Pressure generators

Pressure generator

To use your „tool“ Bolt tensioning device or Hydraulic torque wrench and your „machine element“ Hydraulic nut optimally, we configure for you the following pressure generators in the pressure areas 1,000 bar, 1,600 bar and 2,500 bar.

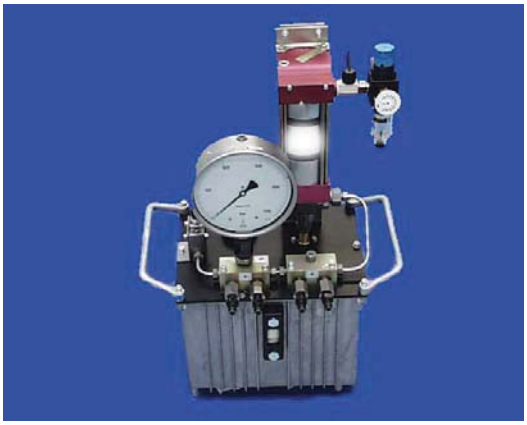
The product line is subdivided into the field

- Manuel, grease
- Manuel, oil
- Air driven
- Electrical driven

So that you can select the most economical solution for you

These demonstrated performance are the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution suitable for you. Also see equipment variations as well as accessories

Hand lever pump



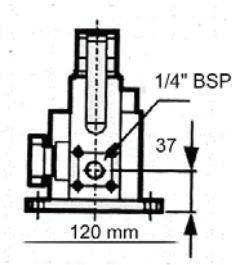
Air-hydraulic pump

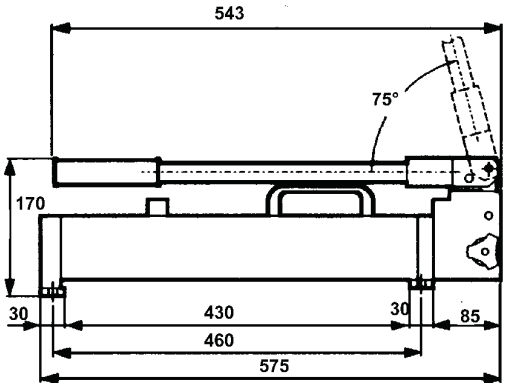
Electrohydraulic pump

Pressure intensifier

Grease gun

Pressure generator
Hand-Lever-Pump 1,000 bar





KHDP 1000...

Specification:
- ⇨ Pressure up to a maximum of **1,000** bar
- ⇨ Designed according to **CE** and **ISO 9001**
- ⇨ Two-staged (automatic reversible)
- ⇨ Adjustable pressure relief valve
- ⇨ Carrying handle
- ⇨ Robust performance
- ⇨ Small weight

Article-No.	Pressure gauge-terminal block	**Pressure gauge** ∅ 100, 0-1,000 bar, Cat. 1.0, glycerinfilled, dial graduation 20 bar	Connecting		High-pressure fast-lock coupling (Female)
			Inside	Outside	
KHDP10001000	no	no *	¼ BSP	-	no
KHDP10002000	no	no *	-	G ¼“, 60° DK	no
KHDP10003000	no	no *	-	G ¼“	yes
KHDP10004000	yes	yes	¼ BSP	-	no
KHDP10005000	yes	yes	-	G ¼“, 60° DK	no
KHDP10006000	yes	yes	-	G ¼“	yes

This demonstrated performance is the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution suitable for you.

