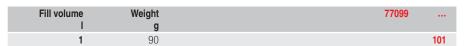
#### Type

Natural transparent container, with long neck and adjustable nozzle, DIN thread 28-400.

#### Use

Especially suited for use with low-viscosity substances.





#### 77100 **Sprayer**

#### Type

Natural transparent container, stainless steel pump mechanism, seal of special Viton material.

For use in industry and trade.



Fill volume	Weight	77100	
1	g		
0,5	140		101

#### 77101 **Sprayer**

# Type

Natural transparent container, made of high-grade materials, seals made of special material Viton.

#### Use

For use in industry and trade.



**Workshop Supplies** 

Fill volume I	Weight g	Operating pressure bar	Delivery volume I/min.	77101	
2,0	500	3	0,4-1,2		101

# 77102

# Compressed-air sprayer

With 360° swivelling spray pipe. Spray amount and shape can be controlled by means of turning the nozzle. Spray container 0,7 I made of plastic. Air connection with plug for quick-release coupling.

# Use

In compliance with the suction principle for low-viscosity fluids.



Max. operating pressure bar	Recommended working pressure bar	Nozzle Ø mm	. , .	Operating temperature °C	77102	
10	2-6	3	40	+5 - +50		101

#### 77105 **Drip feed lubricator**

# Туре

Made of transparent Cellidor, operating by pressing button, fountain pen format, with clip and sealing

For drip feed lubricating, e.g. on precision mechanical devices, hinges, etc.



ì	Contents	Length	Weight	77105	
	ml	mm	g		
	5	140	20		102

#### 77115 **Plastic Iubricators**

#### Type

Resistant to oil, petrol and acid.

brass squirt tube.

Size 1: flat container with fixed squirt tube. Size 2 and 3: round polyethylene container with

For trade and industry.

Size	Contents ml	77115	
1	60		101
2	125		202
3	250		203



#### Туре

With 130 mm long brass tube including brass nozzle. Drip catcher and attachment eye, oil drip feed by raising the pressure lever, all parts replaceable - easy to clean.

#### 77135 - 77136

Type

Single press pump.

#### 77135

Type

Seamless aluminium container.

## 77136

Type

Polyethylene container.

### 77140 - 77141

Type

Double metal pump with rotating piston, also for particularly awkward points for lubrications. Oils in every conceivable position, even overhead.

#### 77140

Type

Seamless aluminium container.

#### 77141

Type

Polyethylene container.



77135

77136

Contents ml	77135	77136	77140	77141
200	102	102	101	101
300	103	103	102	102

#### 77142 - 77144 Oil squirt cans

#### Type

Workshop Supplies

Ergonomically-shaped container, therefore very handy and very stable stand. With long aluminium squirt tube. Thanks to the double-action brass pump with gravity-controlled suction tube, lubrication is possible in any position, even overhead, and the container can be completely emptied. Oil drip feed by slightly raising the pressure lever. Sealing cap with drip catcher.

# 77142

Type

Container made of die-cast zinc, impact-proof and robust.

#### 77144

# Type

Container made of plastics (polyethylene), oil-resistant, break-proof.



Contents	Bottom	Entire height	Spray tube length	77142 77144	
ml	Ø mm	mm	mm		
200	60	245	135	201	201
300	60/65	300	165	202	202
500	75/80	330	165	203	203

#### 77145 Special oil squirt can

With strong pressure pump, round tin plate container and metal squirt tube, oil flow can also be drip-regulated, surge wall to prevent escape of oil, thus allowing lubrication in any position.





# **leilang**

# Туре

Double-action hand pump, with suctioning and pressuring hose. Solid metal construction made of light metal, wear resistant and temperature-proof. With safety handle

#### Use

For use in industry and trade, for refilling containers with fuel oils, mineral, synthetic and biological oils, washing petrol, coolant, anti-freeze, denatured alcohol, kerosene etc.





# 77181

# **Dosing hand pumps**



## Type

With transparent cylinder made of hard PVC, scale in cl for easy fill-up and removal of liquids of every description. Smooth running, quick, high suction power.

## 77181 101

## Type

Including flex hose 300 mm and straight pipe 130 mm.

