

Combination pumps

Type KKP

LP: 160 bar /0.57 to 4.24 cm³/rev
HP: 700 bar /0.17 to 1.53 cm³/rev

Features

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

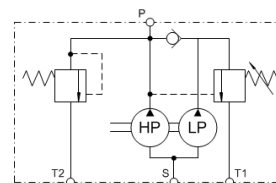


Applications

- For applications that require high flow rates in the low pressure (LP) range and low flow rates in the high pressure (HP) range
- Presses
- Power units for industrial applications e.g. as punching machines rescue devices, torque wrenches

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



Technical Data

Hydraulic fluid	mineral oil according to DIN 51524 (other fluids on request)	
Fluid temperature range	-20 to 80 °C	
Ambient temperature range	-30 to 50 °C	
Viscosity range	12 to 220 mm ² /s	
Max. operating pressure HP	700 bar	
Max. operating pressure LP	60 bar resp. 160 bar, preset by producer	
Operation pressure suction side	-0.2 bar to 0.5 bar gauge pressure	
Filtration (recommendation)	according to NAS 1638 class 6 resp. ISO/DIN 4406 17/15/12	
Installation position	in tank (any)	
Max. rotation speed	see overview „Product information“	
Direction of rotation	any	
Suction height	max. 150 bzw. 400 mm (see mounting, page 2)	
Weight	see overview „Product information“	
Materials	valve block:	steel
	eccentric shaft:	steel
	pump housing:	aluminium
	pressure flange:	aluminium

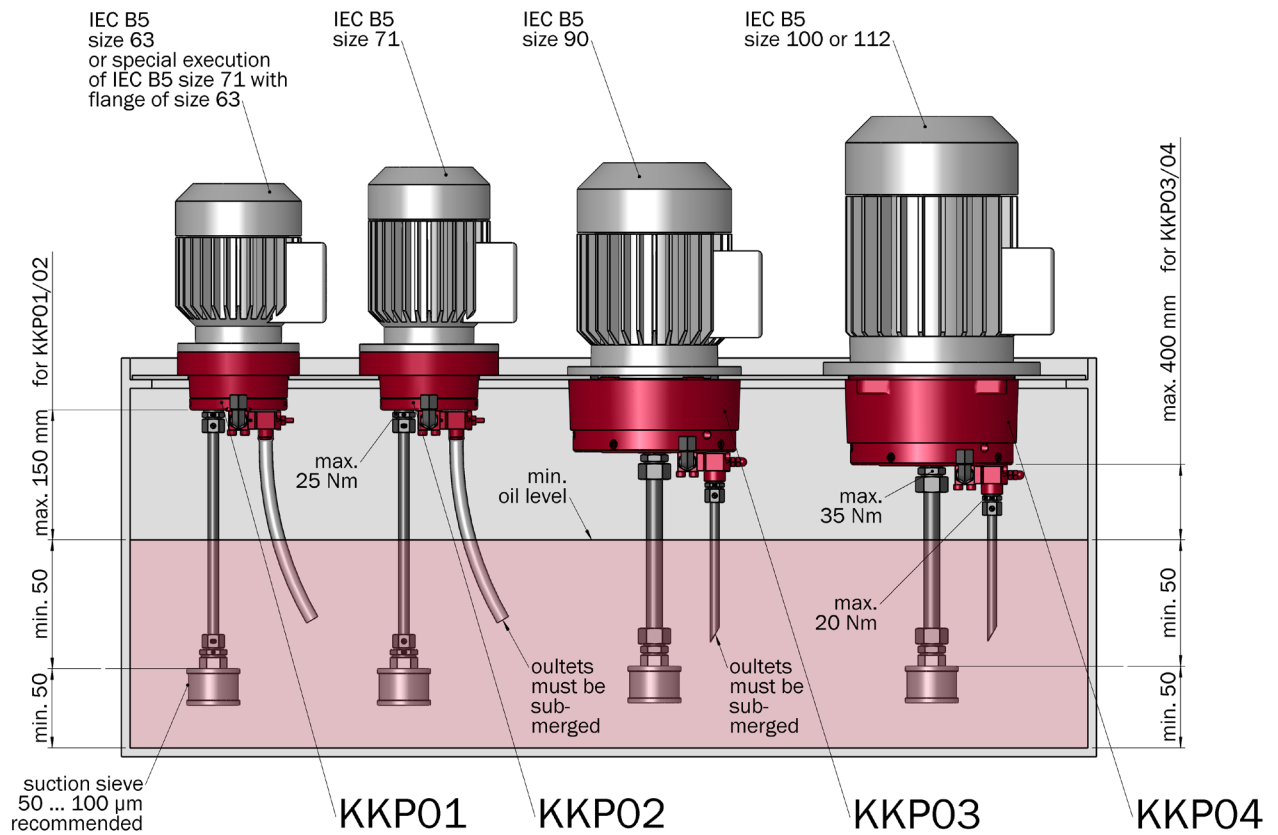
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Type code

Example		KKP	01	-	0,24	-	700	-	2,08	-	60	-	V	-			00
Combination pumps																	Design 00 ... 99 For internal purposes
Size	01 02 03 04																Index Please leave blank For internal purposes
Displacement volume HP [cm³/rev]	see overview „Product information“																Design revision Please leave blank For internal purposes
Max. operating pressure HP [bar]	see overview „Product information“																
Displacement volume HP + LP [cm³/rev]	see overview „Product information“																
Max. unloading pressure LP [bar]	see overview „Product information“																
Seal material	V FKM other seal materials on request																

Mounting



Size 01 and 02:

- Designed for installation in the tank lid, as the valves are leaking slightly.
- Customized version with sealed valves for installation outside the tank available on request.

