

PME70-Series

BRUKSANVISNING • BRUGSANVISNING • KÄYTTÖOHJE • OPERATING INSTRUCTIONS

GEBRAUCHANWEISUNG • MODE D'EMPLOI • GEBRUIKSAANWIJZING

ISTRUZIONI PER L'USO • INSTRUCCIONES DE USO • INSTRUÇÕES DE USO

Thank you for the faith you have shown in us by choosing a REHOBOT product. REHOBOT stands for products of high quality and it is our hope that you will be able to use this product for many years.

To avoid functional disturbances, we recommend that you read these instructions thoroughly before using the product.

Technical description (Fig. 1)

Max. working pressure:	70 MPa (700 bar, 10150 psi)
Capacity, low pressure:	
PME70-2030	2.7 l/min (122 in ³ /min)
PME70-4100	8.0 l/min (488 in ³ /min)
PME70-4200	8.0 l/min (488 in ³ /min)
Capacity, high pressure:	
PME70-2030	0.3 l/min (18.3 in ³ /min)
PME70-4100	1.6 l/min (61 in ³ /min)
PME70-4200	1.6 l/min (61 in ³ /min)
Total oil capacity:	
PME70-2030	4.5 l (244 in ³)
PME70-4100	12 l (732 in ³)
PME70-4200	24 l (1465 in ³)
Effective oil capacity:	
PME70-2030	3.2 l (183 in ³)
PME70-4100	10.0 l (610 in ³)
PME70-4200	20.0 l (1220 in ³)
Motor:	
PME70-2030	230 V, 0.55 kW, single-
phase	
PME70-4100	400 V, 2.2 kW, three-
phase	
PME70-4200	400 V, 2.2 kW, three-
phase	
Weight incl. oil:	
PME70-2030AP	22 kg (48.5 lbs)
PME70-2030ADV	22 kg (48.5 lbs)
PME70-2030MRV	22 kg (48.5 lbs)
PME70-2030MLS	23 kg (50.7 lbs)
PME70-2030MLD	23 kg (50.7 lbs)
PME70-2030SS	25 kg (55.0 lbs)
PME70-2030SD	25 kg (55.0 lbs)
PME70-4100AP	45 kg (99.2 lbs)
PME70-4100MLS	46 kg (101.4 lbs)
PME70-4100MLD	46 kg (101.4 lbs)
PME70-4100SS	49 kg (108.0 lbs)
PME70-4100SD	49 kg (108.0 lbs)
PME70-4200AP	62 kg (136.7 lbs)
PME70-4200MLS	63 kg (138.9 lbs)
PME70-4200MLD	63 kg (138.9 lbs)
PME70-4200SS	66 kg (145.5 lbs)
PME70-4200SD	66 kg (145.5 lbs)

Hydraulic oil grade: ISO VG 10/ISO VG32 or equivalent

All pumps have a two-stage function with automatic switching between high and low pressure at around 1.5–6 MPa. The low pressure unit is a gear pump that delivers a high flow rate up to the switching pressure. The high pressure unit consists of one or two piston pumps.

The pump is available in a number of different versions, as listed below. The rating plate (Fig. 2) tells you which version you have.

AP-	Adapter plate with pressure and return connections. Intended for use with external valve.
ADV-	Automatic release valve. The oil returns to the tank when the motor is switched off (Fig. 3.a).
MRV-	Manual release valve. Used when you want to

maintain pressure for a longer period and control the rate of lowering. (Fig. 3.a).

MLS- Lever valve for single-action tools (Fig. 3.b).
MLD- Lever valve for double-action tools (Fig. 3.b).

SS- Electrically operated valve for single-action tools (Fig. 3.c).

SD- Electrically operated valve for double-action tools (Fig. 3.c).

Safety feature

The pump is equipped with a built-in safety valve that prevents connected tools from overloading. The safety valve is set at the factory to a maximum working pressure of 70 MPa (700 bar, 10150 psi).

System design

When you plan a hydraulic system always choose products that are suitable for the chosen application. Check product limitations with regard to pressure range, lifting capacity and connection options. The maximum working pressure of the system must not exceed the maximum working pressure of any product that is included in the system.

We recommend the use of a pressure gauge to give an accurate indication of the working pressure of each hydraulic system.

Make sure that all hydraulic hoses, couplings, etc., are connected to the correct connection port (pressure or return connection) on the pump, cylinder, valve or other hydraulic component.

Installation

Electrical connection

PME70-2030: The pump is supplied with a two-metre power cord and earthed plug. If any other connection is required please refer to the schematic installation diagram in figures 4.a and 4.b.

PME70-4100/4200: The pump is supplied with a two-metre power cord. Power cords are marked as shown in Fig. 4.c.

PME70-SS/SD, connecting the controller: In order to operate SS/SD pumps you must first install a controller. Controller TRC230-24 is installed as shown in Fig. 5.a (for PME70-2030) or Fig. 5.b (for PME70-4100/4200).



- Check that the motor turns clockwise (see arrow on motor).
- Electrical installation must be carried out by qualified electrician.

Connecting the foot pedal, PME70-2030ADV/MRV

The foot pedal is connected to the connection box as shown in Fig. 6. NOTE! Make sure that there are no kinks in the air hose that could cause a blockage.

