air ia available.

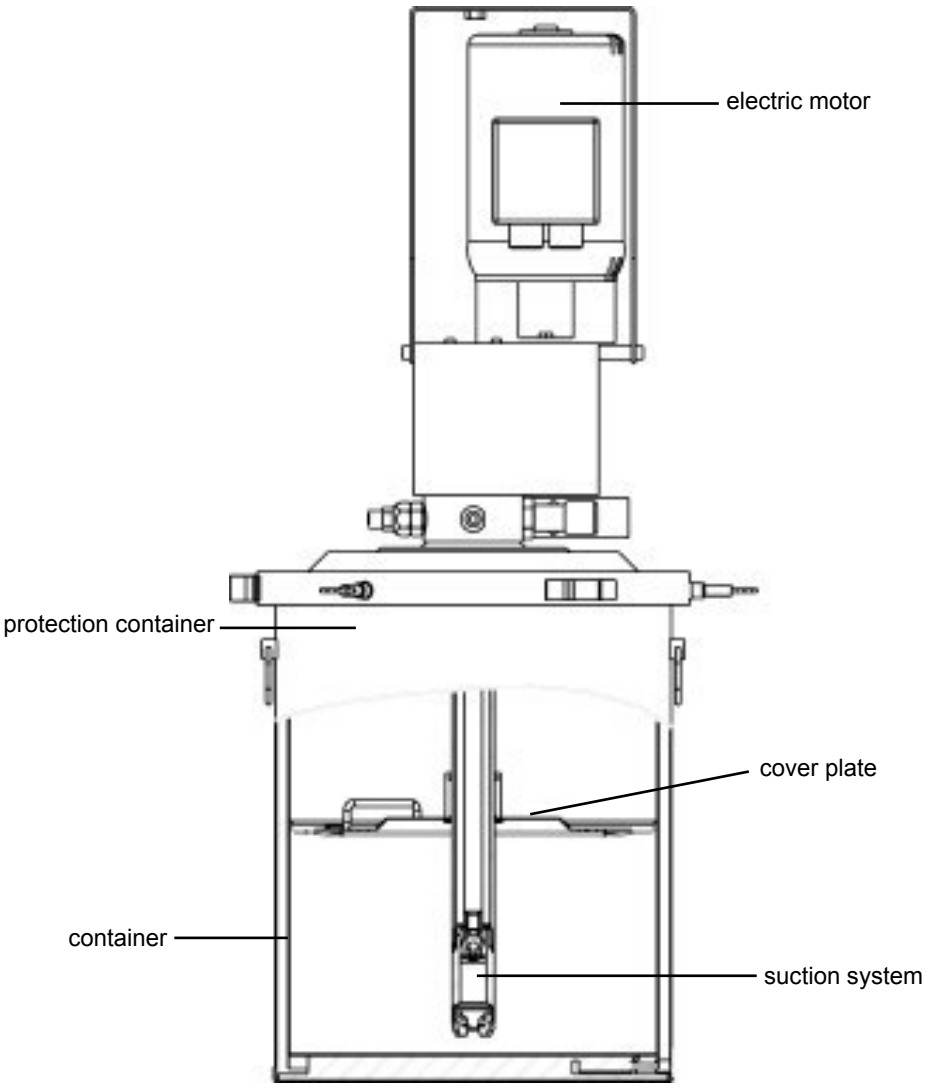
Customer benefits:

- independent from compressed air
- minimal down time / low maintenance
- low-noise
- economic efficiency
- operator convenience
- high quality standard

grease guns as accessories can be found on the datasheets 43-5010 ff.

43e-2030-2

Example of use:



As a combination all air-operated and electric-operated barrel presses are used.
All technical data and pictures are for information only and without responsibility. All design is subject to change without notice.

edition: 09.05.11

TEKAWE
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Grease discharge unit UFV - E 5
with auto-refilling

The buffer unit ensures the lubrication and dosage at plants and aggregates without to interrupt the current working process when changing the lubricant bundle .

The plant is suitable excellent for the operation for several lubrication fittings with different quantity output.

The usual interrupt of the production plants due to bundle change is not needed.

For operation a drum-lifting-aggregate is needed.

- "UFV" - uninterruptible power supply
- Working pressure up to 150 bar (at 6 bar air pressure)
- Automatical filling with sensor-technologie
- stably by sturdy baseplate
- Standardcolour of the housing: anthracite - more colours on request

43e-2050-1

Technical data:

	High-pressure pump	Medium-pressure pump	Low-pressure pump
Pressure ratio air / grease	1 : 60	1 : 25	1 : 10
Discharge amount per double-stroke	6 cm³	17 cm³	20 cm³
Discharge amount at pump outlet	467 cm³ / min.	1296 cm³ / min.	1722 cm³ / min.
Air amount	150 L/min.	217 L/min.	217 L/min.
Working pressure min./max.	2/10 bar		
Max. NLGI class	3		
Voltage	24 V DC		
Tankage	5 l		

Dimensions:

Depth	450 mm
Width	350 mm
Height	approx. 700 mm

Denomination	Item-No.
Grease discharge unit UFV - E 5 with auto-refilling	**1.51 15.1**

This system is also available as a simple conditioning grease supply system without control valve and manometer.

Other designs on request.
All technical data and pictures are for information only and without responsibility. All design is subject to change without notice.

edition: 09.05.11

Stripping covers with rubber lip

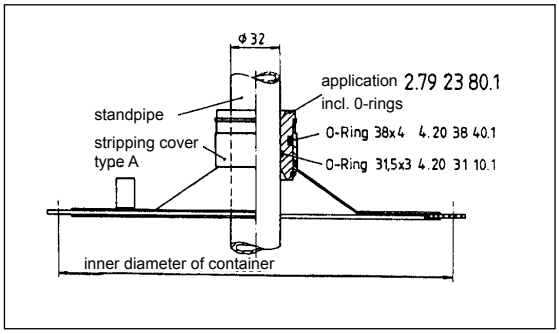
Stripping covers, optional for containers in metal or plastic (conical) for the use of grease barrel presses.
Below the most common stripping covers are listed. Other sizes and designs on request
Please specify the size of the barrel and inner diameter.

Typ A

inner diameter	size of trading unit	Item-No.
250-270	15 kg	**2.79 22 26.1**
255-282*		**2.78 24.1***
260-290*		**2.79 22 27.1***
275-295		**2.79 22 28.1**

* suitable for conically plastic containers

Example: high-pressure press with stripping cover - type A

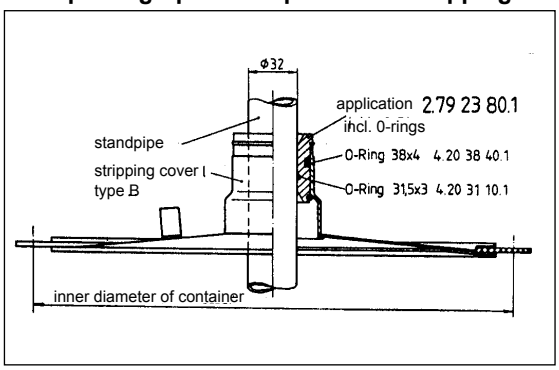


Typ B

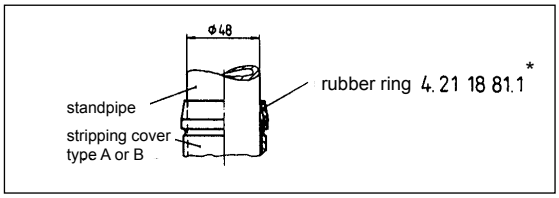
inner diameter	size of trading unit	Item-No.
300-350	25 kg	**2.79 22 33.3**
300-335*		**2.78 32.2***
340-380	50 kg	**2.79 22 35.3**
353-390		**2.79 22 36.3**
355-387*		**2.78 36.2***
368-404		**2.79 22 38.3**
378-414		**2.79 22 39.3**
388-424		**279 22 40.3**
560-574	200 kg	**2.79 24 12.2**

* suitable for conically plastic containers

Example: high-pressure press with stripping cover - type B



low-pressure press with stripping cover - type A / B



***) Advice**: stripping covers are delivered with the application 2.79 23 80.1 for 32-pipes. If the cover is required for low pressure presses with 48-pipes, the application has to be removed and the rubber ring 4.21 18 81.1 has to be reared. (Lubricate it with grease before.)

edition: 09.05.11

Stripping covers
with reinforced lip

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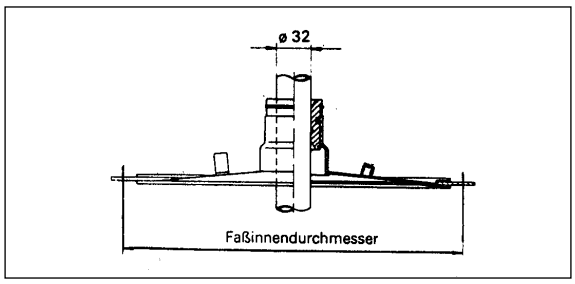
Stripping cover with reinforced lip (8 mm)

Stabilised design - suitable for rigid grease.
Other types and sizes on request.
Please specify the size of the barrel and inner diameter.



