

DLS

SCHMIERSYSTEME





// CONCEPTION

// CONSTRUCTION

// INSTALLATION
AND ASSEMBLY

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DLS stands for ...

Reiner Hochholzer:

...Operational safety and durability!



Helmut Feicht:

...Customer orientation and service friendliness!

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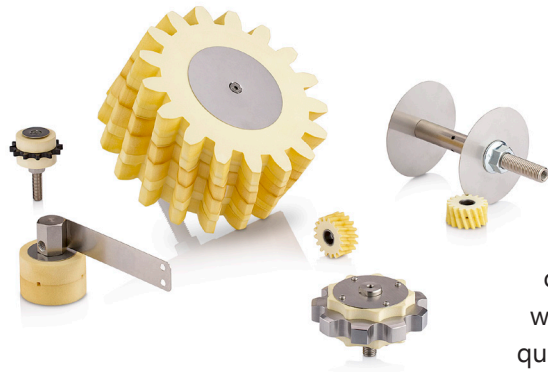


Our tribological solution is accurate tailored to your requirements:

You get lubrication systems for linear guides and ball screws, as well as for open gears and chain drives of all types and sizes.

We advise you personally to work out an optimal solution for your application.

During an on-site visit, we record the general conditions and create a lubrication concept tailored to the respective parameters, without obligation. We also determine the individual lubrication quantity requirements of the individual lubrication points.



We work closely with you to implement the lubrication concept. Subsequent modifications or changes are possible for us at any time!

As a full-range supplier, we provide to you innovative, electronically controlled grease and oil lubricators, as well as lubricating gears, lubrication sprockets and extensive system accessories from stock!

Ideal for original equipment in mechanical engineering as well for retrofitting existing systems.

**Everything reliable, competent and solid
from a single source.**



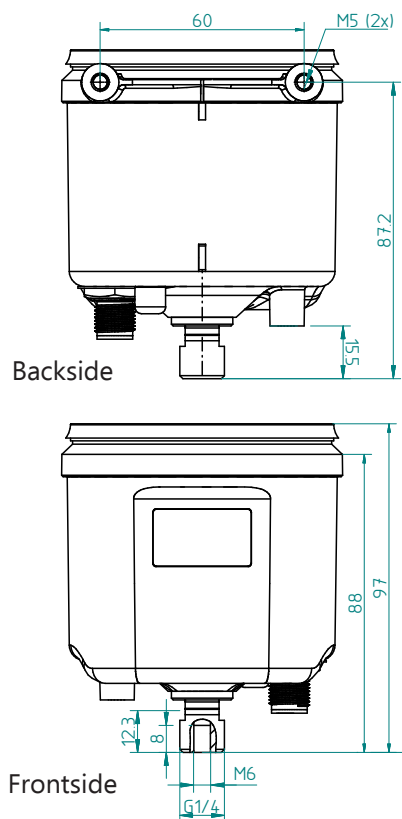
The FlexxPump



The basis of all good lubrications!

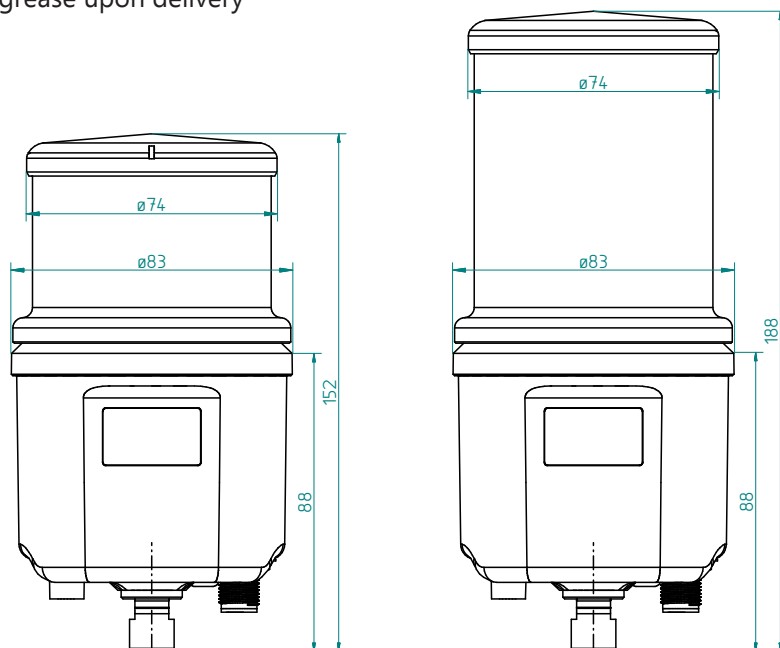


FlexxPump 125 & FlexxPump 125 DLS



Note on delivery:

The FlexxPump 125 is vented with F02 grease upon delivery



type	variant	type	outlets	double-pump bodies	lubrication points	cartridge size	M12x1 plug	part-no.
125	24 V DC time-controlled	125	1	1	max. 4* / 10**	125 cm ³	yes	135-125-100
250						250 cm ³		135-225-100
125 DLS	24 V DC pulse-controlled	125 DLS	1	1	max. 4* / 10**	125 cm ³	yes	135-125-210
250 DLS						250 cm ³		135-225-210

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for grease 24V DC

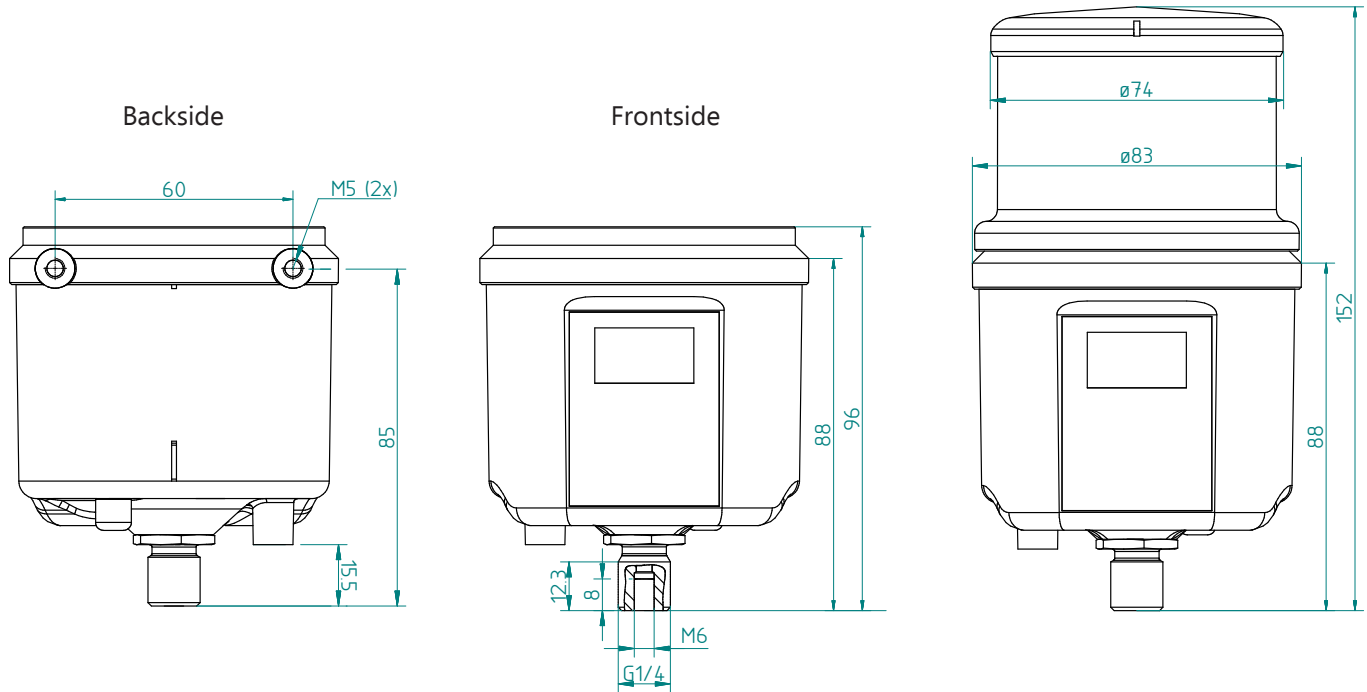
function:	piston pump
lubricant volume:	125 / 250 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 125 / 250 cc:	ca. 780 / 1560
operating pressure:	50 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperature:	-10°C ... +60°C
number of outlets:	1
thread outlet:	G1/4"(a) and M6(i)
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
assembly:	Backside M5(i) (2x) or downside M5(i) with G1/4"(a) or DLS accessories
mounting position:	vertical, cartridge up
control:	integrated microelectronic SPS (#135-125-210)
running-time:	1 till max. 36 months (time-controlled)
max. amount per cycle:	max. 1,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, electronic
error message:	optical LCD and SPS
error acknowledgment:	(#135-125-210) SPS
filling function:	available
protection class:	IP 54
housing material:	PA 6.6-GF 30 / POM



Ideal for single or combined relubrication of:

- + roller bearing
- + racks / open gears
- + linear guides
- + ball swivel connector
- + ball screw

FlexxPump 125 B



Note on delivery:

The FlexxPump 125 is vented with F02 grease upon delivery

type	variant	type	outlets	double-pump bodies	lubrication points	different lubrication amounts	part-no.
125 B	battery time-controlled	125 B	1	1	max 4* / 10**	1	135-125-000

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Battery not included! Please order separately with part-no.: 134-002-25!

Controlled minimum quantity lubrication for grease, battery operated

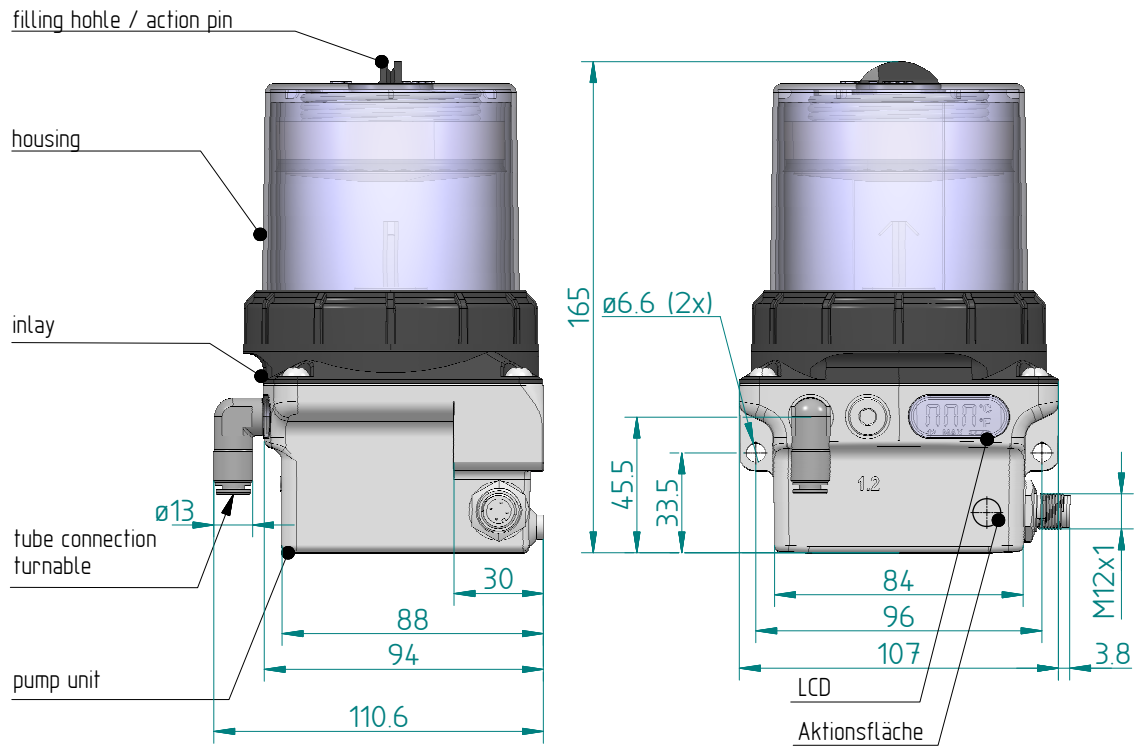
function:	piston pump
lubricant volume:	125 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 125 cc:	ca. 780
operating pressure:	35 bar
lubricant:	till NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	1
thread outlet:	G1/4"(a) and M6(i)
operating voltage:	4,5 V DC
assembly:	Backside M5(i) (2x) or downside M5(i) with G1/4"(a) or DLS accessories
mounting position:	vertical, cartridge up
control:	integrated, microelectronic
running-time:	1 till max. 24 months
max. amount per cycle:	max. 1,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, electronic
error message:	optical LCD
protection class:	IP 54
housing material:	PA 6.6-GF 30 / POM



**Ideal for single or combined
relubrication of:**

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector

FlexxPump 250 DLS



type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
211 DLS	pulse-controlled	1	1	max. 4* / 10 **	1	235-211-210
212 DLS		2	1	max. 8* / 20**	1	235-212-210
222 DLS		2 (1+1)	2	max. 8* / 20**	2	235-222-210
223 DLS		3 (1+2)	2	max. 12* / 30**	2	235-223-210
224 DLS		4 (2+2)	2	max. 16* / 40**	2	235-224-210

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for grease, 24 V DC pulse-controlled

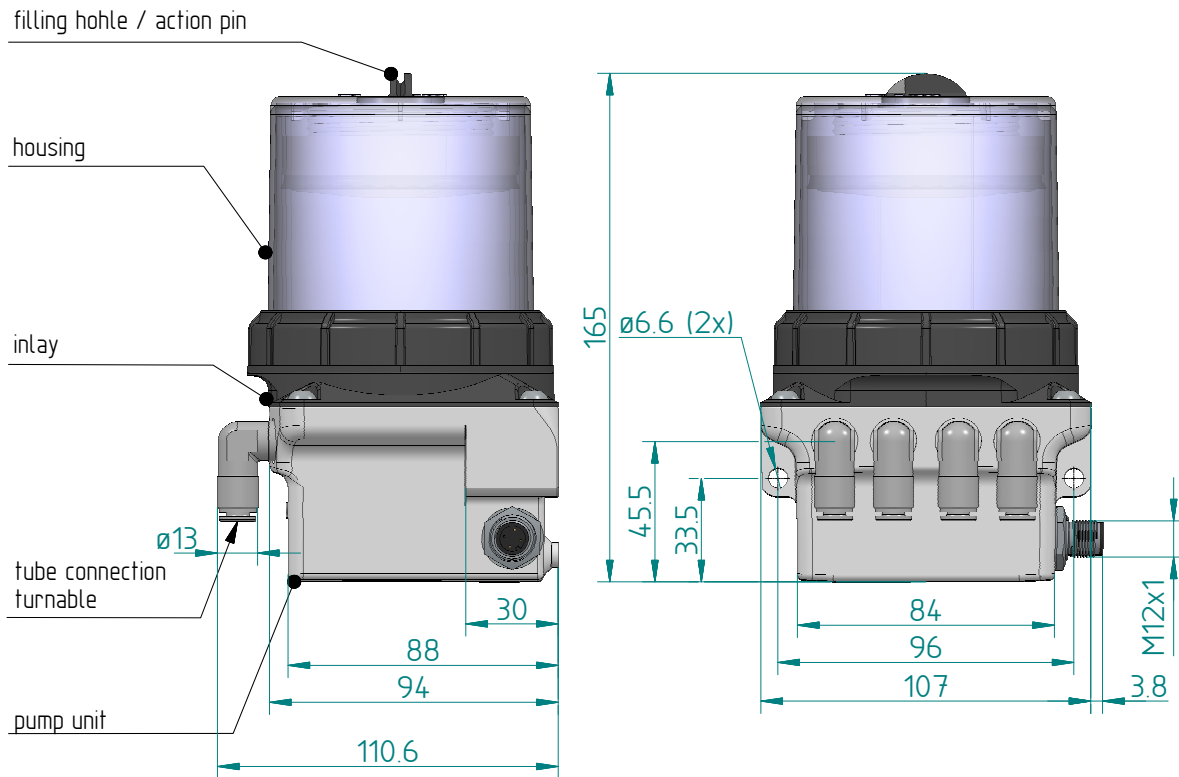
function:	piston pump
lubricant volume:	grease, 250 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 250 cc:	ca. 1560
operating pressure:	70 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 4, right-angled, turnable
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	arbitrary
control:	integrated, microelectronic
max. amount per cycle:	4,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	SPS error message
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	zinc, polyamide



Ideal for single or combined relubrication of:

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector

FlexxPump 250



2 setting modes:

E_t = emptying time: 1 - 36 months
+ C: 1 - 30 cycles

h = break time: 1 - 240 h
+ C: 1 - 30 cycles

type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
211 DLS	24 V DC	1	1	max. 4* / 10 **	1	235-211-100
212 DLS	time-controlled	2	1	max. 8* / 20**	1	235-212-100

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for grease, 24 V DC time-controlled

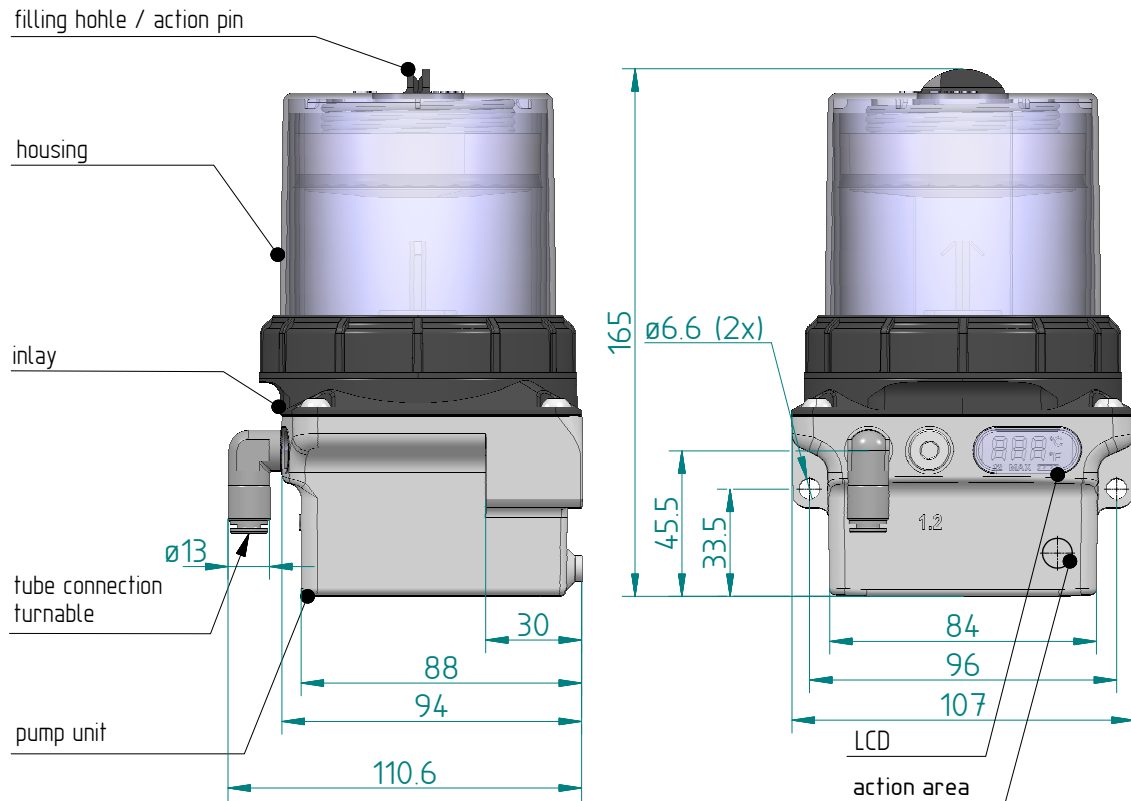
function:	piston pump
lubricant volume:	grease, 250 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 250 cc:	ca. 1560
operating pressure:	70 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 2, right-angled, turnable
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	arbitrary
control:	integrated, microelectronic
running-time:	1 till max. 36 months
max. amount per cycle:	4,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	optical LCD
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	zinc, polyamide



**Ideal for single or combined
relubrication of:**

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector

FlexxPump 250 B



2 setting modes:

E_t = emptying time: 1 - 36 months
+ C: 1 - 30 cycles

h = break time: 1 - 240 h
+ C: 1 - 30 cycles

type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
211 B	battery	1	1	max. 4*	1	235-211-000
212 B	time-controlled	2	1	max 8*	1	235-212-000

* when using distributors / splitter
battery not included! Please also order with part no.: 134-002-024.

Controlled minimum quantity lubrication for grease, battery operated

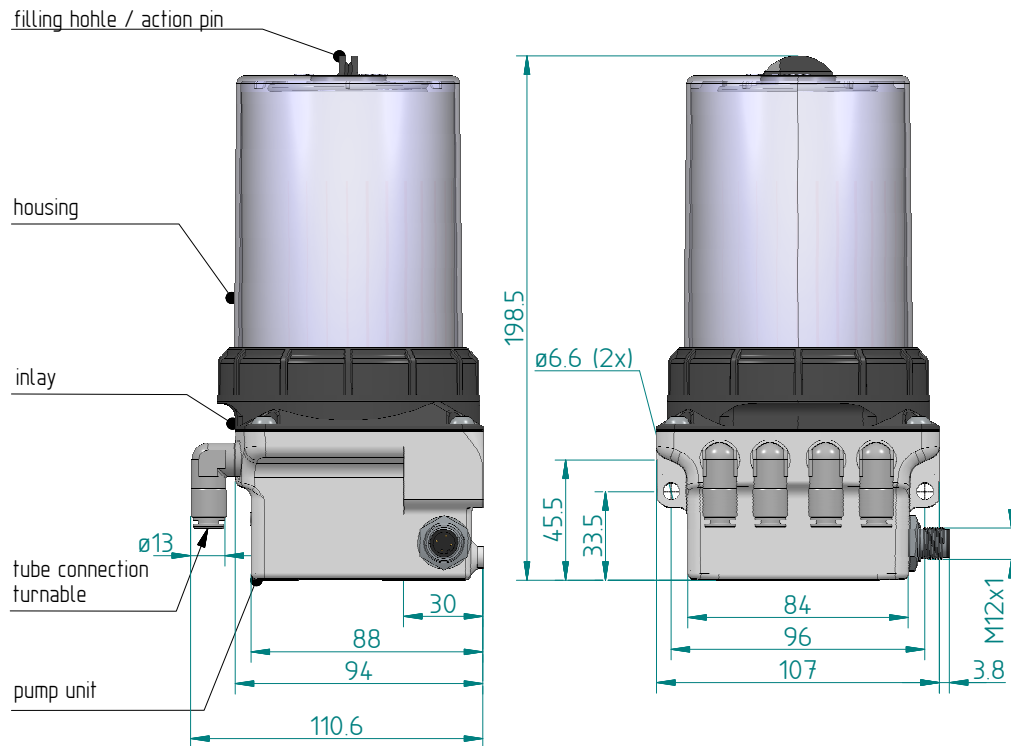
function:	piston pump
lubricant volume:	grease, 250 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 400 cc:	ca. 1560
operating pressure:	50 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 2, right-angled, turnable
operating voltage:	6 V
mounting position:	arbitrary
control:	integrated, microelectronic
running-time:	1 till max. 36 months
max. amount per cycle:	4,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	optical via LCD
protection class:	IP 54
housing material:	zinc, polyamide



**Ideal for single or combined
relubrication of:**

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector

FlexxPump 400 DLS



type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
411 DLS	pulse-controlled	1	1	max. 4* / 10 **	1	235-411-210
412 DLS		2	1	max. 8* / 20**	1	235-412-210
422 DLS		2 (1+1)	2	max. 8* / 20**	2	235-422-210
423 DLS		3 (1+2)	2	max. 12* / 30**	2	235-423-210
424 DLS		4 (2+2)	2	max. 16* / 40**	2	235-424-210

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for grease, pulse-controlled

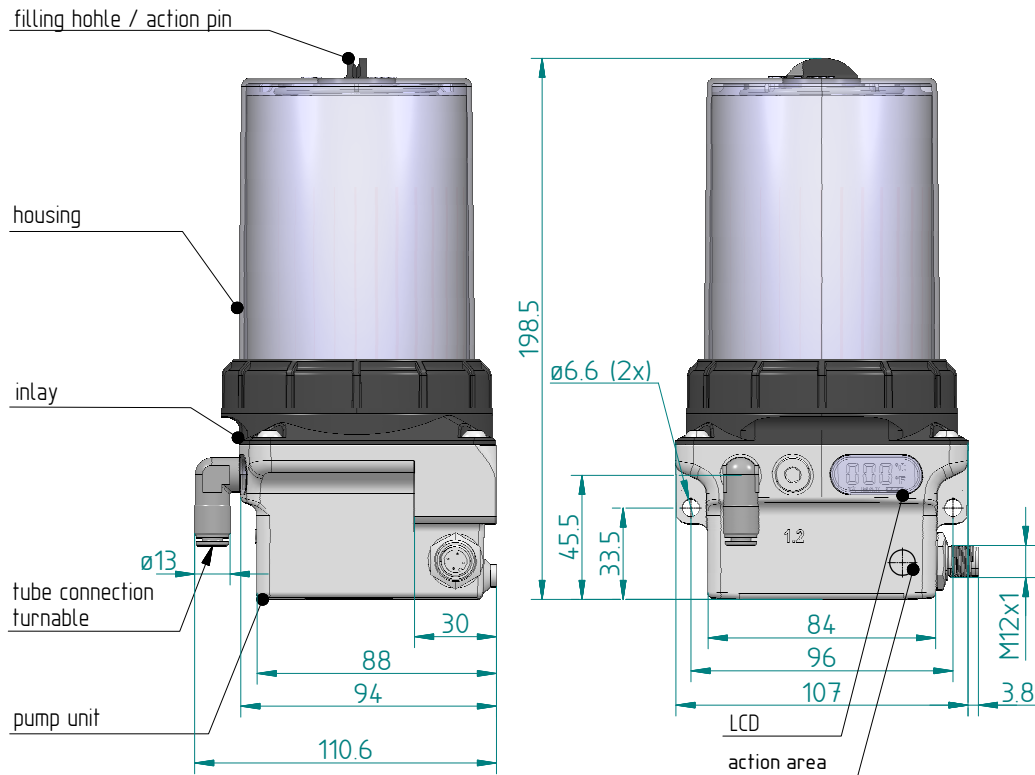
function:	piston pump
lubricant volume:	grease, 400 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 400 cc:	ca. 2600
operating pressure:	70 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 4, right-angled, turnable
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	arbitrary
control:	integrated, microelectronic
max. amount per cycle:	4,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	SPS error message
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	zinc, polyamide



Ideal for single or combined relubrication of:

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector

FlexxPump 400



2 setting modes:

E_t = emptying time: 1 - 36 months
+ C: 1 - 30 cycles

h = break time: 1 - 240 h
+ C: 1 - 30 cycles

type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
411	24 V DC	1	1	max. 4* / 10 **	1	235-411-100
412	time-controlled	2	1	max. 8* / 20**	1	235-412-100

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for grease, 24 V DC time-controlled

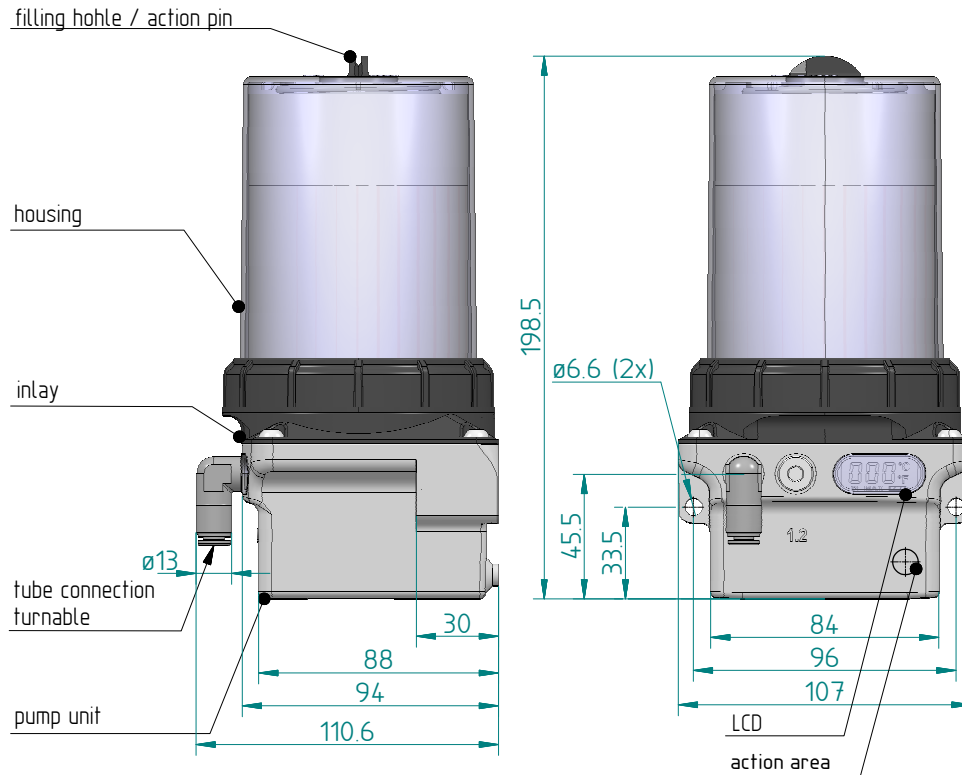
function:	piston pump
lubricant volume:	grease, 400 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 400 cc:	ca. 2600
operating pressure:	70 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60 °C
number of outlets:	max. 2, right-angled, turnable
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	arbitrary
control:	integrated, microelectronic
running-time:	1 till max. 36 months
max. amount per cycle:	4,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	optical LCD
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	zinc, polyamide



**Ideal for single or combined
relubrication of:**

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector

FlexxPump 400 B



2 setting modes:

E_t = emptying time: 1 - 36 months

+ C: 1 - 30 cycles

h = break time: 1 - 240 h

+ C: 1 - 30 cycles

type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
411 B	battery	1	1	max. 4*	1	235-411-000
412 B	time-controlled	2	1	max 8*	1	235-412-000

* when using distributors / splitter
battery not included! Please also order with part no.: 134-002-024.

Controlled minimum quantity lubrication for grease, battery operated

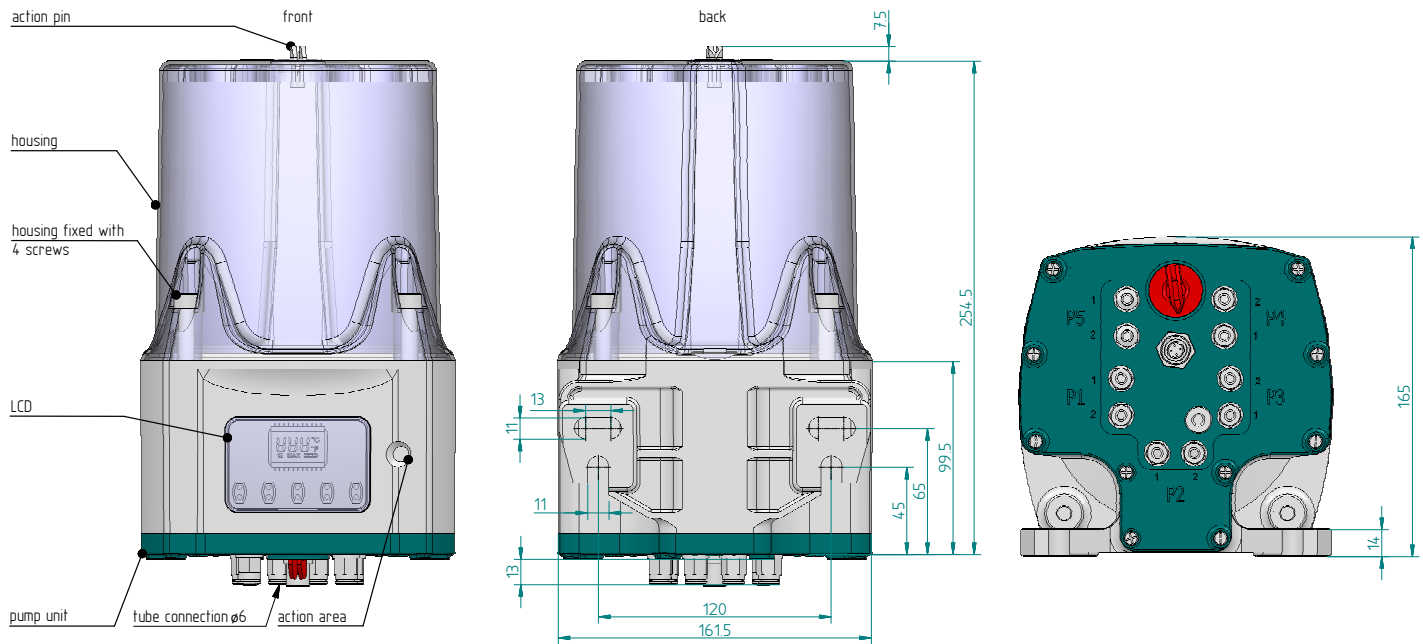
function:	piston pump
lubricant volume:	grease, 400 cc (in cartridge)
volume per stroke:	0,15 cc per outlet
number of pump strokes per cartridge 400 cc:	ca. 2600
operating pressure:	50 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60 °C
number of outlets:	max. 2, right-angled, turnable
operating voltage:	6 V
mounting position:	arbitrary
control:	integrated, microelectronic
running-time:	1 till max. 36 months
max. amount per cycle:	4,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	optical via LCD
protection class:	IP 54
housing material:	zinc, polyamide



**Ideal for single or combined
relubrication of:**

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector

FlexxPump 1500 DLS



type	variant	outlets	double-pump bodies	lubrication amounts	monitoring & control via...	part-no.
1502 DLS	pulse-controlled	2	1	1	SPS	540-202-100
1504 DLS		4	2	2	SPS	540-404-200
1506 DLS		6	3	3	SPS	540-606-300
1508 DLS	time-controlled	8	4	4	SPS	540-808-400
1510 DLS		10	5	5	SPS	541-010-500

Combination of outlets with Y-tube connectors (134-002-000) possible!

