



Brøytehydraulikk

2020-2021

 **Jernkroken 7, Oslo**

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EGIL ENG & CO. AS
Vår kunnskap - Din trygghet

Kjære påbyggere!

En ny brøytesesong er allerede i gang og som i alle andre år ønsker vi å tilby våre kunder komponenter og løsninger for brøytebiler.

Vi takker for den tillit dere har vist ved å velge oss som leverandør i alle disse årene. Vi ønsker å være en foretrukken leverandør gjennom en kombinasjon av høy kompetanse, gode produkter og tilgjengelighet.

For å forbedre vårt samarbeid fra teknisk side har vi utarbeidet en dokumentasjon som inkluderer løsninger og datablad for brøytehydraulikk. Datablad på komponenter finnes også på vår hjemmeside egileng.no.

Vi står klare til deres disposisjon og håper det blir en bra brøytesesong for oss alle!

Med vennlig hilsen
Mobilhydraulikkavdeling
Egil Eng & Co AS

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**BRØYTEHYDRAULIKK
MED NORHYDRAULICK RM270
FAST STEMPELPUMPE**

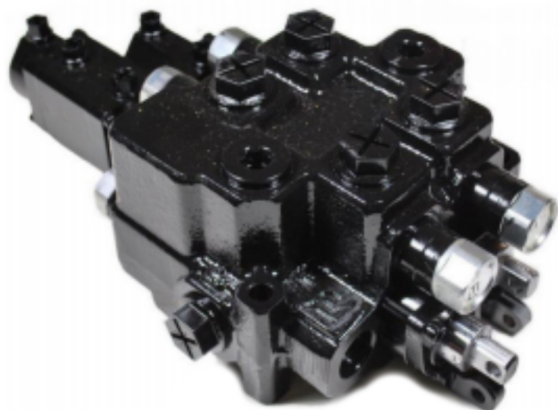
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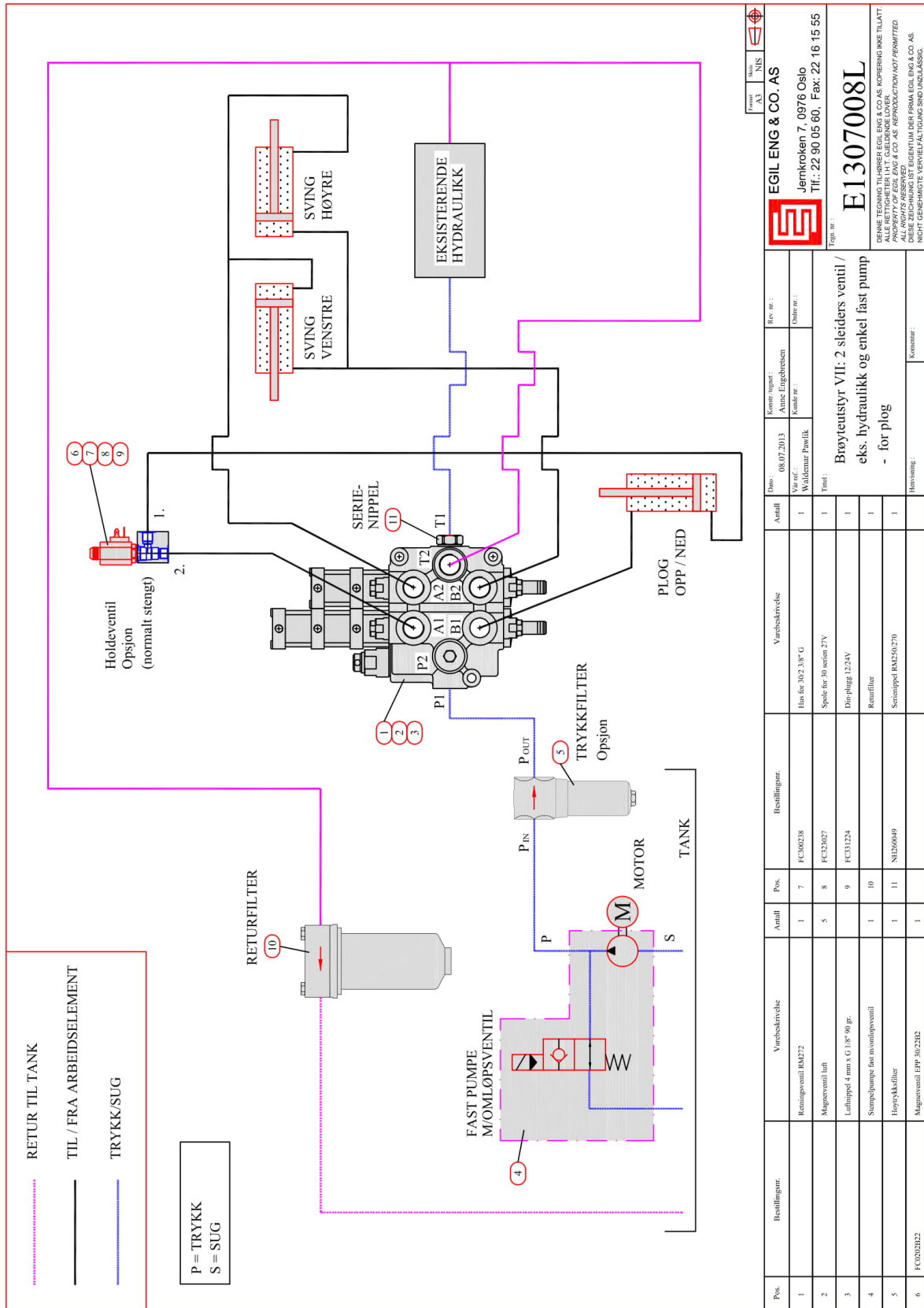
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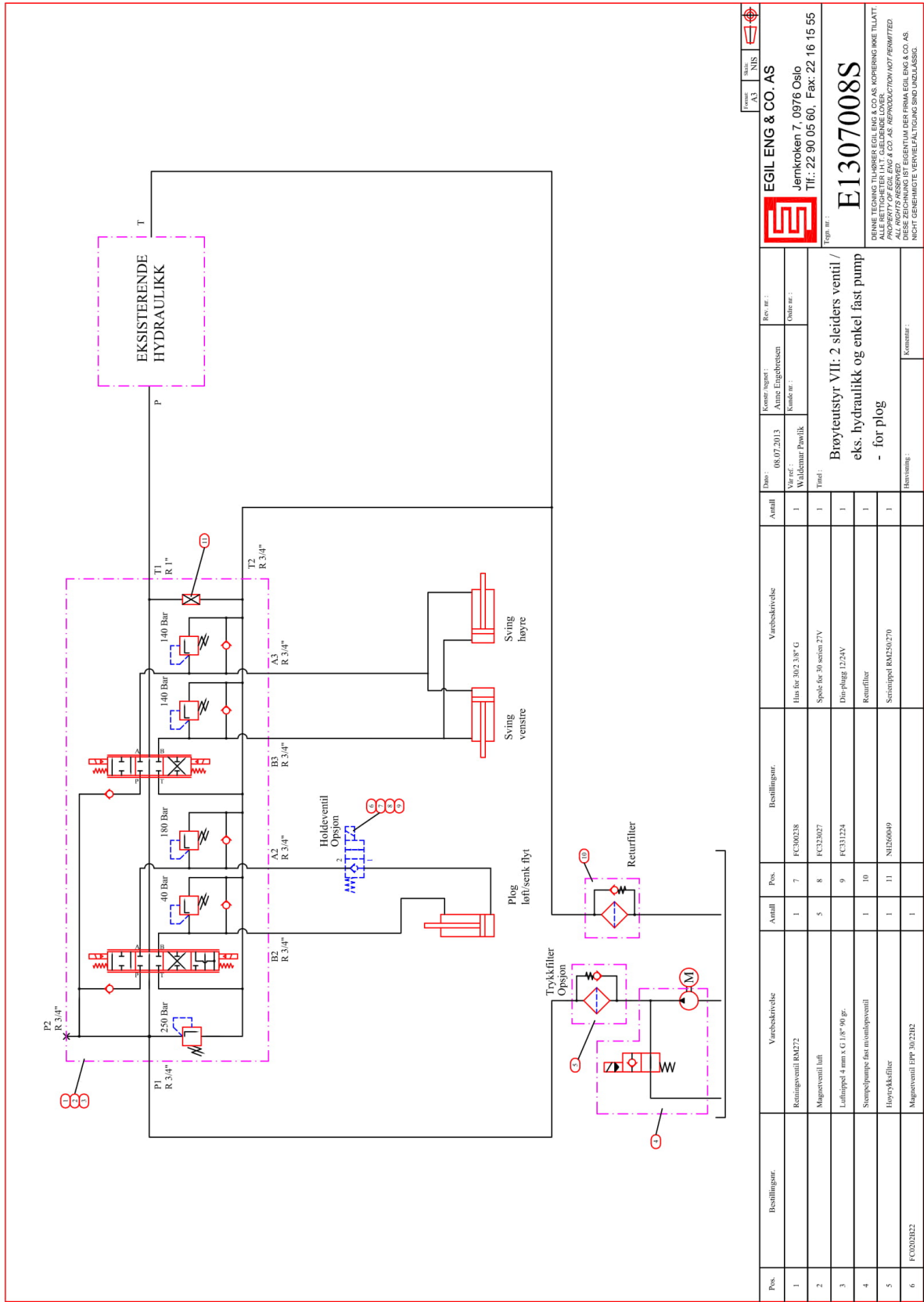
Variant med 2 sleiders plogventil uten saltspreder



Pos.	Bestillingnr.	Varebeskrivelse	Antall	Pos.	Bestillingnr.	Varebeskrivelse	Antall	Dato:	Rev. nr.:
1		Reiningsventil RM272	1	7	FC300238	Hus for 30/2 3/8" G	1	08/07/2013	EGIL ENG & CO. AS
2		Magnetsventil luft	5	8	FC323027	Spole for 30 serier 27V	1	08/07/2013	Jernkroken 7, 0976 Oslo
3		Lutning 4 mm x G 1/8" 90 gr.	1	9	FC331224	Din-plugg 12/24V	1	08/07/2013	Tlf.: 22 90 05 60, Fax: 22 16 15 55
4		Støpselpumpe for innløpsventil	1	10		Returfilter	1		
5		Hydrokylinder	1	11	NID56040	Strømspelt RM250270	1		
6	FC0202022	Magnetsventil EPP 30/23/2	1						

Komponentnr.:	Amne Engelsen
Kunde nr.:	Waldemar Pawlik
Fig. nr.:	

Fig. nr.:	E1307008L
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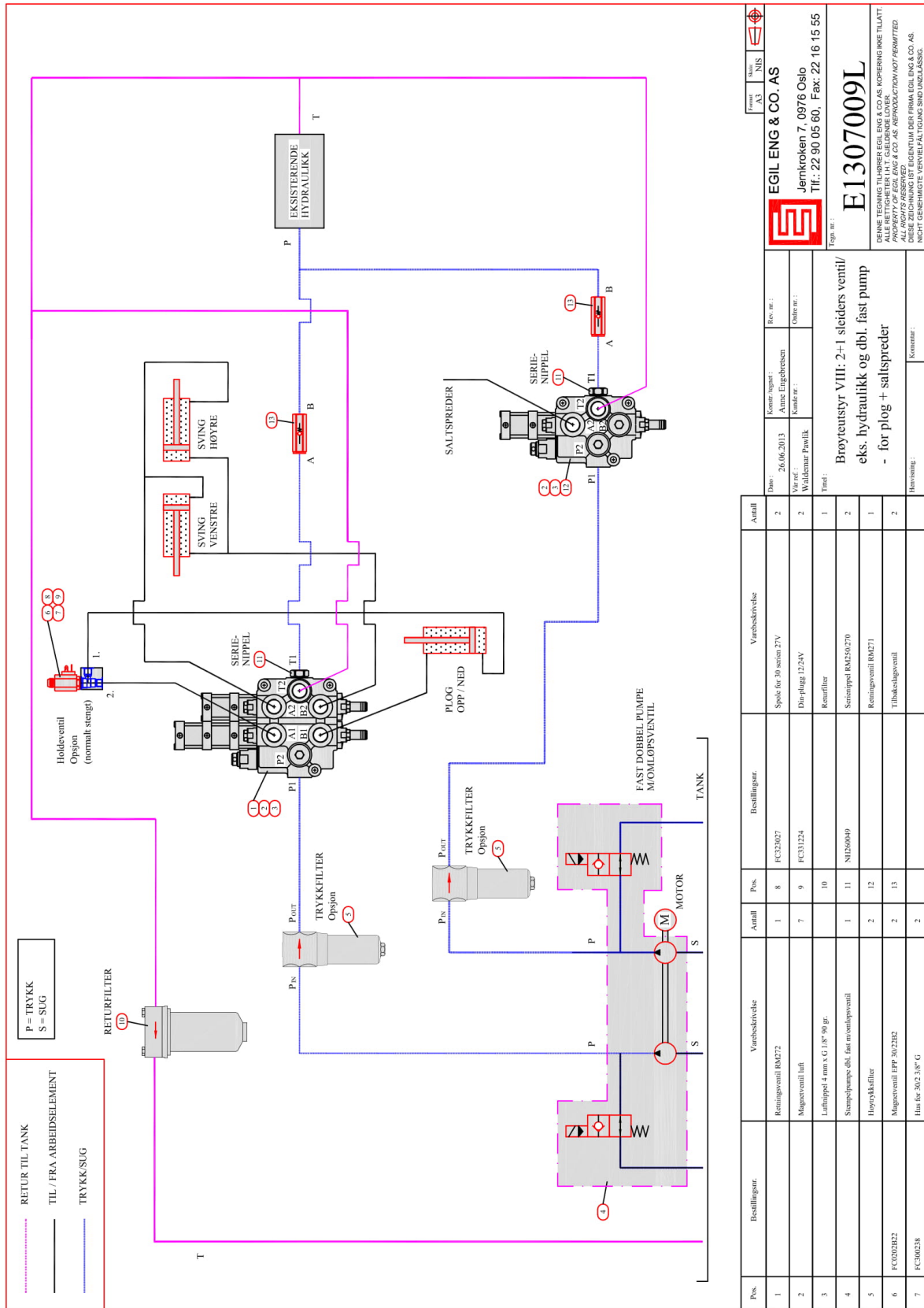
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E1307008S			
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Pos.	Bestillingssnr.	Varebeskrivelse	Antall	Pos.	Bestillingssnr.	Varebeskrivelse	Antall	Dato:	Kontr. signert:	Rev. nr.:
1		Reiningsventil RM272	1	7	FC300238	Hus for 302 3.8" G	1	06.07.2013	Arne Engelsen	
2		Magneventil luft	5	8	FC32027	Spole for 30 serien 2TV	1	06.07.2013	Waldemar Perik	001
3		Luftnippel 4 mm x G 1/8" 90 gr.	9	9	FC31224	Din-plugg 1224V	1			
4		Stempelpumpe fast monolpventil	1	10		Returfilter	1			
5		Høytrykfilter	1	11	N1250649	Stempelpump RM250 270	1			
6	FC020282	Magneventil EPP 30/282	1							

Brøyteustyr VII: 2 sleiders ventil / eks. hydraulikk og enkel fast pump - for plog

Fig. nr.: _____
Kommentar: _____

Variant med 2 sleiders plogventil med saltspreder

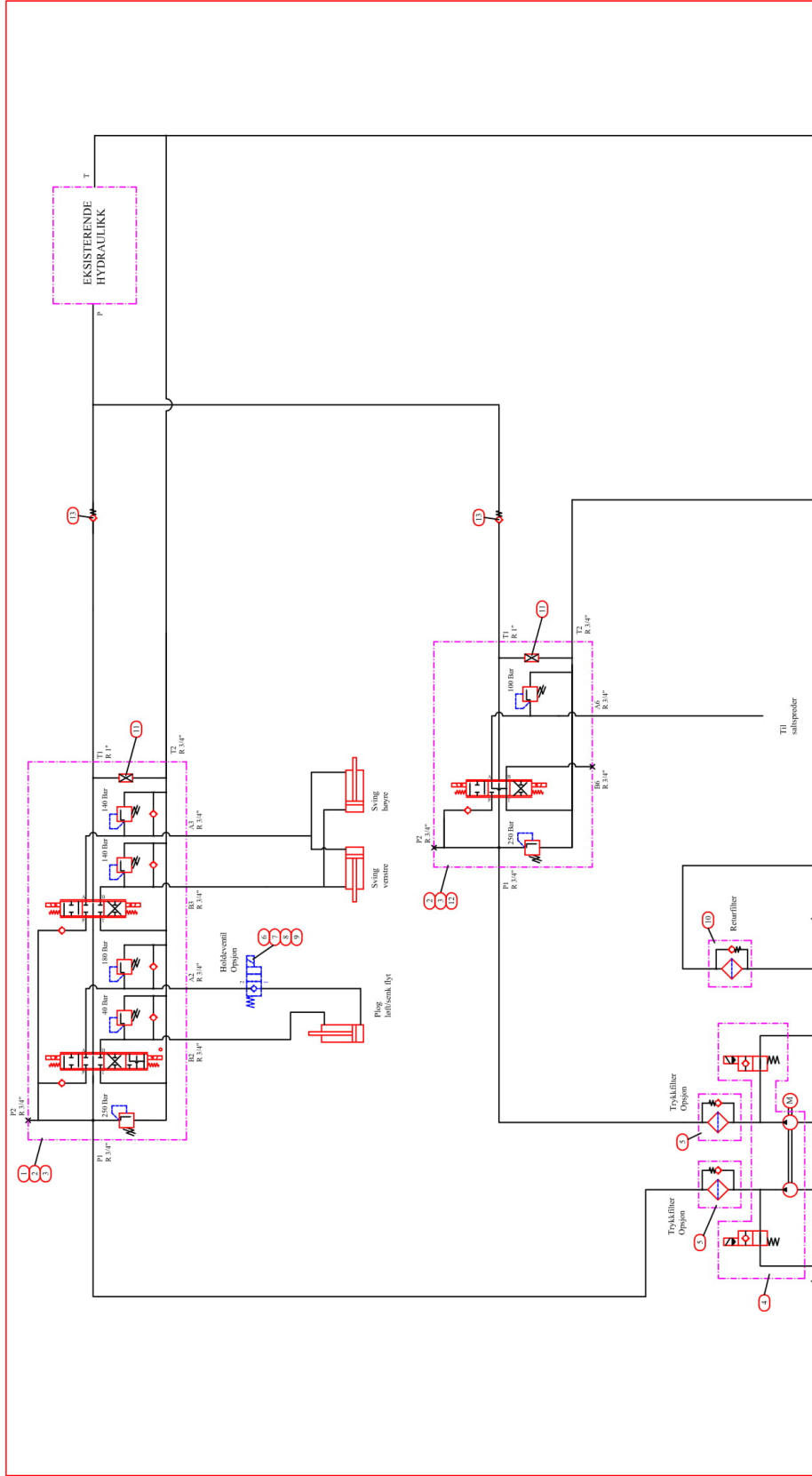


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Fig. nr.: **E1307009L**

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Dato	Revisjon	Revisjon nr.	Rev. nr.
26.06.2013	Amne Engelsen		
Waldemar Fawlik			
Ver ref.			
Titel	Brøyteutsyr VIII: 2+1 sleiders ventill/ eks. hydraulikk og dbi, fast pump - for pløg + saltspreder		
Opprettet			
Revisjon			
Godkjent			



Pos.	Bestillingsnr.	Varebeskrivelse	Antall	Pos.	Bestillingsnr.	Varebeskrivelse	Antall
1	Reiningsventil RM272		1	8	FC32027	Spole for 30 serien 27V	2
2	Magnetsventil luft		7	9	FC33124	Di-utløg 12/24V	2
3	Luftnippel 4 mm x 6 mm x 1/8" 90 gr.		1	10		Reinfilter	1
4	Stempel-pumpe dbl. fast innstøpsventil		1	11	NH20049	Seriempel RM250/270	2
5	Høytrykfilter		2	12		Reiningsventil RM271	1
6	Magnetsventil EPP 30/23/2		2	13		Tilbakestøpsventil	2
7	FC300238	Hus for 302 3/8" G	2				