inner diameter	size of trading unit	Item-No.
300-325	25 kg	**on request**

43e-4010-2

edition: 09.05.11

Cover for 15 kg-, 25 kg- and 50 kg-containers

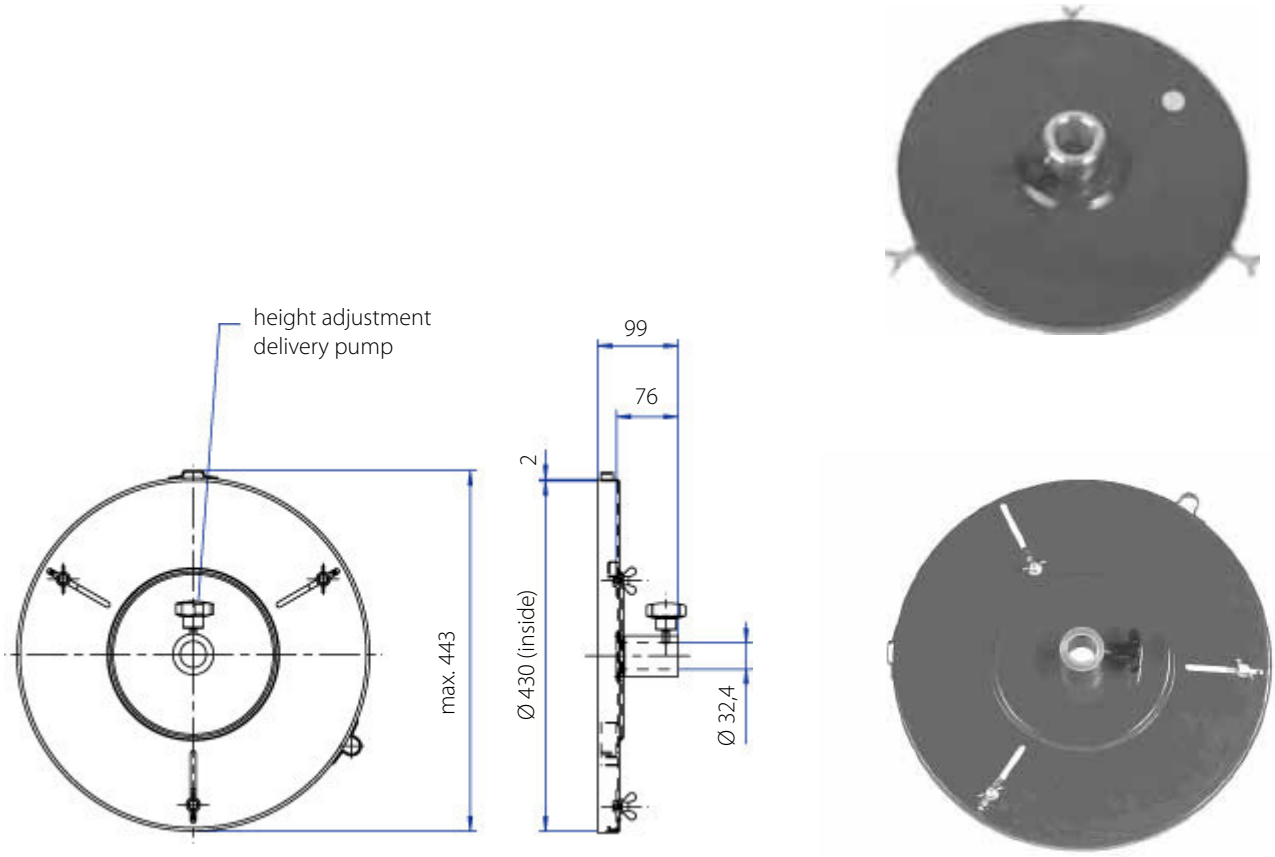


fig.: Cover for 50 kg - container

Denomination	suitable for containers	adjustable from	Item-No.
Cover for 15 kg-container	14-18 kg	280 - 320 mm	**4.25 28.1**
		240 - 300 mm	**4.25 26.1**
Cover for 25 kg-container	20-25 kg	355 - 395 mm	**4.25 30.2**
		312 - 350 mm	**4.25 30.1**
Cover for 50 kg-container	50 kg	315 - 420 mm	**4.25 35.1**
Stripping cover	suitable for conically plastic containers	240 - 280 mm	**2.78 24.1**
		300 - 340 mm	**2.78 32.1**
		355 - 387 mm	**2.78 36.1**

Other types and sizes on request.
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edition: 09.05.11

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Cover plates
for 200 kg-containers

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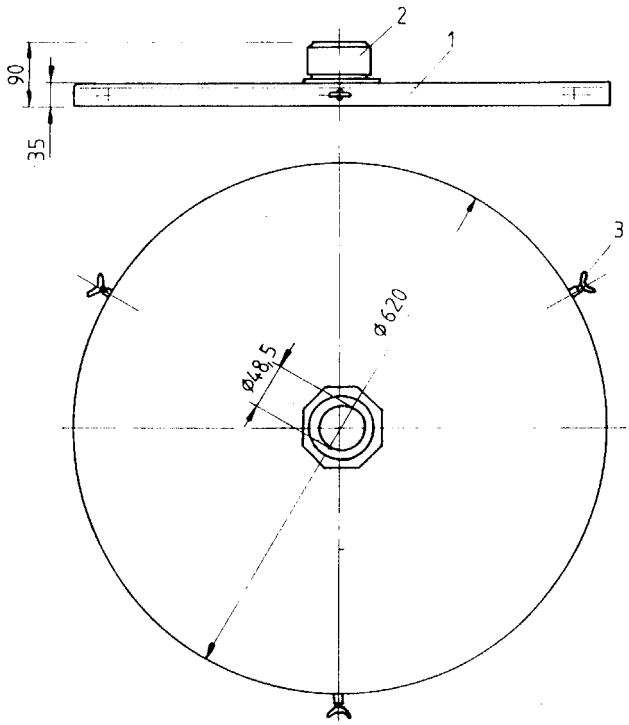


Pos. 1 plate
Pos. 2 track
Pos. 3 wing screw

Denomination	adjustable from	**Item-No.**
Cover for 200 kg-container	560 - 600 mm	4.25 36.1

43e-4050-2

edition: 09.05.11

High pressure gun / Grease filter

High pressure gun: accessory for the high pressure barrel pump

measures:
height: 137 mm
width: 150 mm

Denomination	Item-No.
High pressure gun PN 400 with sieve	2.72 34 41.1

Pos. 1 pistol
Pos. 2 die
Pos. 3 release lever

43e-5010-1

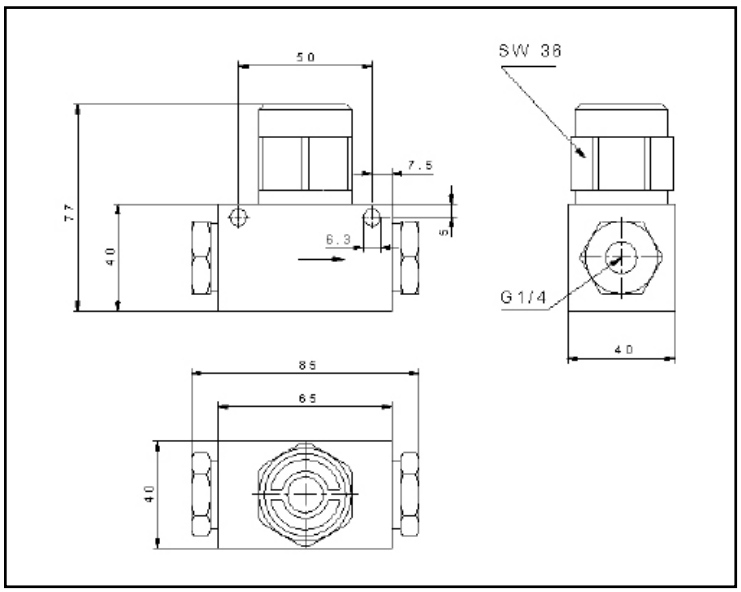
Grease filter

With the installation of a lubrication system impurities and pollutions can get in the piping system. The grease filter serves the purpose to catch these impurities and not let through in sensitive ranges.

The differential pressure between inlet and outlet may not be larger than 20 bar; otherwise the filter element can be destroyed. Therefore it should be regularly examined for impurities and if necessary cleaned and/or replaced.

Technical data:

Max. pressure range	500 bar
Connection thread	G 1/4 G 3/8



Denomination	Item-No.
Grease filter 60 µm, G 1/4"	**2.77 10 90.1**
Grease filter 60 µm, G 3/8"	**2.77 10 90.3**
Grease filter 150 µm, G 1/4"	**2.77 10 91.1**
Grease filter 150 µm, G 3/8"	**2.77 10 90.4**
Strainer 60 µm	**4.59 70.1**
Strainer 150 µm	**4.59 71.1**

edition: 26.02.16

Grease filter with connection block and manometer

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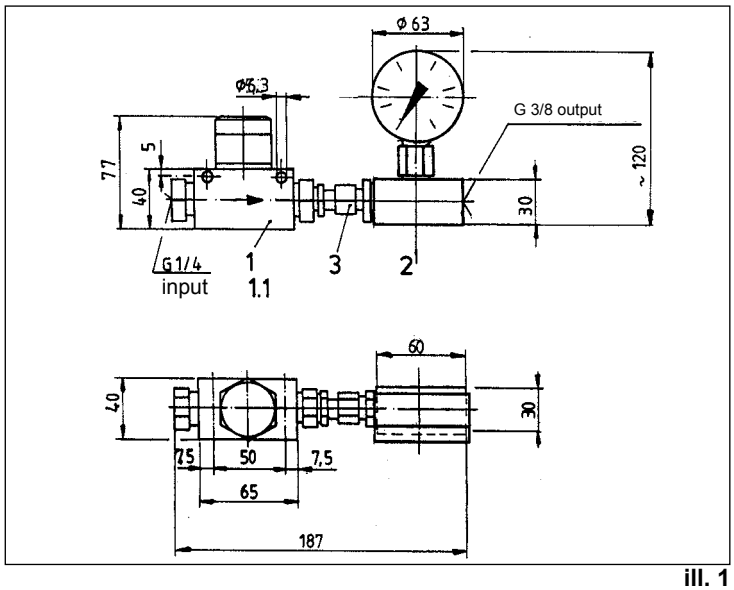
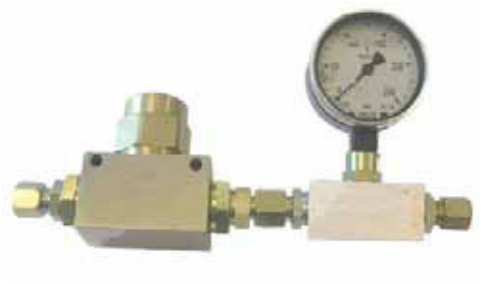
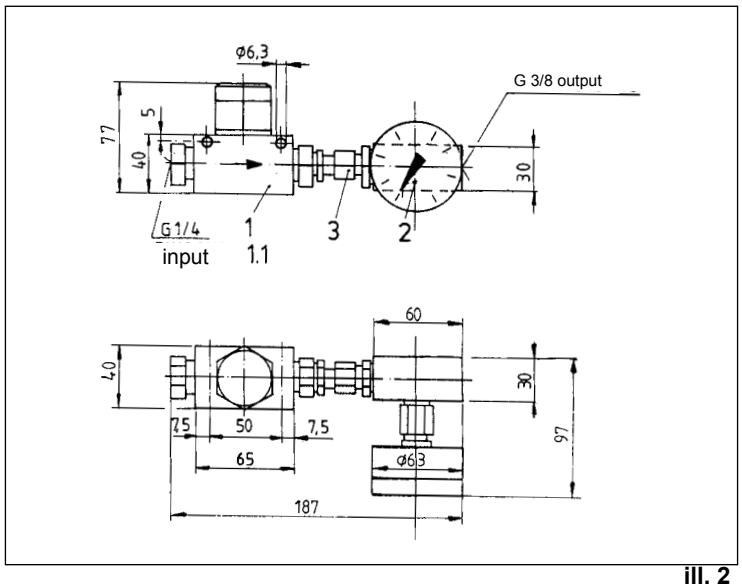


ill. 1



Pos. 1 grease filter 150 µ (2.77 10 90.2)
Pos. 1.1 replacement filter certridge 4.59 71.1
Pos. 2 manometer with connection block with gycerine filling, range 0 - ... bar
Pos. 3 connection (GE 12-LR - Item-No. 2.75 01 36.6X and EVGE 12-LR shortened - Item-No. 3.72 85.4)



ill. 2

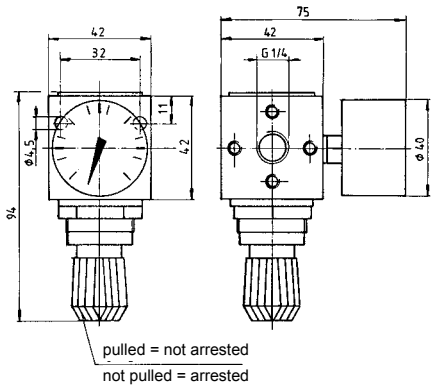
Pos. 1 grease filter 150 µ (2.77 10 90.2)
Pos. 1.1 replacement filter certridge 4.59 71.1
Pos. 2 manometer with connection block with gycerine filling, range 0 - ... bar
Pos. 3 connection (GE 12-LR - Item-No. 2.75 01 36.6X and EVGE 12-LR shortened - Item-No. 3.72 85.4)

Denomination	Ø	connection	Item-No. manometer	with connection block	ill.	Item-No.
grease filter with connection block and manometer 250 bar, glycerine filling	63	behind	1.00 63.1	G 3/8	2	**1.00 89.1**
		below	1.00 64.1		1	**1.00 90.1**
grease filter with connection block and manometer 150 bar, glycerine filling		behind	1.00 73.1		2	**1.00 91.1**
		below	1.00 74.1		1	**1.00 92.1**
grease filter with connection block and manometer 60 bar, glycerine filling		below	1.00 61.1		2	**1.00 93.1**
		behind	1.00 67.1		1	**1.00 94.1**
grease filter with connection block and manometer 100 bar, glycerine filling		below	1.00 68.1		2	**1.00 95.1**
		behind	1.00 69.1		1	**1.00 96.1**

edition: 26.02.16

Pressure reducing valve

To control the grease pressure in barrel presses and the steering pressure.