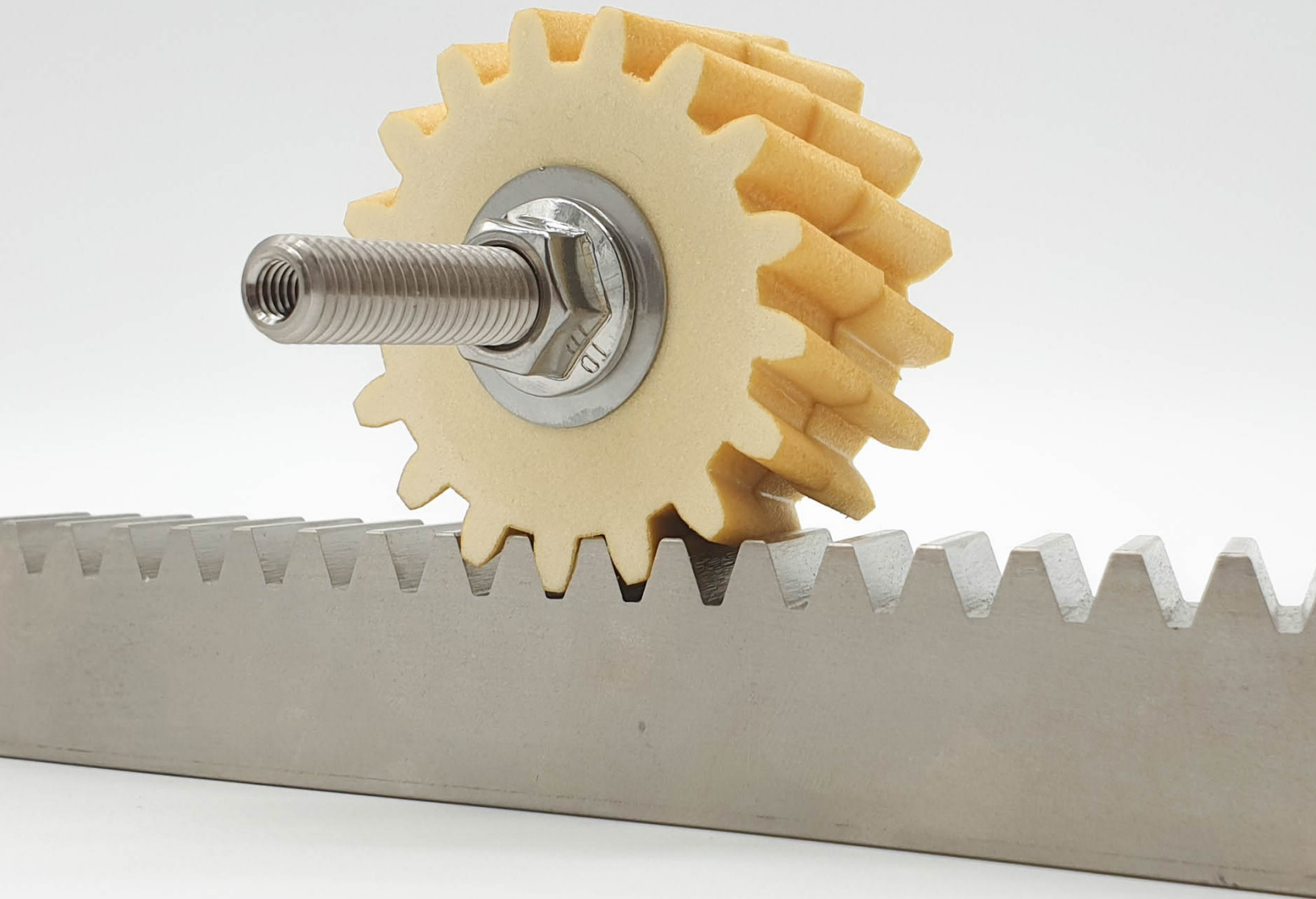
Controlled minimum quantity lubrication for grease, 24 V DC

function:	piston pump
lubricant volume:	grease, 1500 cc (in grease bellow)
volume per stroke:	0,15 cc per outlet
number of pump strokes:	ca. 9500
operating pressure:	70 bar
lubricant:	grease, up to NLGI class 2, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 10, straight
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	vertical Abdeckung up
control:	integrated, microelectronic
running-time:	1 till max. 36 months
max. amount per cycle:	4,50 cc
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	pulse-controlled: SPS time-controlled: optical LCD
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	aluminum, polyamide



Ideal for single or combined relubrication of:

- + roller bearing
- + linear guides
- + ball screw
- + racks / open gears
- + ball swivel connector



The PU-lubrication Pinion

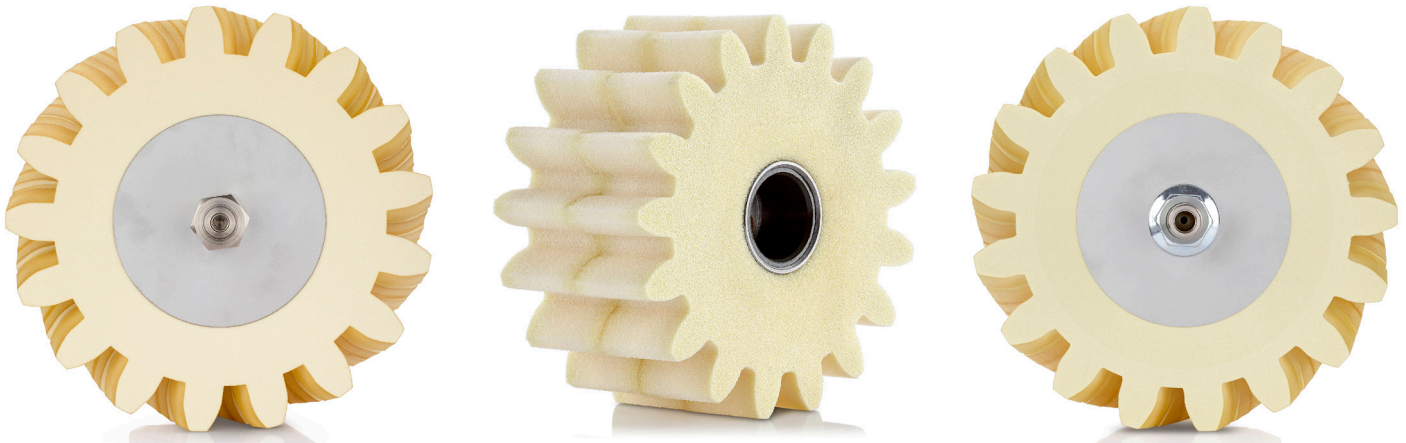
The lubrication pinions consist of an open-cell polyurethane foam (temperature range $-40\text{ }^{\circ}\text{C}$... $+120\text{ }^{\circ}\text{C}$) and are composed of several segments.

For the selection, a constructive decision must be made as to whether the lubrication gear, the rack or the drive gear should be lubricated.

It is preferably attached to the drive gear.

The open-cell polyurethane foam material used for the lubrication gears ensures that the teeth are optimally supplied over a very long period of time.

The material stores the lubricant and releases it again in the smallest metered quantities. Over-lubrication is avoided, as well as insufficient lubrication.

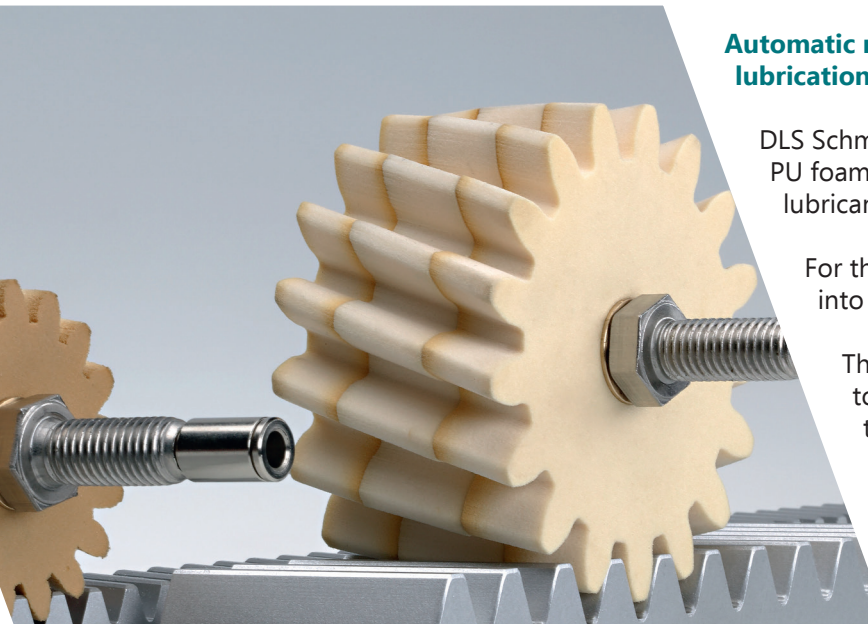


The PU-lubrication Pinion

Lubrication of open gear drives and racks

The teeth of open drives should preferably be relubricated automatically.

- F01 only for open gears and rack and Pinion drives
- F02 for open gears, rack and Pinion drives
and linear guides in food and Pharmaceutical sector (NSF)
- F03 for open gears, rack and Pinion drives and linear guides



Automatic relubrication with polyurethane lubrication-pinions

DLS Schmiersysteme supplies lubrication gears made of PU foam for the automatic, continuous application of the lubricant.

For this purpose, a suitable lubrication gear is brought into contact with the drive gear or the rack.

The PU lubrication gear does not transmit any torque, but only transfers the lubricant to the toothing that is in contact.

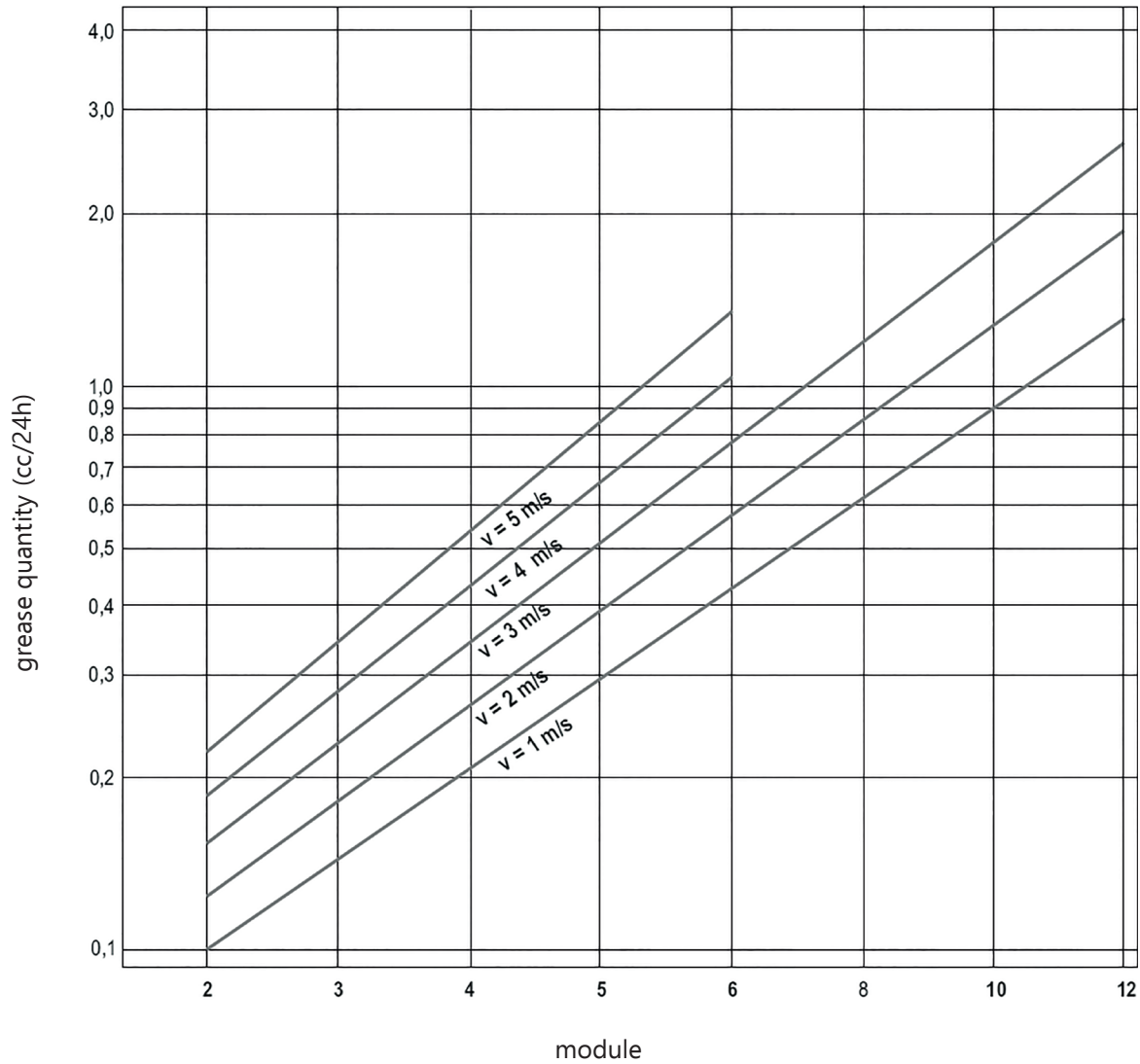
The required relubrication quantities for different gears under different operating conditions can be found in the diagram below.

The prerequisite for the validity of the diagram is the use of the corresponding PU lubricating Pinion and a suitable gear lubricant such as F01, F02 or F03.

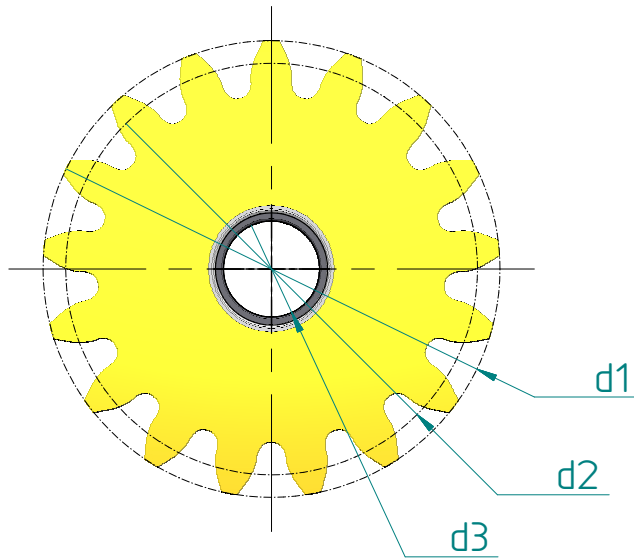
Before using for the first time, the PU lubrication pinions must be filled with a suitable lubricant.

The heart of every good lubrication!

Grease requirement when lubricating with PU-lubrication-pinions



PU-Lubrication pinions



Description:

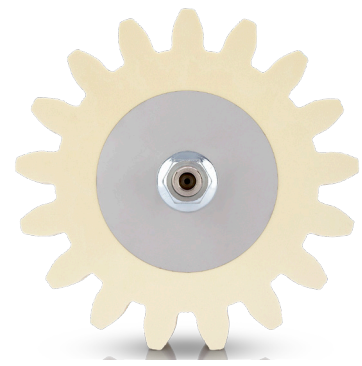
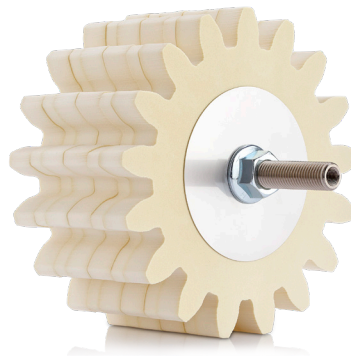
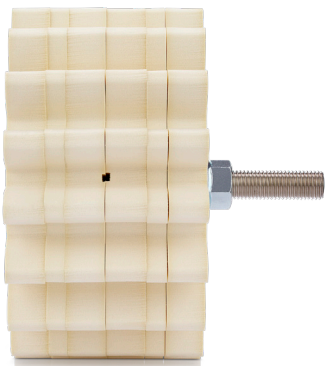
PU-Lubrication Pinion; straight;
incl. sleeve and plain bearing;
toothing after DIN 867

Material:

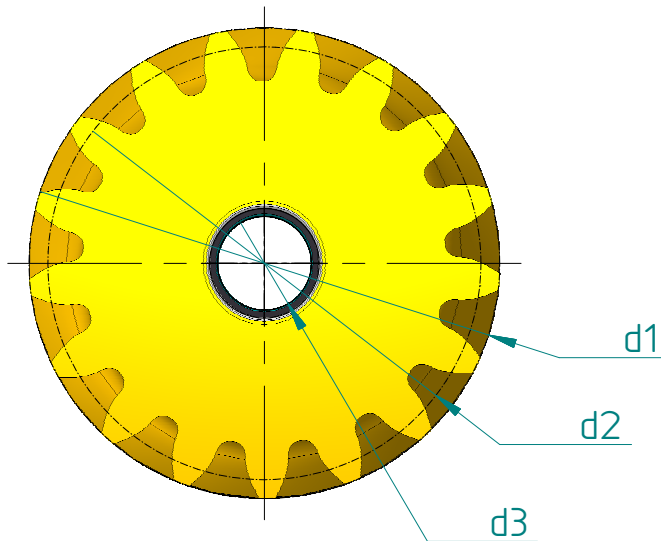
Lubrication Pinion: open-cell PU foam;
Sleeve: steel

Straight

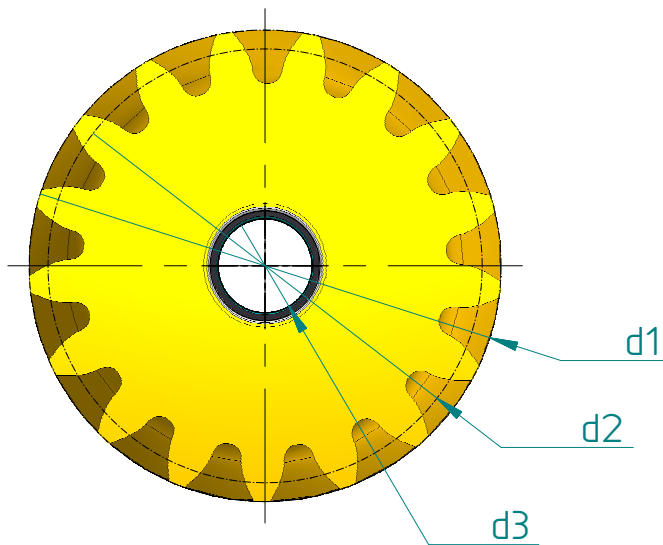
module	z	α	b	d1	d2	d3	flanks	part-no.
1,5	24	20°	15	41,2	38,2	12	straight	130-015-024
2	17	20°	20	40,1	36,1	12	straight	130-020-017
3	17	20°	30	60,1	54,1	12	straight	130-030-017
4	17	20°	40	80,2	72,2	12	straight	130-040-017
5	17	20°	50	100,2	90,2	20	straight	130-050-017
6	17	20°	60	120,2	108,2	20	straight	130-060-017
8	17	20°	80	160,3	144,3	20	straight	130-080-017
10	17	20°	100	200,4	180,4	20	straight	130-100-017
12	8	20°	120	125,9	101,9	20	straight	130-120-008



PU-Lubrication pinions



helical right

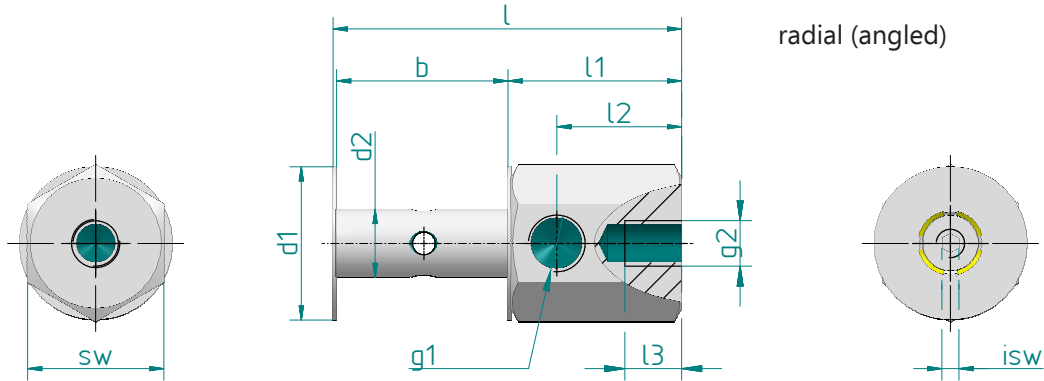


helical left

Helical right & left

module	z	α	b	d1	d2	d3	β	flanks	part-no.
1,5	24	20°	15	41,2	38,2	12	19.53°	right	131-015-024
								left	132-015-024
2	17	20°	20	40,1	36,1	12	19.53°	right	131-020-017
								left	132-020-017
3	17	20°	30	60,1	54,1	12	19.53°	right	131-030-017
								left	132-030-017
4	17	20°	40	80,2	72,2	12	19.53°	right	131-040-017
								left	132-040-017
5	17	20°	50	100,2	90,2	20	19.53°	right	131-050-017
								left	132-050-017
6	17	20°	60	120,2	108,2	20	19.53°	right	131-060-017
								left	132-060-017
8	17	20°	80	160,3	144,3	20	19.53°	right	131-080-017
								left	132-080-017
10	17	20°	100	200,4	180,4	20	19.53°	right	131-100-017
								left	132-100-017
12	8	20°	120	125,9	101,9	20	19.53°	right	131-120-008
								left	132-120-008

Mounting-axis



Description:
Mounting-axis for
PU-Lubrication Pinion;

Material:
Steel, nickel-plated

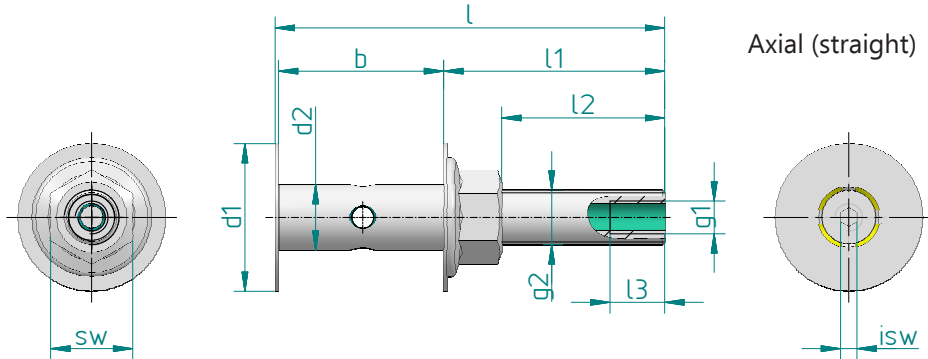
module	b	l	l1	l2	d1	d2	g1	g2	l3	sw	isw	part-no.
1,5	15,2	46,4	30,6	22	27	12	G1/8x10mm	M8	10	24	3	133-015-001
2	20,2	51,4	30,6	22	27	12	G1/8x10mm	M8	10	24	3	133-020-001
3	30,2	61,4	30,6	22	27	12	G1/8x10mm	M8	10	24	3	133-030-001
4	40,2	71,4	30,6	22	27	12	G1/8x10mm	M8	10	24	3	133-040-001
5	50,2	81,4	30,6	22	60	20	G1/8x10mm	M8	10	24	4	133-050-001
6	60,2	91,4	30,6	22	60	20	G1/8x10mm	M8	10	24	4	133-060-001
8	80,2	111,4	30,6	22	60	20	G1/8x10mm	M8	10	24	4	133-080-001
10	100,2	131,4	30,6	22	100	20	G1/8x10mm	M8	10	24	4	133-100-001
12	120,2	151,4	30,6	22	100	20	G1/8x10mm	M8	10	24	4	133-120-001



Radial & Axial lubricant supply

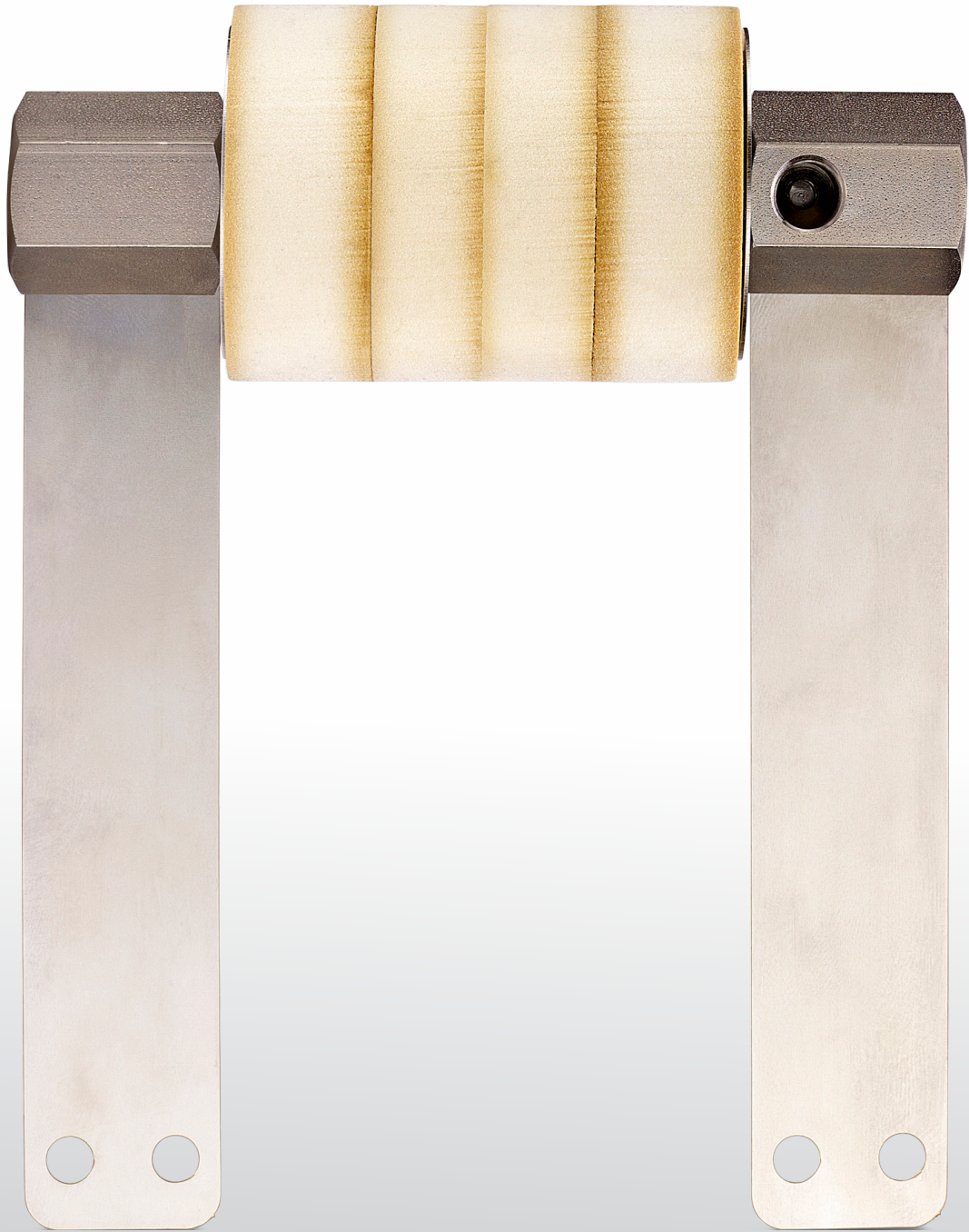
Description:
Mounting-axis for
PU-Lubrication Pinion;

Material:
Steel, nickel-plated



module	b	l	l1	l2	d1	d2	g1	g2	l3	sw	isw	part-no.
1,5	15,2	60,4	44,6	34,0	27	12	M6	M10	10	15	3	133-015-002
2	20,2	61,2	40,4	29,8	27	12	M6	M10	10	15	3	133-020-002
3	30,2	71,2	40,4	29,8	27	12	M6	M10	10	15	3	133-030-002
4	40,2	81,2	40,4	29,8	27	12	M6	M10	10	15	3	133-040-002
5	50,2	116,4	65,5	48,9	60	20	G1/8	M16	10	24	4	133-050-002
6	60,2	126,4	65,5	48,9	60	20	G1/8	M16	10	24	4	133-060-002
8	80,2	146,4	65,5	48,9	60	20	G1/8	M16	10	24	4	133-080-002
10	100,2	166,4	65,5	48,9	100	20	G1/8	M16	10	24	4	133-100-002
12	120,2	186,4	65,5	48,9	100	20	G1/8	M16	10	24	4	133-120-002





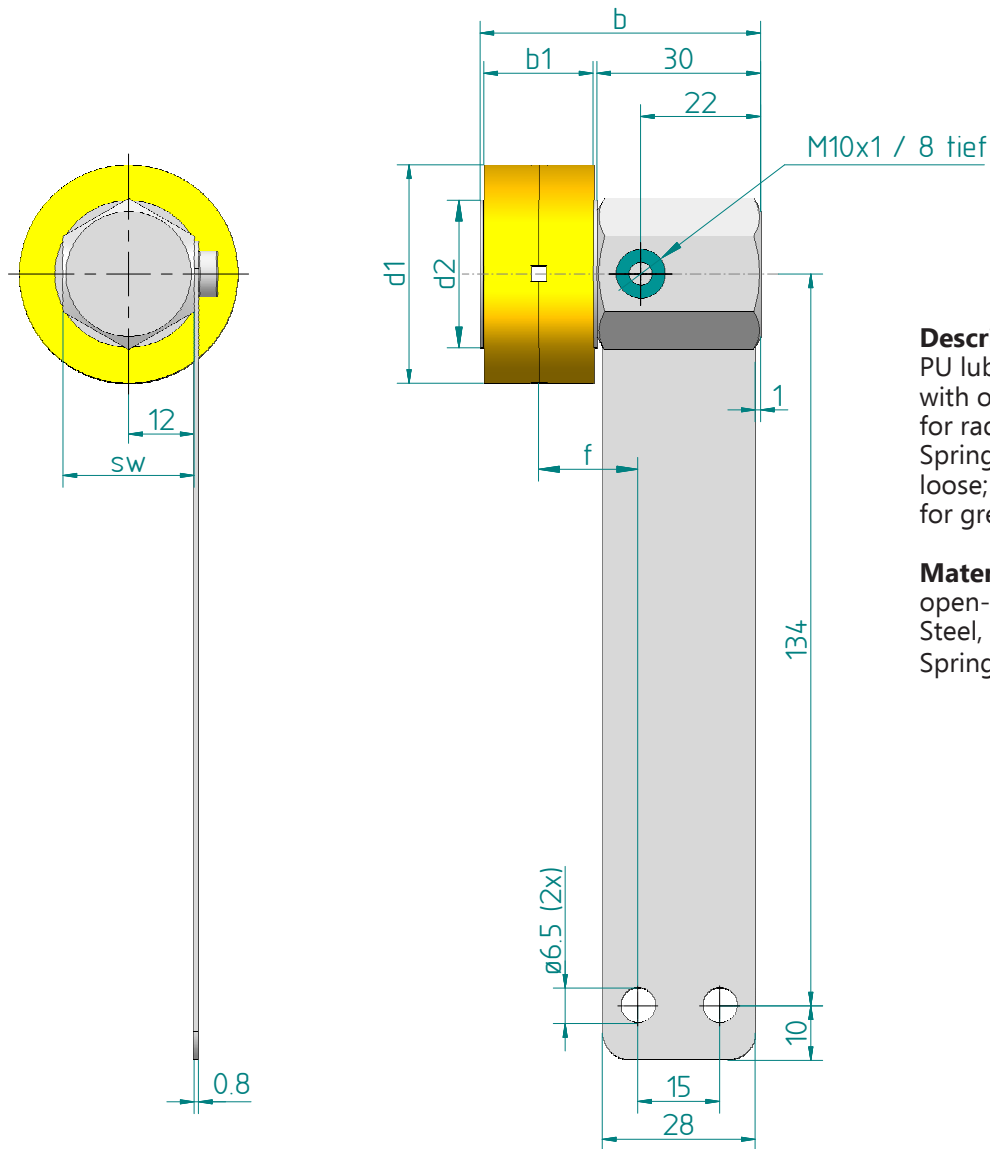
PU-Lubrication roll

The rolls of the PU-Lubrication roll consist of an open-cell polyurethane foam (temperature range -30 °C ... +120 °C) and are composed of several segments.

They are particularly suitable for the relubrication of chains or guides.

