

Combination pumps

Type KKP

LP: 160 bar / 0,35 to 4,60 cm³/rev
HP: 700 bar / 0,12 to 1,88 cm³/rev

Features

- Compact and light design
- Can be started at maximum pressure
- Self-priming
- Modular design

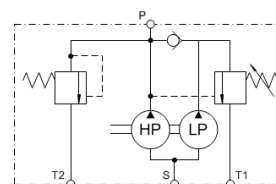


Design

- Integrated low-pressure unloading valve
- Integrated fail safe valve (not suitable for continuous operation, must not be used to restrict the system pressure!)
- With hollow shaft for direct mounting of motor without bell housing and coupling

Applications

- For applications that require high flow rates in the low pressure (LP) area and low flow rates in the high pressure (HP) area
- Presses
- Power units for industrial applications such as punching machines and rescue devices



Technical Data

Hydraulic fluid	Mineral oil according to DIN 51524 (other fluids on request)
Fluid temperature range	-20 up to 80 °C
Ambient temperature range	-30 up to 50 °C
Viscosity range	12 to 220 mm ² /s
Operation pressure at suction port	-0,2 bar to 0,5 bar (relative)
Max. operating pressure HP	700 bar
Max. operating pressure LP	60 bar resp. 160 bar (preset by producer)
Filtration (recommendation)	According to NAS 1638 class 6 resp. ISO/DIN 4406 17/15/12
Weight	See product information
Installation position	In oil reservoir (any)
Max. speed range	See Product information
Direction of rotation (position in tank)	Any
Suction height	Max. 150 bzw. 400 mm (see mounting, page 2)
Material	Eccentric shaft and valve block: steel Pump housing and gear pump: aluminium

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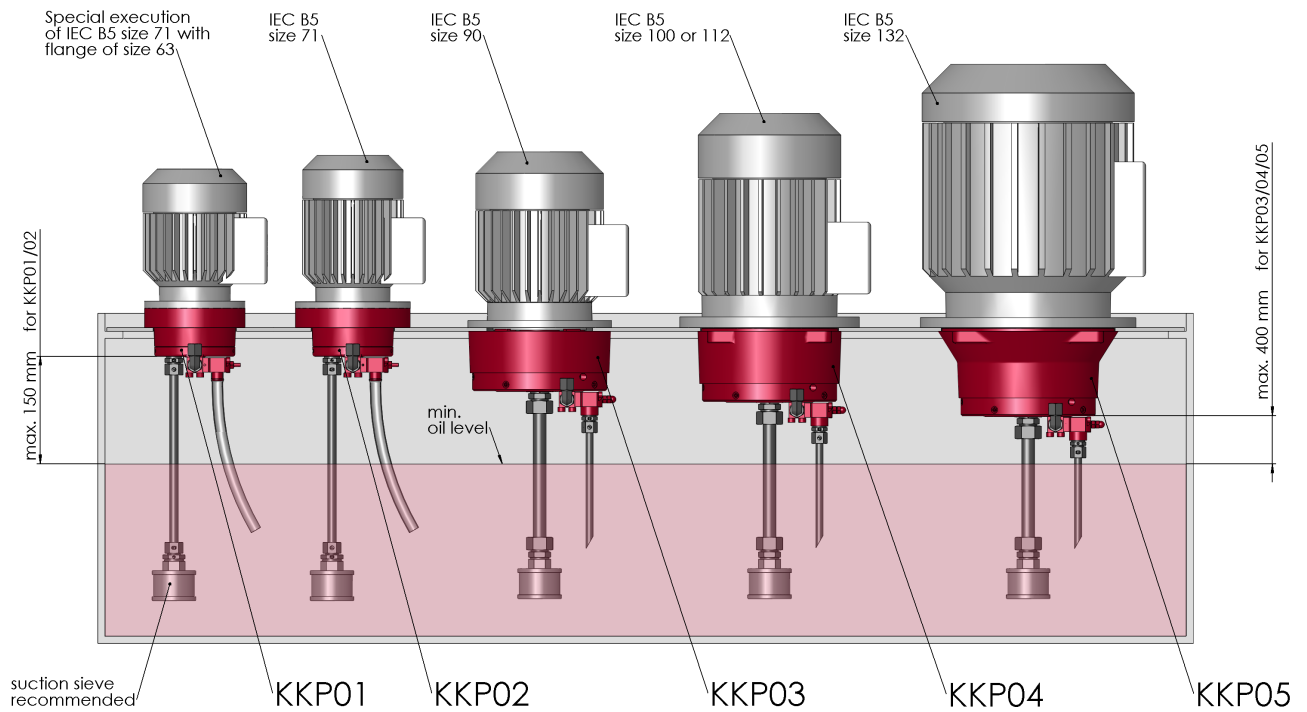
Ordering code

The diagram illustrates the assembly of a part number: **KKP 01 - 0,12 - 700 - 0,35 - 60 V - 00**. The assembly is shown in a tree structure with boxes for 'Combination pumps', 'Size' (01-05), 'Displacement HP [cm³/rev]', 'Max. operating pressure HP [bar]', 'Displacement LP [cm³/rev]', 'Max. operating pressure LP [bar]', 'Seal material', 'Special design' (01-99, 00 for Standard), 'Part index' (Please leave it blank), and 'Design revision' (see dimension drawings).

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Mounting



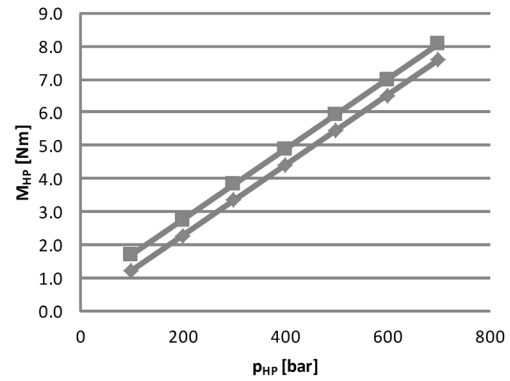
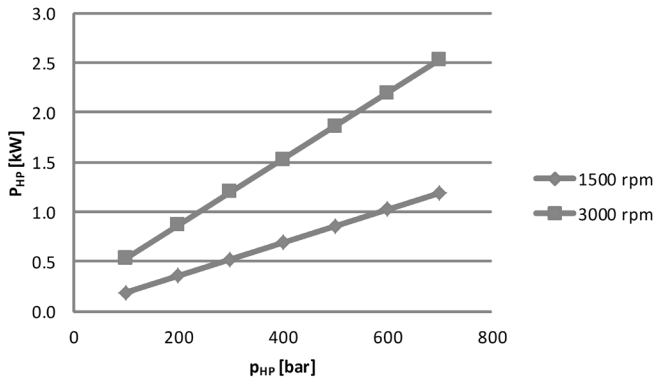
Type KKP
LP: 160 bar/0,35 to 4,60 cm ³ /rev HP: 700 bar/0,12 to 1,88 cm ³ /rev