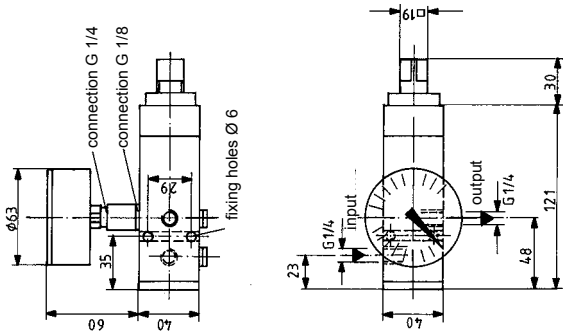
Denomination	limited to	Item-No.
pressure reducing valve G 1/4	2,8 bar	**1.31 82.1**
	4,0 bar	**1.31 84.1**
	6,0 bar	**1.31 86.1**
	8,0 bar	**1.31 88.1**

The pressure reducing valves are completly featured with manometer 0-10 bar.

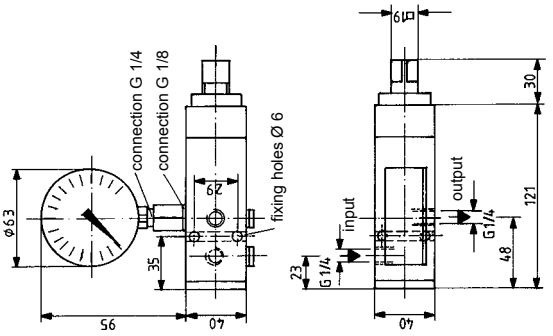
Pressure regulating valve for grease

Technical Data

diameter material input	4 mm
gear transmission ratio	25 : 1
connection / input	G 1/4
connection / output	G 1/4
adjustment range	3 - 50 bar
input pressure	max. 250 bar
manometer	0 - 100 bar



Denomination	connection	Item-No.
pressure regulating valve	below	**4.85 23.1**



Denomination	connection	Item-No.
pressure regulating valve	behind	**4.85 24.1**

edition: 09.03.11

Steering accessories
service unit, manometer

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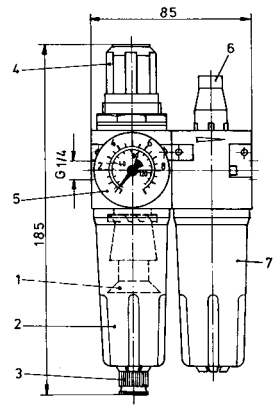
Service unit
with water separator, filter, air line lubricator, reducing valve and manomenter

technical data

temperature, max.	70° C
flow rate, max.	50 m³/h
flow rate, min.	6 m³/h
air pressure, max.	15 bar



1 filter (bronze sinter)
2 water separator
3 water drain
4 adjusting screw
5 manometer
6 adjusting screw (oil volume)
7 oil tank

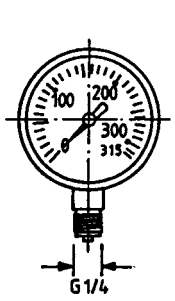
Denomination	Item-No.
service unit	**2.71 10 10.3**

43e-5510-2

manometer for grease pressure

connection G 1/4

Denomination	Anschl.	Item-No.
manometer Ø63 **250 bar**	below	**2.63 31.1**
manometer Ø63 **0-60 bar**, glycerine filled	behind	**2.63 08.5**
	below	**2.63 06.5**
manometer Ø63 **0-100 bar,** glycerine filled	behind	**2.63 11.1**
	below	**2.63 10.1**
manometer Ø63 **0-150 bar,** glycerine filled	behind	**2.63 15.1**
	below	**2.63 16.1**
manometer Ø63 **0-250 bar,** glycerine filled	behind	**2.63 25.5**
	below	**2.63 26.5**
manometer Ø63 **0-400 bar,** glycerine filled	behind	**2.63 41.5**
	below	**2.63 40.5**



e.g.-ill.

glycerine filled:

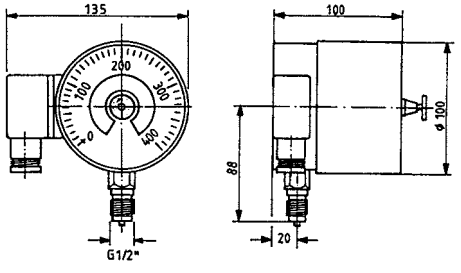
e.g.-ill.

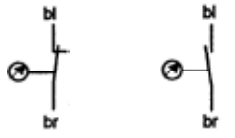
contact manometer

technical data

pressure range	0 - 400 bar
nominal size	100
voltage	max. 380 V
breaking capacity	50 VA

Item-No.	
2.71 80 65.2	**2.71 80 66.2**
max. contact as	
opener	closer

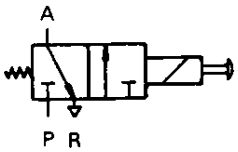




edition: 09.03.11

3/2 - magnetic valve

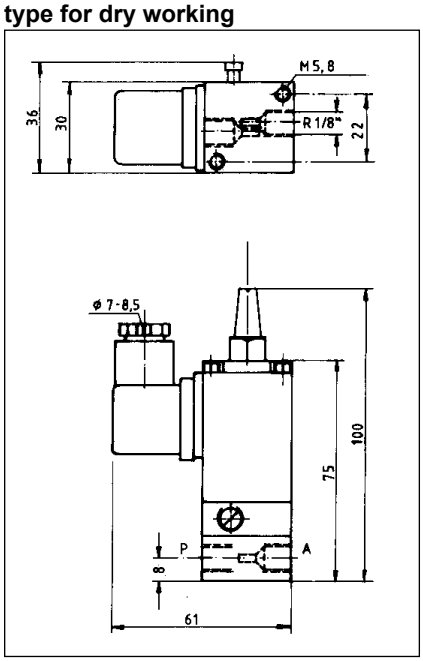
with cable end to control pneumatic central lubrication pumps.



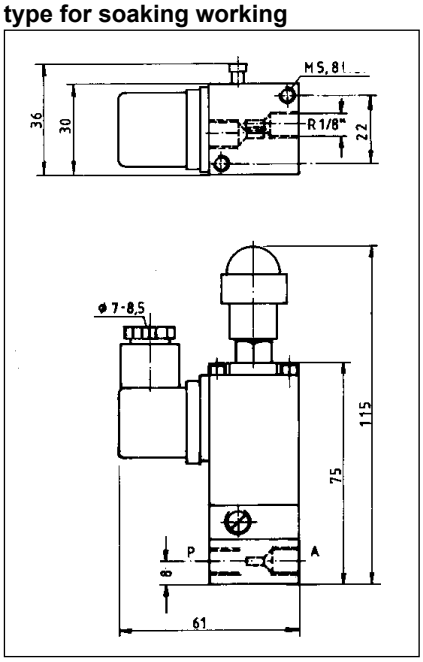
Technical data

fluid	compressed air
type	to drop out, closed
material from the case	brass / cast aluminium
fitting position	any
relative duty factor	100 % DF
utensil socket	DIN 43650
tolerance of voltage	± 10 %
nominal diameter	Ø 2
pressure range	0 - 10 bar
contact rating	7,5 W
protection class	IP 65
working temperature	-20 °C bis +80 °C
capacity	Q_n 120 l/min
spoolle adjustable	4 x 90°

type for dry working



type for soaking working



denomination	voltage (V)		frequency (Hz)	application	item no.
	DC	AC			
3/2 - magnetic valve	-	24	50	dry working	**2.81 20 31.3**
	24	-	-	soaking working	**2.81 20 32.3**
	24	-	-	dry working	**2.81 20 34.3**
	-	220	50	dry working	**2.81 20 42.3**
	-	220	50	soaking working	**2.81 20 45.3**

edition: 09.03.11

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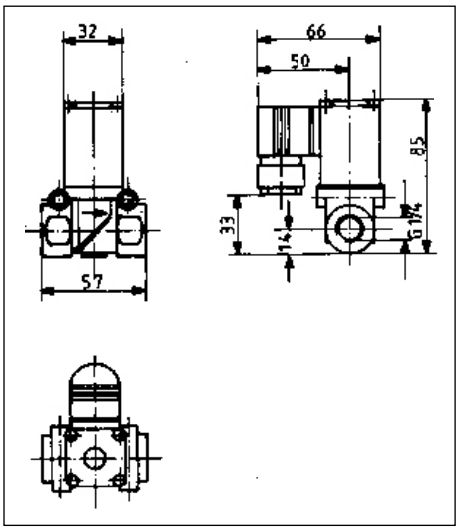
2/2 - Magnetic valve

Technical data

medium	compressed air
type	currentless closed
case material	brass
installation position	optional
rel. switch-on time	100 % ED
connector	DIN 43650
voltage tolerance	+/- 10 %
nominal diameter	DC Ø 8
pressure range	AC 0,2 - 16 bar
	DC 0,2 - 6 bar
contact rating	8 W
protection class	IP 65 (with connector)
working temperature	-10° C bis + 80° C
capacity	Q_n 1700 l/min
spoole adjustable	continously 360°

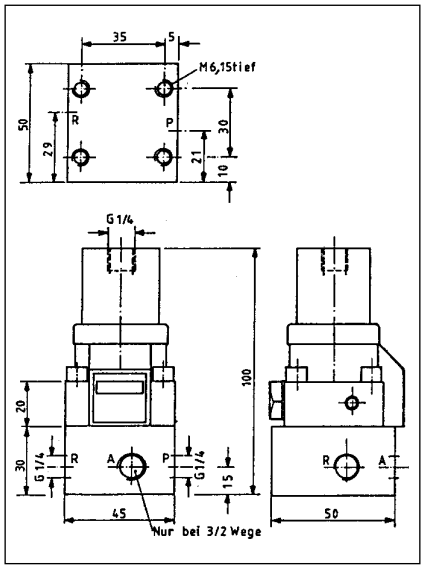


denomination	voltage (V)		frequency (Hz)	item no.
	DC	AC		
2/2 - magnetic valve	24	-	-	**2.81 20 51.3**
	-	24	50	**2.81 20 50.3**
	-	220	50	**2.81 20 52.3**

2/2 - Ball valve, pneumatic
with blockade of the charge line of a metering system

Technical data

nominal diameter Ø		5 mm
pressure range,	pneumatic	3 to 15 bar
	hydraulic	220 bar
connection,	pneumatic	G 1/4
	hydraulic	G 1/4
working temperature		-20° C to +70° C
installation position		optional
weight		1,05 kg



