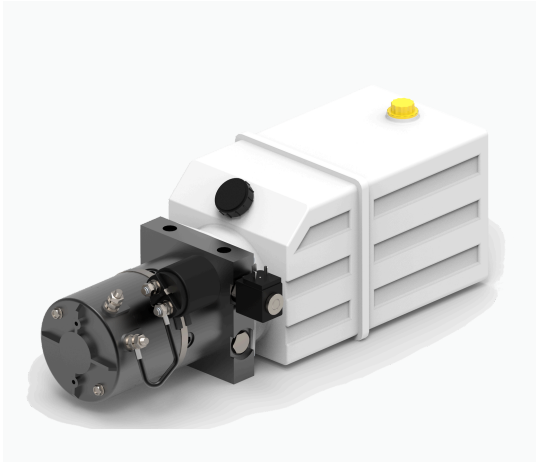
FLUIDPARTS compact Power Pack

0,8...2,2kW; 3...13l; 5...11l/min





FLUIDPARTS*compact* power pack FPC



- *repairable unit*

Technical Properties

- electrically driven compact hydraulic power pack with attached oil tank
- DC power supply (12/24 VDC); AC (230 VAC)
- motor power DC: 0,8/1,6 and 2,2 kW AC: 1,1/1,5 kW
- pump sizes/displacement 2,1, 2,7 and 3,1 ccm/rev
- flow rate lowering flow control valve 0,6...12 l/min
- max. pressure level of 210 bar
- suitable starter relais and remote control available
- cost efficient plastic tank, nominal tank volume 3...13 liter
- multiple tank options, such like breather and suction strainer configurable
- tank fill level indicator
- horizontal and vertical mounting position available
- 5 basis hydraulic circuits and multiple custom specific schematics are possible
- typical connector types for valves DIN43650*

Description

Compact hydraulic power packs are used where decentral hydraulic power is needed for rotary or linear drives and only limited space is available. The *FLUIDPARTS compact* (*FPC*) power pack series especially is designed-to-cost and function. This is achieved by a consequent standardization, function integration and modular configuration.
The *FPC* power pack can e.g. be used for the operation of lifting units, hydraulic jacks and adjustment ramps in the agricultural market, transportation or construction branch.
Many configuration options and many auxiliary items are available, such like starter relais, remote controls and protection covers.
The FPC has got a sustainable design: From the very beginning it is designed as a maintainable and repairable unit.