Product information

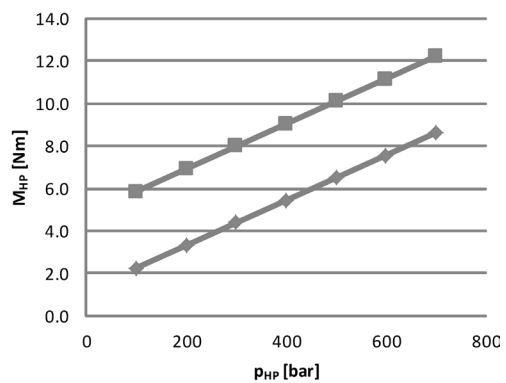
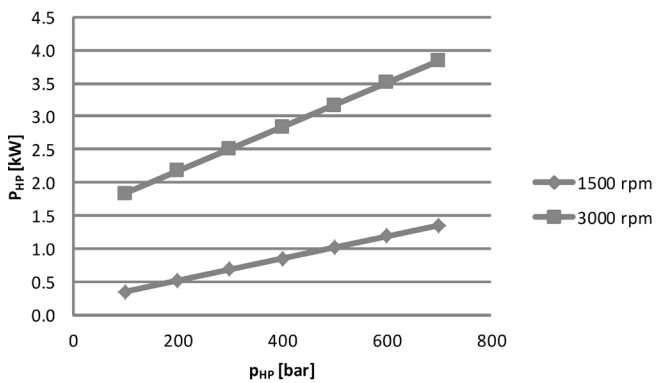
Size	HP mode			LP mode			Speed max. [rpm]	Weight ca.[kg]	Part No.
	Displacement [cm ³ /rev]	Operating pressure max. [bar]	Number of pumping element	Displacement (HP + LP) [cm ³ /rev]	Unloading pressure max. [bar]	Number of pumping element			
01	0,24	700	2	2,08	60	2	3600	1,9	4002107
01	0,24	700	2	2,65	60	2	2000	1,9	4002101
02	0,17	700	1	1,11	60	2	3600	2,0	4002108
02	0,17	700	1	2,02	60	2	3600	2,0	4002109
02	0,24	700	2	1,18	60	2	3600	2,0	4002110
02	0,24	700	2	2,08	60	2	3600	2,0	4002111
02	0,24	700	2	2,65	60	2	2000	2,0	4002112
02	0,34	700	2	2,75	60	2	2000	2,0	3944926
03	0,47	700	3	0,94	160	3	2000	7,9	4002154
03	0,47	700	3	1,15	160	3	2000	7,9	4002155
03	0,47	700	3	1,68	160	3	2000	7,9	4002156
03	0,47	700	3	2,00	160	3	2000	7,9	4002157
03	0,47	700	3	2,36	160	3	2000	7,9	4002158
03	0,47	700	3	3,19	160	3	2000	7,9	4002159
03	0,68	700	3	1,36	160	3	2000	7,9	4002160
03	0,68	700	3	1,88	160	3	2000	7,9	4002161
03	0,68	700	3	2,21	160	3	2000	7,9	4002162
03	0,68	700	3	2,56	160	3	2000	7,9	4002163
04	0,68	700	3	3,39	160	3	2000	8,4	3961199
04	1,21	700	3	2,41	160	3	2000	8,4	4002164
04	1,21	700	3	2,73	160	3	2000	8,4	4002165
04	1,21	700	3	3,09	160	3	2000	8,4	4002166
04	1,21	700	3	3,92	160	3	2000	8,4	4002167
04	1,53	700	3	3,05	160	3	2000	8,4	4002168
04	1,53	700	3	3,41	160	3	2000	8,4	4002169
04	1,53	700	3	4,24	160	3	2000	8,4	4002170
04	1,88	700	3	3,77	160	3	2000	8,4	4002171
04	1,88	700	3	4,60	160	3	2000	8,4	4002172
05	2,71	625	3	5,43	160	3	2000	8,4	4002173

Driving motor power and torque: KKP 01 und 02

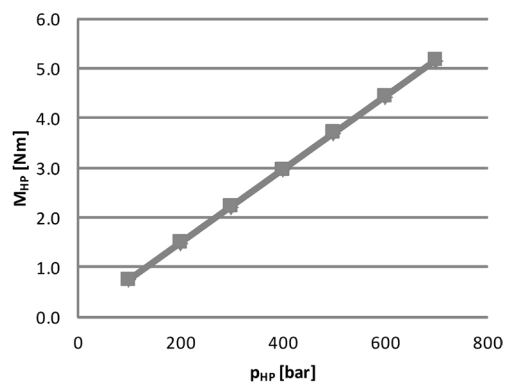
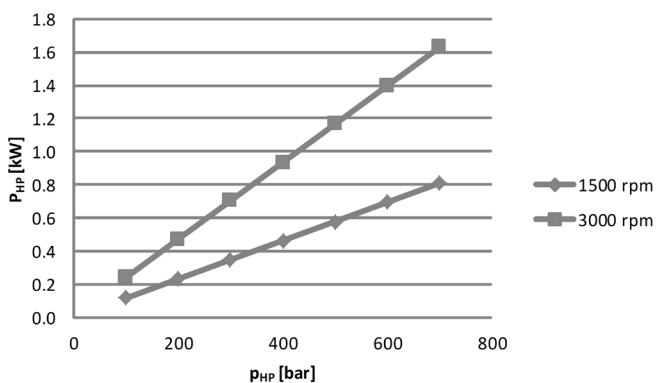
KKP...-0,17-700-1,11-60