- + for grease lubrication
- + grease till NLGI class 2
- + Diameter up to 600 mm
- + Contours freely selectable
- + very good emergency running properties
- + Covers and enclosures on request

PU-Lubrication roll



Description:

PU lubrication roll; slide bearing;
with one-sided recording;
for radial lubricant supply;
Spring plate and screws supplied
loose;
for grease applications

Material:

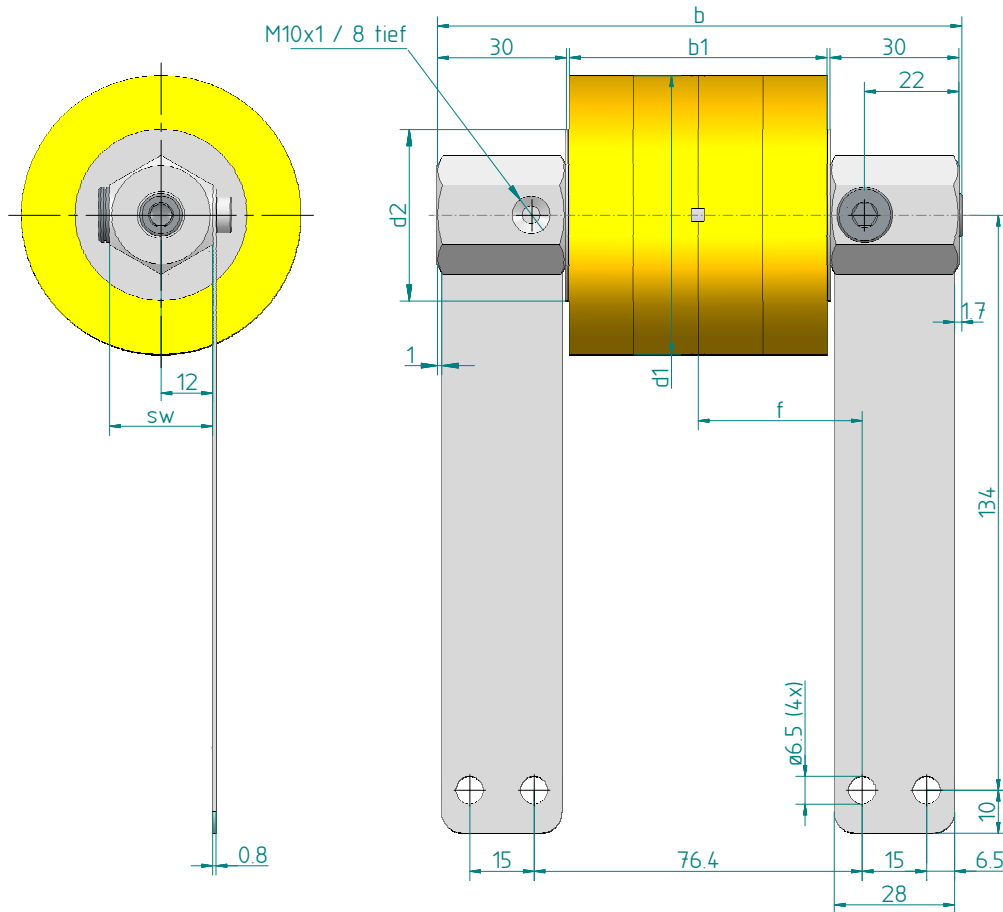
open-cell PU foam;
Steel, nickel-plated;
Spring plate in 1.4310

Single-sided

b1	d1	b	d2	g1	part-no.
20	40	51,4	27	M10x1 10mm	127-020-403
24	40	55,4	27	M10x1 10mm	127-024-403
30	40	61,4	27	M10x1 10mm	127-030-403
40	40	71,4	27	M10x1 10mm	127-040-403
45	40	76,4	27	M10x1 10mm	127-045-403
50	65	81,4	45	M10x1 10mm	127-050-653
60	65	91,4	45	M10x1 10mm	127-060-653



PU-Lubrication roll

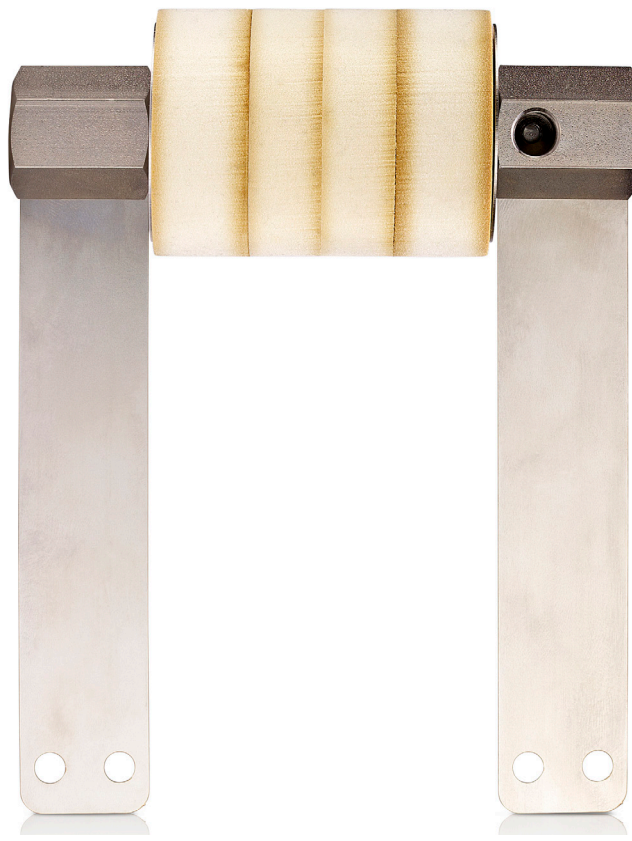


Description:
 PU lubrication roll; slide bearing;
 with double-sided recording;
 for one-sided, radial lubricant
 supply;
 Spring plate and screws supplied
 loose;
 for grease applications

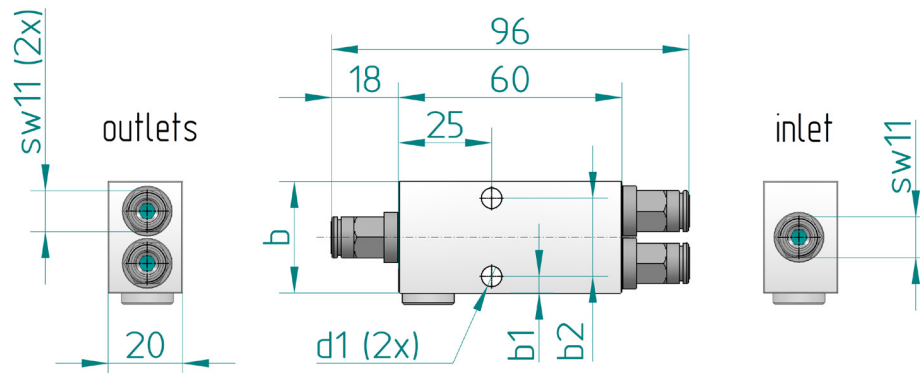
Material:
 open-cell PU foam;
 Steel, nickel-plated;
 Spring plate in 1.4310

Double-sided

b1	d1	d2	b	g1	t	part-no.
60	65	40	121,4	M10x1 10 mm	0,8	127-060-654
70	65	40	131,4	M10x1 10 mm	0,8	127-070-654
80	65	40	141,4	M10x1 10 mm	0,8	127-080-654
90	65	40	151,4	M10x1 10 mm	0,8	127-090-654



Splitter for grease



Description:

Passive flow dividers (splitters) to expand FlexxPump;
with tube connectors for tube 6

Material:

Splitter: aluminum
Connections: brass, nickel-plated

outlets	inlet	tube	outlets	tube	b	b1	b2	d1	part-no.
2	straight	6	straight	6	30	4,5	21	5,5	234-005-002
3	straight	6	straight	6	48	18	15	6,5	234-005-003
4	straight	6	straight	6	60	17,5	25	6,5	234-005-004

Lubricant distribution

The splitters must be connected as close as possible to the outlets of the FlexxPump.

The splitters preferably work in conjunction with the piston pumps of the FlexxPump series.

Only one splitter can be installed at each outlet of the FlexxPump.
Depending on the type, the FlexxPump Splitter can be connected:

- FlexxPump 125 max. 1 splitter with 4 outlets
- FlexxPump 400 max. 4 splitters with 4 outlets each
- FlexxPump 1500 max. 10 splitters with 4 outlets each

It is not possible to operate two or more splitters on one pump outlet
(no cascade of distributors)!

It is important to ensure that the tube lengths after the distributor are the same.

The splitters can be used for greases up to NLGI 2, preferably with grease from the DLS range.

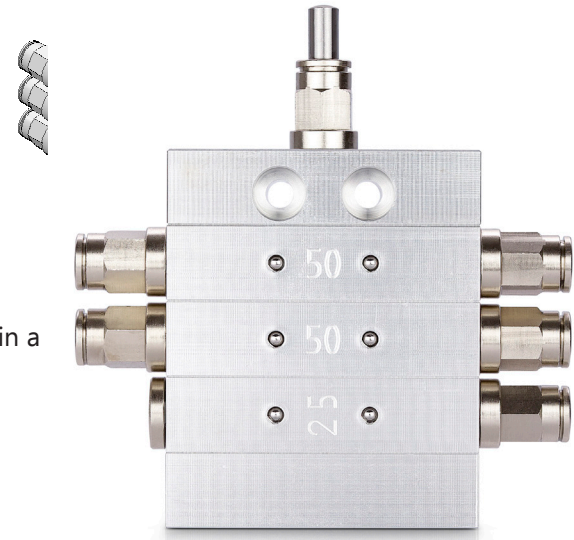
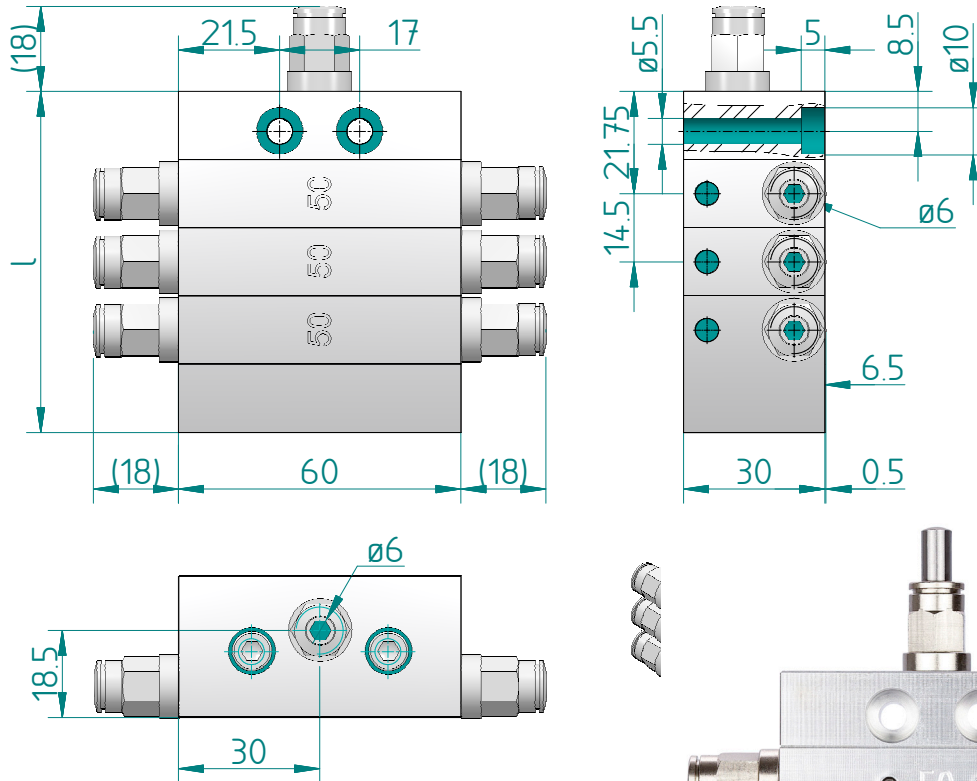
The splitters can not be used when using lubricants with a solid content.

Operating temperature range: +10 °C... +60 °C

The splitters are vented with oil with H1 approval on delivery.



Progressiv distributor



Description:

DLS progressiv distributor in lightweight solution are built in a variable disk construction for all types of FlexxPump series. Adjustment is based on grease lubricants. 6-way disc distributor with 3 dosing disks; straight tube connectors for tube 6 mm at inlet and outlets.

Material:

Distributor: aluminum;
Connections: brass, nickel-plated

Lubricant distribution

outlets	inlet	tube	outlets	tube	l	part-no.
2	straight	6	straight	6	72,5	238-000-002
3	straight	6	straight	6	72,5	238-000-003
4	straight	6	straight	6	72,5	238-000-004
5	straight	6	straight	6	72,5	238-000-005
6	straight	6	straight	6	72,5	238-000-006
7	straight	6	straight	6	87,0	238-000-007
8	straight	6	straight	6	87,0	238-000-008
9	straight	6	straight	6	101,5	238-000-009
10	straight	6	straight	6	101,5	238-000-010

Standard design:

- Modularly disk constructed distributor in lightweight aluminum with special coordination with FlexxPump 125/400/1500 for DLS greases
- 2 to 10 outlets per distributor possible
- Tube connection to inlet and outlets straight for tube 6
- Maximum pressure 100 bar
- Dosing volume 50 mm³

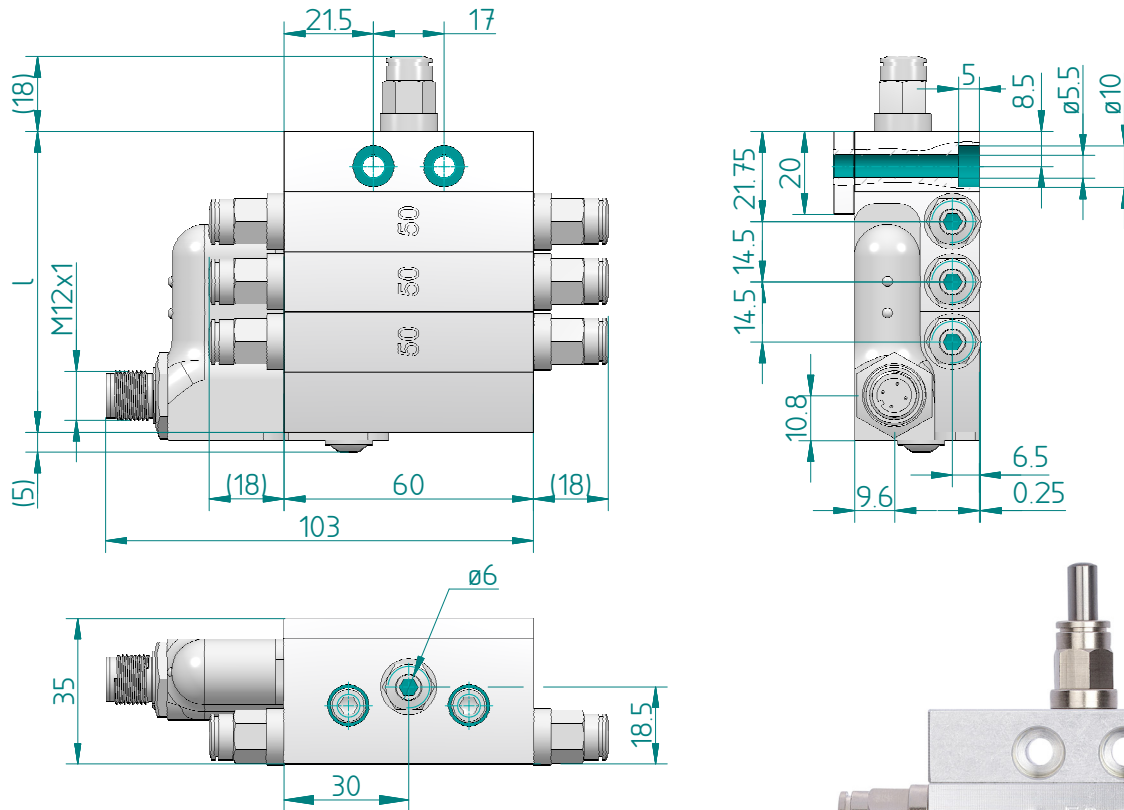
Special design (on request):

- Tube connection in various designs, straight / angled
- Different tube diameters, 4/6/8 mm at inlet or outlet
- Determination of the locations of the outlets
- Different delivery quantities per outlet through disk elements with different dosing volume (25/50/100 mm³)

Good to know:

- Only suitable DLS lubricant can be used!
- Operating temperature range: -20 °C ... + 60 °C (depending on the lubricant used)
- Cannot be used in series in conjunction with FlexxPump 125/400/1500 (no main and secondary distributors / cascading)
- Vented with oil with H1 approval

Progressiv distributor with circulation monitoring



Description:

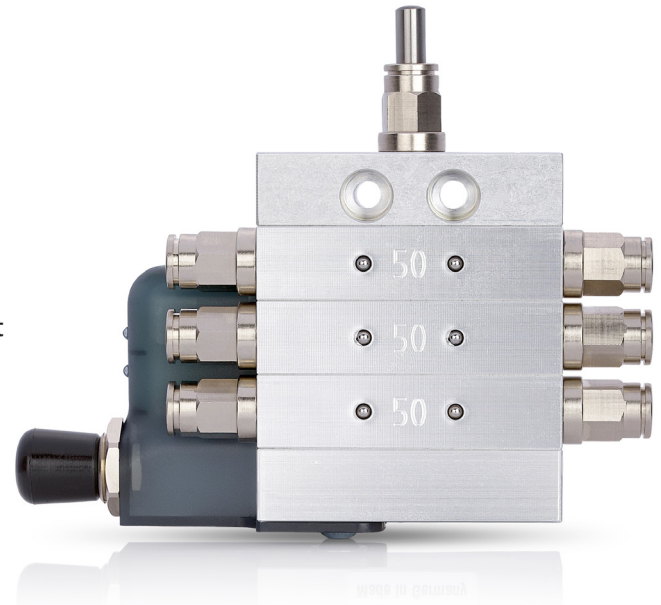
DLS progressiv distributor in lightweight solution are built in a variable disk construction for all types of the FlexxPump series.

Adjustment is based on grease lubricants
6-way disc distributor with 3 dosing elements; straight tube connection for tube 6 mm on inlet and outlets.

Material:

Distributor: aluminum

Connections: brass, nickel-plated



Lubricant distribution

outlets	inlet	tube	outlets	tube	l	part-no.
2	straight	6	straight	6	72,5	238-010-002
3	straight	6	straight	6	72,5	238-010-003
4	straight	6	straight	6	72,5	238-010-004
5	straight	6	straight	6	72,5	238-010-005
6	straight	6	straight	6	72,5	238-010-006
7	straight	6	straight	6	87,0	238-010-007
8	straight	6	straight	6	87,0	238-010-008
9	straight	6	straight	6	101,5	238-010-009
10	straight	6	straight	6	101,5	238-010-010

Standard design:

- Modularly disk constructed distributor in lightweight aluminum with special coordination with FlexxPump 125/400/1500 for DLS greases
- With circulation monitoring to control the correct operation of all outlets
- 2 to 10 outlets per distributor possible
- Tube connection to inlet and outlets straight for tube 6
- Maximum pressure 100 bar
- Dosing volume 50 mm³

Special design (on request):

- Tube connection in various designs, straight / angled
- Different tube diameters, 4/6/8 mm at inlet or outlet
- Determination of the locations of the outlets
- Different delivery quantities per outlet through disk elements with different dosing volume (25/50/100 mm³)

Good to know:

- Only suitable DLS lubricant can be used!
- Operating temperature range: -20 °C ... + 60 °C (depending on the lubricant used)
- Cannot be used in series in conjunction with FlexxPump 125/400/1500 (no main and secondary distributors / cascading)
- Vented with oil with H1 approval



Tube connectors

Application:

pluggable connection with the tubes

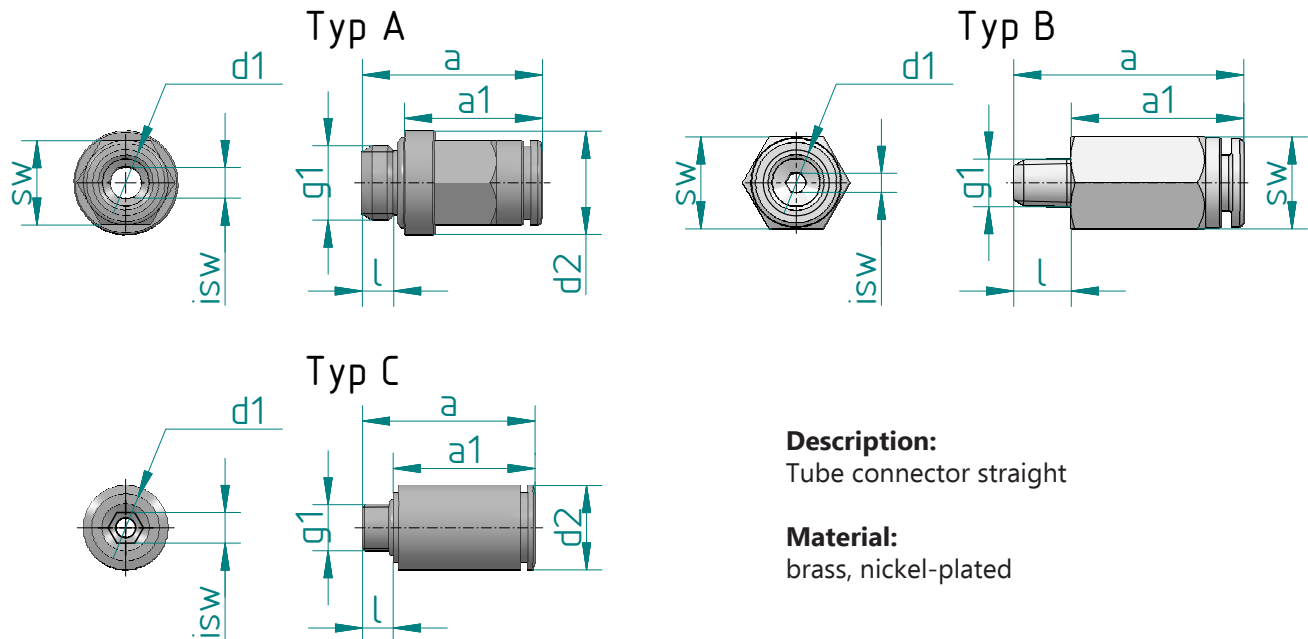
Technical specifications:

- operating pressure 80 bar
- operating temperature -20 °C... +80 °C
- medium fats
- material Ms 58 (nickel-plated), NBR, stainless steel

Features:

- sealing at the connection point with integrated O-rings
- easy assembly of the tubes
- all straight tube connectors with additional hexagon socket

Tube connectors, straight

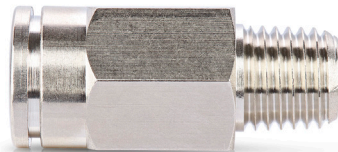


Description:
Tube connector straight

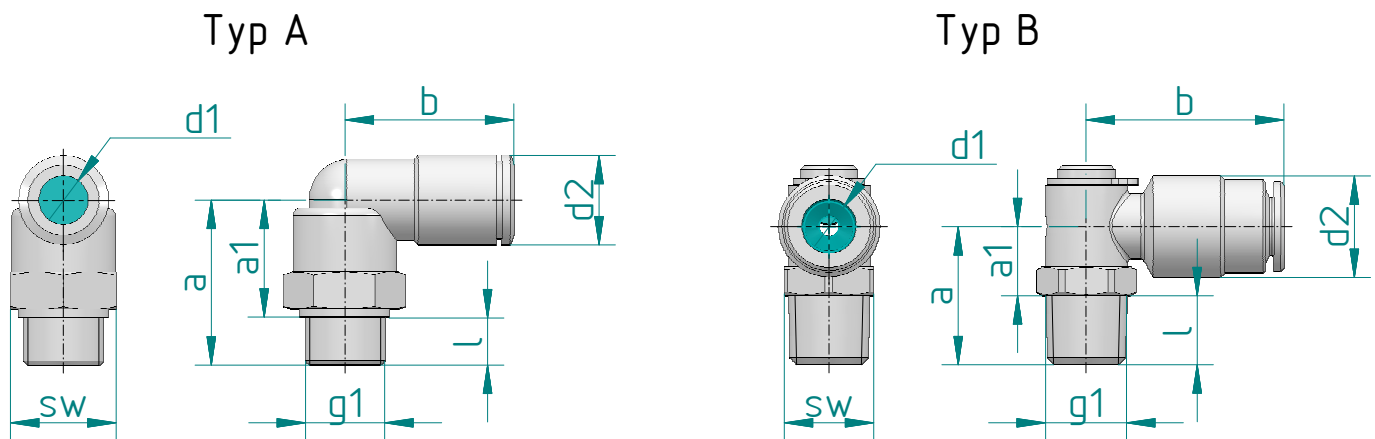
Material:
brass, nickel-plated

The fasteners

d1	g1		type	d2	a	a1	l	sw	isw	part-no.
4	M3	DIN 13-1	C	9	21,3	16,3	5	-	1,5	134-000-017
4	M5	DIN 13-1	C	9	20,5	16,5	4	-	2,5	134-000-016
4	M6x0,75	DIN 13-2	C	9	23,5	16,5	5	-	2,5	134-000-009
4	M6	DIN 13-1	C	9	23,5	16,5	7	-	2,5	134-000-006
4	G1/8	ISO 228-1	A	13,5	24	18	5	9	2,5	134-000-012
6	M5	DIN 13-1	C	11	22,5	17,8	4	-	2,5	134-000-015
6	M6x0,75	DIN 13-2	C	11	22,5	17,8	5	-	2,5	134-000-010
6	M6	DIN 158-1	B	11,5	28,2	20	8	12	2,5	134-000-014
6	M6	DIN 13-1	C	11	22,5	18,5	4	-	2,5	134-000-001
6	M8x1	DIN 158-1	B	11	25,8	17,8	8	11	4	134-000-005
6	M10x1	DIN 13-3	A	13,5	24	18	6	11	4	134-000-011
6	G1/8	ISO 228-1	A	13,5	24	18,5	5	11	4	134-000-002
6	G1/4	ISO 228-1	A	17	24	16	8	11	4	134-000-004
6	R1/8 BSPT	DIN 2999-5	A	12	26	18	8	13	4	134-000-003
8	M10x1	DIN 13-2	A	13	26,5	20,5	6	13	5	134-000-019
8	G1/8	ISO 228-1	A	11	26,5	20,5	6	13	5	134-000-008
8	G1/4	ISO 228-1	A	17	23,5	17	6,5	13	6	134-000-018



Tube connectors, right-angled



Description:

Tube connector right-angled;
360° rotatable

Material:

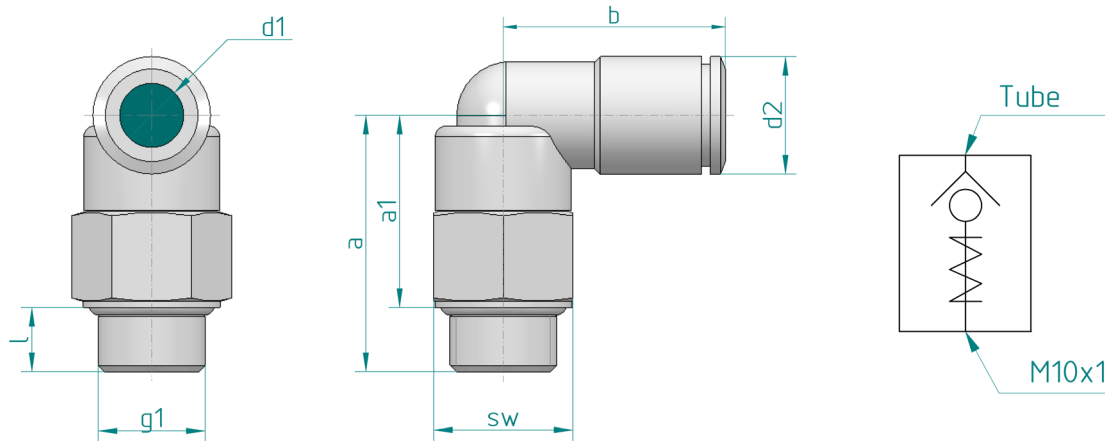
brass, nickel-plated

The fasteners

d1	g1		type	d2	a	a1	b	l	sw	part-no.
4	M3	DIN 13-1	A	9,1	16	11	18,2	5	6	134-001-021
4	M5	DIN 13-1	A	9	14,8	10,8	18	4	9	134-001-020
4	M6x0,75	DIN 13-2	A	9	15,8	10,8	18	5	9	134-001-011
4	M6	DIN 13-1	A	9	15,8	10,8	17,2	5	9	134-001-007
4	G1/8	ISO 228-1	A	9	14,8	8,9	20	5,9	13	134-001-018
6	M5	DIN 13-1	A	11	14,8	10,8	21	4	9	134-001-019
6	M6	DIN 13-1	A	11	15,5	10,5	20,5	5	9	134-001-001
6	M6x0,75	DIN 13-2	A	11	15,8	10,8	20,8	5	9	134-001-012
6	M6	DIN 13-1	B	11	16,5	8,5	24,3	8	11	134-001-014
6	M8x1	DIN 13-2	B	11	17,8	11	17,2	6,8	9	134-001-010
6	M10x1	DIN 13-2	A	11	20,3	14,4	20,8	5,9	13	134-001-006
6	M10x1	DIN 13-2	A	11	24	18	20,5	6	13	134-001-017
6	R1/8	DIN 2999-5	B	11,5	17	8,5	24,3	8,5	11	134-001-016
6	G1/8	ISO 228-1	A	11	20,3	14,4	20,8	5,9	13	134-001-002
6	G1/4	ISO 228-1	A	11	24	16	21,5	7	13	134-001-009
8	M10x1	DIN 13-2	A	13	24,5	18,5	23,5	6	13	134-001-023
8	G1/8	ISO 228-1	A	13	20,3	14,3	24	6	13	134-001-024
8	G1/4	ISO 228-1	A	13	23,3	16,8	23,5	6,5	13	134-001-022
8	M6	DIN 13-1	A	13	19,5	14,5	23,5	5	13	134-001-025



Tube connectors with non-return valve



Description:

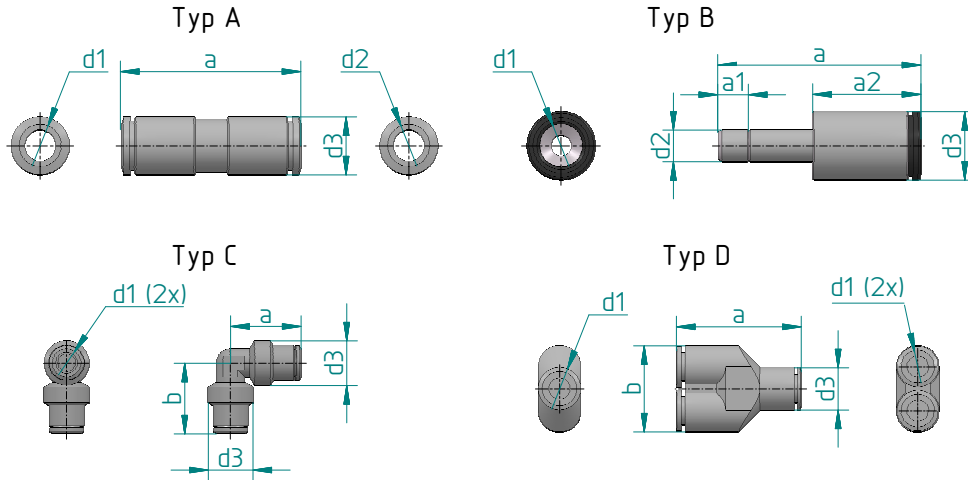
Tube connector with integrated non-return valve;
right-angled; 360° rotatable;

Material:

brass, nickel-plated;
seal: NBR

d1	g1	d2	a	a1	b	l	sw	part-no.
4	M10x1	9	24	18	20	5,5	13	134-001-200
6	M10x1	11	24	18	20,5	5,5	13	134-001-201
8	M10x1	13	25	19	23,5	5,5	13	134-001-202

Connections & Reductions



Description:
Connections and Reductions;
straight or right-angled

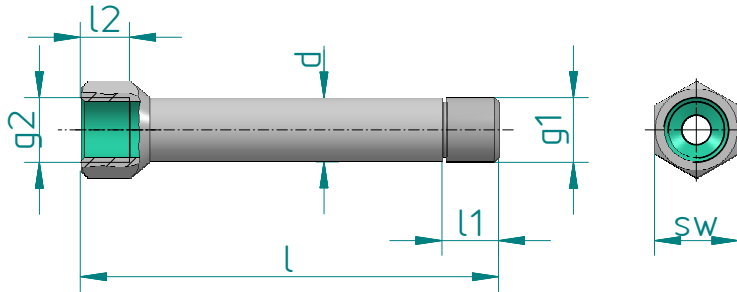
Material:
brass, nickel-plated;

type	d1	d2	d3	a	a1	a2	b	part-no.
A	4	4	9	32	--	--	--	134-000-111
A	6	4	11	34	--	--	--	134-000-106
A	6	6	11	34	--	--	--	134-000-104
A	6	8	13	39	--	--	--	134-000-105
B	4	6	9	30,5	5,1	12,5	--	134-000-110
B	6	4	11	35	10,8	17,8	--	134-000-109
B	8	6	13	38,5	11,6	20,5	--	134-000-108
C	4	-	9	17,5	--	--	17,5	134-001-106
C	6	-	11	20,1	--	--	20,1	134-001-104
D	6	6	12	35,5	--	--	24,5	134-002-000
D	8	8	14	37,9	--	--	28,5	134-002-023

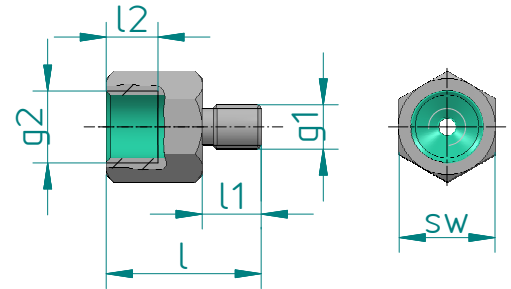


Connections

Typ A



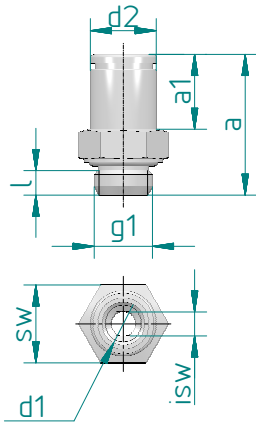
Typ B



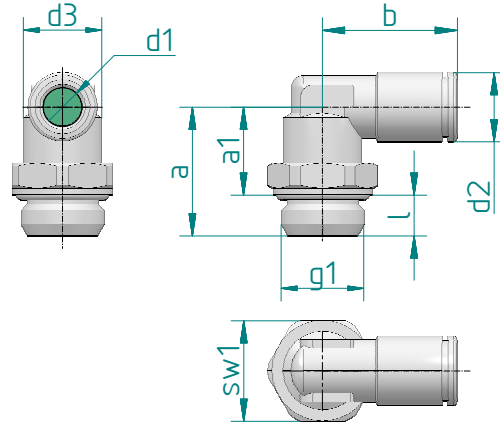
type	g1	g2	l	l1	l2	d	sw	material	part-no.
A	G1/8	G1/8	50,0	12	15,0	14	17	brass, nickel-plated	134-000-703
A	G1/4	G1/4	85,0	11,5	10,0	13	17	Galvanized steel	134-000-701
A	G1/4	G1/4	104,0	11,5	10,0	13	17	Galvanized steel	134-000-702
A	G1/4	G1/4	122,0	13,5	10,0	14	17	Steel, nickel-plated	134-000-712
B	M3	M6	17,5	5,5	7	--	9	brass, nickel-plated	134-000-709
B	M4	M3	16	5	6	--	6	brass, nickel-plated	134-000-707
B	M4	M6	18,5	5	7	--	9	brass, nickel-plated	134-000-708
B	M6	M10x1	21	6,5	7	--	13	brass, nickel-plated	134-000-704
B	M6	G1/8	21	6,5	7	--	13	brass, nickel-plated	134-000-705
B	M8	M6	19,2	9	7,5	--	10	brass, nickel-plated	134-000-706
B	M8	G1/8	24	8,5	8	--	17	brass, nickel-plated	134-000-710
B	M10x1	G1/4	24	8,5	8	--	17	brass, nickel-plated	134-000-711
B	G1/8	G1/4	35	7	12	13	17	Steel, nickel-plated	134-000-700

Tube connectors stainless steel

Typ A



Typ B



Description type A:
Tube connector straight

Description type B:
Tube connector right-angled;
360° rotatable; cylindrical thread

Material:
1.4401; Seal: FKM

type	d1	d2	a	a1	b	g1	l	sw	isw	part-no.
A	4	9	20,5	7	-	M5	4	9	2,5	134-000-901
A	4	9	19	9	-	G1/8	5,5	13	3	134-000-902
A	6	11	22,5	17,5	-	M5	4	-	2,5	134-000-904
A	6	11	23,5	12,5	-	G1/8	5,5	13	4	134-000-905
A	6	11	20	13,5	-	G1/4	6,5	16	4	134-000-906
A	8	13	26	21,5	-	G1/8	5,5	13	5	134-000-907
A	8	13	26	20,5	-	G1/4	6,5	13	5	134-000-908
B	4	9	14,8	10,8	18,2	M5	4	13		134-001-901
B	4	9	19,3	13,8	20	G1/8	5,5	13		134-001-902
B	4	9	20,5	14	20	G1/4	6,5	16		134-001-903
B	6	11	17,6	13,6	20,5	M5	4	9		134-001-904
B	6	11	19,3	13,8	21,5	G1/8	5,5	13		134-001-905
B	6	11	20,5	14	21,5	G1/4	6,5	16		134-001-906
B	8	13	19,3	14,6	23,5	G1/8	4,7	13		134-001-907
B	8	13	20,5	14	23,5	G1/4	6,5	16		134-001-908



DLS-Lubricants

We provide you selected high-performance lubricants, suitable for your application

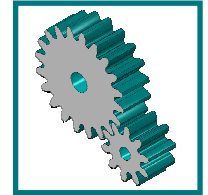
Lubricating greases are the first choice when lubricants have to stay at the friction point as long as possible. In addition to the best lubrication, they protect friction points against external influences such as splash water, moisture and dirt and protect against corrosion and wear.