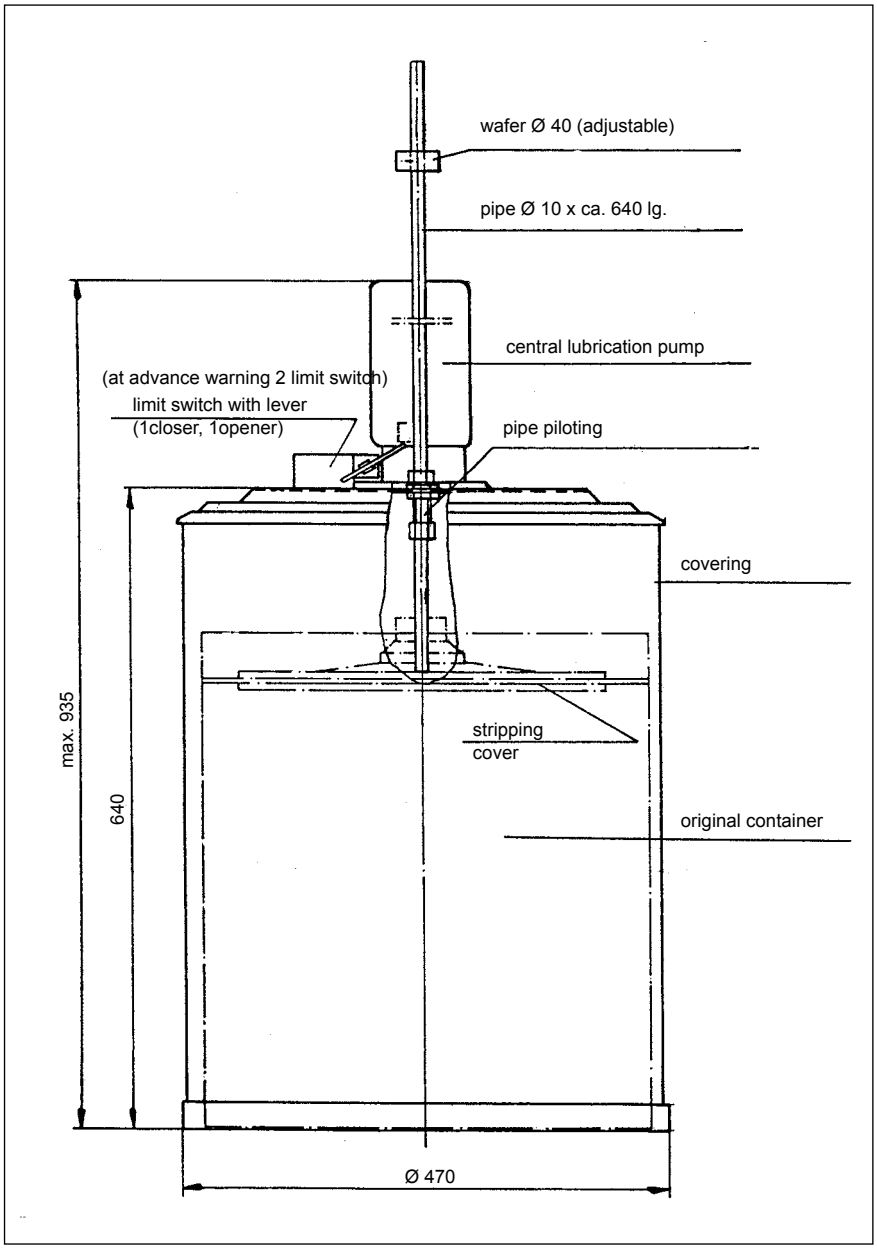
denomination	weight	item no.
pneumatic 2/2 - ball valve	1,05 kg	**2.71 33 18.1**

43e-5510-4

edition: 09.03.11

Grease level controlling for 50 kg - barrels
with limit switch (intermitted feed)

The limit switch is operated if the minimum level of grease is reached (changeover contact).
At construction with 2 limit switches the advance warning takes place by the first switch-key and a main warning by the second switch-key.



ill. 50 kg-container

Denomination	for containers up to	Item-No.
grease level control unit with limit switch (intermittend feed)	**50 kg**	**1.05 13.1**
	200 kg	**1.05.15.1**
grease level control unit with limit switch and advance warning (intermittend feed)	**50 kg**	**1.05 14.1**
	200 kg	**1.05 19.1**

edition: 09.03.11

Control sensor for metering systems

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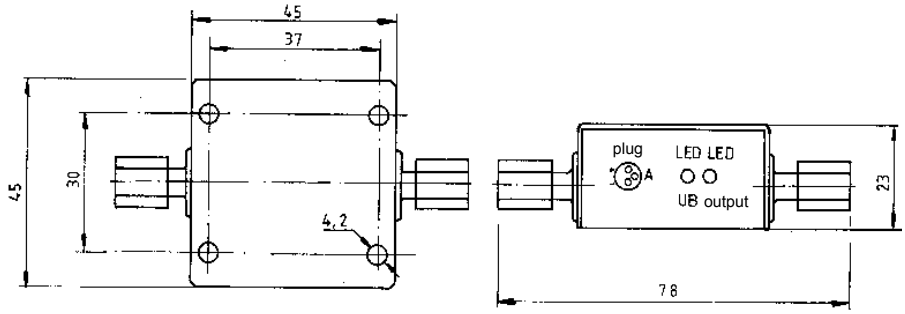
The control sensor for metering systems allows a comfortable and clear identification, if the grease, which was delivered by the metering valve, was pumped to the lubrication point. Every dose - yet from a quantity of 5 mm³ - is indicated by a light emitting diode. In addition to that the impulse can be relayed to the control unit of the machine as a handshaking signal.
The sensor reacts apart from metering control to interferences, e.g. breakage of the lubrication line, trapped air or plugging.

43e-6010-2

Technical Data

ascertainable doses	≥ 5 mm³
pulse frequency	max. 1 impulse/sec.
media	oil/soft grease/NLGI-greases
working pressure	max. 50 bar
working temperature range	-20 to +70°C (dependent on the media)
case measures	h=23 / w=45 / d=45 mm
case material	anodized aluminium
fitting	4 drilling for screws M 4
pipe connection	tube fitting Ø 6mm
installation	directly on the output of the metering valve
fitting position	optional, for small outputs particularly vertical in flow direction
protection class	IP 67 with cable coupling
power supply	10 ... 36 V DC
rated voltage	24 V DC
switching function	PNP - shutter
output current	max. 200 mA short circuit proof
output pulse extension	≥ 50 / ≤ 60 ms
current consumption	ca. 15 mA on 24 V
funktion indicator	LED green = operating voltage LED yellow = lube impulse
connection	connector M 8x1
connector pin assignment	1 (br) + / 3 (bl) - / 2 (sw) output



Denomination		Item-No.
control sensor for metering systems		**2.15 25.1**
Accessories:		
cable coupling with splashed line and engaging sleeve nut	with angular connector with 5,0m of cable	**2.15 18.1**
	with straight connector with 5,0m of cable	**2.15 19.1**

edition: 09.03.11

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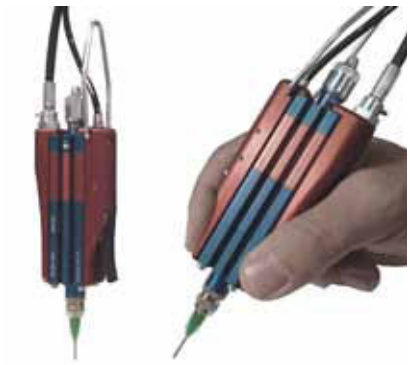
Metering valves with hand grip PEN

1 - 200 mm³

Maximum process reliability with the smallest metering volume - with the new metering-pen you can meter small quantities more accurately on your components.
Thanks to the precise and clean job with the highest repeatability you save at each dosage expensive lubricant!



NEW

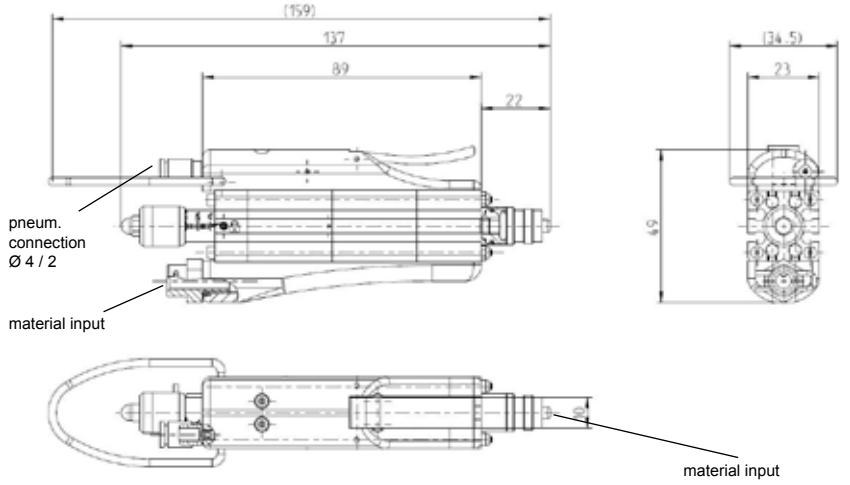
This valve with low weight is suitable for vertical accessible lubrication points. The ergonomic handle allows a comfortable and simple work at the installation point. For optimal conditions, these metering valves can be mounted by a balancer directly above the workstation.
The volumetric metering valve with a handle consists of infinitely variable metering chamber and an integrated pneumatic cylinder for controlling the metering pin.

The pneumatic part of the metering valve is controlled by a pneumatic 5/2-way valve which is built-in the handle. By pulling the trigger the metering of grease is started. The metering speed depends on the material pressure (medium). The air- and grease-chamber are seperated from each other.
The repeatability in middle metering range is +/- 2%.

43-7020-1

technical data

pneum. operating pressure min./max.	5 / 7 bar (opt.: 6 bar)
max. penetration	NLGI-class 3



nomination	metering range [mm³]	material pressure (min. / max.) [bar]	connection input (air pressure)	connection input (medium)	pressure output	item-no.
metering valve with hand grip PEN	1 - 20 10 - 200	20 / 200	M 3 for hose Ø 4	M 8x1	M 5, incl. metering pin adapter	**Please contact us. We are happy to put together for you the fitting metering valve including accessoires**

Accessoires: magnetic field-sensor (2-fold-scan of grease piston) **/ metering pin-set**

Other versions on request.
All technical data and illustrations are not binding. Subject to change.

Ausgabedatum: 02.04.13

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Metering valves with assembling unit

also available with sensor

Volumetric metering valves comprises an adjustable dosage chamber for the medium and an integrated pneumatic cylinder serving as actuator. The metering valve is controlled by means of a 5/2-way valve.

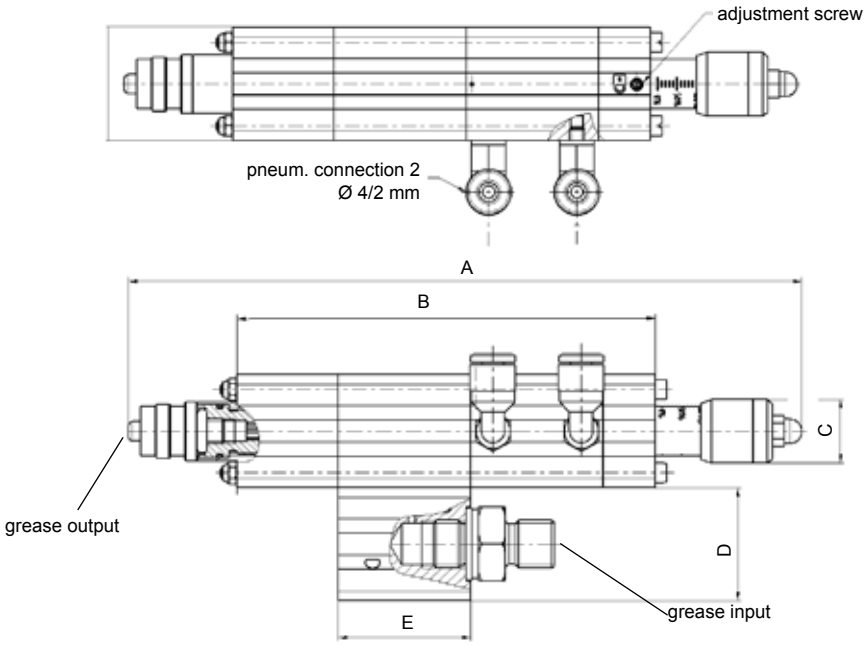
Thanks to the precise and clean application with the highest repeatability you can save on each dosage expensive lubricant. By means of anytime retrofit sensor for the metering piston, you now make your production- and assembly-process for greasing more effectiveness and reliability!