#### 77181 102

## Type

Including flexible hose 750 mm.

Pump capacity ml/stroke	Pipe Ø mm	Pump stroke mm	Weight g	77181
150	40	208	645	101
1000	60	420	768	102



# 77185 - 77187

# Oil and petrol syringes



For suctioning and pressuring, aluminium cylinder pipe, wear-resistance and easy operation thanks to PTFE piston rings.

Cat.-no. 77186 - 77187 suitable for both syringes

## 77185 102 Syringe.

Size 2 incl. 3 small connection tubes 90 / 140 and 250 mm in length, Ø 10 mm.

#### 77185 103 Syringe.

Type

Size 3 incl. 1 straight tube 300 mm in length, Ø 12 mm.

#### 77186

Additional tube.

# Use

For thick oil.

## 77187

Flexible metal hose.



Size	Contents approx. ml	Ø mm	Pump stroke mm	Length mm	Pipe Ø mm	77185		77186		77187	
2	750	60	255	-	10		102				
3	1000	60	363	-	12		103				
-	-	-	-	200	12				101		
	_	_	_	250	10						101

# Oil miser

#### Type

Transparent, impact-resistant, weather-proof. Just enough fluid flows from the main container to the brush holder to wet the bristles of the brush, economical in use and clean. Swivel bracket and 2 brushes included.

#### Use

Only suitable for lubricants and drilling oil, petrol, paraffin, ether, soap water (not for acids, acetone



Container contents approx. I	77190	
0,5		101

#### 77193 Storage containers

#### Type

Equipped with a brush for applying glue, lacquer, contact adhesive, and various solvents.

#### Advantages:

- Saves considerable amounts of glue
- No disposal costs for dried adhesives as special waste
- High chemical-resistance
- Long service life through impact-resistant plastic
- Quality-tested floor-housing seal
- Optimised sealing cap with sealing groove prevents evaporation, even of low-viscosity fluids

#### Use

Universal implementation in production, shipping, trade and hobby.



Contents	Dimensions	77193	
1	mm		
1,5	215 x 105 x 130		101

# 77194

# **Magnetic lubricating pot**

Made of unbreakable plastic. With permanent magnet on the bottom.





77194

77303

Holding capacity ml	Height mm	Width	Weight	77194	
250	80	80	100		101

#### 77300 Multi-purpose tub

# Type

Break-proof, with stable carrying handles. Safe pouring thanks to circumferential overflow rim and spout. With raised area for placing dirty parts.

## Use

For changing oil or cleaning parts.

Quality Polyethylene.





#### 77303 Measuring cup set

Transparent, scale coloured and raised. Oil and acid-resistant, food safe. With ergonomic handle, stackable, safe pouring

Quality Polypropylene.

303	77303	Use	Contents	Set
		from to °C	1	
101		- 10 + 120	0,5/1,0/2,0	3-piece



#### 77305 - 77306 Liquid measure

Type With funnel-shaped spout.

77306 Type Tin plate, swivelling carrying handle

77305 Туре

Tin plate, can be calibrated.

Contents I	77305 77306
1	102
10	102



#### 77319 - 77321 **Funnel**

77319 77321

Type Flexible extension tube.

Tin plate with overflow rim, vent channel in tube, with removable sieve.

77319 - 77321

	Funnei		Extension tube	
Upper Ø Ø	77319		77321	
mm				
160		101		101

#### **Funnel set** 77323

Ø 160 mm with removable brass sieve.

Quality

Polyethylene.

Set	Funnel Ø	77323	
	mm		
6-piece	50/75/100/120/150/160		101



#### 77325 **Funnel**

Red, with black, lockable lid.

Use

For metal drums. Suitable for common 60 or 200  $\mbox{\rm I}$ oil drums. Funnel for disposal of waste oil or chemicals (polyethylene).

Holding- fitting	Ø mm	Contents I	77325	
2 inch outer	250	3.2	101	



#### 77350 Oil supply cans DIN 6425

Type

eng/OP

Made of tin plate, with hinged lid and spout pipe with chained push-on cap, strong carrying handle.