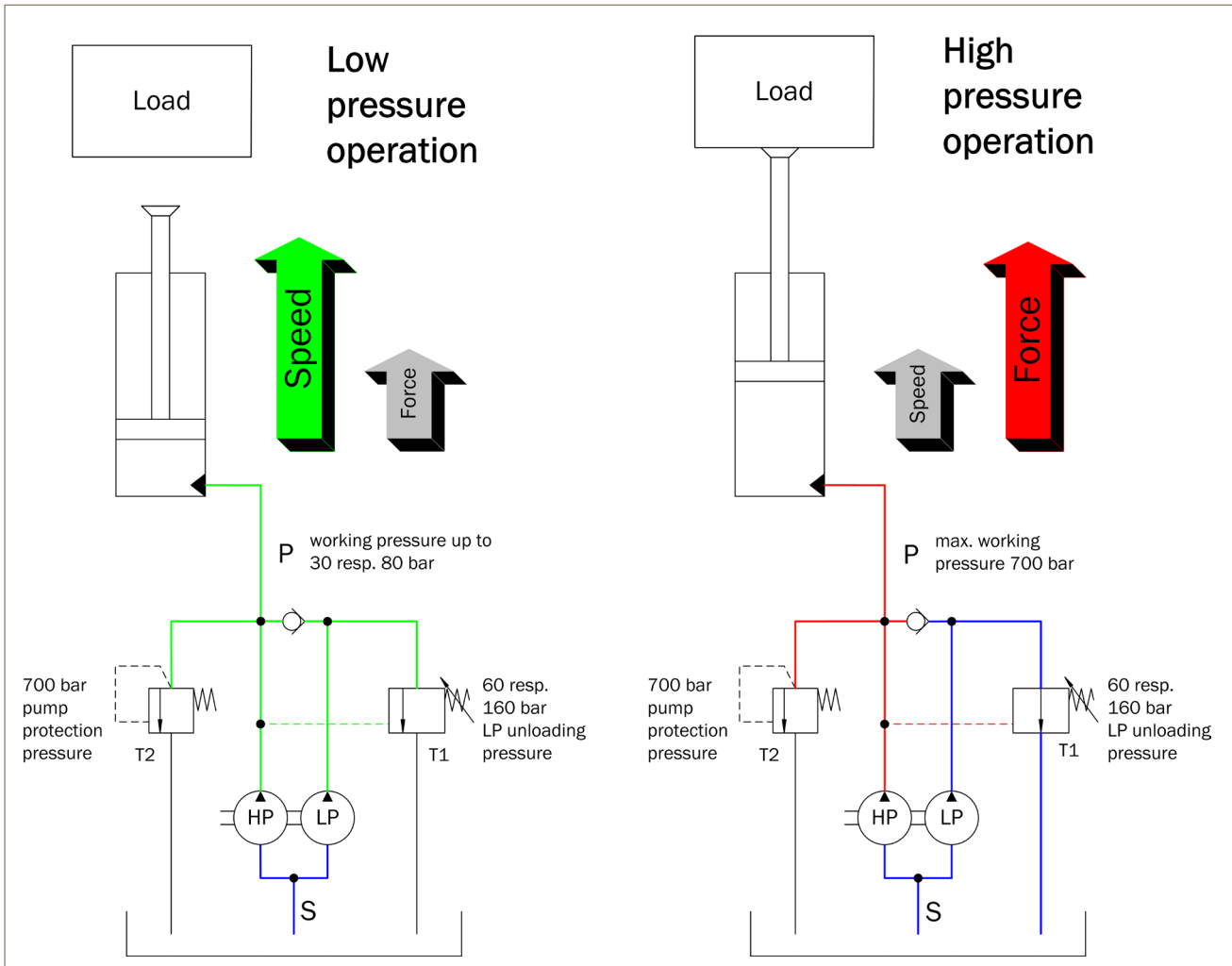
Size 03 and 04:

- Designed to be fitted under the tank lid.
- Can also be installed outside the tank (valves are not leaking to the outside).