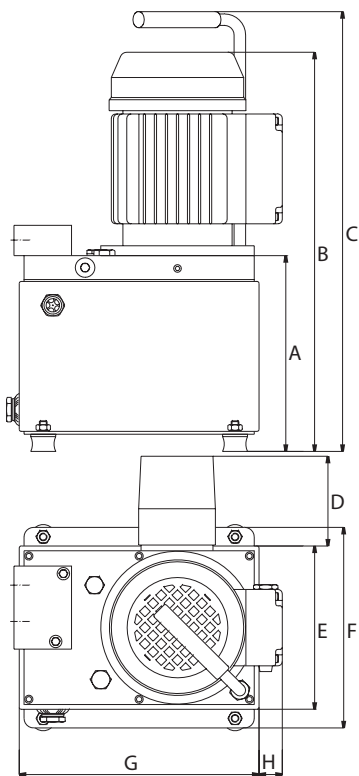
Fitting the bleed plug

Before using the pump the transport plug (Fig. 10, item B) must be removed and replaced with the bleed plug that is supplied with the pump.

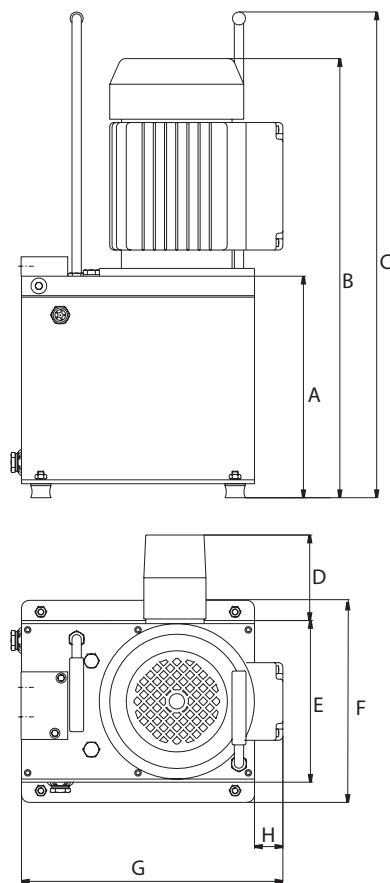
Connecting the hydraulic hose (Fig. 7)

All connection ports have G 1/4" threads. The connection ports are marked as follows:

PME70-2030



PME70-4100
PME70-4200



	PME70-2030		PME70-4100		PME70-4200	
	mm	in	mm	in	mm	in
A	205	8.0	285	11.2	245	9.6
B	418	16.5	550	21.7	510	20.1
C	520	20.5	609	24.0	-	-
D	110	4.3	110	4.3	110	4.3
E	171	6.7	208	8.2	-	-
F	210	8.3	260	10.2	-	-
G	250	9.8	300	11.8	460	18.1
H	25	1.0	40	1.6	40	1.6

NIKKA® ESKILSTUNA
HYDRAULICS SWEDEN

Type AA
Capacity BB L
Max oil pressure CC MPa
Serial number DD

(S)	AA Modell beteckning BB Effektiv oljevoly CC Max. arbetstryck DD Serie nummer	(F)	AA Modèle BB Volume utile d'huile CC Pression de service maxi DD Numéro de série
(N)	AA Modellbetegnelse BB Effektivt oljevolum CC Maks. arbeidstrykk DD Serienummer	(NL)	AA Modelaanduiding BB Effectieve olie-inhoud: CC Max. werkdruk DD Serienummer
(DK)	AA Modelbetegnelse BB Effektivt olievolume CC Max. driftstryk DD Serienummer	(I)	AA Modello BB Quantità effettiva di olio CC Pressione d'esercizio max DD Numero di serie
(SF)	AA Tyypimerkintä BB Tehokas öljyntilavuus CC Suurin työpaine DD Sarjanumero	(E)	AA Denominación del modleo BB Capacidad de aceite efectiva CC Máxima presión de servicio DD Número de serie
(GB)	AA Model designation BB Effective oil capacity CC Max. working pressure DD Serial number	(P)	AA Modelo BB olume efectivo de óleo CC Pressão máxima de trabalho DD Número de série
(D)	AA Modellbezeichnung BB Effektives Ölvolume CC Max. Betriebsdruck DD Seriennummer		