Technical Data

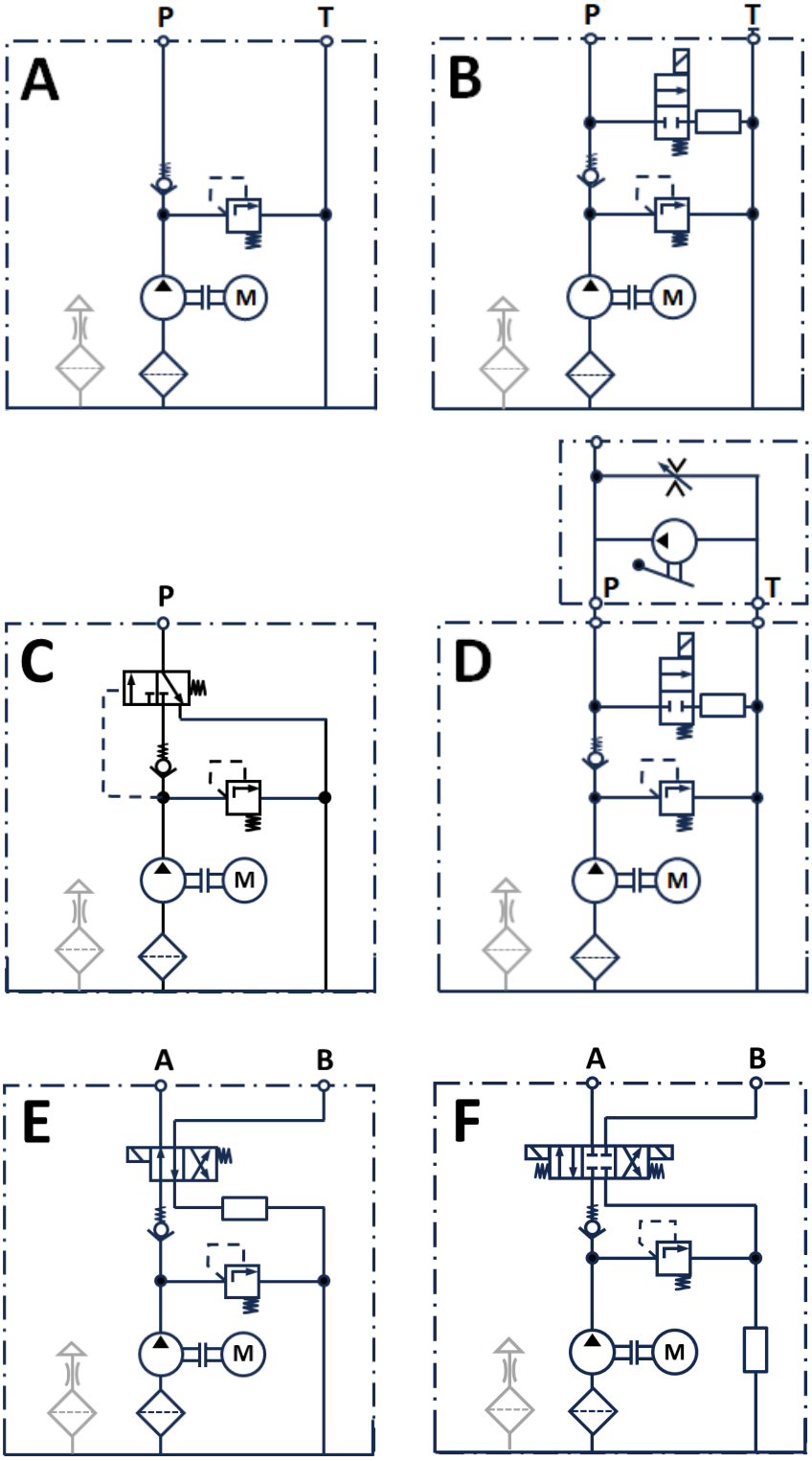
el. nominal power	kW	DC: 0,8/**1,6/2,2** AC: 1,1/1,5
motor supply voltage	V	**12/24** VDC/230 VAC
type of operation		DC: S2=1,8 min; S3=7%**
pump displacement	ccm/rev	1,2/1,6/**2,1**/ **2,7**/ **3,1**
flow rate for lowering valve	l/min	wo./0,6 /1 /2 / 3/ 4 /5 /6/ 7 /**8** /9 /10 /11/ 12
max. operating pressure	bar	210
nominal tank volume	l	3; **5**; **8, 11, 13*****
connector type		valve: DIN43650*; remote control: 4pin connector
approved oil type		DIN 51 524

** other special types on request*
*** for nominal power; alternatives on request*
****usable tank volume pls. see below*



operating viscosity range	mm²/s	10...500
fluid temperature range	°C	-20...+70
ambient temperature range	°C	-30...+80

Hydraulic Schematics



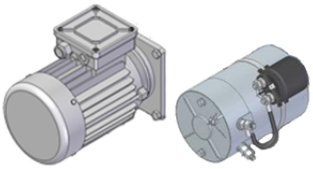


Configuration Code

5				10						15						20						25				
F	P	C	-																				-			

motor type (5)

N	DC motor 12VDC
G	DC motor 24 VDC
W	AC motor 230 VAC/50Hz
D	three-phase-motor 230/400 VAC



power (6-8)

0 8 0	0,8 kW; 12/24 VDC
1 6 0	1,6 kW; 12 VDC
2 2 0	2,2 kW; 24 VDC
1 1 0	1,1 kW; 230 VAC
1 5 0	1,5 kW; 230 VAC

hydraulic schematic (9)



A	relief valve only
B	lift/lower circuit (relief valve + 2/2-way valve)
C	free flow circuit
D	lift/lower circuit with addtional hand pump
E	differencial cylinder circuit (4/2 way valve)
F	differencial cylinder circuit (4/3 way valve)

pump (10-11)