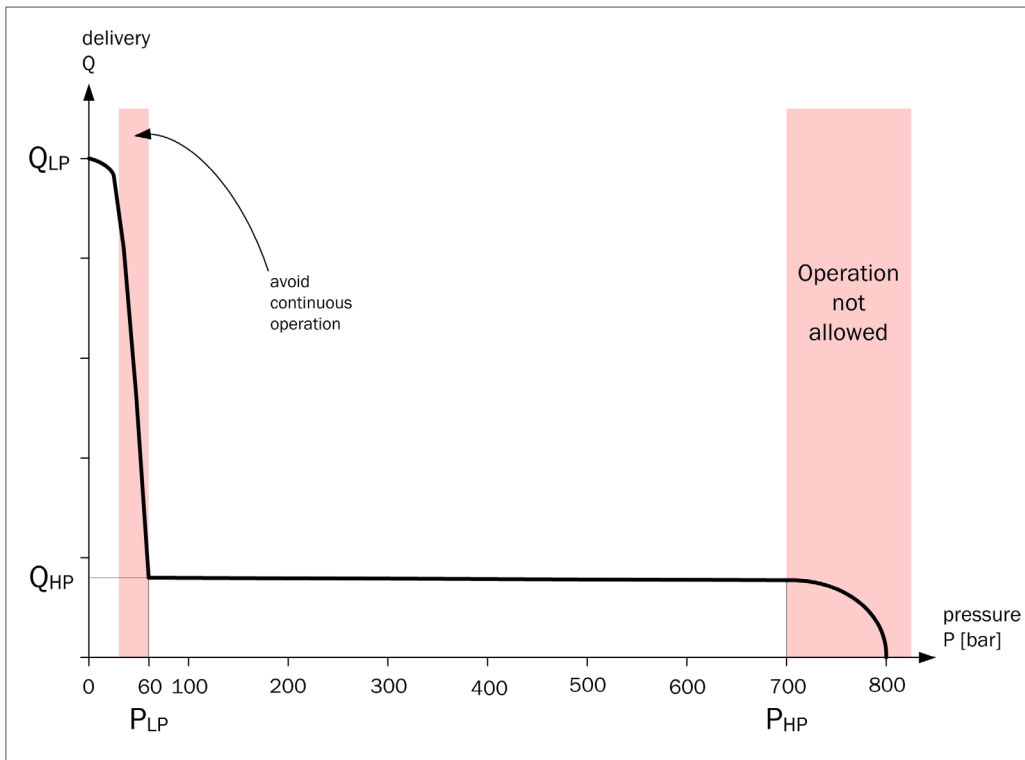
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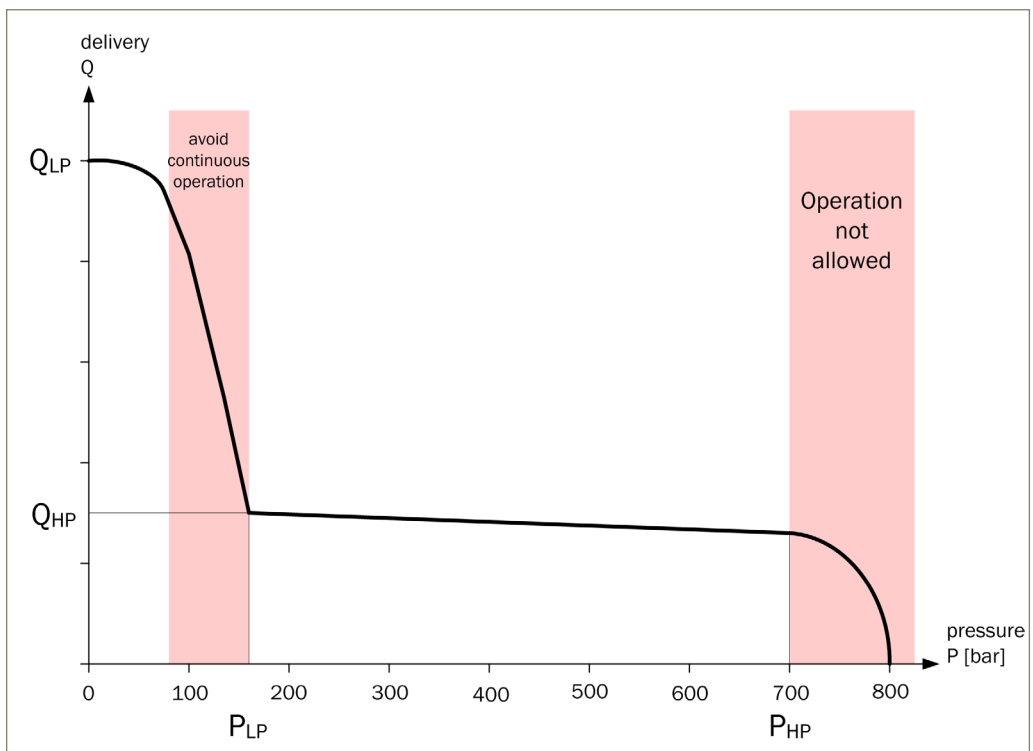
Functional schematic



Functional diagram: Size 01 and 02



Functional diagram: Size 03 and 04



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Product information

size	HP mode			LP mode			max. rotation speed [rpm]	weight [kg]	part no.
	displacement volume [cm ³ /rev]	max. operating pressure [bar]	number of pumping elements	displacement volume (HP + LP) [cm ³ /rev]	max. unloading pressure [bar]**	number of pumping elements			
01	0.24	700	2	0.57	60	1	3600	2.0	on request
01	0.24	700	2	2.08	60	2	3000	2.1	4002107
01	0.24	700	2	2.65	60	2	2500	2.1	on request
02	0.17	700	1	2.02	60	2	3000	2.2	on request
02	0.24	700	2	2.08	60	2	3000	2.2	on request
02	0.24	700	2	2.65	60	2	2500	2.2	4002112
02	0.34	700	2	2.75	60	2	2000	2.2	on request
03	0.47	700	3	0.94	160	3	2000	7.9	on request
03	0.47	700	3	1.68	160	3	2000	7.9	on request
03	0.47	700	3	3.19	160	3	2000	7.9	on request
03	0.68	700	3	1.88	160	3	2000	7.9	on request
03	0.68	700	3	2.21	160	3	2000	7.9	on request
03	0.68	700	3	2.56	160	3	2000	7.9	on request
04	0.68	700	3	3.39	160	3	2000	8.4	on request
04	1.53	700	3	3.05	160	3	2000	8.4	on request
04	1.53	700	3	4.24	160	3	2000	8.4	on request