KKP...-0,17-700-2,02-60



KKP...-0,24-700-0,57-60

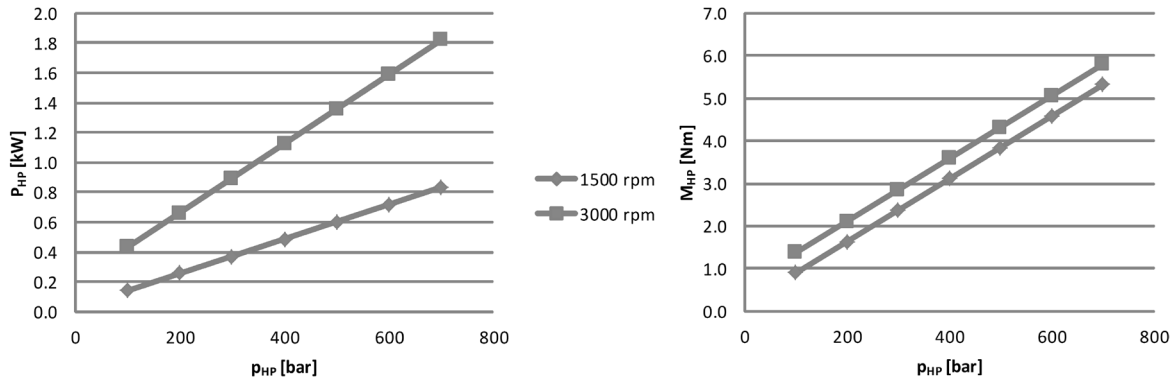


Type KKP

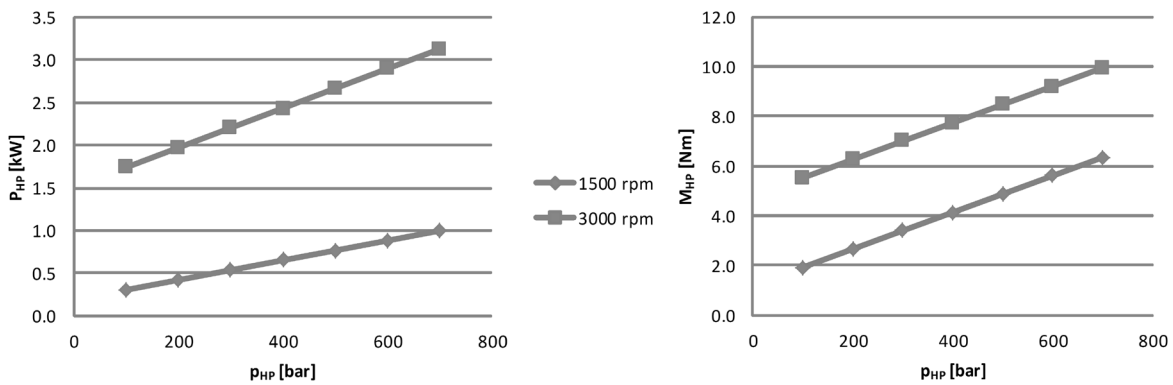
LP: 160 bar/0,35 to 4,60 cm³/rev

HP: 700 bar/0,12 to 1,88 cm³/rev

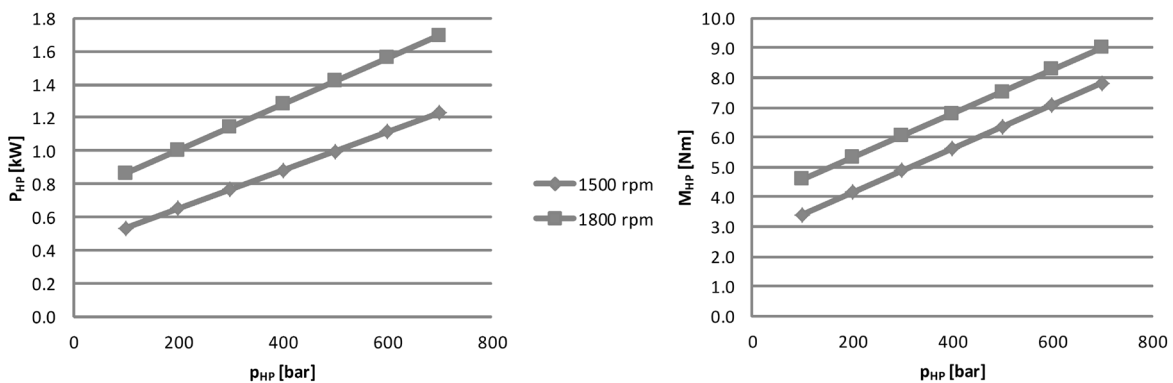
KKP...-0,24-700-1,18-60



KKP...-0,24-700-2,08-60



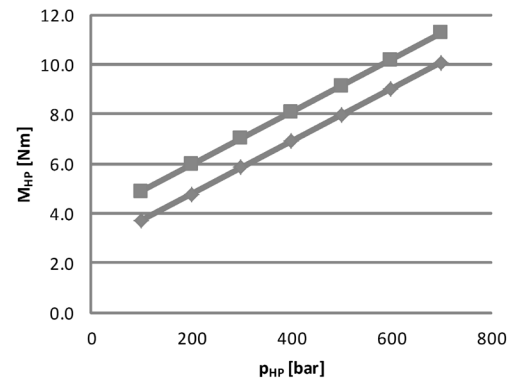
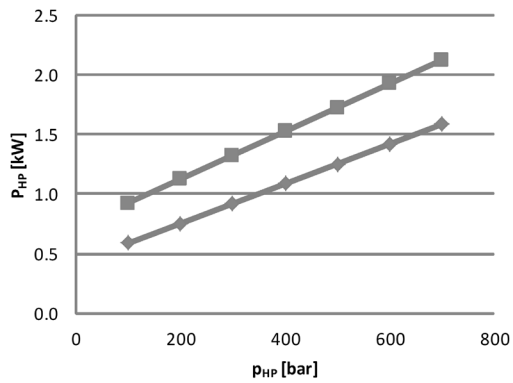
KKP...-0,24-700-2,65-60



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KKP...-0,34-700-2,75-60

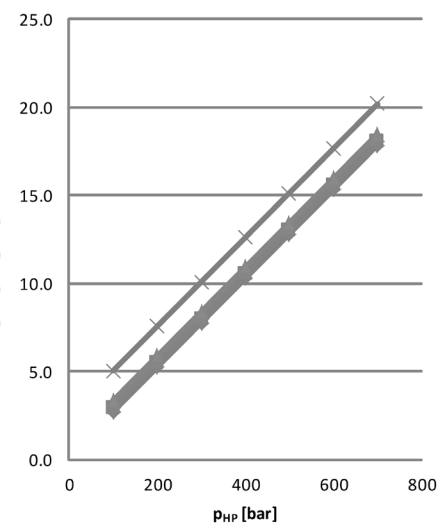
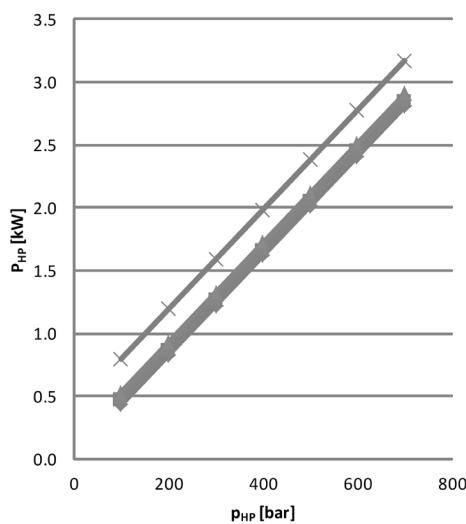
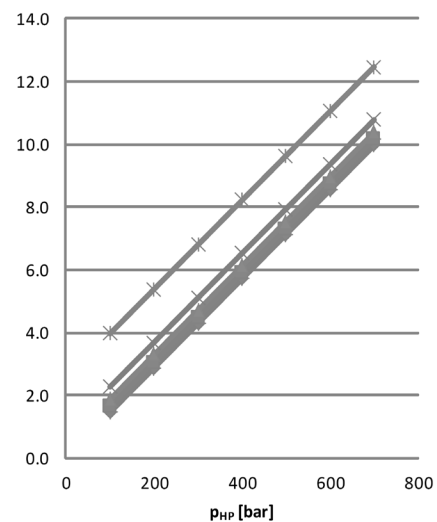
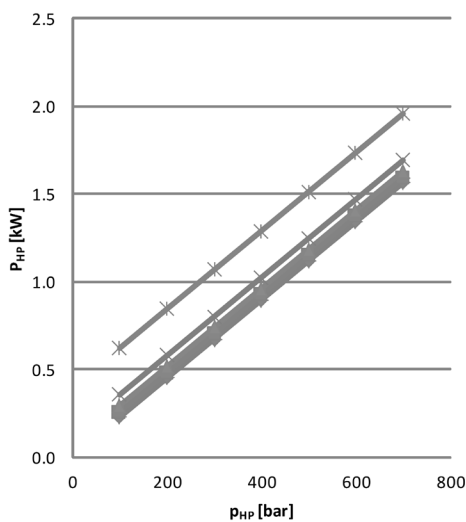
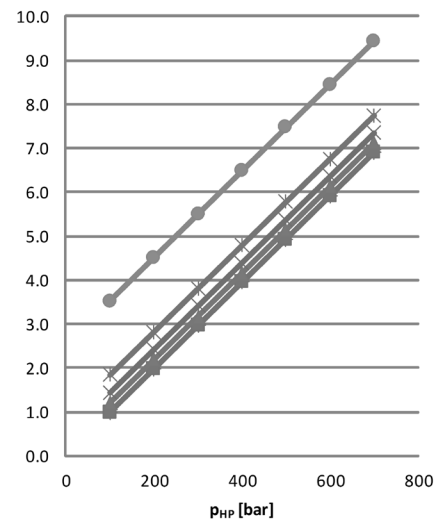
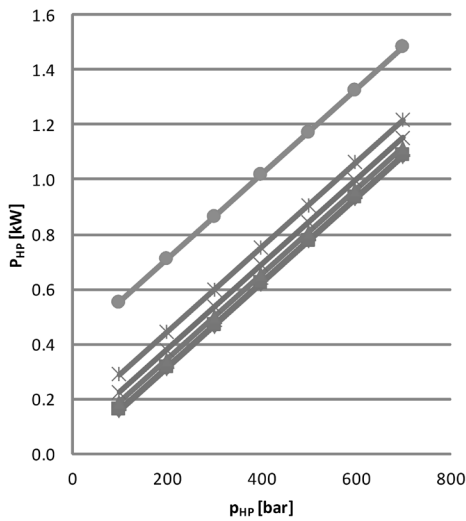