Fig. 2

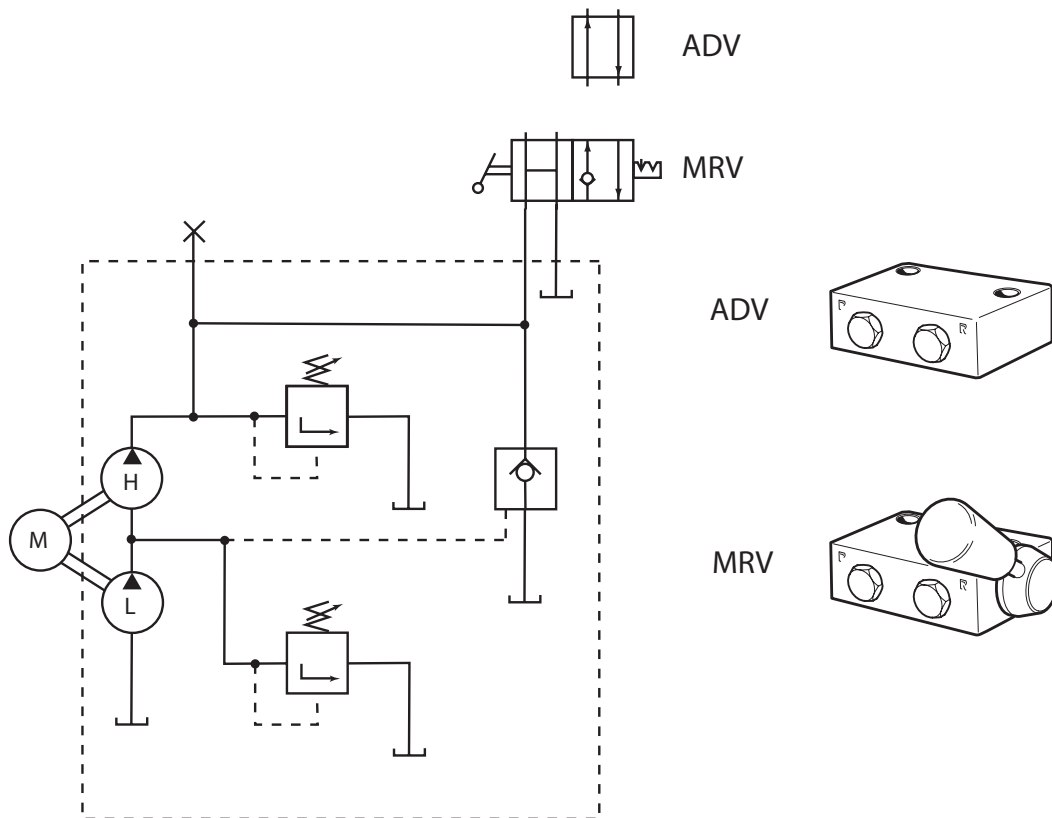


Fig. 3.a

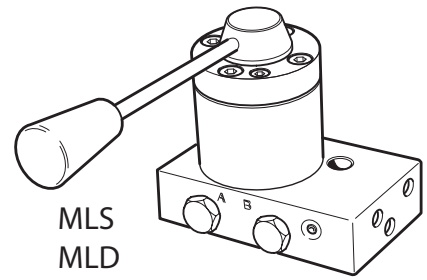
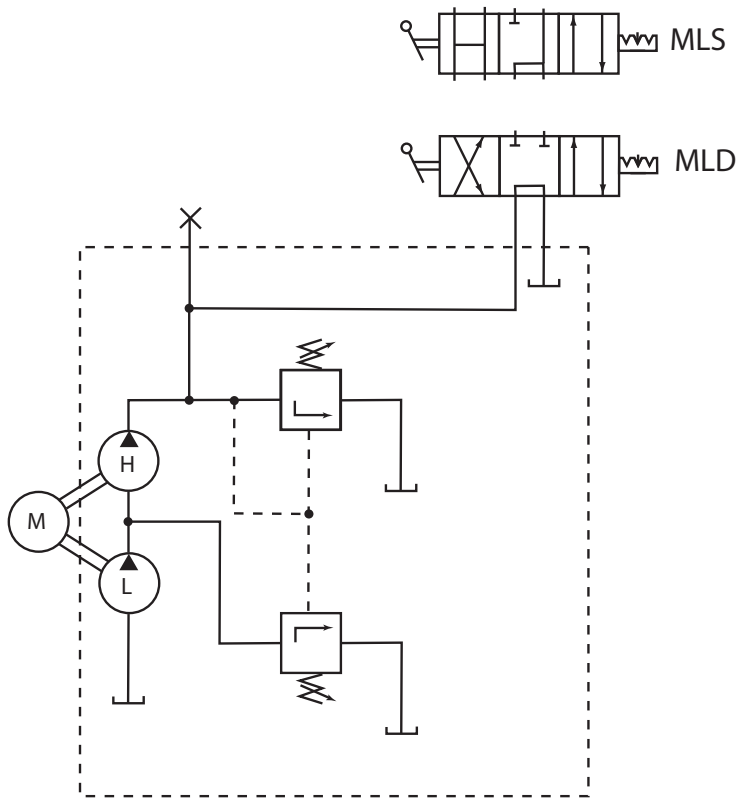