** factory setting

Dimensional drawings

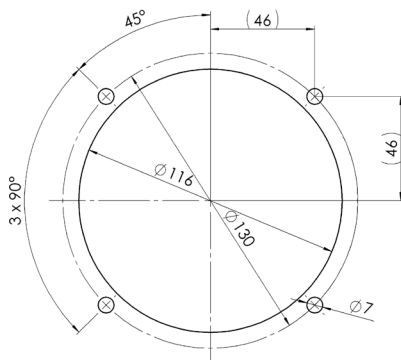
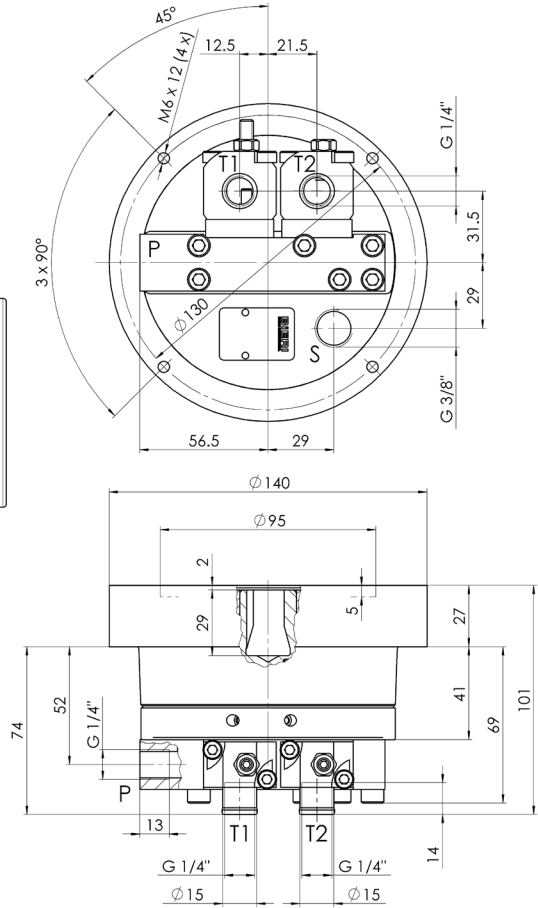
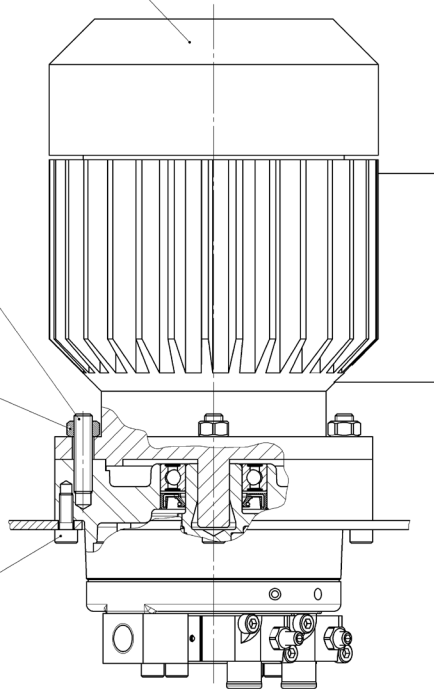
Size 01