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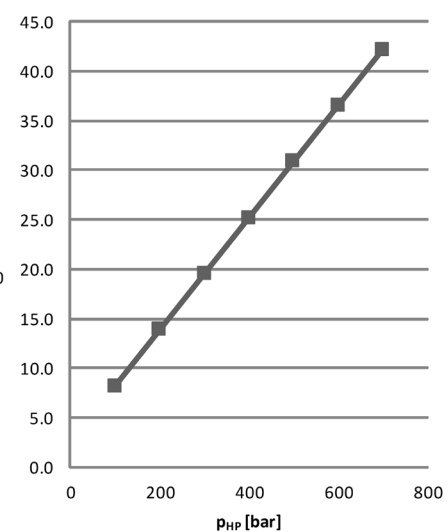
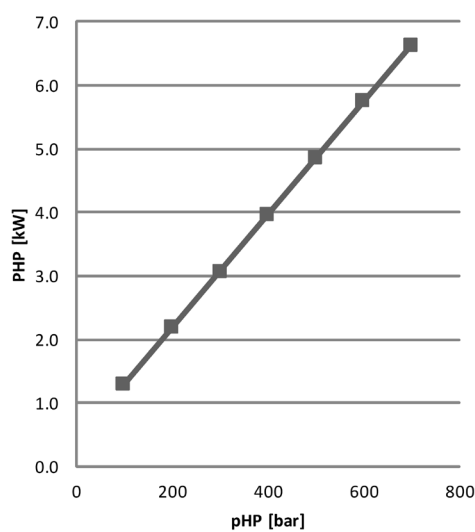
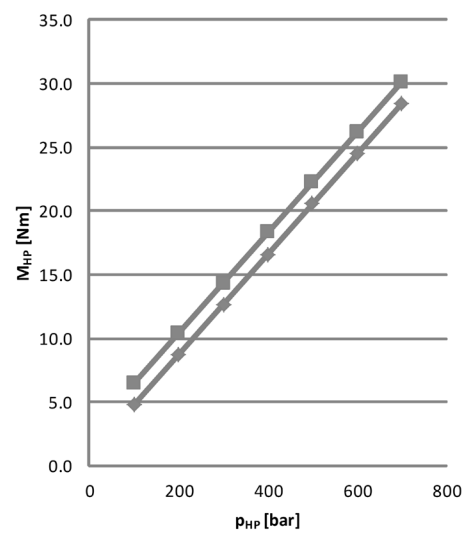
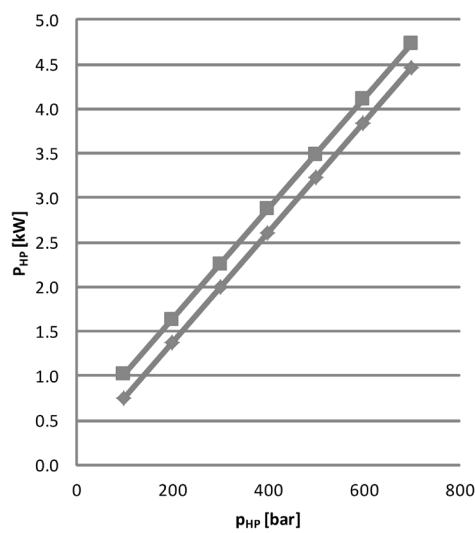
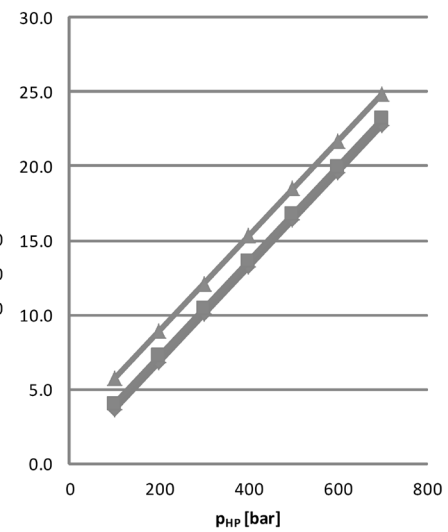
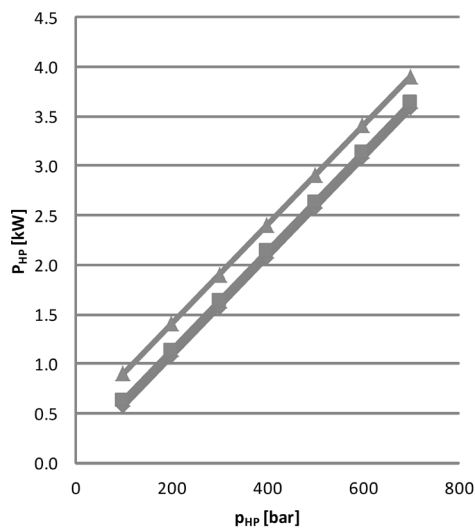
HP: 700 bar/0,12 to 1,88 cm³/rev

Driving motor power and torque: KKP 03, 04 und 05



Type KKP

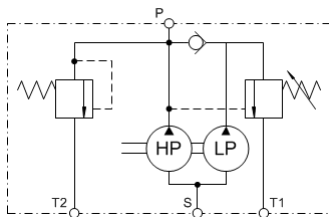
LP: 160 bar/0,35 to 4,60 cm³/rev
HP: 700 bar/0,12 to 1,88 cm³/rev



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LP: 160 bar/0,35 to 4,60 cm³/rev
HP: 700 bar/0,12 to 1,88 cm³/rev

