

APV

HOMOG

+

STEVENS



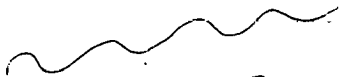
8 712156 226693



APU RANNIE

25-56.

30-56



MANUAL 2.

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MAINTENANCE

CYLINDER AND PISTON WITH HIGH PRESSURE PACKING

At inspection and maintenance of cylinder packing, the piston must be removed.

NOTE:

The illustrations shown are *merely examples*.

The particular design appears from the part assembly drawing in the section on spare parts.

Valve housing and bracket must *not* be dismantled.

DISMANTLING

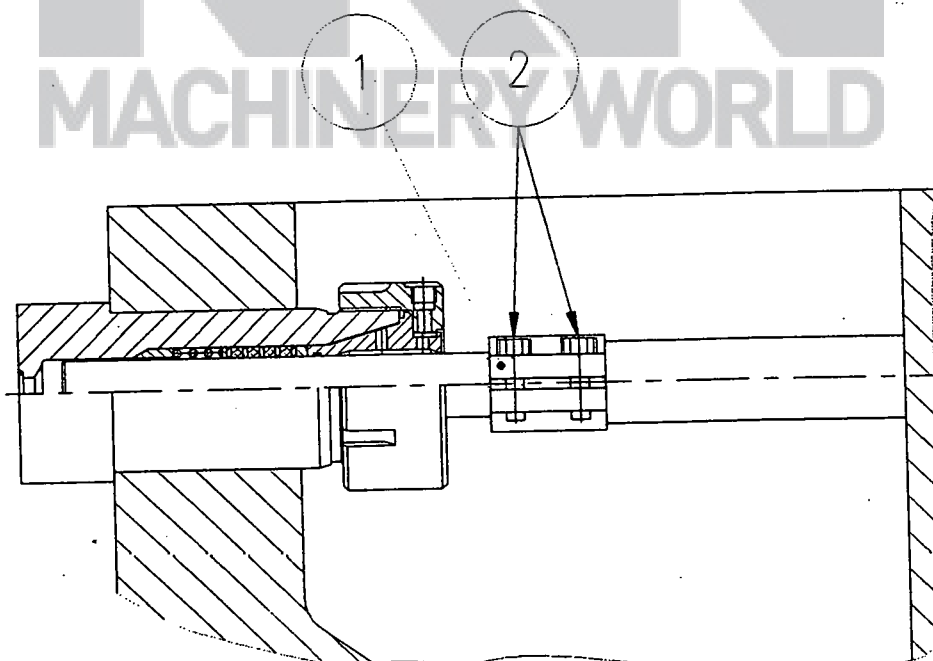
REMEMBER!!

Always check that the power connection from the control board has been switched off, and that the main fuses have been removed.

IMPORTANT!!

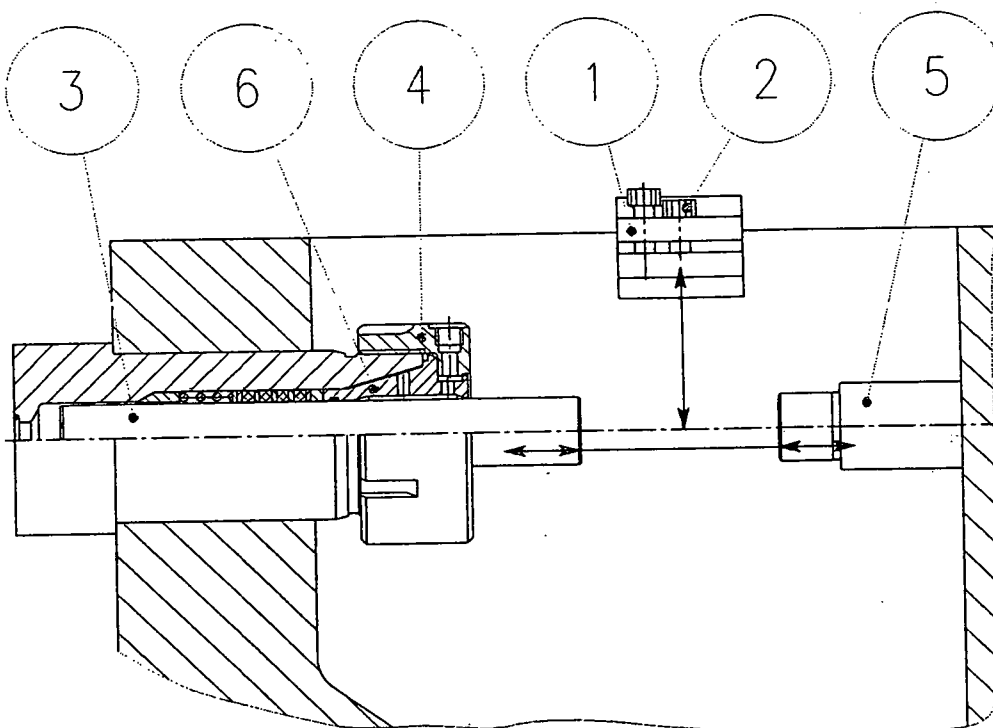
Dismantle *only one* cylinder at a time!!

1. Using the machine V-belt drive, turn the eccentric shaft so that piston coupling Pos. 1 is at its front position.



Figur 1

2. Screw screws Pos.2 on piston Pos.1 about 5 mm up.
3. Unscrew one screw on piston coupling Pos.1 all the way, screw in middle threaded hole, and tighten so that the piston coupling will be opened and is loose.
4. Using the machine V-belt drive, the eccentric shaft is turned so that fixed piston Pos.5 is at rearmost position.



Figur 2

5. Remove piston coupling Pos.1.
IMPORTANT!! If the piston Pos.3 is ceramic, **IT MUST NOT** be exposed to impact.
6. Remove union nut Pos.4 and packing ring (not on all machines).
7. Place piston coupling Pos.1 on fixed piston Pos.5 which is moved up for contact with loose piston Pos.3.
8. Attach piston coupling Pos.1, and the piston is moved to its rearmost position using the machine V-belt drive.
9. Shut homogenising valve so that the water of the valve housing will form a pressure when the piston is moved forward.

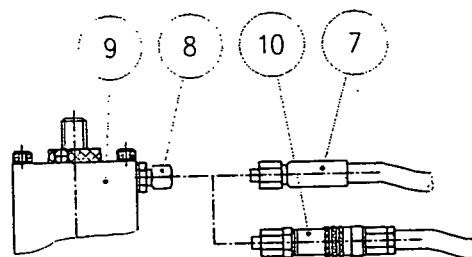
MACHINES WITH HYDRAULIC PRESSURE CONTROL SYSTEM.

NOTE: For machines with hydraulic pressure control system, auxiliary tools are required to shut the homogenising valve.

Remove hydraulic hose Pos.7 from screwed connection Pos.8 on hydraulic cylinder Pos.9.
Remove screwed connection Pos.8 from hydraulic cylinder Pos.9.

Mount quick coupling Pos 10 in hydraulic cylinder Pos.9.
Connect air hose to quick coupling, thus putting hydraulic cylinder Pos.9 under pressure, **MAX 5 BAR**, and the homogenising valve will shut.

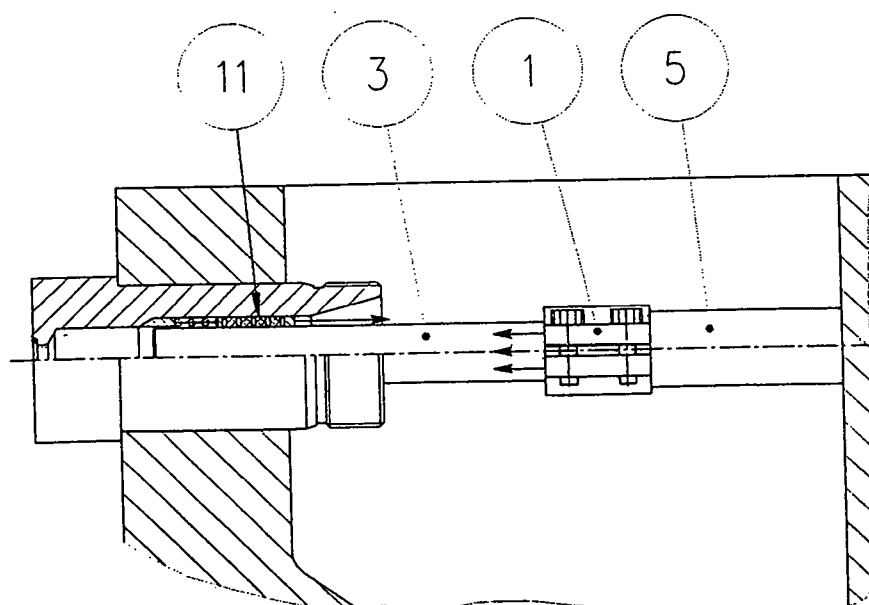
Complete quick coupling is available in tool bag.
After replacement of high pressure packings in cylinders, remove quick coupling Pos.10. Mount screwed connection Pos.8 and hydraulic hose Pos.7 in hydraulic cylinder Pos.9.



Figur 3

IMPORTANT!! The hydraulic cylinder **MUST** be vented at the start of the machine.

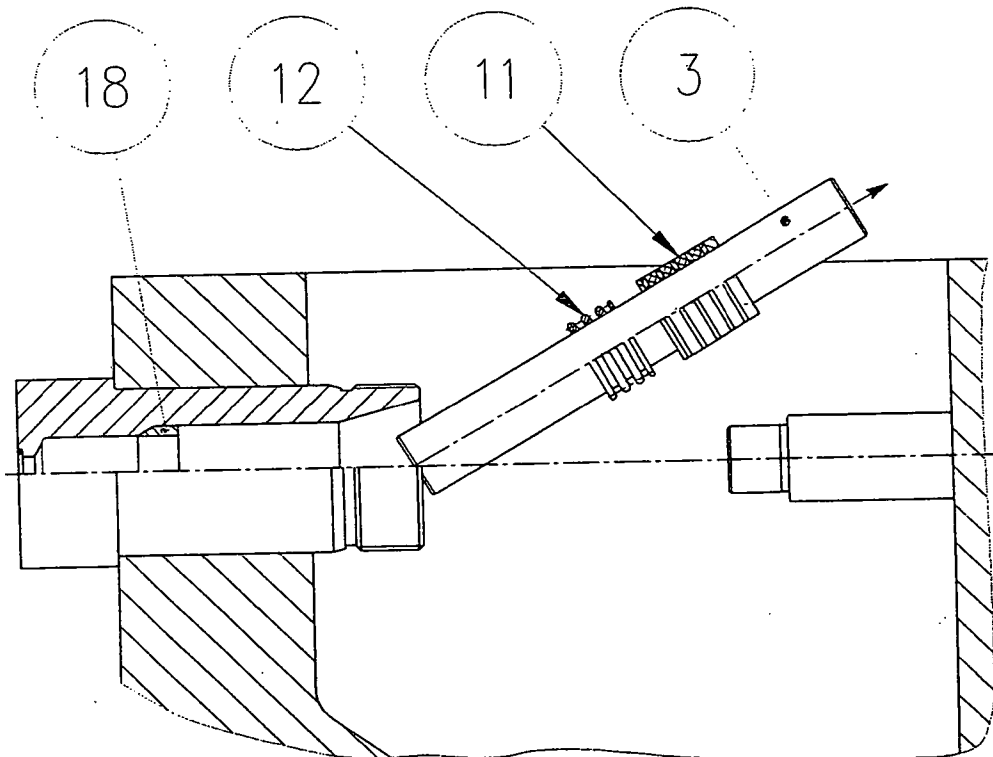
- Using the machine V-belt drive, the piston is moved forward, thus making the pressure in the valve housing push set of packings Pos.11 out of the cylinder.



Figur 4

- With the piston in front position, loosen piston coupling Pos.1, and fixed piston Pos.5 is moved back in rearmost position using the machine V-belt drive.

12. Remove piston coupling Pos.1.
13. Dismantle piston Pos.3, with set of packings Pos.11 and spring Pos.12.



Figur 5

14. Any neck ring Pos.18 can be removed from cylinder.

If the loose piston cannot be dismantled based on the instructions above. (Small piston diameters may prove hard to handle).

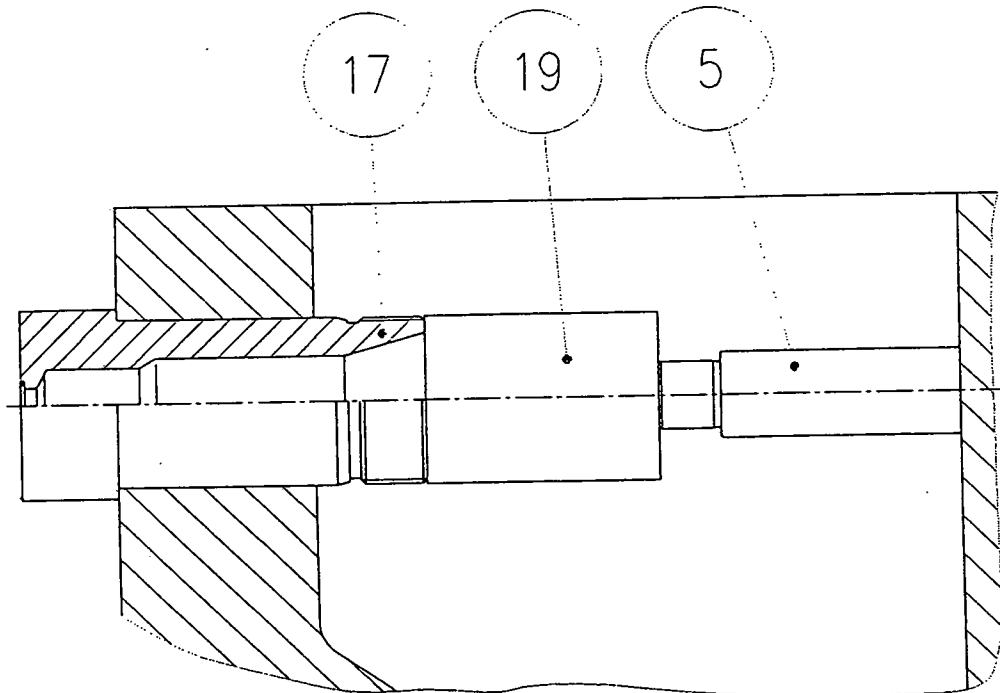
APPLYING TO PISTON DIAMETER OF 10 MM AND 12 MM:

Feed water pressure (water) is applied to machine max. 5 bar. Follow the above dismantling procedure.

DISMANTLING OF CYLINDER

If the actual cylinder has to be removed from the base frame, the loose piston and the valve housing will have to be dismantled first.

14. Place a billet of wood Pos.19, with the same diameter as that of the cylinder, between cylinder Pos.17 and fixed piston Pos.5.



Figur 6

15. Using the machine V-belt drive, turn the eccentric shaft so that the piston will be at front position, thereby pressing the cylinder out.
16. The cylinder may be removed through the front of the base frame.

ASSEMBLY

REMEMBER On machines with cooling water connections in cylinder or union nut, turn both so that the mark or inlet hole for cooling faces upwards before attaching valve housing.