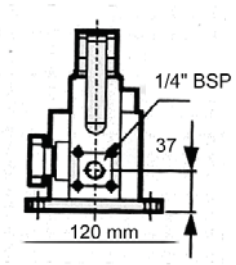
Standard
- ➢ 1. Stage up to 30 bar
  Oil output volume 32 cm³/stroke
- ➢ 2. Stage up to 1,000 bar
  Oil output volume 1,6 cm³/Hub
- ➢ Tank contents 1,9 l
- ➢ Usable contents 1,5 l
- ➢ Weight ca. 6,8 kg
- ➢ Lever effort 370 N
  according to DIN 360 N
- ➢ Oilfilled, tested and vented
- ➢ One Connector

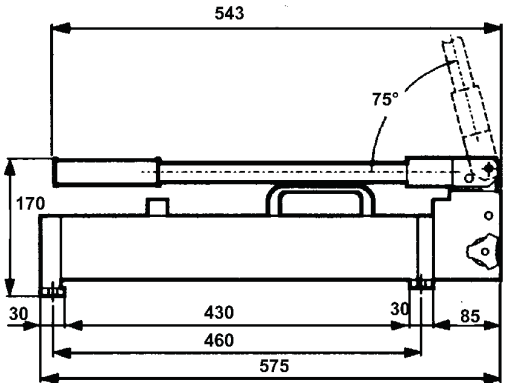
Options
- ➢ Other connecting threads
  see catalogue-sheet
- ➢ Other manometer
  see catalogue sheet
- ➢ Manifold blocks
  see catalogue sheet
- ➢ High pressure hoses
  see catalogue
- ➢ Tank capacity 4 l and/or 8 l
- ➢ Carrying case
- ➢ Distributing valve as mounting valve

* Remark:
If you use a suitable pressure gauge in your equipment,choose a performance from KHDP10001000 up to KHDP10003000 pressure gauge).
If no pressure gauge is available, please choose a performance from KHDP10004000 up to KHDP10006000(with pressure gauge)

Never use your hydraulic system **without** a pressure gauge.

Pressure generator
Hand-Lever-Pump 1,600 bar





KHDP 1600...

Specification:
- ⇨ Pressure up to a maximum of **1,600** bar
- ⇨ Designed according to **CE** and **ISO 9001**
- ⇨ Two-staged (automatic reversible)
- ⇨ Adjustable pressure relief valve
- ⇨ Carrying handle
- ⇨ Robust performance
- ⇨ Small weight

Article-No.	Pressure gauge-terminal block	**Pressure gauge** ∅ 100, 0-1,600 bar, Cat. 1.0, glycerinfilled, dial graduation 20 bar	Connecting		High-pressure fast-lock coupling (Female)
			Inside	Outside	
KHDP16001000	no	no *	¼ BSP	-	no
KHDP16002000	no	no *	-	G ¼“, 60° DK	no
KHDP16003000	no	no *	-	G ¼“	yes
KHDP16004000	yes	yes	¼ BSP	-	no
KHDP16005000	yes	yes	-	G ¼“, 60° DK	no
KHDP16006000	yes	yes	-	G ¼“	yes

This demonstrated performance is the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution suitable for you.

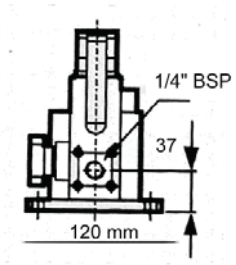
Standard
- ➢ 1. Stage up to 20 bar
  Oil output volume 32 cm³/stroke
- ➢ 2. Stage up to 1,600 bar
  Oil output volume 1,6 cm³/Hub
- ➢ Tank contents 1,9 l
- ➢ Usable contents 1,5 l
- ➢ Weight ca. 6,8 kg
- ➢ Lever effort 460 N
  according to DIN 360 N
- ➢ Oilfilled, tested and vented
- ➢ One Connector

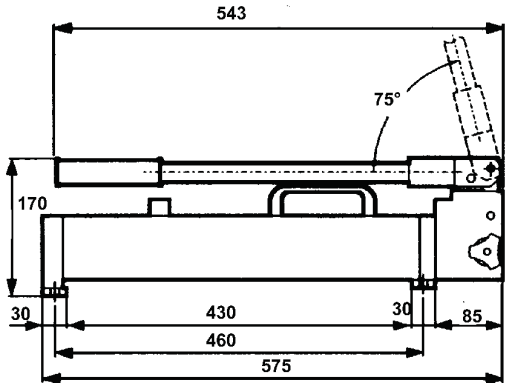
Options
- ➢ Other connecting threads
  see catalogue-sheet
- ➢ Other manometer
  see catalogue sheet
- ➢ Manifold blocksail
  see catalogue sheet
- ➢ High-pressure hoses
  see catalogue
- ➢ Tank capacity 4 l and/or 8 l
- ➢ Carrying case