On the following pages you will find the right lubricant for every application.



Grease F01

Standard grease for open gears



Grease F01 | DIN 51825 OGP0N-30 | NLGI-class 0...1

- Based on lithium / calcium complex with high pressure additives, which are connected to the soap structure and thus have safe access to the metal surface
- Heat-resistant, has good corrosion protection properties and does not contain solid lubricants

Commitment:

- Developed as a lubricating grease for highly loaded open gear drives
- Due to its high temperature properties, it is suitable for a wide range of applications where high temperatures are associated with extreme loads
- Can also be recommended for plain bearings / bushings

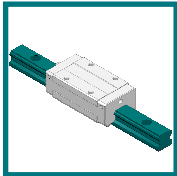
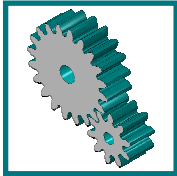
Operating temperature range -30 °C to + 150 °C

description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F01	125 cc	FlexxPump 125	000-101-101
cartridge for FlexxPump 125	F01	250 cc	FlexxPump 125	000-101-102
cartridge for FlexxPump 250	F01	250 cc	FlexxPump 250	000-101-103
cartridge for FlexxPump 400	F01	400 cc	FlexxPump 400	000-101-105
grease bellow for FlexxPump 1500	F01	1500 cc	FlexxPump 1500	000-101-115
tin	F01	1 kg		000-101-210
cartridge for hand press (DIN 1284)	F01	400 cc		000-101-220
hobcock	F01	18 kg		000-101-240
barrel	F01	180 kg		000-101-250

description	lubricant	length	part-no.
tube 6x4	F01	2 m	134-023-001
tube 6x4	F01	5 m	134-053-001
tube 6x4	F01	10 m	134-003-001
tube 8x5	F01	10 m	134-008-001

Grease F02

Standard grease with H1 approval

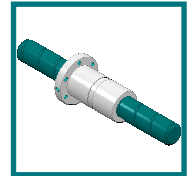
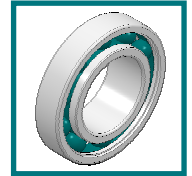


Grease F02 | DIN 51502 KP2R-25 | NLGI-class 2

- Synthetic special grease for high specific loads
- A special additive gives this special grease high thermal and oxidative stability and good corrosion and wear protection properties
- NSF / H1 approval

Commitment:

- cold, hot water and steam resistant
- high oxidation and thermal stability
- high load-bearing capacity, good wear protection
- long service life and wide service temperature range
- high lubricating effect with low friction coefficients



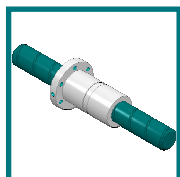
Operating temperature range -40 °C to + 140 °C

description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F02	125 cc	FlexxPump 125	000-102-101
cartridge for FlexxPump 125	F02	250 cc	FlexxPump 125	000-102-102
cartridge for FlexxPump 250	F02	250 cc	FlexxPump 250	000-102-103
cartridge for FlexxPump 400	F02	400 cc	FlexxPump 400	000-102-105
grease bellow for FlexxPump 1500	F02	1500 cc	FlexxPump 1500	000-102-115
tin	F02	1 kg		000-102-210
cartridge for hand press (DIN 1284)	F02	400 cc		000-102-220
hobcock	F02	18 kg		000-102-240
barrel	F02	180 kg		000-102-250

description	lubricant	length	part-no.
tube 6x4	F02	2 m	134-023-002
tube 6x4	F02	5 m	134-053-002
tube 6x4	F02	10 m	134-003-002
tube 8x5	F02	5 m	134-008-002

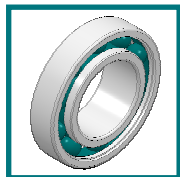
Grease F03

Linear guides & ball screw



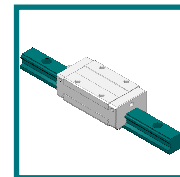
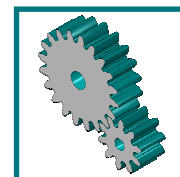
Grease F03 | DIN 51825 KP2K-20 | NLGI-class 2

- very short-fiber and homogeneous lithium saponified universal grease with a mineral oil that used for the lubrication of roller and plain bearings and can be used for medium to high loads
- very adhesive; suitable for short stroke applications
- water-resistant and anti-corrosive



Commitment:

- Lubrication of linear guides (recirculating ball guides, roller guides and Ball screws)
- Can be used together with a lubrication Pinion and continuous relubrication for open gears
- Very good eligibility in relubrication facilities



Operating temperature range -20 °C to + 120 °C

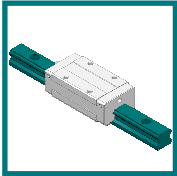
description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F03	125 cc	FlexxPump 125	000-103-101
cartridge for FlexxPump 125	F03	250 cc	FlexxPump 125	000-103-102
cartridge for FlexxPump 250	F03	250 cc	FlexxPump 250	000-103-103
cartridge for FlexxPump 400	F03	400 cc	FlexxPump 400	000-103-105
grease bellow for FlexxPump 1500	F03	1500 cc	FlexxPump 1500	000-103-115
tin	F03	1 kg		000-103-210
cartridge for hand press (DIN 1284)	F03	400 cc		000-103-220
hobbock	F03	18 kg		000-103-240
barrel	F03	170 kg		000-103-250

description	lubricant	length	part-no.
tube 4x2,5	F03	5 m	102-011-013
tube 6x4	F03	2 m	134-023-003
tube 6x4	F03	5 m	134-053-003
tube 6x4	F03	10 m	134-003-003
tube 8x5	F03	10 m	134-008-003

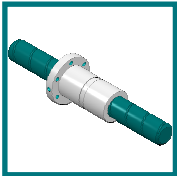
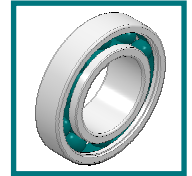
Grease F04

Special grease for bearing lubrication

Grease F04 | DIN 51502 KP2K-20 | NLGI-class 2



- Lithium-calcium saponified multi-purpose grease with a mineral oil that can be used for the lubrication of roller and slide bearings under medium loads
- Suitable for sometimes shock loads; water-resistant and anti-corrosive



Commitment:

- Lubrication of ball and roller bearings; ball screw
- Can be used together with a lubrication Pinion and continuous relubrication for open gears
- Good eligibility in relubrication facilities and distributor

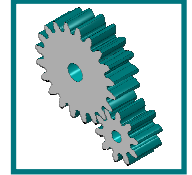
Operating temperature range -30 °C to + 130 °C

description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F04	125 cc	FlexxPump 125	000-104-101
cartridge for FlexxPump 125	F04	250 cc	FlexxPump 125	000-104-102
cartridge for FlexxPump 250	F04	250 cc	FlexxPump 250	000-104-103
cartridge for FlexxPump 400	F04	400 cc	FlexxPump 400	000-104-105
grease bellow for FlexxPump 1500	F04	1500 cc	FlexxPump 1500	000-104-115
tin	F04	1 kg		000-104-210
cartridge for hand press (DIN 1284)	F04	400 cc		000-104-220
hobbock	F04	18 kg		000-104-240
barrel	F04	180 kg		000-104-250

description	lubricant	length	part-no.
tube 6x4	F04	2 m	134-023-004
tube 6x4	F04	5 m	134-053-004
tube 6x4	F04	10 m	134-003-004
tube 8x5	F04	10 m	134-008-004

Grease F05

Special grease for open gears



Grease F05 | DIN 51502 KPF2-P | NLGI-class 2

- Aluminum complex soap with graphite additives
- Highly viscous mineral oil
- Heat-resistant and anti-corrosive

Commitment:

- Lubrication of heavily loaded gears
- Can be pumped very well till 0 °C

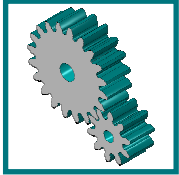
Operating temperature range -20 °C to + 150 °C

description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F05	125 cc	FlexxPump 125	000-105-101
cartridge for FlexxPump 125	F05	250 cc	FlexxPump 125	000-105-102
cartridge for FlexxPump 250	F05	250 cc	FlexxPump 250	000-105-103
cartridge for FlexxPump 400	F05	400 cc	FlexxPump 400	000-105-105
grease bellow for FlexxPump 1500	F05	1500 cc	FlexxPump 1500	000-105-115
tin	F05	1 kg		000-105-210
cartridge for hand press (DIN 1284)	F05	400 cc		000-105-220
hobcock	F05	18 kg		000-105-240
barrel	F05	185 kg		000-105-250

description	lubricant	length	part-no.
tube 6x4	F05	5 m	134-053-005
tube 6x4	F05	10 m	134-003-005
tube 8x5	F05	5 m	134-008-005

Grease F06

High performance lubricant



Grease F06

- synthetic, high viscosity lubricant
- excellent corrosion protection
- very wide temperature range

Commitment:

- Lubrication of highly stressed friction points (e.g. gears, chains)
- Water resistance
- Very high tendency to stick prevents being thrown off
- Pumpability in lubrication systems: 0 °C ... + 80 °C

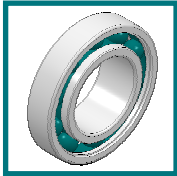
Operating temperature range: -10 °C ... + 250 °C

description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F06	125 cc	FlexxPump 125	000-106-101
cartridge for FlexxPump 125	F06	250 cc	FlexxPump 125	000-106-102
cartridge for FlexxPump 250	F06	250 cc	FlexxPump 250	000-106-103
cartridge for FlexxPump 400	F06	400 cc	FlexxPump 400	000-106-105
grease bellow for FlexxPump 1500	F06	1500 cc	FlexxPump 1500	000-106-115
tin	F06	1 kg		000-106-210
hobbock	F06	18 kg		000-106-240
barrel	F06	180 kg		000-106-250

description	lubricant	length	part-no.
tube 6x4	F06	5 m	134-053-006
tube 6x4	F06	10 m	134-003-006
tube 8x5	F06	5 m	134-008-006

Grease F07

High temperature-special grease for bearing



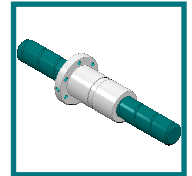
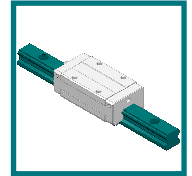
Grease F07 | DIN 51825 KPHC2P-40 | NLGI-class 2

- synthetic (polyalphaolefin) high-performance grease
- small proportions of PTFE as a solid lubricant
- large temperature range

Commitment:

- Sliding and roller bearing; KGT nuts; Recirculating ball bearings
- Pumpability in lubrication systems: -40 °C ... + 80 °C

Operating temperature range: -40 °C ... + 160 °C

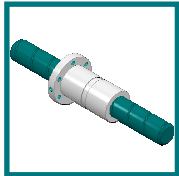
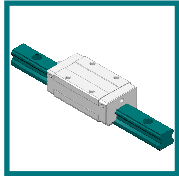


description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F07	125 cc	FlexxPump 125	000-107-101
cartridge for FlexxPump 125	F07	250 cc	FlexxPump 125	000-107-102
cartridge for FlexxPump 250	F07	250 cc	FlexxPump 250	000-107-103
cartridge for FlexxPump 400	F07	400 cc	FlexxPump 400	000-107-105
grease bellow for FlexxPump 1500	F07	1500 cc	FlexxPump 1500	000-107-115
tin	F07	1 kg		000-107-210
cartridge for hand press (DIN 1284)	F07	400 cc		000-107-220
hobbock	F07	18 kg		000-107-240
barrel	F07	180 kg		000-107-250

description	lubricant	length	part-no.
tube 6x4	F07	5 m	134-053-007
tube 6x4	F07	10 m	134-003-007
tube 8x5	F07	10 m	134-008-007

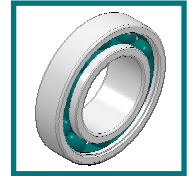
Grease F08

Low temperature-special grease for bearing



Grease F08 | DIN 51502 KP HC 2 P-40 | NLGI-class 2

- fully synthetic grease
- very good wear and corrosion protection
- easily pumpable at low temperatures



Commitment:

- Sliding and roller bearing; KGT nuts; Recirculating ball bearings
- Pumpability in lubrication systems: -25 °C ... + 80 °C

Operating temperature range: -40 °C ... + 180 °C

description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F08	125 cc	FlexxPump 125	000-108-101
cartridge for FlexxPump 125	F08	250 cc	FlexxPump 125	000-108-102
cartridge for FlexxPump 250	F08	250 cc	FlexxPump 250	000-108-103
cartridge for FlexxPump 400	F08	400 cc	FlexxPump 400	000-108-105
grease bellow for FlexxPump 1500	F08	1500 cc	FlexxPump 1500	000-108-115
tin	F08	1 kg		000-108-210
cartridge for hand press (DIN 1284)	F08	400 cc		000-108-220
hobcock	F08	18 kg		000-108-240
barrel	F08	180 kg		000-108-250

description	lubricant	length	part-no.
tube 6x4	F08	5 m	134-053-008
tube 6x4	F08	10 m	134-003-008
tube 8x5	F08	10 m	134-008-008

Grease F09

Special grease for fast moving roller bearing

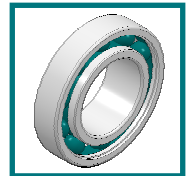
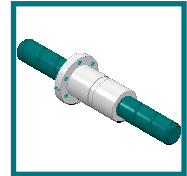
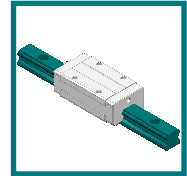
Grease F09 | DIN 51502 KP 2K-30 | NLGI-class 2

- Lithium special soap
- Mineral oil based with additives

Commitment:

- Lubrication of high-speed bearings and gears, KGT; Spindle and plain bearings
- Pumpability in lubrication systems: -10 °C ... + 80 °C

Operating temperature range -10 °C to + 80 °C

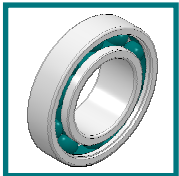
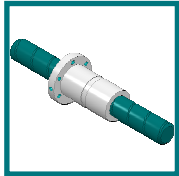
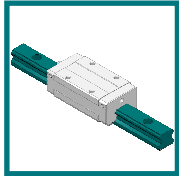


description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F09	125 cc	FlexxPump 125	000-109-101
cartridge for FlexxPump 125	F09	250 cc	FlexxPump 125	000-109-102
cartridge for FlexxPump 250	F09	250 cc	FlexxPump 250	000-109-103
cartridge for FlexxPump 400	F09	400 cc	FlexxPump 400	000-109-105
grease bellow for FlexxPump 1500	F09	1500 cc	FlexxPump 1500	000-109-115
tin	F09	1 kg		000-109-210
cartridge for hand press (DIN 1284)	F09	400 cc		000-109-220

description	lubricant	length	part-no.
tube 6x4	F09	5 m	134-053-009
tube 6x4	F09	10 m	134-003-009
tube 8x5	F09	10 m	134-008-009

Grease F10

Long-term grease for roller and plain bearings



Grease F10 | NLGI-class 2

- lithium saponified, partially synthetic grease lubricant
- best wear protection
- very good non-ferrous metal and aging protection
- optimal high and low temperature behavior

Commitment:

- Sliding and roller bearing; KGT nuts; Recirculating ball carriage
- Pumpability in lubrication systems: -20 °C ... + 80 °C

Operating temperature range: -40 °C ... +140 °C

description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F10	125 cc	FlexxPump 125	000-110-101
cartridge for FlexxPump 125	F10	250 cc	FlexxPump 125	000-110-102
cartridge for FlexxPump 250	F10	250 cc	FlexxPump 250	000-110-103
cartridge for FlexxPump 400	F10	400 cc	FlexxPump 400	000-110-105
grease bellow for FlexxPump 1500	F10	1500 cc	FlexxPump 1500	000-110-115
cartridge for hand press (DIN 1284)	F10	400 cc		000-110-220

description	lubricant	length	part-no.
tube 6x4	F10	5 m	134-053-010
tube 6x4	F10	10 m	134-003-010
tube 8x5	F10	10 m	134-008-010

Grease F11

Special grease for rolling bearings for high alternating loads

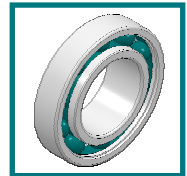
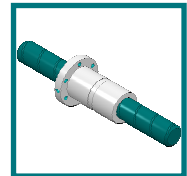
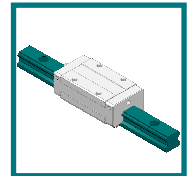
Grease F11 | DIN 51825 KP 1 K-20 | NLGI-class 1

- Lithium special soap
- Semi-synthetic high-speed grease
- HD additives and emergency running properties
- Very good pumpability in lubrication systems

Commitment:

- Lubrication of roller bearings, recirculating ball bearing guides, spindles and KGT
- Pumpability in lubrication systems: -20 °C ... + 80 °C

Operating temperature range -20 °C to + 120 °C



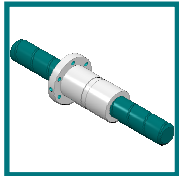
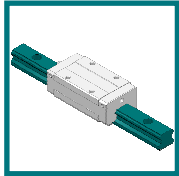
description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F11	125 cc	FlexxPump 125	000-111-101
cartridge for FlexxPump 125	F11	250 cc	FlexxPump 125	000-111-102
cartridge for FlexxPump 250	F11	250 cc	FlexxPump 250	000-111-103
cartridge for FlexxPump 400	F11	400 cc	FlexxPump 400	000-111-105
grease bellow for FlexxPump 1500	F11	1500 cc	FlexxPump 1500	000-111-115
cartridge for hand press (DIN 1284)	F11	400 cc		000-111-220

description	lubricant	length	part-no.
tube 6x4	F11	5 m	134-053-011
tube 6x4	F11	10 m	134-003-011
tube 8x5	F11	10 m	134-008-011

Grease F14

High-performance universal grease

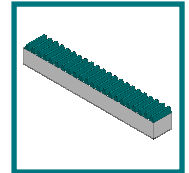
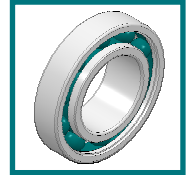
Grease F14 | GB 0 | NLGI-class 0



- Special lubricating grease based on mineral oil
- High pressure absorption capacity
- High wear protection
- Good corrosion protection properties
- Very easy to convey in lubrication systems
- High water resistance

Commitment:

- Lubrication of roller bearing, slide bearing, ball screw, linear guides
- Pumpability in lubrication systems: -25 °C ... + 180 °C

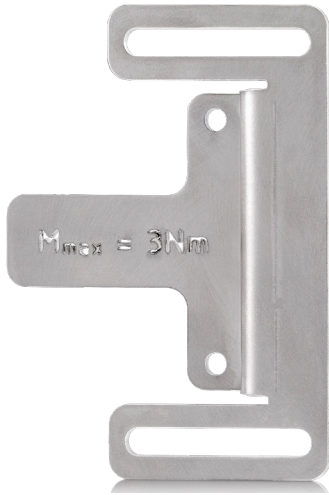


Operating temperature range -25 °C to + 180 °C

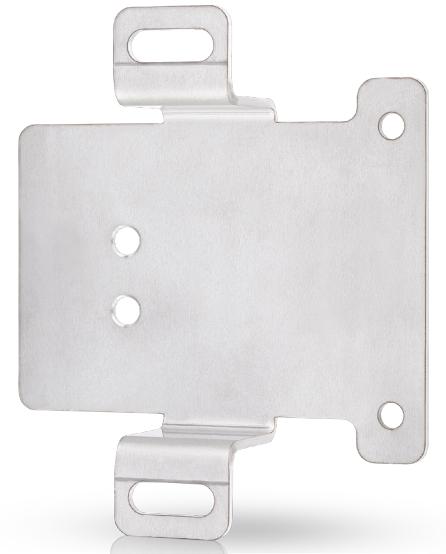
description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	F14	125 cc	FlexxPump 125	000-114-101
cartridge for FlexxPump 125	F14	250 cc	FlexxPump 125	000-114-102
cartridge for FlexxPump 250	F14	250 cc	FlexxPump 250	000-114-103
cartridge for FlexxPump 400	F14	400 cc	FlexxPump 400	000-114-105
grease bellow for FlexxPump 1500	F14	1500 cc	FlexxPump 1500	000-114-115
tin	F14	1 kg		000-114-210
cartridge for hand press (DIN 1284)	F14	400 cc		000-114-220

description	lubricant	length	part-no.
tube 4x2,5	F14	5 m	102-011-024
tube 6x4	F14	2 m	134-023-014
tube 6x4	F14	5 m	134-053-014
tube 6x4	F14	10 m	134-003-014
tube 8x5	F14	2 m	134-028-014
tube 8x5	F14	5 m	134-058-014
tube 8x5	F14	10 m	134-008-014

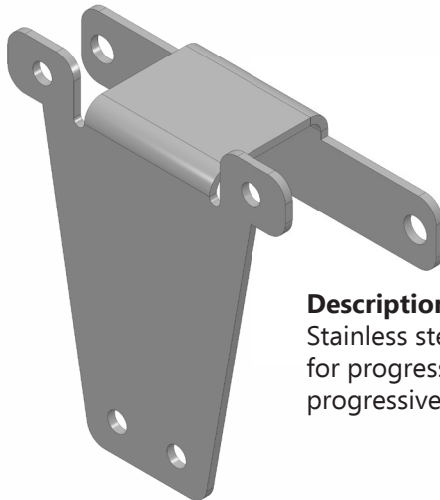
Brackets for FlexxPump 125 & Distributor



Description:
Universal stainless steel bracket
for all types FlexxPump 125;
for easy assembly
rear structure;



Description:
Stainless steel brackets for all
types Flexx Pump 125; for
Splinter (grease);
different designs;
Splinters not im
Included in delivery;



Description:
Stainless steel brackets for all types FlexxPump 125;
for progressive distributor (grease); different designs;
progressive distributor not included;

Brackets for FlexxPump 400



Description:

Accessory bracket in stainless steel for all types FlexxPump 400;

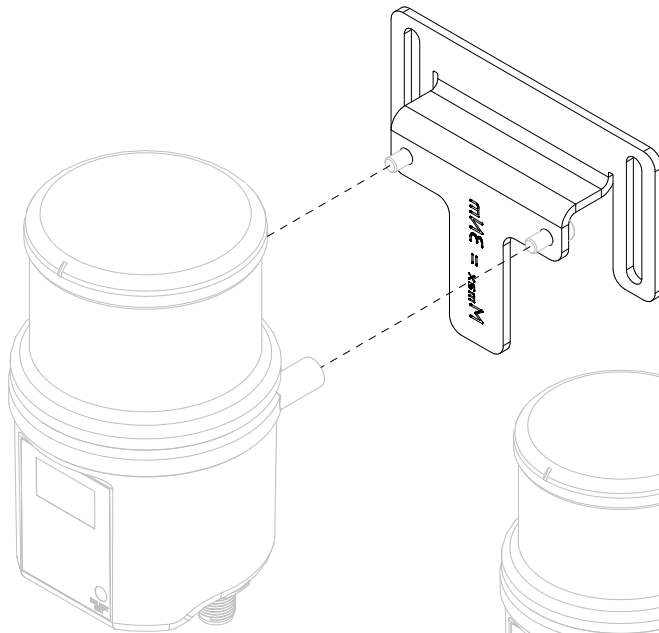
With screws to attach the FlexxPump 400;

Different designs

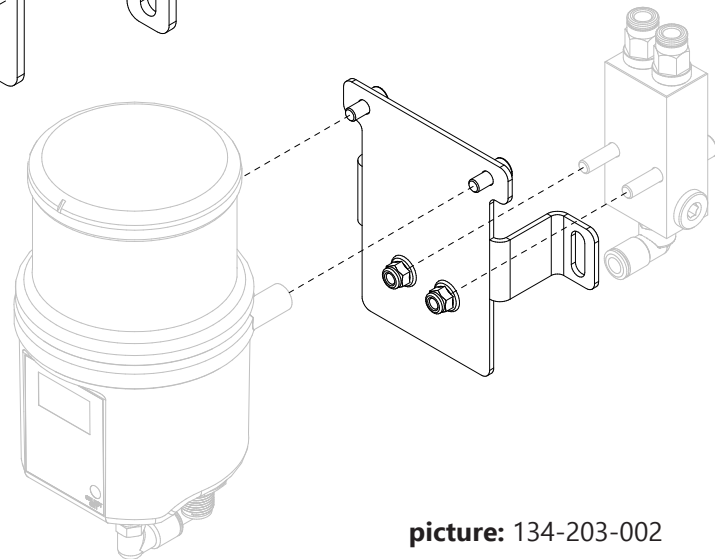
FlexxPump 400 not included in delivery;

See dimension sheet for dimensions

Brackets for FlexxPump 125 & Splitter



picture: 134-200-000

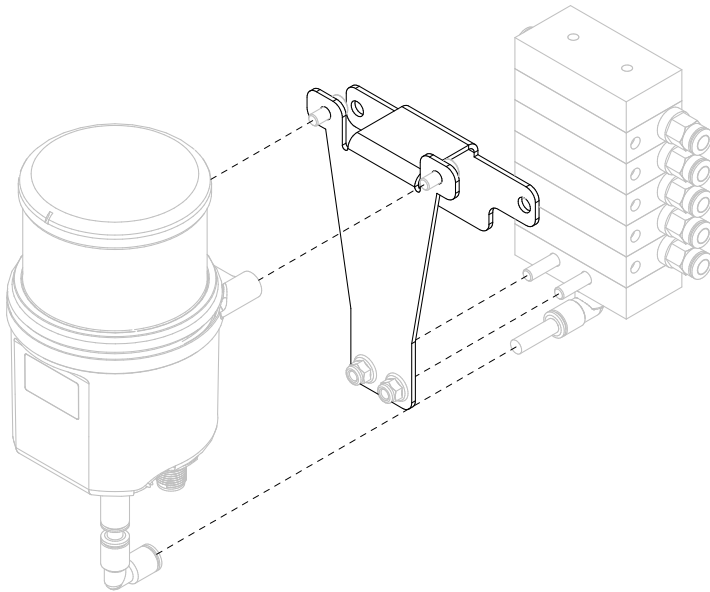


picture: 134-203-002

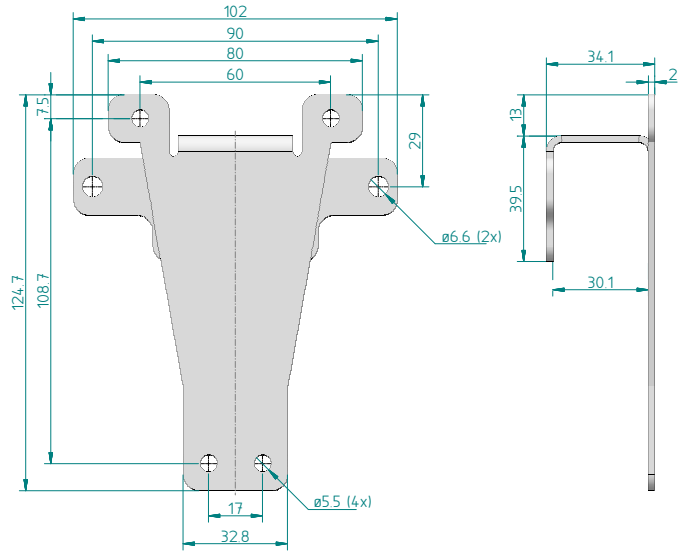
description	part-no.
brackets (stainless steel) for all types FlexxPump 125	134-200-000

description	type splitter	position splitter	part-no.
brackets (stainless steel) for FlexxPump 125 and 2-way Splitter	2-fach	behind	134-203-002
brackets (stainless steel) for FlexxPump 125 and 3-way Splitter	3-fach		134-203-003
brackets (stainless steel) for FlexxPump 125 and 4-way Splitter	4-fach		134-203-004

Brackets for FlexxPump 125 & progressiv distributor



picture: 134-203-105



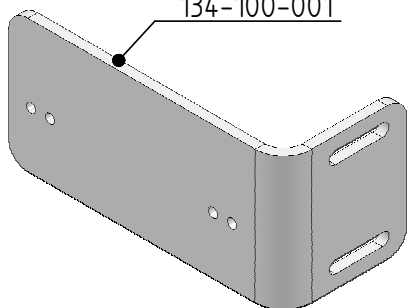
picture: 134-203-110

description	type PGV	position	part-no.
brackets (stainless steel) for FlexxPump 125 and PGV 2 outlets	2x (138-000-002)	behind	134-203-102
brackets (stainless steel) for FlexxPump 125 and PGV 3 outlets	3x (134-000-003)		134-203-103
brackets (stainless steel) for FlexxPump 125 and PGV 4 outlets	4x (134-000-004)		134-203-104
brackets (stainless steel) for FlexxPump 125 and PGV 5 outlets	5x (134-000-005)		134-203-105
brackets (stainless steel) for FlexxPump 125 and PGV 6 outlets	6x (134-000-006)		134-203-106
brackets (stainless steel) for FlexxPump 125 and PGV 7 outlets	7x (134-000-007)		134-203-107
brackets (stainless steel) for FlexxPump 125 and PGV 8 outlets	8x (134-000-008)		134-203-108
brackets (stainless steel) for FlexxPump 125 and PGV 9 outlets	9x (134-000-009)		134-203-109
brackets (stainless steel) for FlexxPump 125 and PGV 10 outlets	10x (134-000-010)		134-203-110

Brackets for FlexxPump 400

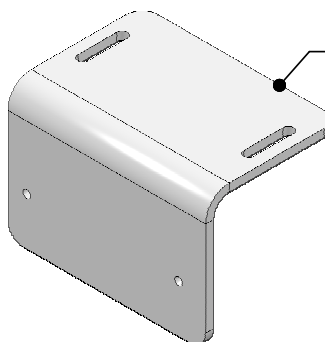
Typ 1

134-100-001



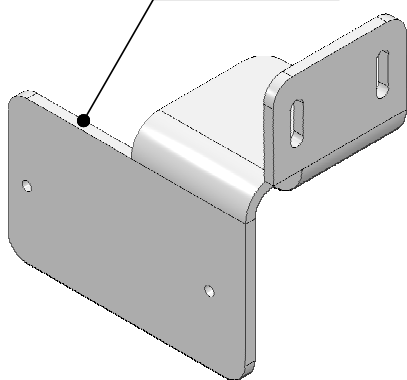
Typ 2

134-100-002



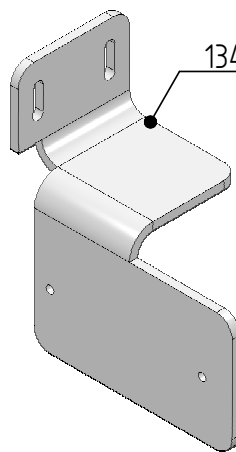
Typ 3

134-100-003



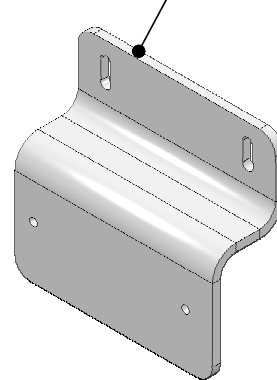
Typ 4

134-100-004



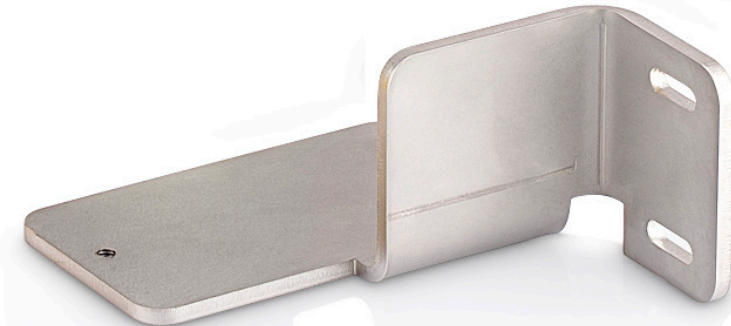
Typ 5

134-100-005



Brackets for FlexxPump 400

description	part-no.
accessory bracket type 1; for FlexxPump 400	134-100-001
accessory bracket type 2; for FlexxPump 400	134-100-002
accessory bracket type 3; for FlexxPump 400	134-100-003
accessory bracket type 4; for FlexxPump 400	134-100-004
accessory bracket type 5; for FlexxPump 400	134-100-005



Sets

FlexxPump 125 & Splitter

type FlexxPump 125	position splitter	type brackets	type splitter	part-no.
FlexxPump 125 (135-125-100) time-controlled	type D behind	134-203-002	2x (134-005-102)	139-103-002
		134-203-003	3x (134-005-103)	139-103-003
		134-203-004	4x (134-005-104)	139-103-004
FlexxPump 125 DLS (135-125-210) pulse-controlled		134-203-002	2x (134-005-102)	139-203-002
		134-203-003	3x (134-005-103)	139-203-003
		134-203-004	4x (134-005-104)	139-203-004



Description:

Complete assembly sets pre-assembled;
incl. FlexxPump 125 (type: time- or pulse-controlled);
incl. stainless steel holder;
incl. splitter;
without lubricant

outlets of the splitter straight;
for tube 6 mm;
See dimension sheet for dimensions

Note on delivery:

The FlexxPump 125 and the splitter are
vented with oil with H1 approval!