Fig. 3.b

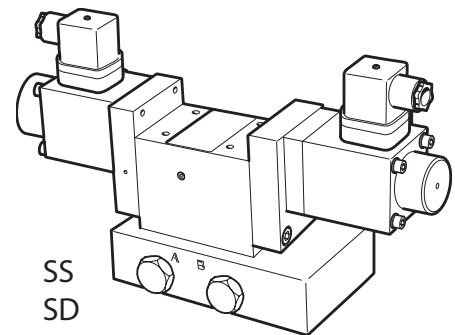
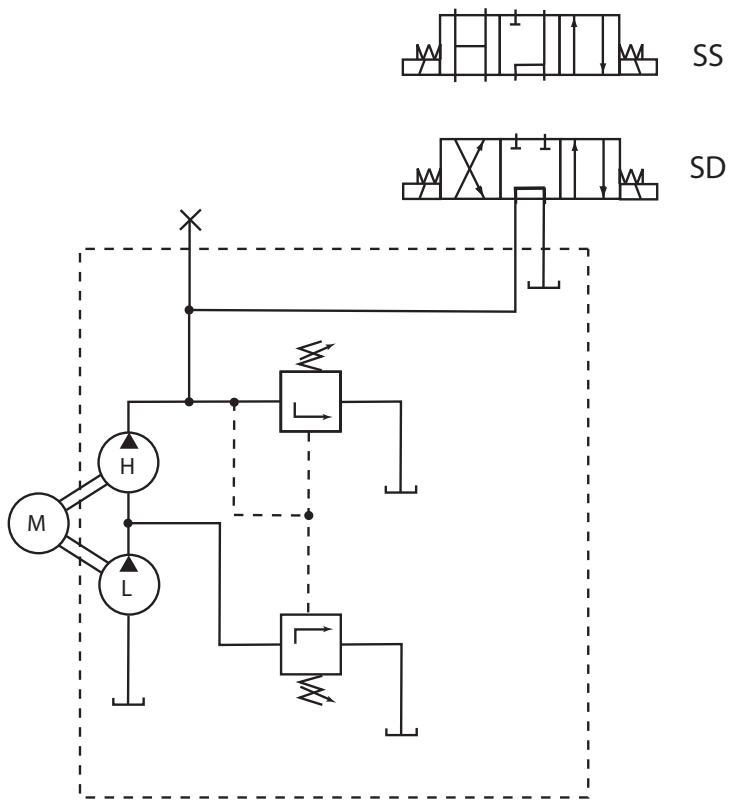


Fig. 3.c

Elektrisk anslutning enfasmotor 230V/Elektrisk tilkobling enfasmotor 230V/Elektrisk tilslutning enfaset motor 230V/
 Sähköliitännä yksivaihemoottori 230V/Electrical connection – single-phase motor, 230 V/Elektrischer Anschluß Einpha-
 senmotor 230 V/Raccordement électrique pour moteur monophasé 230V/Elektrische aansluiting eenfasemotor 230V/Col-
 legamento elettrico di motore monofase a 230 V/Conexión eléctrica, motor monofásico 230V/Ligação eléctrica de motor
 monofásico, 230V

S	-----	Brun	Fas
	=====	Blå	Neutral
	.....	Grön/gul	Jord
N	-----	Brun	Fase
	=====	Blå	Nøytral
	.....	Grønn/gul	Jord
DK	-----	Brun	Fase
	=====	Blå	Neutral
	.....	Grøn/gul	Jord
SF	-----	Ruskea	Vaihe
	=====	Sininen	Nolla
	.....	Vi/ke	Maa
GB	-----	Brown	Phase
	=====	Blue	Neutral
	.....	Green/yellow	Earth
D	-----	Braun	Phase
	=====	Blau	Nulleiter
	.....	Grün/gelb	Erdung

F	-----	Marron	Phase
	=====	Bleu	Neutre
	.....	Vert/jaune	Masse
NL	-----	Bruin	Fase
	=====	Blauw	Neutraal
	.....	Groen/geel	Massa
I	-----	Marrone	Fase
	=====	Blu	Neutro
	.....	Verde/giallo	Terra
E	-----	Marrón	Fase
	=====	Azul	Neutro
	.....	Verde/Amarillo	Tierra
P	-----	Castanho	Fase
	=====	Azul	Neutro
	.....	Verde/Amarelo	Terra