* Remark:
If you use a suitable pressure gauge in your equipment,choose a performance from KHDP16001000 up to KHDP16003000 pressure gauge).
If no pressure gauge is available, please choose a performance from KHDP16004000 up to KHDP16006000(with pressure gauge)

Never use your hydraulic system **without** a pressure gauge.

Pressure generator
Hand-Lever-Pump 2,500 bar





KHDP 2500...

Specification:
- ⇨ Pressure up to a maximum of **2,500** bar
- ⇨ Designed according to **CE** and **ISO 9001**
- ⇨ Two-staged (automatic reversible)
- ⇨ Adjustable pressure relief valve
- ⇨ Carrying handle
- ⇨ Robust performance
- ⇨ Small weight

Article-No.	Pressure gauge-terminal block	**Pressure gauge** ∅ 100, 0-2,500 bar, Cat. 1.0, glycerinfilled, dial graduation 20 bar	Connecting		High-pressure fast-lock coupling (Female)
			Inside	Outside	
KHDP25001000	no	no *	¾"-16UNF	-	no
KHDP25002000	no	no *	-	9/16"UNF 60° DK	no
KHDP25003000	no	no *	-	¼ BSP	yes
KHDP25004000	yes	yes	¾"-16UNF	-	no
KHDP25005000	yes	yes	-	9/16"UNF 60° DK	no
KHDP25006000	yes	yes	-	¼ BSP	yes

This demonstrated performance is the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution suitable for you.

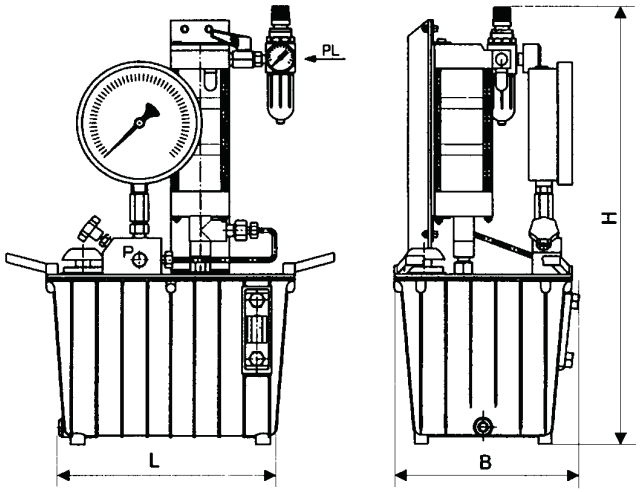
Standard
- ➢ 1. Stage up to 20 bar
  Oil output volume 32 cm³/stroke
- ➢ 2. Stage up to 2,500 bar
  Oil output volume 0,9 cm³/Hub
- ➢ Tank contents 1,9 l
- ➢ Usable contents 1,5 l
- ➢ Weight ca. 6,8 kg
- ➢ Lever effort 450 N
  according to DIN 360 N
- ➢ Oilfilled, tested and vented
- ➢ One Connector

Options
- ➢ Other connecting threads
  see catalogue-sheet
- ➢ Other manometer
  see catalogue sheet
- ➢ Manifold blocks
  see catalogue sheet
- ➢ High pressure hoses
  see catalogue
- ➢ Tank capacity 4 l and/or 8 l
- ➢ Carrying case
- ➢ Distributing valve as mounting valve

* Remark:
If you use a suitable pressure gauge in your equipment,choose a performance from KHDP25001000 up to KHDP25003000 pressure gauge).
If no pressure gauge is available, please choose a performance from KHDP25004000 up to KHDP25006000(with pressure gauge)

Never use your hydraulic system **without** a pressure gauge.