Sets

FlexxPump 125 & progressiv distributor

type FlexxPump 125	position PV	type brackets	type PV	part-no.
FlexxPump 125 (135-125-100) time-controlled	behind	134-203-102	2x (138-000-102)	139-103-102
		134-203-103	3x (138-000-103)	139-103-103
		134-203-104	4x (138-000-104)	139-103-104
		134-203-105	5x (138-000-105)	139-103-105
		134-203-106	6x (138-000-106)	139-103-106
		134-203-107	7x (138-000-107)	139-103-107
		134-203-108	8x (138-000-108)	139-103-108
		134-203-109	9x (138-000-109)	139-103-109
		134-203-110	10x (138-000-110)	139-103-110
FlexxPump 125 DLS (135-125-210) pulse-controlled	behind	134-203-102	2x (138-000-102)	139-203-102
		134-203-103	3x (138-000-103)	139-203-103
		134-203-104	3x (138-000-104)	139-203-104
		134-203-105	5x (138-000-105)	139-203-105
		134-203-106	6x (138-000-106)	139-203-106
		134-203-107	7x (138-000-107)	139-203-107
		134-203-108	8x (138-000-108)	139-203-108
		134-203-109	9x (138-000-109)	139-203-109
		134-203-110	10x (138-000-110)	139-203-110



Description:

Complete assembly sets pre-assembled;
incl. FlexxPump 125 (type: time- or pulse-controlled);
incl. stainless steel holder;
incl. progressive distributor;
without lubricant

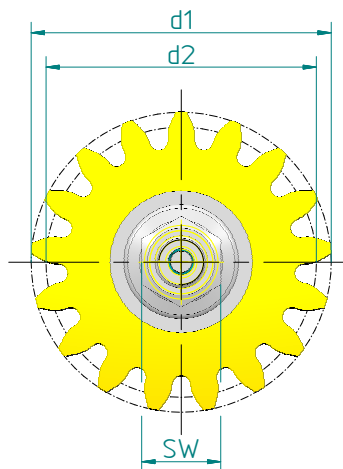
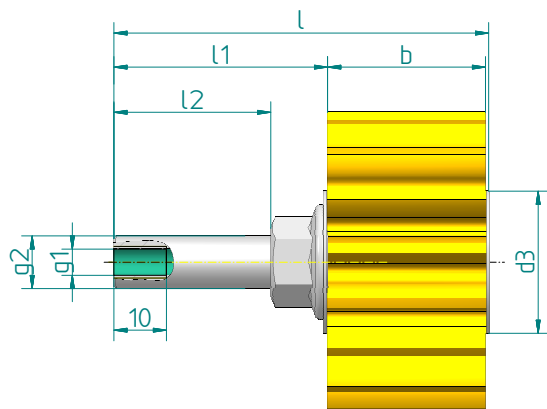
Distributor outlets straight;
for tube 6 mm;
See dimension sheet for dimensions

Note on delivery:

The FlexxPump 125 and the progressive distributor are
vented with oil with H1 approval!

Sets

PU-Lubrication Pinion with axis, straight



Description:
 PU-Lubrication Pinion;
 straight;
 incl. sleeve and plain bearing;
 with straight axis
 toothing after DIN 867
 with oil (H1 approval)
 pre-oiled*

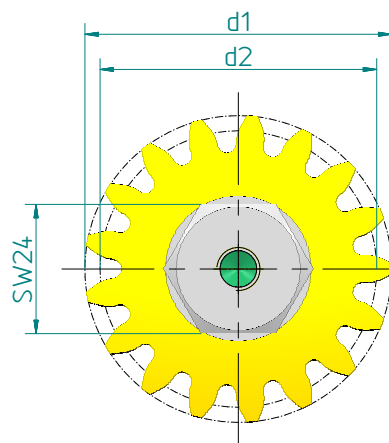
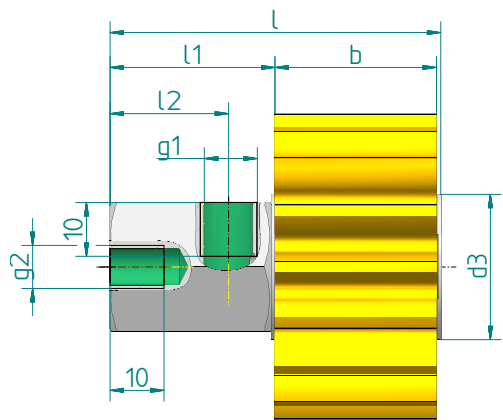
Material:
 Pinion: open-cell PU foam;
 axis: Steel nickel-plated

module	z	b	d1	d2	l	l1	l2	g1	g2	d3	sw	part-no.
1,5	24	15	39	36	60,4	44,6	34,0	M6	M10	27	15	150-152-421
2	17	20	38	34	61,2	40,4	29,8	M6	M10	27	15	150-021-721
3	17	30	57	51	71,2	40,4	29,8	M6	M10	27	15	150-031-721
4	17	40	76	68	81,2	40,4	29,8	M6	M10	27	15	150-041-721
5	17	50	95	85	116,4	65,5	48,9	G1/8	M16	60	24	150-051-721
6	17	60	114	102	126,4	65,5	48,9	G1/8	M16	60	24	150-061-721
8	17	80	152	136	146,4	65,5	48,9	G1/8	M16	60	24	150-081-721
10	17	100	190	170	186,4	65,5	48,9	G1/8	M16	60	24	150-101-721
12	8	120	120	96	186,4	65,5	48,9	G1/8	M16	60	24	150-120-721

*Alternatively also possible without H1 approval

Sets

PU-Lubrication Pinion with axis, right-angled



Description:

PU-Lubrication Pinion;
straight;
incl. sleeve and plain bearing;
with angled axis
toothing after DIN 867
with oil (H1 approval)
pre-oiled*

Material:

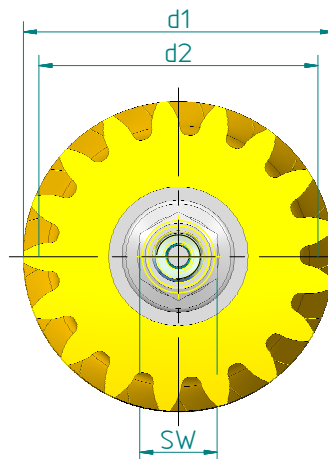
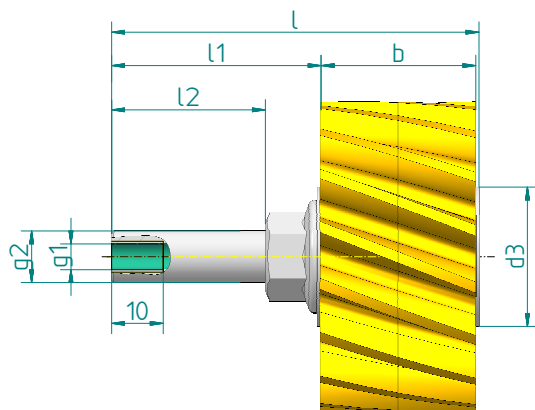
Pinion: open-cell PU foam;
axis: Steel nickel-plated

module	z	b	d1	d2	l	l1	l2	g1	g2	d3	sw	part-no.
1,5	24	15	39	36	60,4	30,6	22,0	G1/8	M8	27	24	150-152-411
2	17	20	38	34	61,2	30,6	22,0	G1/8	M8	27	24	150-021-711
3	17	30	57	51	71,2	30,6	22,0	G1/8	M8	27	24	150-031-711
4	17	40	76	68	81,2	30,6	22,0	G1/8	M8	27	24	150-041-711
5	17	50	95	85	116,4	30,6	22,0	G1/8	M8	60	24	150-051-711
6	17	60	114	102	126,4	30,6	22,0	G1/8	M8	60	24	150-061-711
8	17	80	152	136	146,4	30,6	22,0	G1/8	M8	27	24	150-081-711
10	17	100	190	170	166,4	30,6	22,0	G1/8	M8	100	24	150-101-711
12	8	120	120	96	186,4	30,6	22,0	G1/8	M8	100	24	150-120-711

*Alternatively also possible without H1 approval

Sets

PU-Lubrication Pinion RH with axis, straight



Description:

PU-Lubrication Pinion;
helical right;
incl. sleeve and plain bearing;
with straight axis
toothing after DIN 867
with oil (H1 approval)
pre-oiled*

Material:

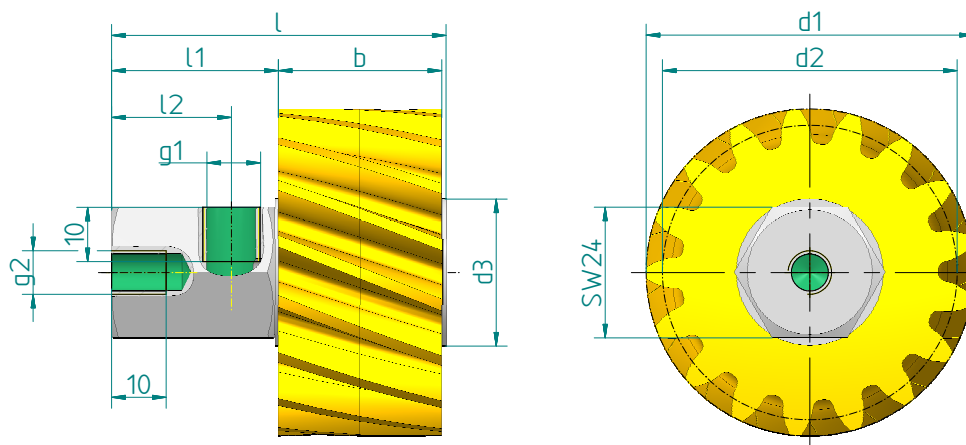
Pinion: open-cell PU foam;
axis: Steel nickel-plated

module	z	b	d1	d2	l	l1	l2	g1	g2	d3	sw	β	part-no.
1,5	24	15	41,2	38,2	60,4	44,6	34,0	M6	M10	27	15	19°31'42"	151-152-421
2	17	20	40,1	36,1	61,2	40,4	29,8	M6	M10	27	15	19°31'42"	151-021-721
3	17	30	60,1	54,1	71,2	40,4	29,8	M6	M10	27	15	19°31'42"	151-031-721
4	17	40	80,2	72,2	81,2	40,4	29,8	M6	M10	27	15	19°31'42"	151-041-721
5	17	50	100,2	90,2	116,4	65,5	48,9	G1/8	M16	60	24	19°31'42"	151-051-721
6	17	60	120,2	108,2	126,4	65,5	48,9	G1/8	M16	60	24	19°31'42"	151-061-721
8	17	80	160,3	144,3	146,4	65,5	48,9	G1/8	M16	60	24	19°31'42"	151-081-721
10	17	100	200,4	180,4	166,4	65,5	48,9	G1/8	M16	100	24	19°31'42"	151-101-721
12	8	120	125,9	101,9	186,4	65,5	48,9	G1/8	M16	100	24	19°31'42"	151-120-721

*Alternatively also possible without H1 approval

Sets

PU-Lubrication Pinion RH with axis, right-angled



Description:

PU-Lubrication Pinion;
helical right;
incl. sleeve and plain bearing;
with straight axis
toothing after DIN 867
with oil (H1 approval)
pre-oiled*

Material:

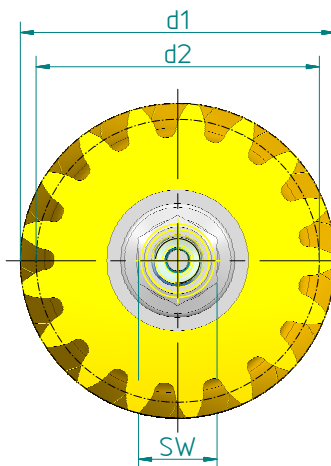
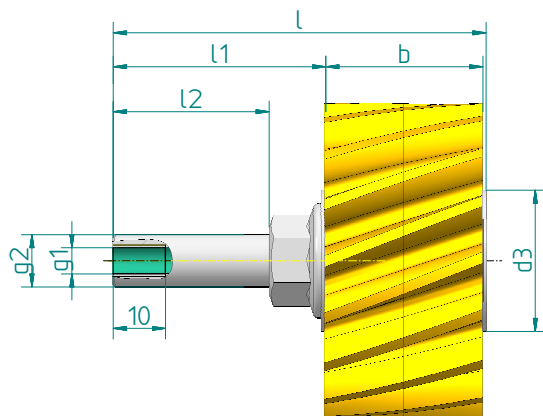
Pinion: open-cell PU foam;
axis: Steel nickel-plated

module	z	b	d1	d2	l	l1	l2	g1	g2	d3	sw	β	part-no.
1,5	24	15	41,2	38,2	60,4	30,6	22	G1/8	M8	27	24	19°31'42"	151-152-411
2	17	20	40,1	36,1	61,2	30,6	22	G1/8	M8	27	24	19°31'42"	151-021-711
3	17	30	60,1	54,1	71,2	30,6	22	G1/8	M8	27	24	19°31'42"	151-031-711
4	17	40	80,2	72,2	81,2	30,6	22	G1/8	M8	27	24	19°31'42"	151-041-711
5	17	50	100,2	90,2	116,4	30,6	22	G1/8	M8	60	24	19°31'42"	151-051-711
6	17	60	120,2	108,2	126,4	30,6	22	G1/8	M8	60	24	19°31'42"	151-061-711
8	17	80	160,2	144,3	146,4	30,6	22	G1/8	M8	60	24	19°31'42"	151-081-711
10	17	100	200,4	180,4	166,4	30,6	22	G1/8	M8	100	24	19°31'42"	151-101-711
12	8	120	125,9	101,9	186,4	30,6	22	G1/8	M8	100	24	19°31'42"	151-120-711

*Alternatively also possible without H1 approval

Sets

PU-Lubrication Pinion LH with axis, straight



Description:

PU-Lubrication Pinion;
helical left;
incl. sleeve and plain bearing;
with straight axis
toothing after DIN 867
with oil (H1 approval)
pre-oiled*

Material:

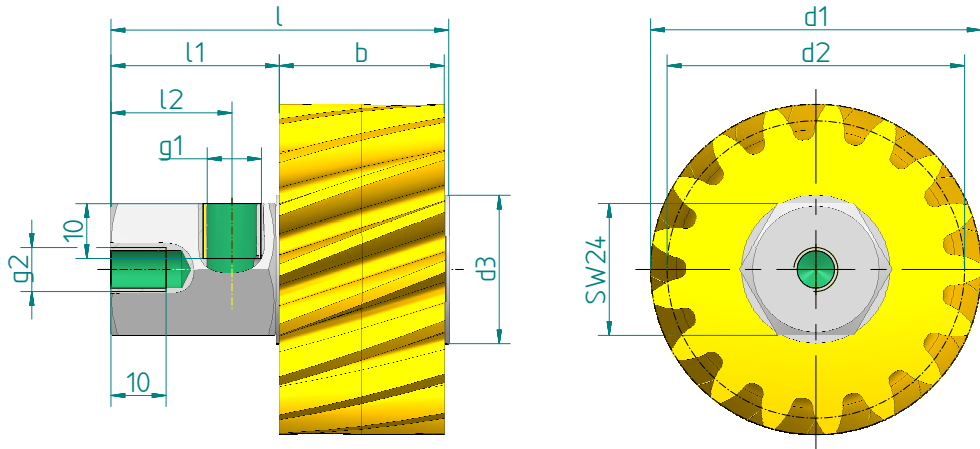
Pinion: open-cell PU foam;
axis: Steel nickel-plated

module	z	b	d1	d2	l	l1	l2	g1	g2	d3	sw	β	part-no.
1,5	24	15	41,2	38,2	60,4	44,6	34,0	M6	M10	27	15	19°31'42''	152-152-421
2	17	20	40,1	36,1	61,2	40,4	29,8	M6	M10	27	15	19°31'42''	152-021-721
3	17	30	60,1	54,1	71,2	40,4	29,8	M6	M10	27	15	19°31'42''	152-031-721
4	17	40	80,2	72,2	81,2	40,4	29,8	M6	M10	27	15	19°31'42''	152-041-721
5	17	50	100,2	90,2	116,4	65,5	48,9	G1/8	M16	60	24	19°31'42''	152-051-721
6	17	60	120,2	108,2	126,4	65,5	48,9	G1/8	M16	60	24	19°31'42''	152-061-721
8	17	80	160,3	144,3	146,4	65,5	48,9	G1/8	M16	60	24	19°31'42''	152-081-721
10	17	100	200,4	180,4	166,4	65,5	48,9	G1/8	M16	100	24	19°31'42''	152-101-721
12	8	120	125,9	101,9	186,4	65,5	48,9	G1/8	M16	100	24	19°31'42''	152-120-721

*Alternatively also possible without H1 approval

Sets

PU-Lubrication Pinion LH with axis, right-angled



Description:

PU-Lubrication Pinion;
helical left;
with angled axis
toothing after DIN 867
with oil (H1 approval)
pre-oiled*

Material:

Pinion: open-cell PU foam;
axis: Steel nickel-plated

module	z	b	d1	d2	l	l1	l2	g1	g2	d3	sw	β	part-no.
1,5	24	15	41,2	38,2	60,4	30,6	22	G1/8	M8	27	24	19°31'42''	152-152-411
2	17	20	40,1	36,1	61,2	30,6	22	G1/8	M8	27	24	19°31'42''	152-021-711
3	17	30	60,1	54,1	71,2	30,6	22	G1/8	M8	27	24	19°31'42''	152-031-711
4	17	40	80,2	72,2	81,2	30,6	22	G1/8	M8	27	24	19°31'42''	152-041-711
5	17	50	100,2	90,2	116,4	30,6	22	G1/8	M8	60	24	19°31'42''	152-051-711
6	17	60	120,2	108,2	126,4	30,6	22	G1/8	M8	60	24	19°31'42''	152-061-711
8	17	80	160,2	144,3	146,4	30,6	22	G1/8	M8	60	24	19°31'42''	152-081-711
10	17	100	200,4	180,4	166,4	30,6	22	G1/8	M8	100	24	19°31'42''	152-101-711
12	8	120	125,9	101,9	186,4	30,6	22	G1/8	M8	100	24	19°31'42''	152-120-711

*Alternatively also possible without H1 approval

Accessories FlexxPump 125 B & 400 B

description	part-no.
Battery for FlexxPump 125 B; 4,5 V; alkaline	134-002-025
Battery for FlexxPump 400 B; 6 V; alkaline; only for external battery box	134-002-028
Battery for FlexxPump 400 B; 6 V; alkaline	134-002-031
Cable M12x1 with red LED; 5 m; only for FlexxPump 125 B / 400 B with M12x1-plug	134-002-016
Cable M12x1 with red LED; 10 m; only for FlexxPump 125 B / 400 B with M12x1-plug	134-002-017



Picture:
Cable M12x1;
with red LED

Accessories FlexxPump 125, 400 & 1500 24 V DC

description	part-no.
Cable M12x1; straight plug; 4-pole; open end; 5 m	134-002-003
Cable M12x1; straight plug; 4-pole; open end; 10 m	134-002-007
Cable M12x1; angled plug with LED; 4-pole; open end; 5 m	134-002-014
Cable M12x1; angled plug with LED; 4-pole; open end; 10 m	134-002-015
Diagnosis and control unit; FlexxCheck for FlexxPump 400/500 DLS; without power supply	20038756
Power pack 230 V AC / 24 V DC - 0.6 A: Input power cable 1.8 m long; Output 1.8 m connection cable with M12x1 plug	134-002-011



Picture:
Diagnosis and control unit;
FlexxCheck for FlexxPump
400/500 DLS;
without power supply

Power pack
230 V AC / 24 V DC - 0.6
A: Input power cable 1.8 m
long;
Output 1.8 m connection
cable with M12x1 plug

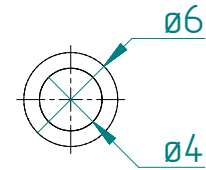
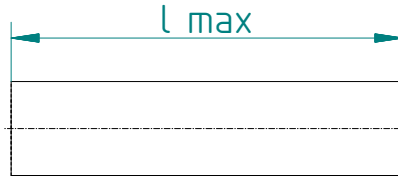


Picture:
Cable M12x1;
angled plug with LED; 4-pole
open end



Picture:
Cable M12x1;
straight plug; 4-pole
open end

Tubes



Description:

Tubes empty or pre-filled with lubricant;
 Different lengths and diameters
 Max. Pressure 90 bar (at 20 °C)

Material:

PA; black

tube	d1	d2	l max.	description	part-no.
empty	4	2,5	25 m	tube black; by meter	134-004-003
	6	4	50 m	tube black; by meter	134-004-001
	8	5	50 m	tube black; by meter	134-004-005

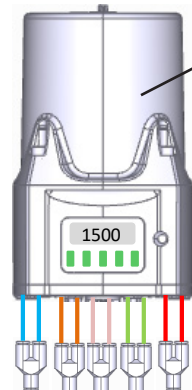
accessories					part-no.
tube cutter					134-002-002

Lubrication charts

Linear guide and ball screw with FP1510 DLS

FlexxPump 1510 DLS:

- pulse-controlled
- 10 outlets
- 5 pump-bodies
- 5 lubrication amounts

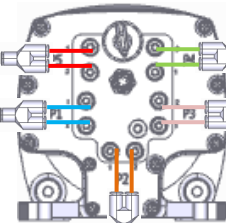


Grease bellow:

- 1,5 kg
- prefilled with F03

SPS

1510 DLS 541-010-500



pump-bodie 4

pump-bodie 5

pump-bodie 1

pump-bodie 3

pump-bodie 2

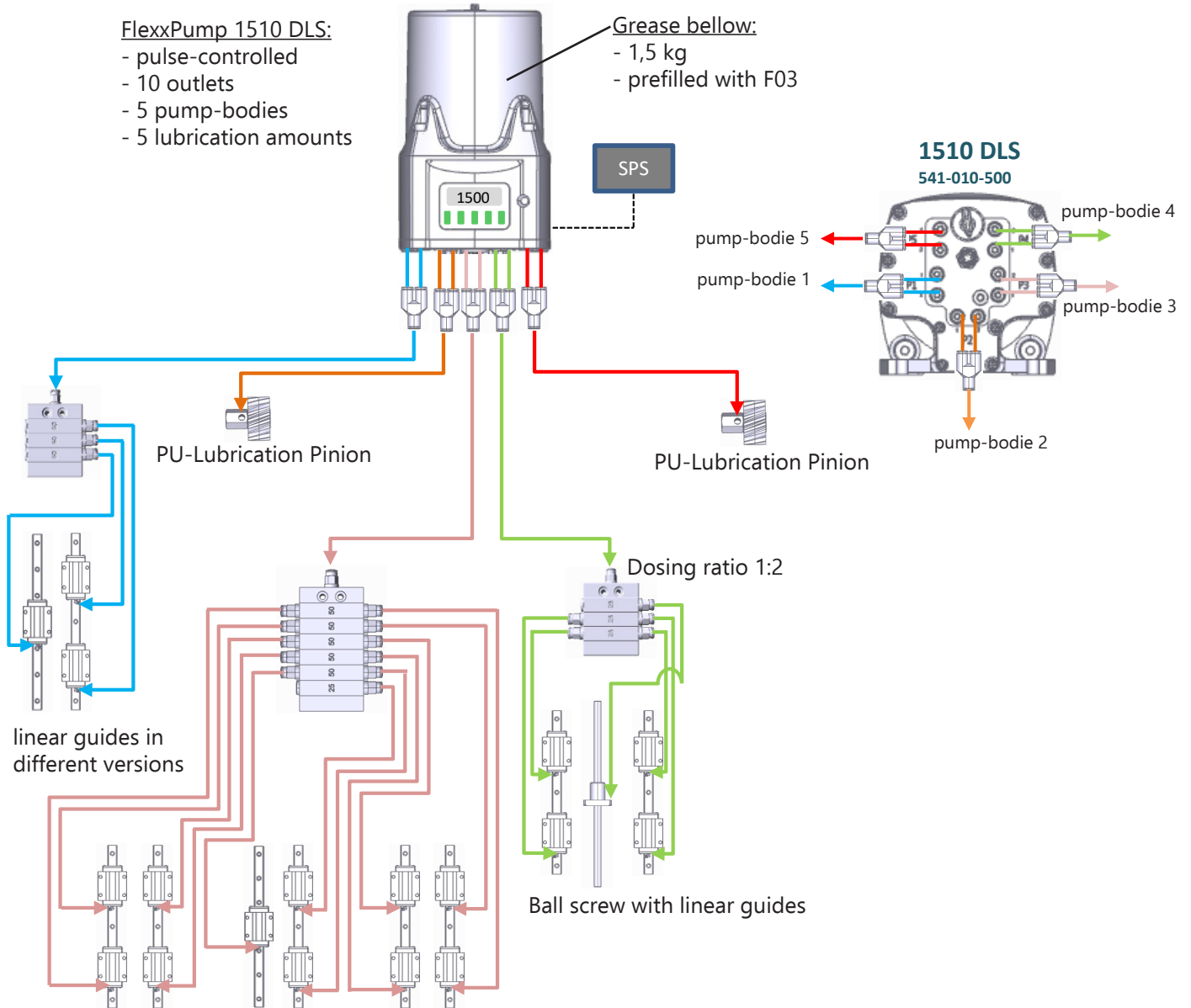
PU-Lubrication Pinion

PU-Lubrication Pinion

Dosing ratio 1:2

linear guides in
different versions

Ball screw with linear guides



Lubrication charts

Rack and Pinion drive with linear guide

Lubricant dispenser

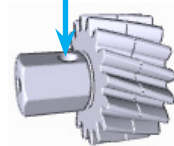
- for 2 different lubrication amounts;
- pulse-controlled;
- max. pressure 70 bar;
- dosing volume min. 0,15 cc

High pressure tube:

- black; 6x4;
- suitable for drag chains;
- smallest bending radius 30 mm

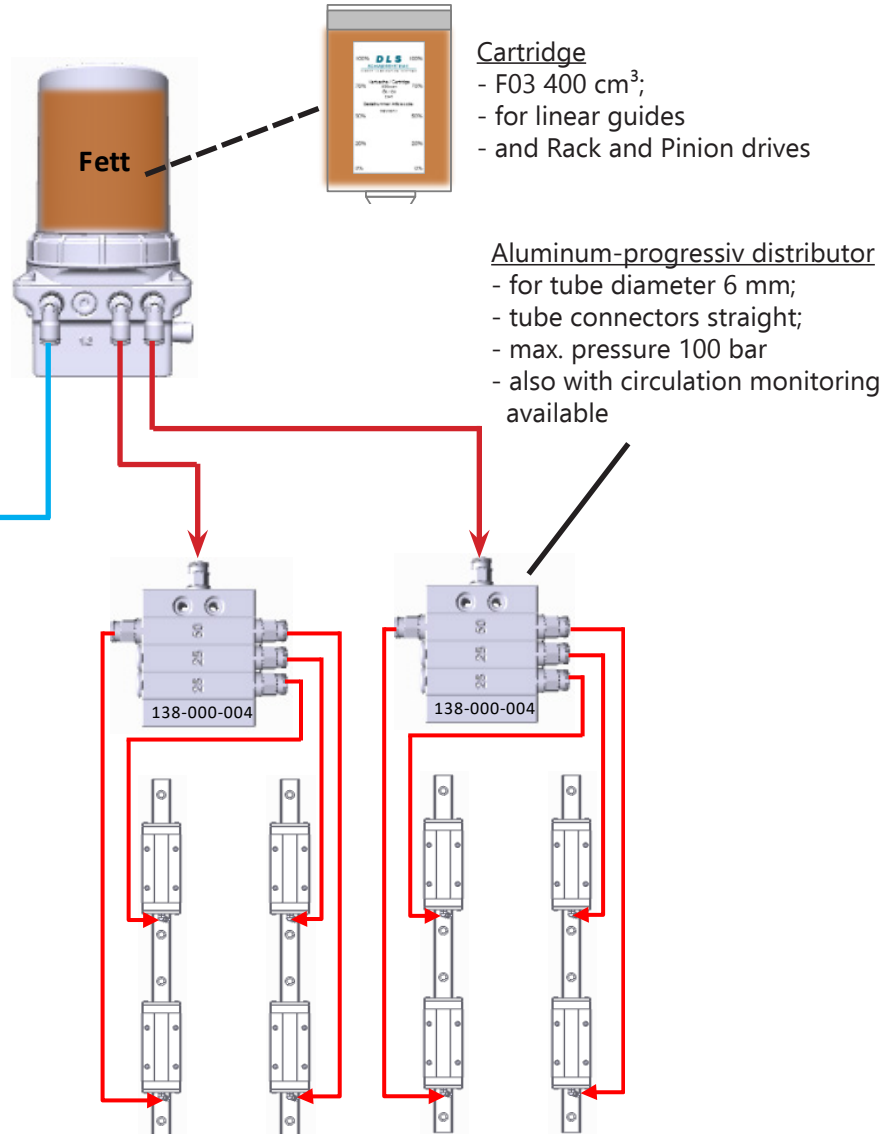
Tube lengths:

- till distributor 2 m
- after distributor 6 m
- without distributor 8 m



Lubrication pinion with mounting-axis

- usable from -30 °C ... +120 °C;
- Geometry freely selectable



Cartridge

- F03 400 cm³;
- for linear guides
- and Rack and Pinion drives

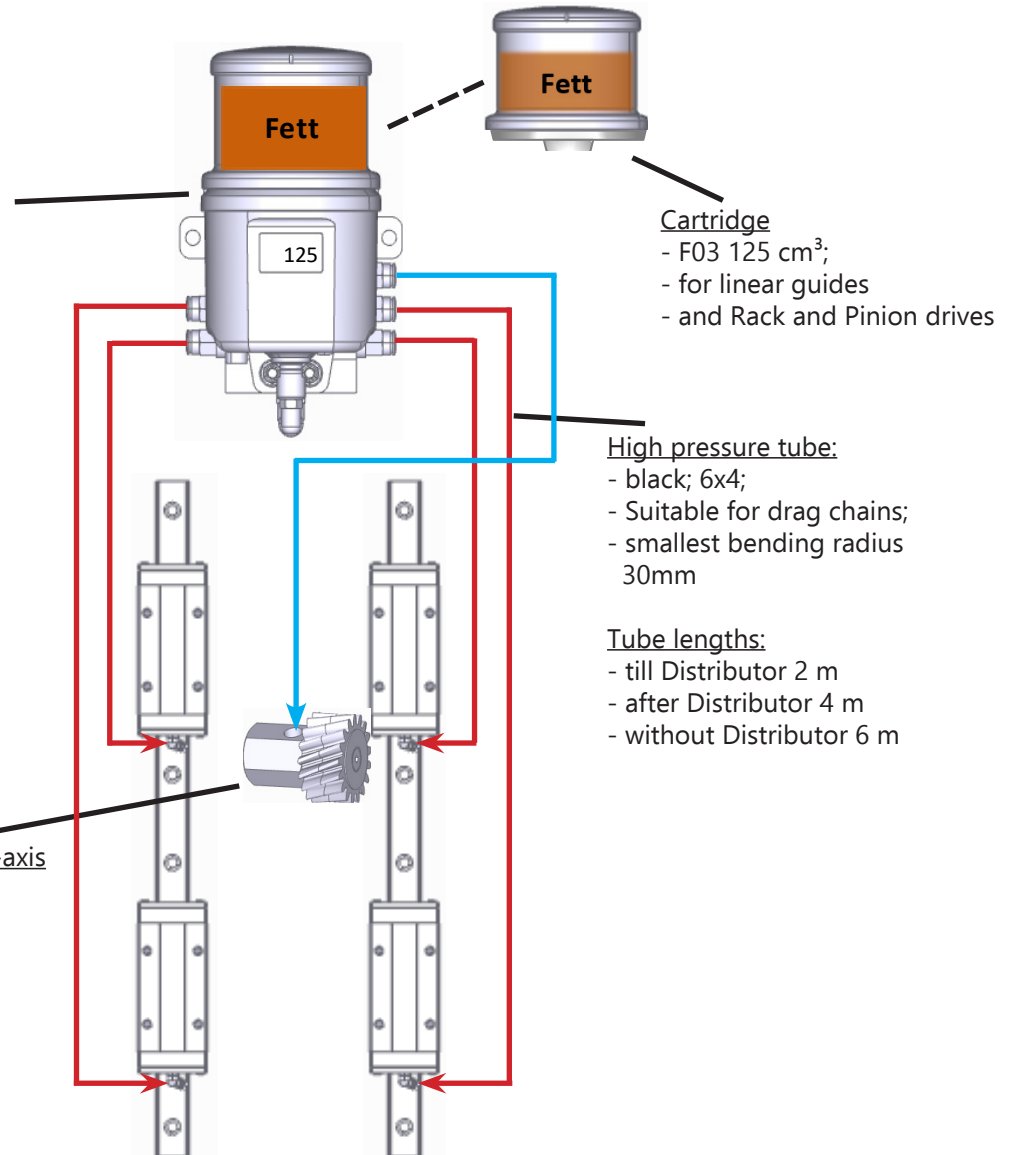
Aluminum-progressiv distributor

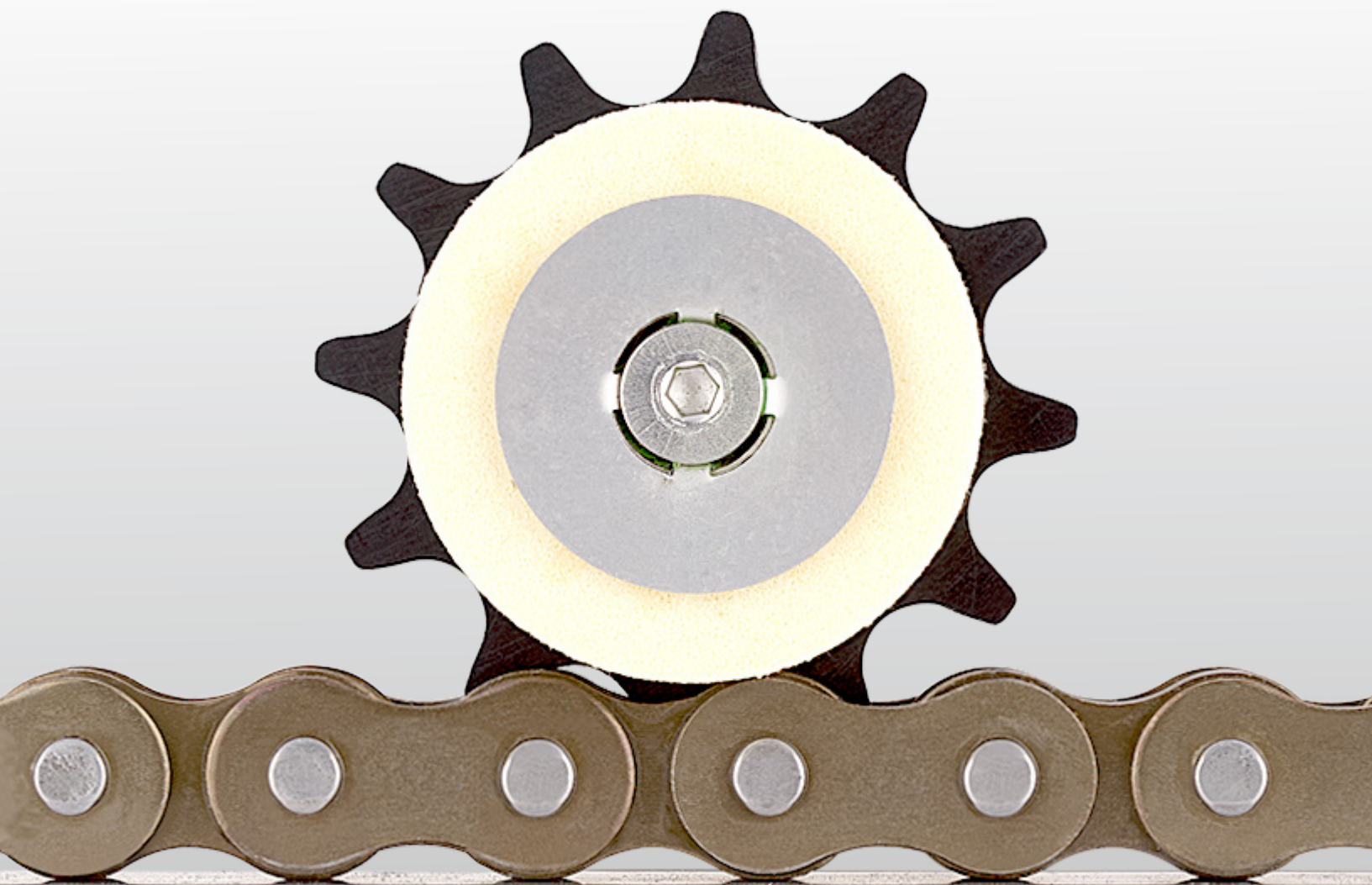
- for tube diameter 6 mm;
- tube connectors straight;
- max. pressure 100 bar
- also with circulation monitoring available

Lubrication charts

Rack and Pinion drive with linear guide FP125

Lubricant dispenser
- pulse-controlled;
- max. pressure 50 bar;
- dosing volume min. 0,15 cc





Oil lubrication

Oil lubrication is suitable for many applications, as it can be adapted to the operating conditions and structural conditions.

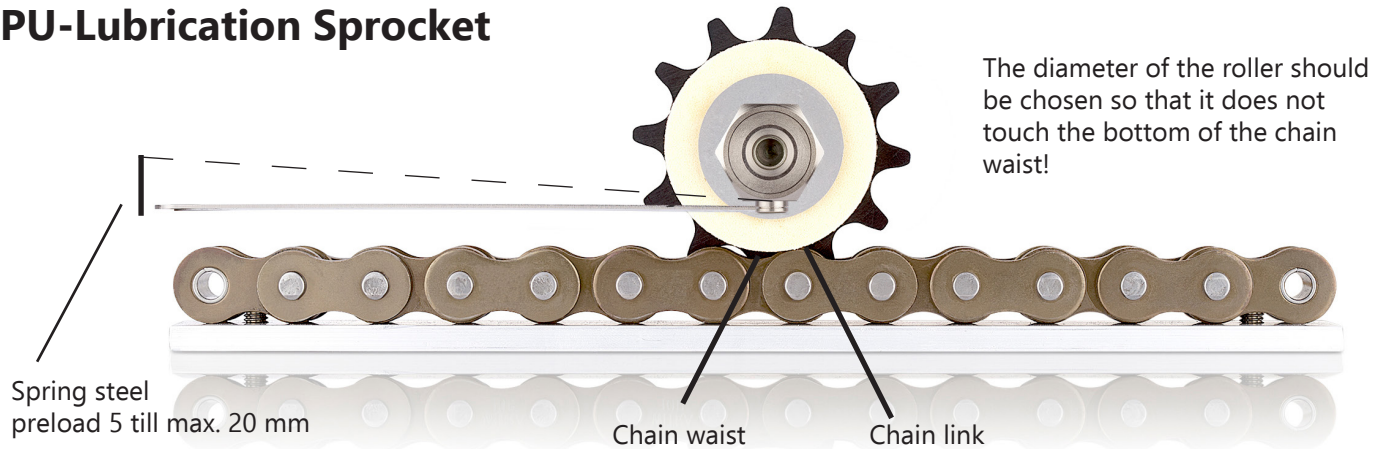
When selecting a suitable oil lubrication method for a bearing arrangement, the following requirements must be taken into account:

- + required amount and viscosity of the oil
- + Speed and hydrodynamic friction losses
- + permissible storage temperature

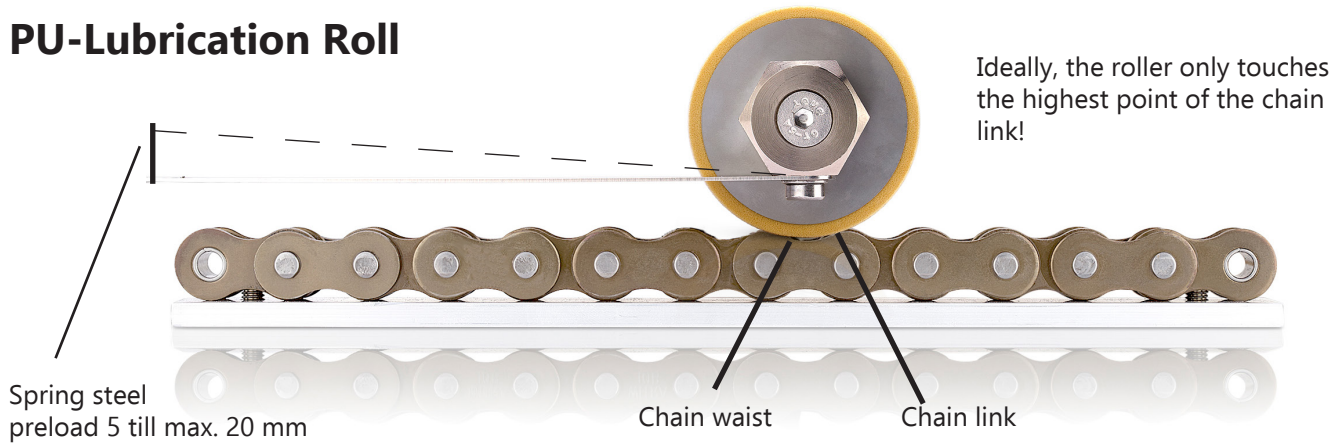


Chain Lubrication

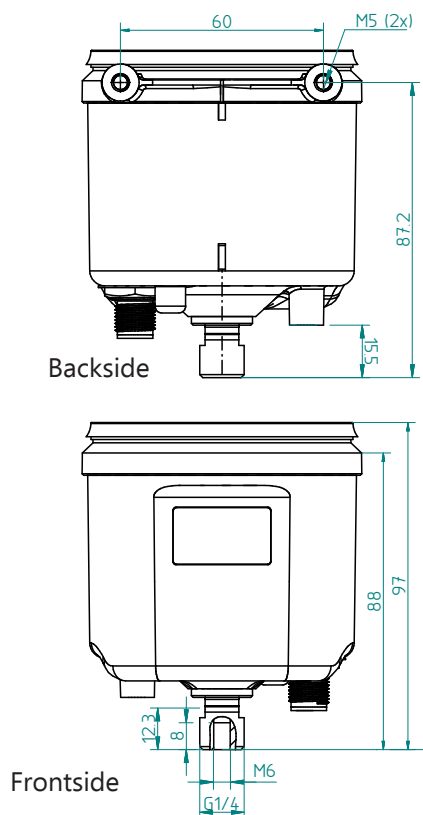
PU-Lubrication Sprocket



PU-Lubrication Roll

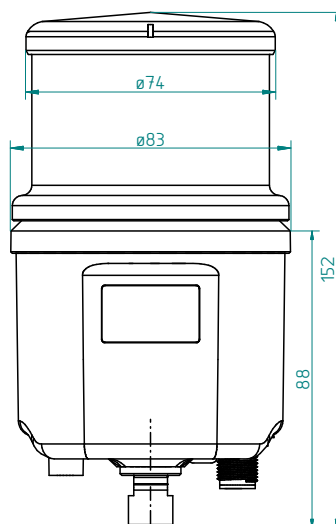


FlexxPump 125 & FlexxPump 125 DLS



Note on delivery:

The FlexxPump 125 is vented with Grease F02 on delivery



type	variant	outlets	double-pump bodies	lubrication points	M12x1 plug	part-no.
125	24 V DC time-controlled	1	1	max. 4* / 10**	++	135-125-100
125 DLS	24 V DC pulse-controlled	1	1	max. 4* / 10**	++	135-125-210

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for oil 24V DC

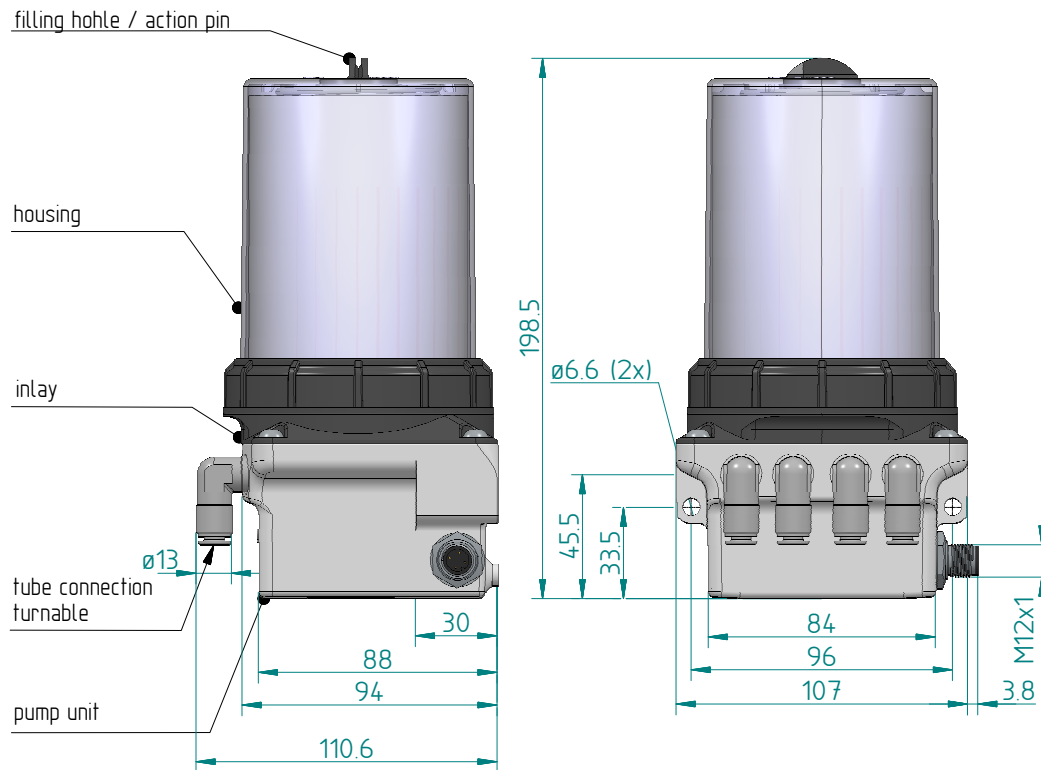
function:	piston pump
lubricant volume:	125 / 250 ml (in cartridge)
volume per stroke:	0,15 mlc per outlet
number of pump strokes per cartridge 125 / 250 cc:	ca. 780 / 1560
operating pressure:	50 bar
lubricant:	oil
operating temperatur:	-10°C ... +60°C
number of outlets:	1
thread outlet:	G1/4"(a) and M6(i)
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
assembly:	Backside M5(i) (2x) or downside M5(i) with G1/4"(a) or DLS accessories
mounting position:	perpendicular, cartridge up
control:	integrated microelectronic SPS (#135-125-210)
running-time:	1 till max. 36 months (time-controlled)
max. amount per cycle:	max. 1,50 ml
pressure monitoring:	integrated, electronic
level monitoring:	integrated, electronic
error message:	time-controlled: optical LCD pulse-controlled: SPS
error acknowledgment:	SPS (#135-125-210)
filling function:	available
protection class:	IP 54
housing material:	PA 6.6-GF 30 / POM



**Ideal for single or combined
relubrication of:**

- + chains
- + open gears
- + rails for rollers

FlexxPump 500 DLS



type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
511 DLS	pulse-controlled	1	1	max. 4* / 10 **	1	235-511-210
512 DLS		2	1	max. 8* / 20**	1	235-512-210
522 DLS		2 (1+1)	2	max. 8* / 20**	2	235-522-210
523 DLS		3 (1+2)	2	max. 12* / 30**	2	235-523-210
524 DLS		4 (2+2)	2	max. 16* / 40**	2	235-524-210

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for oil 24 V DC pulse-controlled

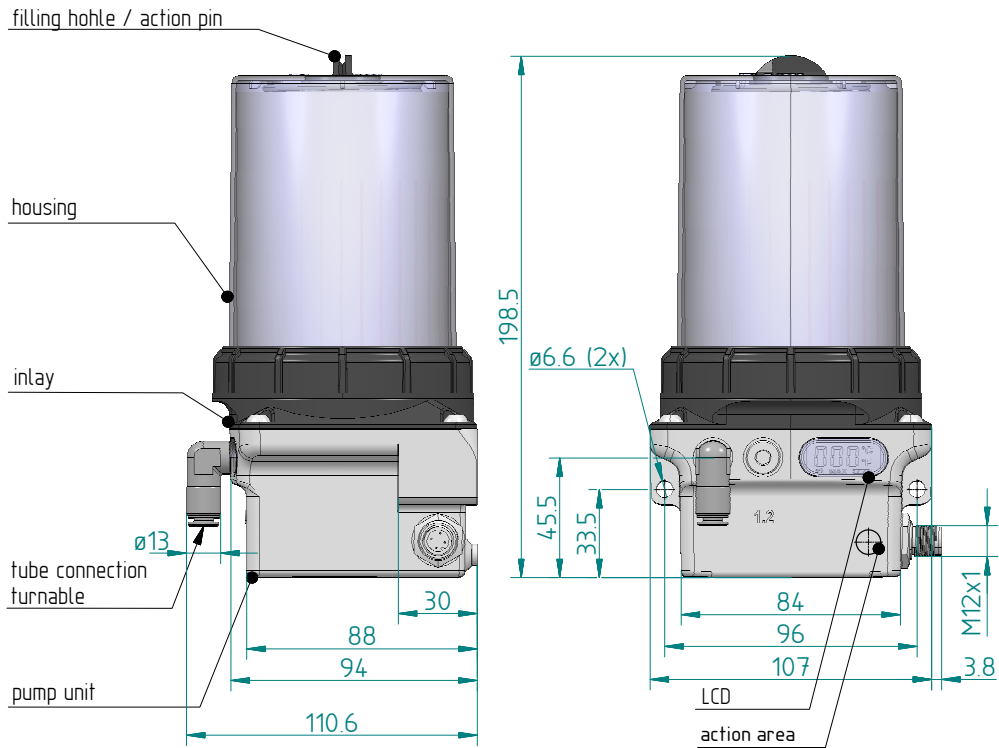
function:	piston pump
lubricant volume:	oil, 400 ml (filled in directly)
volume per stroke:	0,15 ml per outlet
number of pump strokes per filling 400ml:	ca. 2600
operating pressure:	70 bar
lubricant:	oil, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 4, right-angled, turnable
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	perpendicular
control:	integrated, microelectronic
max. amount per cycle:	4,50 ml
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	SPS error message
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	zinc, polyamide



**Ideal for single or combined
relubrication of:**

- + chains
- + open gears
- + rails for rollers

FlexxPump 500



2 setting modes:

E_t = emptying time: 1 - 36 months
+ C: 1 - 30 cycles

h = break time: 1 - 240 h
+ C: 1 - 30 cycles

type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
511	24 V DC	1	1	max. 4* / 10 **	1	235-511-100
512	time-controlled	2	1	max. 8* / 20**	1	235-512-100

* when using distributors / splitter

** when using distributors more lubrication points are possible!

Controlled minimum quantity lubrication for oil 24 V DC time-controlled

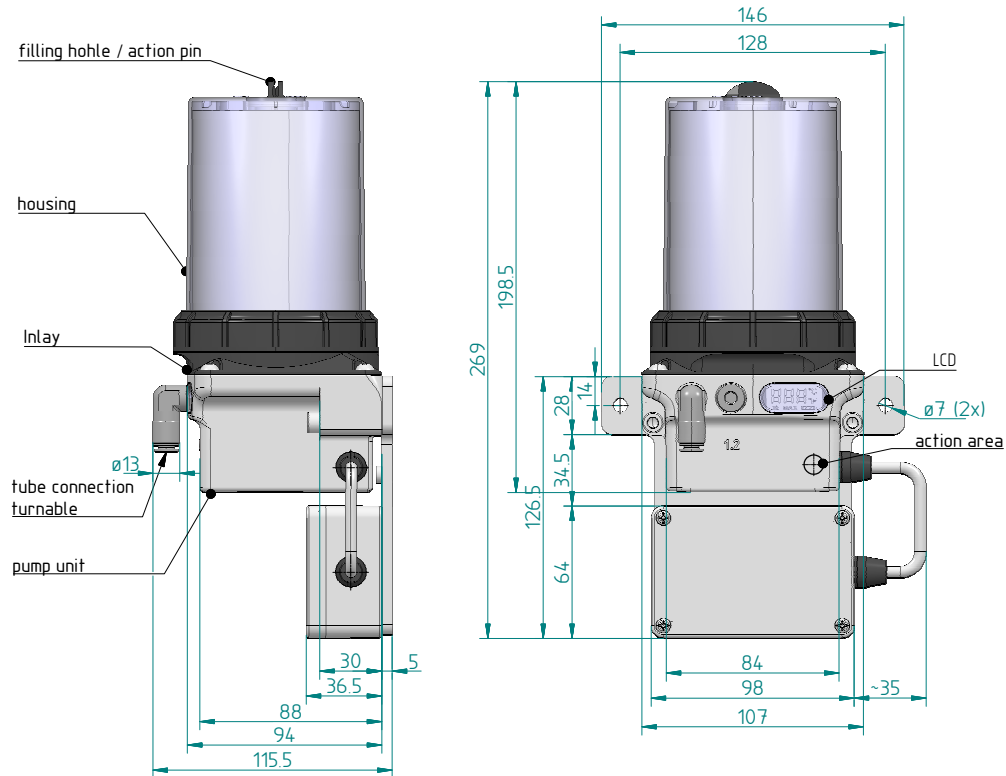
function:	piston pump
lubricant volume:	oil, 400 ml (filled in directly)
volume per stroke:	0,15 ml per outlet
number of pump strokes per filling 400ml:	ca. 2600
operating pressure:	70 bar
lubricant:	oil, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 2, right-angled, turnable
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	perpendicular
control:	integrated, microelectronic
running-time:	1 till max. 36 months
max. amount per cycle:	4,50 ml
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	optical LCD
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	zinc, polyamide



**Ideal for single or combined
relubrication of:**

- + chains
- + open gears
- + rails for rollers

FlexxPump 500 B



2 setting modes:

E_t = emptying time: 1 - 36 months
+ C: 1 - 30 cycles

h = break time: 1 - 240 h
+ C: 1 - 30 cycles

type	variant	outlets	double-pump bodies	lubrication points	lubrication amounts	part-no.
511 B	battery	1	1	max. 4*	1	235-511-000
512 B	time-controlled	2	1	max 8*	1	235-512-000

* when using distributors / splitter

With external battery compartment. Battery (134-002-028) is not included.

Controlled minimum quantity lubrication for grease, battery operated

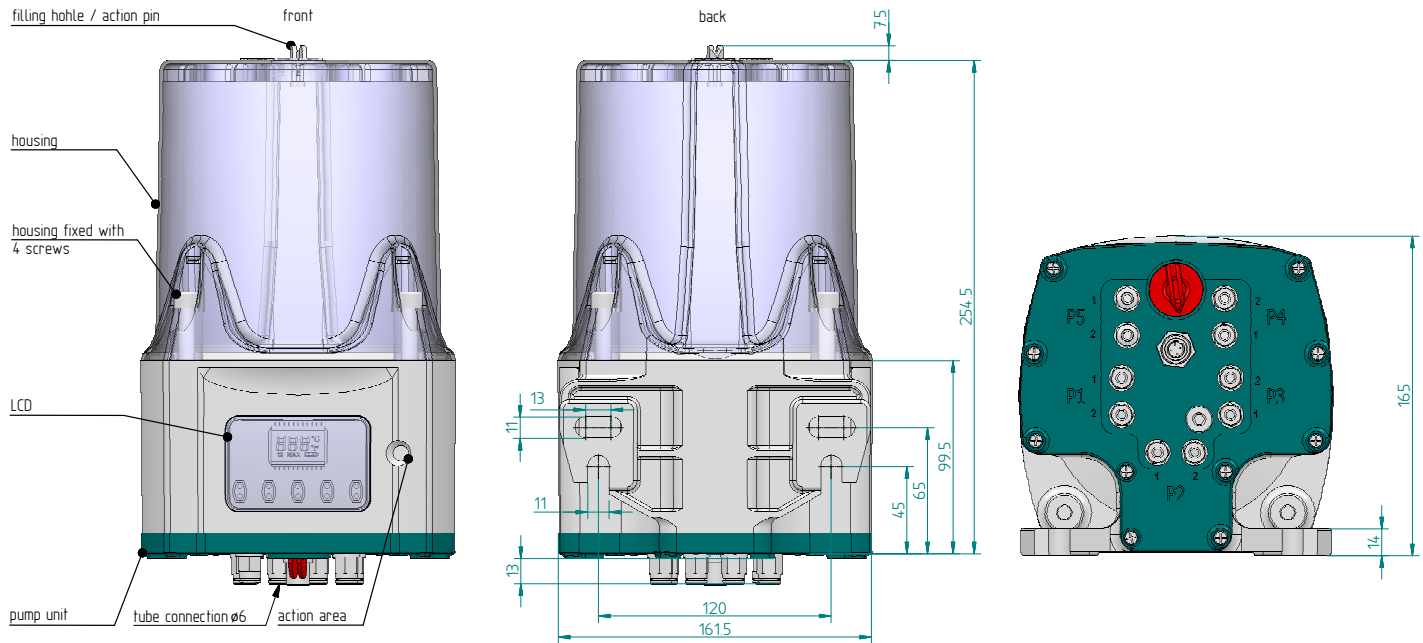
function:	piston pump
lubricant volume:	oil, 400 ml (filled in directly)
volume per stroke:	0,15 ml per outlet
number of pump strokes per filling 400ml:	ca. 2600
operating pressure:	50 bar
lubricant:	oil, solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 2, right-angled, turnable
battery voltage:	6 V
mounting position:	perpendicular
control:	integrated, microelectronic
running-time:	1 till max. 36 months
max. amount per cycle:	4,50 ml
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	optical LCD
protection class:	IP 54
housing material:	zinc, polyamide



**Ideal for single or combined
relubrication of:**

- + chains
- + open gears
- + rails for rollers

FlexxPump 2000



type	variant	outlets	double-pump bodies	lubrication amounts	part-no.
2002 DLS	pulse-controlled	2	1	1	550-202-100
2004 DLS		4	2	2	550-404-200
2006 DLS	time-controlled	6	3	3	550-606-300
2008 DLS		8	4	4	550-808-400
2010 DLS		10	5	5	551-010-500

Combination of outlets with Y-tube connector 134-002-000 possible!

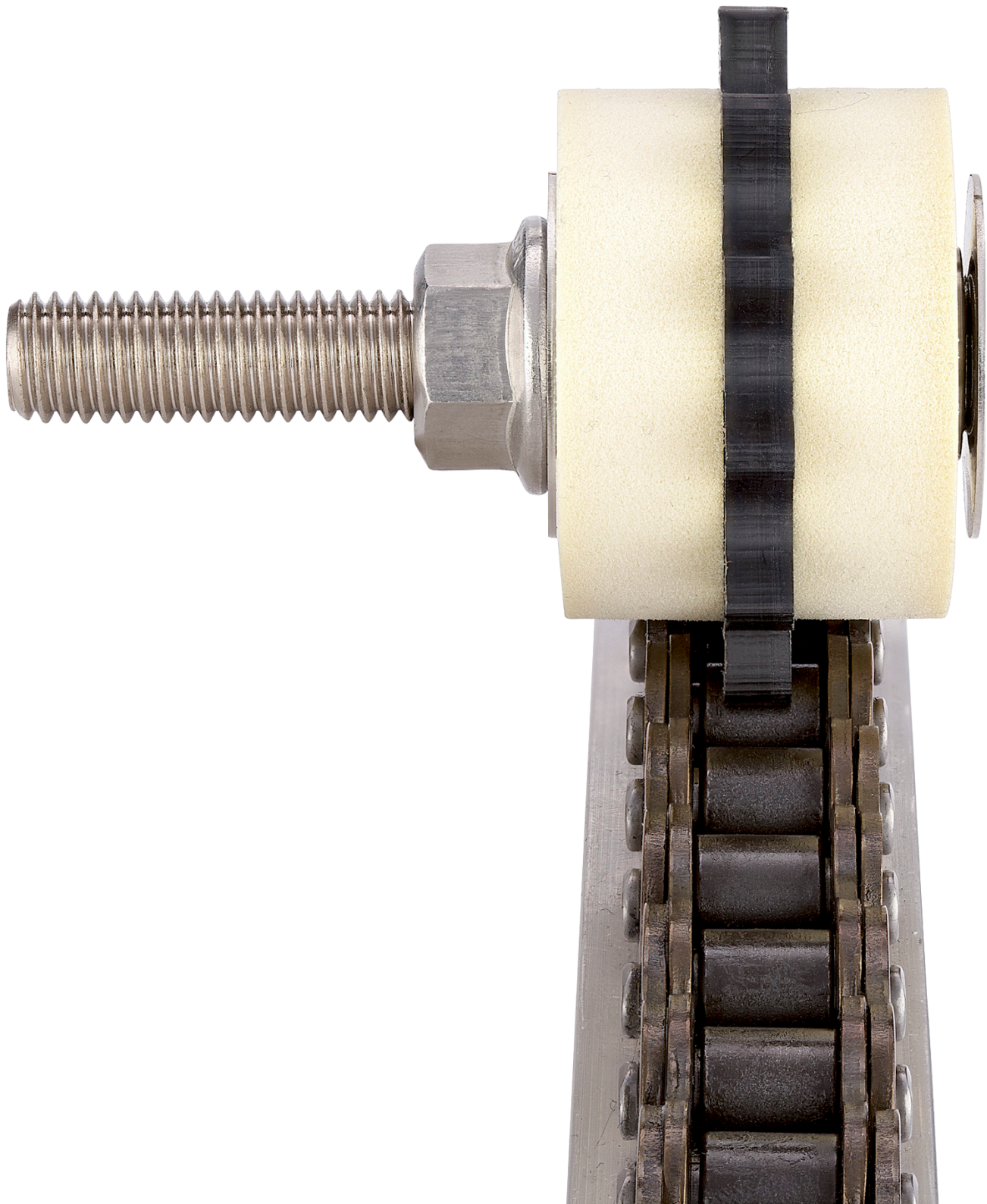
Controlled minimum quantity lubrication for oil 24 V DC

function:	piston pump
lubricant volume:	oil, 2000 ml (filled in directly)
volume per stroke:	0,15 ml per outlet
number of pump strokes:	ca. 12500
operating pressure:	70 bar
lubricant:	oil solid particles possible
operating temperatur:	-10°C ... +60°C
number of outlets:	max. 10, straight
operating voltage:	24 V DC (via cable)
connector:	M12 x 1, 4-pole
current consumption 24 V DC:	Imax. 350 mA
mounting position:	perpendicular
control:	integrated, microelectronic
running-time:	1 till max. 36 months (time-controlled)
max. amount per cycle:	4,50 ml
pressure monitoring:	integrated, electronic
level monitoring:	integrated, reedcontact
error message:	pulse-controlled: SPS time-controlled: optical LCD
optional:	angled plug with integrated LED (see accessories)
protection class:	IP 54
housing material:	aluminum, polyamide



**Ideal for single or combined
relubrication of:**

- + chains
- + open gears



PU-Lubrication Sprocket

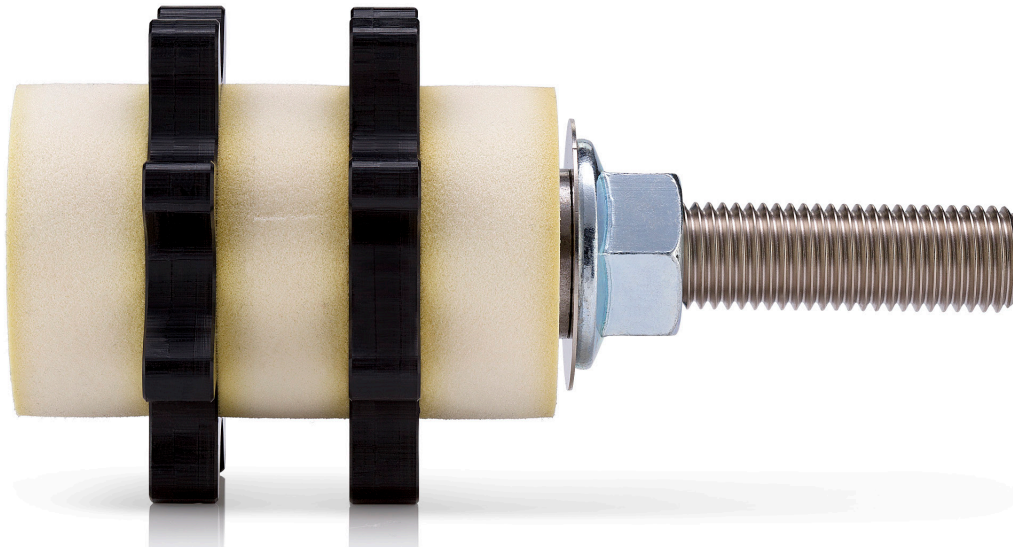
The rollers made of open-cell PU foam transfer the lubricant selectively to the surface of the link plates of roller chains. The mechanical power to drive the rollers is ensured by a low-wear plastic Pinion.