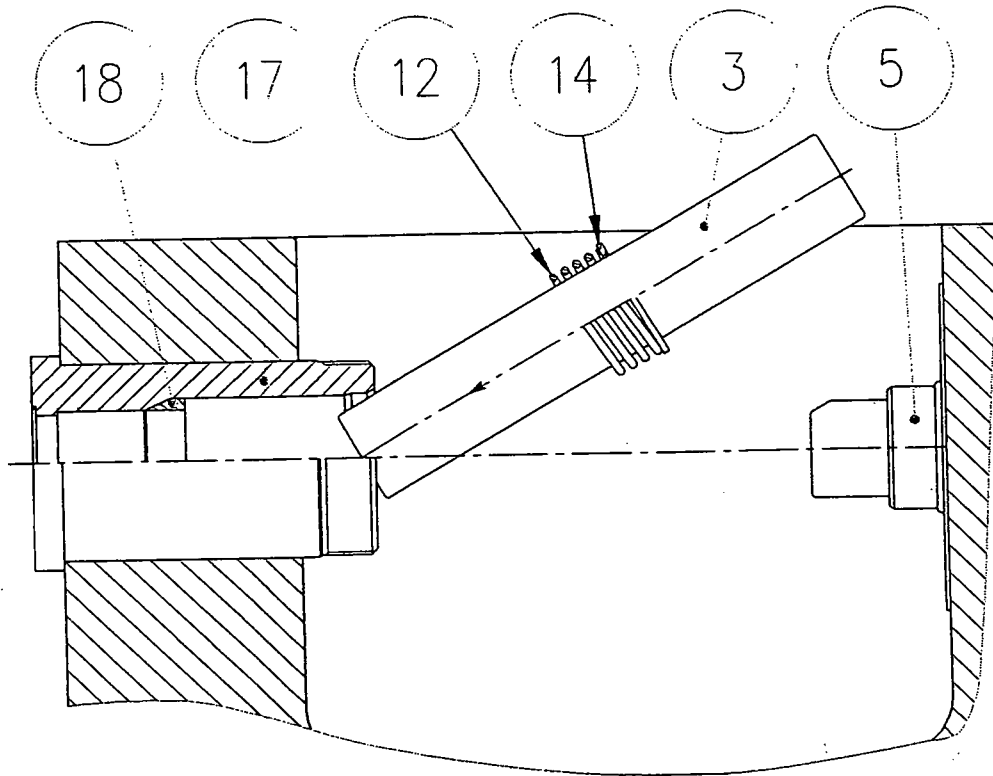
REMEMBER!! to grease thread of cylinder with molycote grease before mounting.

17. Using the machine V-belt drive, set fixed piston Pos.5 at rearmost position.
18. Mount any neck ring Pos.18 in cylinder Pos.17.

Generally, packings can **EITHER** be mounted direct in the cylinder separately using assembly tools, **OR** the entire set of packings may be built up in assembly tools for subsequent total assembly in cylinder.

A. ASSEMBLY DIRECT IN CYLINDER

1. Place spring Pos.12 and intermediate ring Pos.14 on loose piston Pos.3 which is moved into cylinder Pos. 17.

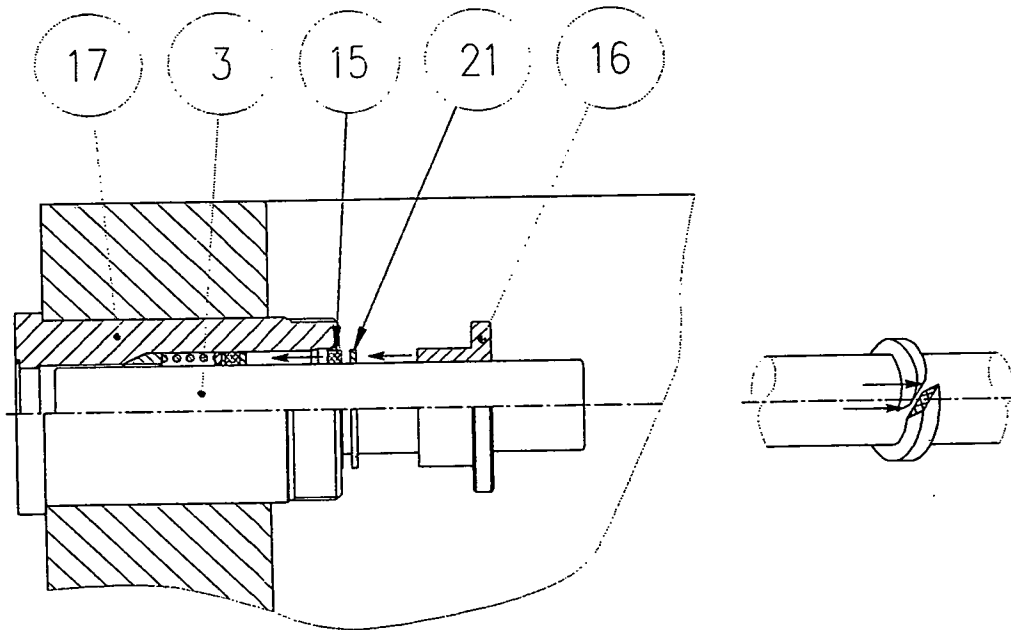


Figur 7

NOTE: The complete high pressure packing Pos.11 consists of several single packings Pos.15 and rings for packings Pos.21. The set of packings is built up to specified list of parts.

2. Packing Pos.15 is laid round loose piston Pos.3, and pressed with fingers firmly in cylinder Pos.17.

IMPORTANT!! Packing Pos.15 is to be mounted on loose piston Pos.3, as shown in the sketch. Joints are to be displaced 120° between the particular packings Pos.15.



Figur 8

3. Mount ring for packing Pos.21 on loose piston Pos.3, and push both, using packing tool Pos.16, into cylinder Pos.17.
The packing tools are in the tool bag.

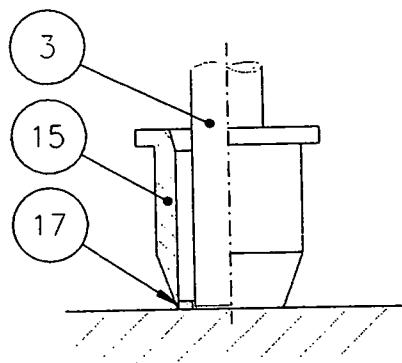
Repeat this until all packings Pos.15 and rings for packings Pos.21 have been placed in cylinder Pos.17 and form a complete high pressure packing.

4. When the last part of the high pressure packing has been placed in cylinder Pos.17, remove packing tool Pos.16.

B. BUILT-UP OF SET OF PACKINGS IN ASSEMBLY TOOLS.

1. Place on loose piston Pos.3 cone tool Pos.13 with intermediate ring for spring Pos.14. Assembly tools are available in tool bag.

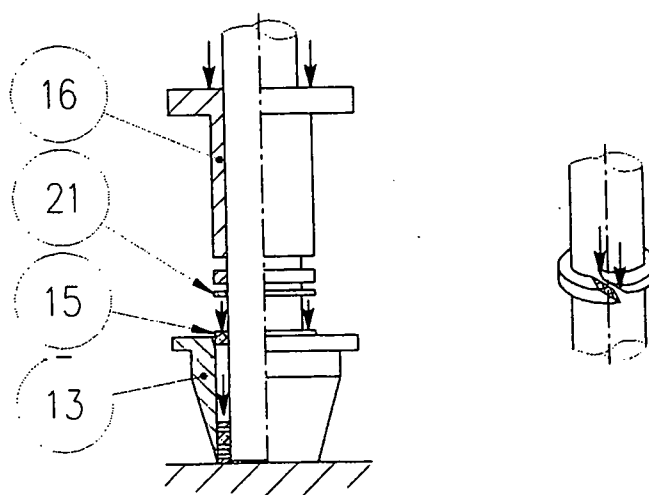
NOTE: Tools may be designed differently depending on the specific design.



Figur 9

2. Build up set of packings to specified list of parts.

REMEMBER!! Lubricate piston, packings, and cone tool with approved lubricant (such as Molycote 111) before building up set of packings.

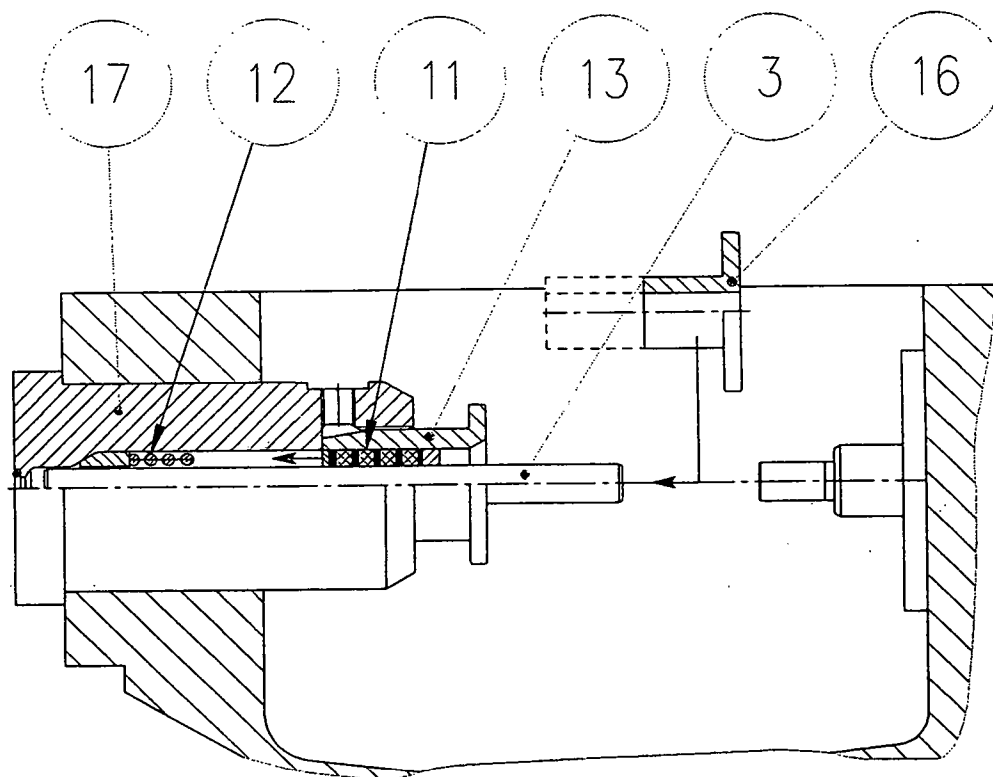


Figur 10

3. Mount the particular packings Pos.15 and rings for packings Pos.21 manually in cone tool Pos.13, with joint appr. 120° displaced for each other, and push in place using packing mandrel Pos.16. (For a few machine types, the mandrel is two-part)

IMPORTANT!! that the packing faces right when mounted so that the bevel cut is mounted as shown in sketch.

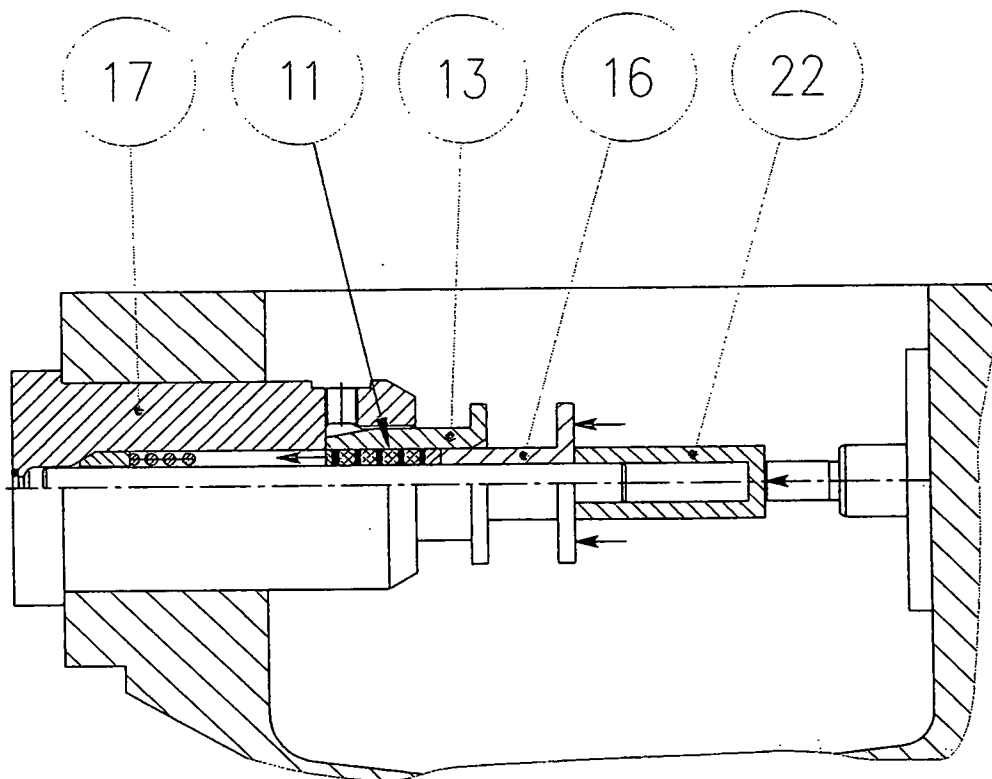
4. Place spring Pos.12 in cylinder Pos.17.
5. Move packing set with tools to suitable position on loose piston Pos.3 prior to mounting.



Figur 11

6. Mount loose piston Pos.3, with packing set Pos.11 in cone tool Pos.13 and packing mandrel Pos.16, in cylinder Pos.17.
7. Press entire set of packings Pos.11 out of cone tool Pos.13 and into cylinder Pos.17 using packing mandrel Pos.16.

NOTE: You will usually have to beat packing mandrel Pos.16 with a lead hammer or similar. One other possibility is that of using suitable pipe Pos.22 and press the set of packings in by turning the machine belt drive.

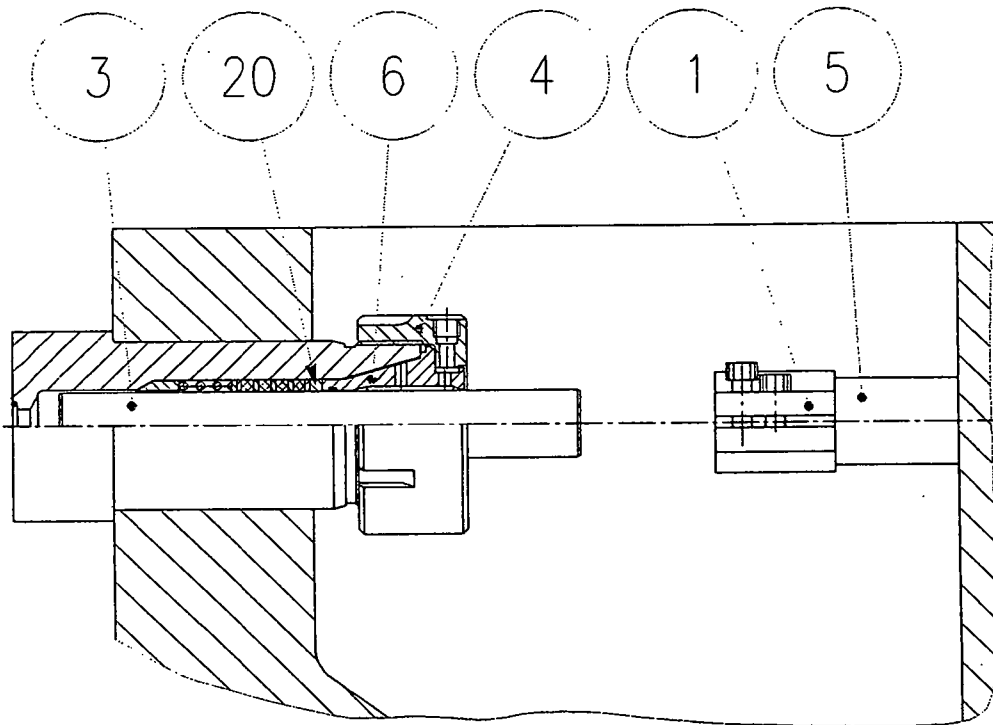


Figur 12

When packing set Pos.11 is in place in cylinder Pos.17, auxiliary tools can be removed.