Metering valves with sensor (hydraulic and/or pneumatic) present a low cost and hence frequently used solution for monitoring the dosage process. The sensor registers the movement of the metering piston and thus the ejection of the lubricant. The initial signal confirms that the dispensing occured. This dispensing interrogation facilitates an optimal process supervision and guarantees a high service life through his robust construction. The dosage chamber volume is continuously adjustable by a screw adjustment.

new model!

Technichal data

operating air pressure min./max.	5 / 7 bar (opt.: 6 bar)
specification of operation medium	NLGI-Klasse 3



Denomination	metering range [cm³]	material pressure (min. / max.) [bar]	connection input / output	A	B	C	D	E	F [□]	weight [g]	Item-No.
Metering valve with assembling unit	0,05 - 0,45	200 bar / 80 bar	G 1/8 / G 1/8							425	**2.05 60.1***
	0,001 - 0,02	20 / 200	G 1/8 / M5	137	85	Ø13	23	27	23x23	169	**on request**
	0,01 - 0,2								23x24		**on request**
	0,1 - 2,0		G 1/4 / G 1/8	224	156	Ø20	36	52	36x36	773	**2.05 70.2**
	1,0 - 6,0									802	**2.05 83.1**

*) discontinued model

Other types and sizes on request.

All technical data and pictures are for information only and without responsibility. All design is subject to change without notice.

edition: 19.08.15

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Metering valves
2 - 133 cm³
for direct mounting (also available with sensor)

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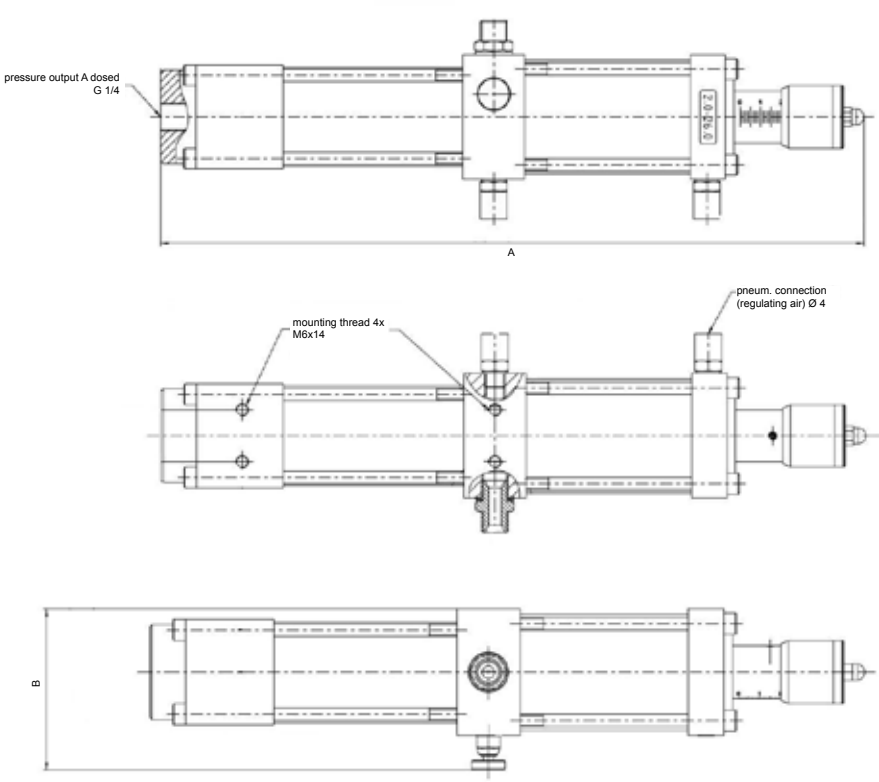
Metering valves for simple and fast attachment to the mounting block. To control a 5/2-way valve is provided. The required metering amount is infinitely adjustable via the regulating sleeve.

This metering valves are also available with hydraulic and pneumatic sensor, for a simple process monitoring.

technical data

max. input pressure	200 bar
output pressure	80 bar
pneum. operation pressure min./max.	5 bar / 7 bar (opt.: 6 bar)
lubricants	to NLGI 3
G = mounting thread	M6 / M8*

43e-7030-2



denomination	metering-range [cm³]	material-pressure on / off	connec-tion on / off	regula-tion air connect.	measurement A	measurement B	weight [g]	item-no.
metering valve for direct mount-ting (without sensor)	2,0 - 26,0	200 bar / 80 bar	G 1/4 / G 1/4	G 1/8	340	76	2087	**2.06 60.1**
	5,0 - 54,0				463	76	2560	**2.06 70.1**
	10 - 133*		G 1/4 / G 3/8		560	106	6570	**2.06 80.1**

accessoires: sensor for monitoring the piston position (hydraulic and pneumatic)

Upon request, customized application nozzles can be supplied. Other versions on Request. All technical data and illustrations are not binding. Subject to change.

(ehem. 43-7040-1)

edition: 19.08.15

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Metering valve with handgrip horizontal

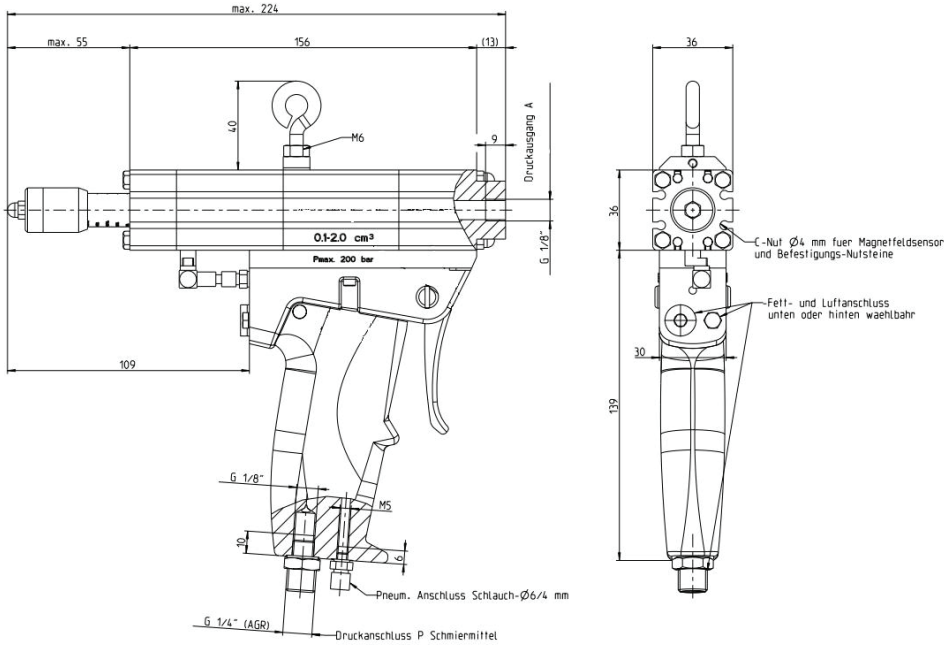
Metering valves series equipped with ergonomic handle is especially suited for easy and handy operation. Handling of this valve may be further facilitated by using counterbalance suspended directly above the assembly area. The connection for the material supply and for the air supply can be used optionally at the drag or at the backside of the handgrip.
The dosage chamber inlet and outlet are alternatively shut and opened by means of a pin valve with pneumatic control. The dosage chamber volume is continuously adjustable by a screw adjustment.

Function

The pneumatic part of the metering valve is controlled by a 5/2-way valve whic is located inside the handle. Pressing the trigger initiates ejection of the meter medium. The output pressure depends on the lubricant feed pressure (media). T pneumatic system is separated from the grease chamber.

Technical data

operating air pressure min./max. 5 bar / 7 bar (opt.: 6 bar)



denomination	metering range [cm³]	medium pressure min./max.	connection in / out	control air connection	item-no.
metering valve with hand grip horizontal	0,1 - 2,0	20 bar / 200 bar	G 1/8 / G 1/4	M5	**Please contact us. We are happy to put together for you the fitting metering valve including accessoires.**
	1,0 - 6,0				

accesssoires: magnetic field-sensor (2-fold-control of the grease piston) / **metering pin-set**

Other models on request. All technical data and pictures are for information only and without responsibility.
All design is subject to change without notice.

edition: 03.04.13

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Metering valve with handgrip vertical (also available with sensor)

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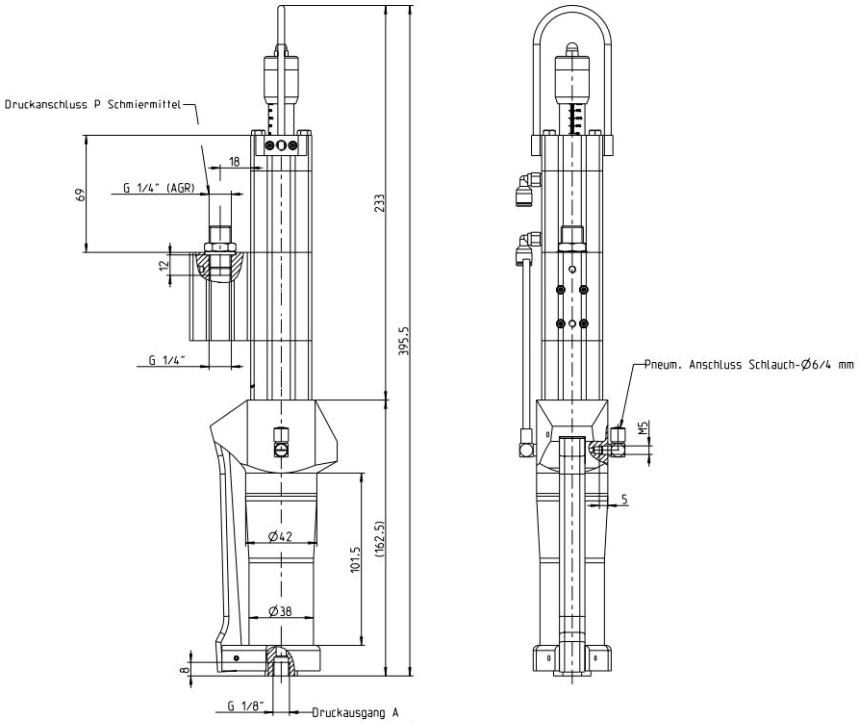
These metering valves are suitable for vertcally accessible lubrication points. The ergonomic handle with modern and optimised metering activator is especially suited for easy and handy operation. Handling of these metering valves may be further facilitated by using a counterbalance suspended directly above the assembly area.
The metering tolerance is maintained to better than +/- 2% in the middle range of dosage volume. The output can be adjusted continuously.