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Fig. nr.: **E1307009S**
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Kontr. signet: **Atme Engtelesen**
 Dato: **26.06.2013**
 W. nr.: **Waldemar Porsik**
 Rev. nr.:
 Ønske nr.:

Proyeusstyr VIII: 2+1 sleiders ventil/
 eks. hydraulikk og dbl. fast pump
 - for plog + saltspreder

Antall	Bestillingsnr.	Varebeskrivelse	Pos.
1	FC32027	Spole for 30 serien 27V	8
2	FC33124	Di-utløg 12/24V	9
1		Reinfilter	10
2	NH20049	Seriempel RM250/270	11
1		Reiningsventil RM271	12
2		Tilbakestøpsventil	13

**BRØYTEHYDRAULIKK MED
SAUER DANFOSS PVG 32 VENTIL
FOR VARIABLE PUMPE**

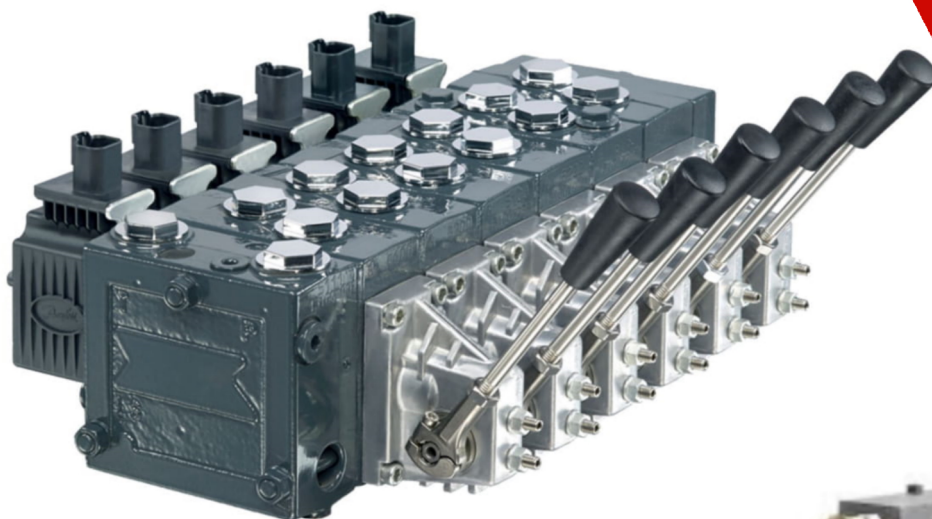
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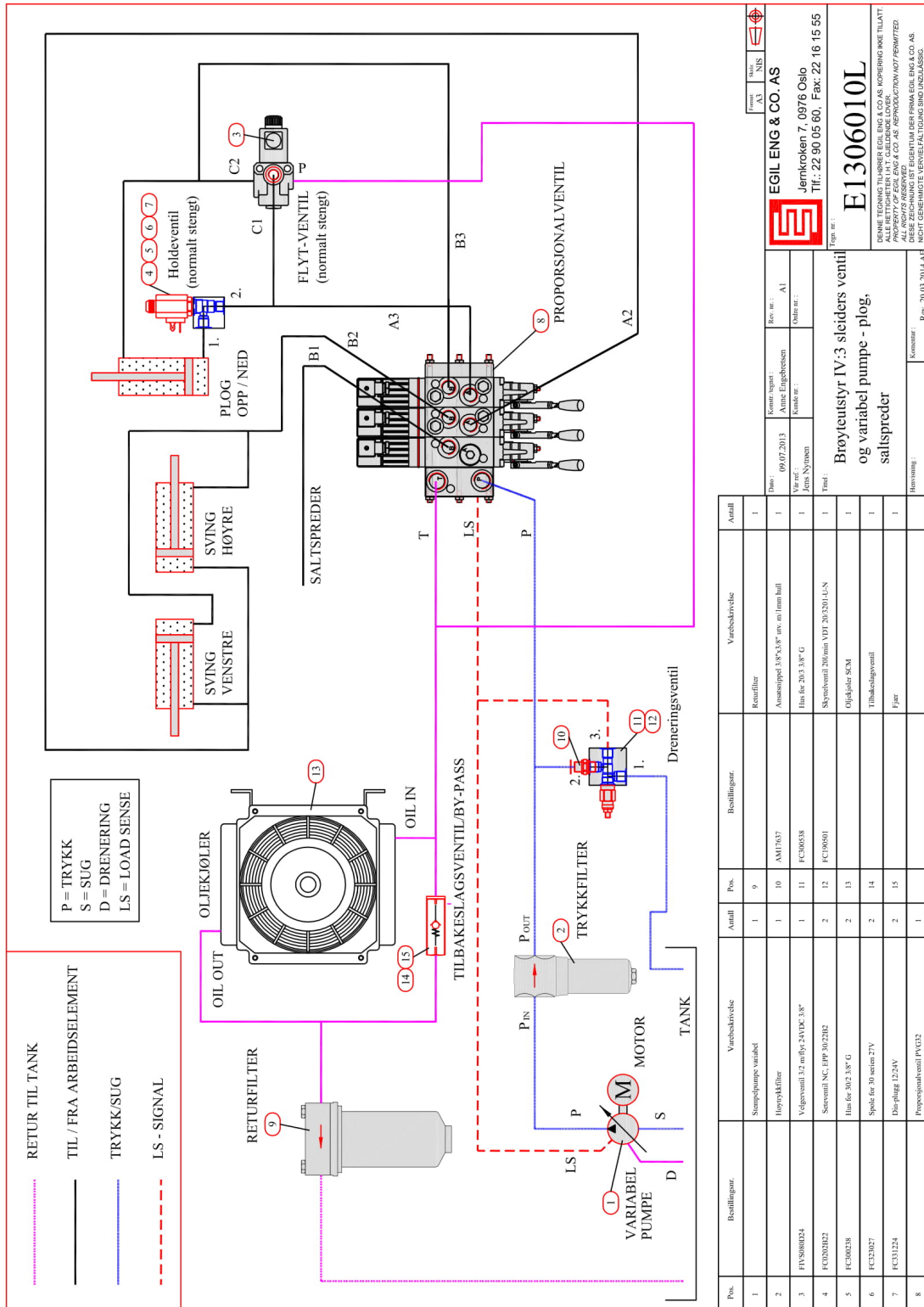
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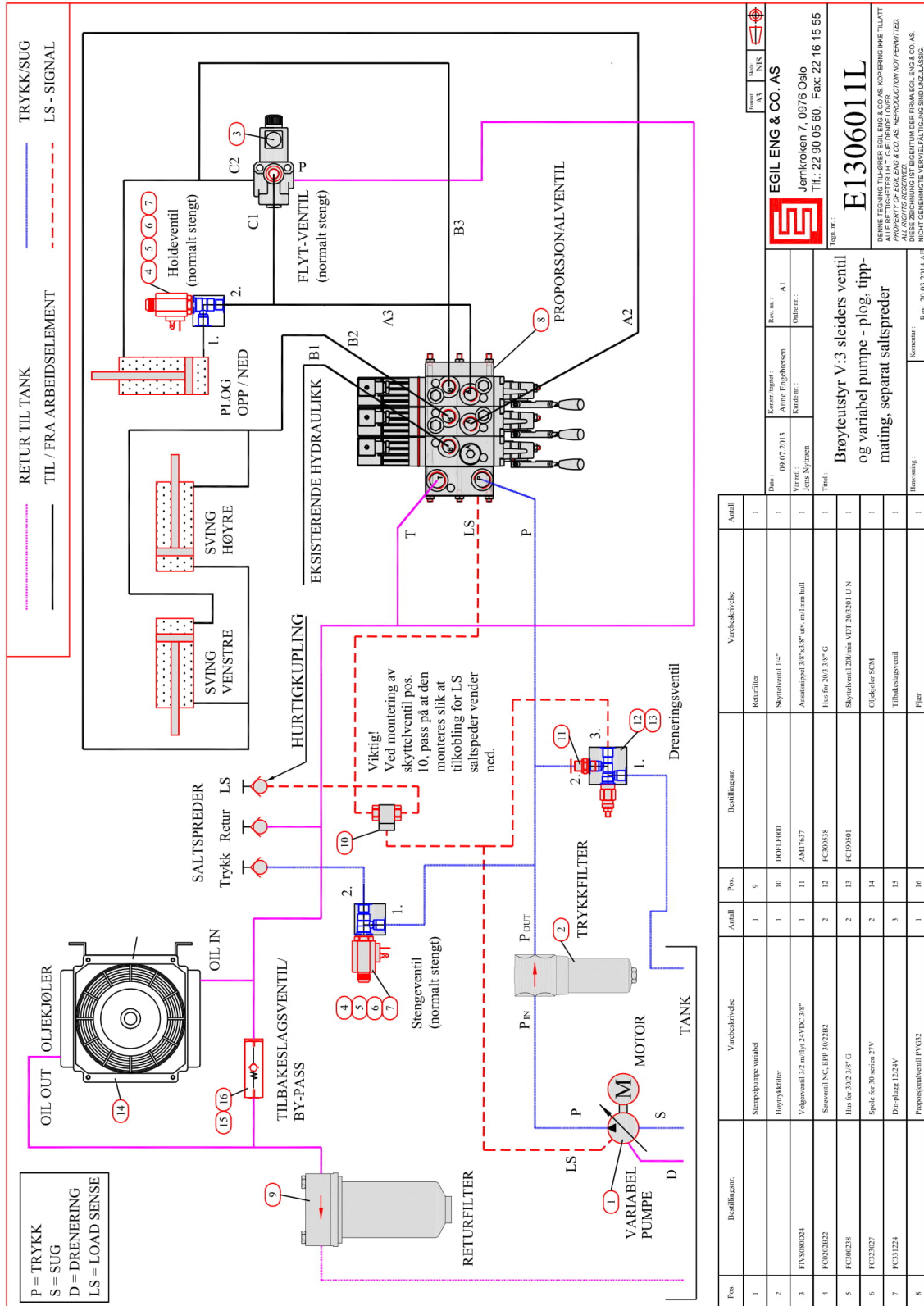


Variant med 3 sleiders ventil og variabel pumpe for plog og saltspreder



Variant med 3 sleiders ventil plog og tippmating (separat saltspreder)

I dette tilfellet er variabel pumpe koblet direkte til saltspredercentral (så lenge er den utstyrt med LS funksjon).



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E1306011L

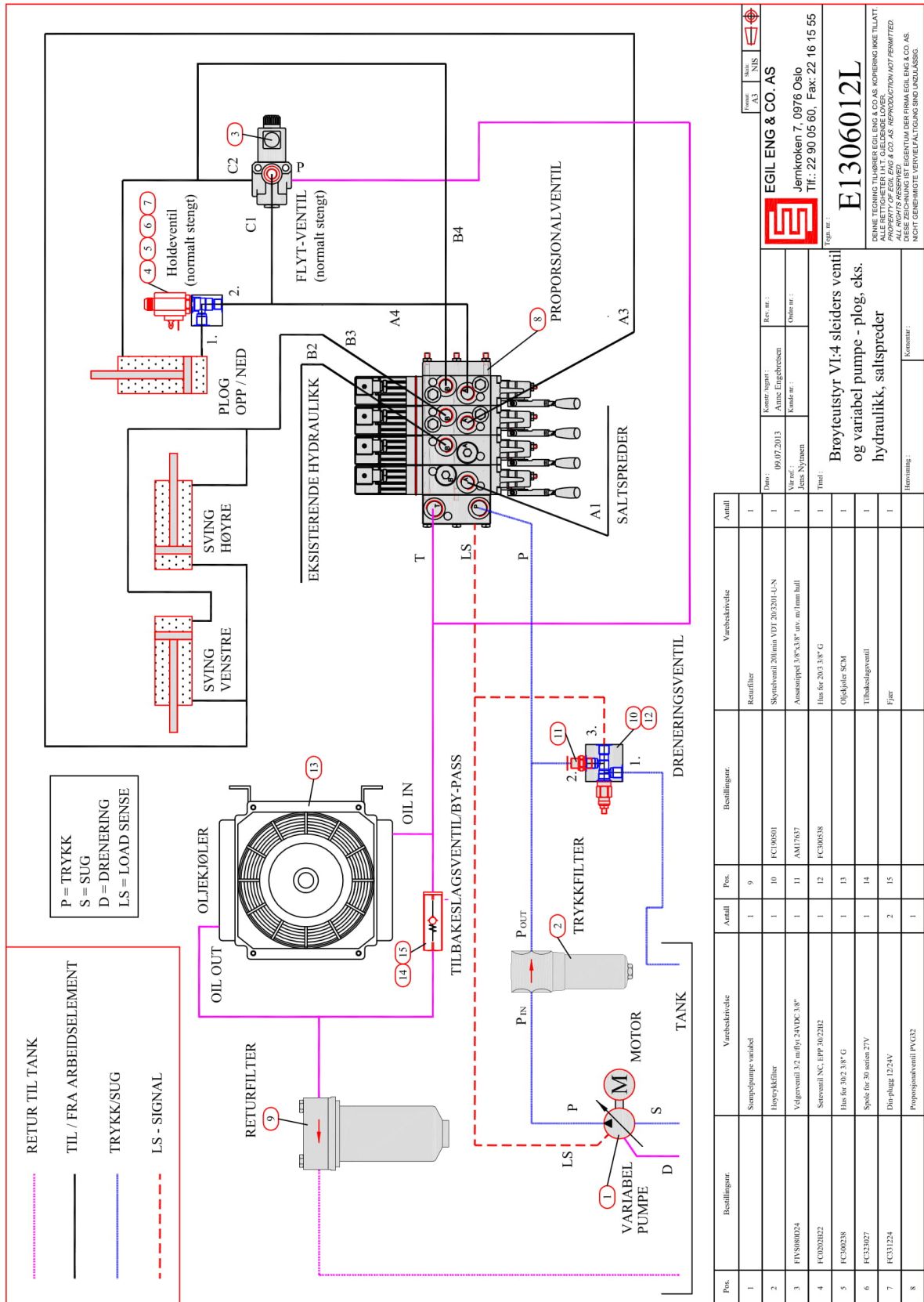
BRØYTEUTSTYR V:3 SLEIDERS VENTIL
 OG VARIABEL PUMPE - PLOG, TIPP-
 MATING, SEPARAT SALTSPREDER

Revisjon: 09.07.2013
 Avne Egeheuser
 Jørgen Nystuen

Rev. nr.: A1
 Dato: 09.07.2013
 Avne Egeheuser
 Jørgen Nystuen

Revisjon: 20.03.2014 AE

Variant med 4 sleiders ventil plog, tippmating og saltspreder



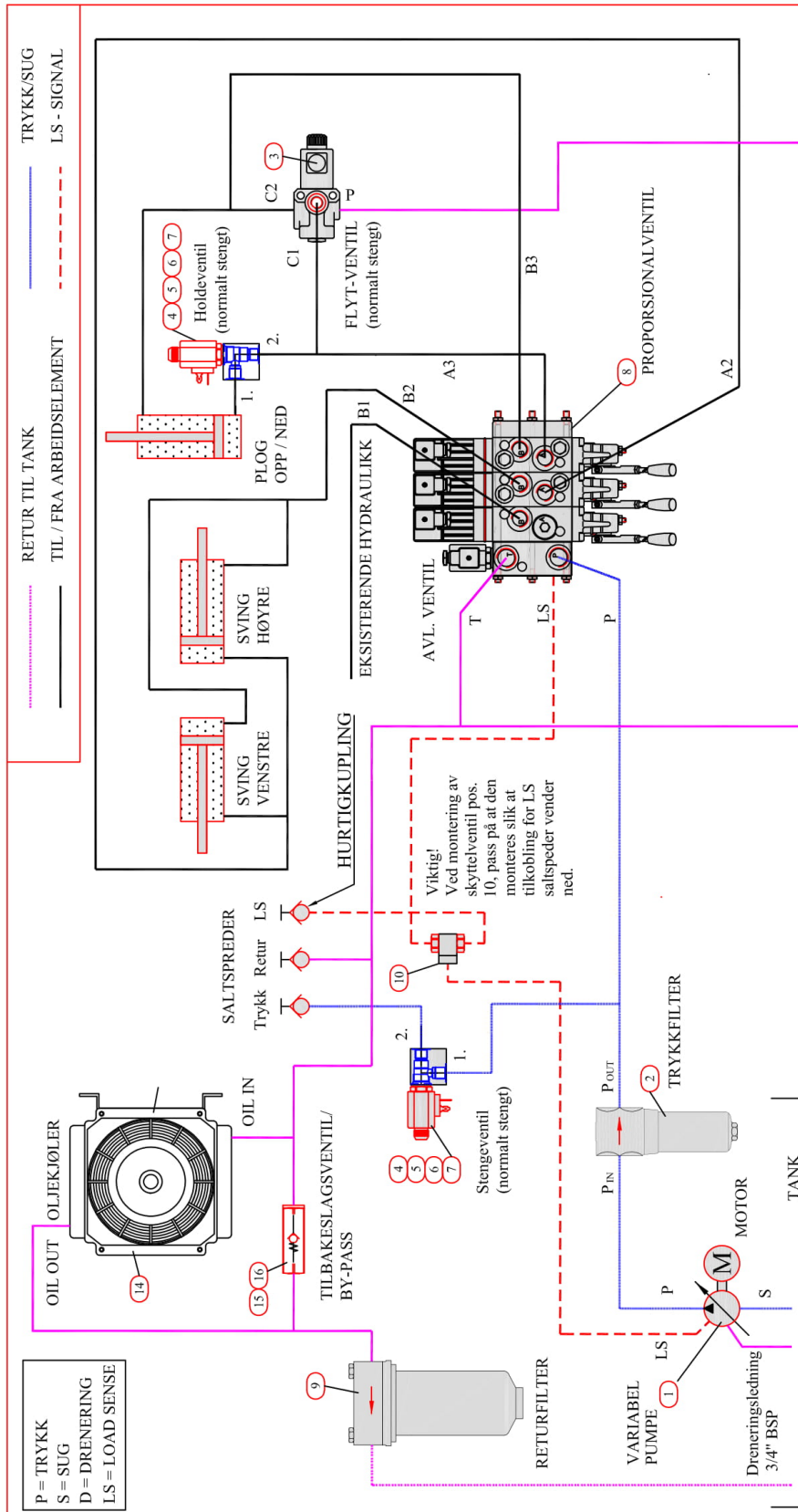
Pos.	Bestillingnr.	Varebeskrivelse	Antall	Pos.	Bestillingnr.	Varebeskrivelse	Antall
1		Stempelpumpe variabel	1	9		Returfilter	1
2		Høytrykfilter	1	10	FC198501	Slykeventil 200mm VDI 20320/LL-S	1
3	F15/S080224	Vegerventil 3,2 moflyg 20VDC 3,8"	1	11	AM17637	Ansattapp 3,8"x3,8" sv. m/1mm hull	1
4	FC0202422	Sesventil NC EPP 4022R2	1	12	FC300338	Hus for 20.3.38" G	1
5	FC300238	Hus for 30.2.38" G	1	13		Oljekule SCM	1
6	FC323027	Spole for 30.2.38" G	1	14		Tilbakekopventil	1
7	FC313224	Din plugg 1224V	2	15		Fuger	1
8		Proporsjonalventil PVG32	1				

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E1306012L

Figur nr.:
 BRØYTEUTSTYR VI-4 SLEIDERS VENTIL
 OG VARIABEL PUMPE - PLOG, EKS.
 HYDRAULISK, SALTSPREDER

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P = TRYKK
 S = SUG
 D = DRENERING
 LS = LOAD SENSE