MOUNTING OF UNION NUT RESP. PACKING NIPPLE AND COUPLING.

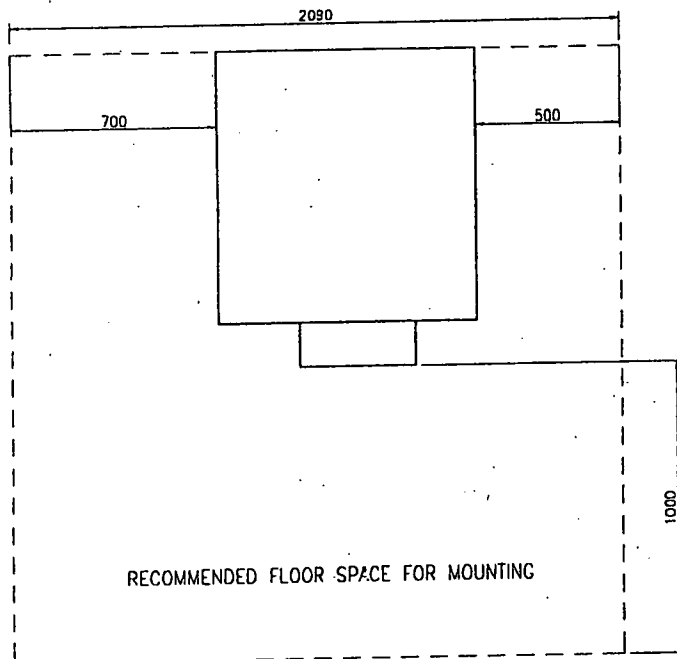
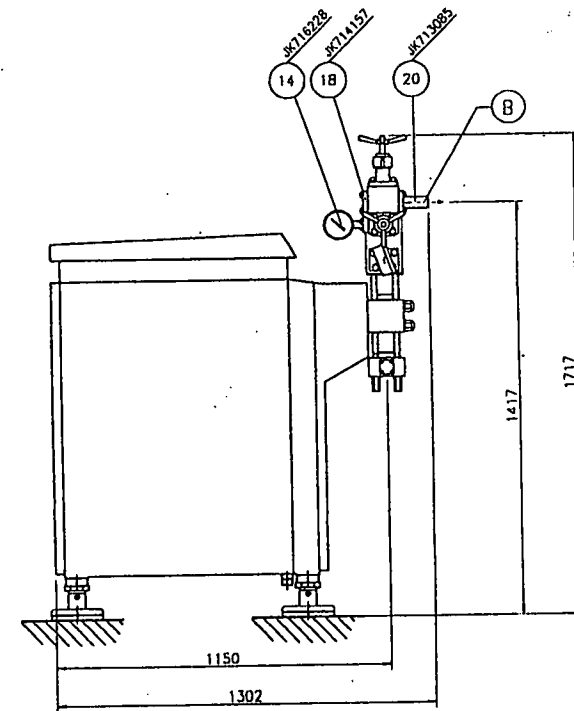
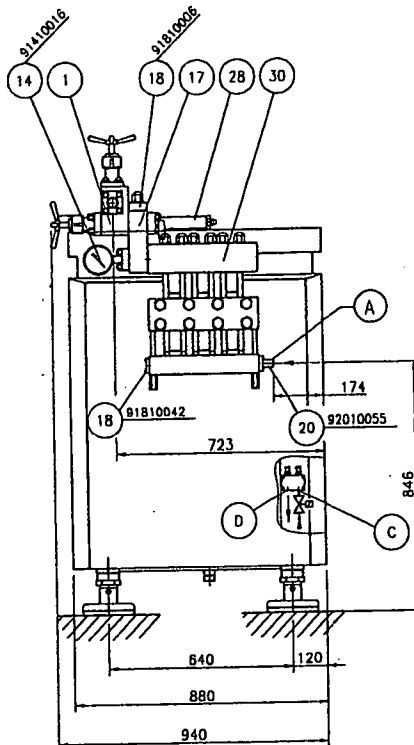
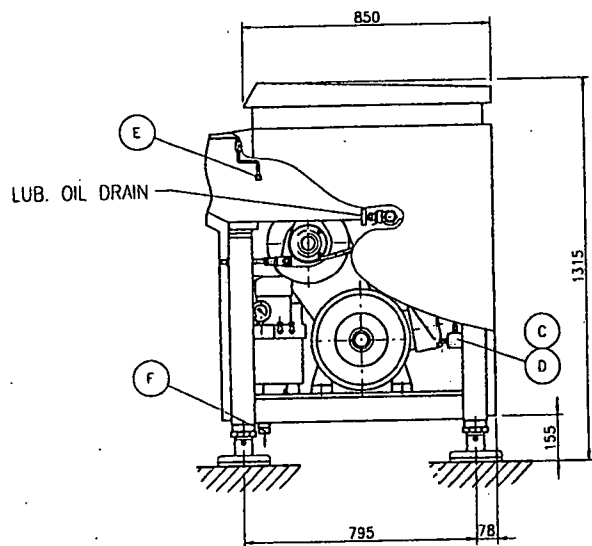
1. Mount packing ring and union nut Pos.4 (packing nipple on some designs) on cylinder and fasten.
2. Place piston coupling Pos.1 on fixed piston Pos.5.
3. Using the machine belt drive, move fixed piston Pos.5 up to loose piston Pos.3.



Figur 13

REMEMBER!! that loose piston Pos.3 and fixed piston Pos.5 must be in contact before fastening piston coupling Pos.1.

4. Fasten piston coupling Pos.1.
5. Secure union nut/packing nipple Pos.4 against LOOSENING by beating the hook spanner shaft with a rubber hammer.



MACHINE WEIGHT INCL. MOTOR APPROX.: XXXX Kg

CONNECTIONS		
POS.	SIZE	DESCRIPTION
A	NOM.25	PRODUCT INLET
B	NOM.38	PRODUCT OUTLET
C	R1/2"	COOLING WATER INLET
D	R1/2"	COOLING WATER OUTLET
E	R3/8"	PLUNGER FLUID INLET
F	HOSE	PLUNGER WELL DRAIN LINE

APV 15KW/D.56

INSTALLATIONSTEGNING INSTALLATION DRAWING INSTALLATIONSZEICHNUNG DESSIN D'INSTALLATION	Date	Sig.	Erstaller
	Tegn.	JUVI	1-01.155
	Enkl.		
	Rev.		Mol. no.:

Erstallt af

APV APV HOMOGENISERS AS
 RANHIE COPENHAGEN

SECTION 1:

Konsolarrangement
Bracket unit
Konsoleanordnung
Dispositif de console

SECTION 5+6 :

Homogeniseringsventil
Homogenising valve
Homogenisierventil
Soupape d'homogénéisation

SECTION 9 :

Kølesystem, excentrikgrav
Cooling system, eccentric sump
Kühlvorrichtung, Exzentrikgraben
Système de refroidissement, carter d'excentrique

SECTION 10 :

Olieaftapning
Oil drain
Ölabzapf Vorrichtung
Vidange d'huile

SECTION 11 :

Oliestandviser
Oil level indicator
Ölstands Vorrichtung
Indicator de niveau d'huile

SECTION 12 :

Afløb
Outlet
Auslaufanordnung
Sortie

SECTION 13 :

Cylinderarrangement
Cylinder arrangement
Zylinderanordnung
Dispositif de cylindres

SECTION 14+15 :

Trykindikering
Pressure indication
Druckanzeige
Indication de pression

SECTION 16 :

Vindkedel
Air vessel
Windkessel
Bouteille d'air

SECTION 17 :

Mellemblok
Intermediate part
Zwischenstück
Bloc intermédiaire

SECTION 18+19 :

Blindflange
Blind flange
Blindflange
Bride d'obturation

SECTION 20 :

Rørtilslutning
Pipe connection
Rohranschluss
Raccordement

SECTION 22 :

Rørsikringsventil
Pipe connection
Rohrsicherungsventil
Soupape de protection de tuyauteries

SECTION 23 :

Rørtilslutning med vindkedel
Pipe connection with air vessel
Rohranschluss mit Windkessel
Raccordement de tuyau avec bouteille d'air

SECTION 26 :

Tilløbstragt
Inlet funnel
Zulauf Trichter
Entonnoir d'alimentation

SECTION 27 :

Drejehane
Swing-cock unit
Drehhahnanordnung
Robinet tournant

SECTION 28 :

Tryksikkerhedssystem
Pressure safety system
Drucksicherungssystem
Dispositif desûrete de pression

SECTION 30 :

Ventilhus
Valve housing
Ventilgehäuse
Corps de soupape

SECTION 31 :

Kølesystem, cylinder
Cooling system, cylinder
Kühlvorrichtung, Zylinder
Système de refroidissement

SECTION 32 :

Aseptisk system
Aseptic system
Aseptisches system
Dispositif aseptique

SECTION 33 :

Bundramme
Base frame
Exzentragehäuse
Cadre de fond

SECTION 34 :

Servosystem
Servo system
Servosystem
Servo-systeme

SECTION 36 :

Excentrik
Eccentric
Exzentrage
Excentrique

SECTION 37 :

El-diagram, komplet
Complete wiring diagramme
Electrisches Diagramm, komplett
Diagramme complet de montage électrique

SECTION 38 :

Transmission
Transmission
Transmission
Transmission

SECTION 41 :

Udskyldnings-arrangement
Flush system
Ausspühl Vorrichtung
Dispositif de rincage

SECTION 42 :

Sikkerhedssystem
Safety system
Sicherungssystem
Système de sécurité

SECTION 43 :

El-styring, kølesystem
Electric control, cooling system
El-Steuerung, Kühlvorrichtung
Commande électrique, système de refroidissement

SECTION 44 :

Hydrauliksystem
Hydraulic system
Hydraulik Anordnung
Dispositif d'hydraulique

SECTION 45 :

Kabinet
Cabinet
Kabinett
Carrosserie

SECTION 46 :

Stel
Frame
Kabinett
Carrosserie

SECTION 47 :

Aseptisk system
Aseptic system
Aseptisches system
Dispositif aseptique

SECTION 51 :

Pulsationsdæmper
Pulsation damper
Pulsationsdämpfer
Arrotisseur de pulsations

SECTION 52 :

Tryktester
Pressure measuring instrument
Drückprüfer
Metteur de pression

SECTION 53 :

Gearkasse
Gear box
Getriebekasten
Boite de vitesse

SECTION 54 :

Varmesystem
Heating system
Heizsystem
Système de chauffage

SECTION 55 :

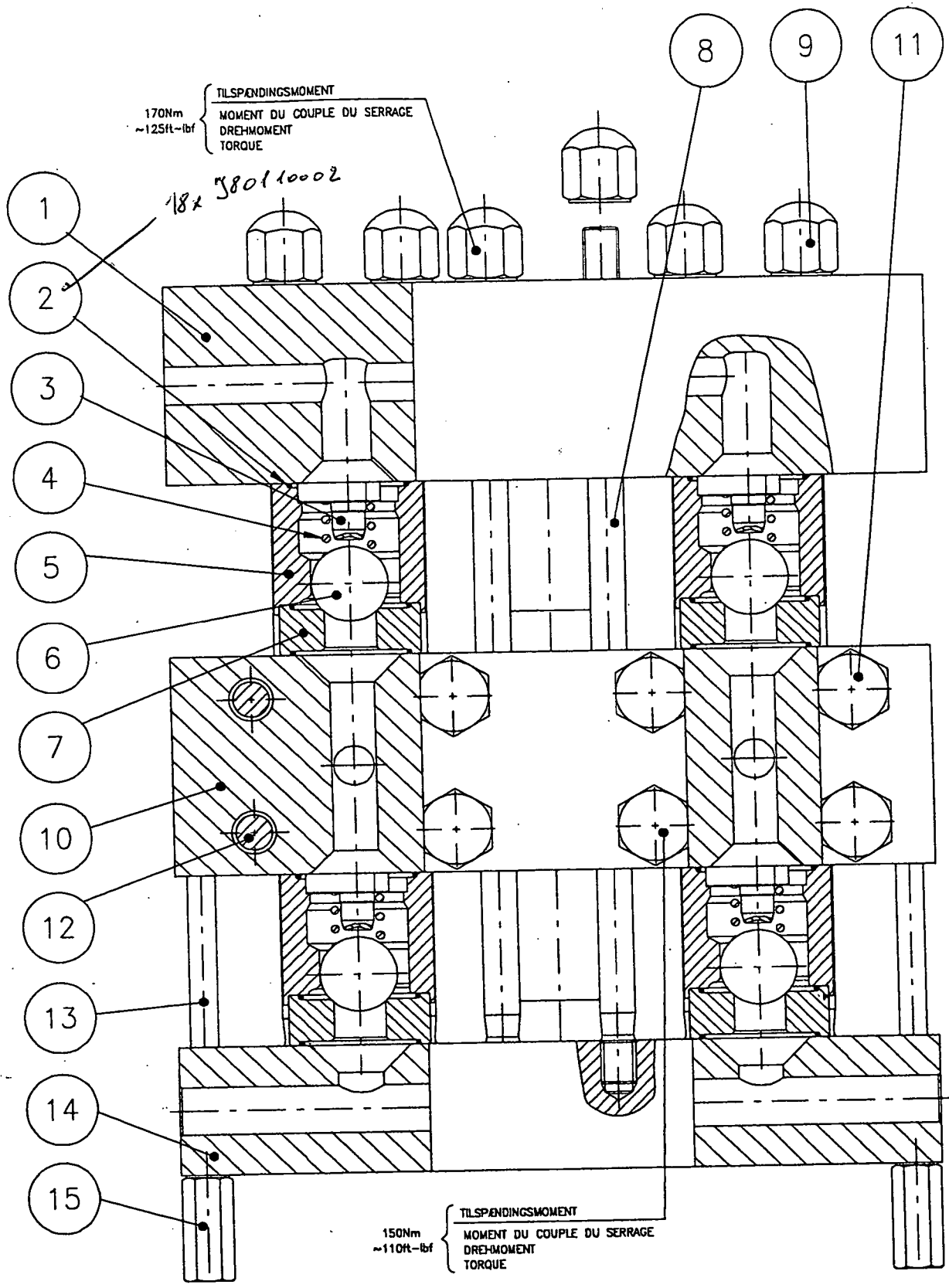
Forbro
Intermediate part
Zwischenstück
Bloc intermédiaire

SECTION 64 :

Krydshoveddæksel, delsamling
Wiper Box, Assembly
Stopfbuchse, Zusammenbau
Couvercle de la crosse

SECTION 66 :