Contents I	Height mm	77350	
5	290		102
10	350		103



# Fuel cans

#### Type

With flexible nozzle. Robust and resistant against impact damage. Sealing cap secured against loss with lanyard. Spout nozzle with integrated vent. Spout nozzle is stored in the canister: Contamination through transport is prevented; and also it is difficult to lose the spout nozzle. Secure stand due to large footprint. Easy carrying thanks to solid handle. Optimised design, robust thanks to circumferential reinforcements. TÜV-tested, UN/BAM

#### Use

For liquid fuels.

Quality Material HDPE.

Contents I	H x L x W mm	Spout length mm	Spout Ø mm	Colour	77370	
5	237 x 331 x 185	195	20	red		101
10	319 x 329 x 195	195	20	red		102
20	410 x 385 x 229	195	20	red		103



## 77371

# Metal canister MK 20

#### 77371 101

# Type

Interior painted, without spout nozzle, can be vented.

#### Use

For all vehicle models, and for lead-free petrol.

Contents

20

77371 102 Spout Type Flexible, galvanised.

Weight 77371 approx. kg 3,6 101

102



# Spout 77405

Туре

Canister

# Rinsing basins

Colour

areen

With removable perforated insert, the lid closes with a tight seal and prevents evaporation of washing fluid; it locks at opening. The lid closes automatically if there is a fire, smothering the flames. Black sheet metal outside lacquered. Black sheet metal outside lacquered.

For combustible washing agents, especially for washing small parts.



Contents	Ø	Height	77405	
approx. I	mm	mm		
5	300	125		101

# 77415

# Waste oil collector

www.hhw.de Fax order hotline: +49 6204 739-1217

# Type

With compressed-air exhauster, transparent 2 m exhausting hose, safety valve (set to 0,5 bar), and relief valve. Mobile, with 2 fixed wheels and 2 steering wheels, sieve insert.

For waste oil A III (of known source) with a flame point above 55° C. Please do not use in any case, waste oils with danger classification A I, A II, and B.



77415	Height-adjustable	Contents collection funnel	Collection funnel Ø	Dispensing hose	Container contents
	mm	approx. l	mm	m	I
F# 101	1150 - 1750	18	420	2	70

# Small parts cleaning unit

Capacity

I/min.

#### Type

Table-top model with 4 legs, working top and splash guards galvanized.

With foot-operated safety switch and cleaning brush, with electric pump, power cable and plug. Tested in compliance with ZH 1/562 04.82, DIN VDE 0700 T1A6 12.91 and DIN VDE 0700 T236 03.84.

#### Supplied without drum.

**Exterior dimensions** 

H x W x D mm

#### Use

For cleaning machine parts and tools in workshops and factories using commercial cold cleaning

#### Note:

A regenerative drum pump directly draws off the cleaning agent from the barrel to the cleaning brush. The contaminated cleaner flows directly back into the drum, in this process the contamination particles settle on the bottom. Fresh liquid is always drawn off in the upper section. Model with air-pressure pump and cold cleaning agents available on request.

Spare brush

Spare cleaning brush with hollow handle, Ø 30 mm.

77421







TUV SERVICE

77420

## 1350 x 800 x 550 3-5

Working height

#### 85590 Safety collecting container

mm

## Type

Made of sheet steel, inside tin-coated for flammable, solid materials. Comfortable opening by means of a pedal. Self-closing lid. Punched bottom edge to prevent heat-up/self-ignition. No leakage of collected liquids. High stability against overturning. Container identification in compliance with GefStoffV and BGV A8 pending. Tested safety product.

F#

For safe collection of used cleaning materials.

101



Contents I	Ø x height mm	Finish exterior	85590	
20	290 x 397	powder-coated, red		101

# 85593

# **Economical moisturising devices**

#### Type

Made of sheet steel, inside tin-coated. Spring-bearing mounted saturation plate with flame stop. Economical use of cleaning fluid, unused fluid flows back into container. Very low evaporation. Good medium stability, even when working with contaminated materials. High stability against overturning. Container identification in compliance with GefStoffV and BGV A8 pending. Tested safety product.