Pos.	Bestillingnr.	Varebeskrivelse	Antall	Pos.	Bestillingnr.	Varebeskrivelse	Antall
1		Støpselpumpe variabel SU/FA/B	1	9			1
2		Høytrykfilter	1	10	DOFLF000	Skyttelventil 1/4"	1
3	FVS9800D24	Vegerventil 3,2 m ØV 24VDC 3/8"	1	11	AM17637	Anstøpselopp 3/8"x3/8" utv. m 1mm hull	1
4	FC0202B22	Serveventil NC, EPP 30/22B2	2	12	FC00638	Hns for 20,3 3/8" G	1
5	FC00238	Hns for 30,2 3/8" G	2	13	FC190601	Skyttelventil 20mm VDT 20/3201-LUN	1
6	FC15027	Spole for 30 serien 27V	2	14		Oljefilter SCM	1
7	FC031224	Dir-plugg 12,24V	3	15		Tilbakelagsventil	1
8		Proportionalventil PV/G32	1	16		Fjær	1

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E1810004

Fig. nr. 1

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Rev. nr.: AI
 Dato: 09.07.2013
 Kunde: Agnes Engseth
 Skisse: Agnes Engseth
 Tegn: Agnes Engseth

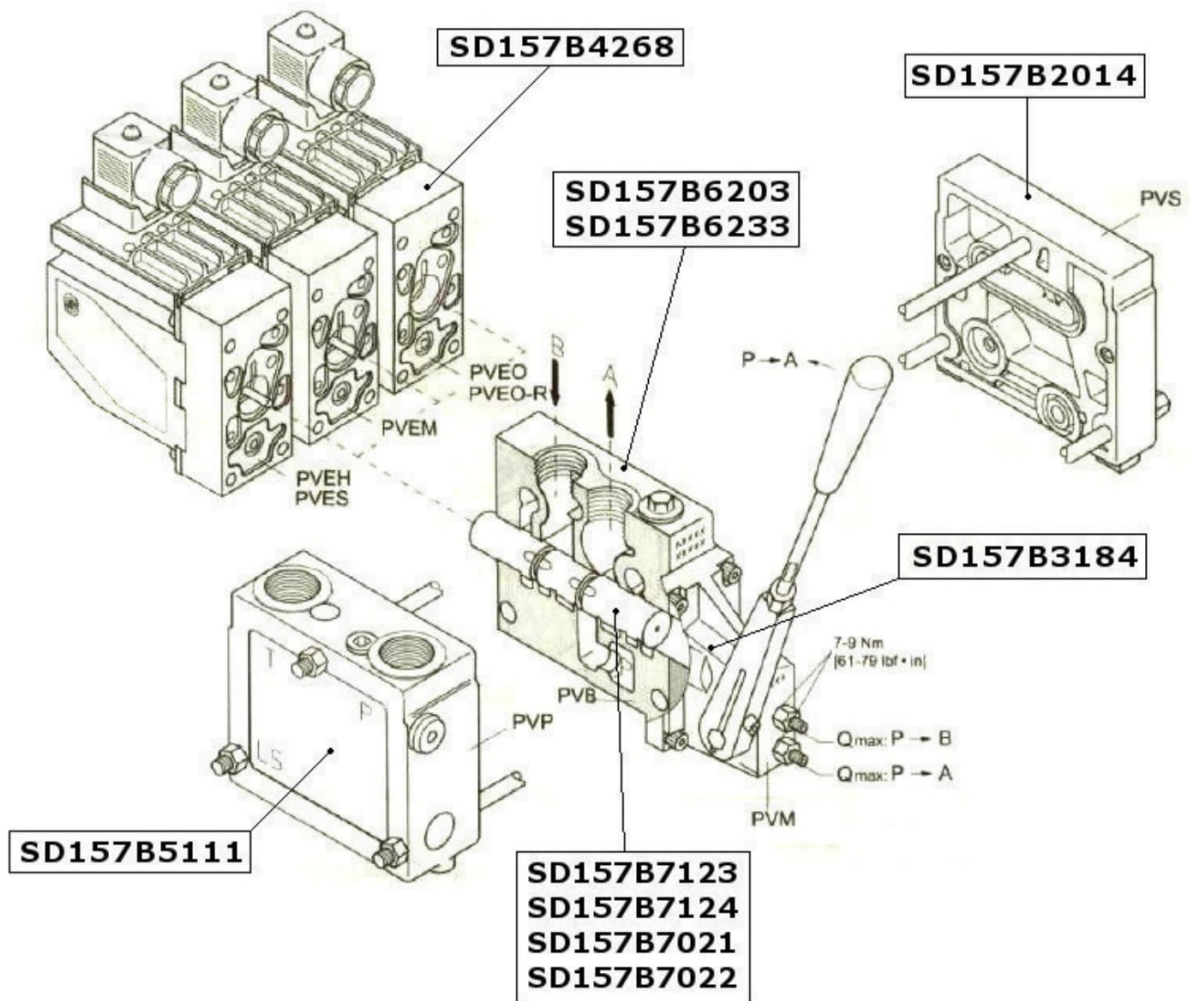
Rev. nr.: AI
 Dato: 09.07.2013
 Kunde: Agnes Engseth
 Skisse: Agnes Engseth
 Tegn: Agnes Engseth

Rev. nr.: AI
 Dato: 09.07.2013
 Kunde: Agnes Engseth
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Broyteuyst V:3 sleiders ventil og variabel pumpe - plog, tippmating, separat saltspeder

Rev. nr.: AI
 Dato: 09.07.2013
 Kunde: Agnes Engseth
 Skisse: Agnes Engseth
 Tegn: Agnes Engseth

Mest typiske elementer brukt i Sauer Danfoss PVG32 plgventiler fra Egil Eng:





PVG 32 Proportional Valve Specification Module Selection Chart

PVB, basic valves

Code no. 157B....	No facilities for shock valves A and B		Facilities for shock valves A and B	
	G 1/2	7/8 - 14 UNF	G 1/2	7/8 - 14 UNF
Without compensator /check valve	6000	6400	6030	6430
With check valve	6100	6500	6130	6530
With check valve and LS _{sh} shuttle valve	-	-	6136	6536
With compensator valve	6200	6600	6230	6630
With damped compensator valve	6206	-	6236	-
With compensator valve, LS _{sh} relief valve and LS _{sh} shuttle valve	6203	6603	6233	6633
With damped compensator valve, LS _{sh} relief valve and LS _{sh} shuttle valve	6208	-	6238	-
Weight	kg [lb]		3.1 [6.8]	

PVPV/M, pump side module closed center

Code no. 157B....	With pilot supply for PVE			
	and without PVL 63		and with PVL 63	
	G1	1 5/16 - 12UNF	G1	1 5/16 - 12UNF
PVPV	5938	5911	5941	5913
PVPVM	5937	5912	5940	5914
Weight	kg [lb]		3.0 [6.6]	

PVPC, plugs

Code no. 157B....	G 1/2	1/2 in - 20	Weight kg [lb]	
External pilot supply	5400	-	0.05	0.1
External pilot supply incl. check valve	5600	5700	0.05	0.1

PVM, mechanical actuation

Standard	157B....	3171**	3191*	22.5°
		3172	3192*	37.5°
Standard, with base, without arm and button	157B....	3174	3194*	37.5°
		3175	3195*	22.5°
Standard, without base, arm and button	157B....	3173	3193*	-
Weight	kg [lb]	0.4 [0.9]		

*Without stop screws. **Anodized 157B3184

End plate, PVS, PVS1

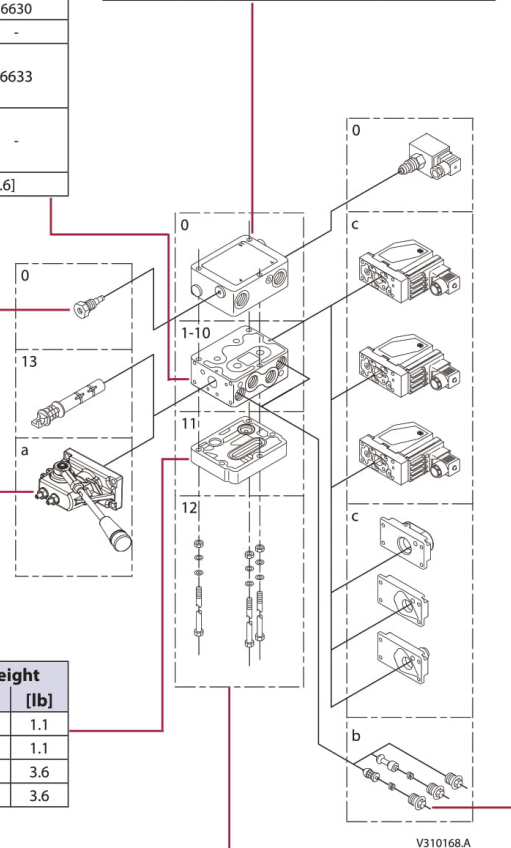
Code no. 157B....		BSP	SAE	Weight	
				kg	[lb]
PVS, without connections		2000	2020	0.5	1.1
PVS, with LX connection	G 1/8 [3/8 -24 UNF]	2011	2021	0.5	1.1
PVS1, without connections		2014	2004	1.7	3.6
PVS1, with LX connections	G 1/4 [1/2 -20 UNF]	2015	2005	1.7	3.6

PVAS, assembly kit

Code no. 157B...	0	1	2	3	4	5	6	7	8	9	10	11	12
PVB's	8000	8001	8002	8003	8004	8005	8006	8007	8008	8009	8010	8061	8062
PVB + PVPVM	-	8021	8022	8023	8024	8025	8026	8027	8028	8029	8030	8081	8082
Weight kg [lb]	0.1 [0.2]	0.15 [0.3]	0.25 [0.6]	0.30 [0.7]	0.40 [0.9]	0.45 [1.0]	0.50 [1.1]	0.60 [1.3]	0.65 [1.4]	0.70 [1.6]	0.80 [1.7]	0.85 [1.8]	0.9 [2.0]

PVLP, shock/and anti-cavitation valves

Code no. 157B....	2032	2050	2063	2080	2100	2125	2140	2150	2160	2175	2190	2210	2230	2240	2250	2265	2280	2300	2320	2350	
Settings	bar	32	50	63	80	100	125	140	150	160	175	190	210	230	240	250	265	280	300	320	350
	[psij]	460	725	914	1160	1450	1813	2031	2175	2320	2538	2755	3045	3335	3480	3625	3845	4061	4351	4641	5075
Weight		0.05 kg [0.17 lb]																			

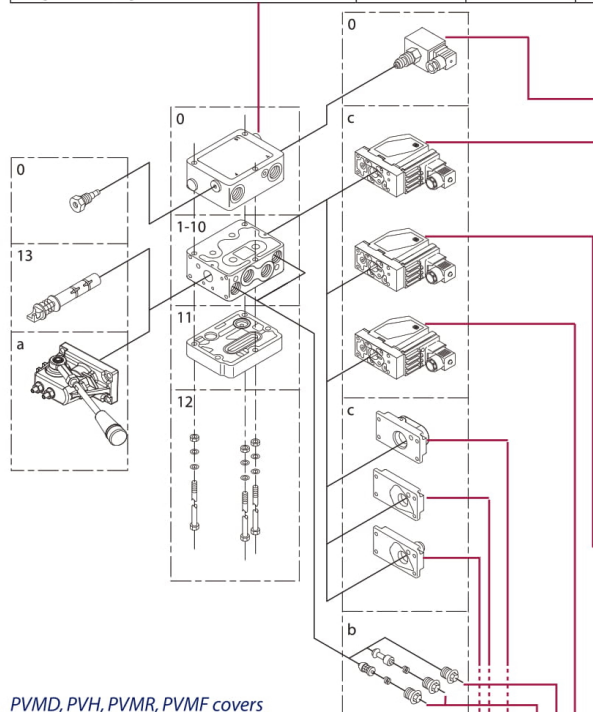




PVG 32 Proportional Valve Specification Module Selection Chart

PVP, pump side module

Code no. 157B....	Without pilot supply		With pilot supply				
	for PVE	for PVE with facilit. for PVPX	for PVE	for PVE and facilit. for PVPX	for PVE and pilot oil pressure take-off	for PVH and pilot oil pressure take-off	
Open centre	P = G 1/2, T = G 3/4	5000	-	5010	5012	-	-
	P = 7/8 in - 14, T = 1 1/16 in - 12	5200	-	5210	5212	-	-
	P = G 3/4, T = G 3/4	5100	5102	5110	5112	5180	5190
	P = 1 1/16 in - 12, T = 1 1/16 in - 12	5300	-	5310	5312	5380	5390
Closed centre	P = G 1/2, T = G 3/4	5001	-	5011	5013	-	-
	P = 7/8 in - 14, T = 1 1/16 in - 12	5201	-	5211	5213	-	-
	P = G 3/4, T = G 3/4	5101	5103	5111	5113	5181	5191
	P = 1 1/16 in - 12, T = 1 1/16 in - 12	5301	-	5311	5313	5381	5391
Weight	kg [lb]	3.0 [6.6]	3.0 [6.6]	3.0 [6.6]	3.0 [6.6]	3.0 [6.6]	3.0 [6.6]



PVMD, PVH, PVMR, PVMF covers

Code no. 157B....	Code No.	Weight kg [lb]
PVMR (frict. detent)	0004	0.3 0.6
PVMF (mech. float position)	0005	0.3 0.6
Cover for PVM	0001	0.1 0.2
Hydraulic actuation PVH 9/16 - 18 UNF	0007	0.9 2.0
Hydraulic actuation PVH G 1/4	0008	0.2 0.4

PVPX, electrical LS pressure relief valves

Code no. 157B....	Code No.	Weight kg [lb]
Normally open	12 V 4236	0.3 0.7
	24 V 4238	0.3 0.7
Normally closed	12 V 4246	0.3 0.7
	24 V 4248	0.3 0.7
Normally open with manual override	12 V 4256	0.3 0.7
	24 V 4258	0.3 0.7
Plug	4260	0.3 0.7
	5601	0.06 0.13

PVE, electrical actuation

Code no. 157B....	Hir.	AMP	Deut.	Weight kg [lb]
PVEO, on-off	12 V 4216	4901	4291	0.6 [1.3]
	24 V 4228	4902	4292	0.6 [1.3]
PVEO-R, on/off	12 V 4217	4903	-	0.6 [1.3]
	24 V 4229	4904	-	0.6 [1.3]
PVEM, prop. medium - Standard	12 V 4116	-	-	0.9 [2.0]
	24 V 4128	-	-	0.9 [2.0]
PVEM, prop. medium - Float -> B	12 V 4416	-	-	1.0 [2.2]
	24 V 4428	-	-	1.0 [2.2]
PVEA, active fault mon.	-	4734	4792	0.9 [2.0]
PVEA, passive fault mon.	-	4735	-	0.9 [2.0]
PVEA-DI, active fault mon.	-	4736	4796	0.9 [2.0]
PVEA-DI, passive fault mon.	-	4737	-	0.9 [2.0]
PVEH active fault mon.	4032	4034	4092	1.0 [2.2]
PVEH passive fault mon.	4033	4035	4093	1.0 [2.2]
PVEH float -> B, act. fault	4332	-	4392	1.0 [2.2]
PVEH float -> A, act. fault	-	4338	-	1.0 [2.2]
PVEH-DI active fault mon.	-	4036	4096	1.0 [2.2]
PVEH-DI passive fault mon.	-	4037	-	1.0 [2.2]
PVES, active fault mon.	4832	4834	4892	1.0 [2.2]
PVES, passive fault mon.	4833	4835	-	1.0 [2.2]

PVLA, anti-cavitation valve

Code no. 157B....	Code No.	Weight kg [lb]
Plug A or B	2002	0.04 0.09
Valve A or B	2001	0.05 0.1



Danfoss



Ferdig sammenbygd ventil mekanisk betjent uten sjokkventil med:		Beskrivelse	Pris
<ul style="list-style-type: none"> - Anodiserte spakhus - Anodiserte deksler - PVP med intern pilotolje - Forsterket endeplate - Kompenseringsleide og tilbakeslagsventil. 		1 seksjon	p.p.f
		2 seksjon	p.p.f
		3 seksjon	p.p.f
		4 seksjon	p.p.f
		5 seksjon	p.p.f
		6 seksjon	p.p.f
		7 seksjon	p.p.f
		8 seksjon	p.p.f
		9 seksjon	p.p.f
Tillegg per seksjon for:	PVB med Ls trykkjustering A/B port	p.p.f	
	PVB med sjokkventiler på A og B port	p.p.f	
	PVB med Ls trykkjustering og sjokkventiler på A og B port	p.p.f	
	PVB med mekanisk raster	p.p.f	
Tillegg for el.aktivering per seksjon	PVEO on/off anodisert	p.p.f	
	PVEM prop. Medium	p.p.f	
	PVEH prop high	p.p.f	

PVG32 komponent prislister

Del	Beskrivelse	Art nummer	Pris
Inngangselement PVP 	Lukket senter	SD157B5111	p.p.f
	Åpent senter	SD157B5110	p.p.f
	For avlastningsventil	SD157B5113	p.p.f
Arbeidselement 	Med komp.	SD157B6200	p.p.f
	Med komp. – for sjokkvent.	SD157B6230	p.p.f
	Med komp. – med LSA/B just.	SD157B6203	p.p.f
	Med komp. – og tilbakeslagsventil med LSA/B justering for sjokkvent.	SD157B6233	p.p.f
LS avlastningsventil 	Normalt åpen 24V	SD157B4238	p.p.f
Spakhus 	Mekanisk aktivering anodisert	SD157B3184	p.p.f
Endeplate 	Utgangselement PVSI forsterket	SD157B2014	p.p.f
	Utgangselement PVS med LX forbindelse	SD157B2011	p.p.f
	Utgangselement PVS med LX forbindelse forsterket	SD157B2015	p.p.f
Endedeksel 	Endedeksel for manuell betjening anodisert	SD157B0009	p.p.f
Sleidekontroll 	Sleidekontroll PVMR, friksjon detent	SD157B0004	p.p.f
Sleidekontroll elektrisk 	Sleidekontroll PVEO, on/off 12V	SD157B4216	p.p.f
	Sleidekontroll PVEO, on/off 24V	SD157B4268	p.p.f
	Sleidekontroll PVEM 12V medium	SD157B4116	p.p.f
	Sleidekontroll PVEM 24V medium	SD157B4128	p.p.f
	Sleidekontroll PVEH 11-32V aktiv	SD157B4032	p.p.f