Pressure generator
Air-Hydraulic-Pump 1,000 bar



KLDP 1000...

Specification:
- ⇨ Pressure up to a maximum of **1,000** bar
- ⇨ 6,5 l tank capacity
- ⇨ transportable
- ⇨ Pressure exit ¼ BSP
- ⇨ Manometer 0-1,000 bar, ∅ 100, Category 1.0, glycerinfilled, dial graduation 20 bar
- ⇨ Compression-air condition consisting of: filter, water separator, pressure regulator, air pressure manometer
- ⇨ air pressure shutoff valve
- ⇨ safety valve air sided
- ⇨ pressure medium oil

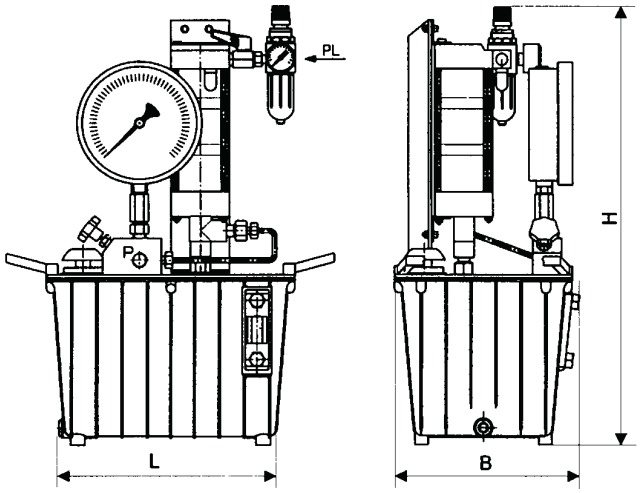
Article-Number	Max. hydraulic-pressure in bar	Safety valve air sided	Gear ratio	Stroke volume (rated) in cm^3	Flow rate l/min	L x B x H in mm
KLDP10001000	1,000	5,5	1 : 200	0,51	0,50	310 x 240 x 360
KLDP10002000	1,000	2,5	1 : 400	0,51	0,18	310 x 240 x 490
KLDP10003000	1,000	2,0	1 : 600	0,51	0,12	310 x 240 x 560

This demonstrated performance is the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution suitable for you.

Standard
- ➢ Oil filled, proofed and decompressed
- ➢ Stress relief valve (pressure out flow) in the connector bolt
- ➢ 1 connector with high pressure fast-lock coupling

Options
- ➢ Safety valve (oil sided)
- ➢ Movable on wheels
- ➢ Tank capacity 13 l and/or 30 l
- ➢ Other connecting threads see catalogue-sheet
- ➢ Other manometer see catalogue sheet
- ➢ Manifold blocks see catalogue sheet
- ➢ Other gear ratio as required
- ➢ High-pressure hoses see catalogue
- ➢ Separate tank movement connector

Pressure generator
Air-Hydraulic-Pump 1,600 bar



KLDP 1600...

Specification:
- ⇨ Pressure up to a maximum of **1,600** bar
- ⇨ 6,5 l tank capacity
- ⇨ transportable
- ⇨ Pressure exit ¼ BSP
- ⇨ Manometer 0-1,600 bar, ∅ 100, Category 1.0, glycerinfilled, dial graduation 20 bar
- ⇨ Compression-air condition consisting of: filter, water separator, pressure regulator, air pressure manometer
- ⇨ air pressure shutoff valve
- ⇨ safety valve air sided
- ⇨ pressure medium oil