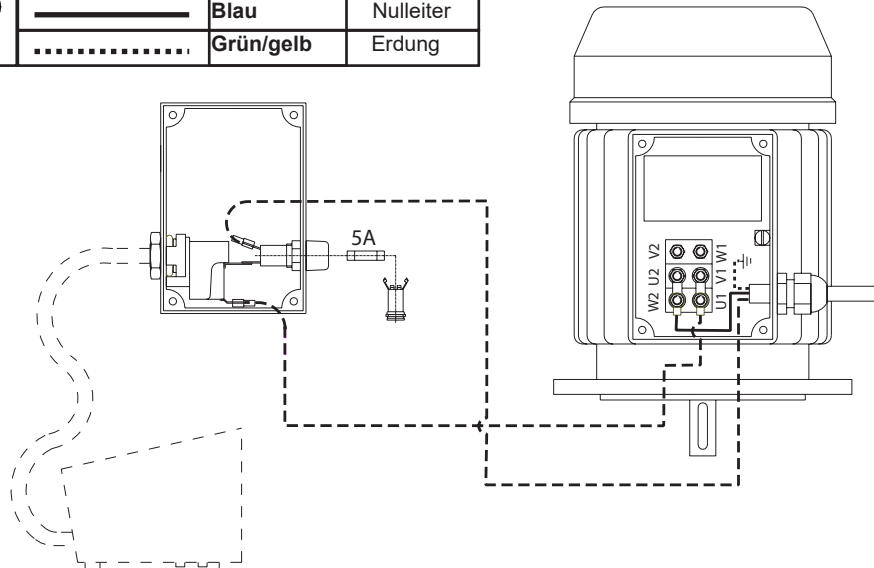


Fig. 4.a

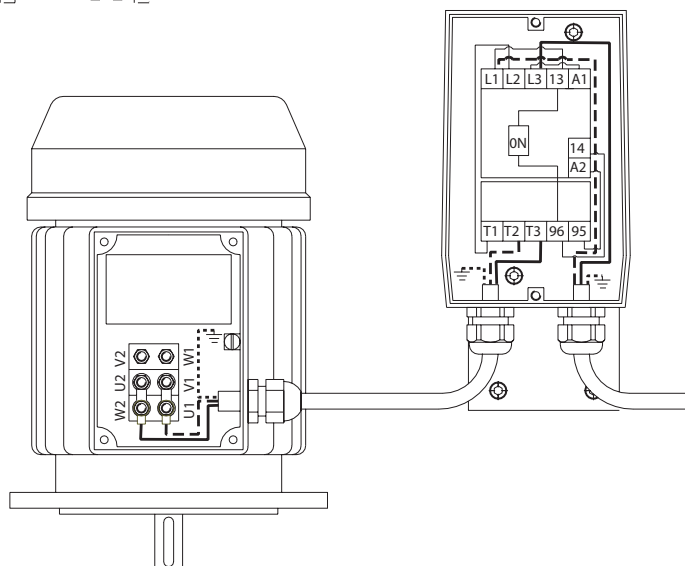


Fig. 4.b

Elektrisk anslutning trefasmotor 400V/Elektrisk tilkobling trefasemotor 400V/Elektrisk tilslutning trefaset motor 400V/
 Sähköliitäntä kolmivaihemoottori 400 V/Electrical connection – three-phase motor, 400V/Elektrischer Anschluß Dreiphasenmotor 400V/Raccordement électrique pour moteur triphasé 400V/Elektrische aansluiting driefasemotor 400V/
 Collegamento elettrico di motore trifase a 400 V/Conexión eléctrica, motor trifásico 400V/Ligação eléctrica de motor trifásico, 400V

S	.....	Grön/gul	Jord
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutral
N	.....	Grønn/gul	Jord
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Nøytral
DK	.....	Grøn/gul	Jord
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutral
SF	.....	Vi/ke	Maa
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Nolla
GB	.....	Green/yellow	Earth
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutral
D	.....	Grün/gelb	Erdung
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Nulleiter

F	.....	Vert/jaune	Masse
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutre
NL	.....	Groen/geel	Massa
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutraal
I	.....	Verde/giallo	Massa
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutro
E	.....	Verde/Amarillo	Tierra
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutro
P	.....	Verde/amarelo	Terra
	—————	1	L1
	-----	2	L2
	-----	3	L3
	-----	4	Neutro

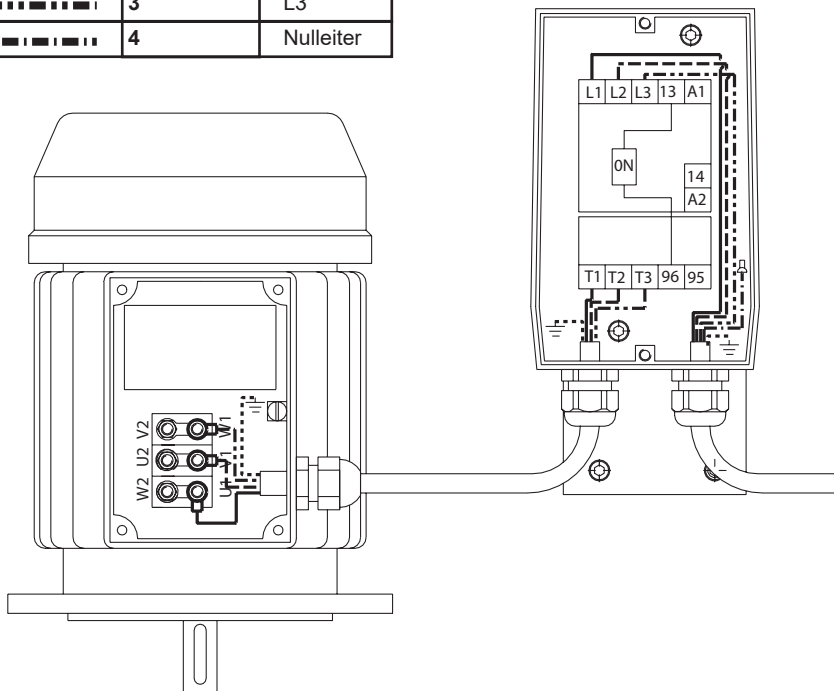


Fig. 4.c

S	-----	Brun	Fas
	—————	Blå	Neutral
	.....	Grön/gul	Jord
N	-----	Brun	Fase
	—————	Blå	Nøytral
	.....	Grønn/gul	Jord
DK	-----	Brun	Fase
	—————	Blå	Neutral
	.....	Grøn/gul	Jord
SF	-----	Ruskea	Vaihe
	—————	Sininen	Nolla
	.....	Vi/ke	Maa
GB	-----	Brown	Phase
	—————	Blue	Neutral
	.....	Green/yellow	Earth
D	-----	Braun	Phase
	—————	Blau	Nulleiter
	.....	Grün/gelb	Erdung

F	-----	Marron	Phase
	—————	Bleu	Neutre
	.....	Vert/jaune	Masse
NL	-----	Bruin	Fase
	—————	Blauw	Neutraal
	.....	Groen/geel	Massa
I	-----	Marrone	Fase
	—————	Blu	Neutro
	.....	Verde/giallo	Massa
E	-----	Marrón	Fase
	—————	Azul	Neutro
	.....	Verde/Amarillo	Tierra
P	-----	Castanho	Fase
	—————	Azul	Neutro
	.....	Verde/amarelo	Terra