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

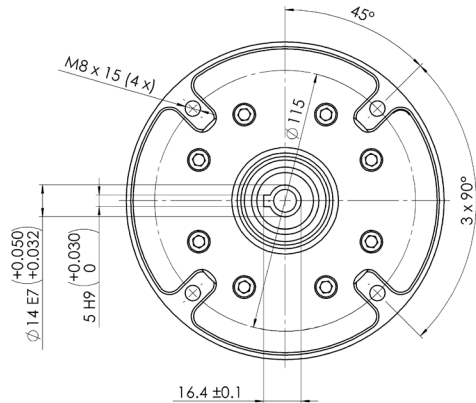
2) threaded bolts M8 x 35

2) hexagonal nuts M8

2) M6 screws



tank lid bore pattern



2) Not included in the scope of supplier

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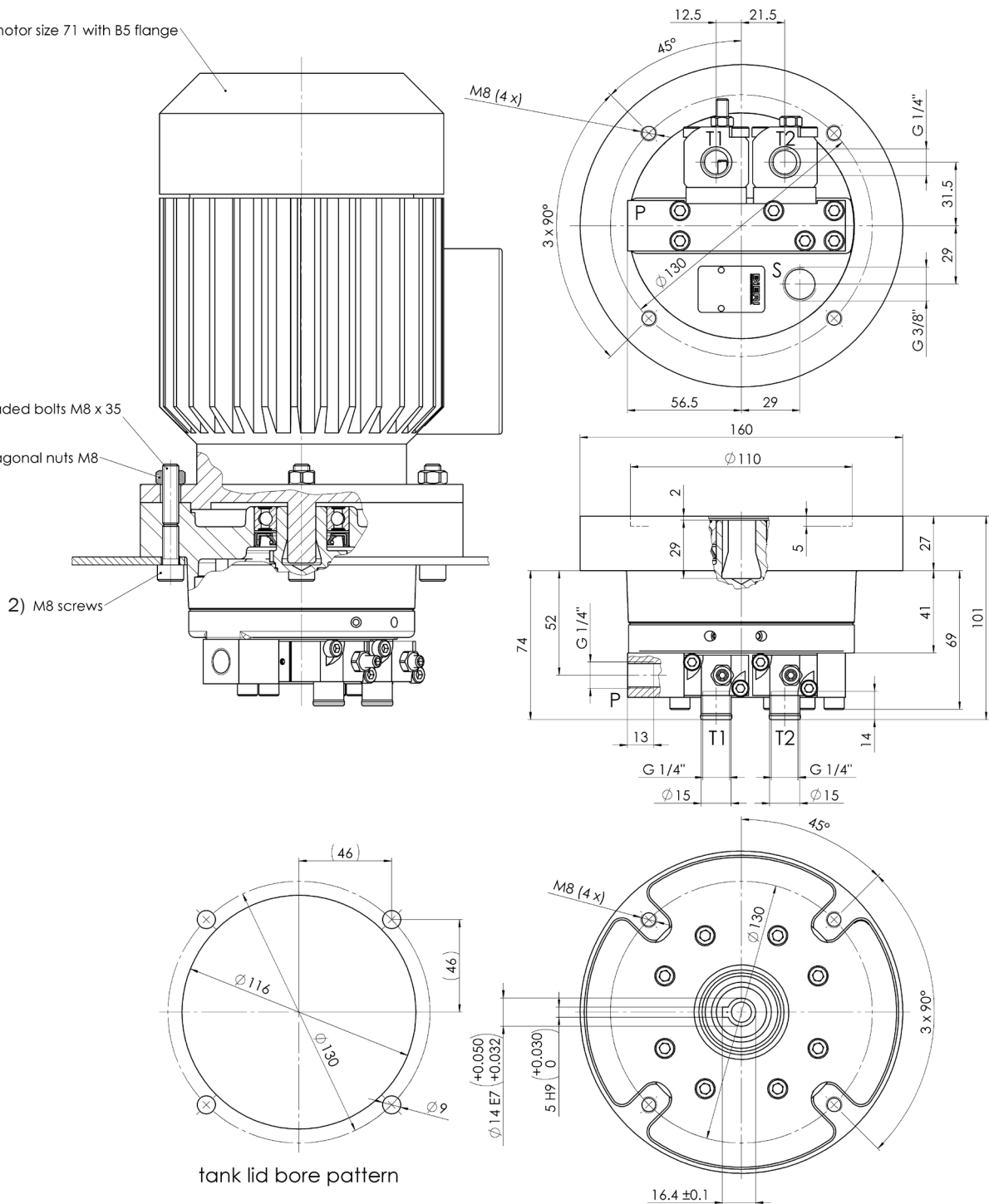
Size 02