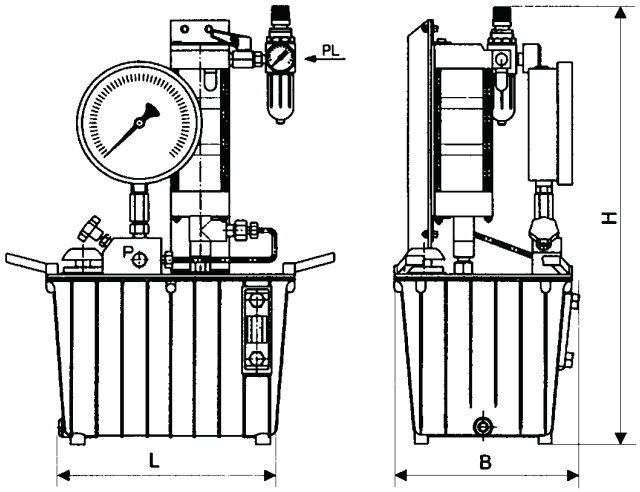
Article-Number	Max. hydraulic-pressure in bar	Safety valve air sided	Gear ratio	Stroke volume (rated) in cm^3	Flow rate l/min	L x B x H in mm
KLDP16001000	1,600	4,5	1 : 400	0,51	0,18	310 x 240 x 490
KLDP16002000	1,600	3,0	1 : 600	0,51	0,12	310 x 240 x 560

This demonstrated performance is the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution fitting for you.

Standard
- ➢ Oil filled, proofed and decompressed
- ➢ Stress relief valve (pressure out flow) in the connector bolt
- ➢ 1 connector with high pressure fast-lock coupling

Options
- ➢ Safety valve (oil sided)
- ➢ Movable on wheels
- ➢ Tank capacity 13 l and/or 30 l
- ➢ Other connecting threads see catalogue-sheet
- ➢ Other manometer see catalogue sheet
- ➢ Manifold blocks see catalogue sheet
- ➢ Other gear ratio as required
- ➢ High-pressure hoses see catalogue
- ➢ Separate tank movement connector

Pressure generator
Air-Hydraulic-Pump 2,500 bar



KLDP 2500...

Specification:
- ⇨ Pressure up to a maximum of **2,500** bar
- ⇨ 6,5 l tank capacity
- ⇨ transportable
- ⇨ Pressure exit ¼ BSP
- ⇨ Manometer 0-2,500 bar, ∅ 100, Category 1.0, glycerinfilled, dial graduation 20 bar
- ⇨ Compression-air condition consisting of: filter, water separator, pressure regulator, air pressure manometer
- ⇨ air pressure shutoff valve
- ⇨ safety valve air sided
- ⇨ pressure medium oil

Article-Number	Max. hydraulic-pressure in bar	Safety valve air sided	Gear ratio	Stroke volume (rated) in cm^3	Flow rate l/min	L x B x H in mm
KLDP25001000	2,500	6,5	1 : 400	0,51	0,18	310 x 240 x 490
KLDP25002000	2,500	4,5	1 : 600	0,51	0,12	310 x 240 x 560

This demonstrated performance is the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution suitable for you.

Standard
- ➢ Oil filled, proofed and decompressed
- ➢ Stress relief valve (pressure out flow) in the connector bolt
- ➢ 1 connector with high pressure fast-lock coupling

Options
- ➢ Safety valve (oil sided)
- ➢ Movable on wheels
- ➢ Tank capacity 13 l and/or 30 l
- ➢ Other connecting threads see catalogue-sheet
- ➢ Other manometer see catalogue sheet
- ➢ Manifold blocks see catalogue sheet
- ➢ Other gear ratio as required
- ➢ High pressure hoses see catalogue
- ➢ Separate tank movement connector

Electro hydraulic aggregate KEDP

The electric pressure generator is particularly optimized for fast continuous pressure generation combined with high flow rates.

A pressure of up to 2500bar can be reached with the AS Tech electro hydraulic aggregate EDP, at the same time achieving high flow rates. Optionally a bi-directional wireless remote control allows you to build up and release pressure as well as continually display the current pressure.
Various equipment configurations are available allowing a perfect balance between your own operations, size and efficiency.

What exactly does the electric hydraulic aggregate do?