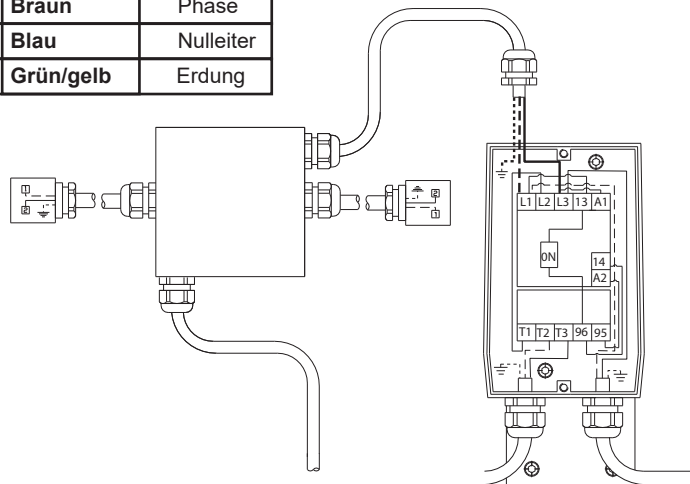


Fig. 5.a

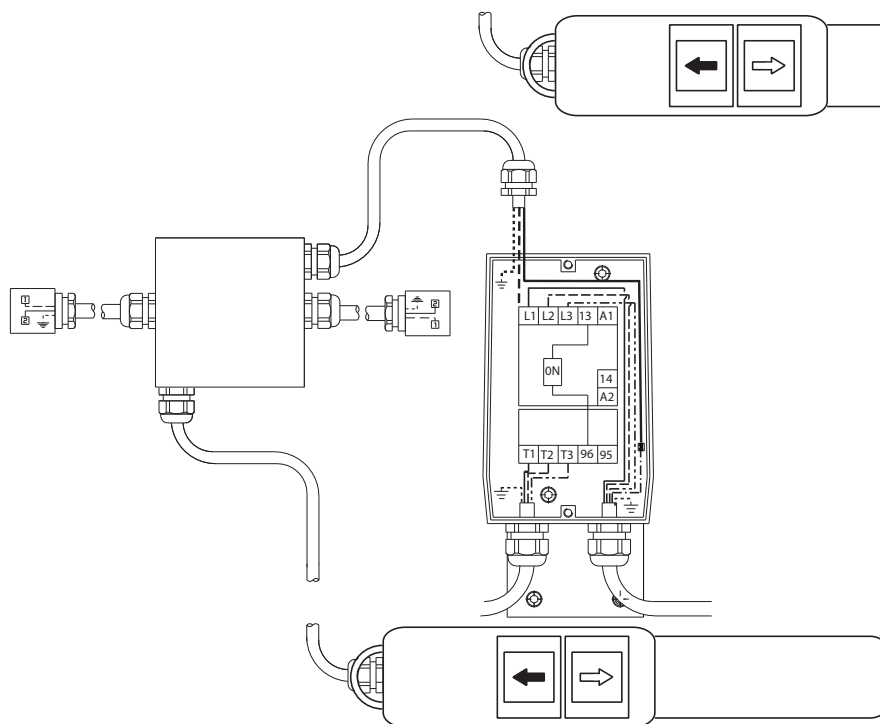


Fig. 5.b

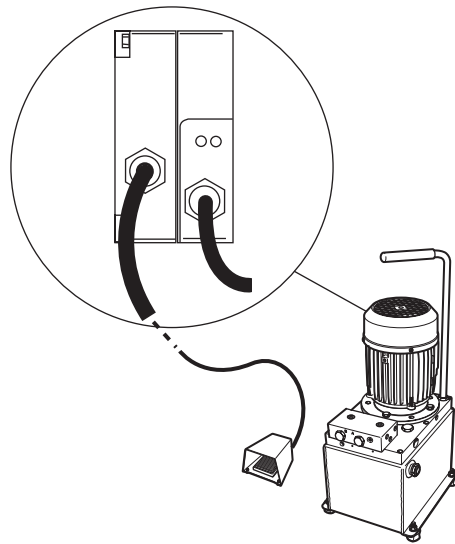


Fig. 6

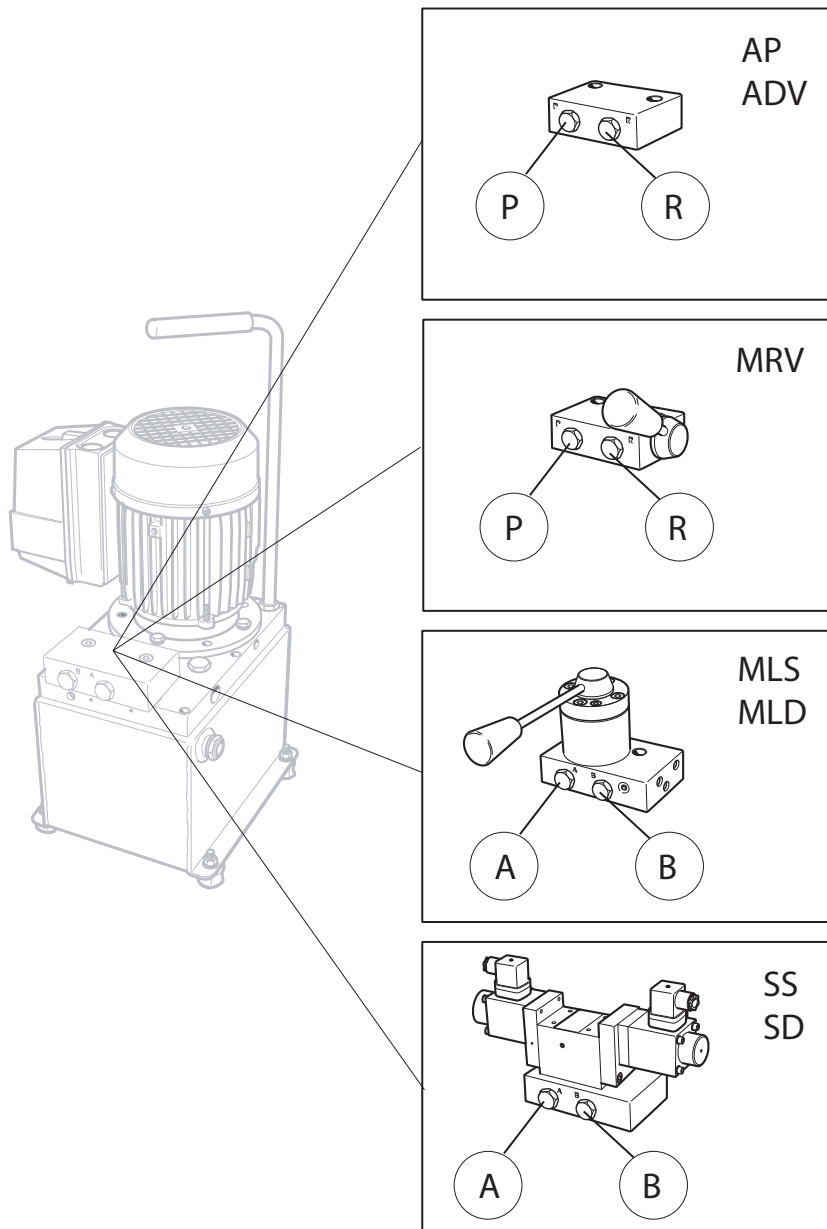


Fig. 7

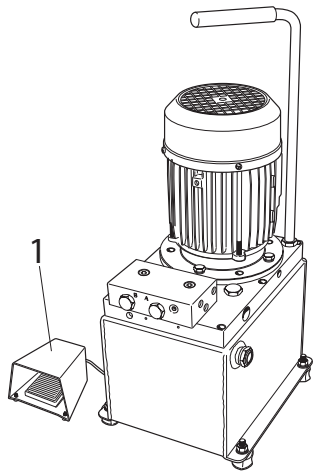


Fig. 8