#### Use

For economical moistening of a cloth, in cases in which only low amounts of solvents are required.





**Workshop Supplies** 

77500



C	Contents I	Ø x height mm	Saturation plate Ø mm	Finish exterior	85593	
	0,5	120 x 135	75	powder-coated, red		101
	2,0	180 x 190	135	powder-coated, red		104

#### 77500 High-pressure push-type grease guns

Made of steel with universal nose piece.

For grease and oil.



Contents ml	Pressure capacity approx. bar	77500	
60	200		101
150	200		102
340	200		103

# 77540 - 77543

# Grease guns



#### Use

For grease, cartridges and grease filler. Connecting thread M 10 x 1.

#### 77540 101

# One-hand grease gun PEP500/D

#### Type

- With nozzle pipe 103/R with 4-jaw professional nose piece
- Made of precision steel
- Plastic display bag
- Filling nipple
- Quickly filled with Füllmeister® or with 400 g grease cartridges (DIN 1284)
- Contents 500 cm3 / 400 g
- Connection thread G 1/8 inch
- Weight 1,4 kg

#### Use

For use on lubricating points that are difficult to access.

#### 77540 302

# Professional lever grease gun X-TRA 701/M DIN 1283

- Steel, robust durable
- Display box
- Filling nipple
- Safety grip
- Quickly filled with Füllmeister® or with 400 g grease cartridges (DIN 1284)
- Contents 500 ccm / 400 g
- Connection thread M 10 x 1
- Weight 1,3 kg

## 77540 203

# Hand-operated lever grease gun

# Type

- With die-cast zinc head Z 410,
- Burst-pressure test at approx. 1200 bar,
- Fill volume 500 cm<sup>3</sup>,
- $^{\text{D}}\textsc{elivery}$  volume / stroke approx 1,2 cm $^{\text{3}},$
- Delivery pressure to 400 bar,
- No misleading signs of lubrication thanks to precision fit pump piston and cylinder,
- incl. of Armoured hose 11 x 300 mm,
- Nozzle pipe bent 150 mm and
- 2 x nose piece with 4 lathed jaws.

#### 77540 301

# Hydraulic grease gun DL Plus Type

- Compression ratio 1:50,
- Recommended working pressure 6 bar
- Flow capacity per stroke 0,8cm<sup>3</sup>
- Nominal contents 500cm3
- Complete with armoured hose
- 4-jaw nose piece
- Attachment eye and
- Filling nipple

#### 77543 101-104

- Accessories for cat.-no 77540.

# 77543 101

#### Nozzle pipe

- Belt with hydraulic gripper coupling.

#### 77543 102

#### Armoured hose

- 11 mm Ø
- 300 mm long,
- Polyamide with hydraulic nose piece

# 77543 103

#### Set of nozzles

- Made of steel
- High-gloss nickel-plated
- Consisting of: hollow nozzle, pointed nozzle and hydraulic nozzle piece.

#### 77543 104

#### Hydraulic nozzle piece

- 4 jaws with wrench surface.







77540 301



77543 101



77543 102



77543 103

77543 104







# 77540 ... 77543 ... 101 101 302 102 203 103 301 104

Accessories

# 77544

Grease guns

# Lubricating nipples assortment

#### Type

Professional taper lubricating nipples in compliance with DIN 71412.

			10
			5
			10
			5
			5
			5
Contents	77544		10
			5
120-piece		101	5
•			

	Set contents
30	straight (180°) M 6 x 1
20	straight (180°) M 8 x 1
10	straight (180°) M 10 x 1
10	straight (180°) R 1/8 inch
5	angled (45°) M 6 x 1
10	angled (45°) M 8 x 1
5	angled (45°) M 10 x 1
5	angled (45°) R 1/8 inch
5	angled (90°) M 6 x 1
10	angled (90°) M 8 x 1
5	angled (90°) M 10 x 1
5	angled (90°) R 1/8 inch





# Battery powered grease gun AFP-E 500

#### Type

- Armoured hose with 4-jaw hydraulic nose piece
- 2 x 18 V rech. battery 1300 mAh
- Maximum pressure, limited through safety valve
- Carrying strap