With the electric driven pump you can deliver a flow rate of up to 8l/min in the low-pressure range (up to 230 bar).
Above 230 bar the aggregate changes into high pressure range and can deliver a constant 0,9l/min.
The smaller flow rate serves only to reach the high pressure, all piston volumes such as the hoses have been completed in the low pressure range.
The pressure is built up and discharged by a cable remote control, discharging is also possible by a hand drain valve in cases of emergency.
Optionally the pump can be driven by our wireless remote control KEZB 25001001. The wireless remote operates within a range of up to 300m, ensuring the highest security for personnel using high pressure hydraulics. The remote constantly displays the current pressure and applying as well as discharging pressure can be controlled.
The wireless remote is also the base unit required for automatic documentation. Sensor information is automatically logged in the remote control unit, which can be downloaded to a PC for automatic generation of printout or electronic documentation. For further information, check the product brochure for the wireless remote option.
An exact configuration table as well as technical details can be found on the following page.
Typical applications of the electro hydraulic aggregate are by assembling machines with a lot of screw connections or by drawing on bearings.

Design Abbreviation	KEDP	XX	X	X	X	X	X	X
Pressure rating[bar]	Code number	16	X	X	X	X	X	X
1000	10							
1600	16							
2500	25							
Motor Voltage/ Frequency[V/Hz]	Code number	xx	1	X	X	X	X	X
110/60	0							
230/50	1							
360;460/50;60	2							
400	3							
Tank volume[l]	Code number	xx	x	2	X	X	X	X
20	2							
30	3							
Connectors	Code number	xx	x	x	2	X	X	X
1	1							
2	2							
4	4							
Transport type	Code number	xx	x	x	x	1	X	X
Carrying handle	0							
Carrying handle with frame	1							
Carrying handle with frame and sand sheet for slack soil	2							
mobile	3							
Mobile with frame	4							
Pressure reduction	Code number	xx	x	x	x	x	1	X
Manually actuated	0							
Electrically actuated	1							
Wireless Remote System	2							
Motor Power	Code number	xx	x	x	x	x	x	1
0,75 kW	0							
1,1 kW	1							
1,5 kW	2							

The advantages at a glance

- Independent operation by own power supply at any already existing plant / machine possible	- Various equipment available for optimized handling adapted to our customers requirements
- Optional wireless operation	- Effective fatigue-free working
- Automatic logging of the measured data	- Automatic archiving
- Real time documentation	- Pressures up to 2500 bar
- High flow rate	- Excel Export of recorded data

Pressure intensifier up to 2500 bar

Technical data :

- Maximum pressure 2500 bar
- Flow rate volume 0.6 l/min
- Pressure ratio 1:13
- Infinite pressure adjustment from 200 bar to 2500 bar
- 2 or 4 consumer connections optional
- Equipped with quick-release couplings / nipples
- Rugged design with carrying handle
- Weight approx. 17 kg

The pressure converter KHDU creates a maximum hydraulic pressure of 2500 bar in conjunction with an existing low-pressure pump unit.

If, for example, you have used your low pressure pump unit in the past exclusively for hydraulic wrenches up to 700 bar, you can employ the pressure intensifier with the hydraulic pump for tensioning with bolt tensioning devices up to 2500 bar.

The unit operates with the flow rate of your pump unit up to 20 bar.
From 20 bar low pressure, the pressure intensifier switches over automatically and supplies a continuous flow of 0.6 l/min up to 2500 bar.

The pressure converter is suitable for connection to **existing** hydraulic pump unit with supply/return functions made by **all manufacturers**.

The field of application of the pressure intensifier is almost boundless.
It is used in all branches of industry requiring high-pressure hydraulic.