Metering valves with sensor (hydraulic or pneumatic) present a low cost a hence frequently used solution for monitoring the dosage process.

Technical data

operating air pressure min./max. 5 bar / 7 bar (opt.: 6 bar)



denomination	metering range [cm³]	medium-pressure min./max.	connection in / out	control air connection	item-no.
metering valve with handgrip vertical	0,1 - 2,0	20 bar / 200 bar	G 1/8 / G 1/4	M5	**Please contact us. We are happy to put together for you the fitting metering valve including accessoires.**
	1,0 - 6,0				

accesssoires: magnetic field-sensor (2-fold-control of the grease piston) / **metering pin-set**
Other models on request. All technical data and pictures are for information only and without responsibility.
All design is subject to change without notice.

43e-7050-2
edition: 03.04.13

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Metering valve for major quantities

pneumatically or hand-operated

General notes
The metering valve can be employed with a low-pressure press or a medium pressure press.
The media is delivered from a original container e.g. 25, 50 or 180 kg.
The metered volume is continuously adjustable from 100 up to 1000 cm³.

Function
The metering unit works double-acting or hand-operated.
By switching the pneumatically or hand-operated 4-way-ball valve, the media is placed in the metering chamber on one side and simultaneously pressed to the metering point on the other side. With every activation of the pneumatic drive this process is repeated.

Advice: The operating pressure on the input of the meering valve must not excess **75 bar**.

Adjustment of metered volume
The favoured metered volume is adjustable with a star handle in a very simple and exact way. This is effected with a locked compressed air input on the filling press.
The appropriate default setting can be read off on a scale.

Technical Data

metering range	100 - 1000 cm³
input pressure of the media	up to 75 bar / 75 bar
connection input/output	G 3/8
steering air pressure	5-6 bar
steering air connection	G 1/4

Denomination	Item-No.
metering valve for major quantities, pneumatically operated	**1.12 30.1**
metering valve for major quantities, hand-operated	**1.12 31.1**

edition: 26.07.16

43e-7060-1

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Cartridge metering unit 0-2 cm³

Cartridge metering unit 0-2 cm³

Application for small and middle machines with an automatically central lubrication. The cartridge metering unit is a pneumatically working aggregate, which can supply the lubricant in intervals at the bearing- and friction places, in a multiplicity of applications, in the desired adjustable quantity.

Continuous adjustable grease metering unit (0...2 cm³) with pneumatical cylinder, mounting elbow and reservoir for the admission of grease cartridges with max. 400 gram and/or loose grease for filling in with max. 500 gram contents.

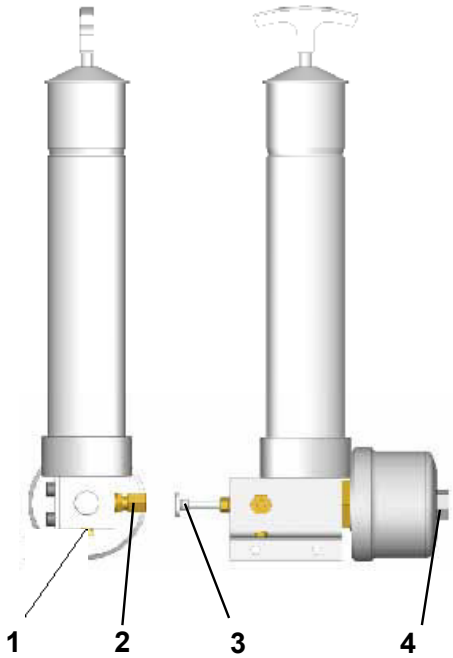
The install-position with grease is unimportant. With oil it should be paid attention for vertically installation. The pneumatic cylinder is released by means of a 3/2-way-valve (optional) with compressed air. The equipment must be aired out before start-up.

example of use

43e-7505-1

Technical data:

discharge amount (adjustable):	0...2 cm³
recommended working pressure:	200 bar
max. working pressure:	300 bar
recommended pneumatical working pressure:	4 bar
max. pneumatical working pressure:	6 bar
ratio air : grease:	1 : 50
max. metering capacity with 4 bar:	approx. 75 cm³ / min
grease consistency range:	NLGI 000...3
temperature range:	0° C...+80° C
reservoir content:	Cartridge 400 gr. loose grease 500 gr.
total dimensions:	Height: 415 mm Lenght: 200 mm Width: 88 mm



Pos. 1: aeration screw
Pos. 2: discharge-non-return-valve pipe-Ø 6 mm
Pos. 3: proportioning adjustment 1 turn = 0,08 cm³
Pos. 4: compressed air inlet thread M 10x1

Denomination	Item-No.
Cartridge metering unit 0-2 cm³	**1.12 32.1**

edition: 09.03.11

TEKAWE
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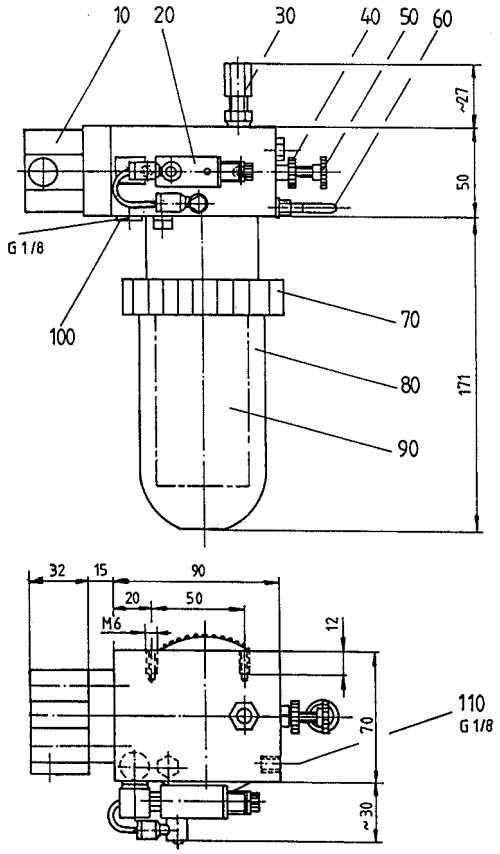
Metering unit with external control
by 3/2-way valve

Metering unit with external control by 3/2-way valve and with single-acting, pneumatical cylinder for catridges Ø 50 x 130.
The metering volume is adjustable from 0-300 mm³ or 0-500 mm³.

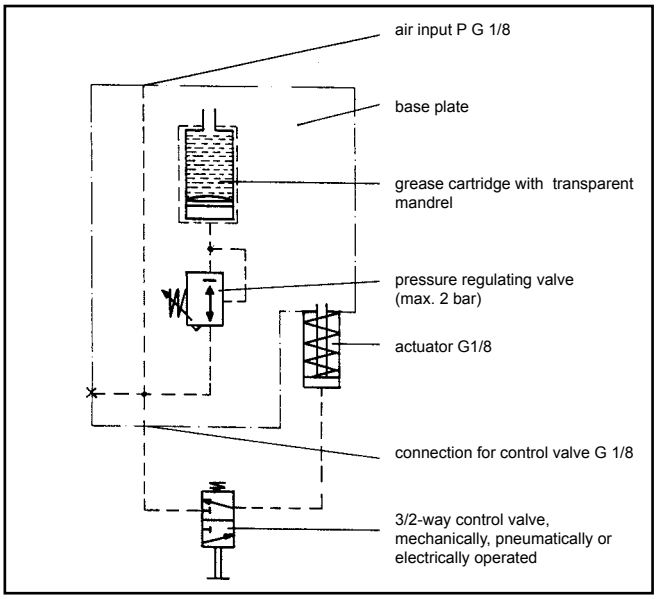
Technical data:

inlet pressure:	3 - 6 bar
output medium pressure:	max. 170 bar (at 0-300 mm³) max. 100 bar (at 0-500 mm³)



Pos. 10 actuator, single-acting
Pos. 20 pressure regulator for filling pressure
Pos. 30 grease output with return valve for pipes Ø 6
Pos. 40 counter nut (knurl)
Pos. 50 metering screw with knurl
Pos. 60 bleeder screw
Pos. 70 box nut
Pos. 80 transparent pressure tank
Pos. 90 grease cartridge
Pos. 100 compressed air connection G1/8 (closed)
Pos. 110 compressed air connection

pneumatic connection plan



Denomination	metered volume	Item-No.
metering unit with external control by 3/2-way valve	0 - 300 mm³	**1.12 21.1**
	0 - 500 mm³	**1.12 26.1**

43e-7540-1

edition: 02.08.11

Metering unit with external control

by 5/2-way valve

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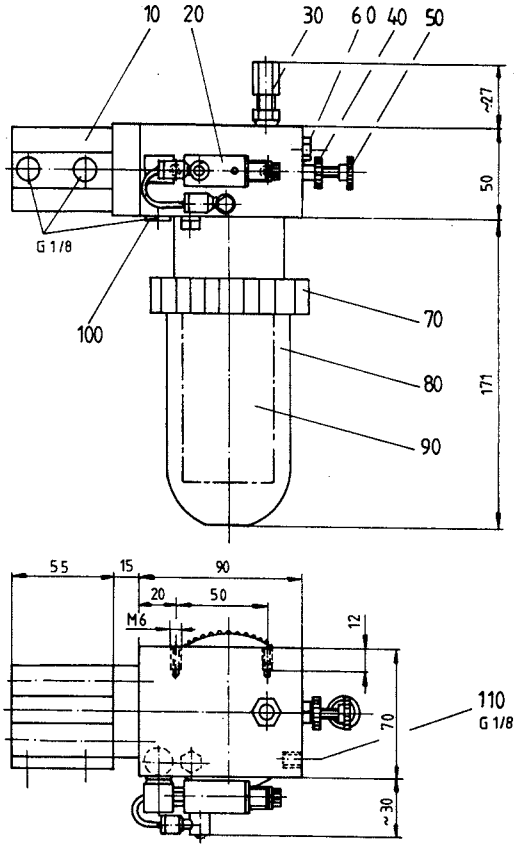
43e-7540-2

Metering unit with external control by 5/2-way valve and with single-acting, pneumatical cylinder for catridges Ø 50 x 130.
The metering volume is adjustable from 0-420 mm³ or 0-750 mm³.