Sleide 	10 l/min syl. 4/3 uten LS justering	SD157B7000	p.p.f	
	10 l/min syl. 4/3 med LS justering	SD157B7020	p.p.f	
	10 l/min motor 4/3 uten LS justering	SD157B7100	p.p.f	
	10 l/min motor 4/3 med LS justering	SD157B7120	p.p.f	
	10 l/min enk.v. 3/3 uten LS justering	SD157B7200	p.p.f	
	25 l/min syl. 4/3 uten LS justering	SD157B7001	p.p.f	
	25 l/min syl. 4/3 med LS justering	SD157B7021	p.p.f	
	25 l/min motor 4/3 uten LS justering	SD157B7101	p.p.f	
	25 l/min motor 4/3 med LS justering	SD157B7121	p.p.f	
	25 l/min enk.v. 3/3 uten LS justering	SD157B7201	p.p.f	
	40 l/min syl. 4/3 uten LS justering	SD157B7002	p.p.f	
	40 l/min syl. 4/3 med LS justering	SD157B7022	p.p.f	
	40 l/min motor 4/3 uten LS justering	SD157B7102	p.p.f	
	40 l/min motor 4/3 med LS justering	SD157B7122	p.p.f	
	40 l/min enk.v. 3/3 uten LS justering	SD157B7202	p.p.f	
	65 l/min syl. 4/3 uten LS justering	SD157B7003	p.p.f	
	65 l/min syl. 4/3 med LS justering	SD157B7023	p.p.f	
	65 l/min motor 4/3 uten LS justering	SD157B7103	p.p.f	
	65 l/min motor 4/3 med LS justering	SD157B7123	p.p.f	
	65 l/min enk.v. 3/3 uten LS justering	SD157B7203	p.p.f	
	100 l/min syl. 4/3 uten LS justering	SD157B7004	p.p.f	
	100 l/min syl. 4/3 med LS justering	SD157B7024	p.p.f	
	100 l/min motor 4/3 uten LS justering	SD157B7104	p.p.f	
	100 l/min motor 4/3 med LS justering	SD157B7124	p.p.f	
	100 l/min enk.v. 3/3 uten LS justering	SD157B7204	p.p.f	
	130 l/min syl. 4/3 uten LS justering	SD157B7006	p.p.f	
	130 l/min syl. 4/3 med LS justering	SD157B7026	p.p.f	
	130 l/min motor 4/3 uten LS justering	SD157B7106	p.p.f	
	130 l/min motor 4/3 med LS justering	SD157B7126	p.p.f	
	Sjokkventil 	Sjokk/Etterfyllingsventil PVLP 32 bar	SD157B2032	p.p.f
		Sjokk/Etterfyllingsventil PVLP 50 bar	SD157B2050	p.p.f
		Sjokk/Etterfyllingsventil PVLP 63 bar	SD157B2060	p.p.f
		Sjokk/Etterfyllingsventil PVLP 80 bar	SD157B2080	p.p.f
Sjokk/Etterfyllingsventil PVLP 100 bar		SD157B2100	p.p.f	
Sjokk/Etterfyllingsventil PVLP 125 bar		SD157B2125	p.p.f	
Sjokk/Etterfyllingsventil PVLP 140 bar		SD157B2140	p.p.f	
Sjokk/Etterfyllingsventil PVLP 150 bar		SD157B2150	p.p.f	
Sjokk/Etterfyllingsventil PVLP 160 bar		SD157B2160	p.p.f	
Sjokk/Etterfyllingsventil PVLP 175 bar		SD157B2175	p.p.f	
Sjokk/Etterfyllingsventil PVLP 190 bar		SD157B2190	p.p.f	
Sjokk/Etterfyllingsventil PVLP 210 bar		SD157B2210	p.p.f	
Sjokk/Etterfyllingsventil PVLP 230 bar		SD157B2230	p.p.f	
Sjokk/Etterfyllingsventil PVLP 240 bar		SD157B2240	p.p.f	
Sjokk/Etterfyllingsventil PVLP 250 bar		SD157B2250	p.p.f	
Sjokk/Etterfyllingsventil PVLP 265 bar		SD157B2265	p.p.f	
Sjokk/Etterfyllingsventil PVLP 280 bar		SD157B2280	p.p.f	
Sjokk/Etterfyllingsventil PVLP 300 bar		SD157B2300	p.p.f	
Sjokk/Etterfyllingsventil PVLP 320 bar		SD157B2320	p.p.f	
Sjokk/Etterfyllingsventil PVLP 350 bar		SD157B2350	p.p.f	

PLOGSTYRINGER

🏠 **Jernkroken 7, Oslo**

👤 **22 90 05 60**

✉ **firma@egileng.no**

🌐 **egileng.no**

🛒 **webshop.egileng.no**



Styrepaneler, kabelsett og reservedeler

Beskrivelse	Varenummer	Bilde
Styrepanel modulbasert frontplog 2 knapp	EL1806001	
<u>Styrepanel modulbasert frontplog (Utgått)</u>	EL1206001 (Utgått)	
<u>Styrepanel modulbasert frontplog dobbel</u>	EL1206001X	
<u>Styrepanel for front-/sideplog</u>	EL1410001X	
<u>Kabelsett med styrerkort for plogstyring</u>	E117000	
<u>Kretskort for plogstyring m/komp.</u>	EE9904002K	
<u>Spakbryter 4-veis fjærretur mikrobytere</u>	SZ119964	
<u>Styrespak 4-veis + 2 brytere</u>	EL8588167	




Styrepanel

På styrepanelet finnes:

- 1 stk 4-veis joystick med to brytere, med stillinger: løft – senk – høyre – venstre.
- 1 stk. 2-stilling bryter merket ON med tilhørende grønn lampe for statusindikasjon
- 1 stk. 2-stilling bryter merket med FLYT-symbol med tilhørende gul lampe for statusindikasjon
- 1 stk. 2-stilling bryter merket med Sand/salt-symbol med tilhørende gul lampe for statusindikasjon
- 1 stk. 2-stilling bryter merket med Slaps-symbol med tilhørende gul lampe for statusindikasjon
- 1 stk. nødstoppbryter.

Joystick

Funksjonstabell:

	Funksjon	Aktive utganger
	LØFT	PIN 1, 9
	SENK	PIN 2, 3, 9
	HØYRE	PIN 5, 9
	VENSTRE	PIN 6, 9

Funksjoner henviser til utganger på kretskort EE117000 som blir slått på, ved bruk av styrepanelet. Hvilke utganger som anvendes, vil variere med system hos forbruker. Se vedlagt koblingskjema.

NB: Brytere på joystick med leder 12 og 13 skal kobles til rele ved bruk.

Aktivering av flyt: For å aktivere flyt-funksjon, må to handlinger utføres:

1. Trykkbryter-Flyt settes i PÅ-stilling.
2. Spakbryter Senk må aktiveres i et øyeblikk.

Tilhørende grønn indikasjonslampe vil nå lyse, gul indikasjonslampe vil slukkes. Plogen er i Flyt-modus.

Flyt-modus vil deaktiveres ved at enten Trykkbryter-Flyt slås av eller Spakbryter Løft aktiveres.

Deaktivering av flyt kvitteres ved at tilhørende grønn indikasjonslampe slukkes.

GUL OG GRØNN LAMPE VIL TIL ENHVER TID KVITTERE FOR OM PLOGEN ER I FLYTESTILLING ELLER IKKE.

GRØNN = FLYT, GUL = TRANSPORT.

Aktivering av Sand/Slaps For å aktivere Sand/slaps-funksjon, trykk inn Trykkbryter Sand/slaps. Tilhørende grønn indikasjonslampe vil nå lyse

Aktivering av Saltspreder For å aktivere Saltspreder-funksjon, trykk inn Trykkbryter Saltspreder. Tilhørende grønn indikasjonslampe vil nå lyse.

Kabelsett

På kabelsettet finnes:

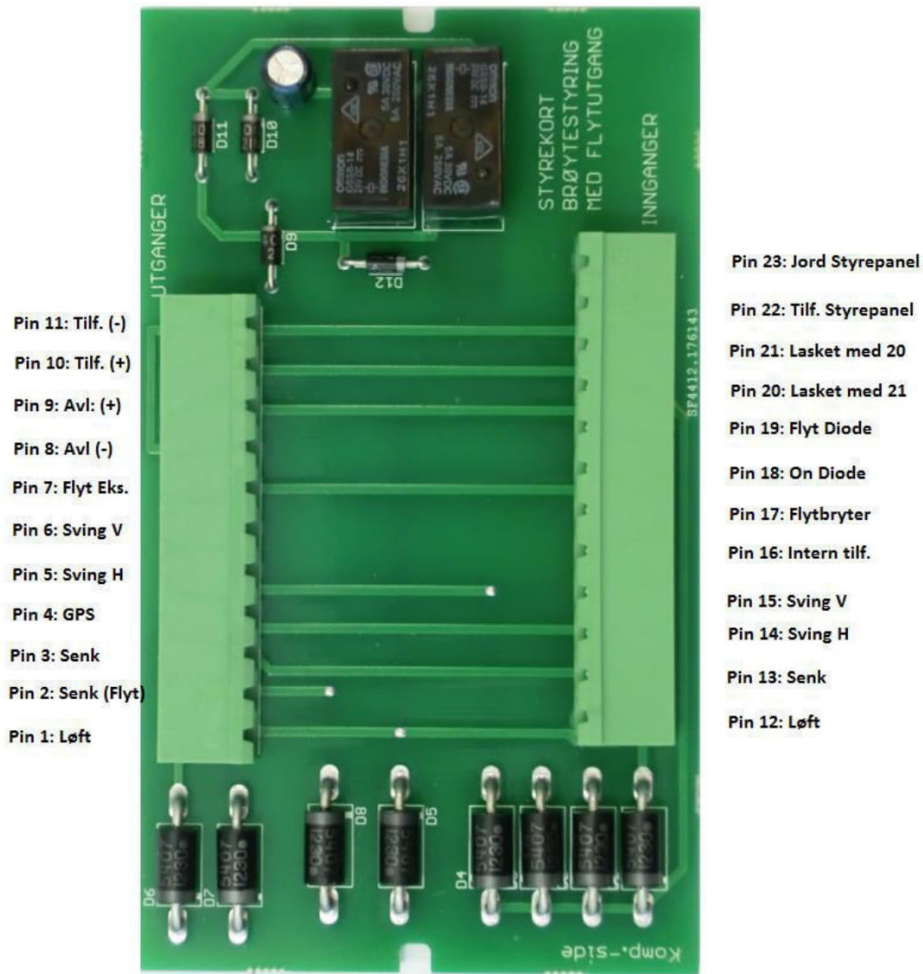
- Kretskort for plogstyring artnr: EE9905004K
- 12 leders kabel for utganger/hydraulikkentral
- 2-leder kabel for hele systemets tilførsel
- 2-leder kabel for avlastningsventil

Oppkobling styrepanel og kabelsett

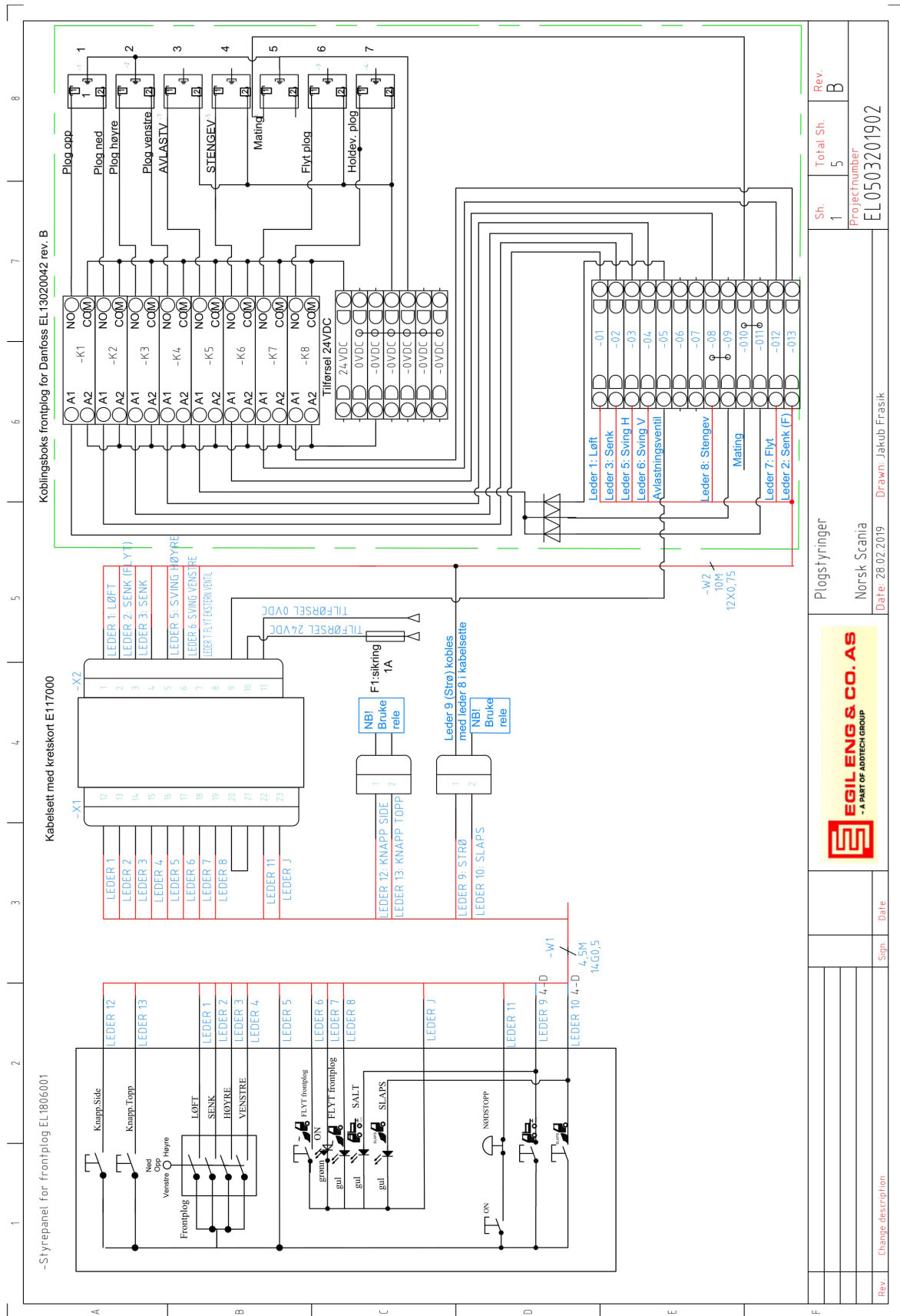
- 11-pins kontakt fra styrepanel presses inn motstykket på kretskortet.
- 2-leder tilførselskabel kobles til +24V og 0V
- 2-leder kabel for «Avlastningsventil» kobles til avlastningsventil
- (Valgfritt) For GPS utgang koble til Pin 4.

Pin 4 på kretskort vil ligge med 24V når funksjonen Flyt er aktivert. Se vedlagt bilde av kretskort.

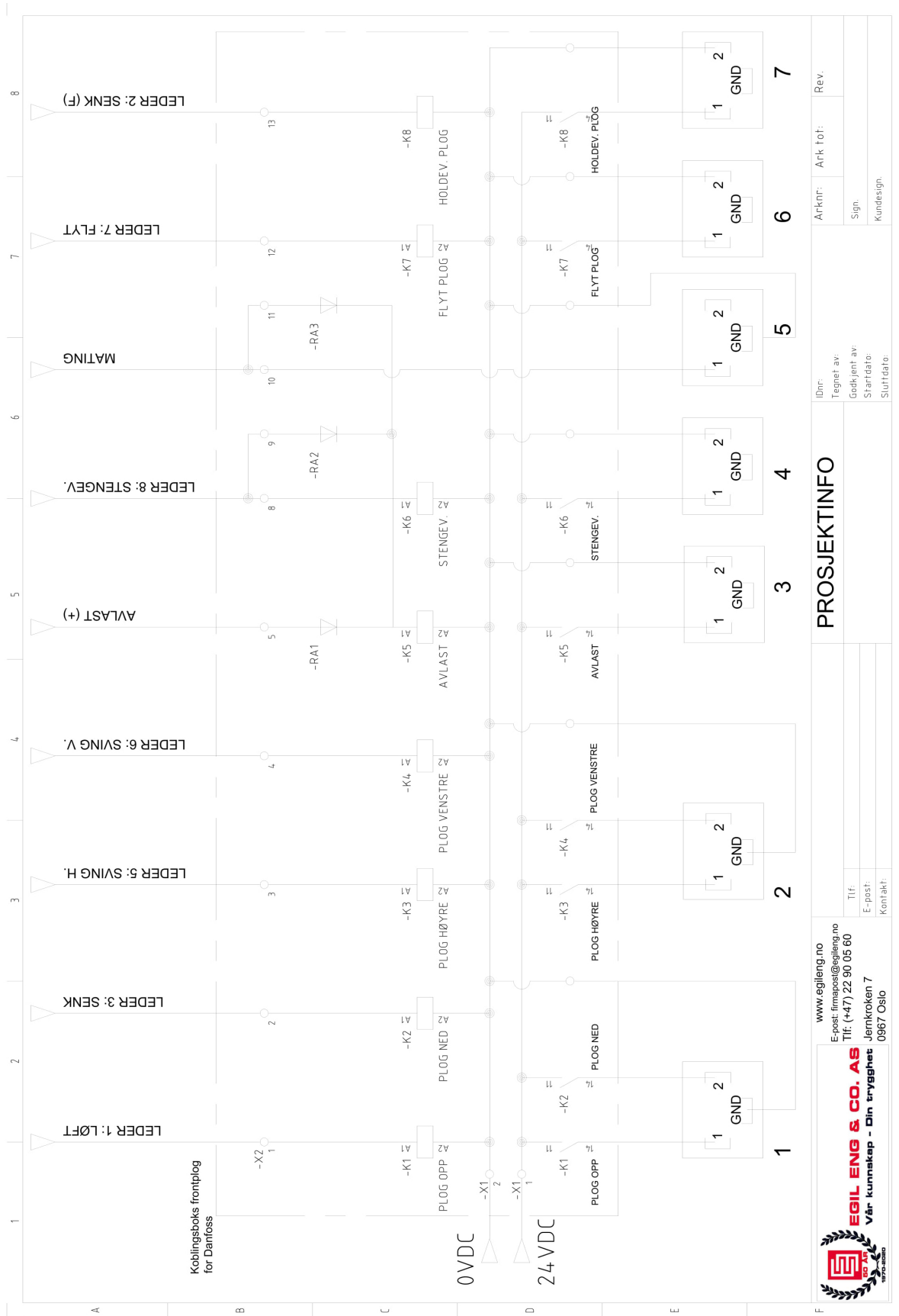
Oversikt over tilkoblinger på kretskort art. EE11700



Tilkobling mellom EL1806001, EE11700 og EL12020042



Rev	Change description	Sign	Date
 EGIL ENG & CO. AS - A PART OF ADITECH GROUP			
Plogstyringer		Norsk Scania	
Date: 28.02.2019		Drawn: Jakub Frask	
Sh	Total Sh	Rev.	
1	5	B	
Project number EL0503201902			



IDnr:	Arknr:	Rev.
Tegnet av:	Arkt. tof:	
Godkjent av:	Sign.	
Startdato:	Kundesign.	
Suttdato:		