2) IEC motor size 71 with B5 flange

2) threaded bolts M8 x 35

2) hexagonal nuts M8

2) M8 screws

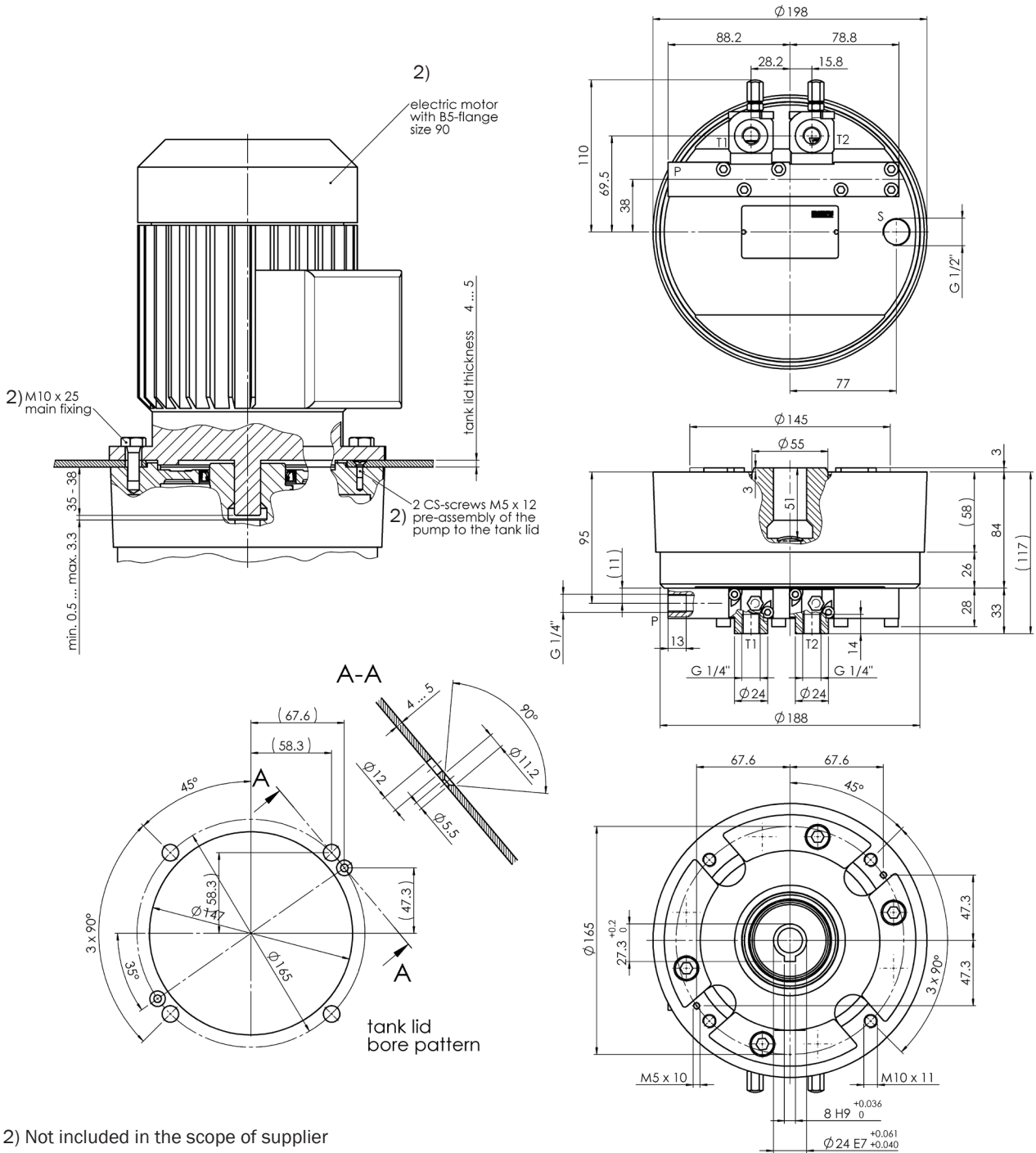


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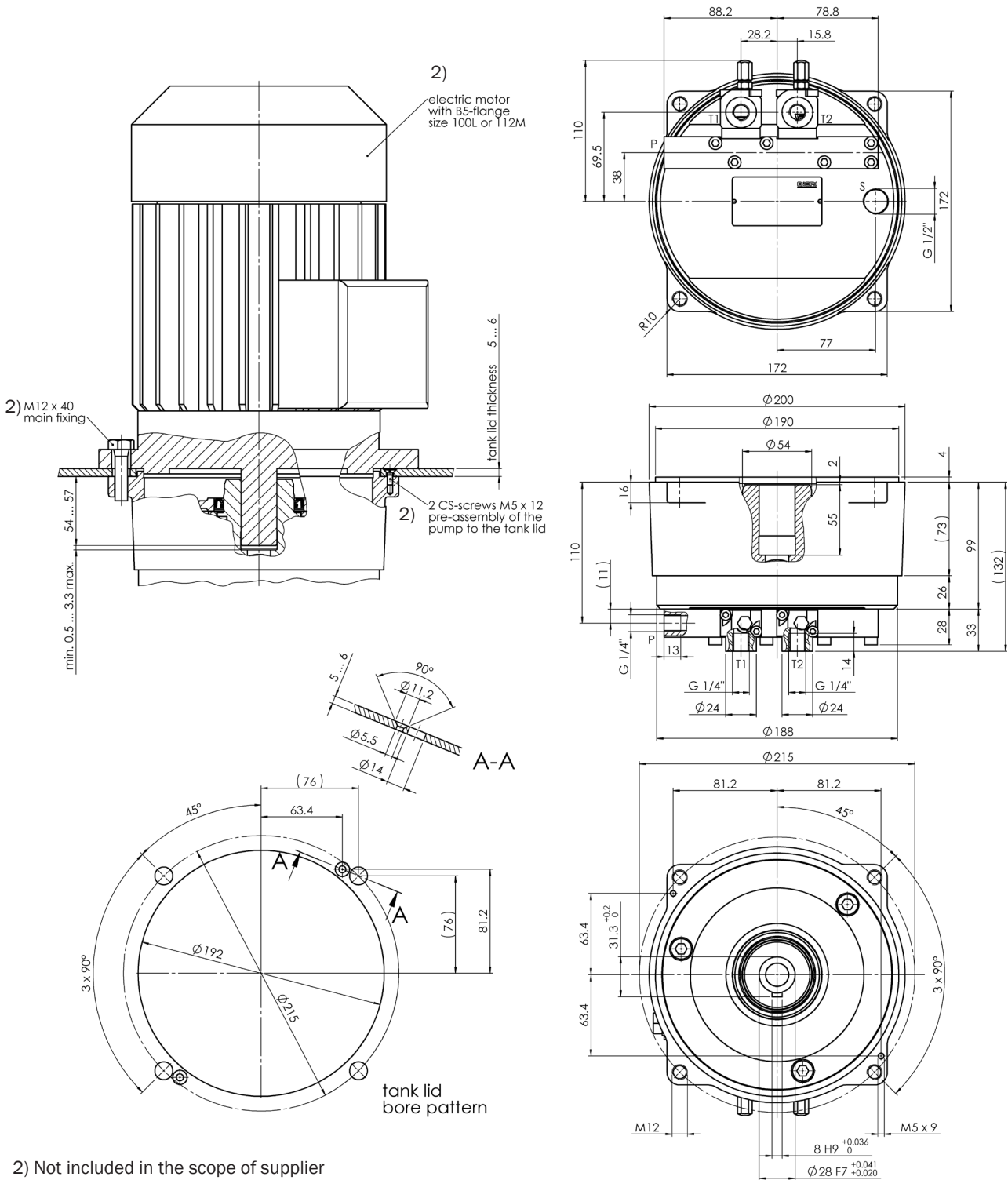
Size 03