Туре	Fast charger min	Operating pressure approx. bar	Max. pressure bar	Delivery rate approx. ccm/min	Contents ccm/g	Weight kg	Туре	77545	
AFP-E 500	60	400	400	100	500/400	8	in plastic case		101

# 90317

# Battery-powered grease gun



# Type

- Up to 7 cartridges per battery charge
- Balanced design with a length of just 355 mm
- REDLINK TM electronic overload protection for long service life of rech. battery, motor, and gear unit
- Vent valve for fast work progress
- Capacity when filling from containers 454 g and for cartridge 411 g
- Integrated hose holder and hook-in device for shoulder strap
- Handle with soft-grip support
- Rech. battery change indicator

#### Use

Ideal for lubricating vehicles and machines in mobile use.

#### Scope of supply:

- Transport pouch
- 1 x 12 V/4,0 Ah Red Li-Ion rech. battery
- Fast-charger C12 C



Volt/Ah	Operating pressure	Flow rate	Hose pressure	Length hose	Weight with rech. batt.	90317
	bar	g/min	bar	mm	kg	
12,0/4,0	562	74	690	914	3,3	101

# 77549 - 77550 Professional push-type grease guns and professional one-hand grease guns

# 77549 101-103

# Professional push-type grease guns Type

Can be filled quickly and cleanly with screwin cartridge PAT 100 (1 pc. in scope of supply) with approx. 100 g lithium-saponified grease, consistency 2.

#### 77550 101-102

# Professional one-hand grease guns

Display box. Can be filled quickly and cleanly with screw-in cartridge PAT 100 (2 pc. in scope of supply) filled with approx. 100 g lithium-saponified grease, consistency 2. Connecting thread M 10 x 1. With 4-jaw professional nose piece.

#### 77550 103 Refill set

Туре

4 grease cartridges Optimol PD2, each 100 g.

# Use

For filling the professional one-hand grease gun **PEP200** and the professional push-type grease gun **K100**.



	Туре	Type with	77549		77550	
Push-type press	K100/2	Pointed nose piece		101		
Push-type press	K100/3	Universal nose piece	#	102		
Push-type press	K100/Na	Needle-nose nose piece	#	103		
One-hand grease gun	PEP200 D	Nozzle pipe 103/M				101
One-hand grease gun	PEP200 G	Safety armoured rubber hose 110/M				102
Refill set	Optimol PD2	-				103

# 77551 Multi-purpose grease in cartridge

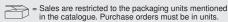
# Type

eng/OP

For grease guns cat.-no. 77540 and other off-the-shelf grease guns.

Contents	77551	
400		101





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# Grease filler

#### Type

Increased suction capacity due to longer stroke and enlarged intake and valve openings. Stable and wear-resistant due to reinforced steel lever. Environmentally-friendly, air-free filling. Bucket emptying through special grease following cover.

#### Scope of supply:

Grease following cover, dust-protection lid, fill pipe with muff.

#### Use

For filling grease guns. Suitable for bio lubricating greases, long-life greases with bonding additives and for greases tu consistency class 2 (liquefied greases).

For container kg	Inner Ø mm	Delivery rate ccm / stroke	Pump pipe Ø mm	77555	
15 - 18	255 - 282	50	40		102

# 77605

# Compressed air lubricating device

#### PM 15 mobile

#### Type

- With safety lubricating hose 4 m
- Incl. Maintenance unit for low-wear operation and drum fitting with 2-inch thread
- Pre-feed system for safe pumping of long-life greases
- High delivery capacity through 1:55, compression ratio, through suction connection, safety lubrication hoses with large inner diameter
- Grease follower cover for buckets with inner diameter Ø 260 - 290 mm
- Steel dust protection lid for buckets with outer diameter Ø 265 - 310 mm
- High-pressure lubricating gun with ball bearing pro-Z joint, special ease of motion under pressure
- Compressed air connection / grease outlet G 1/4 inch inner thread
- Trolley

Suitable for oils and greases to consistency class 2. also bio-greases (multi-purpose greases)



Air pressure min./max. bar	Lubricating pressure max. bar	Burst pressure bar	Delivery volume approx. ccm/min	77605
3/10	400	1.600	600	101

\*At free discharge and 7 bar inlet pressure.