PROSJEKTINFO

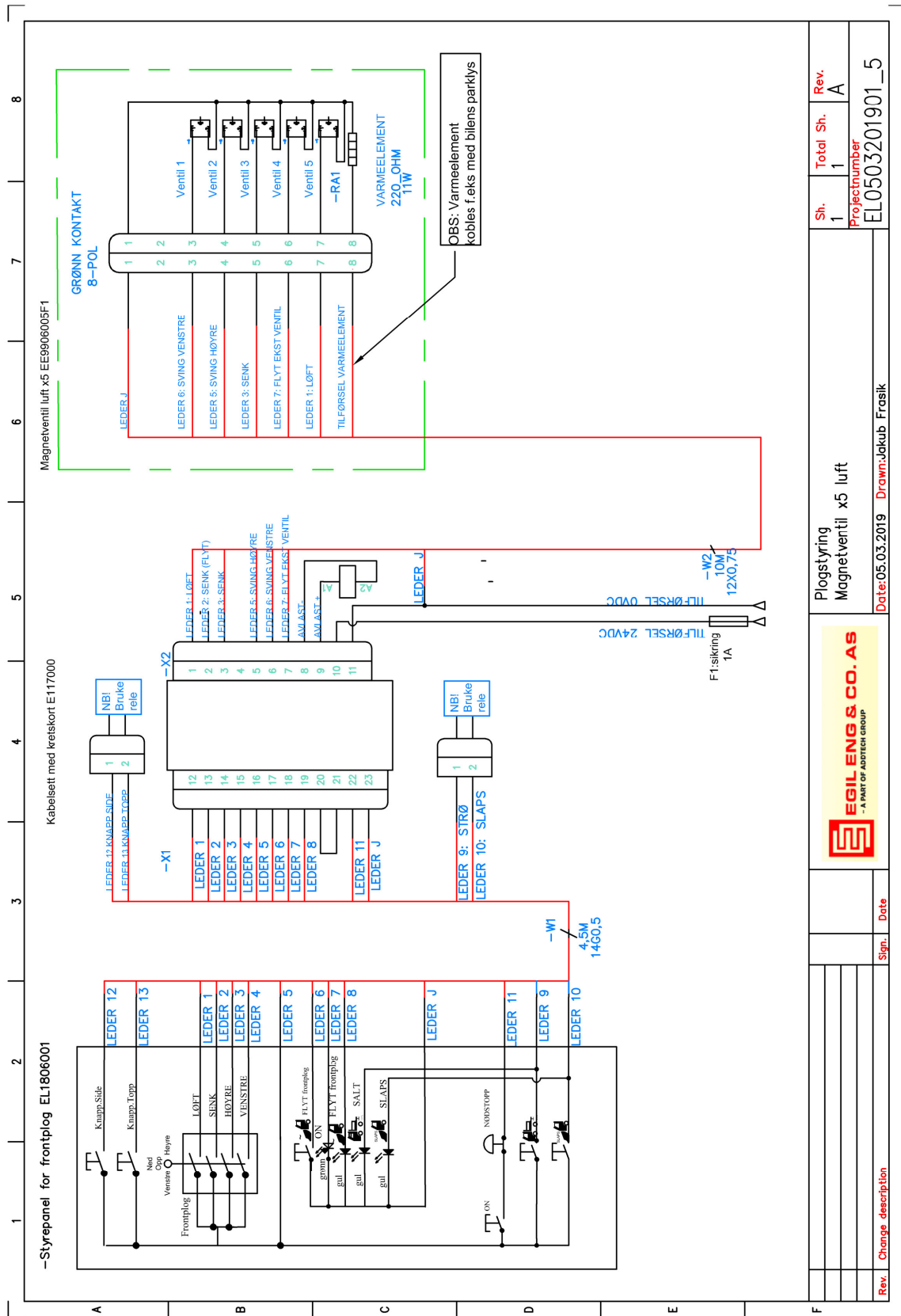
Tlf:	
E-post:	
Kontakt:	

www.egileng.no
 E-post: firmapost@egileng.no
 Tlf: (+47) 22 90 05 60

EGIL ENG & CO. AS
 Vår kunnskap - Din trygghet

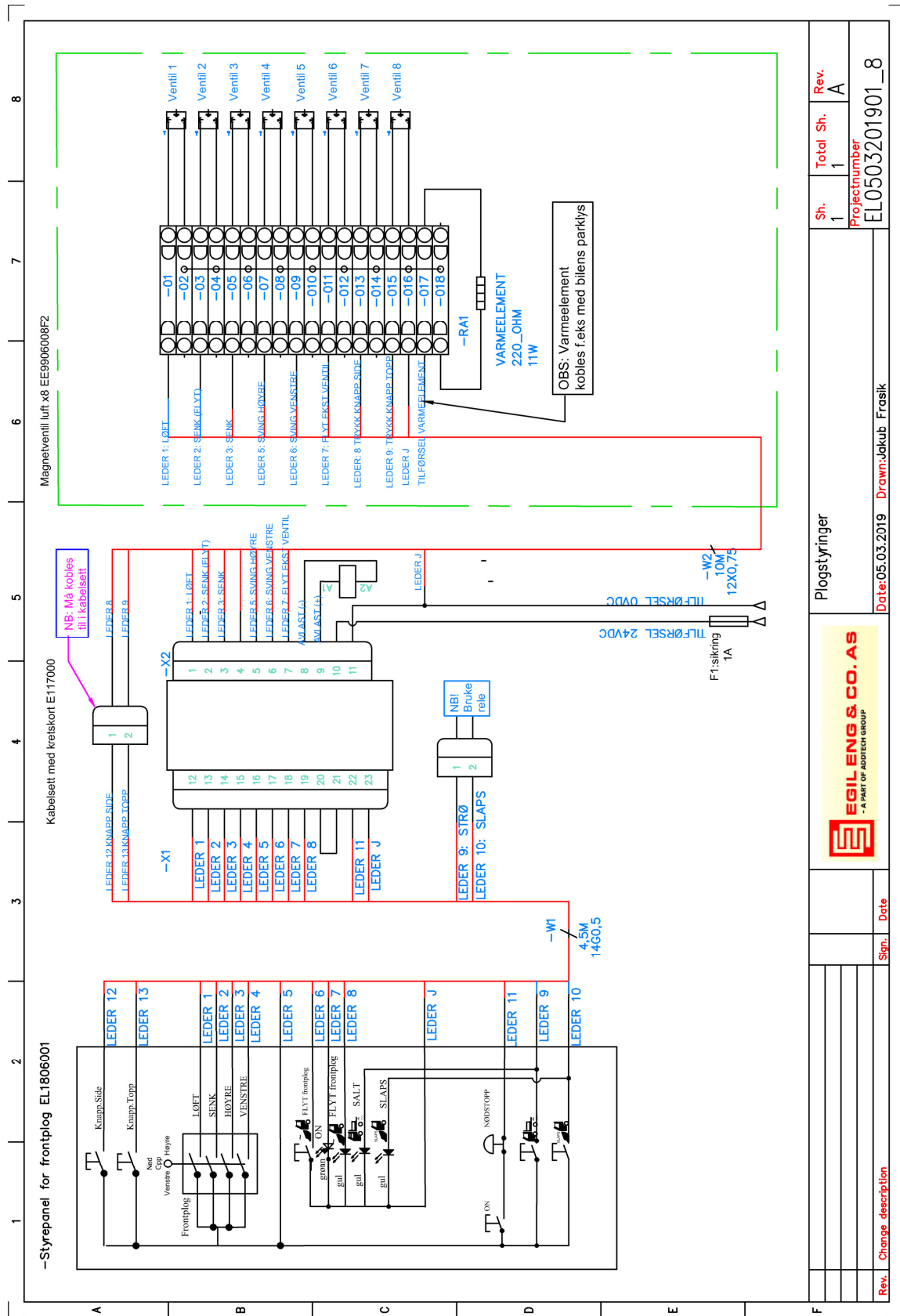
Jernkrøken 7
 0867 Oslo

Tilkobling mellom Styrepanel EL1806001 og Magnetventil luft x5 i kapsling EE9906005F1



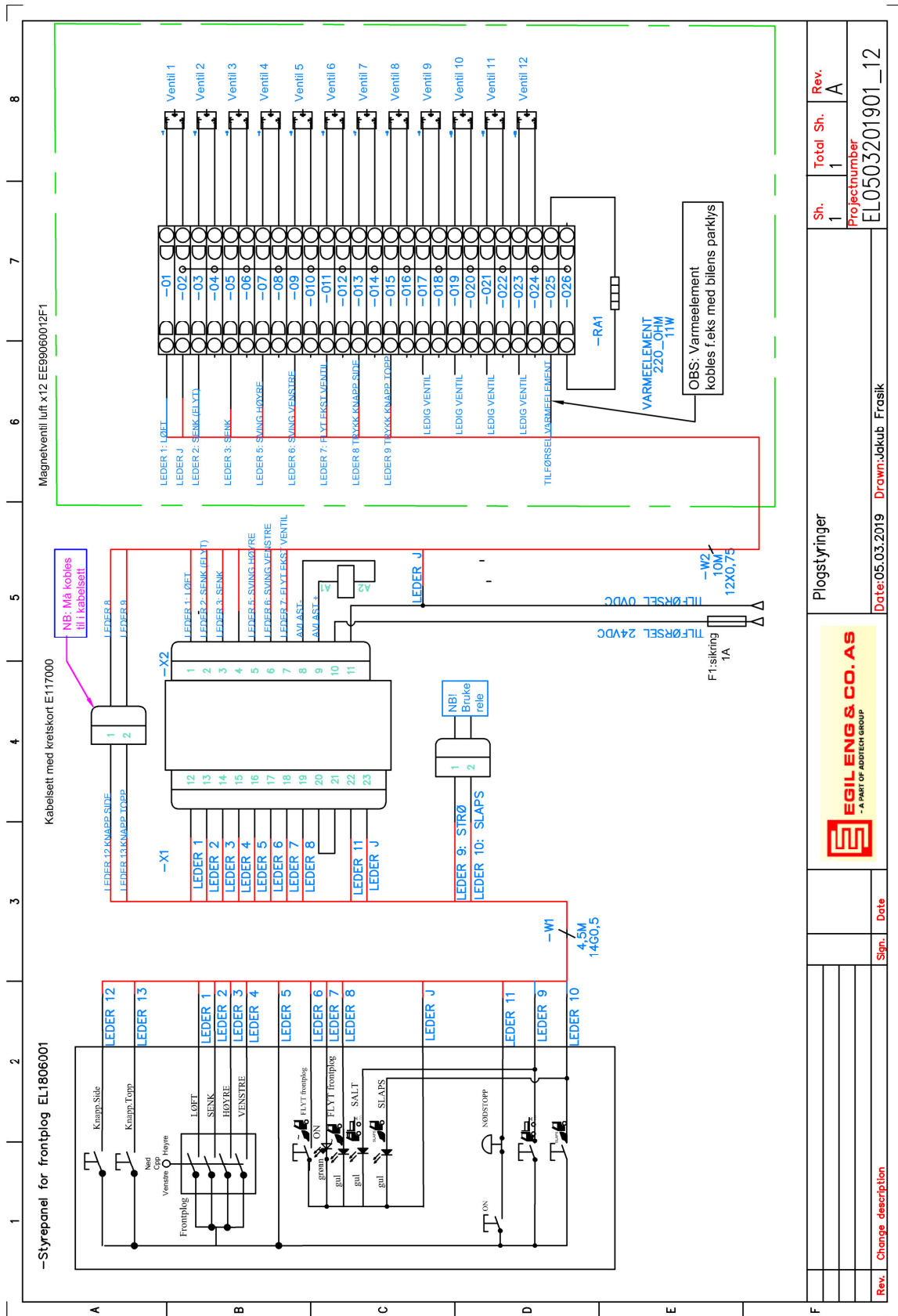
Rev.	Change description	Sign.	Date
 EGIL ENG & CO. AS - A PART OF ADITECH GROUP			
Plogstyring Magnetventil x5 luft			
Date: 05.03.2019 Drawn: Jøakub Fraski		Sh. 1 Total Sh. 1 Project number EL0503201901_5	Rev. A

Tilkobling mellom Styrepanel EL1806001 og Magnetventil luft x8 i kapsling EE9906008F2



Plogstyringer		Sh. 1	Total Sh. 1	Rev. A
Project number		EL0503201901_8		
Date: 05.03.2019		Drawn: Jekub Frøsk		
 EGIL ENG & CO. AS - A PART OF ADDRESS GROUP				
Rev. Change description	Sign.	Date		

Tilkobling mellom Styrepanel EL1806001 og Magnetventil luft x12 i kapsling EE99060012F2

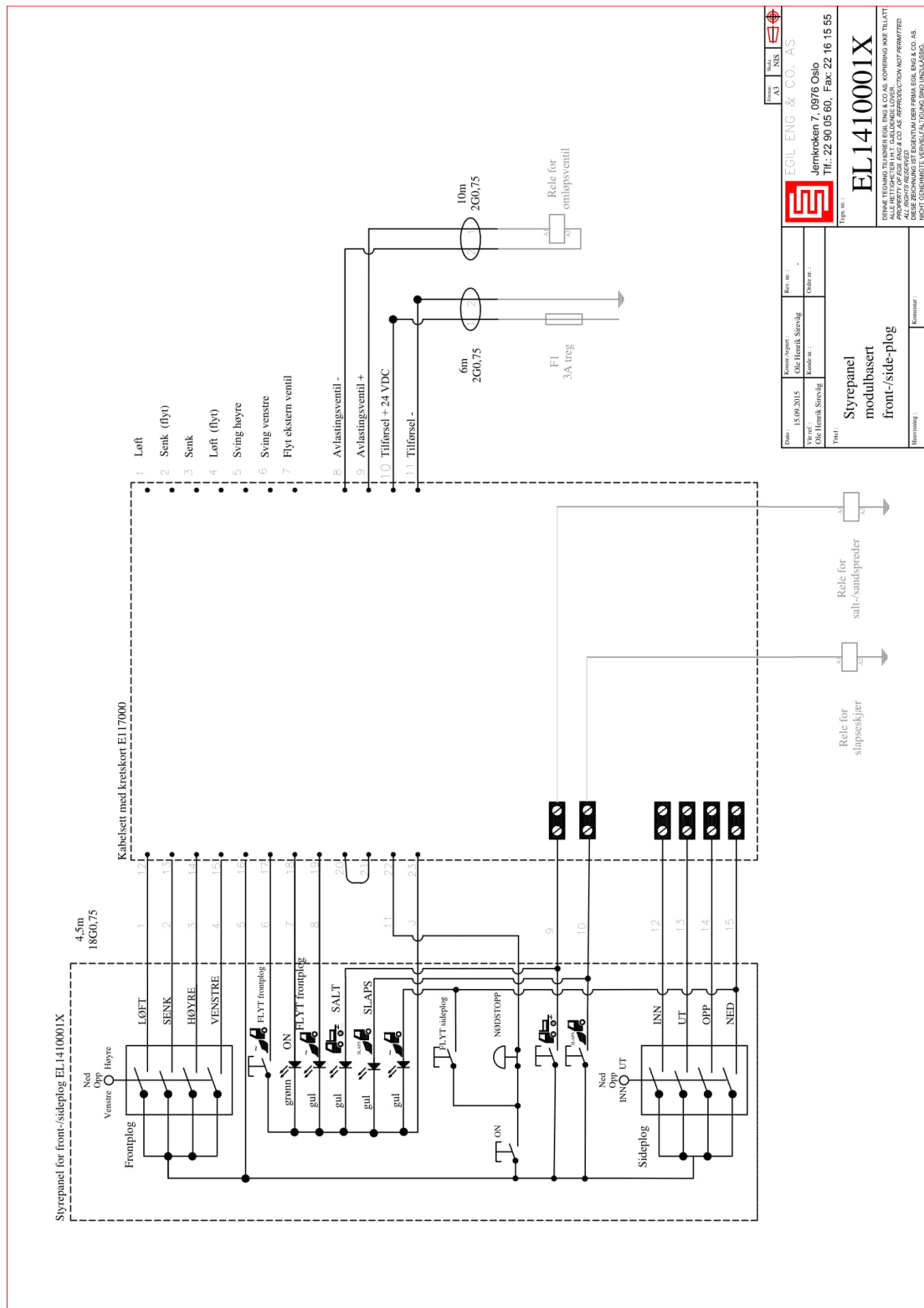


Plogstyringer		Sh. 1	Total Sh. 1	Rev. A
Project number		EL0503201901_12		
Date: 05.03.2019		Drawn: Jakob Frøsk		
 EGIL ENG & CO. AS - A PART OF ADDRESS GROUP				
Rev. Change description	Sign.	Date		

Styrepanel for front-/sideplog art. EL1410001X




Oversikt over tilkoblinger på Styrepanel for front-/sideplog art. EL1410001X og kretskort art. EE11700



Kabelsett med styte kort for plogstyring art. E117000



Tilbehør og reservedeler

Beskrivelse	Varenummer	Bilde
<u>Armlene Frameco 310 ergo, høyre.</u>	FR310ERGO	
<u>Festebrakett for plogstyringer</u>	E0510007	
<u>Komplett sirkulærkontakt 12pol HUN skjøt</u>	EE121998	
<u>Komplett sirkulærkontakt 12pol HUN panel</u>	EE121997	
<u>Komplett sirkulærkontakt 12 pol HAN</u>	EE121996	
<u>Dioderekke 4stk</u>	EL1305001	
<u>Dioderekke 8stk</u>	EL1305002	

<u>Komplett sirkulærkontakt 19pol HUN skjøt</u>	EE1220117	
<u>Komplett sirkulærkontakt 19pol HUN panel</u>	EE122015	
<u>Komplett sirkulærkontakt 19p pol HAN</u>	EE122013	

Koblingsbokser og reservedeler

Beskrivelse	Varenummer	Bilde
<u>Magnetventil luft x5 i kapsling</u> 180x130x100mm	EE9906005F1	
<u>Magnetventil luft x6 i kapsling</u> 180x130x100mm	EE9906006F1	
<u>Magnetventil luft x8 i kapsling</u> 180x180x125mm	EE9906008F2	
<u>Magnetventil luft x12 i kapsling</u> 255x180x125mm	EE99060012F2	
<u>Koblingsboks Danfoss front-/sideplog</u>	EL13020042	
<u>Kretskort for luftventiler</u>	EE9905004K	
<u>Magnetventil luft 3/2 NC</u>	CAMP00305P53S01	

310 Ergo Comfort

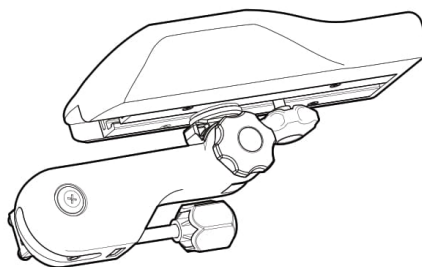
310 Ergo Comfort

- **Komfort och avlastning**
- **Hög flexibilitet**

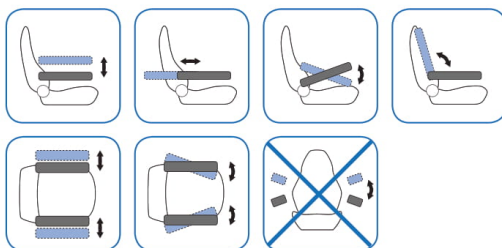
Komfort och avlastning var fokus i utvecklingen av det här armstödet. Det är mycket flexibelt med många olika justeringsmöjligheter och kan användas tillsammans med en lättvikts joystick. Ett vanligt armstöd i framför allt lastbilar, entreprenadmaskiner och gaffeltruckar. Det monteras också ofta på bevakningsstolar som avlastningsstöd.

Tekniska Specifikationer:

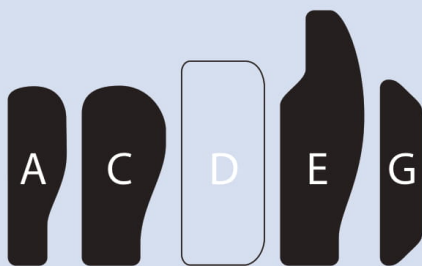
Vikt utan stolsfäste: 1,3kg
Max vikt för reglage: 1,0kg



JUSTERINGSMÖJLIGHETER



ALTERNATIV DYNOR



FRAMECO AB, Installatörvägen 19, 461 73 Trollhättan.
Telefon 0520-48 82 30.
www.frameco.se

Frameco 
THE ARMREST MANUFACTURER

Start

Om oss

Kvalitet

Miljö

Kontakt

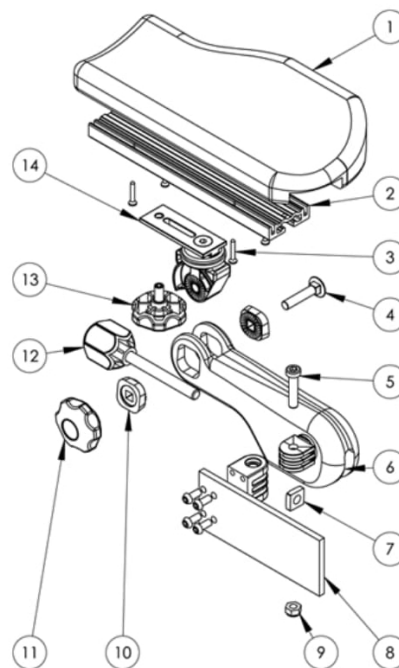
Armstöd

310 Ergo Comfort

Reservdelar

ARTIKEL NR. BESKRIVNING

310	1.	70016	Dyna C hö
		70017	Dyna C vä
600	2.	81077	Skena C smalt spår
	3.	70151	Spax 4 * 25mm
600S	4.	70849	Vagnsbult M8* 45
	5.	70776	Skruv M8* 35
2000	6.	81175	Arm 310 inkl. tapp, höger
		81223	Arm 310 inkl. tapp, vänster
2000E	7.	70109	Mutter M4M M10
	8.	Kontakta oss	Stolsfäste inkl. torn m. 4 skruv
2000S	9.	70107	Låsmutter M8
	10.	70269	Taggad låsbricka 310
2000ES	11.	70267	Låg ratt M8
	12.	80233	Hög ratt M10 kpl.
5200	13.	80232	Låg ratt M8 kpl.
	14.	80228	Dynadapter 310 kpl.