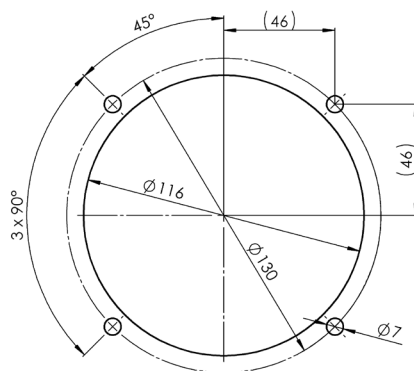
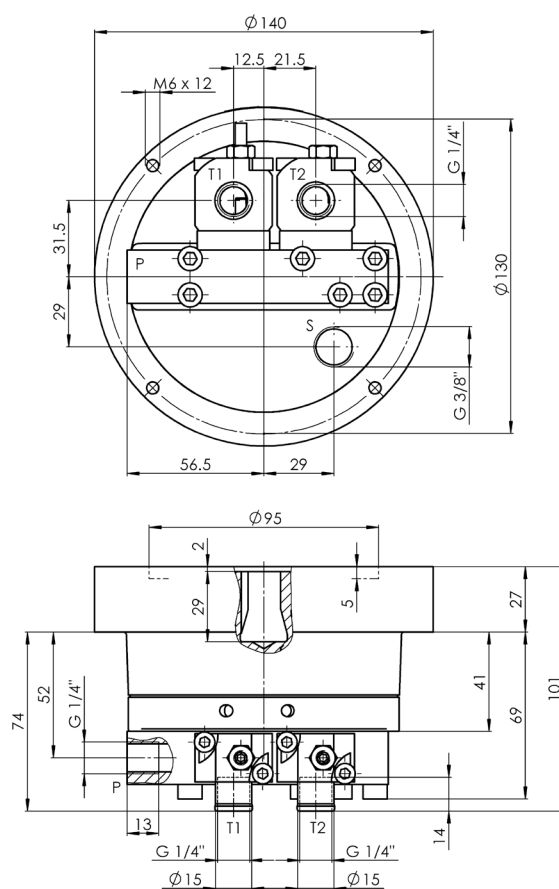
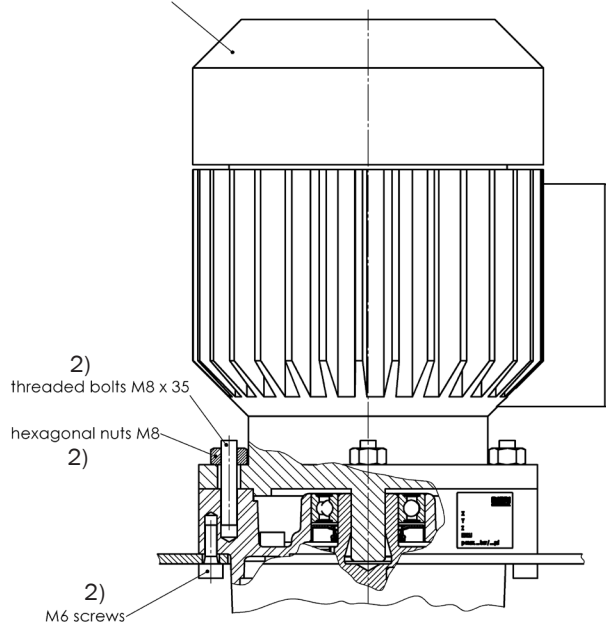
Hydraulic schematic



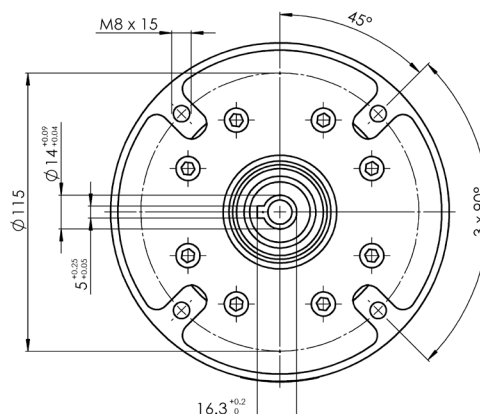
Dimensional drawings

Size KKP01 / Design revision A

special motor size 71 2)
with B5 flange
dimensions of size 63



tank lid bore pattern

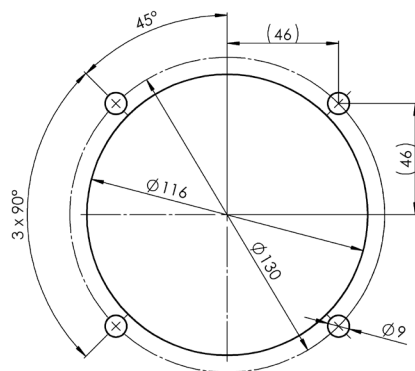
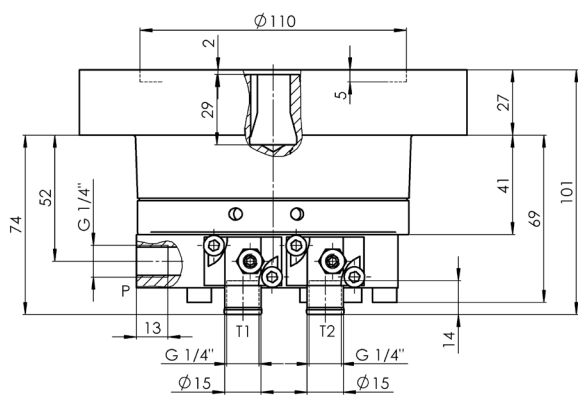
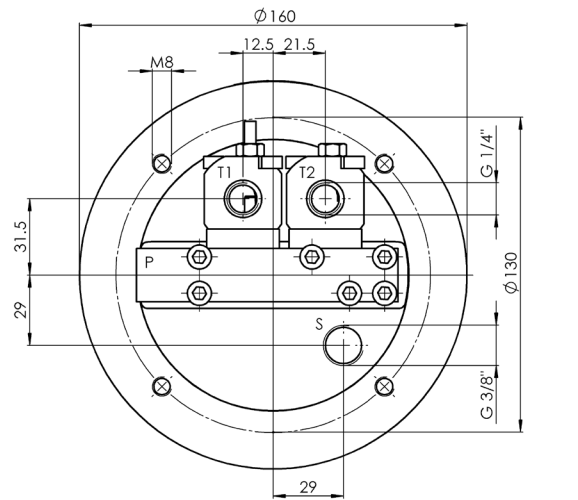
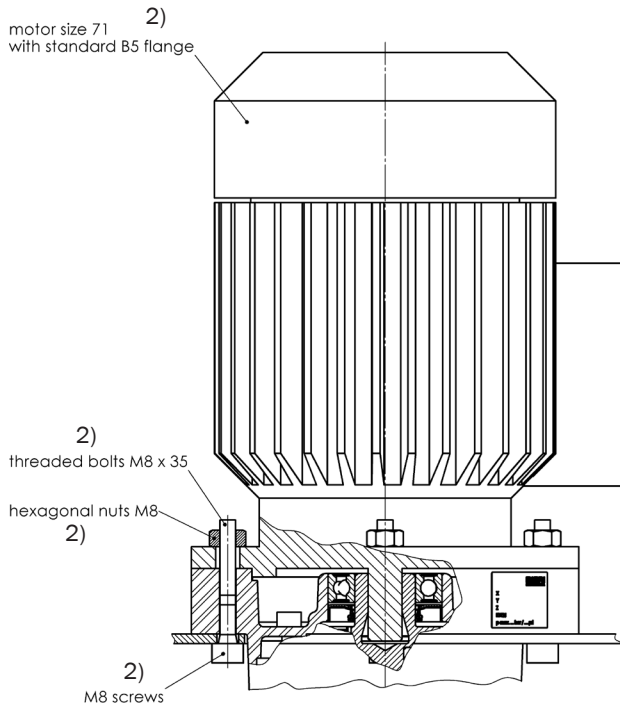