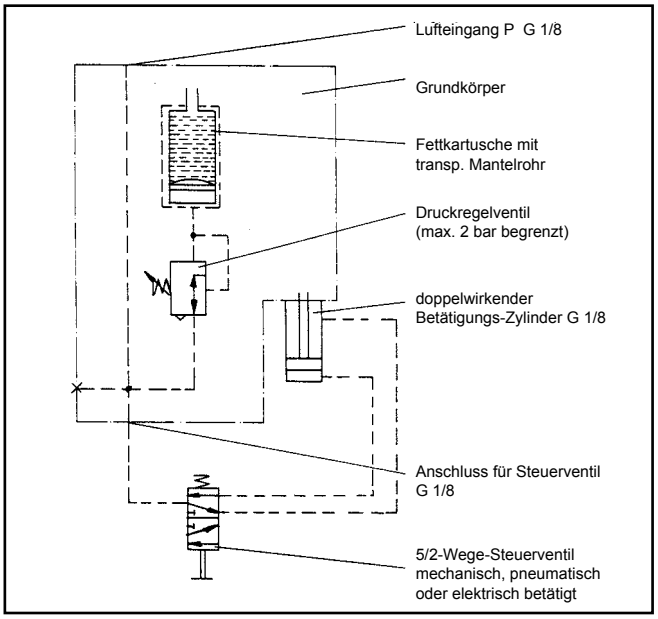
Technical data:

inlet pressure:	3 - 6 bar
output medium pressure:	max. 170 bar (at 0-420 mm³)
	max. 100 bar (at 0-750 mm³)
	max. 160 bar (at 0-500 mm³)



Pos.	10	Betätigungszylinder, doppelwirkend
Pos.	20	Druckluftregler für Fülldruck
Pos.	30	Fettausgang mit Rückschlagventil für Rohr Ø 6
Pos.	40	Kontermutter (Rändel)
Pos.	50	Dosierschraube mit Rändel
Pos.	60	Enlüftungsschraube
Pos.	70	Überwurfmutter
Pos.	80	transparenter Druckbehälter
Pos.	90	Fettkartusche
Pos.	100	Druckluft-Anschluß G1/8 (verschlossen)
Pos.	110	Druckluft-Anschluß

Pneumatischer Anschlußplan



Denomination	metered volume	Item-No.
metering unit with external control by 5/2-way valve	0 - 420 mm³	**1.12 20.1**
	0 - 750 mm³	**1.12 25.1**

(ehem. 43-7545)

edition: 02.08.11

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Pneumatic metering gun for grease cartridges

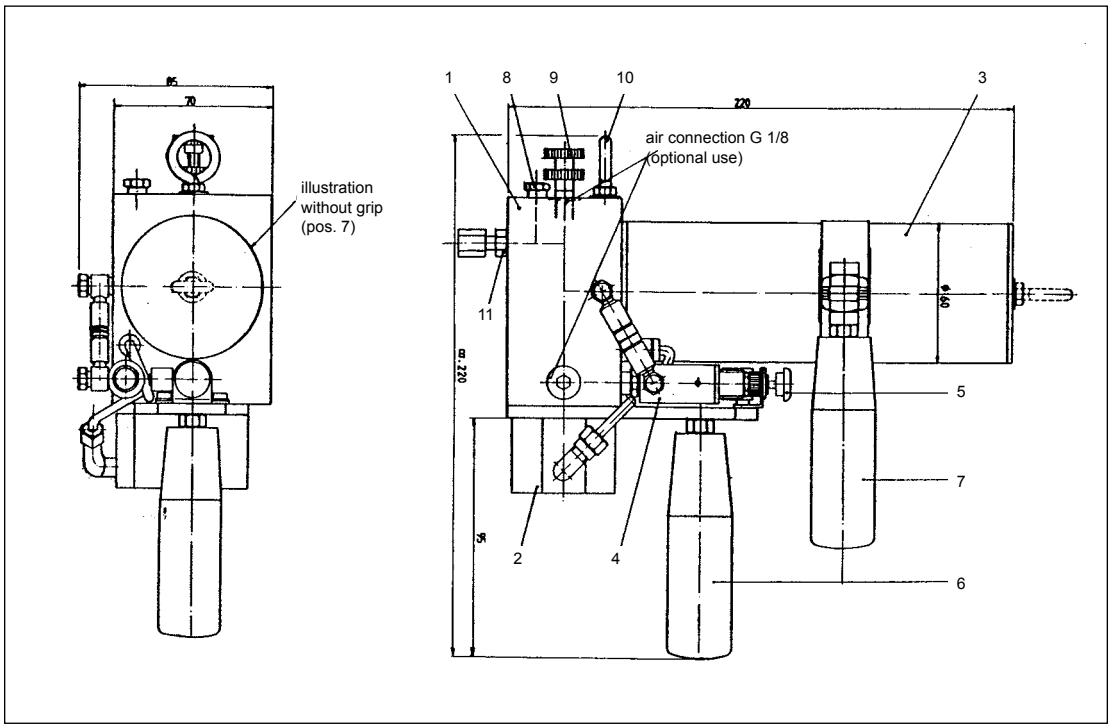
∅ 50 x 130

Pneumatic metering gun for grease-cartridges for the use at hand-work places, e.g. for greasing of ABS-sensor holes.
The metering volume is adjustable from 0-300 mm³ or 0-500 mm³.

For this metering system we design and produce appropriate greasing tools according to the workpiece to lubricate.

Technical data

inlet pressure	3 - 6 bar
outlet medium pressure	max. 170 bar



Pos. 1 metering unit
Pos. 2 metering cylinder
Pos. 3 cartridge tube
Pos. 4 pressure reducing valve
Pos. 5 operating button
Pos. 6 grip
Pos. 7 grip with spring clamp
Pos. 8 bleeder screw
Pos. 9 metering screw
Pos. 10 ring picot
Pos. 11 return valve

Denomination	metered volume	Item-No.
pneumatic metering gun for grease cartridges Ø 50 x 130 mm	0 - 300 mm³	**1.12 00.1**

43e-7550-1

edition: 02.08.11

Grease cartridge empty

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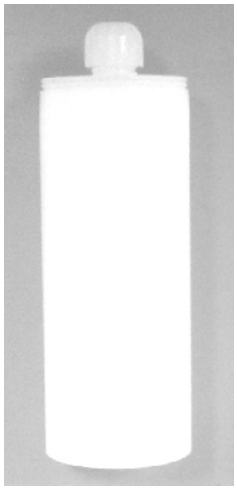
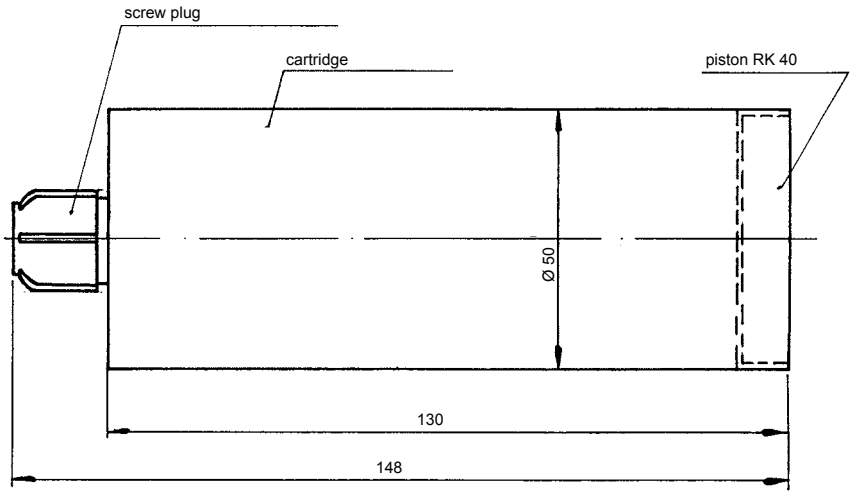
Plastic grease cartridge for use with metering systems, e.g. described in leaflet 43e-7540 and 43e-7550.

This grease cartridges can be filled with any required grease.



Technical data

filling quantity	150 ml
material	synthetic material PA



Denomination	filling quantity	material	Item-No.
grease cartridge, empty	150 ml	synthetic material PA	**3.20 00.1**

edition: 02.08.11

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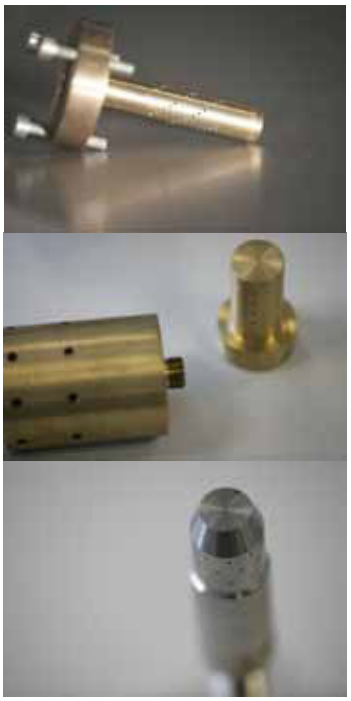
Greasing tools for metering units

Greasing tools for the application of grease and other viscous media in combination with our metering units and systems.

For use cases of all kinds, e.g. the greasing of individual surfaces, holes, axles etc., we design and produce special greasing tools and application units.

In combination with our cartridge metering unit (e.g. leaflet 43e-7540 and 43e-7550) you get a complete metering system, which is matched to your greasing-process.

application types: - punctual
- linear- or laminar
- volume filling



Examples:

43e-7550-3

edition: 02.08.11

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bleeder valve

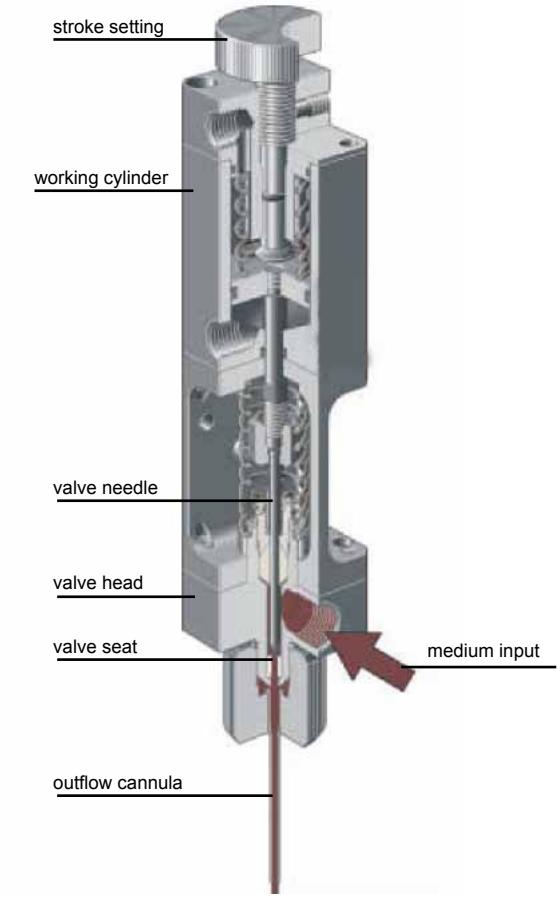
This bleeder valve is employed for the application of liquid up to paste-like media. It is distinguished by its compact type of construction as well as by its pressure load of up to 250 bar.
High precision and exact metering amounts for individual applications can be achieved.
The bore has a width of 2 mm and is contructed for minor output quantities. The metered volume per time unit ist continously variable and adjustable by the use of a knurled screw!

- different series and sizes
- large opening- and closing force
- pneumatic double control
- valve seat and valve needle optional also in hard metal for use of abrassive media
- handle optional with pneumatic or electrical operation

43e-8210-1

Technical data

medium inlet pressure	250 bar
weight, approx.	0,50 kg



Denomination	Item-No.
bleeder valve, 2 mm possible wide	**2.11 20.1**

Other models on request (possible wide, outflow-Ø).
All technical data and pictures are for information only and without responsibility.
All design is subject to change without notice.

edition: 02.08.11

Siewekeweg 6 | D - 33758 SH-Stukenbrock | Fon: +49 (0) 5207 - 9558-0 | Fax: +49 (0) 5207 - 9558-70 | info@tekawe.de | www.tekawe.de

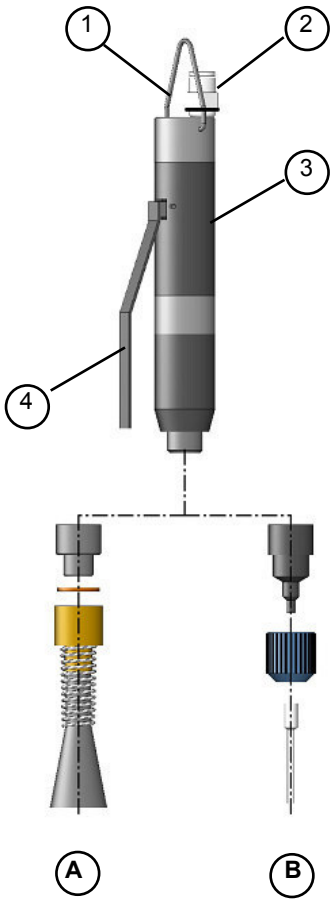
Hand-discharge unit

in 2 versions "Brush" and "Line"

Hand discharge unit in 2 versions "Brush" and "Line"

The hand discharge valve is suitable for proportioning greases and oils during manual processes.
The round construction of the hand metering valve makes a comfortable controlling possible of the hand order. Thus is avoided fatiguing of the hand and the dosing accuracy is increased.
The metering valve is relased by means of manual control.