Værktøj
Tools
Werkzeug
Outils



15/24KW 25-42.56/66

VENTILHUS
VALVE HOUSING
VENTILGEHÄUSE
CORPS DE SOUPAPE

	Dato	Sign.	Erstatter
Tegn.	07-05-99	PRM/CPNr.	723317
Kontr.	10/5-99	FRU	
Rev.			Mat. no.: 93010060

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APV HOMOGENISERS AS
COPENHAGEN

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 030

PAGE 1

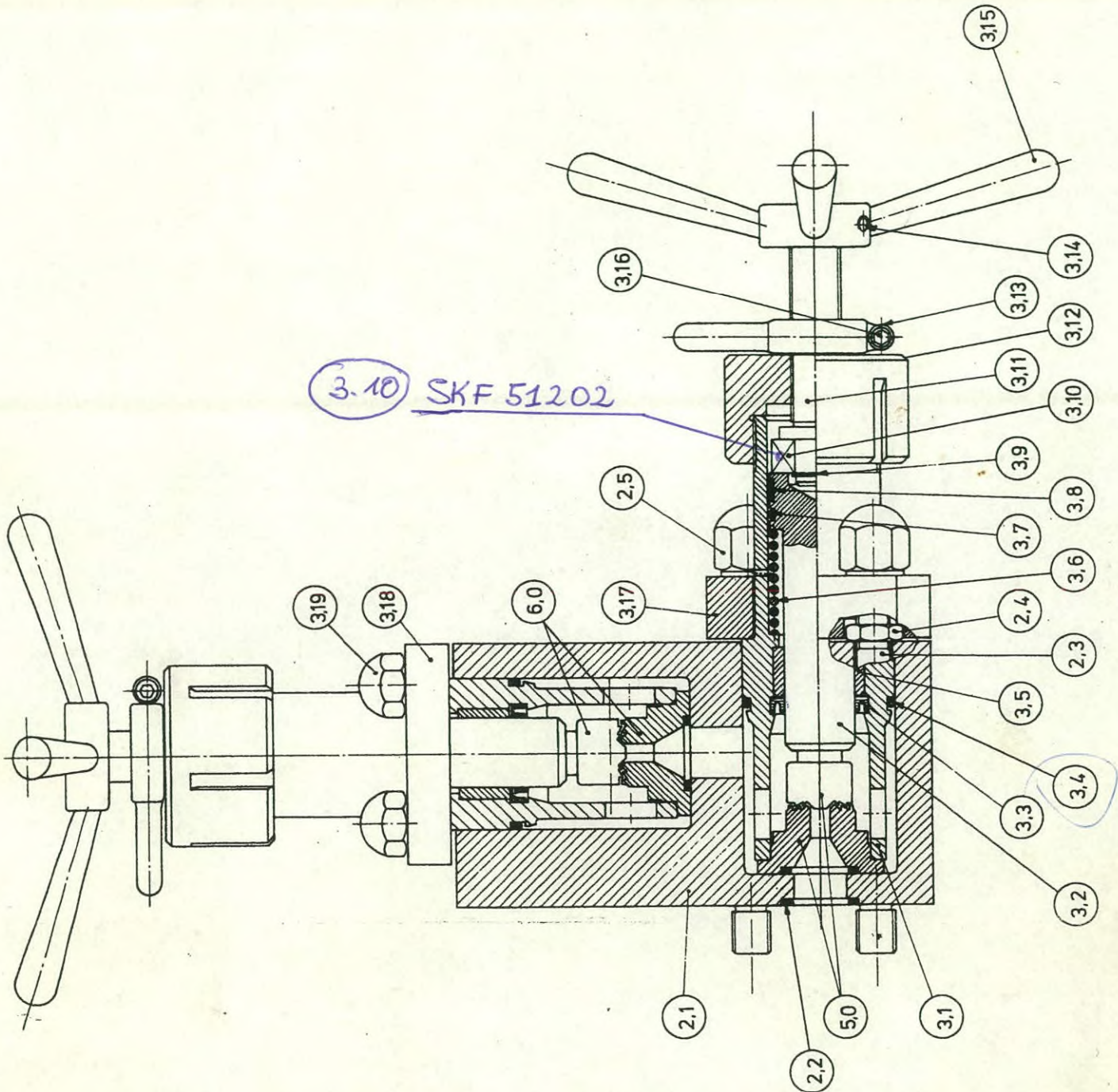
MATERIAL NO.
J93010060

Valve housing

DRAWING NO.
723317

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION	
0001	J14610004	1,000	Top part	
0002	J80110002	18,000	O-ring	
0003	J03310006	6,000	Valve stop	
0004	J68910000	6,000	Spring	OK
0005	J03710000	6,000	Valve guide	OK
0006	J035105	6,000	Ball	OK
0007	JK112147	6,000	Valve seat, valve housing	~
0008	J18910009	12,000	Stud	
0009	JK108385	12,000	Nut, Hex Cap	
0010	J23010002	1,000	Intermediate part	
0011	JK107724	8,000	Nut, Hex Cap	
0012	J18910007	8,000	Stud	
0013	J18910002	2,000	Stud	
0014	J14610044	1,000	Bottom part	
0015	JK111435	2,000	Nut, Hex Cap	

LAST PAGE



22.51 / D.60 / D.72

KONSOLARRANGEMENT
 BRACKET UNIT
 KONSOLEANORDNUNG
 DISPOSITIF DE CONSOLE

	Dato	Sign.	Erstatter
Tegn.	23/6-87	OT	Nr.
Kontr.			712066
Appr.			

RANNIE

Rannie a/s
 Roholmsvej 8
 DK-2620 Albertslund
 Denmark

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*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS
COPENHAGEN

DATE 21.06.2001
GROUP 001
PAGE 1
DRAWING NO.

MATERIAL NO. Bracket unit
JK712066

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0002	JK714023	1,000	Bracket unit
0003	JK714024	1,000	Internal unit for bracket

LAST PAGE

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 002

PAGE 1

MATERIAL NO.
JK714023

Bracket unit

DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK111820	1,000	Homogenising bracket
0002	JK000018	1,000	O-ring
0003	JK107595-1	4,000	Stud
0004	JK108028	2,000	Nut
0005	JK102750-2	4,000	Nut, Hex Cap

LAST PAGE

*** APV SYSTEMS PARTS LIST ***

APV SYSTEMS

DATE 21.06.2001

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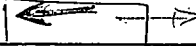
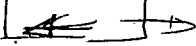
GROUP 003

PAGE 1

MATERIAL NO.
JK714024

Internal unit for bracket

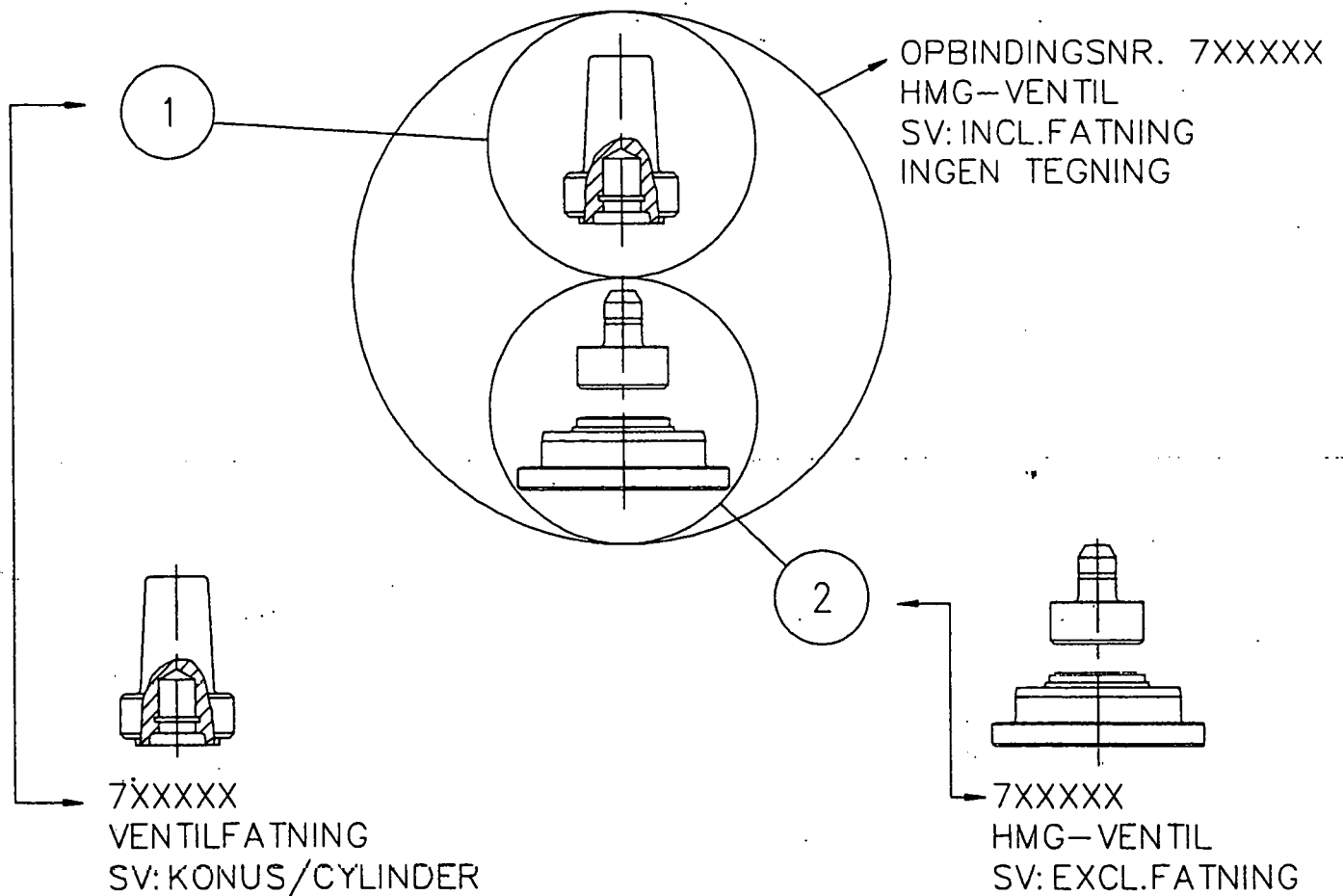
DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK113712	2,000	Guide
0002	JK110394	2,000	Spindle, homogenising valve
0003	JK000109	2,000	U-ring 
0004	JK000077	2,000	O-ring 
0005	JK108246	2,000	Bushing
0006	JK111484	2,000	Spring
0007	JK002196	2,000	O-ring
0008	JK000164	2,000	Guiding ring
0009	JK000165	2,000	Spring ring
0010	JK000166	2,000	Thrust bearing
0011	JK107957	2,000	Spindle, handwheel
0012	JK107844	2,000	Union nut, guide
0013	JK110388	2,000	Stop ring
0014	JK000652	4,000	Pointed screw
0015	JK108245	2,000	Handwheel
0016	JK001009	2,000	Cheese-head screw
0017	JK107581	1,000	Flange
0018	JK107953	1,000	Flange
0019	JK103189-2	4,000	Hexagon head screw

LAST PAGE

SE BM09

STYKLISTEOPBYGNING OG TEGNINGER FOR HMG-VENTILER.



TEGN. NR: 717685

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

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GROUP 005

PAGE 1

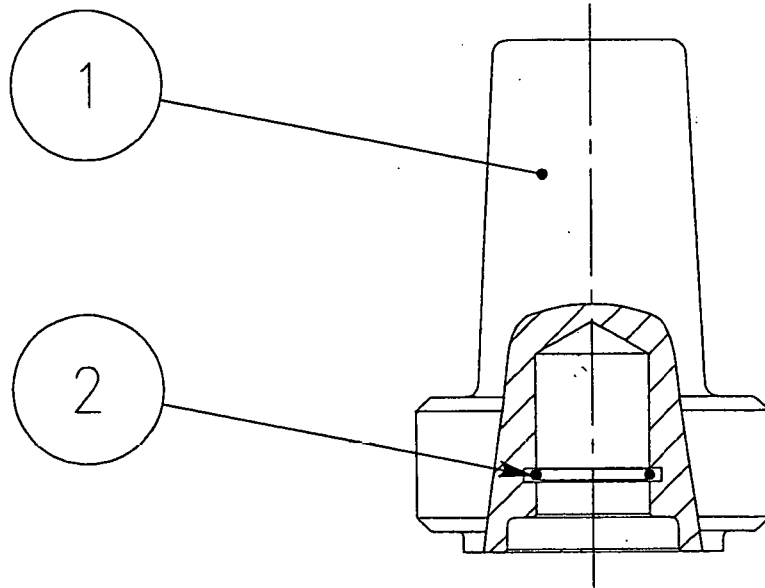
MATERIAL NO.
JK717685

Homogenising valve

DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK718030	2,000	Valve socket
0002	JK718086	2,000	Homogenising valve

LAST PAGE



51/60/72/79H

VENTILFATNING
 VALVE SOCKET
 VENTILFASSUNG
 MANCHON DE SOUPEPE

	Dato	Sign.	Erstatter
Tegn.	10.01.91	BO	Nr.
Kontr.	J. 2. 34	<i>[Signature]</i>	718030
Rev.			