2) Not included in the scope of supplier

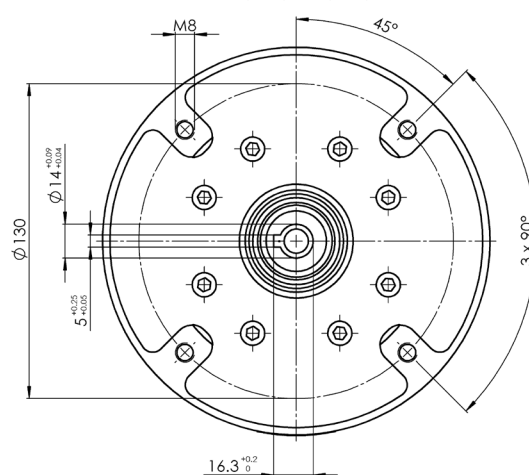
Type KKP

LP: 160 bar/0,35 to 4,60 cm³/rev
HP: 700 bar/0,12 to 1,88 cm³/rev

Size KKP02 / Design revision A



tank lid bore pattern

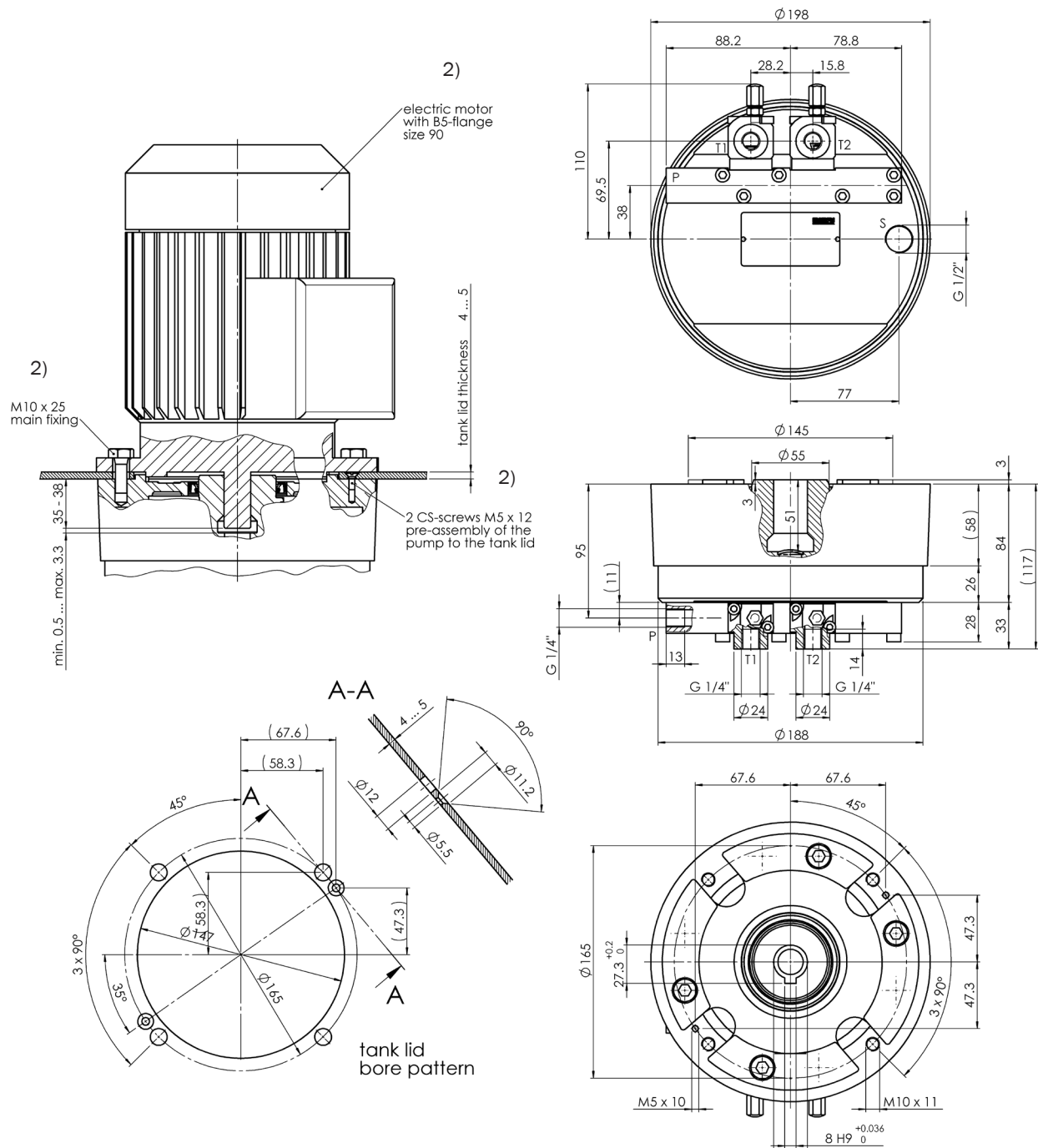


2) Not included in the scope of supplier

Type KKP

LP: 160 bar/0,35 to 4,60 cm³/rev
HP: 700 bar/0,12 to 1,88 cm³/rev

Size KKP03 / Design revision B

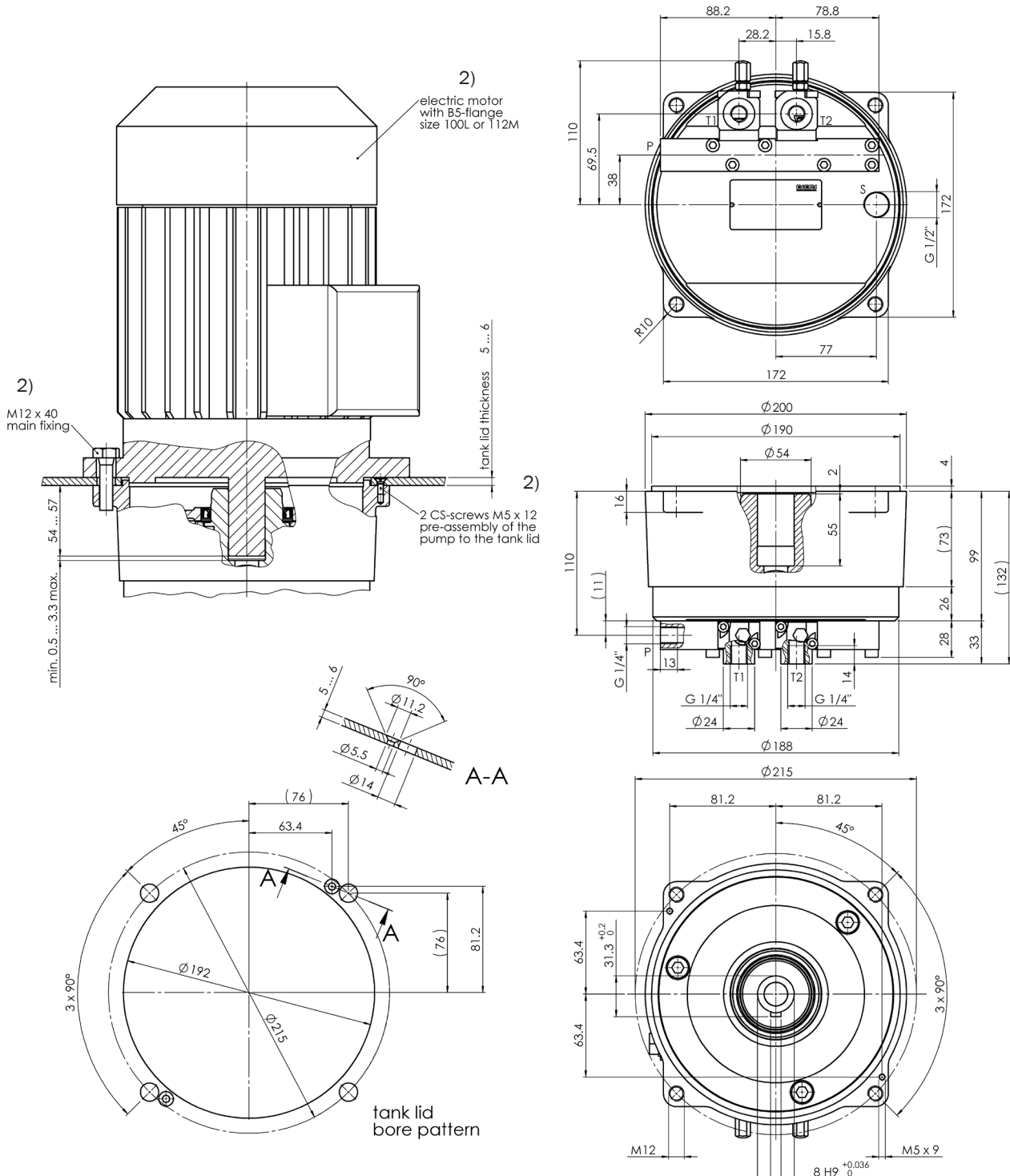