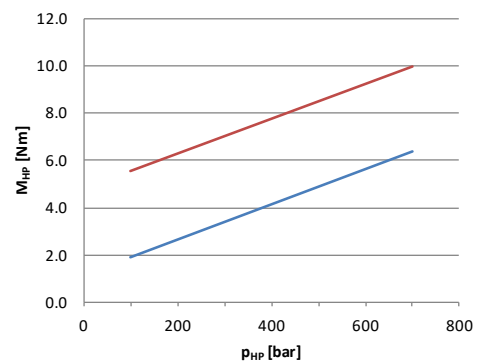
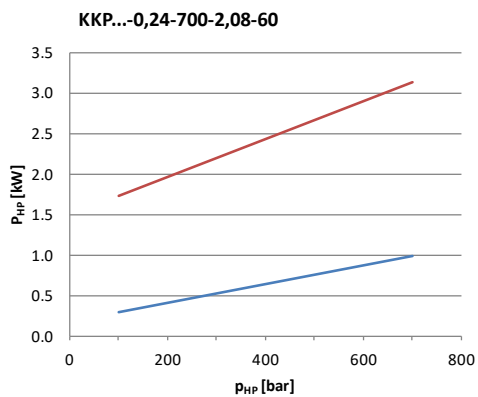
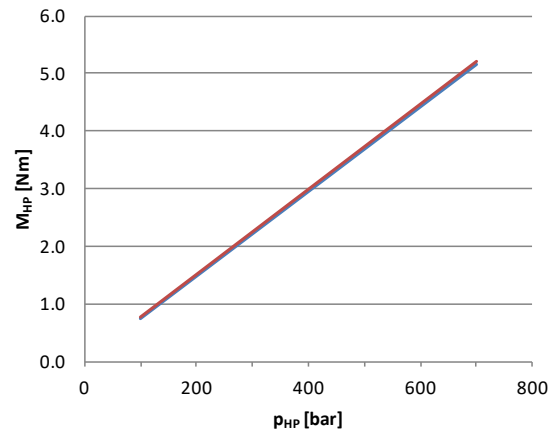
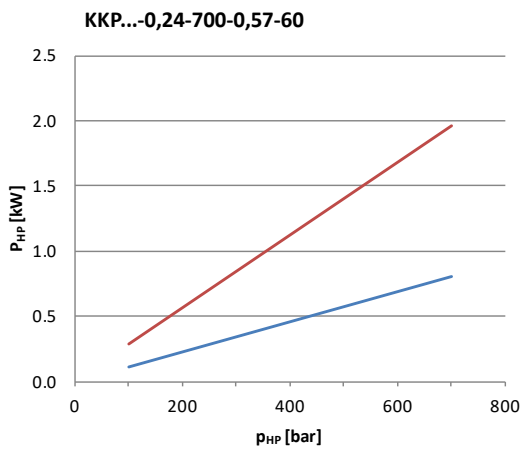
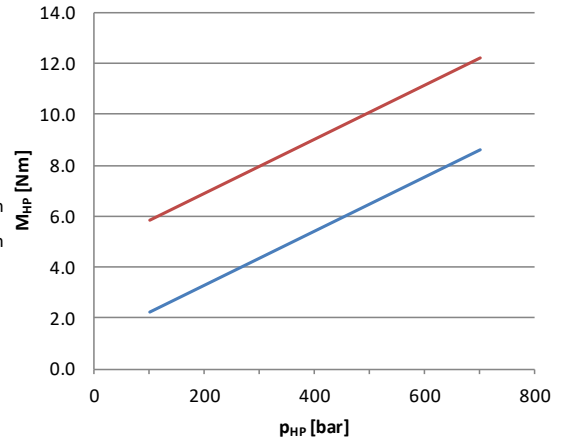
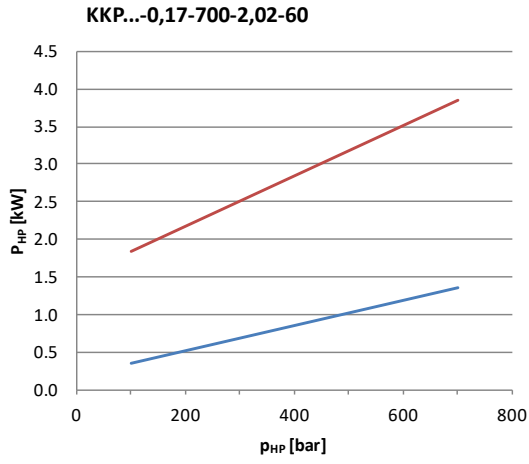
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Size 04



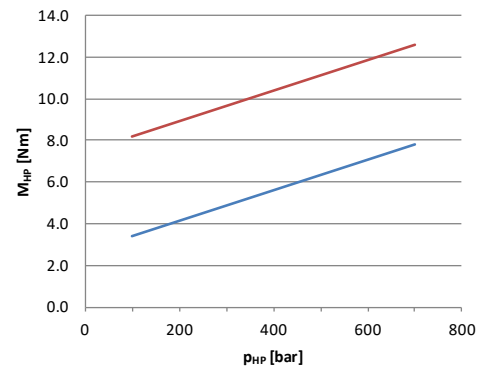
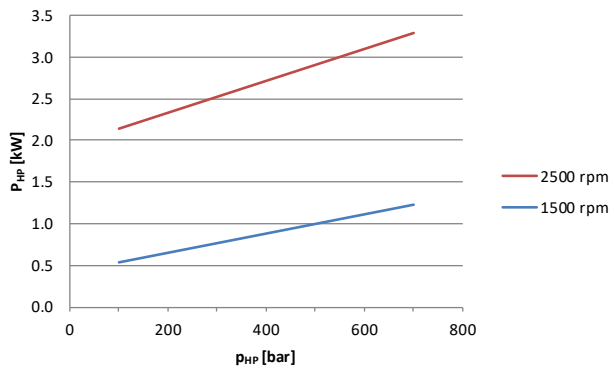
Driving motor power and torque: Size 01 und 02