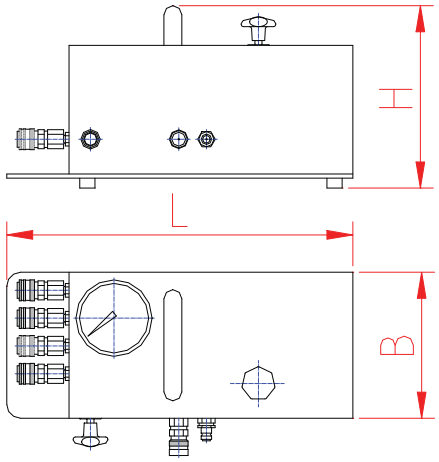
The pressure intensifier has particular advantages in applications where hand-lever pumps were employed. In these cases, the assembly times can be considerably shortened and work can be conducted without tiring.

Apart from bolt tensioning devices and hydraulic nuts, the typical applications include pushing on and pulling off shaft / hub connections.

Convince yourself, please call us.

Pressure generator

Pressure intensifier 1600 and 2500 bar



KHDU 16/25...

Features:

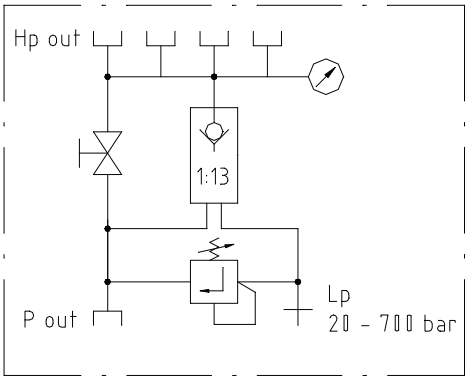
- ⇨ Maximum pressure up to **2500** bar
- ⇨ pressure ratio 1:13
- ⇨ For connection to continuously operating pump units from 20 bar to 700 bar
- ⇨ Matches all units for hydraulic torque wrench
- ⇨ Filtering 10 µm to ISO 4406
- ⇨ Pressure gauge, ∅ 100, Cl. 1,0, glycerine-damped, graduation 20 bar
- ⇨ Pressure limiting valve adjustable
- ⇨ Rugged design with carrying handle
- ⇨ Weight approx.17 kg

1600 bar KHDU 16...

Article number	Flow rate in l/min		Operating pressure in bar		Dimensions		
	In max	Out max	In max	Out max	L	W	H
KHDU16001002	12	0.6	700	1600	500	210	250
KHDU16001004	12	0.6	700	1600	500	210	250

2500 bar KHDU 25...

Article number	Flow rate in l/min		Operating pressure in bar		Dimensions		
	In max	Out max	In max	Out max	L	W	H
KHDU25001002	12	0.6	700	2500	500	210	250
KHDU25001004	12	0.6	700	2500	500	210	250



The last digit of the article number designates the **number of outlets**

The design shown here represents the most frequently employed unit. If a different design is required, we would be delighted to quickly produce a suitable solution for you.

Standard design

- ➢ Outlet: Manifold block with 2 or 4 high-pressure, fast-lock couplings
- ➢ Inlet: Connector block with fast-lock coupling and -nipple
- ➢ Manual pressure relief valve
- ➢ Oil-filled and tested
- ➢ Infinite pressure adjustment
- ➢ No further energy supply necessary

Options

- ➢ Other manifold blocks
- ➢ Other pressure gauges
- ➢ Other quick-release couplings
- ➢ Mobile

Pressure generator

The hydraulic pressure boosters offer a full range of dedicated solutions engineered to lower costs by turning low system pressure into high pressures ranges of 20 – 5,000 bar.