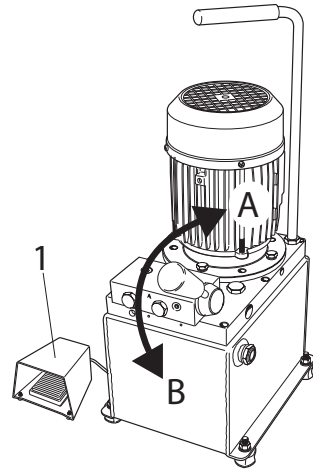
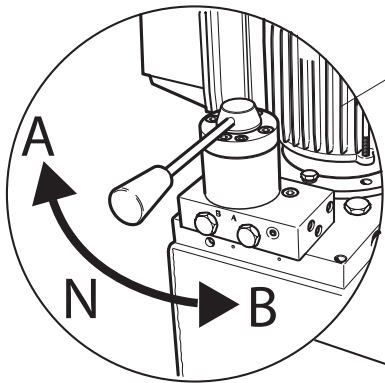
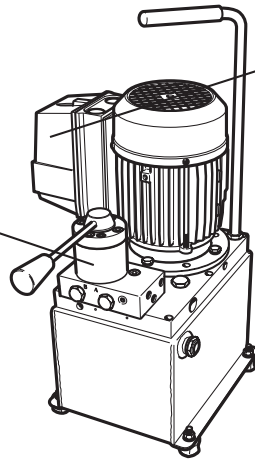


Fig. 9



2



1

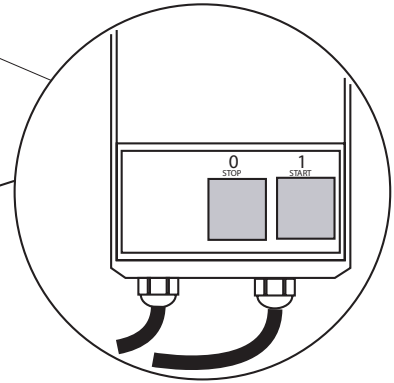
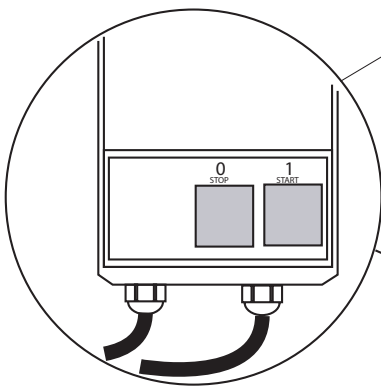
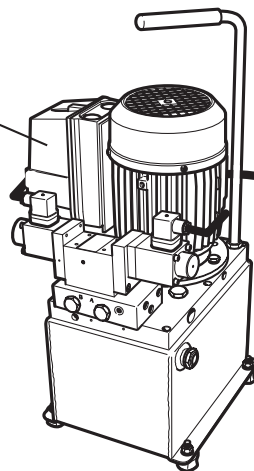