Erstaltet af



*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

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GROUP 005

PAGE 1

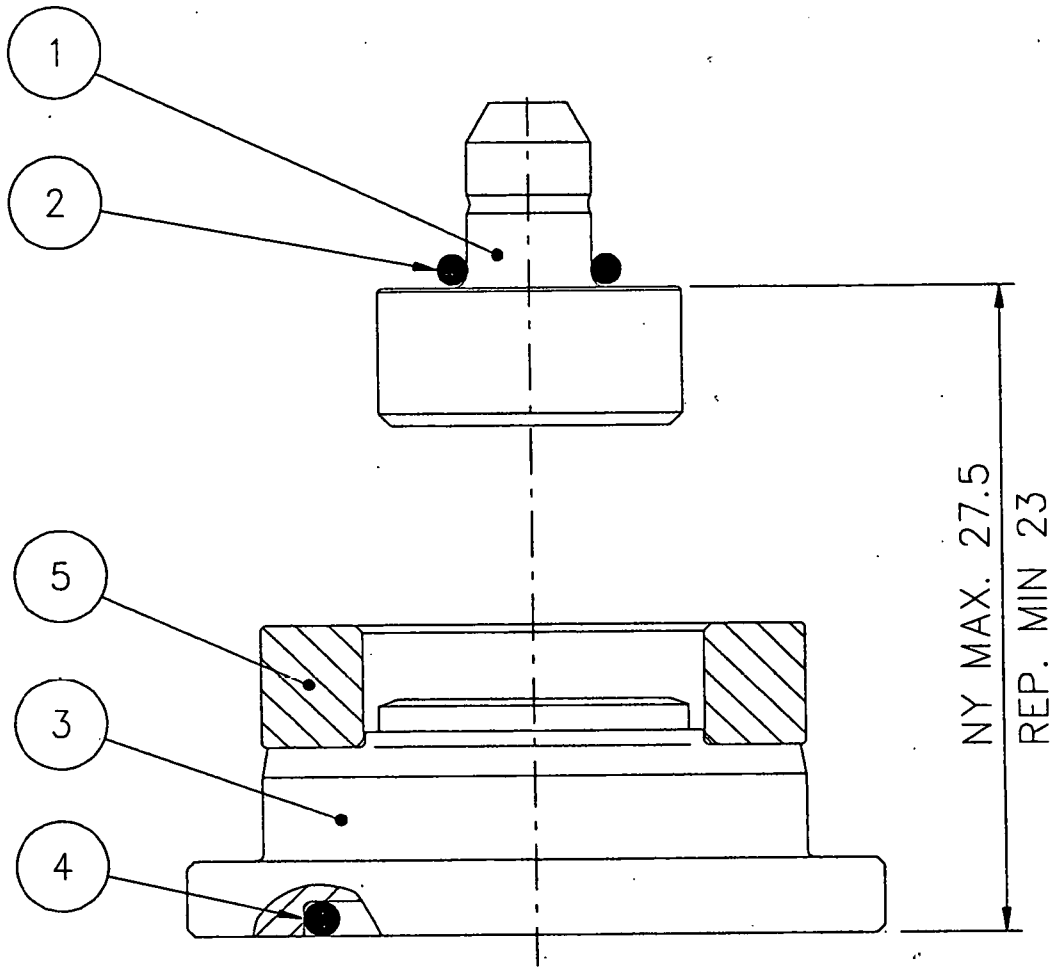
MATERIAL NO.
JK718030

Valve socket

DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK117393	2,000	Valve socket, Hmg valve
0002	JK118015	2,000	Spring ring

LAST PAGE



D.51/60/72/79

HOMOGENISERINGSVENTIL
 HOMOGENISING VALVE
 HOMOGENISIERVENTIL
 SOUPAPE D'HOMOGENEISATION

	Dato	Sign.	Erstatter
Tegn.	10.01.91	BO	Nr. 718086
Kontr.	24/9-98	<i>[Signature]</i>	
Rev.	24.09.98	JA/CP	Mat. no.:

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*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS
COPENHAGEN

DATE 21.06.2001
GROUP 005
PAGE 1
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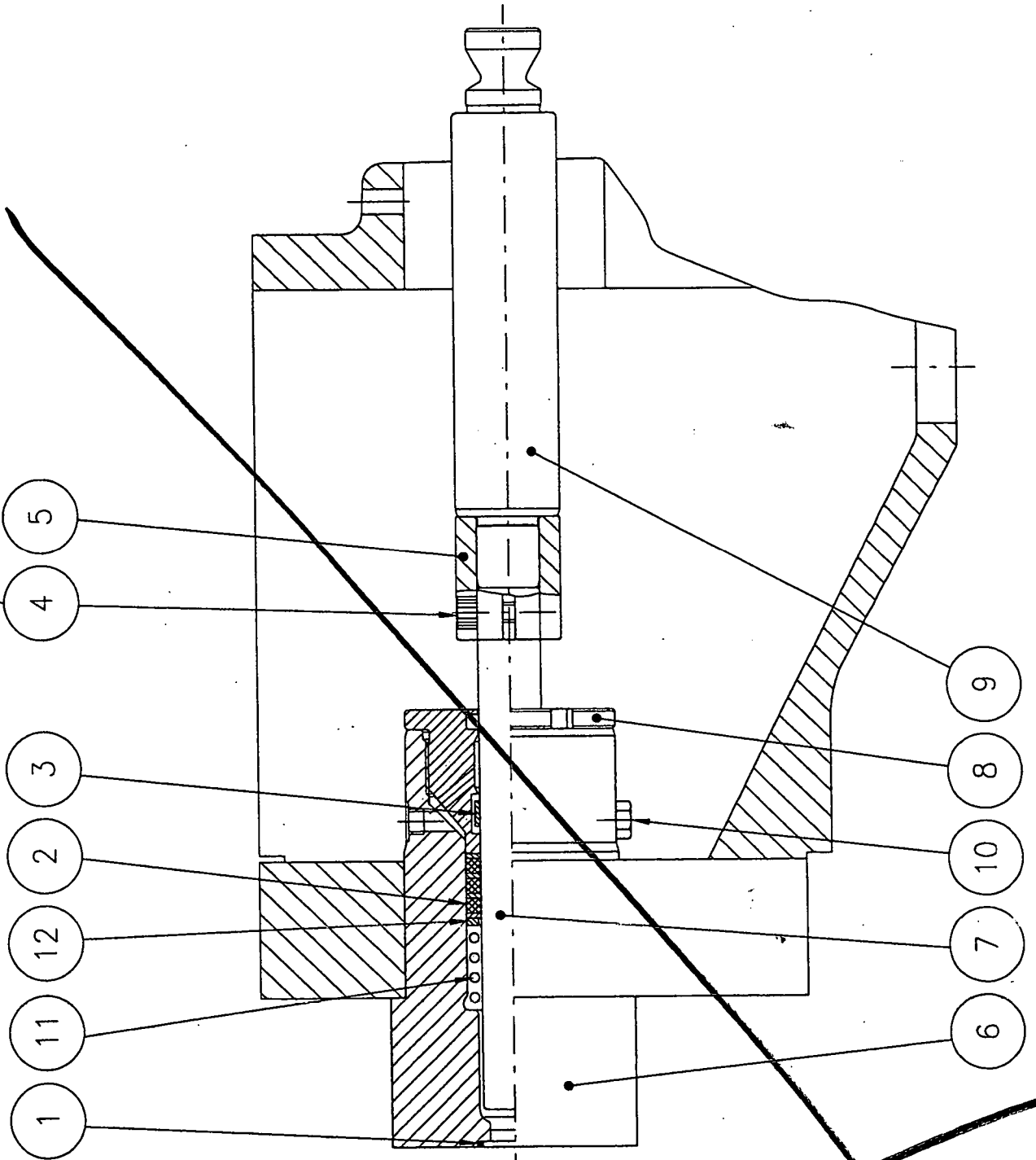
MATERIAL NO. JK718086 Homogenising valve

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION	
0001	JK117392	2,000	Wearing piece	DK
0002	JK000005	2,000	O-ring	20
0003	JK117317	2,000	Bottom part, homogenising valve	2
0004	JK000018	2,000	O-ring	
0005	JK117316	2,000	Impact Ring	25

LAST PAGE

TILSPÆNDINGSMOMENT
 MOMENT DU COUPLE DU SERRAGE
 DREHMOMENT
 TORQUE

17Nm
 ~12.5ft-lbf



15KW/25.56

CYLINDERARRANGEMENT
 CYLINDER ARRANGEMENT
 ZYLINDERANORDNUNG
 DISPOSITIF DE CYLINDRES

	Dato	Sign.	Erstatter
Tegn.	07-05-01	PRM/Ch	724927
Kontr.	7.5.01	PRM	
Rev.			Mat. no.:

Erstattet af



APV HOMOGENISERS AS
 COPENHAGEN

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 013

PAGE 1

MATERIAL NO.
J91310287

Cylinder arrangement

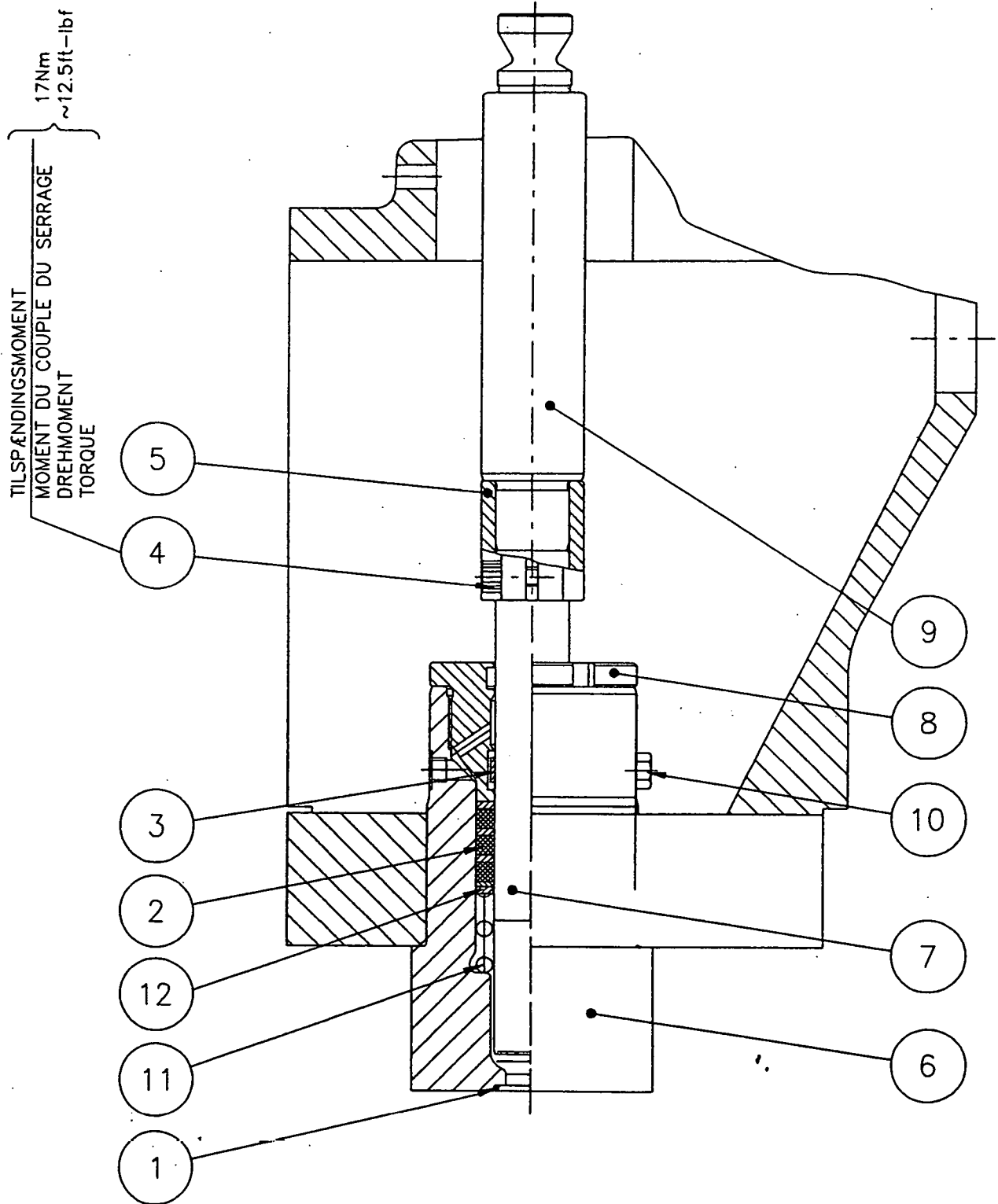
DRAWING NO.
724927

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK000104	3,000	O-ring
0002	J91310288	3,000	High pressure packing, complete
0003	J04910020	3,000	Guiding ring
0004	JK002867	6,000	Cheese-head screw
0005	J17310003	3,000	Plunger coupling
0006	J01810110	3,000	Cylinder
0007	J12210008	3,000	Plunger
0008	J02510096	3,000	Gland, Liquid cyl.
0009	J35110017	3,000	Crosshead extention
0010	JK001680	3,000	Plug
0011	J68910005	3,000	Spring
0012	J51110007	3,000	Ring
0999	J81210124	1,000	Bushing
0999	J81210125	1,000	Mandrel

LAST PAGE

Zie onderen haft
 van ontwerp mei 2005

Nov 05 - 2005



30.56

CYLINDERARRANGEMENT
 CYLINDER ARRANGEMENT
 ZYLINDERANORDNUNG
 DISPOSITIF DE CYLINDRES

	Date	Sign.	Erstatter
Tegn.	30-08-00	LSL/JM	Nr. 724332
Kontr.	21/8-00	LSL	
Rev.			Mat. no.: 91310246



APV HOMOGENISERS AS
 COPENHAGEN

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*** A P V S Y S T E M S P A R T S L I S T ***

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DATE 25.04.2005

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GROUP 013

PAGE 1

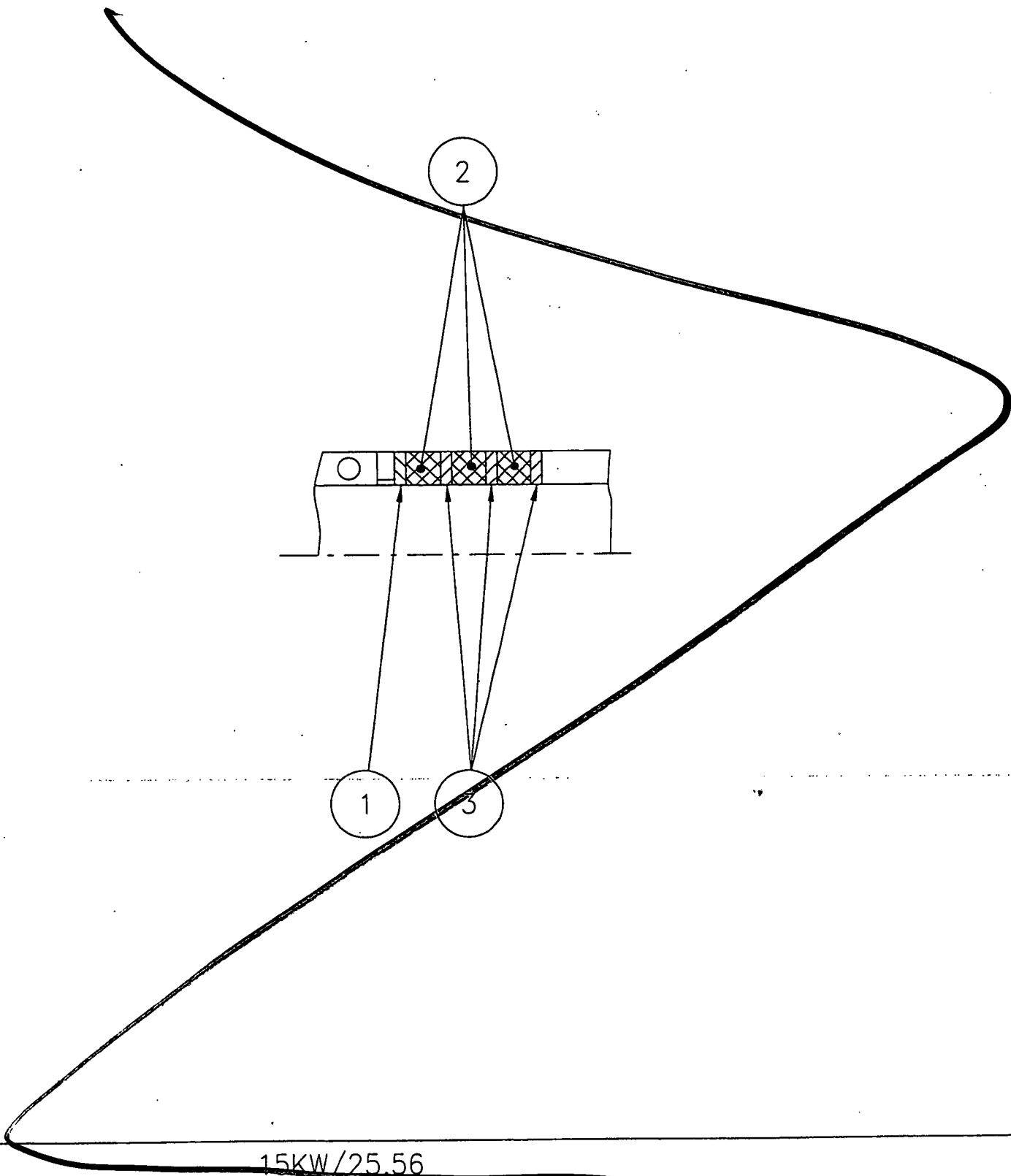
MATERIAL NO.
J91310246

Cylinder arrangement

DRAWING NO.
724332

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK000104	3,000	O-ring
0002	J91310245	3,000	High pressure packing, complete
0003	J04910010	3,000	Guiding ring
0004	JK002867	6,000	Cheese-head screw
0005	JK113472	3,000	Plunger coupling
0006	J01810100	3,000	Cylinder
0007	J12210009	3,000	Plunger
0008	J02510083	3,000	Gland, Liquid cyl.
0009	J35110012	3,000	Crosshead extention
0010	JK001680	3,000	Plug
0011	JK112232	3,000	Spring
0012	J51110077	3,000	Ring