2 1	21=2,1 ccm/U
2 7	27=2,7 ccm/U
3 2	32=3,2 ccm/U

motor type (12)

H	horizontal
V	vertical
U	universal

tank (13-14)

0 3	03=3,0 l
0 5	05=5,0 l
0 8	05=8,0 l
1 1	11=11,0 l
1 3	13=13,0 l

suction/filtering (15)

N	without suction
S	suction strainer 120 µm
F	return filter 20 µm

Solenoid valve (16)

A	12V NC	B	24V NC
D	12V NC +man. override	E	24V NC +man. override
K	12V NO	L	24V NO
N	12V NO +man. override	O	24V NO +man. override
		Y	without valve with plug

Solenoid valve (17)

O	without
M	mesh 280 µm



Configuration Code

5									10									15									20									25			
F	P	C	-																																	-			

flow control valve (18-20)

0 0 0	without
0 2 0	2,0 l/min
0 3 0	3,0 l/min
0 4 0	4,0 l/min
0 5 0	5,0 l/min
0 6 0	6,0 l/min
0 7 0	7,0 l/min
0 8 0	8,0 l/min
0 9 0	9,0 l/min
1 0 0	10,0 l/min
1 1 0	11,0 l/min
1 2 0	12,0 l/min

accessories I (21)

A	without
B	starter relay incl. harness
C	starter relay,harness & remote control

accessories II (22)

A	without
B	with motor cover
C	with electric stroke limiter
D	with battery switch

pressure setting (23-25)

1 8 0	180 bar
2 1 0	210 bar

revision status (27)

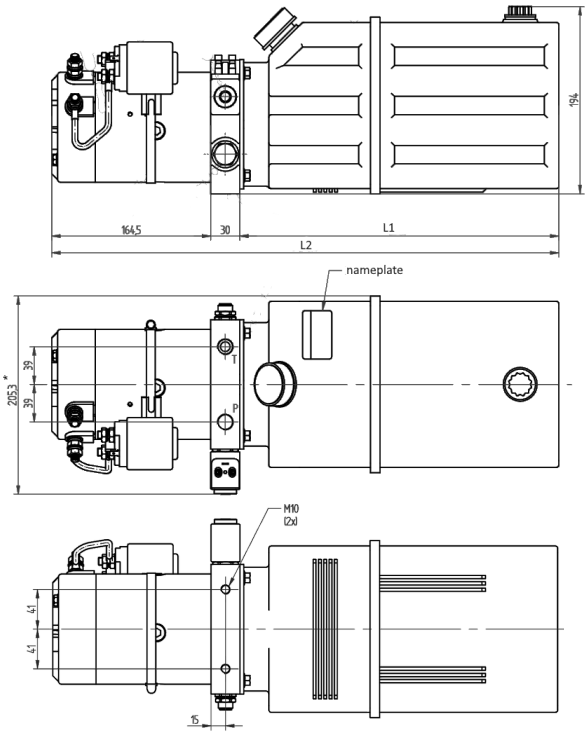
A	Rev. A
B	Rev. B

idx

0 0
0 1
0 2



Dimensions



dimensions (DC-motor versions)

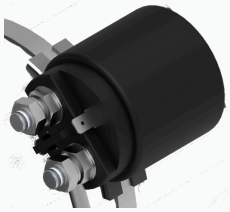
tank size	dimension L1 [mm]	dimension L2 [mm]
3 liter*	-	-
5 liter	260	454,5
8 liter	330	524,5
11 liter	435	629,5
13 liter	545	739,5

**width of free flow version: 183 mm*

Accessories

** on request*

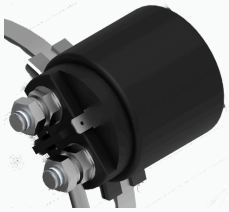
starter relais including mounting accessories, suitable for FPC power packs (please consider motor selection!)



starter relais kit

12 VDC; 200 A - 1450103
KIT-FPC-B-RELAIS 12V

starter relais including mounting accessories, suitable for FPC power packs (please consider motor selection!)