# 77610

#### High-pressure lubricator compressor Type

- With 4 m high-pressure lubricating hose (burst pressure 1200 bar) and
- Lubricating gun with rotating joint
- Mobile
- Contents 6,5 kg
- Compression ratio 1:50

77610 - 77616

- Air pressure: min. 3 bar, max. 8 bar
- Integrated pressure reduction valve,
- Lubricating pressure max. 400 bar
- Delivery rate 4 cm³/double-stroke
- max. delivery capacity, 400 cm<sup>3</sup>/min. with free discharge
- Suitable for oils and greases to consistency class 3
- Weight approx. 19 kg.

# 77614

# Safety rubber armoured hose

- 300 mm long,
- Safety-tested in accordance with DIN 1283
- Bursting pressure 1600 bar.

# 77615

#### **Push-on coupling**

- Diameter 16 mm, for flat lubricating nipples

## 77616

# Safety pressure hose

Lubricating compressor

- Length 4 m

Other hose lengths 7 and 10 m available on request.

77610

F#

201



)	Coupling	Hose		
	 77615	 77616		

#### 77620

H x W x L mm 710 x 290 x 480

# Profi quick change set SWS in plastic case

In stable plastic case with oil-resistant insert.

	Set contents
1	nozzle pipe 103/M, straight, with 4-jaw pro nose piece
2	4-jaw pro nose pieces 120/M
1	Quick-change reinforced rubber hose 2200
1	Quick-change nozzle pipe with slide coupling 2070/M 1
1	Quick-change nozzle pipe with combination nose piece
1	Adapter R 1/8 inch inner, M 10 x 1 outer
1 1 1	Quick-change nozzle pipe with slide coupling 2070/M 1 Quick-change nozzle pipe with combination nose piece

Type with	Weight approx. kg	77620	
In plastic case	0,80	#	102



77620



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Armoured hose

- Handy pumps for diesel, heating oil, hydraulic fluid and engine oil
- For 200 I drums
- 1 m plastic hose with discharge nozzle, suction pipe

Pump	Delivery capacity l/stroke	77705	
MZE-02	0,2		101
MZE-04	0,4		102







# **Drum and container pumps**



Other insertion depths and versions available on request.

## 77720 101

# Pump set for low delivery rates

## Type

- IP 24
- With 2-stage switch for precision filling.

#### Use

For filling, transferring and metering of acids and alkalines such as battery acid, ammonia water, glycol, caustic soda, and soap solution.

#### 77720 202

## Pump set - for acids

#### Type

- Drum fitting and FLUX-clip for safe fixation of the nozzle on the pump
- IP 24
- With RPM adjustment and under-voltage triggering

For pumping acids such as boric acid, fruit acid, phosphoric acid, hydrochloric acid, or sulphuric acid (up to 80%).

# 77720 103

## Pump set - for petroleum products Туре

- Drum fitting and FLUX-clip for safe fixation of the nozzle on the pump
- IP 24
- With under-voltage triggering

#### Use

For pumping petroleum products such as Diesel, fuel oil, hydraulic, machine and engine oil.

#### 77720 104

#### Pump set - for highly combustible liquids Type

- Foot-piece Ø 43 mm
- Drum fitting and FLUX-clip for safe fixation of the
- Motor explosion-proof in compliance with II 2 G EEx de IIC T6 in accordance with ATEX Directive 94/9/EC
- Category 2 with low voltage release

#### Use

For pumping highly combustible liquids such as acetone, petrol, butanol, ethanol, methanol, toluene, xylene etc.

For safely pumping low-viscosity, neutral, aggressive and highly combustible liquids. Only pumps made of stainless steel used in conjunction with an ex-protected collector motor or pneumatic motor may be used for pumping flammable liquids.