Fig. 10



1



2

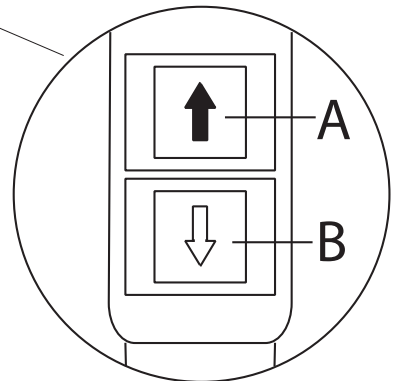
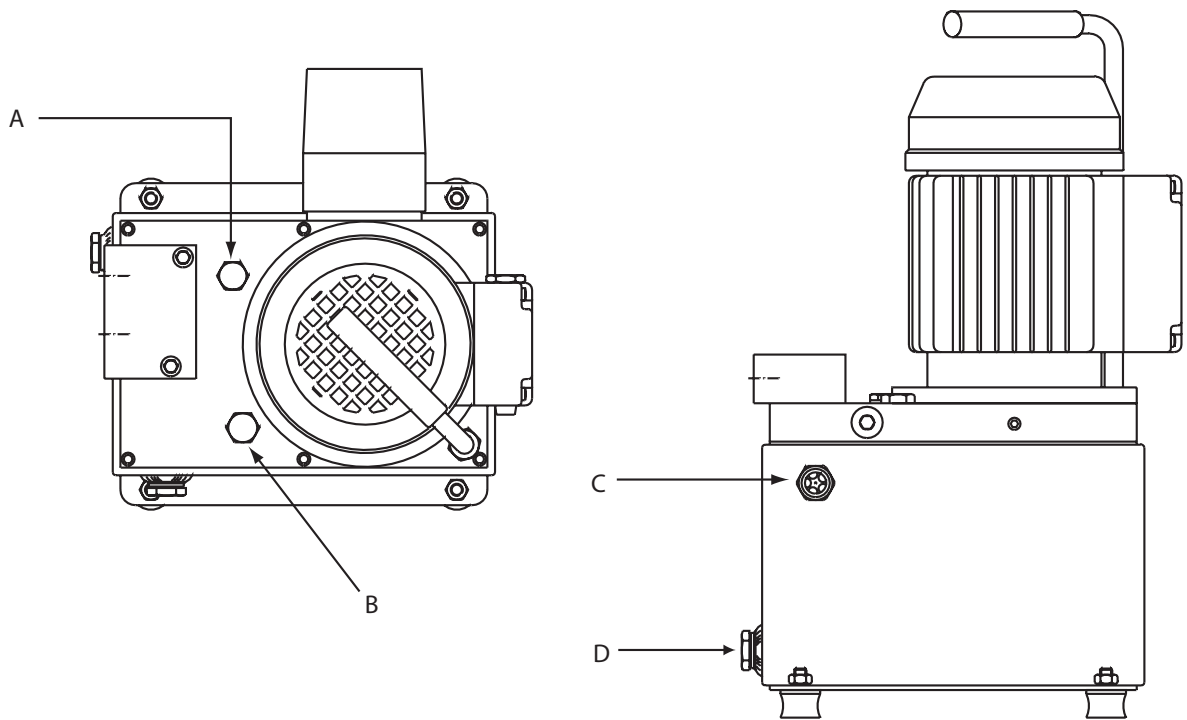


Fig. 11



(S)	A	Manometeranslutning
	B	Oljepåfyllning
	C	Nivåglas
	D	Dräneringsplugg
(N)	A	Manometertilkobling
	B	Oljepåfylling
	C	Nivåvindu
	D	Dreneringsplugg
(DK)	A	Manometertilslutning
	B	Oliepåfyldning
	C	Skueglas
	D	Aftapningsprop
(SF)	A	Painemittarin liitäntä
	B	Öljyntäyttöaukko
	C	Tarkastusikkuna
	D	Tyhjennysaukko
(GB)	A	Pressure gauge port
	B	Oil filler plug
	C	Level glass
	D	Drain plug
(D)	A	Manometeranschluß
	B	Nachfüllen von Öl
	C	Sichtglas
	D	Ablaßschraube

(F)	A	Raccordement manomètre
	B	Remplissage d'huile
	C	Regard vitré
	D	Bouchon de vidange
(NL)	A	Manometeraansluiting
	B	Olie bijvullen
	C	Peilglas
	D	Drainageplug
(I)	A	Attacco del manometro
	B	Rabbocco dell'olio
	C	Vetrospia
	D	Tappo di spurgo
(E)	A	Conexión de manómetro
	B	Llenado de aceite
	C	Mirilla de nivel
	D	Tapón de drenaje
(P)	A	Ligação de manómetro
	B	Enchimento de óleo
	C	Visor de nível
	D	Bujão de drenagem

Fig. 12