starter relais kit

24 VDC; 150 A - 1450104
KIT-FPC-B-RELAIS 24V

wired remote control with 2 buttons, 3 meter cable, with IP65 push connector



remote control

1449972
FB-2TOK30SOO01X00

wired remote control with 2 buttons, 3 meter cable, with IP67 screw connector



remote control

FB-2TOK30SOO02X00

wired remote control with 2 buttons, 3 meter cable, with IP65 push connector + turn key



remote control

FB-2TSK30SOO01X00

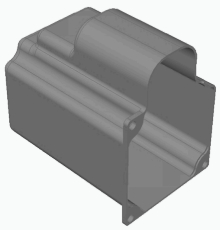
mounting brackets for wired remote control (without remote control)



mounting bracket

1449951
FB-00000000H0100

motor protection cover for FPC power pack (does not protect against water ingression)



motor cover

on request
FPC-B000A00

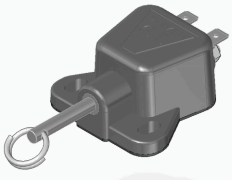
battery switch with removable turn key and protection cover, IP4x.



battery switch

1450019
FPC-D000XA00

electrical limit switch 12/24VDC 4 A max. Protection classe IP65



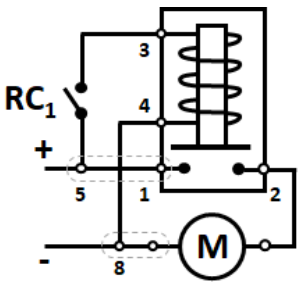
electrical limiter switch

1449931
FPC-C000XA00

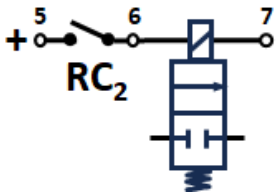


Electrical Connection

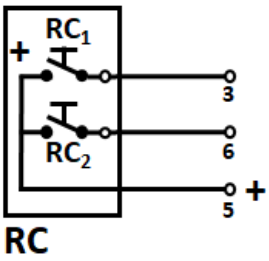




connection of the
motor starter



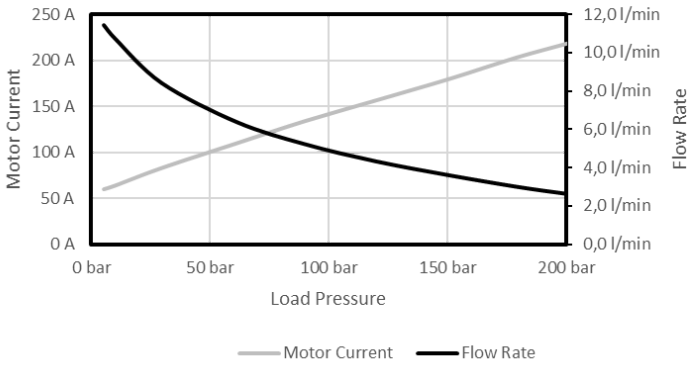
connection of the
lowering valve



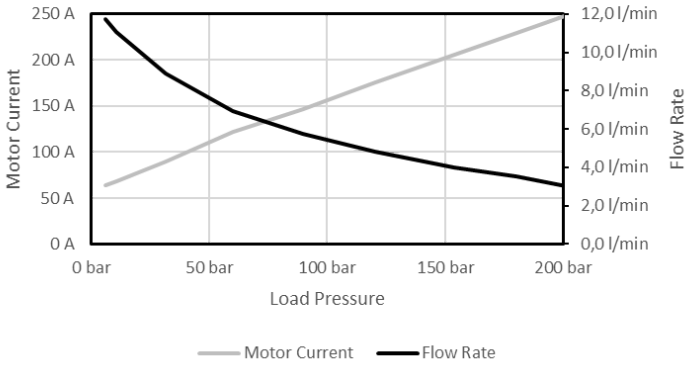
connection of the
remote control

Motor Characteristics

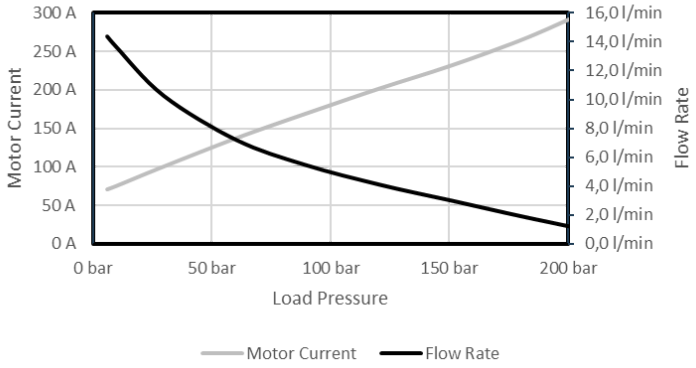
motor 12 V/1,6 kW; pump 2,1 ccm



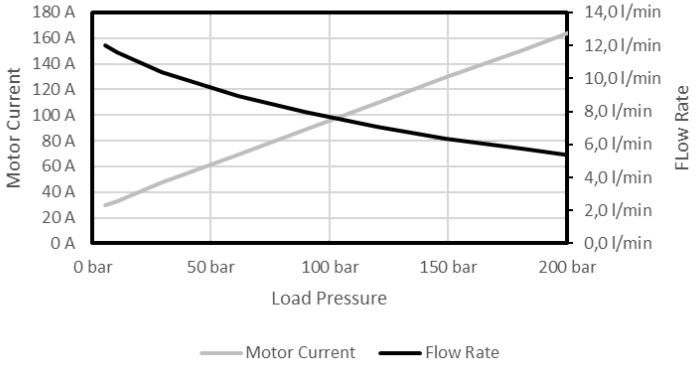
motor 12V/1,6 kW; pump 2,7 ccm



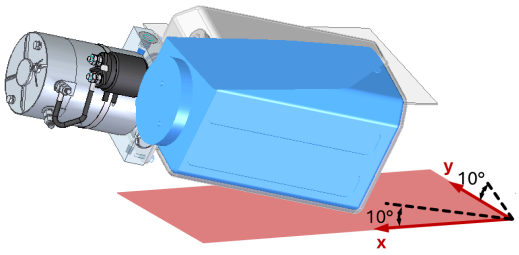
motor 12 V/1,6 kW: pump 3,2 ccm



motor 24 V/2,2 kW; pump 2,7 ccm



Usable Oil Volume



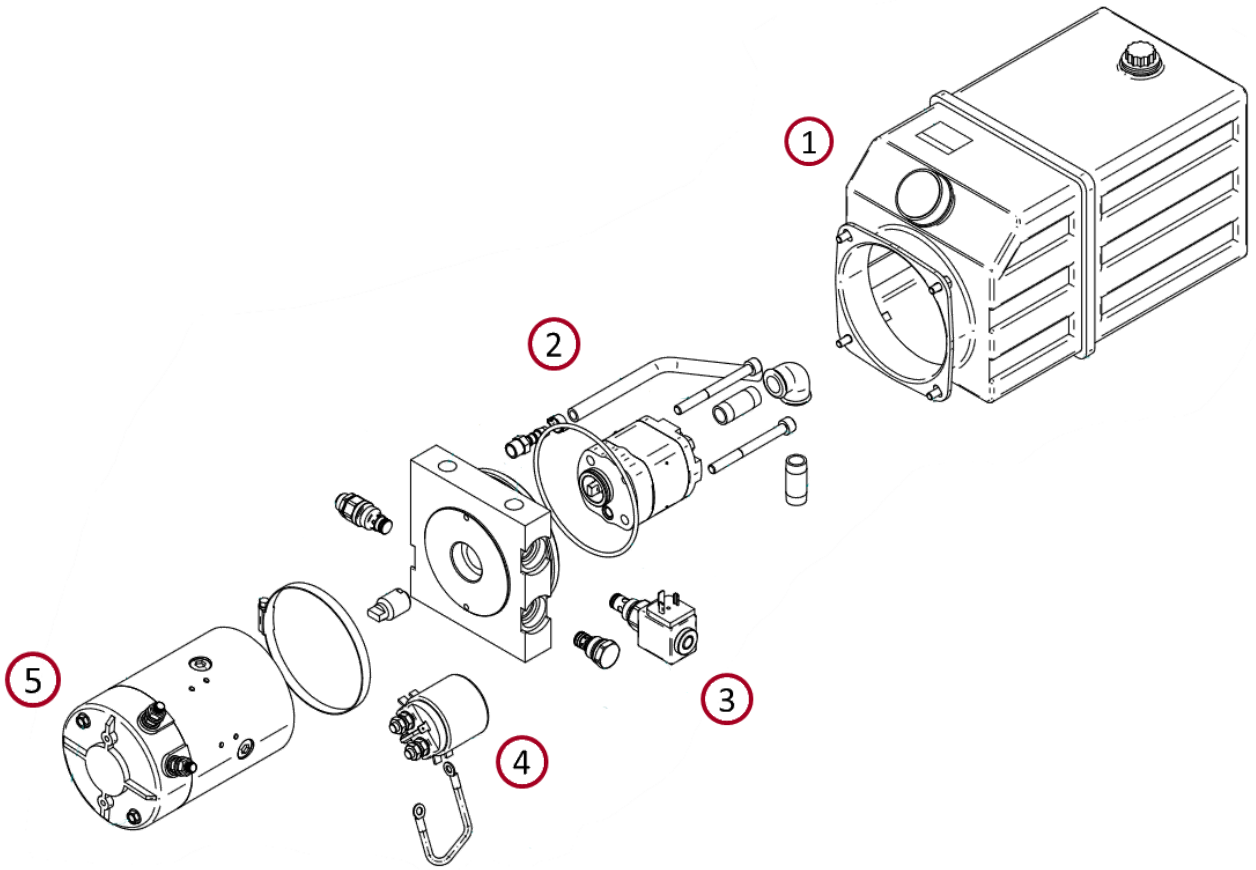
assumed worst case scenario:
10° tilted around X- and Y-axis