Output pressure (bar)	Average flowrate (l/min)	Input pressure (bar)	Input flowrate (l/min)	Connection	Weight (kg)	Pressure ratio	Type of booster
24 – 800	0.3 – 2.5	20 – 200	2.0 – 15.0	Tube	1.0	1.2 – 20.0	KHDM08001001
24 – 500	0.3 – 2.5	20 – 200	2.0 – 15.0	Manifold NG6/DO3	2.5	1.2 – 20.0	KHDM05001001
24 – 800	0.3 – 2.5	20 – 200	2.0 – 15.0	Tube	3.0	1.2 – 20.0	KHDM08002001
26 – 800	0.7 – 5.5	20 – 200	2.0 – 35.0	Tube	3.7	1.3 – 9.8	KHDM08003001
24 – 800	0.7 – 11.0	20 – 200	2.0 – 15.0	Tube	3.8	1.2 – 20.0	KHDM08004001
26 – 800	1.5 – 11.0	20 – 200	5.0 – 70.0	Tube	9.5	1.3 – 8.2	KHDM08005001
24 – 800	11.2 – 56.0	20 – 200	5.0 – 70.0	Tube	20.0	1.2 – 8.2	KHDM08006001
100 – 2000	0.3 – 1.6	20 – 200	2.0 – 14.0	Tube	1.5	5.0 – 20.0	KHDM16001001
100 – 2000	0.3 – 1.6	20 – 200	2.0 – 14.0	Tube	5.0	5.0 – 20.0	KHDM20001001
220 – 3000	0.3–1.8	20–200	5.0 – 20.0	Tube	9.9	8.2–25.0	KHDM25001001

» Application:

- Bolt tight
- Bolt disassembly
- Hydraulic wrench
- Railway tools
- Rescue tools
- Fixture

Pressure generator

» Boosters (1600bar)

Specification:

- ⇨ Pressure up to a maximum of 1600 bar
- ⇨ 5 pressure ratio
- ⇨ Design of reliable
- ⇨ Light weight

Article-number	Max. pressure(bar)	Pressure ratio	Input flowrate(l/min)	Output flowrate(l/min)
KHDM16001001	1600	5.0	14.0	1.6
KHDM16001002	1600	6.6	13.0	1.3
KHDM16001003	1600	9.0	13.0	0.9
KHDM16001004	1600	13.0	12.0	0.6
KHDM16001005	1600	20.0	12.0	0.3

Standard

- ➢ Connection: pipeline
- ➢ Output pressure: 1600 bar

Options

- ➢ Safe valve
- ➢ ourlet or inlet: G1/4" or 7/16-20 UNF

» Boosters (2500bar)

Article-number	Max. pressure(bar)	Pressure ratio	Input flowrate(l/min)	Output flowrate(l/min)
KHDM25001001	2500	25.0	20.0	0.3

Standard

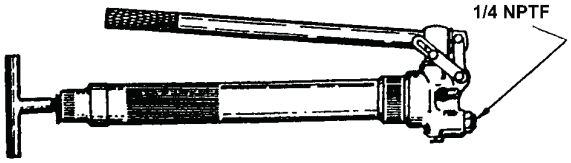
- ➢ Connection:tube
- ➢ Output pressure: 2500 bar

Options

- ➢ ourlet or inlet: G1/2" or 9/16-20 UNF

Pressure generator

Hand-lever-grease gun and accessories



KFDP...

Specification:

- ⇨ Max pressure up to **1,000** bar
- ⇨ Pressure media grease
- ⇨ Single-stage
- ⇨ For grease cartridge
- ⇨ With manometer
- ⇨ With depressurisation valve

Hand-lever-grease gunKFDP...

Article-number	Pressure area	Connector thread inner
KFDP04001001	0 - 400 bar	¼ NPTF
KFDP07001001	0 - 700 bar	¼ NPTF
KFDP10001001	0 – 1000 bar	¼ NPTF

Grease hoses KFUH...

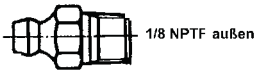
Article-number	Length in mm	Mounted with grease coupling
KFUH10001003	300	-
KFUH10002003	300	FUK10001001
KFUH10001005	500	-
KFUH10002005	500	FUK10001001

Grease coupling KFUK

Article-number	Connector thread
KFUK10001001	1/8 NPTF innen

Grease nipple KFUN

Article-number	Connector thread
KFUN10001001	1/8 NPTF außen



This demonstrated performance is the mostly used application. If another equipment option should be required, we are gladly ready to develop the solution suitable for you. Also see equipment variations as well as accessories .