LAST PAGE



15KW/25.56

HØJTRYKSPAKNING
 HIGH PRESSURE PACKING
 HOCHDRUCKPACKUNG
 JOINT A HAUTE PRESSION

	Dato	Sign.	Erstatter
Tegn.	04-05-01	PRM/C	724930
Kontr.	4/5-01	PRM	
Rev.			Mat. no.:

Erstattet af



APV HOMOGENISERS AS
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PAGE 1

MATERIAL NO.
J91310288

High pressure packing, complete

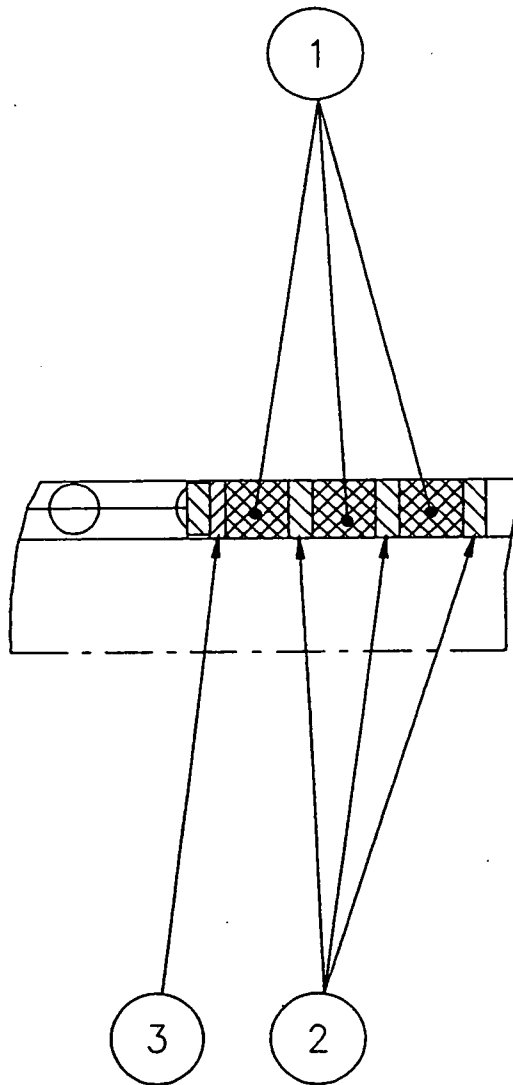
DRAWING NO.
724930

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J51110014	3,000	Ring
0002	J50010001	9,000	Braid Packing
0003	J51110013	9,000	Ring

LAST PAGE

*Zie onder heeft
ombouw mei 2005*

nieuw 05 - 2005



30.56

STEMPELPAKNING, KOMPLET
HIGH PRESSURE PACKING
HOCHDRUCKPACKUNG
JOINT A HAUTE PRESSION

	Dato	Sign.	Erstatter
Tegn.	30.08.00	LSL/JM	Nr. 724325
Kontr.	3/1/00	LSL	
Rev.			Mat. no.: 91310245

Erstatter af



APV HOMOGENISERS AS
COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 25.04.2005

COPENHAGEN

GROUP 013

PAGE 1

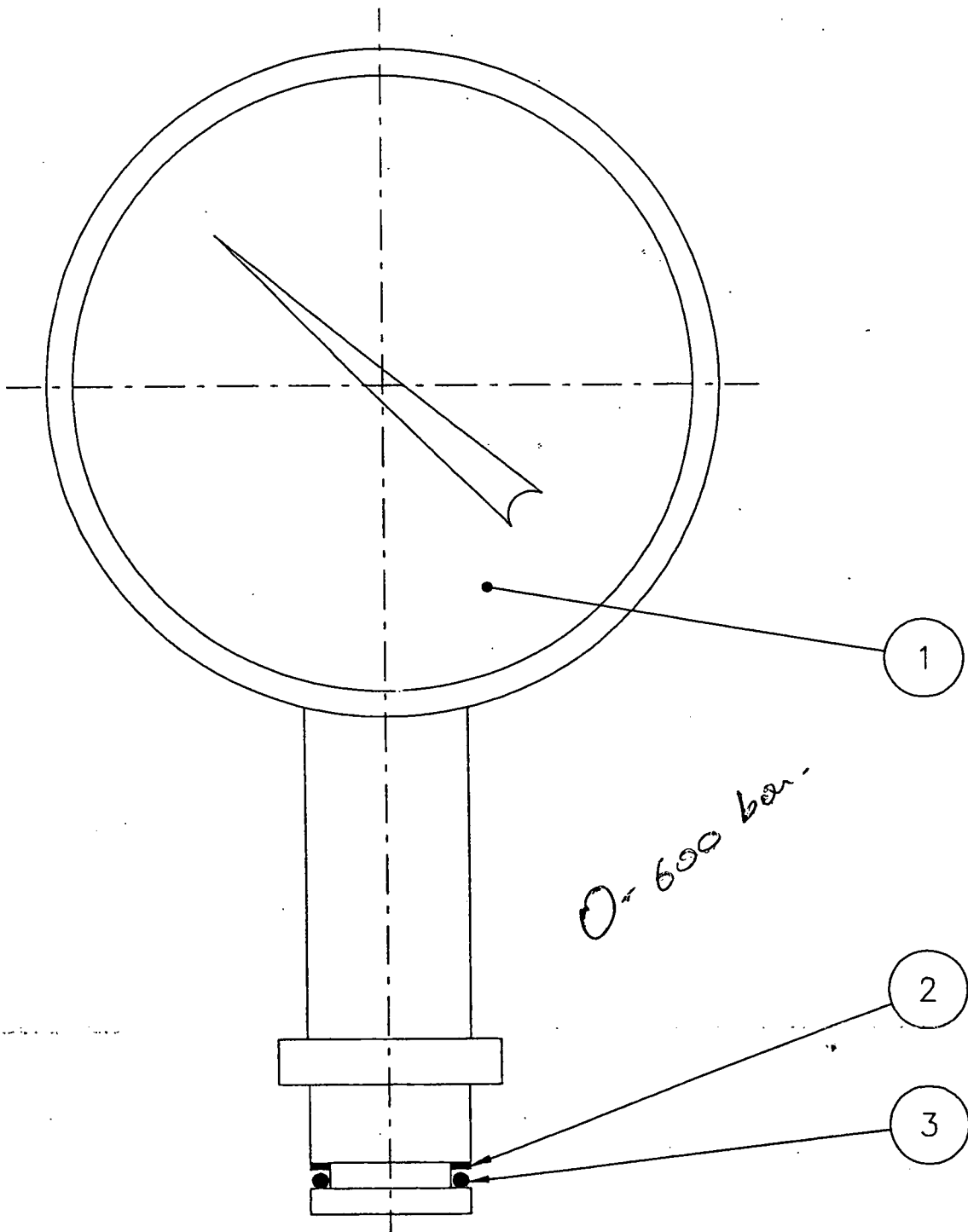
MATERIAL NO.
J91310245

High pressure packing, complete

DRAWING NO.
724325

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK112040	12,000	Ring
0002	JK112200	9,000	Braid Packing

LAST PAGE



15/24KW D.55/66

TRYKINDIKERING
 PRESSURE INDICATION
 DRUCKANZEIGE
 INDICATION DE PRESSION

Dato		Sign.	Erstatter
Tegn.	17-11-97	KJ/CP	Nr. 721908
Kontr.	17-11-97	<i>[Signature]</i>	
Rev.			Mat. no.: 91410016

Erstattet af



APV HOMOGENISERS AS
 COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 014

PAGE 1

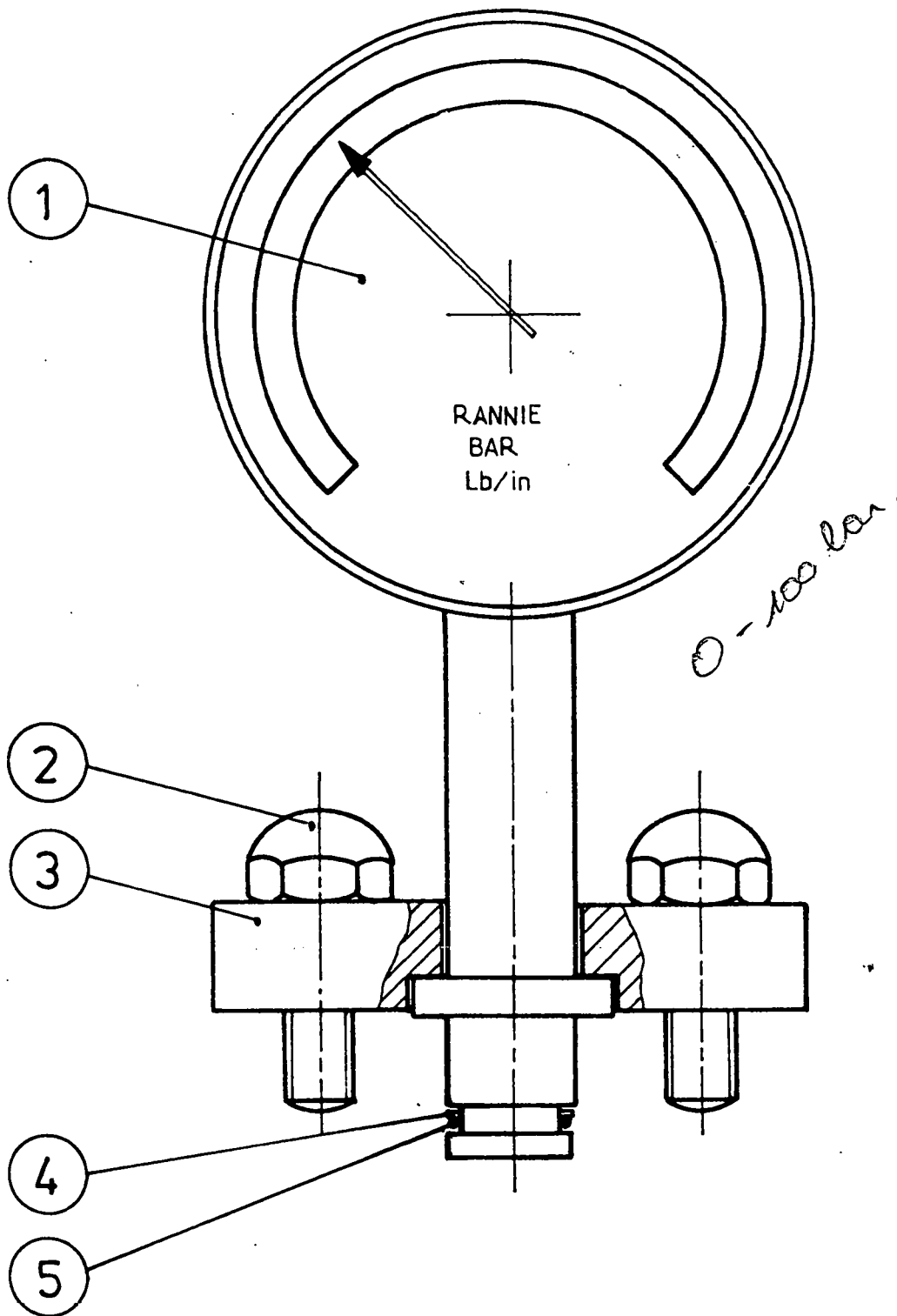
MATERIAL NO.
J91410016

Pressure indication, Pressure Gauge

DRAWING NO.
721908

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK001317	1,000	Pressure gauge
0002	JK001100	1,000	Back-up ring
0003	JK000017	1,000	O-ring

LAST PAGE



22.51 / D.60 / D.72 / D.79

TRYKINDIKERING
 PRESSURE INDICATION
 DRUCKANZEIGE
 DICATION DE PRESSION

	Dato	Sign.	Erstatter
Tegn.	12/2-88	KJ	Nr.
Kontr.			716228
Appr.			

RANNIE

Rannie a/s
 Roholmsvej 8
 DK-2620 Albertslund
 Denmark

Erstattet af

*** A P V S Y S T E M S P A R T S L I S T ***

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GROUP 014

PAGE 1

MATERIAL NO.

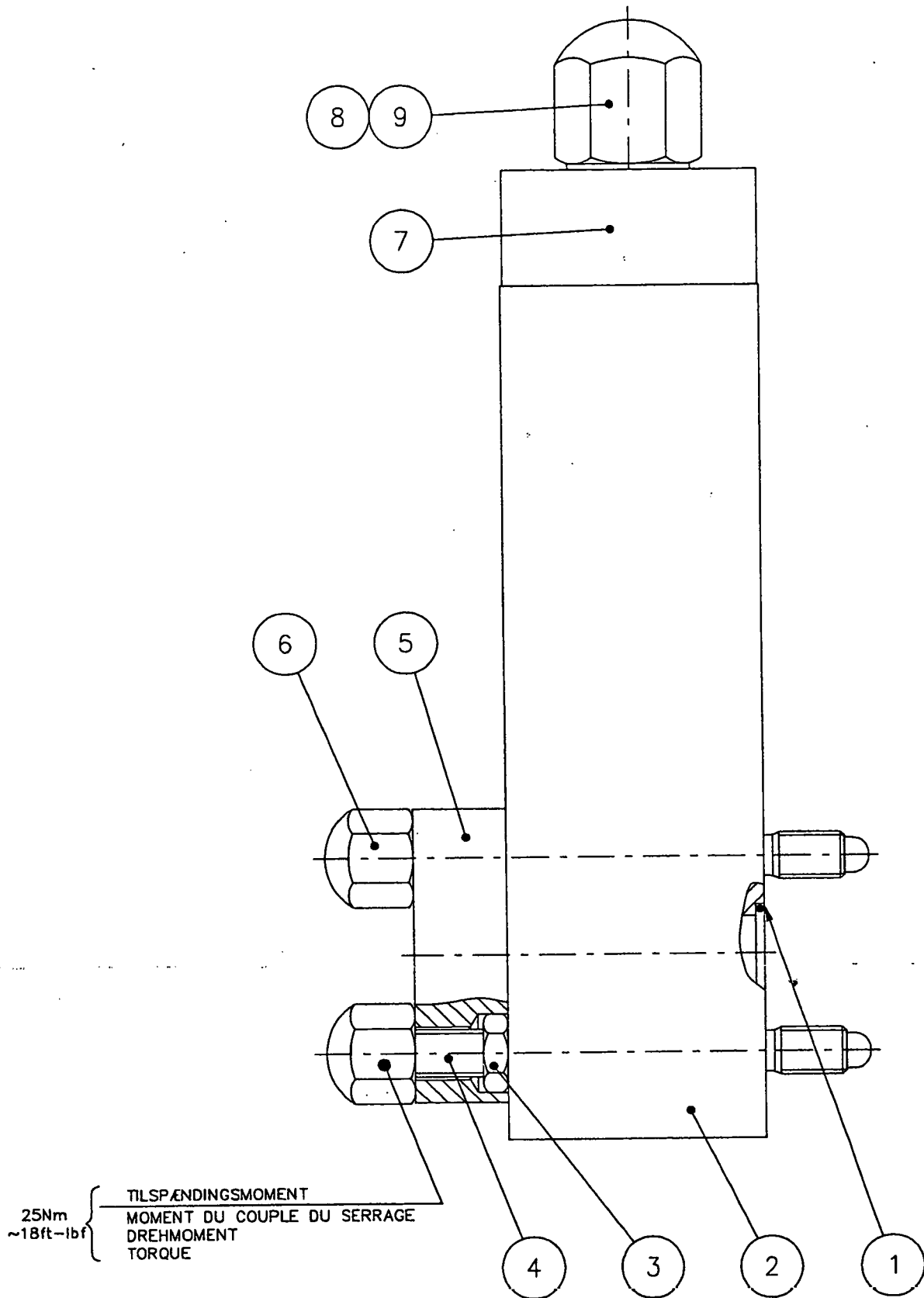
DRAWING NO.