77720 101

77720 202





77720 103

77720 104

**Workshop Supplies** 





Technical data:		Pump F 314 PP	Pump F 430 PP	Pump F 430 AL	Pump F 424 S
Quality	of	Polypropylene	Polypropylene	Aluminium	Stainless steel 1.4571
Outer Ø	mm	25	40	41	41
Pressure port		G 1 A	G 1 1/4 A	G 1 1/4 A	G 1 1/4 A
Hose line *		PVC DN 13	PVC DN 19	Mineral oil DN 25	Universal DN 21
Length *	m	1,5	2,0	2,0	2,0
Nozzle		PP	PP	AL	Messing
Seal		FKM	FKM	NBR	PTFE
Collector motor	W / V / Hz	230/230/50	500/230/50	800/230/50	460/230/50
Connection cable	m	5, 2-pole plug	5, 2-pole plug	5, 2-pole plug	5, safety plug (not ex protected)

Pump Type	Collector motor Type	Delivery rate max. I/min.	Delivery rate max. I/min.*	Delivery head max. m	Viscosity max. mPas	Temperature max. °C	Immersion depth mm	Weight kg	77720	
F 314 PP	FEM 3070	40	15	5,2	250	45	700	2,4		101
F 430 PP	FEM 4070	165	40	9,5	600	50	1000	5,1	#	202
F 430 AL	F 457	220	80	12,0	800	80	1000	7,8	#	103
F 424 S	F 460 Fx	200	50	9.5	600	100	1000	10.9	#	104

\*With hose and nozzle

# Info

# Lubrication systems cat.-no. 77810 - 77822

#### Clever lubrication.

perma lubricators are self-contained units, which work without external force, for automatic and place independent single point lubrication of roller- and sliding bearings, chains, open gears and sliding guideways.

#### Lubricants

SF 01 Universal grease for all areas at operating temperatures from -30°C to +130°C. SF 04 High-temperature lubricant for high operating temperatures of -20°C up to +160°C.

SO 14 High-performance oil for high lubricating requirements of industrial chains at operating temperatures of -20  $^{\circ}$  C up to +250  $^{\circ}$  C.

#### Technical data

Code	Lubricant	NLG class	Thickener	Basis	Temperature range	Use	DIN
SF 01	Universal grease	2	Li/Ca	mineral	-30°C to +130°C	universal	KP2K-30
SF 04	High-temperature grease	0/1	PHS	mineral + PAO	-20°C to +160°C	high operating temperatures	K1S-20
SO 14	High-performance oil	_	_	synthetic	-20°C to +250°C	industry chains	CLPE320

## 77810 - 77822

# **Lubrication system Perma CLASSIC**

#### 77810

perma CLASSIC

Type

Lubrication system driven by electrochemical processes, metal housing with 120 cm³ fill volume with empty status indicator.

Dependent on the application, choose an activating screw and tighten it. A gas generating pellet will drop into a liquid electrolyte to start a chemical reaction. The lubricant is continuously injected into the lubrication point over the desired amount of time (1, 3, 6 or 12 months), ensuring a even dosage. Maximum pressure is 4 bar at temperatures between 0°C and +40°C.

The activating screw is indispensable.

77822

**Activating screws** 

Type

Black sealing ring. Dosage time at +20°C.

For lubrication systems perma CLASSIC and FUTURA.



77810

#### Lubricant type Dosing time Screw colour 77810 77822 SF 01 101 SF 04 SO 14 102 103





## 77820 - 77822

# **Lubrication systems Perma FUTURA**

# 77820

perma FUTURA

Type

Lubrication system driven by electrochemical processes, transparent plastic housing with 120 cm3 fill volume.

Use

Dependent on the application, choose an activating screw and tighten it. A gas generating pellet will drop into a liquid electrolyte to start a chemical reaction. The lubricant is continuously injected into the lubrication point over the desired amount of time (1, 3, 6 or 12 months), ensuring a even dosage. Maximum pressure is 4 bar at temperatures between 0°C and +40°C.

# Note:

The activating screw is indispensable.

77822

**Activating screws** 

Black sealing ring. Dosage time at +20 °C.

For lubrication systems FUTURA and CLASSIC.



77822 101



Lubricant type	Dosing time months	Screw colour	77820		77822	
SF 01	-	-		101		
SF 04	-	-	#	102		
	1	yellow				101
	3	green				102
	6	red				103
	12	grey				104

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