The open-cell polyurethane foam material used for the lubricating gears ensures that the chains are optimally supplied over very long periods of time.

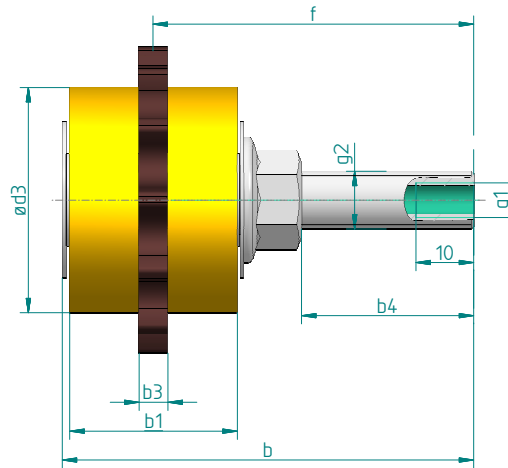
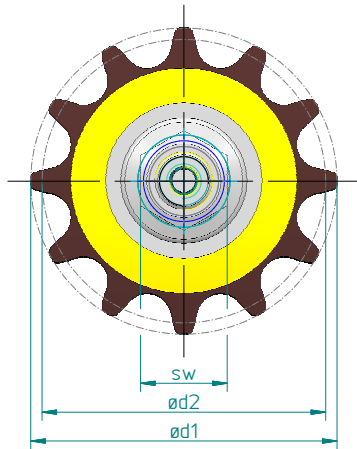
The material stores the lubricant and releases it again in very small dosages.

Over-lubrication is avoided, as is wear due to insufficient lubrication.

The PU lubrication sprockets are available for simplex, duplex and triplex chains with and without spring steel, depending on the size. The optimal contact pressure of the lubricating Pinion can be individually adjusted using a tensioning element. With the tensioning element, absorb also vibrations and shocks.



PU-Lubrication Sprocket simplex - with axis



Description:

PU-Lubrication Sprocket for simplex roller chain; mounted on straight axis; plain bearings;

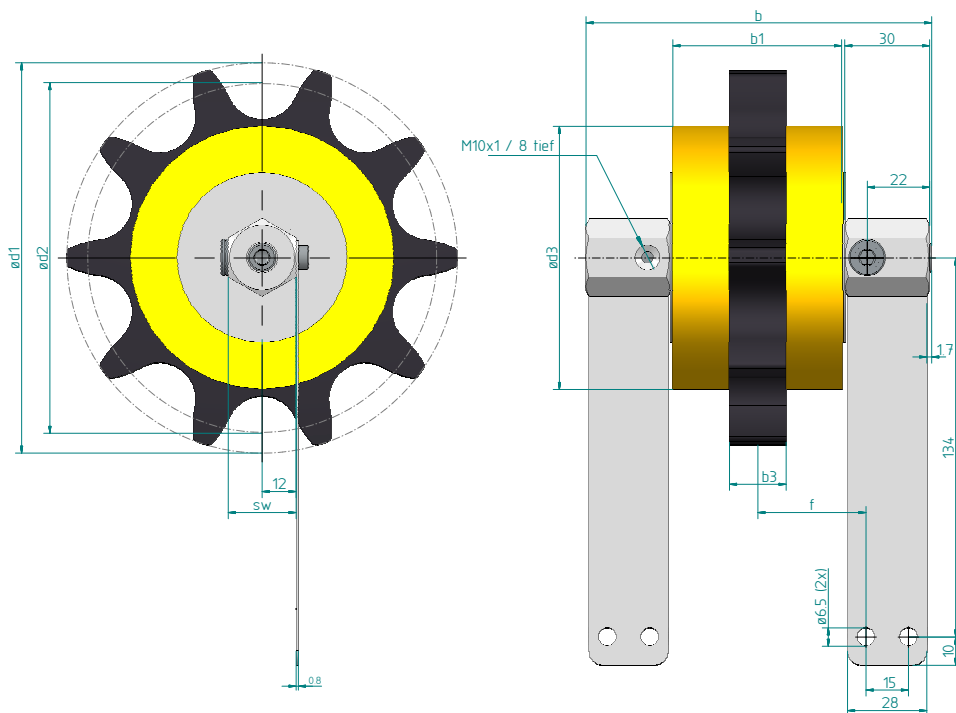
Material:

Sprocket: PA;
axis: Steel nickel-plated;
Roll: PU-foam;

mounting position:
arbitrary

DIN 8187-1/ 8188-1	z	b	b1	d1	d2	d3	f	b3	b4	g1	g2	sw	part-no.
08B-1	12	71,2	29	53	49,1	39	55,5	5	30,0	M6	M10	15	136-201-012
10B-1	10	71,2	29	55	51,4	39	55,5	5	30,0	M6	M10	15	136-301-010
12B-1	8	71,2	29	55	49,8	36	55,5	5	30,0	M6	M10	15	136-401-008
16B-1	8	81,2	40	75	66,4	48	60,5	10	30,0	M6	M10	15	136-501-008
20B-1	8	116,4	50	90	83,0	59	90,7	10	49,1	M10x1	M16	24	136-601-008
24B-1	10	126,4	60	138	123,3	93	95,7	20	49,1	M10x1	M16	24	136-701-010
28B-1	8	146,4	80	140	116,2	81	105,7	20	49,1	M10x1	M16	24	136-801-008
32B-1	8	146,4	80	150	132,8	93	105,7	20	49,1	M10x1	M16	24	136-901-008

PU-Lubrication Sprocket simplex - angled axis and double spring steel



Description:

PU-Lubrication Sprocket for simplex-roller chain; mounted on angled axis; with spring steel; plain bearings;

Material:

Sprocket: PA;
axis: Steel nickel-plated;
Roll: PU-foam;

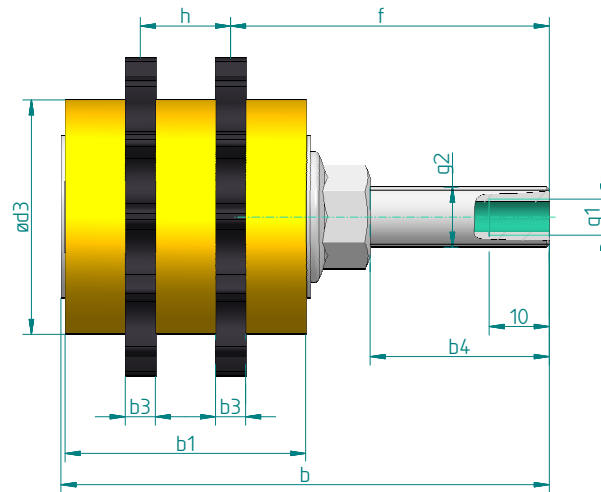
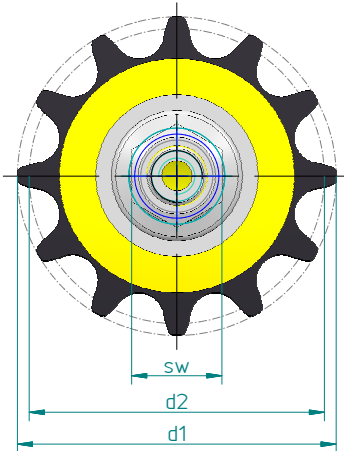
mounting position:

arbitrary

Spring steel and screws enclosed loose.

DIN 8187-1 / 8188-1	z	b	b1	d1	d2	d3	b3	f	sw	part-no.
24B-1	10	122,1	60	138	123,3	93	20	38,2	24	136-701-110
28B-1	8	142,1	80	140	116,2	81	20	48,2	24	136-801-108
32B-1	8	142,1	80	150	132,8	93	20	48,2	24	136-901-108

PU-Lubrication Sprocket duplex - straight axis



Description:

PU-Lubrication Sprocket for duplex-roller chain; mounted on straight axis; plain bearings;

Material:

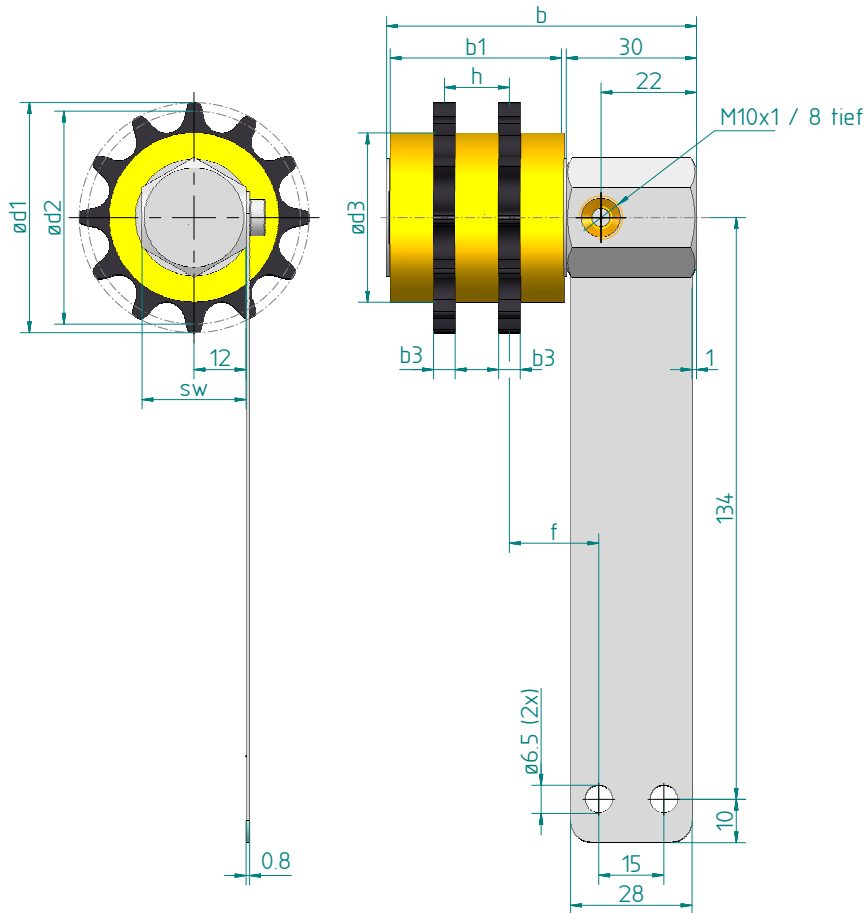
Sprocket: PA;
axis: Steel nickel-plated;
Roll: PU-foam;

mounting position:

arbitrary

DIN 8187-1/ 8188-1	z	b	b1	d1	d2	d3	f	h	b3	b4	g1	g2	sw	part-no.
08B-2	12	81,2	40	53	49,1	39	53,0	15	5	30,0	M6	M10	15	136-202-012
10B-2	10	81,2	40	55	51,4	39	53,0	15	5	30,0	M6	M10	15	136-302-010
12B-2	8	86,2	44	55	49,8	36	55,5	15	5	30,0	M6	M10	15	136-402-008
16B-2	8	146,4	80	75	66,4	48	90,7	30	10	49,1	M10x1	M16	24	136-502-008
20B-2	8	146,4	80	90	83,0	59	90,7	30	10	49,1	M10x1	M16	24	136-602-008
24B-2	10	166,4	100	138	123,3	93	90,7	50	10	49,1	M10x1	M16	24	136-702-010
28B-2	8	196,4	130	140	116,2	81	95,7	70	10	49,1	M10x1	M16	24	136-802-008
32B-2	8	196,4	130	150	132,8	93	95,7	70	10	49,1	M10x1	M16	24	136-902-008

PU-Lubrication Sprocket duplex - angled axis and spring steel



Description:

PU-Lubrication Sprocket for duplex-roller chain; mounted on angled axis; with spring steel; plain bearings;

Material:

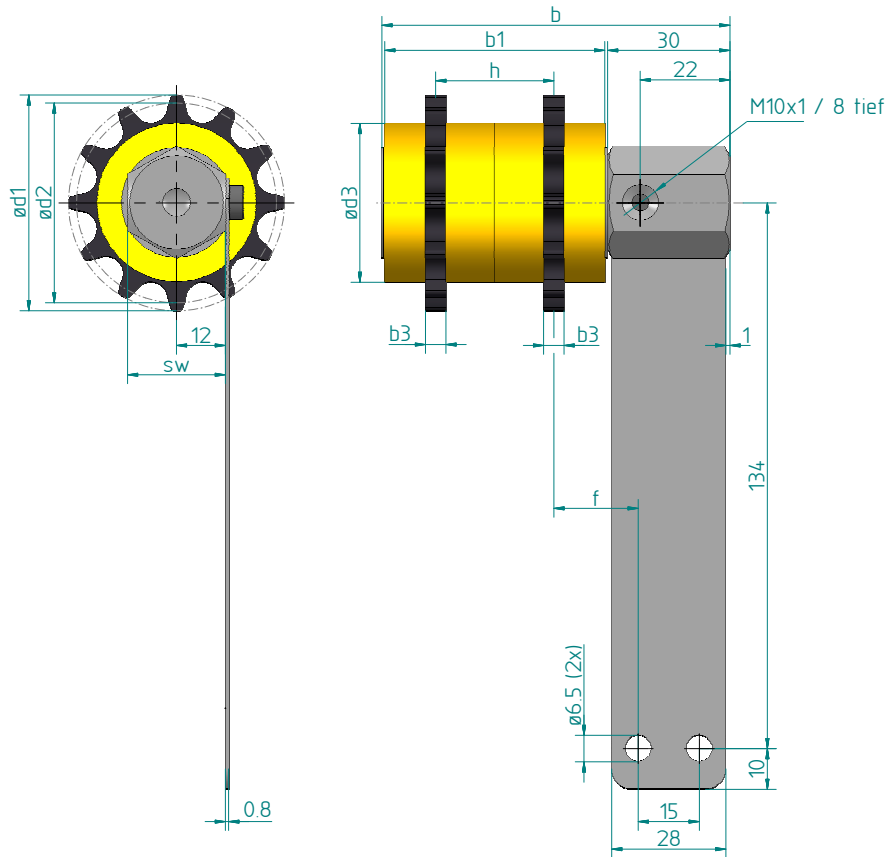
Sprocket: PA;
axis: Steel nickel-plated;
Roll: PU-foam;

mounting position:
arbitrary

Spring steel and screws enclosed loose.

DIN 8187-1/ 8188-1	z	b	b1	d1	d2	d3	f	h	b3	sw	part-no.
08B-2	12	71,4	40	53	49,1	39	20,7	15	5	24	136-202-112
10B-2	10	71,4	40	55	51,4	39	20,7	15	5	24	136-302-110
12B-2	8	76,4	44	55	49,8	36	23,2	15	5	24	136-402-108

PU-Lubrication Sprocket triplex - angled axis and spring steel



Description:

PU-Lubrication Sprocket for triplex-roller chain; mounted on angled axis; with spring steel; plain bearings;

Material:

Sprocket: PA;
axis: Steel nickel-plated;
Roll: PU-foam;

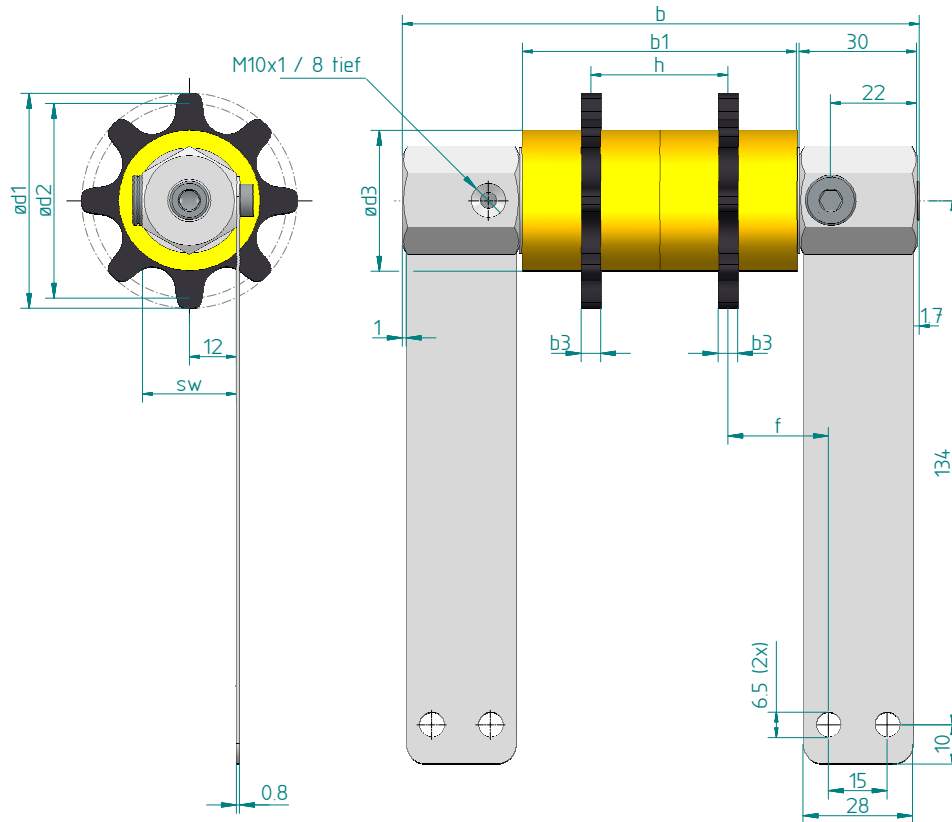
mounting position:

horizontal
(vertical mounting position on request)

Spring steel and screws enclosed loose.

DIN 8187-1/ 8188-1	z	b	b1	d1	d2	d3	f	h	b3	sw	part-no.
08B-3	12	85,4	54	53	49,1	39	20,7	29	5	24	136-203-112
10B-3	10	91,4	59	55	51,4	39	23,2	30	5	24	136-303-110

PU-Lubrication Sprocket triplex - angled axis and double spring steel



Description:

PU-Lubrication Sprocket for triplex-roller chain; mounted on angled axis; with spring steel; plain bearings;

Material:

Sprocket: PA;
axis: Steel nickel-plated;
Roll: PU-foam;

mounting position:

arbitrary

Spring steel and screws enclosed loose.

DIN 8187-1 / 8188-1	z	b	b1	d1	d2	d3	f	h	b3	sw	part-no.
12B-3	8	132,1	70	55	49,8	36	25,7	35	5	24	136-403-108*
16B-3	8	162,1	100	75	66,4	48	28,2	60	10	24	136-503-108
20B-3	8	182,1	120	90	83,0	59	33,2	70	10	24	136-603-108
24B-3	10	212,7	150	138	123,3	93	33,5	100	10	24	136-703-110
28B-3	8	262,7	200	140	116,2	81	43,5	130	10	24	136-803-108
32B-3	8	262,7	200	150	132,8	93	43,5	130	10	24	136-903-108

*only horizontal mounting position possible (vertical mounting position on request)

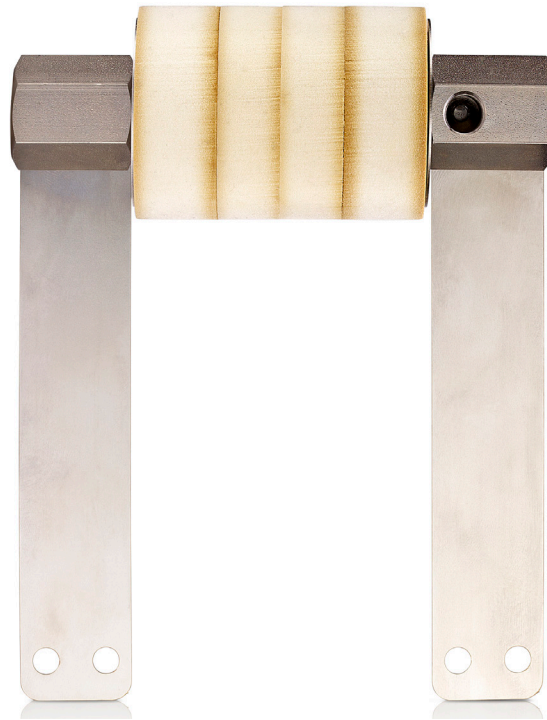
Single-sided

b1	d1	b	d2	g1	part-no.
20	40	51,4	27	M10x1 10mm	137-020-403
24	40	55,4	27	M10x1 10mm	137-024-403
30	40	61,4	27	M10x1 10mm	137-030-403
40	40	71,4	27	M10x1 10mm	137-040-403
45	40	76,4	27	M10x1 10mm	137-045-403
50	65	81,4	45	M10x1 10mm	137-050-653
60	65	91,4	45	M10x1 10mm	137-060-653

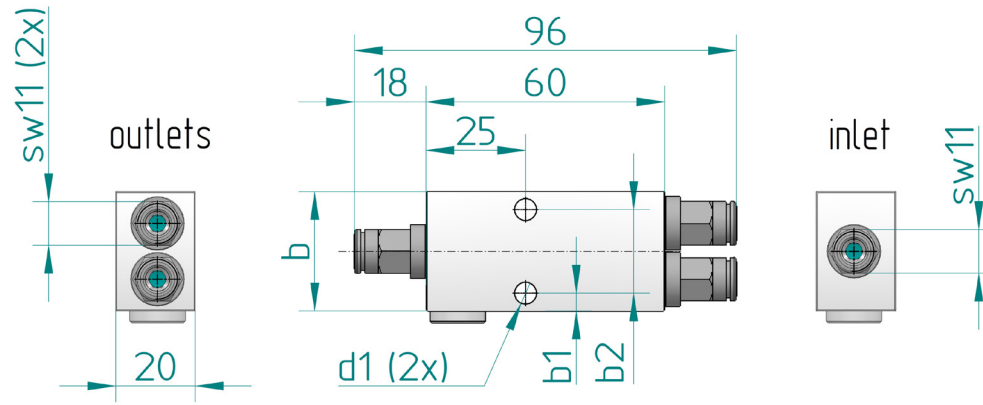


Double-sided

b1	d1	d2	b	g1	t	part-no.
60	65	40	121,4	M10x1 10mm	0,8	137-060-654
70	65	40	131,4	M10x1 10mm	0,8	137-070-654
80	65	40	141,4	M10x1 10mm	0,8	137-080-654
90	65	40	151,4	M10x1 10mm	0,8	137-090-654



Splitter for oil



Description:

Passive flow dividers (splitters) to expand FlexxPump; with tube connectors for tube 6

Material:

Splitter: aluminum;
connectors: brass,
nickel-plated

outlets	inlet	tube	outlets	tube	b	b1	b2	d1	part-no.
2	straight	6	straight	6	30	4,5	21	5,5	234-005-006
3	straight	6	straight	6	48	18	15	6,5	234-005-007
4	straight	6	straight	6	60	17,5	25	6,5	234-005-008

Lubricant distribution

The splitters are to be connected as close as possible to the outlets of the FlexxPump.

The splitters preferably work in conjunction with the piston pumps in the series FlexxPump.

Only one splitter can be installed at each outlet of the FlexxPump.
Depending on the type of FlexxPump, the splitters can be connected as follows:

- FlexxPump 125 max. 1 splitter with 4 outlets
- FlexxPump 500 max. 4 splitters with 4 outlets each
- FlexxPump 2000 max. 10 splitters with 4 outlets each

It is not possible to operate two or more splitters on one pump outlet
(no cascade of distributors)!

It is important to ensure that the tube lengths after Distributor are the same.

The splitters can be used for oils from 60 cSt, preferably with oils from the DLS range.

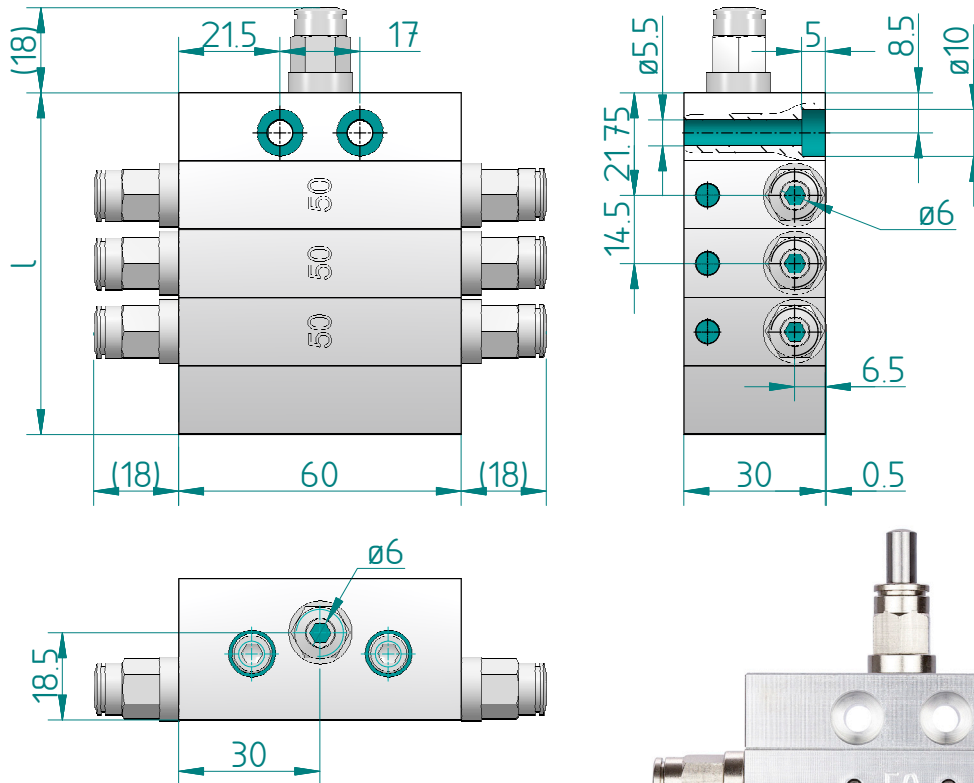
The splitters cannot be used when using lubricants with a solid content.

Operating temperature range: +10 °C... +60 °C

Splitters are vented with oil with H1 approval.



Progressiv distributor



Description:

DLS progressiv distributor in lightweight solution are built in a variable disk construction for all types of FlexxPump series.

Adjustment is based on oil lubricants.

6-way slice distributor with 3 dosing elements;
straight tube connection for tube 6mm on inlet and outlets.

Material:

Distributor: aluminum;

Connections: brass, nickel-plated

Lubricant distribution

outlets	inlet	tube	outlets	tube	l	part-no.
2	straight	6	straight	6	72,5	238-000-002
3	straight	6	straight	6	72,5	238-000-003
4	straight	6	straight	6	72,5	238-000-004
5	straight	6	straight	6	72,5	238-000-005
6	straight	6	straight	6	72,5	238-000-006
7	straight	6	straight	6	87,0	238-000-007
8	straight	6	straight	6	87,0	238-000-008
9	straight	6	straight	6	101,5	238-000-009
10	straight	6	straight	6	101,5	238-000-010

Standard design:

- Modular disk constructed distributor in lightweight aluminum construction with special coordination with FlexxPump 125/500/2000 for DLS oils
- 2 to 10 outlets per distributor possible
- Tube connection on inlet and outlets straight for tube 6
- Maximum pressure 100 bar
- Dosing volume 50 mm³

Special design (on request):

- Tube connection in various designs, straight / right-angled
- Different tube diameter,
- 4/6/8 mm on inlet or outlet
- Establishing the locations of the outlets
- Different delivery amounts per outlet through disc elements with different dosing volume (25/50/100 mm³)

Good to know:

- Only suitable DLS lubricant can be used!
- Operating temperature range: -20 ° C... +60 ° C (depending on the lubricant used)
- In connection with FlexxPump 125/500/2000 cannot be used in series (no main and secondary distributors / cascading)
- Vented with oil with H1 approval

Lubricant distribution

outlets	inlet	tube	outlets	tube	l	part-no.
2	straight	6	straight	6	72,5	238-010-002
3	straight	6	straight	6	72,5	238-010-003
4	straight	6	straight	6	72,5	238-010-004
5	straight	6	straight	6	72,5	238-010-005
6	straight	6	straight	6	72,5	238-010-006
7	straight	6	straight	6	87,0	238-010-007
8	straight	6	straight	6	87,0	238-010-008
9	straight	6	straight	6	101,5	238-010-009
10	straight	6	straight	6	101,5	238-010-010

Standard design:

- Modular disk constructed distributor in lightweight aluminum construction with special coordination with FlexxPump 125/500/2000 for DLS oils
- With circulation monitoring to control the correct operation of all outlets
- 2 to 10 outlets per distributor possible
- Tube connection on inlet and outlets straight for tube 6
- Maximum pressure 100 bar
- Dosing volume 50 mm³

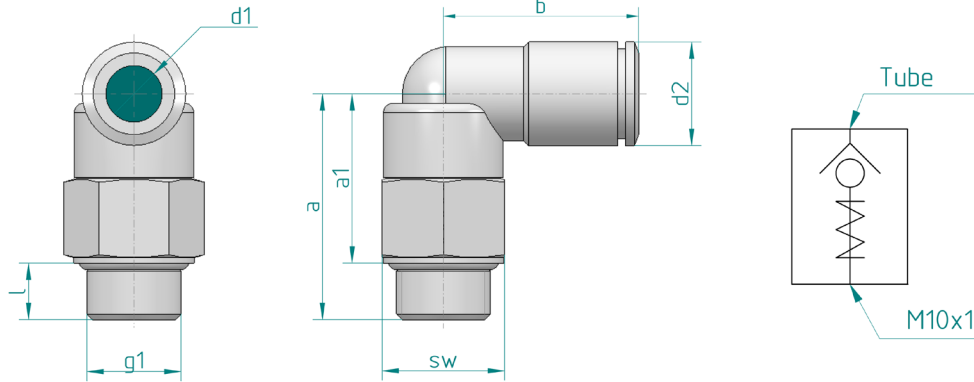
Special design (on request):

- Tube connection in various designs, straight / right-angled
- Different tube diameter,
- 4/6/8 mm on inlet or outlet
- Establishing the locations of the outlets
- Different delivery amounts per outlet through disc elements with different dosing volume (25/50/100 mm³)

Good to know:

- Only suitable DLS lubricant can be used!
- Operating temperature range: -20 ° C... +60 ° C (depending on the lubricant used)
- In connection with FlexxPump 125/500/2000 cannot be used in series (no main and secondary distributors / cascading)
- Vented with oil with H1 approval

Tube connector with non-return valve



Description:

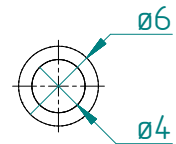
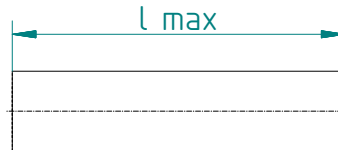
Tube connector with integrated non-return valve; right-angled; 360° rotatable;

Material:

brass, nickel-plated;
Seal: NBR

d1	g1	d2	a	a1	b	l	sw	part-no.
4	M10x1	9	24	18	20	5,5	13	134-001-200
6	M10x1	11	24	18	20,5	5,5	13	134-001-201
8	M10x1	13	25	19	23,5	5,5	13	134-001-202

Tube



Description:

Tube pre-filled with lubricant; (only OE1)

Material:

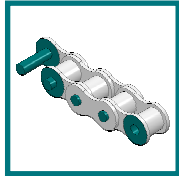
PA; black ; transparent only for oil

lubricant	d1	d2	l max.	good to know	part-no.
OE1	6	4	15 m	tube, black; by meter	134-003-051
empty	6	3	50 m	tube, transparent; by meter	134-004-002

accessories		part-no.
Tube cutter		134-002-002

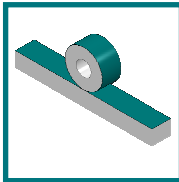
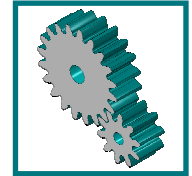
Oil OE1

Creeping oil for chains



Oil OE1

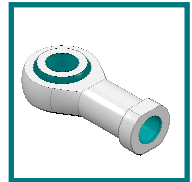
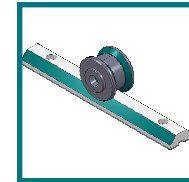
- Highly viscous, very creeping adhesive lubricant
- Synthetic white oil
- Pressure and adhesive lubricant with EP and boundary lubricating properties
- With H1 approval



Commitment:

- Lubrication of chains and plain bearings
- Pumpability in lubrication systems: +5 ° C ... +65 ° C

Operating temperature range: -10 ° C ... +80 ° C

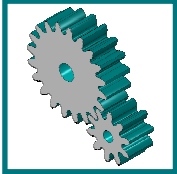


description	lubricant	volume	usage	part-no.
cartridge for FlexxPump 125	OE1	125 cc	FlexxPump 125	000-201-101
cartridge for FlexxPump 125	OE1	250 cc	FlexxPump 125	000-201-102
cartridge for FlexxPump 250	OE1	250 cc	FlexxPump 250	000-201-103
cartridge for FlexxPump 400	OE1	400 cc	FlexxPump 400	000-201-105
canister	OE1	5 liter		000-201-503



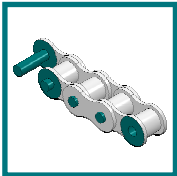
Oil OE3

Chain oil with H1 approval



Oil OE3

- Paraffin oil based lubricant
- H1 approval
- Very good wear and corrosion protection



Commitment:

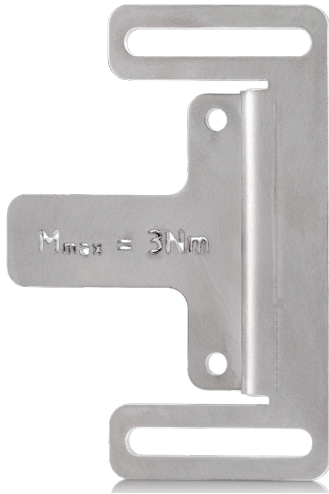
- Lubrication of chains and plain bearings
- Pumpability in lubrication systems: + 5 ° C ... + 80 ° C

Operating temperature range: -10 ° C ... +120 ° C

description	lubricant	volume	part-no.
canister	OE3	5 liter	000-201-505
canister	OE3	20 liter	000-201-507

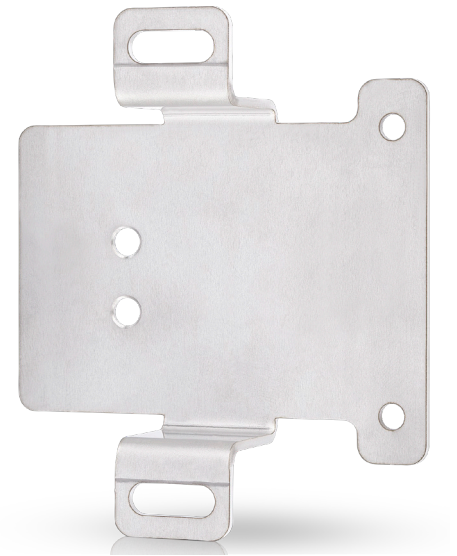


Bracket for FlexxPump 125 & Distributor



Description:

Universal stainless steel bracket for all types FlexxPump 125; for easy assembly on rear structure;



Description:

Stainless steel brackets for all types FlexxPump 125; for Progressive Distributor (oil); different designs; Progressive distributor not included;



Description:

Stainless steel brackets for all types FlexxPump 125; for splitter (oil); different designs; Splitter not included;

Brackets for FlexxPump 500



Description:

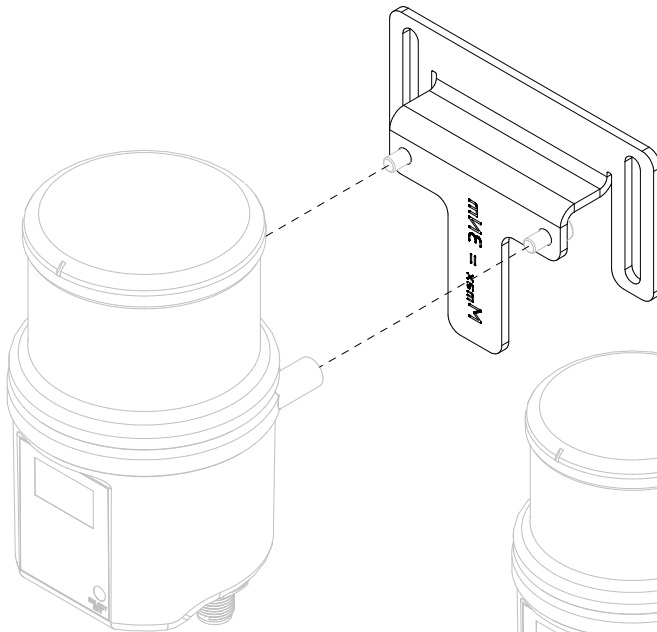
Accessory bracket in stainless steel for all types FlexxPump 500;

With screws to attach the FlexxPump 500;

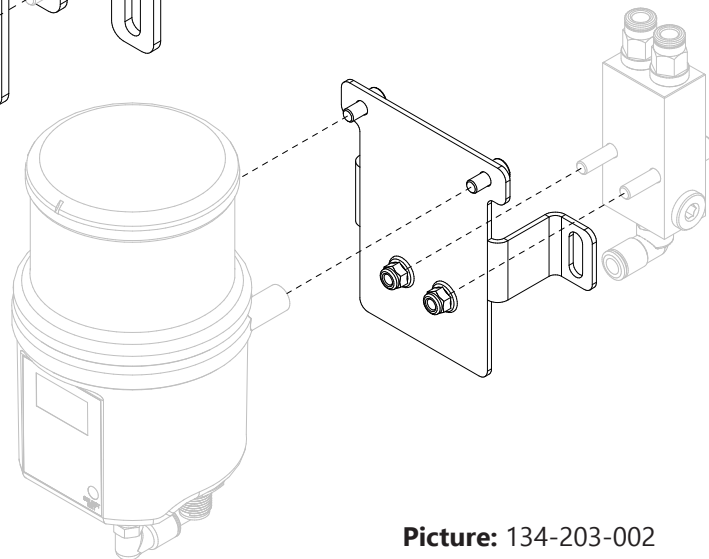
Different designs;

Solid execution;

Brackets for FlexxPump 125 & Splitter



Picture: 134-200-000

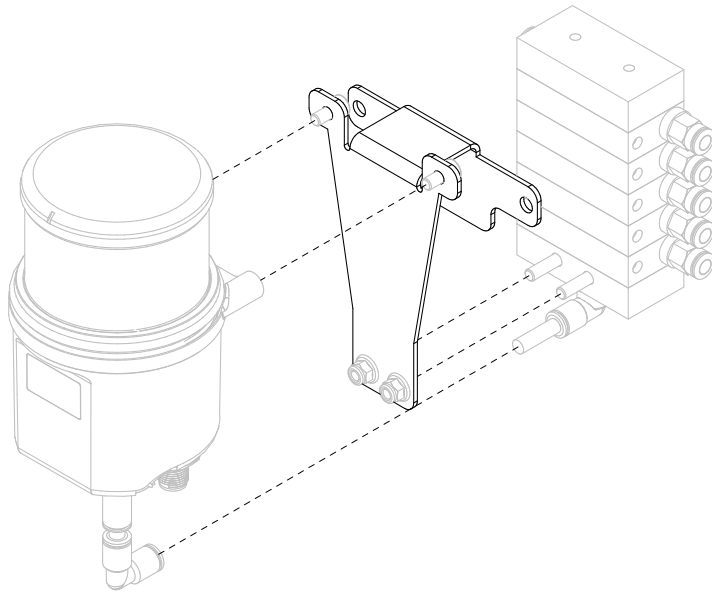


Picture: 134-203-002

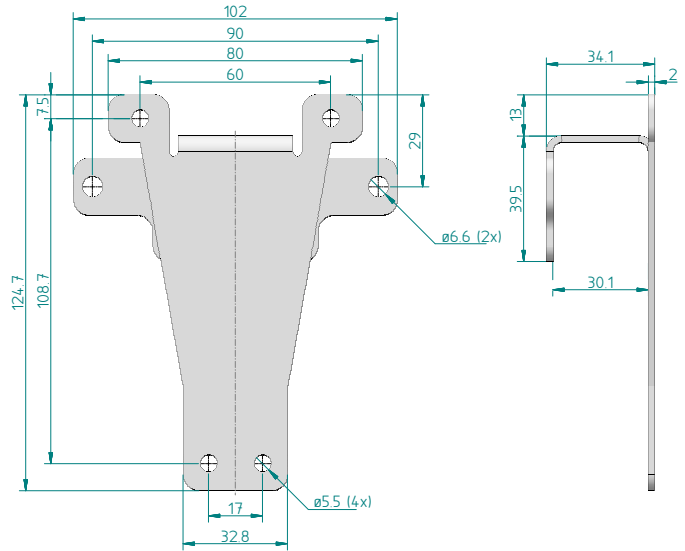
description	part-no.
brackets (stainless steel) for all types FlexxPump 125	134-200-000

description	type splitter	position splitter	part-no.
brackets (stainless steel) for FlexxPump 125 and 2-way Splitter	2-fach	behind	134-203-002
brackets (stainless steel) for FlexxPump 125 and 3-way Splitter	3-fach		134-203-003
brackets (stainless steel) for FlexxPump 125 and 4-way Splitter	4-fach		134-203-004

Brackets for FlexxPump 125 & Progressiv distributor



picture: 134-203-105



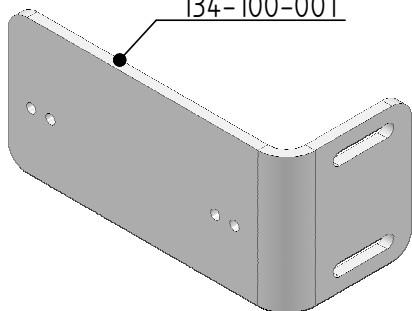
picture: 134-203-110

description	type PGV	position	part-no.
brackets (stainless steel) for FlexxPump 125 and PGV 2 outlets	2x (138-000-002)	behind	134-203-102
brackets (stainless steel) for FlexxPump 125 and PGV 3 outlets	3x (134-000-003)		134-203-103
brackets (stainless steel) for FlexxPump 125 and PGV 4 outlets	4x (134-000-004)		134-203-104
brackets (stainless steel) for FlexxPump 125 and PGV 5 outlets	5x (134-000-005)		134-203-105
brackets (stainless steel) for FlexxPump 125 and PGV 6 outlets	6x (134-000-006)		134-203-106
brackets (stainless steel) for FlexxPump 125 and PGV 7 outlets	7x (134-000-007)		134-203-107
brackets (stainless steel) for FlexxPump 125 and PGV 8 outlets	8x (134-000-008)		134-203-108
brackets (stainless steel) for FlexxPump 125 and PGV 9 outlets	9x (134-000-009)		134-203-109
brackets (stainless steel) for FlexxPump 125 and PGV 10 outlets	10x (134-000-010)		134-203-110

Brackets for FlexxPump 500

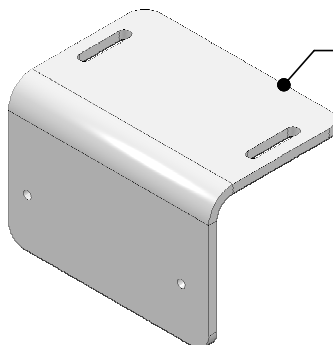
Typ 1

134-100-001



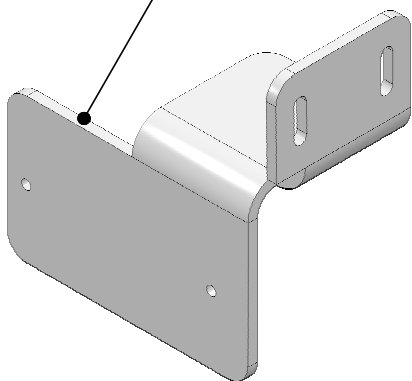
Typ 2

134-100-002



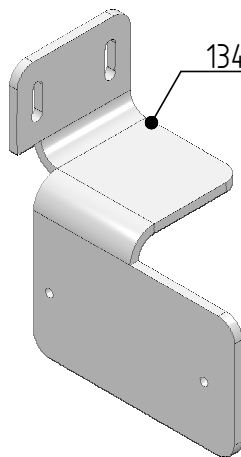
Typ 3

134-100-003



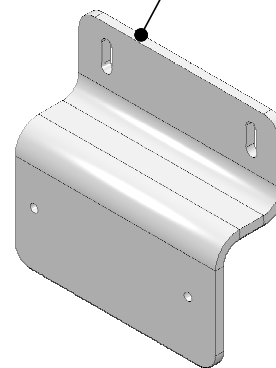
Typ 4

134-100-004



Typ 5

134-100-005



Brackets for FlexxPump 500

description	part-no.
accessory bracket type 1; for FlexxPump 500	134-100-001
accessory bracket type 2; for FlexxPump 500	134-100-002
accessory bracket type 3; for FlexxPump 500	134-100-003
accessory bracket type 4; for FlexxPump 500	134-100-004
accessory bracket type 5; for FlexxPump 500	134-100-005



Notice:

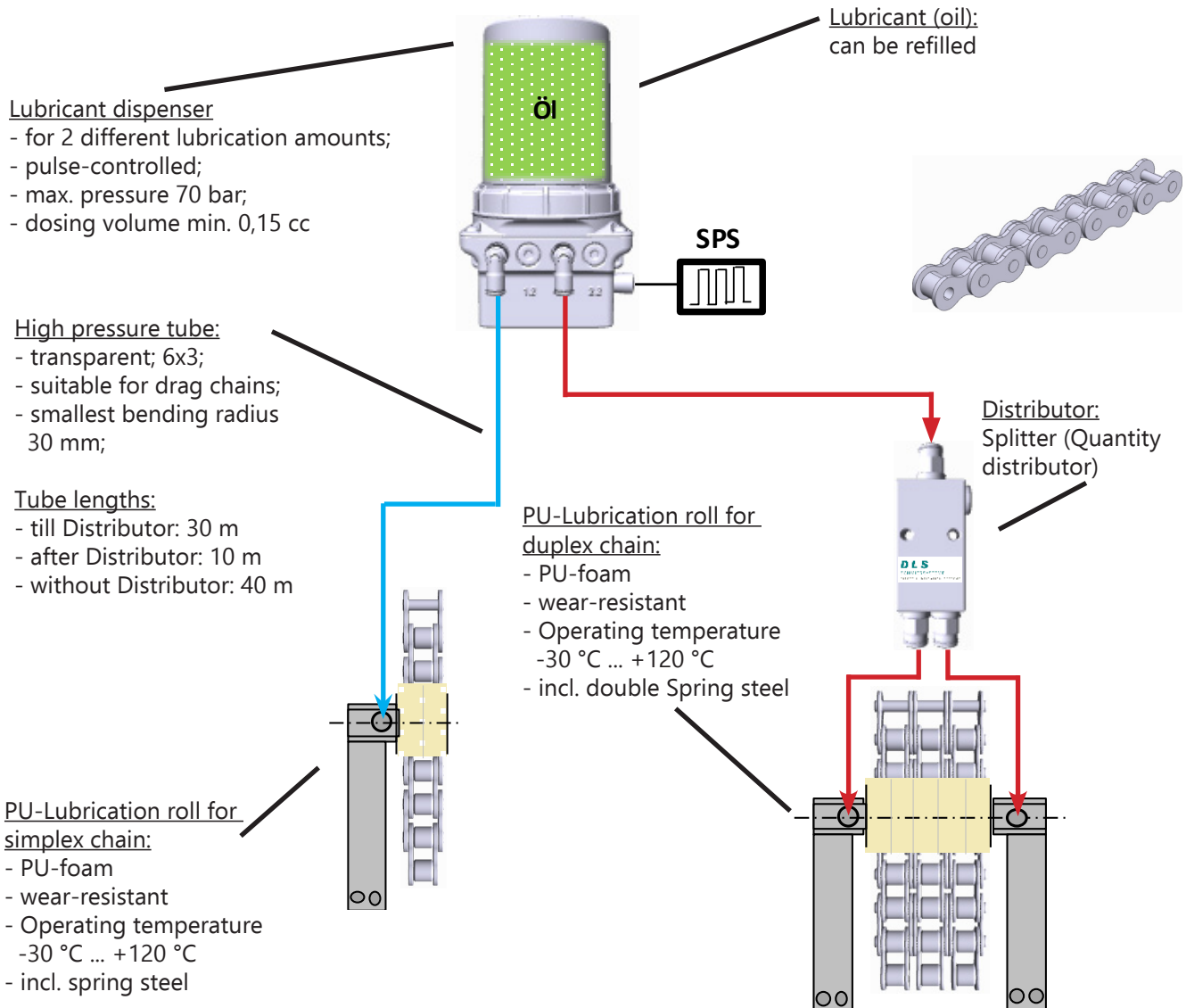
FlexxPump 500 not included;
See dimension sheet for dimensions

Brackets for FlexxPump 500 are identical to Brackets for FlexxPump 400



Lubrication charts

Chain lubrication



Lubrication charts

Hollow pin chain

Lubricant dispenser

- for 1 lubrication amount;
- pulse-controlled;
- max. pressure 70 bar;
- dosing volume min. 0,15 cc

Lubricant (oil):
can be refilled



SPS



High pressure tube:

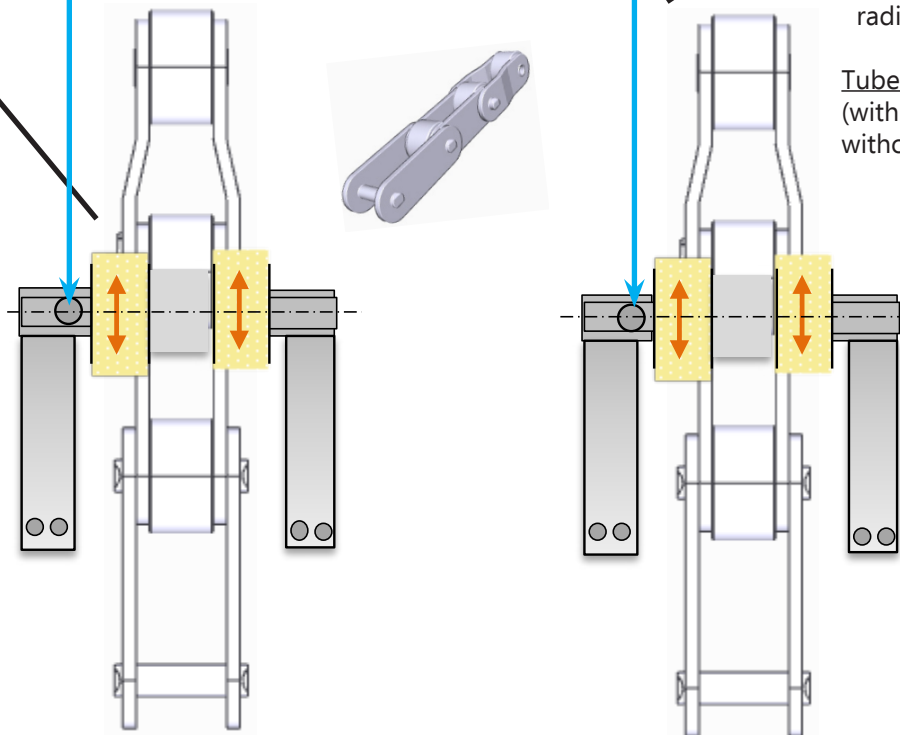
- transparent; 6x3;
- Suitable for drag chains;
- smallest bending radius 30 mm

Tube lengths:

(with suitable oils)
without Distributor 40 m

PU-Lubrication roll for hollow pin chain:

- PU-foam
- wear-resistant
- Operating temperature
-30 °C ... +120 °C
- incl. double
Spring steel



Support preventive maintenance

FlexxPump



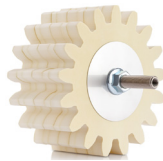
Exchange after 5-6 cartridges
or after 12,000 pump strokes
/ Pump body
or after 5 years

Tubes



Exchange after 5 years

Lubrication Pinions



Visual inspection every 6 months
Exchange after 3 years, incl.
mounting axes

PU-Lubrication Roll



Visual inspection every 6 months
Exchange after 2 years

**PU-Lubrication
Sprocket**



Visual inspection every 6 months
Exchange after 3 years

Cartridges



Service life max. 24 months

QuickGuide

FlexxPump 125 DLS - pulsedriven

Step 1:

Prepare the pump



The pump is bled at the factory.

Remove the protective caps inside of the pump and at the outlet.

Mount the cartridge in this way that the label is aligned on the front of the display. Connect the pump via the 4 pin plug with 24 volts.

Step 2:

Spülen der angeschlossenen Pumpe



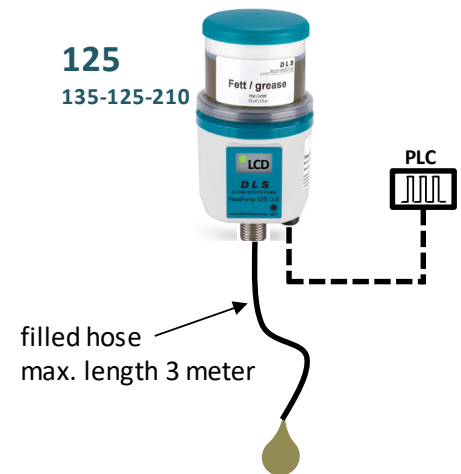
The pump is vented with an NSF approved grease.

This grease is mixable with all DLS lubricants.

If necessary, the lubricant can be flushed out of the pump. In this case please use the 12 s high signal. The pump will make 40 strokes a 0,15 cm³.

Step 3:

Programmierung der Pumpe



There are 3 high signals available:

The 2 s high Signal.

The signal can be repeated for a maximum of 30 times.

Detailed information you will find in our user manual and at: www.dls-schmiersysteme.de

QuickGuide

FlexxPump 125 - time controlled

Step 1:

Prepare the pump



The pump is bled at the factory.

Remove the protective caps inside of the pump and at the outlet.

Mount the cartridge in this way that the label is aligned on the front of the display. Connect the pump via the 4 pin plug with 24 volts.

Step 2:

Flush the connected pump



The pump is vented with an NSF approved grease. This grease is mixable with all DLS lubricants.

If necessary, the lubricant can be flushed out of the pump. Please use the „FIL-function“

Detailed information you will find at chapter 6.3.10 and at:

www.dls-schmiersysteme.de

Step 3:

Programm the pump with the action pin



There are 2 Settings available:

1. Break time setting "h"
Possible Setting for the breaktime (h) from 1 h to 240 h
Setting for the strokes „c“ per cycle 1 to 10
Factory settings: h = 6; c = 1
2. Empty time Et
Possible settings for the empty time 1 to 24 months
Factory setting: Et = 6
The number of strokes can not be adjusted.

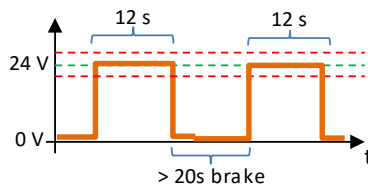
QuickGuide

FlexxPump 400 DLS - pulsedriven

Step 1:

Bleed the pump

423 DLS
pulsedriven
#235-423-210



Use the 12 s high signal to bleed the pump.

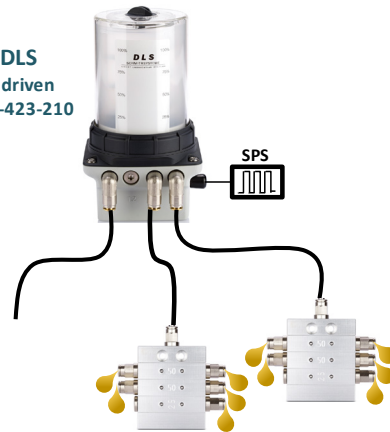
The 12 s high signal you have to use twice. (see also user manual FlexxPump 400; page 19)

Grease has to be clearly visible at all outlets!

Step 2:

Connect the prefilled tubes with the pump and bleed the distributor

423 DLS
pulsedriven
#235-423-210



In the picture, shown above, the outlets 2.1 and 2.2 are connected with the distributor.

Use the 5s high signal as often as it is necessary to make the grease visible at every outlet of the distributor.

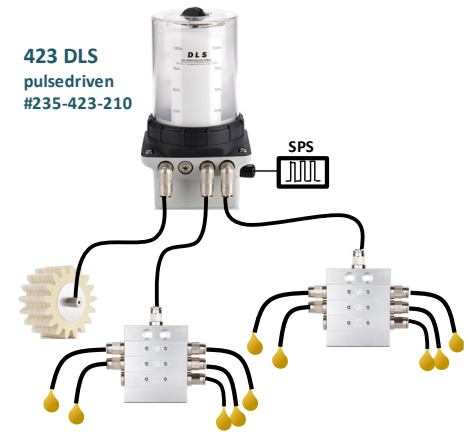
All the distributor are bleed with H1 approved Oil for delivery.

Subsequently, connect the tubes with the distributor and the lubrication points.

Step 3:

Prefill the lubrication pinion

423 DLS
pulsedriven
#235-423-210



Use the 2s high signal as often as it is necessary to make the grease visible at the holes of the lubrication pinion.

Alternative use the hand press for grease. **Attention! Operate slowly.**

Lubrication pinions are delivered in dry conditions. They are not prefilled with oil or grease.

NEVER use the lubrication pinions in dry conditions!

QuickGuide

FlexxPump 400 - timecontrolled

Step 1:

Bleed the pump with the installed cartridge



Use the action pin at the top of the transparent cover. To switch the pump on, put the action pin into the action area until the display shows, „On“ . More details in chapter 6.3.3 inside of the user manual.

After you've switched on the pump, put the action pin into the action area until the display shows „FIL“. The pump dispenses 40 times 0,15 cm³.

Step 2:

In case of use a distributor you are able to flush them

412-24V
235-412-100



Connect the filled hoses to the bled pump and the distributor.

Use the "run" setting for special dispenses Details in the user manual, chapter 6.3.8.

All distributor are bled with NSF approved oil.

Next step is, to connect the filled hoses with the distributor and on the other hand with the lubrication point.

Step 3:

Programm the pump

412-24V
235-412-100



There are two settings available.
Break time setting: h
"h" setting between 1 to 240 hours
"c" setting between 1 to 30

Entleerzeitmodus – Et
"Et" setting between 1 to 36 months
"c" setting between 1 to 30 dispenses

More details you will find inside the user manual in chapter 6.3.8 and 6.3.9. and at:

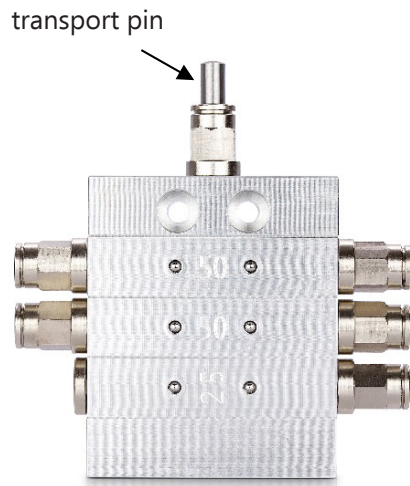
www.dls-schmiersysteme.de

QuickGuide

Progressive distributor

Step 1:

Remove the transport pin



Pull the transport pin out of the inlet.

The progressive metering device is flushed, vented and checked at the factory with a „white oil“.

If necessary, the progressive distributor can be filled with the working grease before commissioning.

Step 2:

Fill the distributor



The distributor is approved up to a maximum pressure of 100 bar. DLS Lubricating Systems recommends „flushing“ the distributor with a DLS pump.

ATTENTION:
Please do not use a hand grease gun! The guarantee expires!

Step 3:

Assembly of the progressive distributor



Direction of movement of the distributor in the application okay



Direction of movement of the distributor in the application okay



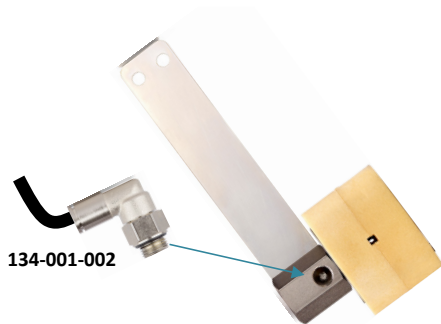
Direction of movement of the distributor in the application is **NOT** okay

QuickGuide

PU-Lubrication Roll with Spring Sheet

Step 1:

Upon delivery the lubrication roller are pre-assembled



Please screw the fitting into the axis. The fitting (134-001-201) has to be ordered separately!

Install the tubing

Attention:

Cut the hose only with tube cutter. Push the hose deep (approx. 18 mm) into the fitting. Remove the hose not more than two time, otherwise you have to shorten the hose about 5mm.

If you don't cut the end, leaks are possible!

Step 2:

pre-fill the lubrication roller



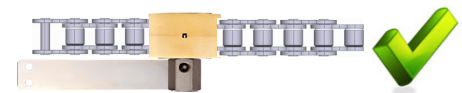
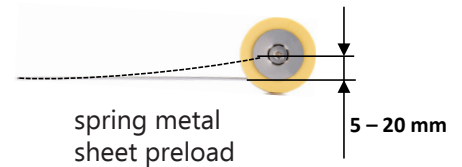
Upon delivery, the lubrication roller are not pre-filled

Recommendation: put the lubrication roller around 2 min in mineral oil. Let the excess oil drain off

ATTENTION: never use the rollers in dry conditions!

Step 3:

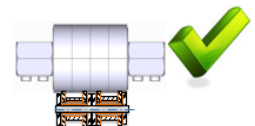
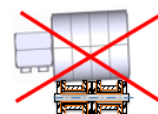
lubrication roller assembly



Installation details:

Make sure the roller is running parallel to the chain.

Starting with a width of around 90mm, please use double spring metal sheet!

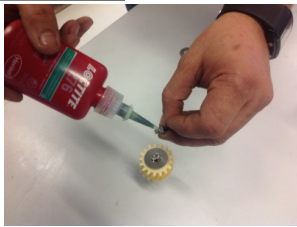


QuickGuide

PU-Lubrication Pinion

Step 1:

Assembly
lubrication pinion on axis



The lubrication pinion will be delivered separately from the axis.

The lubrication pinion and the axis are not mounted!

The screw has to be glued into the axis!

Take care, there is no glue between sleeve bearing of the pinion and the axis.

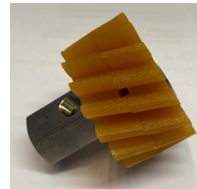
The glue has to be dry out min. 7h

Step 2:

Connection with prefilled tubes

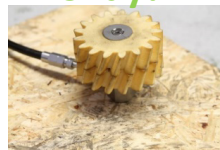
Lubrication pinions have to be prefilled with oil or grease.

Lay down the pinion into mineral oil and wait around 1-2 minutes. The pinion will be protected against abrasion for a short time.



Subsequently prefill the pinion with grease with subsequently turning of the pinion on the axis.

okay!



wrong!

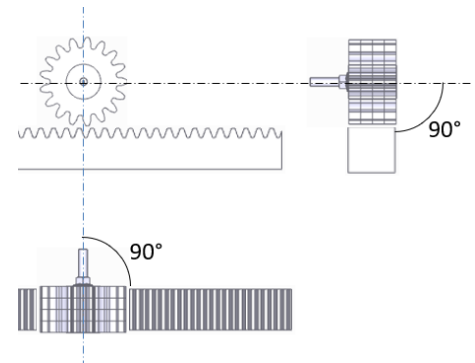
**to fast, to much grease,
no rotation of the pinion**



ATTENTION: Never use the lubrication pinion in dry conditions!

Step 3:

Assembly of lubrication pinions



Installation details:

The lubrication pinion has to be mounted very accurate, right angled into the moving direction.

Do not mount to tight!

The lubrication pinion need clearance from 0,5 to 0,7mm!

Partner

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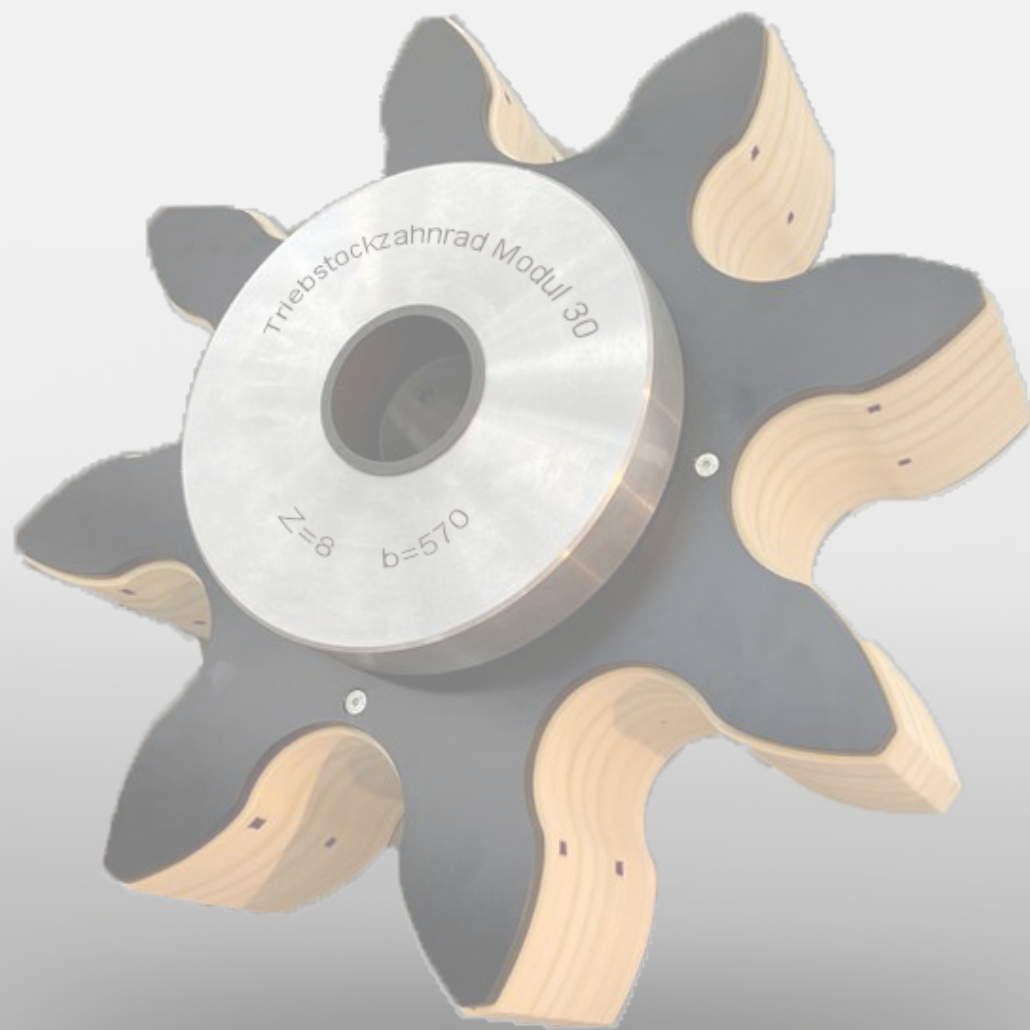
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