2) Not included in the scope of supplier

Type KKP

LP: 160 bar/0,35 to 4,60 cm³/rev
HP: 700 bar/0,12 to 1,88 cm³/rev

Size KKP04 / Design revision B

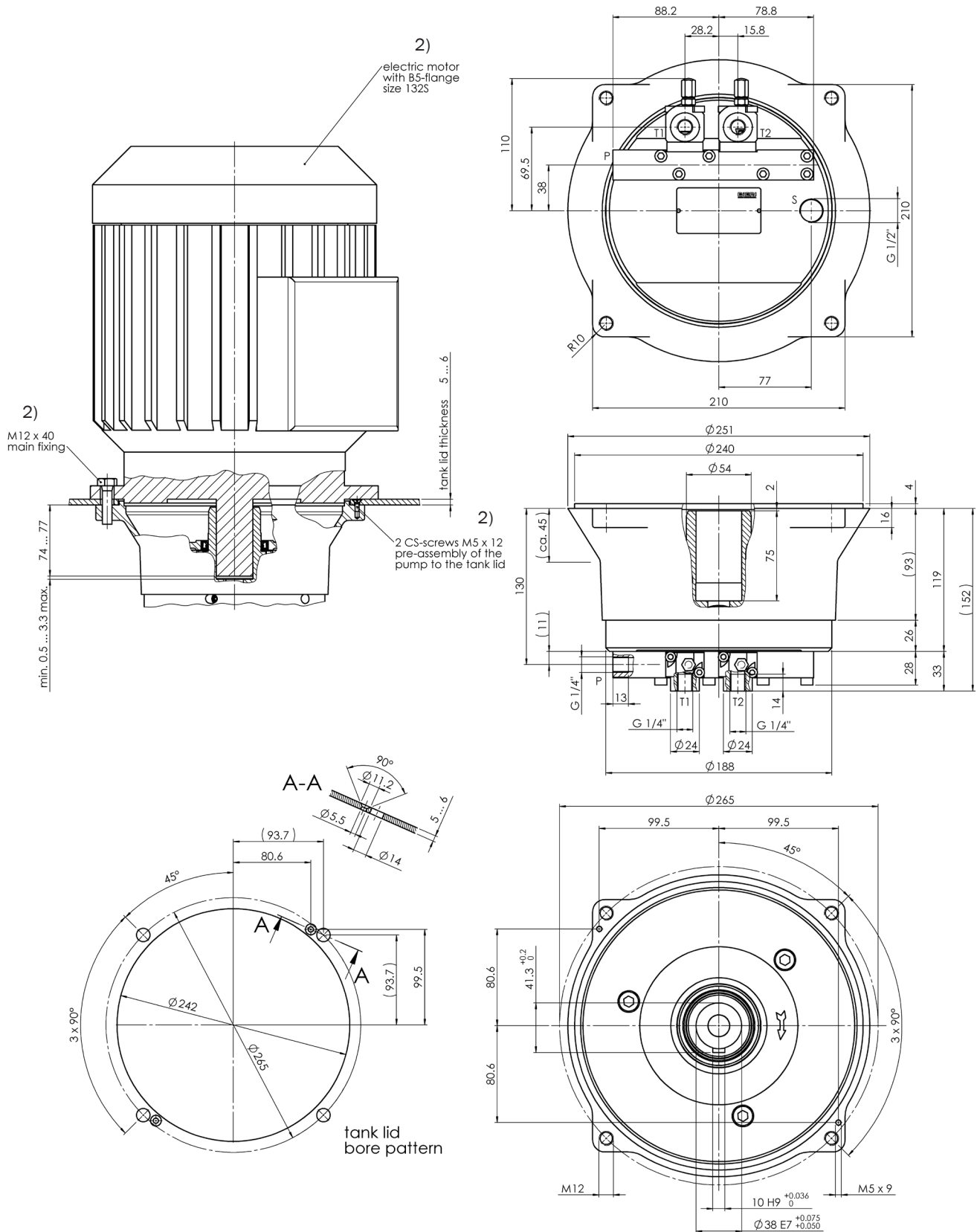


2) Not included in the scope of supplier

Type KKP

LP: 160 bar/0,35 to 4,60 cm³/rev
HP: 700 bar/0,12 to 1,88 cm³/rev

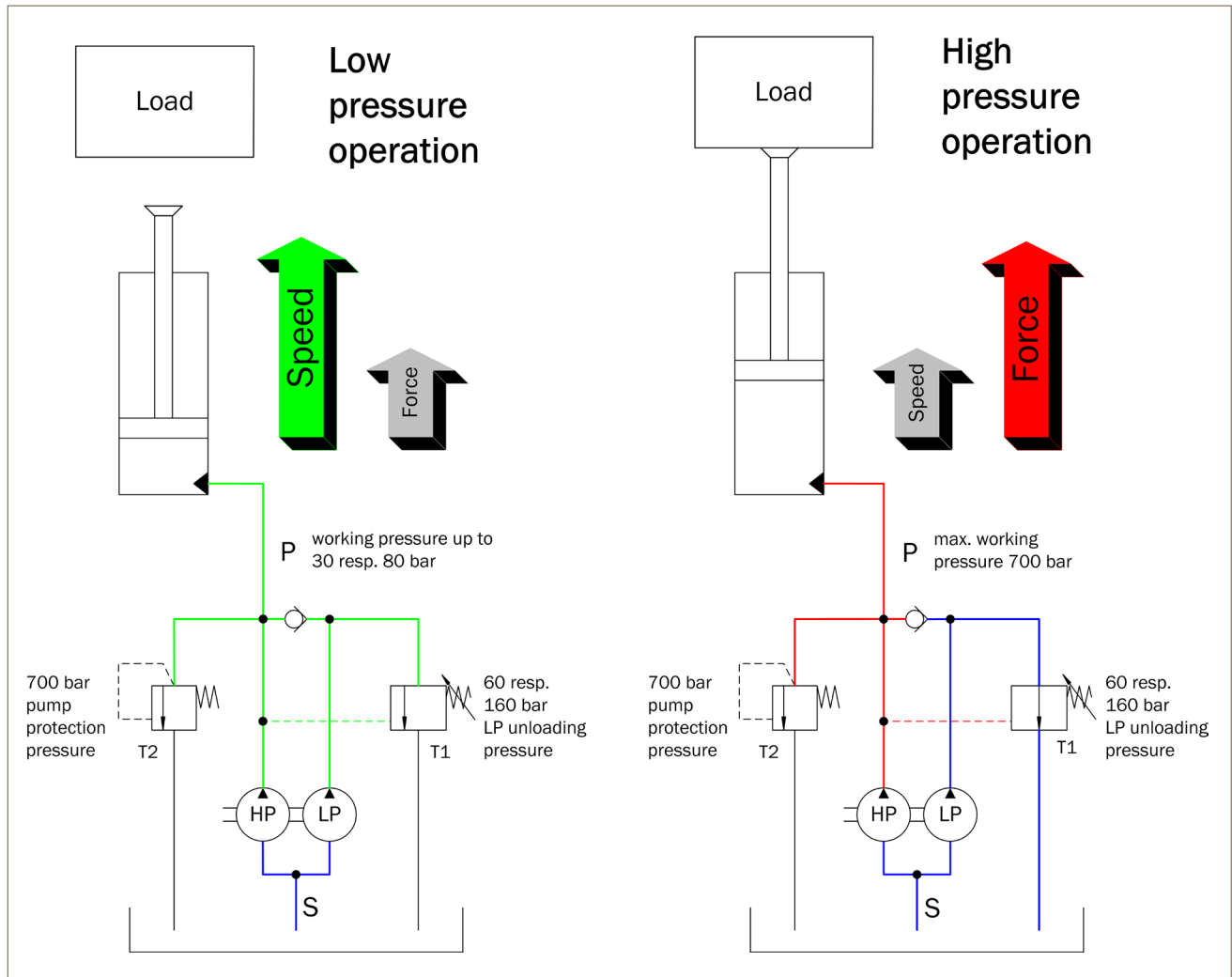
Size KKP05 / Design revision B



2) Not included in the scope of supplier

Functional schematic/diagram