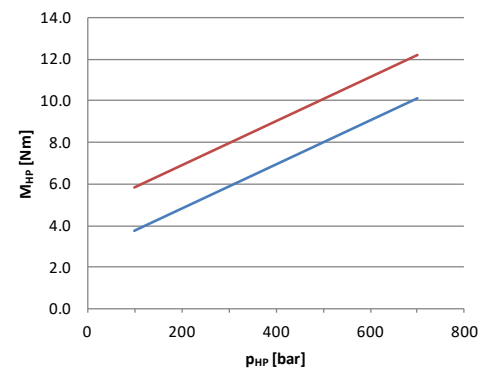
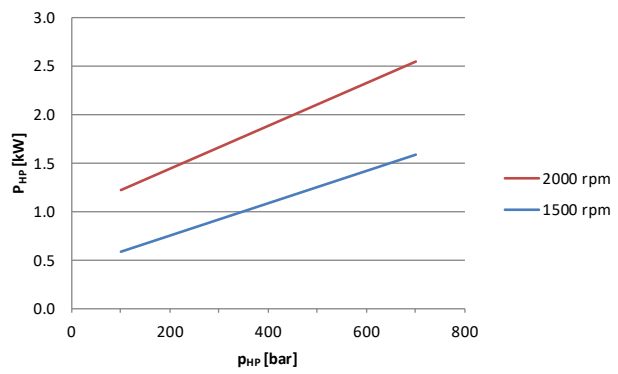
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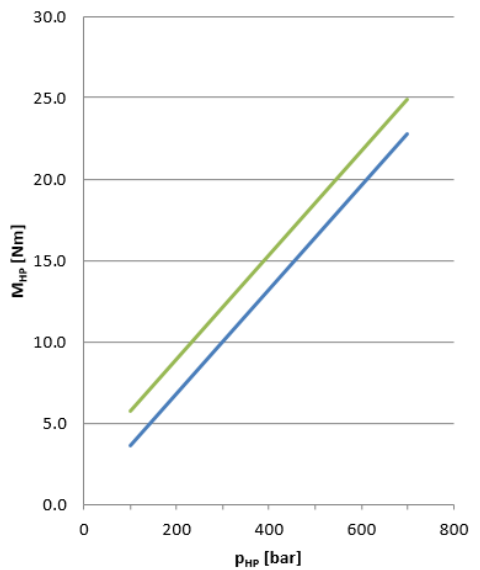
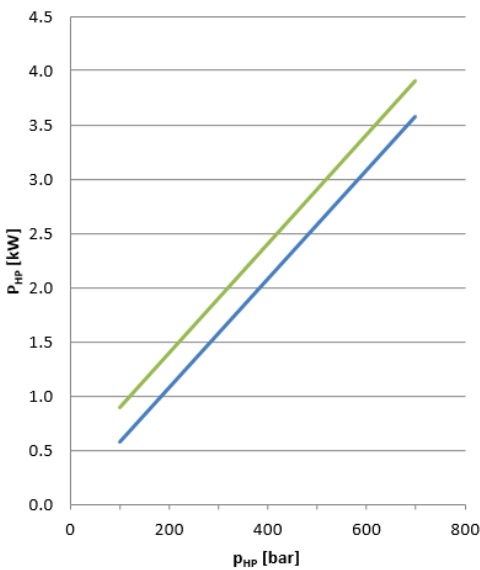
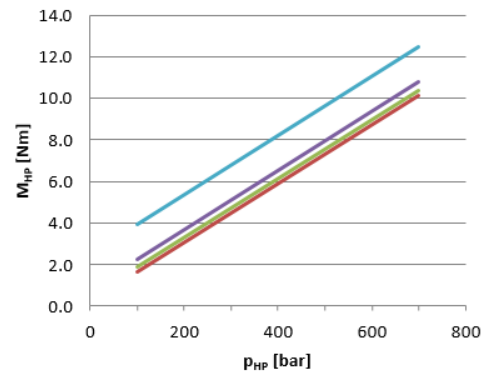
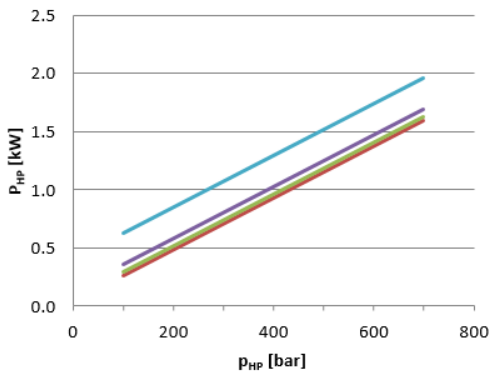
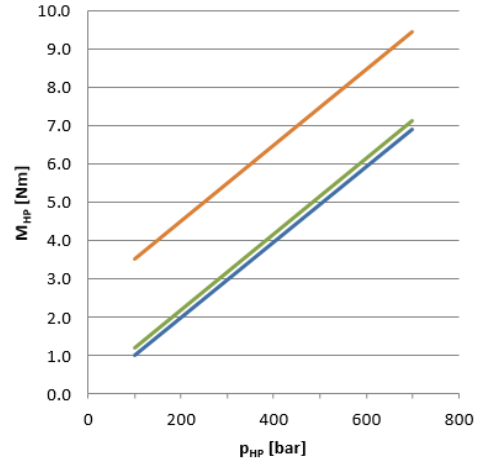
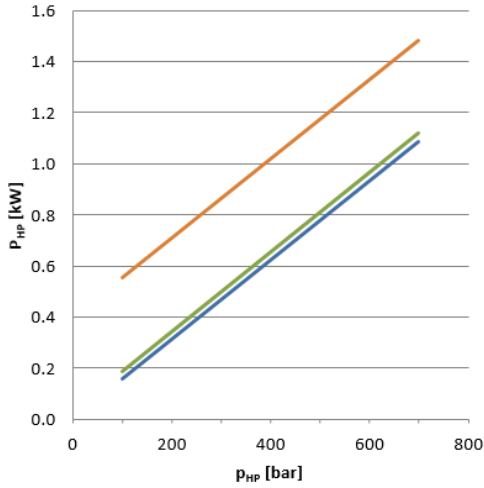
KKP...-0,24-700-2,65-60



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



Driving motor power and torque at 1'500 rpm: Size 03 and 04



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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.