Due to the unique pen-shape and the low weight, the valve is perfectly in the hand.



Pos. 1: Retainer
Pos. 2: Hose connection
Pos. 3: Discharge unit
Pos. 4: Control lever

Technical data:

Max. working pressure:	10 bar
Nominal width:	2 mm
Consistency range grease:	NLGI 000 … 2
Oil viscosity range:	10...1500 mm² / s
Temperature range:	0°C up to +80°C
Hose connection:	4 mm or 6 mm, pluggable
Handhold diam.:	20 mm
Weight:	approx. 150 gr.

The hand discharge unit is available in two versions:

A - Brush version "**TEKA-brush**":
- Stainless steel applying brush
- Sealing ring
- Adapter

The stainless steel applying brush has a not measurable wear and is very resistantly, also with extreme applications and loads.

B - Nozzle version "**TEKA-line**":
- Nozzle needle
- Adapter

With the cannula it can be made an exact line or crawler-type application.

43e-8250-1

edition: 02.08.11

Hand-discharge unit

in 2 versions "Brush" and "Line"

TEKAWE
Tribo- und Industrietechnik GmbH

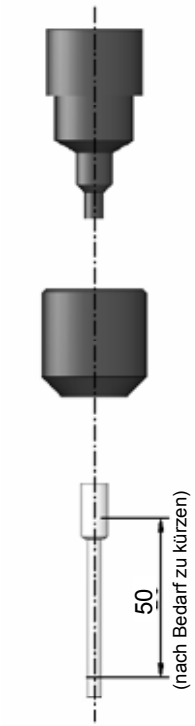
43e-8250-2

A - Brush attachment for hand discharge unit

Denomination	D [mm]	L[mm]	Item-No.
Connector brush	---	**---**	**9.12 18.1**
Sealing ring			**4.10 15.1**
Subtlest stainless steel brush	ca. 10	25	**2.20 09.1**

More dimensions and part.-no.'s for the complete set on request.

B - Nozzle attachment for hand discharge unit



Denomination	Outside-Ø [mm]	Inside-Ø [mm]	Item-No.
Connector cannula	---	**---**	**9.12 15.1**
Knurled nut			**5.12 04.1**
Needle nozzle range	0,9	0,54	**5.17 09.1**
	1,0	0,62	**5.17 10.1**
	1,5	0,98	**5.17 15.1**

Item-No. for the complete set on request.

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Grease discharging valves
Grease spraying valves

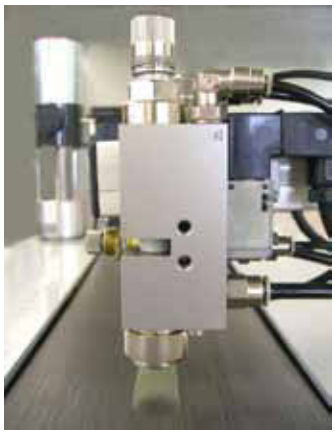
- **Nozzle-models in many forms and dimensions**
- **Electrical /pneumatical activating**
- **variable mounting position**
- **Rasterregulierung zum einfachen Verstellen der Materialmenge**
- **materials:** **nozzle: stainless steel**
  needle: hard metal
  sealing: viton (*)
  (*) other material on request

(Grease-) discharging valves

In many cases of applications a punctual or linear discharging is necessary, e.g. worthwhile.
With our precise discharging valves an even grease application is obtained.
With timing it can exactly proportioned quantities of circle, linear or punctually amounts be laid on.
The highest frequence of timing is 50-60 cycles/sec.

The discharging valve is a pneumatically steered item for processing pasty media (adhesives, seal materials, greases up to NLGI class 2-3).
Extremely short control air ways, which are made possible by the directly flanged on 5/2-way-solenoid valve, bring a very fast and and accurate open- and close-motion of the needle.
The max. operating pressure is 10-100 bar depend on model. Discharging can take place either intermittently or continuously.

(Grease-) spraying valves



Often an optimal lubricant supply can be achieved only by spraying of the lubricant.
The spraying valves offered by us fulfill these widespread demands.
With them its possible to spray greases finely until NLGI class 2-3. (also adhesives)

Spraying can take place both intermittently and continuously. Through the 5/2-way control valve air impulses are routed to the working piston. The air pressure has to be approx. 5-6 bar.
For the cleaning of the nozzle (no pre- or after-dripping) the valve works with pre- and/or after-air-pressure, whereby the duration of the after-air-pressur can be individually adjusted.

Denomination	size of the nozzle / Ø	pressure of medium	pressure of control air	measures [mm]	**Item-No. (basic model)**
(Grease-) discharging valve	0,2 / 0,3 / 0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1,0 / 1,2 / 1,5 / 2,0 / 2,5	max. 100 bar	min. 6 bar	162 x 15 x 82	**2.11 40.1**
(Grease-) spraying valve	0,3 / 0,5 / 0,8 / 1,0 / 1,2 / 1,5 / 2,0	max. 35 bar	min. 5-6 bar	132 x 81 x 22	**2.08 21.1**

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Grease discharging valves
Grease spraying valves

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Additional instructions for use:

The processing of media by means of the discharging valves requires attention from the user regarding to following basic rules:
Before using media it has to be clarify, if:

- it is possible a processing of the medium due to its flow characteristics with the discharge valve
- the medium is corresponding to the desired requirements e.g. like compatibility with seals material

The possibility for spraying of a lubricant depends not alone of the viscosity or penetration, but also is affected to a considerable degree by the additives. In any case, lubricants should be examined of solid or detention material additives before its spraying application.

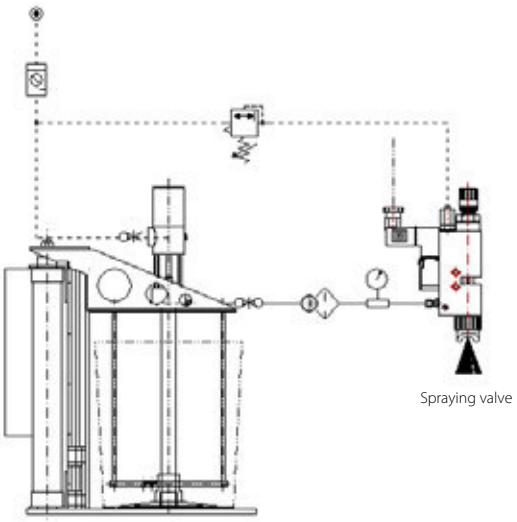
43e-8270-2

Grease discharging unit

With the grease discharging unit its possible to charge grease in a safe, filtered and pulsation-free way to the spraying valve or discharging valve. The unit plant consists of grease-station (barrel pump or container lift system), filter, manometers and additional armatures and pipes.

With the container lift system a fast and problem-free change of material bundles for pasty media is ensured.
Pedestrian pulling up by hand of the stripping cover and the grease pump takes place here pneumatically.

-> please see our data sheet (43e-1510) about container lift systems



Spraying valve

Container lift unit

edition: 02.08.11

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Tribo- und Industrietechnik GmbH

Elektropneumatical hand discharge valve

With this special precise discharging valves an even grease application is obtained.
The hand lever enables a simple handling - the term of dispensing could be effected individual. The hand discharge valve is suitable for hanging on an balancer. The amount of grease can be adjusted with an knurled screw.

NEW

43e-8270-3

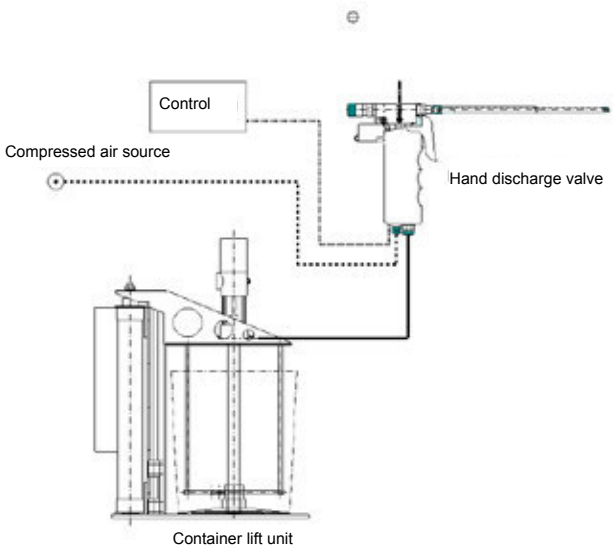
Advantages:

- high reducing of costs
- process safety
- clean environment
- very easy for automation
- micro discharging
- no after-dripping
- high clock cycle
- easy to integrate

Technical data:

dimension:	*105 x 15 x 150 mm*
weight:	*approx. 480 g*
working pressure:	*min. 6 bar*
pressure of material:	*approx. 20 bar*
sealing:	*viton-seal*

Example:



Denomination	Item-No.
elektropneumatical hand discharge valve	**2.11 43.1**

Other models on request.
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TEKAWE
Tribo- und Industrietechnik GmbH

TEKA exacto Spray

Spraying valves- und systems for every shape or surface

Using the TEKAWE spraying device "TEKA exacto Spray" mainly thinny and liquid substances such as water, release agents and oil can be sprayed exactly and precisely timed.

The "TEKA exacto Spray" exactly moistens the planned shapes or surfaces and it can be adjusted to almost every individual client-specific request.

Through a precise spraying (no further flow) of an exactly defined amout at the exactly defined time at the correct place, a high reduction of material can be reached. This leads to a clean working environment and in most cases a costly suction or a complex cleansing can be relinquished.

Furthermore, by using an increased level of automation and an optimized cycle time the output quantity can be increased.
Additionally, a high process reliability is guaranteed through pressure, level and volume monitoring.

43e-8280-1

Mini-spraying valve

The mini spraying valve illustrated in the given example is the core of the spraying device and it captivates by its compact and robust construction.

In order to cover high requirements and the wide scope of application, the size of the valve and the spraying angle of the air cap may be adjusted individually, so a perfect spray pattern can be generated. Therefore the spray pattern may be designed in a round or oval style.

Technical data:

material pressure	max. 3 bar
cycle time	max. < 1 sec.
viskosity	0 - 200 mm²/s (higher viscosity on request)
control air	min. 5 - 6 bar
spray air	0,5 - 6 bar
spray pattern	round and oval
dimensions	system-dependent
materials	- installation section, pump units: aluminium anodized / stainless steel - mini-spraying valves: stainless steel - seal: viton (special models on request)

We gladly give you our offer for your special case of application or conduct some spraying-tests and demonstrations with the corresponding medium.

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Conception + Realisation

Using systems made by us will profit from our experience and knowledge of more than 30 years. Convince yourself of our reaching and miscellaneous know-how. We would be pleased to advice you on your individual use case and we would be delighted to offer you an appropriate solution.

Contact

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