power pack with 5 liter tank*: *max. horizontal filling: 5,7 l* *max. inclined filling: 5,2 litres* *min. inclined filling: 1,1 l*	*max. usable displacement volume:* ***4,1 l...5,5 l*** **
power pack with 8 liter tank*: *max. horizontal filling: 7,6 l* *max. inclined filling: 6,5 l* *min. inclined filling: 1,8 l*	*max. usable displacement volume:* ***4,7 l...7,4 l*** **
power pack with 11 liter tank*: *max. horizontal filling: 10,4 l* *max. inclined filling: 8,3 l* *min. inclined filling: 3 l*	*max. usable displacement volume:* ***5,3 l...10,2 l*** **

**with breather on top of the tank*
*** inclined scenario/horizontal scenario*



Sparepart Kits



1 tank kits

***KIT-FPC-B-TANK 13L**; 1450099; square plastic tank 13 litres incl. filler/breather, O-ring, band clamp*
***KIT-FPC-B-TANK 11L**; 1450100; square plastic tank 11 litres incl. filler/breather, O-ring, band clamp*
***KIT-FPC-B-TANK 8L**; 1450101; square plastic tank 8 litres incl. filler/breather, O-ring, band clamp*
***KIT-FPC-B-TANK 5L**; 1450102; square plastic tank 5 litres incl. filler/breather, O-ring, band clamp*

2 pump kits

***KIT-FPC-B-PUMP 2,1**; 1449854; pump 2,1 ccm/rev with mounting screws and suction pipe/suction strainer*
***KIT-FPC-B-PUMP 2,7**; 1450098; pump 2,7 ccm/rev with mounting screws and suction pipe/suction strainer*
***KIT-FPC-B-PUMP 3,1**; 1449856; pump 3,1 ccm/rev with mounting screws and sucton pipe/suction strainer*

3 manifold kits

***KIT-FPC-B-MANIFOLD-24VDC**; 1450095; Manifold with valves for lift-lower-circuit; 24VDC*

4 starter relais kits

***KIT-FPC-B-RELAIS 12V**; 1450103; motor starter relais 12VDC/200A incl. mounting clamp*
***KIT-FPC-B-RELAIS 24V**; 1450104; motor starter relais 24VDC/150A incl. mounting clamp*

5 motor kits

***KIT-FPC-B-MOTOR 12V-1,6kW**; 1450096; DC motor 12VDC/1,6 kW incl. mounting screws and coupling*