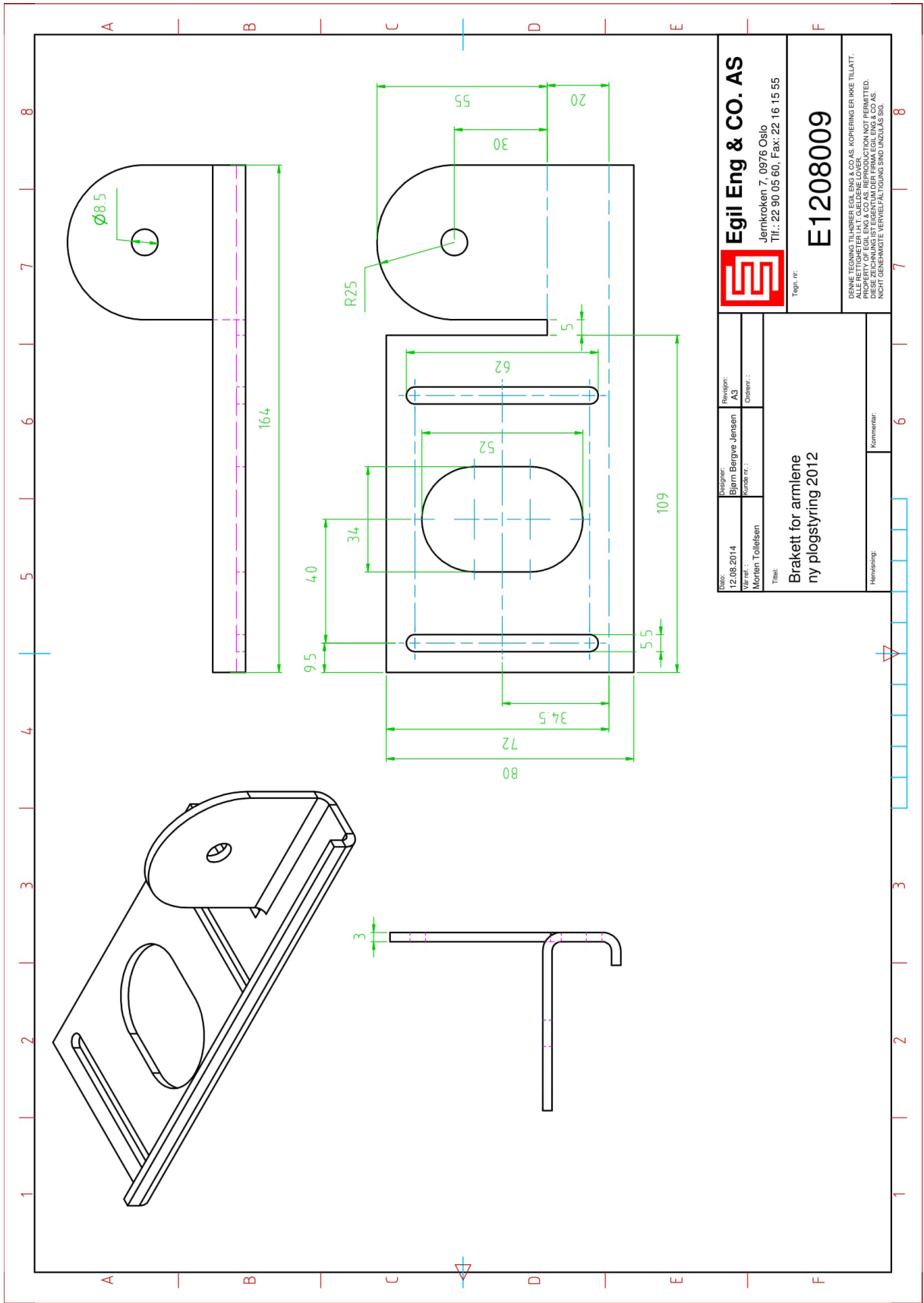



Dynor

Leder

Reglage

Anpassad



		Egil Eng & CO. AS Jernkroken 7, 0976 Oslo Tlf.: 22 90 05 60, Fax: 22 16 15 55	
Dato: 12.08.2014 Vår ref.: Mørten Tollefsen		Tegning nr.: E1208009	
Design: Bjørn Bergve-Jensen Kunde nr.:		Rev. nr.: A3 Ordre nr.:	
Tittel: Brakett for armlelene ny plogstyring 2012		Beskrivelse:	
Hvervsing:		Kommentar:	

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Stempelpumper faste enkle SAP Sunfab



Beskrivelse	Art. nummer	Dreieretning
Stempelpumpe SAP 040	SU23040	Høyre
Stempelpumpe SAP 047	SU23047	Høyre
Stempelpumpe SAP 056	SU23056	Høyre
Stempelpumpe SAP 064	SU23064	Høyre
Stempelpumpe SAP 084	SU23084	Høyre
Stempelpumpe SAP 108	SU23108	Høyre
Stempelpumpe SAP 084 L, high speed	SU23211	Venstre
Stempelpumpe SAP 084 R, high speed	SU23212	Høyre
Stempelpumpe SAP 108 L, high speed	SU23213	Venstre
Stempelpumpe SAP 108 R, high speed	SU23214	Høyre

Omløpsventil for SAP



Beskrivelse	Art. nummer	Pumpe type
Omløpsv. forSAP/SCP 12-64	SU91073	Opptil 64ccm
Omløpsv. forSAP/SCP 84-108	SU91077	84-108ccm

Stempelpumper faste enkle F1 Parker



Beskrivelse	Art. nummer	Dreieretning
Stempelpumpe F1-041-R Lastebil	PA3781040	Høyre
Stempelpumpe F1-051-R Lastebil	PA3781050	Høyre
Stempelpumpe F1-061-L Lastebil	PA3781061	Venstre
Stempelpumpe F1-061-R Lastebil	PA3781060	Høyre
Stempelpumpe F1-081-R Lastebil	PA3781080	Høyre
Stempelpumpe F1-101-L Lastebil	PA3781101	Venstre
Stempelpumpe F1-101-R Lastebil	PA3781100	Høyre

Omløpsventil for F1



Beskrivelse	Art. nummer	Pumpe type
Omløpsventil for F1 025-061 24V m nød kj	PA3784179	Opptil 61ccm
Omløpsventil for F1 081-101 24V m nød kj	PA3784180	81-101ccm

Stempelpumper faste doble Parker F2



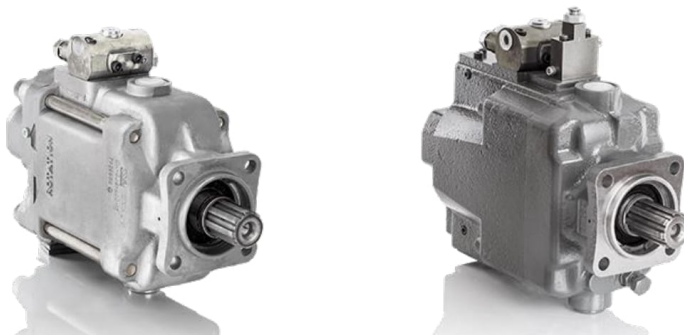
Beskrivelse	Art. nummer	Dreieretning
Stempelpumpe F2-70/35-L Lastebil	PA3781471	Venstre
Stempelpumpe F2-70/35-R Lastebil	PA3781470	Høyre

Omløpsventil for F2



Beskrivelse	Art. nummer	Pumpe type
Omløpsventil F2 alle str. 24V m nød kj.	PA3784377	Til alle F2 pumper

Variable pumper SVH Sunfab



Beskrivelse	Art. nummer	Dreieretning
Stempel.P Var 92ccm L LS LASTEBIL	SU91918	Venstre
Stempel.P Var 92ccm R LS LASTEBIL	SU91919	Høyre
Stempel.P Var 112ccm L LS LASTEBIL	SU91935	Venstre
Stempel.P Var 112ccm R LS LASTEBIL	SU91936	Høyre
Stempel.P Var 130ccm L LS LASTEBIL	SU92156	Venstre
Stempel.P Var 130ccm R LS LASTEBIL	SU92157	Høyre

Dreneringsventil for SVH



Beskrivelse	Art. nummer	Pumpe type
Omløps v. variabel pumpe	SU50863	Til alle SVH pumper

Variable pumper VP1 Parker



Beskrivelse	Art. nummer	Dreieretning
Variabel pumpe VP1-045-R	PA3780334	Høyre
Variabel pumpe VP1-075-R	PA3780336	Høyre
Variabel pumpe VP1-095-L	PA3786001	Venstre
Variabel pumpe VP1-095-R	PA3786000	Høyre
Variabel pumpe VP1-110-L	PA3784111	Venstre
Variabel pumpe VP1-110-R	PA3784110	Høyre
Variabel pumpe VP1-130-L	PA3784501	Venstre
Variabel pumpe VP1-130-R	PA3784500	Høyre

Dreneringsventil for VP1



Beskrivelse	Art. nummer	Pumpe type
Dreneringsventil	PA3798799	Til alle VP1 pumper

FPK03&04-AP420

In-line high pressure filters,
up to 420 bar



Technical Data

- Filter head casting in spheroidal cast iron.
- Extruded steel bowl.
- Operating pressure at 42 MPa (420 bar)
- Static pressure testing at 63 MPa (630 bar).
- Fatigue pressure of 2.000.000 cycles at 0 - 30 MPa (0 - 300 bar) per NFPA T 3.10.5.1.
- By-pass valve setting 600 kPa (6 bar) per ISO 3968.
- Reverse flow valve which allows fluid to pass through the element in one direction but to by-pass the element when the flow is reversed. State letter "V" while placing the order.
- Operating temperature -20 +120°C.
- Compatibility hydraulic fluids per ISO 2943.
- Flow rate and pressure drop per ISO3968 with oil kinematic viscosity 30 cSt at 40°C and density 0,875 kg/dm³.
- Ports threaded per ISO 228/1 or flanged per SAE J518-6000 PSI
- Tapped predisposition for indicator.

Filter Elements

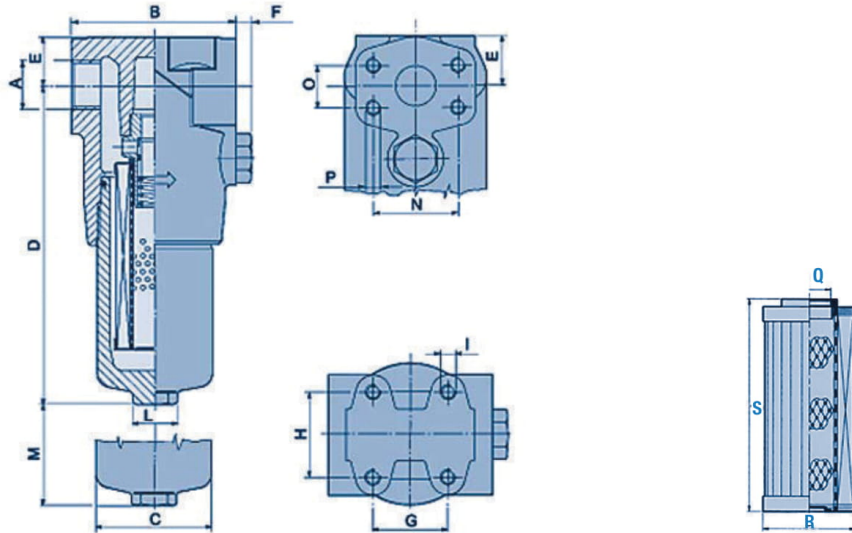
- Synteq® synthetic media (5 - 10 - 25 micron), reinforced with wire mesh.
- Collapse resistance 2 MPa (20 bar) per ISO 2941. (They can also be supplied at 21 MPa (210 bar) on customer's request).

FPK03&04-AP420

In-line high pressure filters,
up to 420 bar



Specifications



HIGH PRESSURE
FILTERS

FLOW l/min	/03		/02		/01			
	SYNTHETIC MEDIA							
	$\beta_{23(c)}=1000$		$\beta_{11(c)}=1000$		$\beta_{8(c)}=1000$			
	TYPE	ELEMENT	FLOW l/min	TYPE	ELEMENT	FLOW l/min	TYPE	ELEMENT
50	K030286	P171733	50	K030285	P171732	40	K030284	P171731
	AP 361.03	AP 451.53		AP 361.02	AP 451.52		AP 361.01	AP 451.51
80	K030289	P171736	80	K030288	P171735	60	K030287	P171734
	AP 362.03	AP 452.53		AP 362.02	AP 452.52		AP 362.01	AP 452.51
80	K030292	P171736	80	K030291	P171735	60	K030290	P171734
	AP 362.08	AP 452.53		AP 362.07	AP 452.52		AP 362.06	AP 452.51
120	K030295	P171739	120	K030294	P171738	80	K030293	P171737
	AP 363.03	AP 453.53		AP 363.02	AP 453.52		AP 363.01	AP 453.51
120	K030298	P171739	120	K030297	P171738	80	K030296	P171737
	AP 363.08	AP 453.53		AP 363.07	AP 453.52		AP 363.06	AP 453.51
180	K040676	P171742	180	K040675	P171741	160	K040674	P171740
	AP 364.03	AP 454.53		AP 364.02	AP 454.52		AP 364.01	AP 454.51
180	K040679	P171742	180	K040678	P171741	160	K040677	P171740
	AP 364.08	AP 454.53		AP 364.07	AP 454.52		AP 364.06	AP 454.51
300	K040682	P171745	300	K040681	P171744	270	K040680	P171743
	AP 365.03	AP 455.53		AP 365.02	AP 455.52		AP 365.01	AP 455.51
300	K040685	P171745	300	K040684	P171744	270	K040683	P171743
	AP 365.08	AP 455.53		AP 365.07	AP 455.52		AP 365.06	AP 455.51
400	K040688	P171748	400	K040687	P171747	320	K040686	P171746
	AP 366.03	AP 456.53		AP 366.02	AP 456.52		AP 366.01	AP 456.51
400	K040691	P171748	400	K040690	P171747	320	K040689	P171746
	AP 366.08	AP 456.53		AP 366.07	AP 456.52		AP 366.06	AP 456.51

Service Indicators

ELECTRONIC DIFFERENTIAL PRESSURE INDICATOR

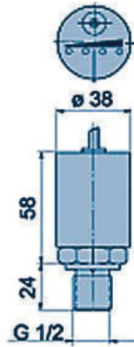
Measures element restriction and indicates servicing required

P171970 (505.06)

Setting: 500 kPa (5 bar)

Max. values: 30 ACV - 0,5 A res. - 0,2 A ind.

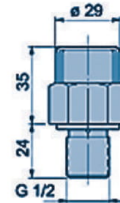
Protection class: IP 65



VISUAL DIFFERENTIAL PRESSURE INDICATOR

P171945 (506.06)

Setting: 500 kPa (5 bar)



VISUAL ELECTRICAL DIFFERENTIAL PRESSURE INDICATOR

P171947 (507.03)

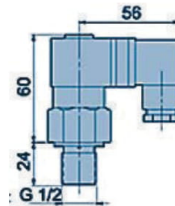
P171944 (507.06) with thermostat at min. temperature at 30°C

Setting: 500 kPa (5 bar)

Max. values: 250 ACV - 30 DCV - 5 A res.and ind.

Protection class: IP 65

Cable clamp: PG 11



ELECTRICAL DIFFERENTIAL PRESSURE INDICATOR

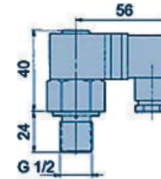
P761056

Setting: 500 kPa (5 bar)

Max. values: 250 ACV - 30 DCV - 5 A res.and ind.

Protection class: IP 65

Cable clamp: PG 11



DIMENSIONS ASSY (mm)														
A	B	C	D	E	F	G	H	I	L	M	N	O	P	Kg.
G 1/2	110	78	186	33	9	50	57	M10	Hex30	50				6,1
G 3/4	110	78	215	33	9	50	57	M10	Hex30	50				6,7
3/4 SAE 6000	110	78	215	33	9	50	57	M10	Hex30	50	50,8	23,8	M10	6,8
G 1	110	78	320	33	9	50	57	M10	Hex30	50				8,2
1 SAE 6000	110	78	320	33	9	50	57	M10	Hex30	50	57,15	27,76	M12	8,4
G 1 1/4	140	105	256	46	9	94	57	M12	Hex30	55				14,8
1 1/4 SAE 6000	140	105	256	46	9	94	57	M12	Hex30	55	66,68	31,75	M14	15,1
G 1 1/2	140	105	356	46	9	94	57	M12	Hex30	55				17,2
1 1/2 SAE 6000	140	105	356	46	9	94	57	M12	Hex30	55	79,38	36,5	M16	17,2
G 1 1/2	140	105	496	46	9	94	57	M12	Hex30	55				20,1
1 1/2 SAE 6000	140	105	496	46	9	94	57	M12	Hex30	55	79,38	36,5	M16	20,1

DIMENSIONS ELEMENT (mm)		
Q	R	S
27	54	87
27	54	122
27	54	122
27	54	230
27	54	230
40	78	140
40	78	140
40	78	240
40	78	240
40	78	380
40	78	380

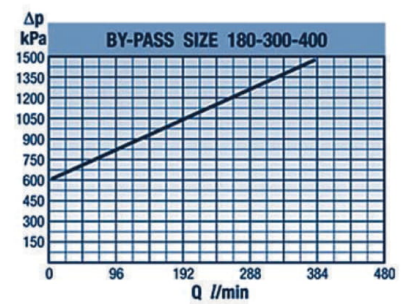
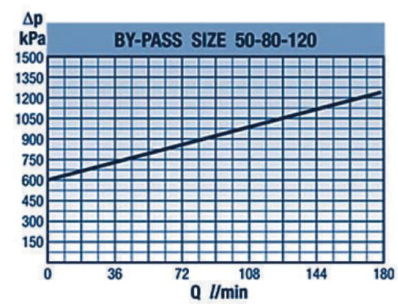
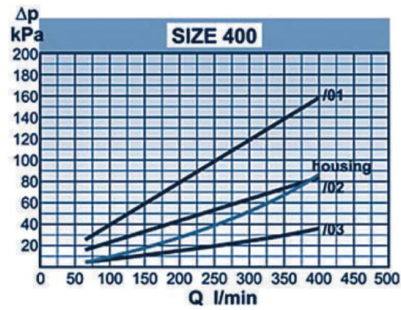
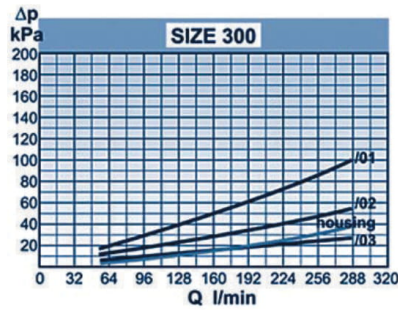
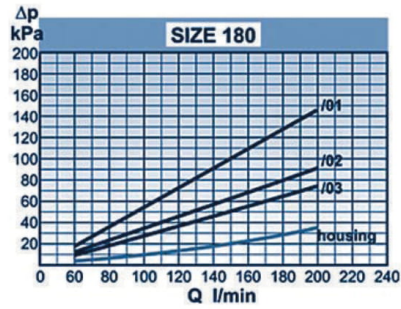
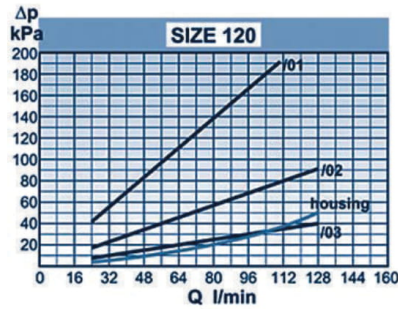
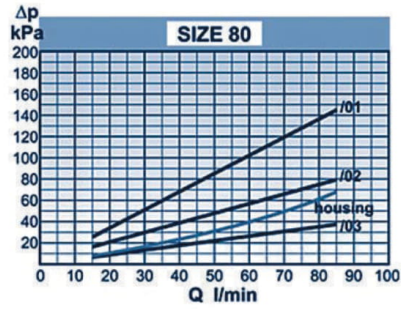
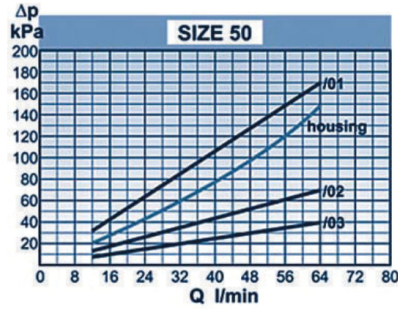
HIGH PRESSURE FILTERS

FPK03&04-AP420

In-line high pressure filters,
up to 420 bar



Performance Curves



HIGH PRESSURE
FILTERS



Nordhydraulic
HYDAC INTERNATIONAL

Directional control valve RM 270



Solutions that power your visions

31-02-RM270-07/07.11

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P.O Box 189 (Industrivägen 15)
SE-872 24 KRAMFORS
Sweden

Telephone: Int. +46 612 71 72 00
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Web: www.nordhydraulic.se

Data sheet
Directional control valve / RM 270

RM 270

RM 270

Make use of the Nordhydraulic expertise

Our skilled and experienced design and application engineers are at your disposal, helping you to specify the valve configuration that meets your application requirements.