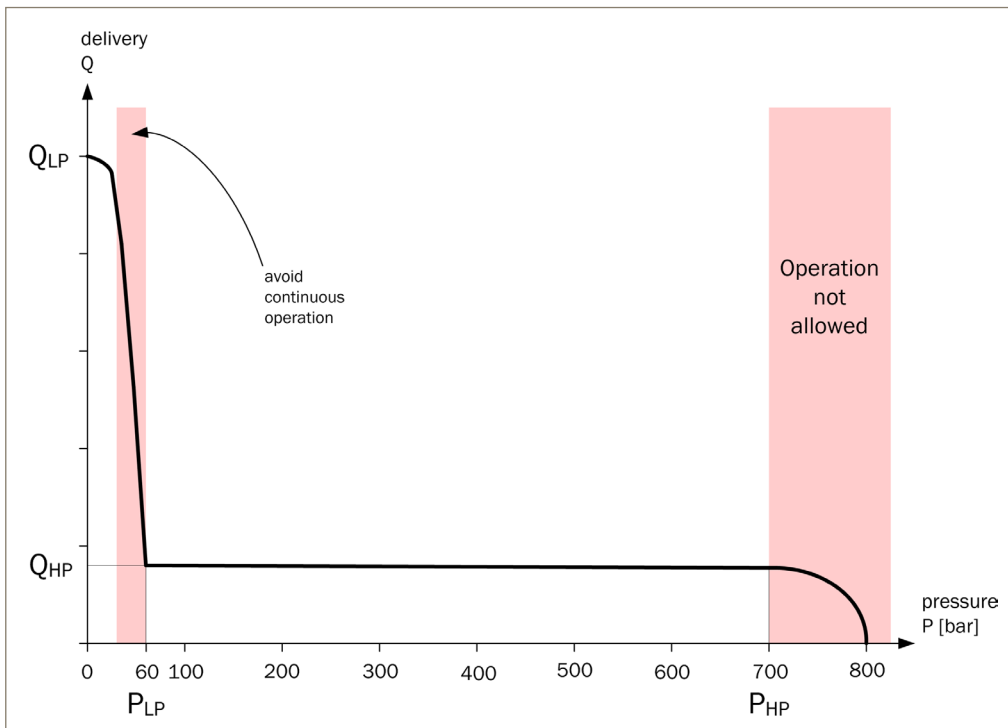
Functional schematic



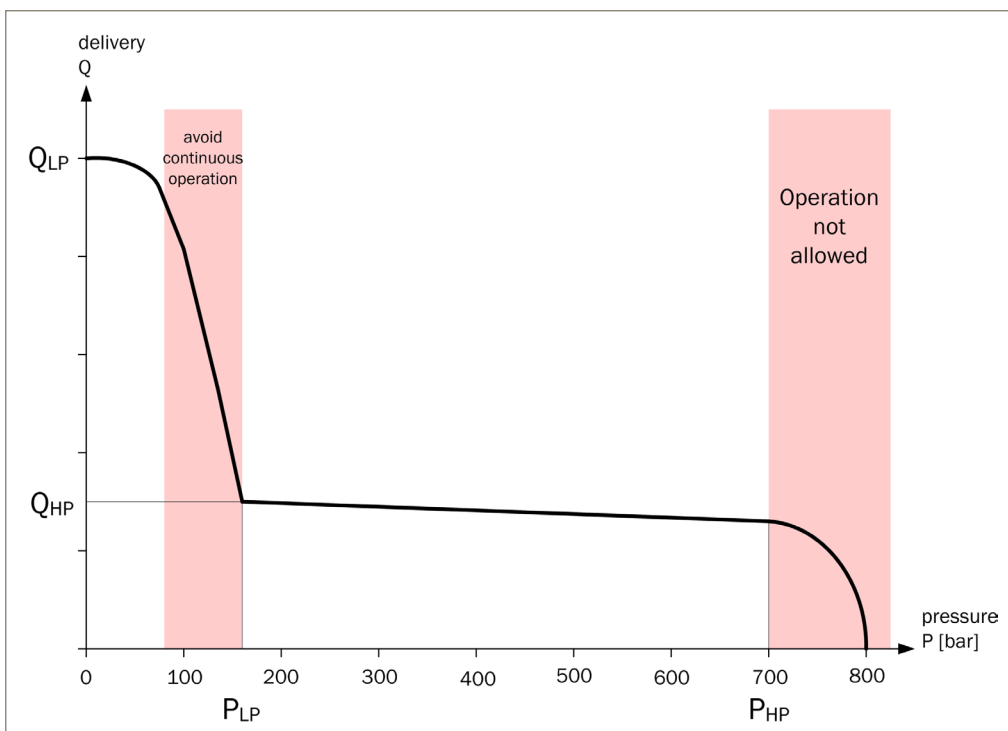
Type KKP

LP: 160 bar/0,35 to 4,60 cm³/rev
HP: 700 bar/0,12 to 1,88 cm³/rev

Functional diagram size KKP01 and 02



Functional diagram size KKP03, 04 and 05



Bieri Hydraulik AG

Könizstrasse 274
CH-3097 Liebefeld
Tel. +41 31 970 09 09 | Fax +41 31 970 09 10
info@bierihydraulics.com | www.bierihydraulics.com

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.