Key valve features

The RM 270 is a monoblock valve, designed for system pressures up to 300 bar and pump flows up to 160 l/min.

It is available with 1, 2, 3, 4, and 6 sections per valve.

The valve is designed with an open centre for fixed displacement pumps.

The valve can be operated manually or by pneumatic and electro-pneumatic remote control.

The "SuperRapid"-range of the valve is optimized for maximum lowering flow of 185 l/min and allows lowering at the same time as another function is pressurized.

The valve offers excellent operating characteristics because of the specially designed spools for different applications.

Low and uniform spool forces are the result of careful balancing of the flow forces.

Applications

Typical applications are cranes, tippers, refuse trucks, multi-bucket systems and roller container vehicles. Several special versions of RM 270 fulfil many other applications.

Further RM 270 properties and possibilities

- Each section can be provided with a pressure relief valve, an anticavitation valve or a combination of these.
- There are many varieties of spools and spool controls which make the valve suitable for a wide range of applications.
- Two or more blocks can be connected in series.
- The valve can be supplied with a built-in unloading valve, which in an emergency situation makes it possible to let all the pump flow go to tank at a very low pressure drop.
- A combination of built-in flow control-, unloading- and counter pressure valves gives a compact solution and less mounting parts for refuse trucks.



- Possibility for built-in load holding valves.
- In systems with demand for both high and low flows the valve can be combined with RS 210. The adapter between the valves includes a flow control valve for reduced flow to the RS 210 working sections.

Table of contents

Technical datapage 3
Dimensions, weightpage 4
Relief valves.....page 5 - 6
Electrical unloading valve.....page 7
Spool controls.....page 8
Spools.....page 9
High pressure carry-over.....page 10
Super Rapid.....page 12

Data sheet

This data sheet presents a selection of standard components and how to specify these in a valve assembly according to your application requirements. For further information on RM 270 and available components, please contact Nordhydraulic.



Technical data

Pressures / flow

Max. system pressure* 300 bar (30,0 MPa)
 Max continuous return line pressure..... 20bar (2,0 MPa)
 Rated flow..... 120 l/min
 *depending on application

Recommended contamination level at normal duty: equal to or better than 18/14 as per ISO 4406.

Hydraulic fluid viscosity range at continuous operation: 10-400 mm²/s(cSt). Higher viscosity allowed at start up.

Further data

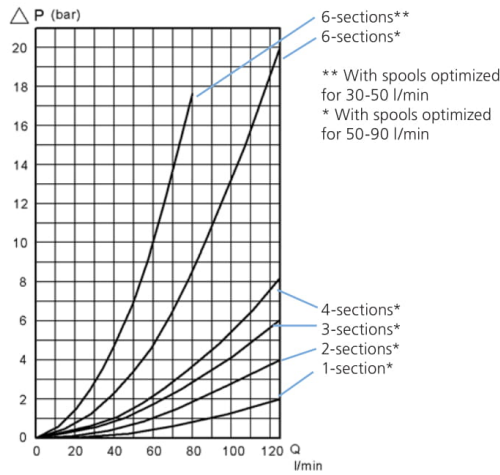
Spring force for spool control 9 in neutral position:
 130 N (13,0 kp).
 Spring force for spool control 9 with fully selected spool:
 155 N (15,5 kp).

Mineral oil and synthetic oil based on mineral oil are recommended.

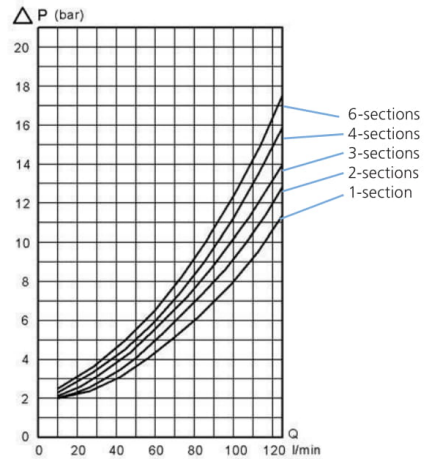
Max. hydraulic fluid temperature range for continuous operation: -15°C - + 80°C.

Spool leakage at 100 bar, 32 cSt and 40°C: <20 cm³/min.

Pressure drop

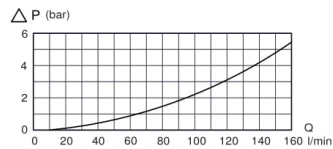


Pressure drop P-T

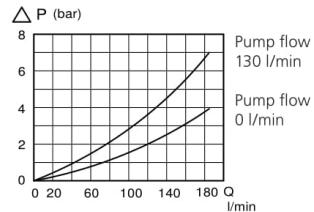


Pressure drop P - AB

Oil temperature/viscosity for all graphs: + 50°C / 32 cSt



Pressure drop P-T unloaded

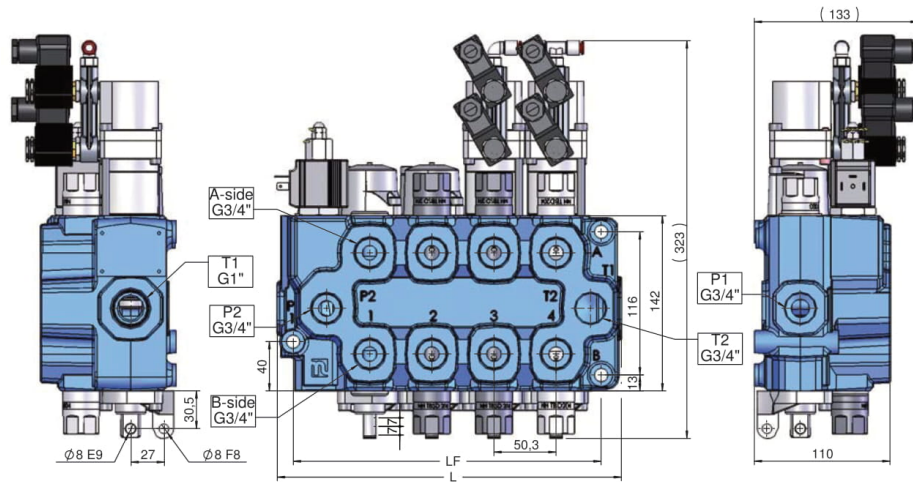


Pressure drop A-T Super Rapid 1-section valve



RM 270

Technical data - Dimensions, weight



Spool stroke +/- 7 mm
Float position 7 mm

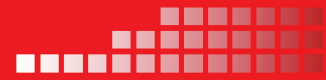
Weights, complete valve:

1 section	11 kg
2 sections	15 kg
3 sections	19 kg
4 sections	23 kg
6 sections	31 kg

Measurements	L mm	LF mm
1 section	128	100
2 sections	178,3	150
3 sections	228,6	200
4 sections	278,9	250
6 sections	379,5	350



Type	LA mm	LB mm
9	43	
10	43	
11	75	
13	75	
14	75	
P	109	
P5	157	
EP	109	
MSLA	48,5	
M19		38,5
M211		32
M212		55,5



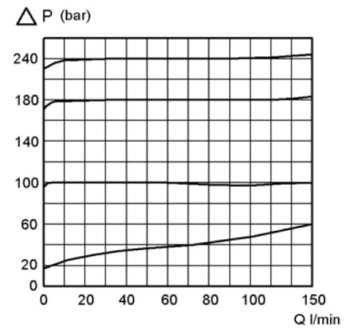
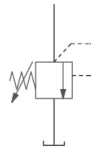
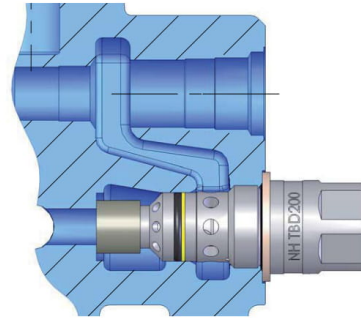
Main relief valve

Main relief valve TBD200

The TBD200 is a differential area, direct acting relief valve for the main circuit. It is adjustable and sealable.

Setting range: 35 - 300 bar (3,5 - 30,0 MPa).

Setting range step: 5 bar.



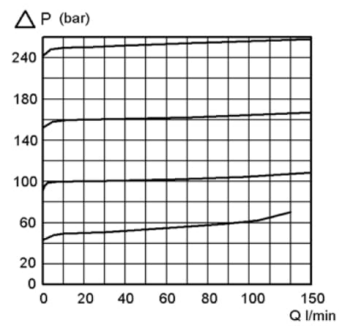
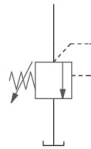
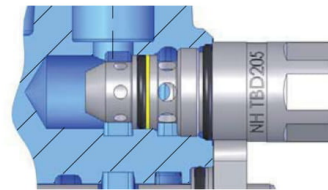
Service port valves

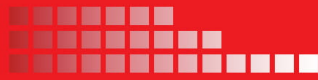
Port relief valve TBD205

The TBD205 is a differential area, direct acting relief valve for the secondary circuit. It is adjustable and sealable.

Setting range: 40 - 300 bar (4,0 - 30,0 MPa).

Setting range step: 10 bar.





RM 270

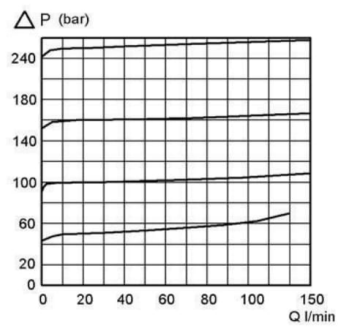
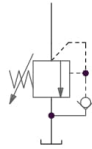
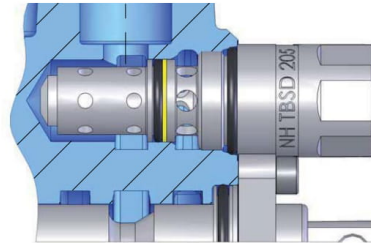
Service port valves

Port relief and anticavitation valve TBSD205

The TBSD205 is a differential area, direct acting relief and anticavitation valve for the secondary circuit. It is adjustable and sealable.

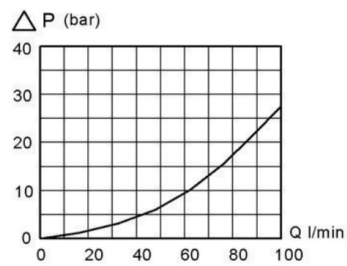
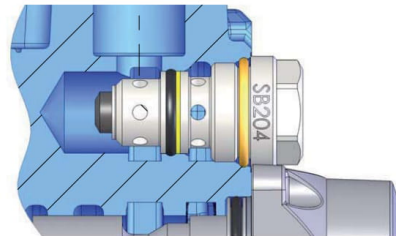
Setting range: 40 - 300 bar (4,0 - 30,0 MPa).

Setting range step: 10 bar.



Anticavitation valve SB204

The anticavitation valve service to ensure that, in the event of a lower pressure in the cylinder port than in the tank, oil can be drawn from the system oil tank to the consumer.





Electrical unloading valve

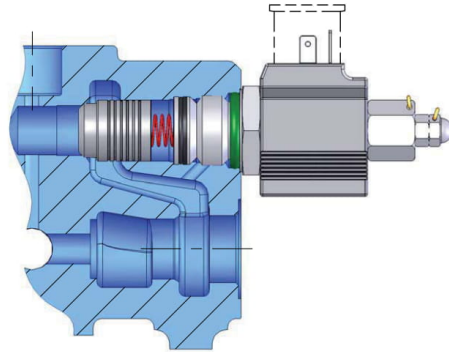
RM 270

Data

Power consumption.....	14 W
Rated voltage.....	12 and 24 V
Max voltage variation	+/- 10%
Duty factor	100%
Connection	Hirschmann ISO 4400-DIN 43650
Protection class.....	IP65

IS12
manual override with push operation 12V.

IS24
manual override with push operation 24V.





RM 270

Spool controls - A-side

Spool control 9

9 Spring centering.
9W for cable control.



Spool control 10

Detents at positions 1, 2 and 3.



Spool control 11

Spring centering with detent at position 4.



Spool control 13

Spring centering with detent at position 2.



Spool control 14

Spring centering with detent at position 3.



Spool control P

Pneumatic*.



Spool control EP

Electro/pneumatic on/off**.



Spool control P5

Pneumatic control with detent at position 4*.



Spool control EP5

Electro/pneumatic on/off with detent in position 4**.



Spool control MSLA

Spool control, stroke limitation.



* ConnectionG 1/8" BSP

** Power consumption.....4,8 W
Rated voltage 24 V
Max voltage variation +/- 10%
Duty factor 100%
Connection according to EN175301-803/B
Protection class..... IP65

Spool controls - B-side

Bracket M19

Bracket for 3-pos. spool.

Bracket M212

Bracket for 4-position spool with manual control.

Bracket M211

Bracket for 4-position spool and for 4-pos EP-spool control.



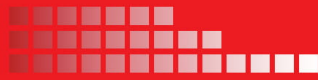
Spools

RM 270

	<p align="center">Spools for general use</p> <p align="center">Function</p>	<p align="center">Code</p>
	<p align="center">Double acting spool</p>	<p align="center">10XAA1</p>
	<p align="center">Slewing spool, gentle operating</p>	<p align="center">10XKS1</p>
	<p align="center">Single acting spool P - A</p>	<p align="center">20XAA1</p>
	<p align="center">Single acting spool P - B</p>	<p align="center">20XAA2</p>
	<p align="center">Motor spool</p>	<p align="center">40XAA1</p>
	<p align="center">Motor spool A - T</p>	<p align="center">50XAA2</p>
	<p align="center">Motor spool B - T</p>	<p align="center">60XAA1</p>
	<p align="center">Double acting spool with 4th pos. for float</p>	<p align="center">30XAA1</p>
	<p align="center">Regenerative spool</p>	<p align="center">80XAA1</p>
	<p align="center">Single acting "SR" *185 lpm lowering flow</p>	<p align="center">713TA1</p>

The RM 270 spools are available in variety of flows and styles to accommodate most design requirements. Since the development of spools is a continuous process and all available spools are not described in this data sheet, contact Nordhydraulic for advice on choosing spools in order to optimize your valve configuration.

Generally the spools are divided in 5 different flow ranges. In the table only the accessibility of different functions are shown. The letter indicating flow range is replaced with X, as some spool functions are available in several flow ranges.
 3 = 20 - 40 lpm
 4 = 30 - 50 lpm
 5 = 40 - 60 lpm
 7 = 50 - 90 lpm
 12 = 90 - 130 lpm



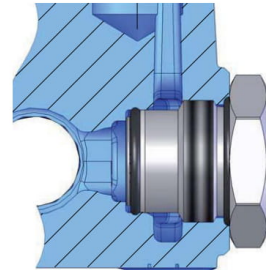
RM 270

High pressure carry-over

High pressure carry-over nipple SG25

The type SG25 series nipple is used for series mounting of valve blocks when pipe or hose is used between the blocks.

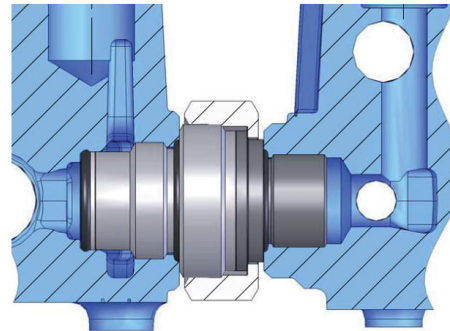
For RM 270 Super Rapid see page 12.



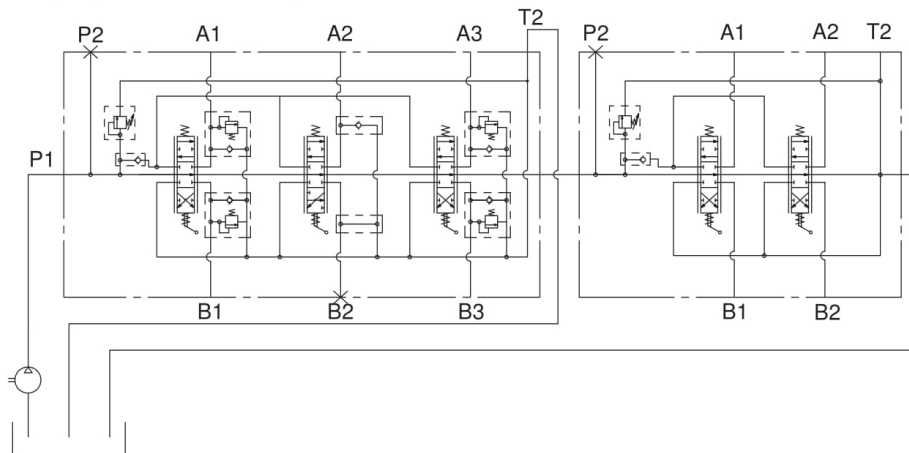
High pressure carry-over flange kit SC250

The type SC250 flange kit is used to connect valve blocks in series, without any pipe or hose.

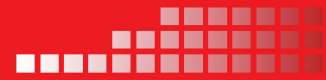
For RM 270 Super Rapid see page 12.



High pressure carry-over



When high pressure carry over SG25 or SC250 is used for series mounting, the tank connection T2 for the first valve must always be connected to the tank (see diagram above). Valve blocks connected in series give priority of flow to the first block in the series. This means that there will be no flow at block 2 if block 1 is fully activated.

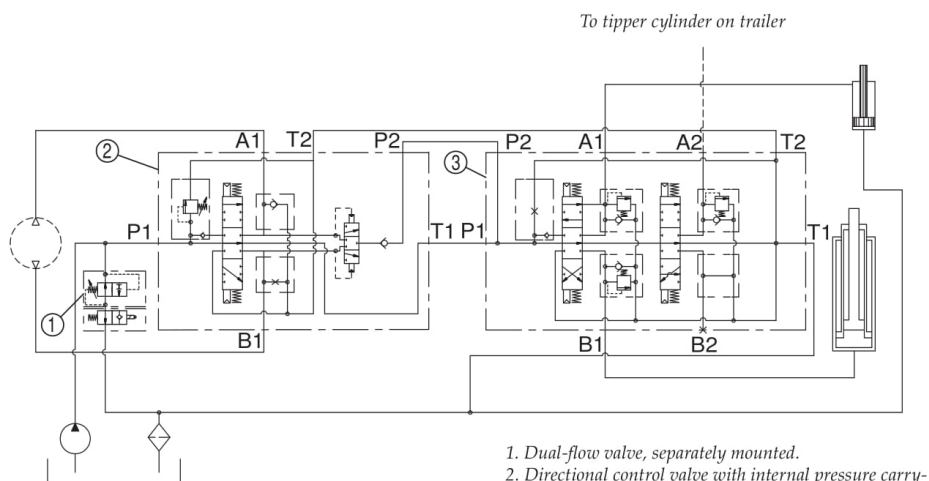
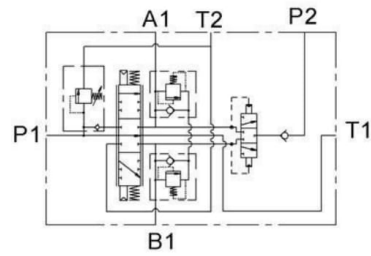


Integrated pressure carry-over function and extra check valve

The valve is made from a 1 section valve with a shuttle spool to create the pressure carry-over function, and an extra check valve in the pressure line. Carry-over pressure can be obtained from both A and B port, depending of which is used.

The built in shuttle spool makes it possible to use the return flow from, for instance, a hydraulic winch motor on a cable lift, to regulate the downward movement of the tipper cylinder at the same time as the winch pulls the platform on the frame.

The extra check valve prevents the oil from running backwards in the system when only the tipper valve is used.



1. Dual-flow valve, separately mounted.
2. Directional control valve with internal pressure carry-over function and extra check valve.
3. Directional control valve for tipper function.

RM 270

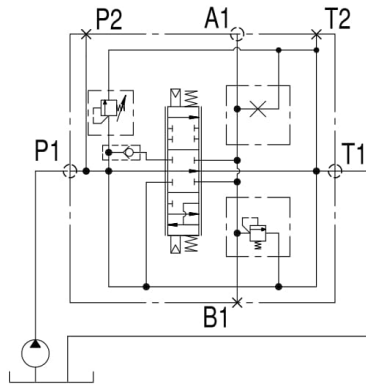
"Super Rapid" - tipping valve configuration

The "Super Rapid" tipping valve is optimized for maximum lowering flow. The multi section valves allows lowering at the same time as an other function is pressurised. The valve can be equipped for variable pump operation. Due to a strengthening of the valve body the valve permits high continuous working pressure. The valve is available with 1, 2 and 3 sections.

It is not possible to use a high pressure carry-over nipple SG25 or flange kit SC250 in a RM 270 Super Rapid valve with only one section.

Each valve section can be provided with a pressure relief valve, an anticavitation valve or a combination of these.

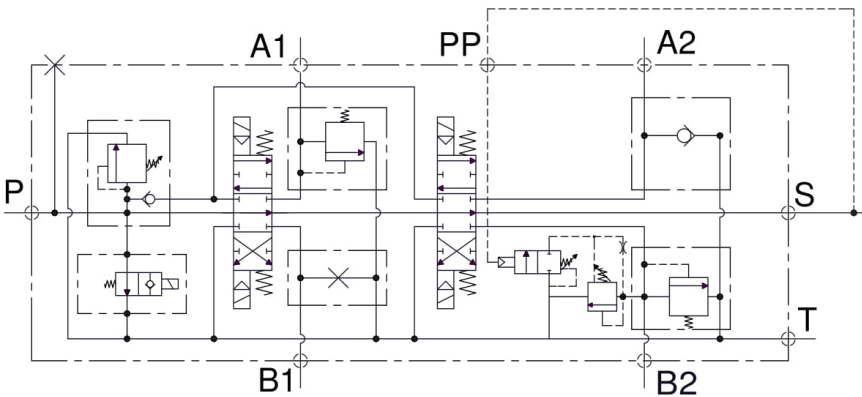
The valve can be provided with pneumatic or electro/pneumatic spool control.



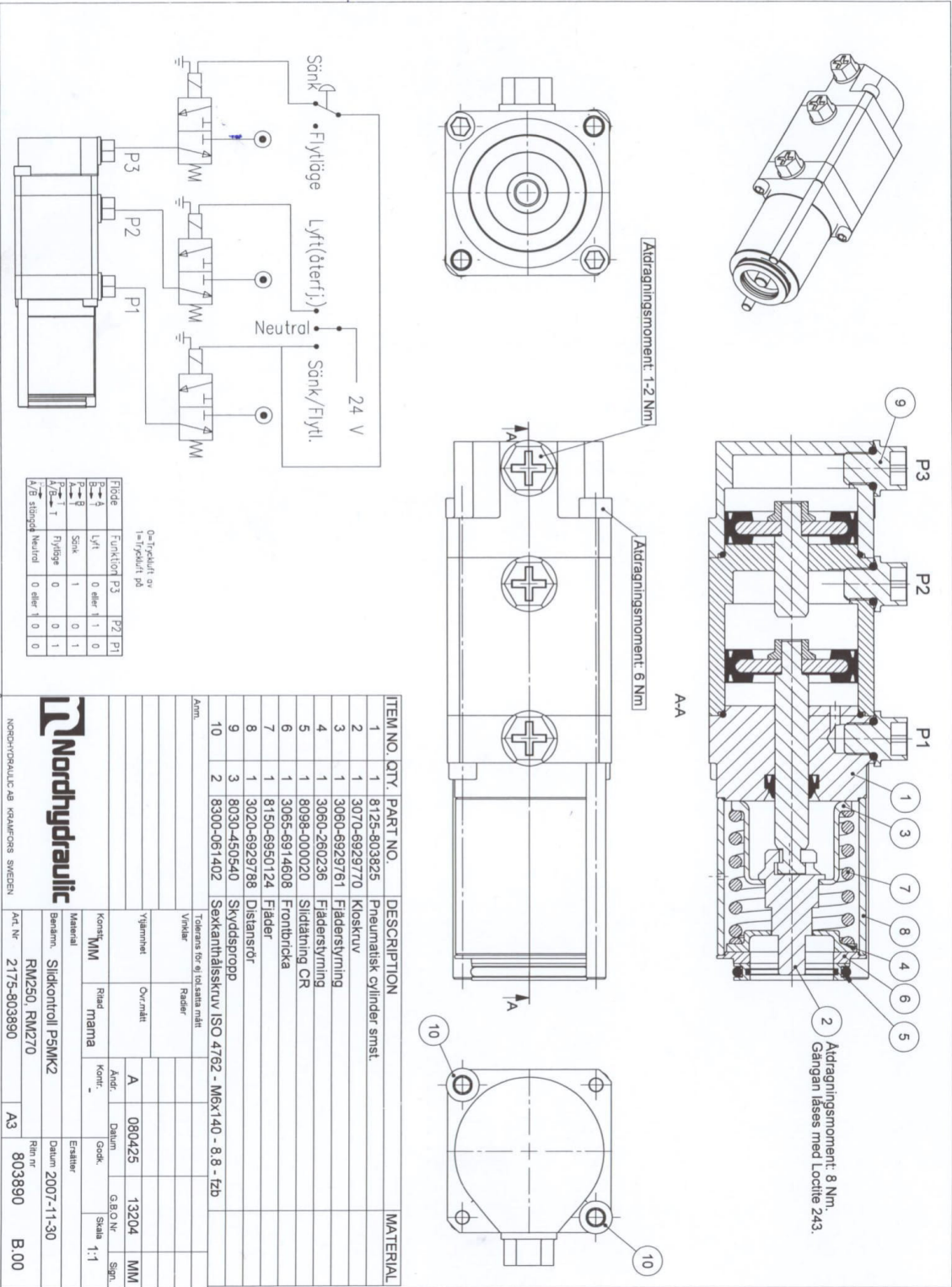
Technical data

Max. system pressure	300 bar (30,0 MPa)
Max return pressure	25 bar (2,5 MPa)
Lowering flow	185 l/min

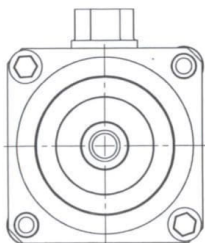
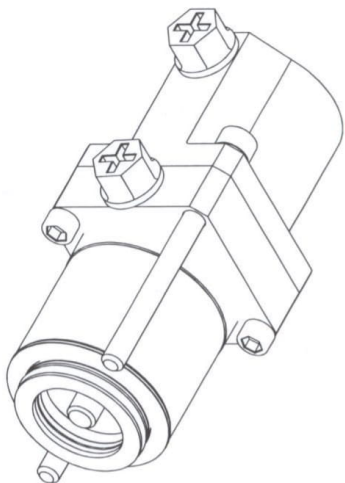
Valve configuration for refuse truck application



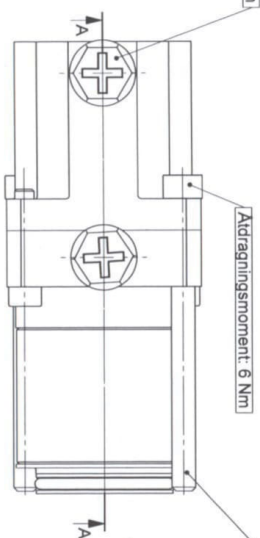
The valve can be configured for refuse vehicles. Typical is 1 four-sectional valve or 2 two-sectional valves for the functions tail gate, packing and exhaust. The pressure to the exhaust cylinder is controlled of the packing pressure so that the pressure is low during the packing cycle but high during exhaust. The circuit shows a two sectional valve with the functions tailgate on section 1 and exhaust on section 2. The valve for the packing functions is supplied from port S.



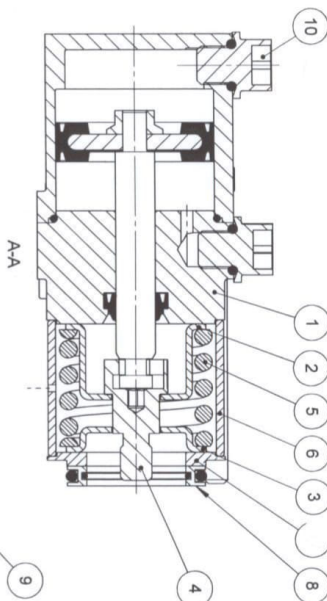
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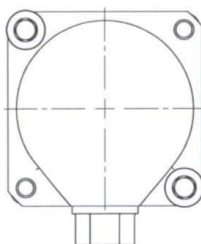
Aldragningsmoment: 1-2 Nm



Aldragningsmoment: 6 Nm



Aldragningsmoment: 8 Nm.
 Gången låses med Loctite 243.



ITEM NO.	QTY.	PART NO.	DESCRIPTION	MATERIAL
1	1	8125-803004	Luftcylinder-kpl	
2	1	3060-260110	Fjäderstyrning hög	-
3	1	3060-260140	Fjäderstyrning låg	-
4	1	3070-260227	Koskruv	
5	1	8150-6902421	Fjäder	SS 1774.05
6	1	3025-6914594	Adapterör	
7	1	3065-6914608	Frontbricka	
8	2	8098-000020	Slidstättning CR	
9	2	8300-060792	Sexkantlås-skruv ISO 4762 - M6x75 - 8.8 - fzB	
10	2	8030-450540	Skyddspropp	

Tolerans för ej indata mått: Skyddspropp

Andra: Vindlar, Radlar

Väljmeriet	Ordnr	A	080425	13204	MM
Konst:	Rad	man	Andr. Kont.	Godk. AO	Skala 1:1
Material: Slidkontroll PMK2					
Eratör: Datum 2008-04-15					

NORDHYDRAULIC AB KEMARCS SWEDEN

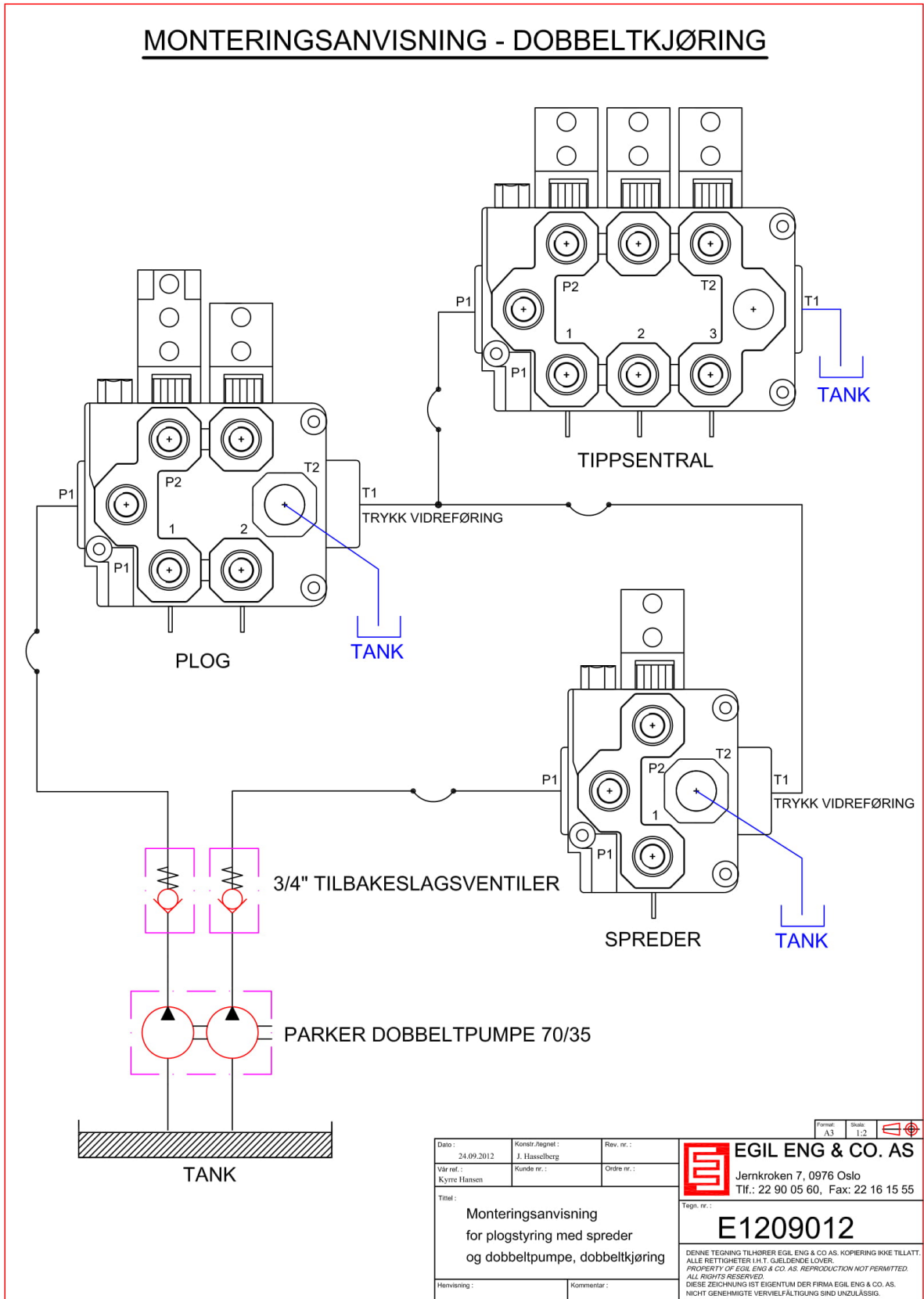
Art. Nr 2175-804292

A3

Rit nr 804292

A

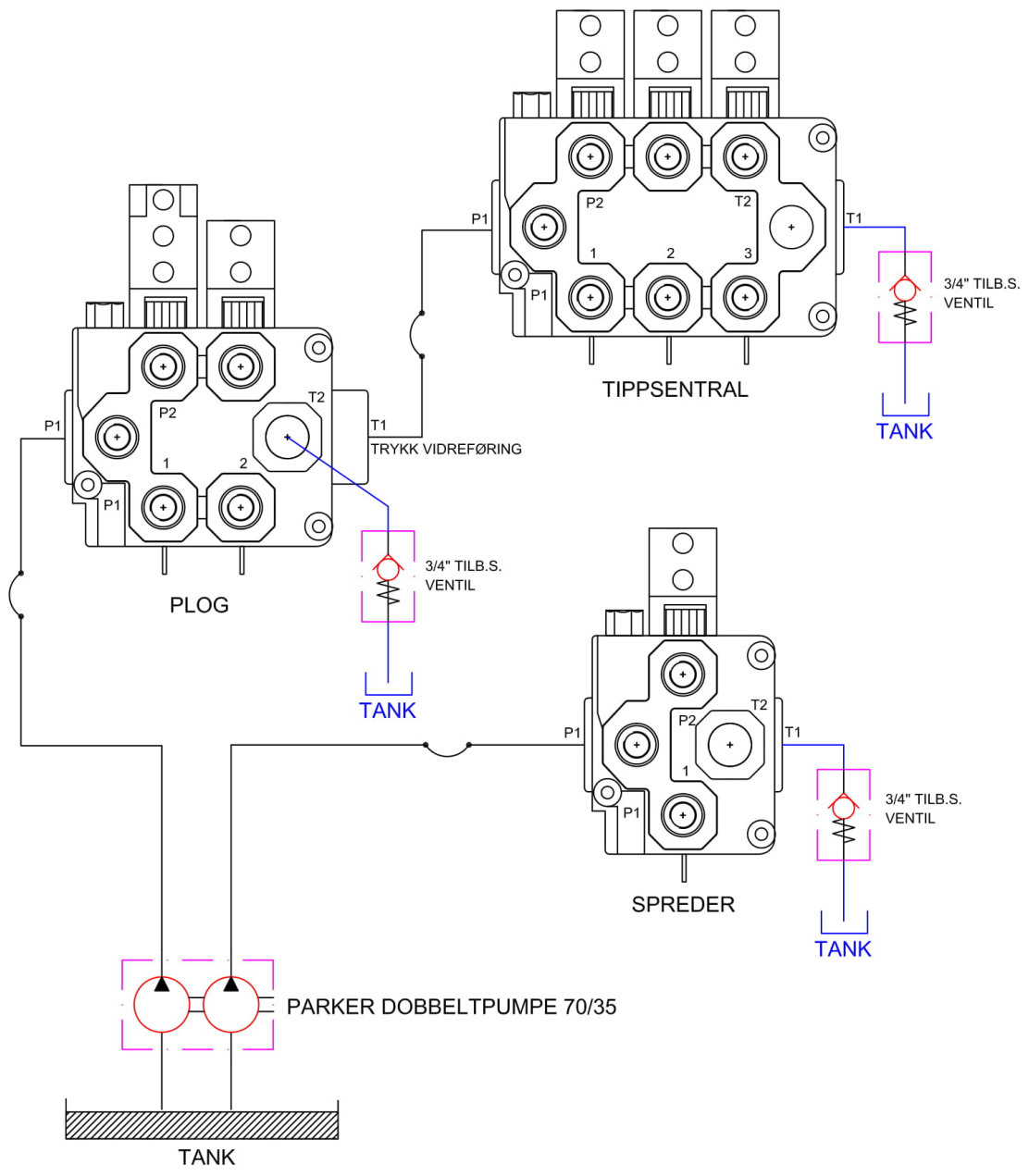
MONTERINGSANVISNING - DOBBELTKJØRING



Dato:	24.09.2012	Konstr./tegnst:	J. Hasselberg	Rev. nr.:	
Vår ref.:	Kyrre Hansen	Kunde nr.:		Ordre nr.:	
Titel:					
Monteringsanvisning for plogstyring med spredde og dobbeltpumpe, dobbeltkjøring					
Henvisning:			Kommentar:		

Format:	A3	Skala:	1:2	
EGIL ENG & CO. AS				
Jernkroken 7, 0976 Oslo				
Tlf.: 22 90 05 60, Fax: 22 16 15 55				
Tegn. nr.:				
E1209012				
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MONTERINGSANVISNING - ENKELTKJØRING



Dato:	07.08.2013	Konstr./tegnst.: J. Hasselberg	Rev. nr.:	
Vår ref.:	Kyrre Hansen	Kunde nr.:	Ordre nr.:	
Titel:		Monteringsanvisning for plogstyring med spredde og dobbeltpumpe, enkeltkjøring		
Henviing:		Kommentar:		



EGIL ENG & CO. AS
Jernkroken 7, 0976 Oslo
Tlf.: 22 90 05 60, Fax: 22 16 15 55

Tegn. nr.:

E1308003

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