JK716228

Pressure indication, Pressure Gauge

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK002036	1,000	Pressure gauge
0002	JK103189-5	2,000	Hexagon head screw
0003	JK111943	1,000	Flange
0004	JK001100	1,000	Back-up ring
0005	JK000017	1,000	O-ring

LAST PAGE



70/60x5 ø19 → 70/60x50 ø19

MELLEMBLOK
INTERMEDIATE PART
ZWISCHENSTÜCK
BLOC INTERMEDIARE

	Dato	Sign.	Erstatter
Tegn.	12-01-01	JSA/CH	724685
Kontr.	12.01.01	<i>[Signature]</i>	
Rev.			Mat. no.:

Erstattet af



APV HOMOGENISERS AS
COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

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DATE 21.06.2001

COPENHAGEN

GROUP 017

PAGE 1

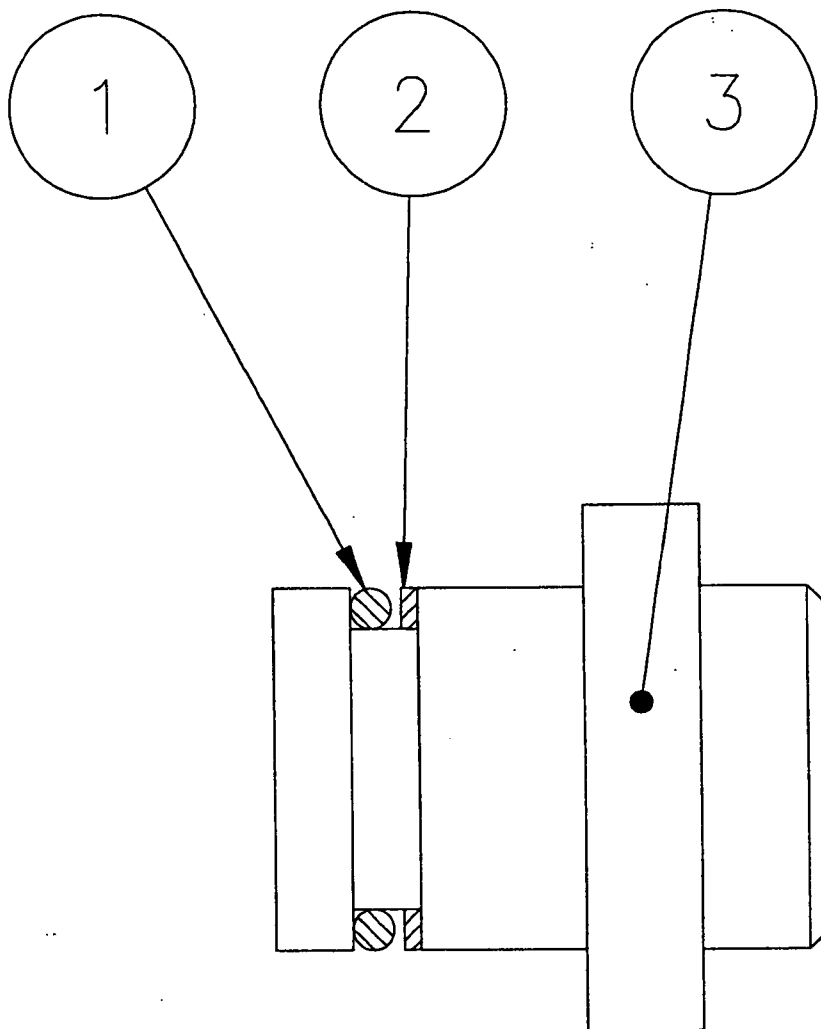
MATERIAL NO.
J91710064

Block, Mounting

DRAWING NO.
724685

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK000018	1,000	O-ring
0002	J70110009	1,000	Distance piece
0003	JK108028	4,000	Nut
0004	J18910017	4,000	Stud
0005	J82810005	1,000	Flange
0006	JK102750-2	4,000	Nut, Hex Cap
0007	J82810003	1,000	Flange
0008	JK108385	2,000	Nut, Hex Cap
0009	JK112494	2,000	Stud

LAST PAGE



Mat. no.: 91810006/91810055/91810063/91810068

BLINDFLANGE
 BLIND FLANGE
 BLINDFLANSCH
 BRIDE D'OBTURATION

	Dato	Sign.	Erstatter
Tegn.	29-01-98	KJ/CV	Nr. 722095
Kontr.	<i>S. J. 2006</i>		
Rev.	08-03-00	KJ/CV	Mat. no.:

Erstatter af



APV HOMOGENISERS AS
 COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

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COPENHAGEN

GROUP 018

PAGE 1

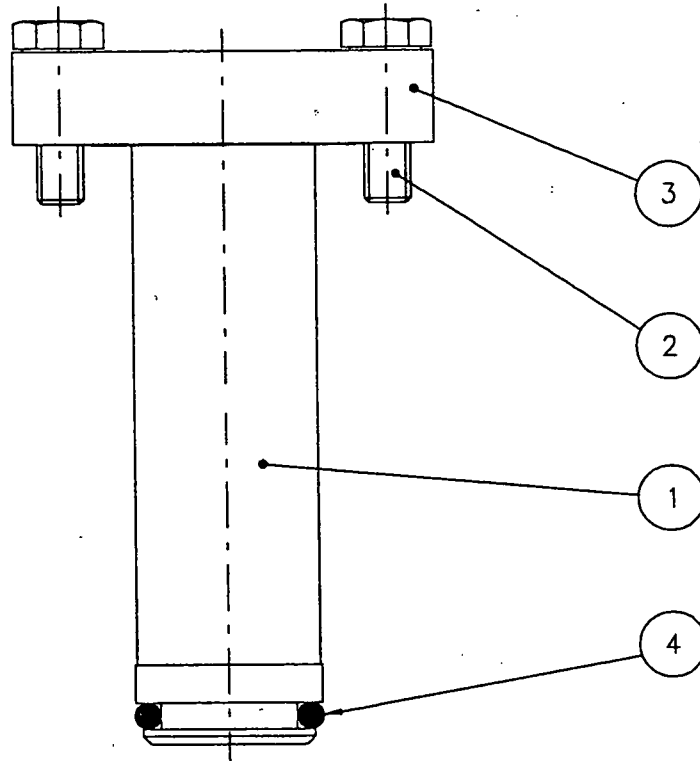
MATERIAL NO.
J91810006

Blind flange

DRAWING NO.
722095

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK000017	1,000	O-ring
0002	JK001100	1,000	Back-up ring
0003	JK113439	1,000	Plug

LAST PAGE



Mat. no.: 91810042/91810084

NOM.25

BLINDFLANGE
 BLIND FLANGE
 BLINDFLANSCH
 BRIDE D'OBTURATION

	Dato	Sign.	Erstatter
Tegn.	05-05-99	PRM/KL	Nr. 723301
Kontr.	1-12-00	KL	
Rev.	30-11-00	KJ/CV	Mat. no.:

Erstattet af



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 COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

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COPENHAGEN

DATE 21.06.2001

GROUP 018

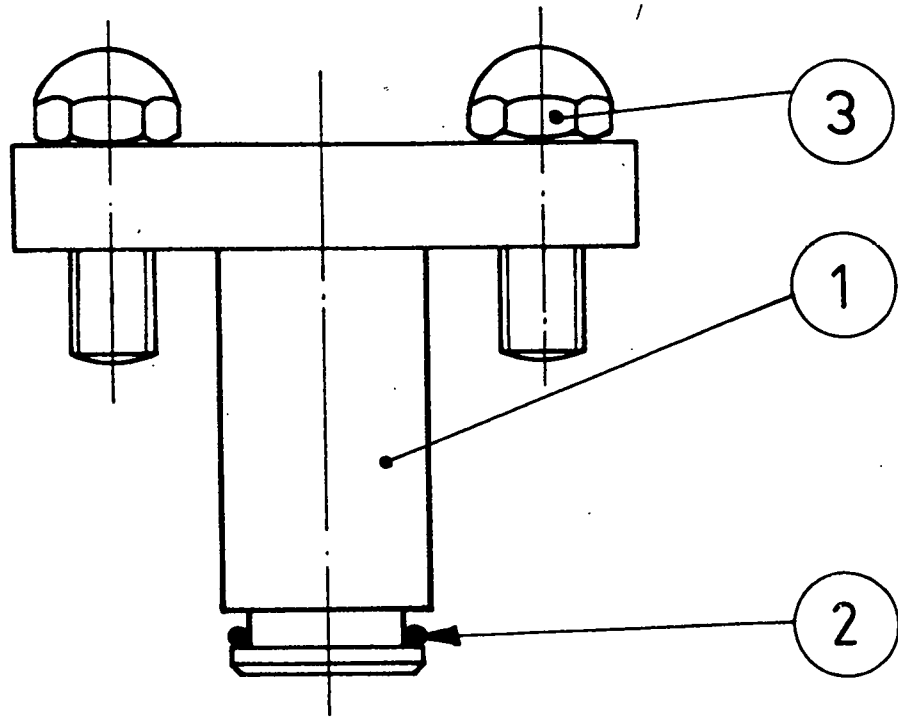
PAGE 1

MATERIAL NO.
J91810042 Blind flange

DRAWING NO.
723301

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J82710013	1,000	Plug, flange
0002	JK002122	4,000	Hexagon head screw
0003	J82810027	1,000	Flange
0004	JK000017	1,000	O-ring

LAST PAGE



22.51 / D.60 / D.72

BLINDFLANGE
BLIND FLANGE
BLINDFLANSCH
BRIDE D'OBTURATION

	Dato	Sign.	Erstatter
Tegn.	23/7-87	OT	Nr.
Kontr.			714157
Appr.			

RANNIE

Rannie a/s
Roholmsvej 8
DK-2620 Albertslund
Denmark

Erstattet af

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 018

PAGE 1

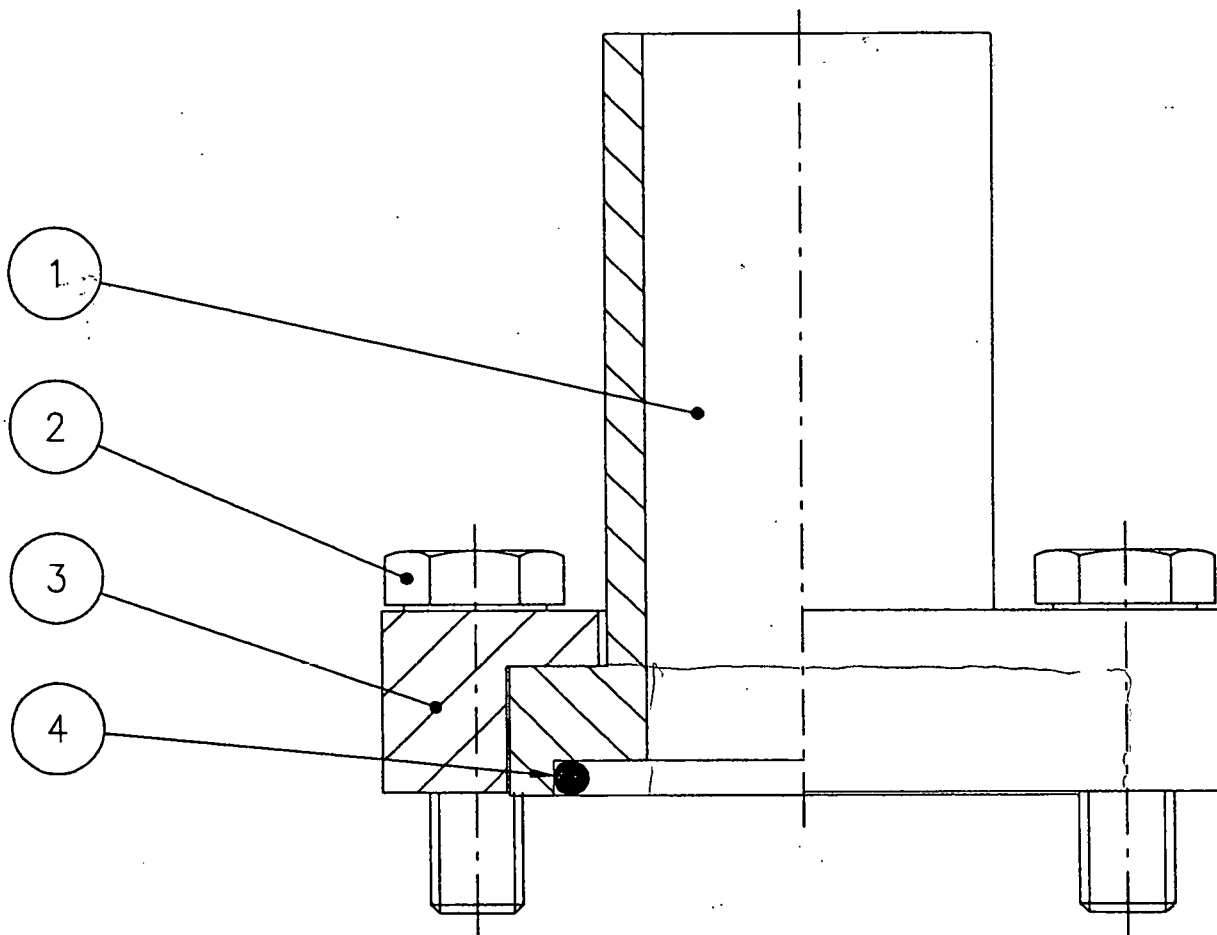
MATERIAL NO.
JK714157

Blind flange

DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK113952	1,000	Flange with plug, bracket
0002	JK000029	1,000	O-ring
0003	JK103189-5	4,000	Hexagon head screw

LAST PAGE



Mat. no.: 92010055/92010064/92010072

NOM.25

RØRTILSLUTNING
 PIPE CONNECTION
 ROHRANSCHLUSS
 RACCORDEMENT DE TUYAU

	Dato	Sign.	Erstatter
Tegn.	10-05-99	PRM/KL	Nr. 723325
Kontr.	12-4-00	KJ	
Rev.	11-04-00	KJ/CV	Mat. no.:

Erstattet af



APV HOMOGENISERS AS
 COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

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DATE 21.06.2001

COPENHAGEN

GROUP 020

PAGE 1

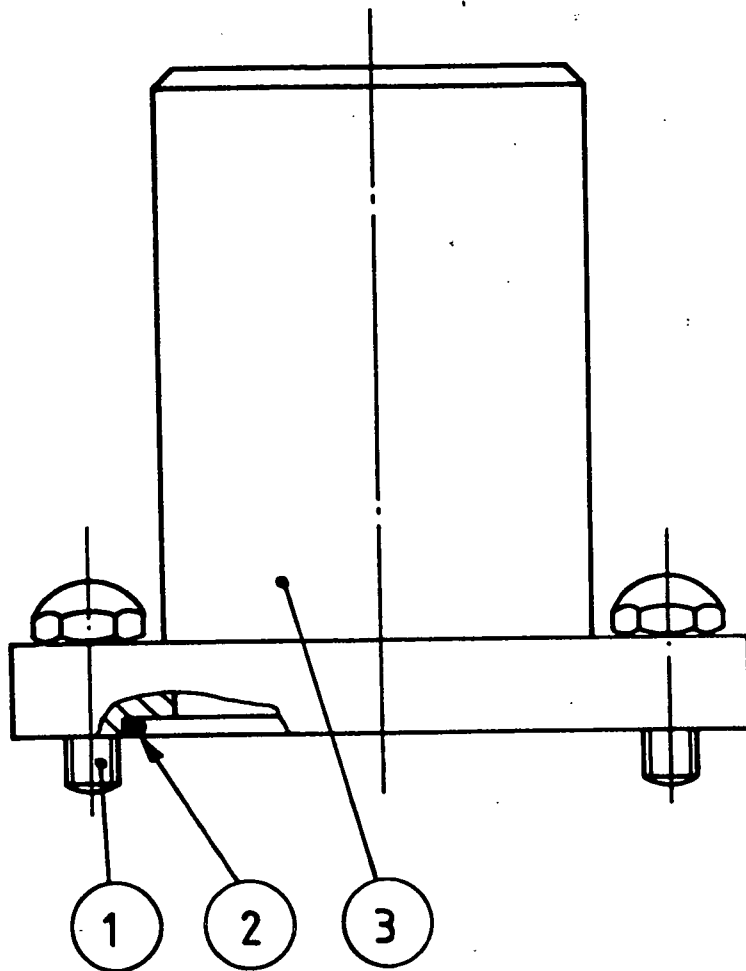
MATERIAL NO.
J92010055

Pipe connection

DRAWING NO.
723325

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J34210076	1,000	Pipe branch
0002	JK002122	4,000	Hexagon head screw
0003	J82810027	1,000	Flange
0004	JK000027	1,000	O-ring

LAST PAGE



22.51 / D.60 / D.72

RØRTILSUTNING
 PIPE CONNECTION
 ROHRANSCHLUSS
 RACCORDEMENT DE TUYAU

	Dato	Sign.	Erstatter
Tegn.	23/7-87	OT	Nr. 713085
Kontr.			
Appr.			

RANNIE

Rannie a/s
 Roholmsvej 8
 DK-2620 Albertslund
 Denmark

Erstattet af

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS
COPENHAGEN

DATE 21.06.2001

GROUP 020

PAGE 1

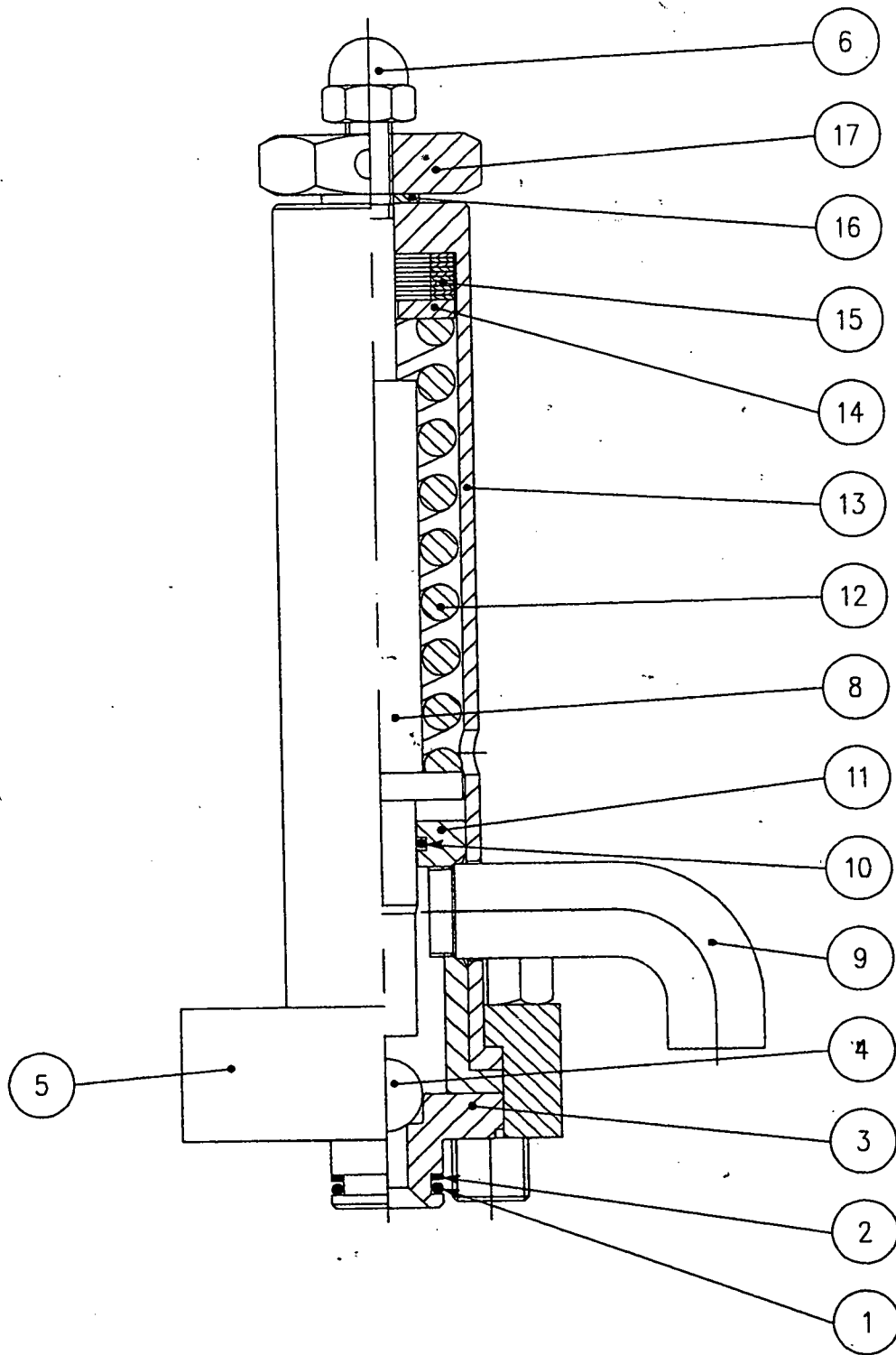
MATERIAL NO.
JK713085

Pipe connection

DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK103189-5	4,000	Hexagon head screw
0002	JK000035	1,000	O-ring
0003	JK113167	1,000	Pipe branch

LAST PAGE



Mat. no.: 92810003/92810029

55KW/D.95

TRYKSIKKERHEDSSYSTEM
 PRESSURE SAFETY SYSTEM
 DRUCKSICHERUNGSSYSTEM
 DISPOSITIF DE SURETE DE PRESSION

	Dato	Sign.	Erstatter
Tegn.	08-10-97	LSL/CP	Nr. 721823
Kontr.	1-12-00	<i>[Signature]</i>	
Rev.	30-11-00	KJ/CV	Mat. no.:

Erstattet af



APV HOMOGENISERS AS
 COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

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DATE 21.06.2001

GROUP 028

PAGE 1

MATERIAL NO.
J92810003

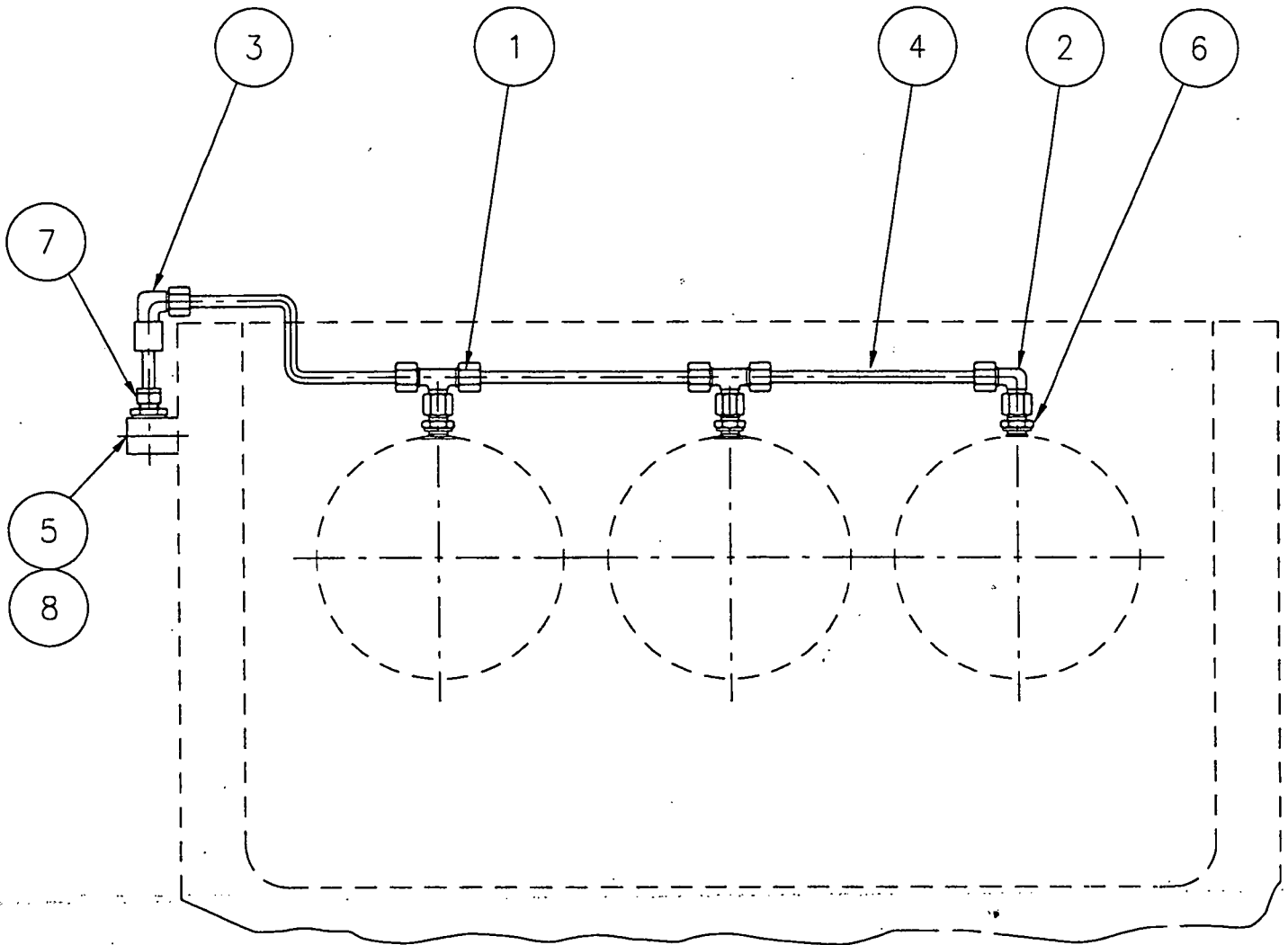
Pressure safety system

DRAWING NO.
721823

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK000017	1,000	O-ring
0002	JK001100	1,000	Back-up ring
0003	JK113513	1,000	Valve seat, safety valve
0004	JK001572	1,000	Ball
0005	JK113647	1,000	Flange
0006	JK000655	1,000	Nut, Hex Cap
0007	JK106796	4,000	Hexagon head screw
0008	JK113068	1,000	Spindle, safety valve
0009	J73010011	1,000	Outlet pipe, safety valve
0010	JK000012	1,000	O-ring
0011	JK113067	1,000	Guide
0012	JK111490	1,000	Spring
0013	JK113072	1,000	Spring housing, safety valve
0014	JK113177	1,000	Ring
0015	JK001633	10,000	Disc
0016	JK001634	1,000	Washer
0017	JK119416	1,000	Nut

LAST PAGE

SNIT A-A



STD. KØLESYSTEM 3 DELT 1/8"

KØLESYSTEM, CYLINDER
 COOLING SYSTEM, CYLINDER
 KÜHLVORRICHTUNG, ZYLINDER
 SYSTEME DE REFROIDISSEMENT, CYLINDRE

	Dato	Sign.	Erstatter
Tegn.	27-10-00	LNI/JMI	Nr. 724448
Kontr.	28/5-00	[Signature]	
Rev.	21.05.01	JSA/CH	Mat. no.:

Erstattet af



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PAGE 1

MATERIAL NO.
J93110062

Cooling system, eccentrik sump

DRAWING NO.
724448

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J84210020	2,000	Screwed connection
0002	J84210021	1,000	Screwed connection
0003	JK003637	1,000	Screwed connection
0004	JK203001	1,000	Pipe
0005	J34210139	1,000	Connection
0006	J84210022	3,000	Screwed connection
0007	J84210009	1,000	Screwed connection
0008	J82010017	2,000	Cheese-head screw

LAST PAGE

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GROUP 009

PAGE 1

MATERIAL NO.
J93110064

Cooling system, eccentrik sump

DRAWING NO.
724571

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J84120019	1,000	Hose distribution box
0002	JT81108	2,000	Cheese-head screw
0003	JK000475	3,000	Screwed connection
0004	J84120022	2,000	Plug
0005	J84210085	4,000	Screwed connection
0007	JK203443	2,300	Pipe
0008	JK000678	4,000	Screwed connection
0011	J84110029	3,000	Hose
0017	JK000864	1,000	Cheese-head screw
0018	J84210062	1,000	Stop cock

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GROUP 009

PAGE 1

MATERIAL NO.
J96110021 Lubrication system

DRAWING NO.
724567/98177-1

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J06020028	1,000	Oil pump
0002	JT80646	4,000	Hexagon head screw
0003	JT79101	4,000	Nut
0004	J23520003	1,000	Oil filter
0005	JK001016	4,000	Hexagon head screw
0006	J84120017	1,000	Nipple
0007	JK002399	2,000	O-ring
0008	J84120022	2,000	Plug
0080	J41220003	1,000	Oil-level glass
0090	JT84411	1,000	Pipe elbow
0100	J84120016	1,000	Non-return valve
0110	J84120005	1,000	Screwed connection
0130	J84120007	1,000	Nipple
0140	J81420002	1,000	Clamping Bush, TL
0150	JK000168	3,000	Cheese-head screw
0160	J84110032	1,000	Hydraulic hose
0170	JT51020	1,000	Screwed connection
0180	J84120067	1,000	Screwed connection
0190	JT51110	1,000	Screwed connection
0210	JT18053	1,000	Pressure gauge
0220	J84120055	2,000	Socket
0240	J84120056	1,000	Nipple pipe
0250	JT84410	1,000	Angle

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

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PAGE 2

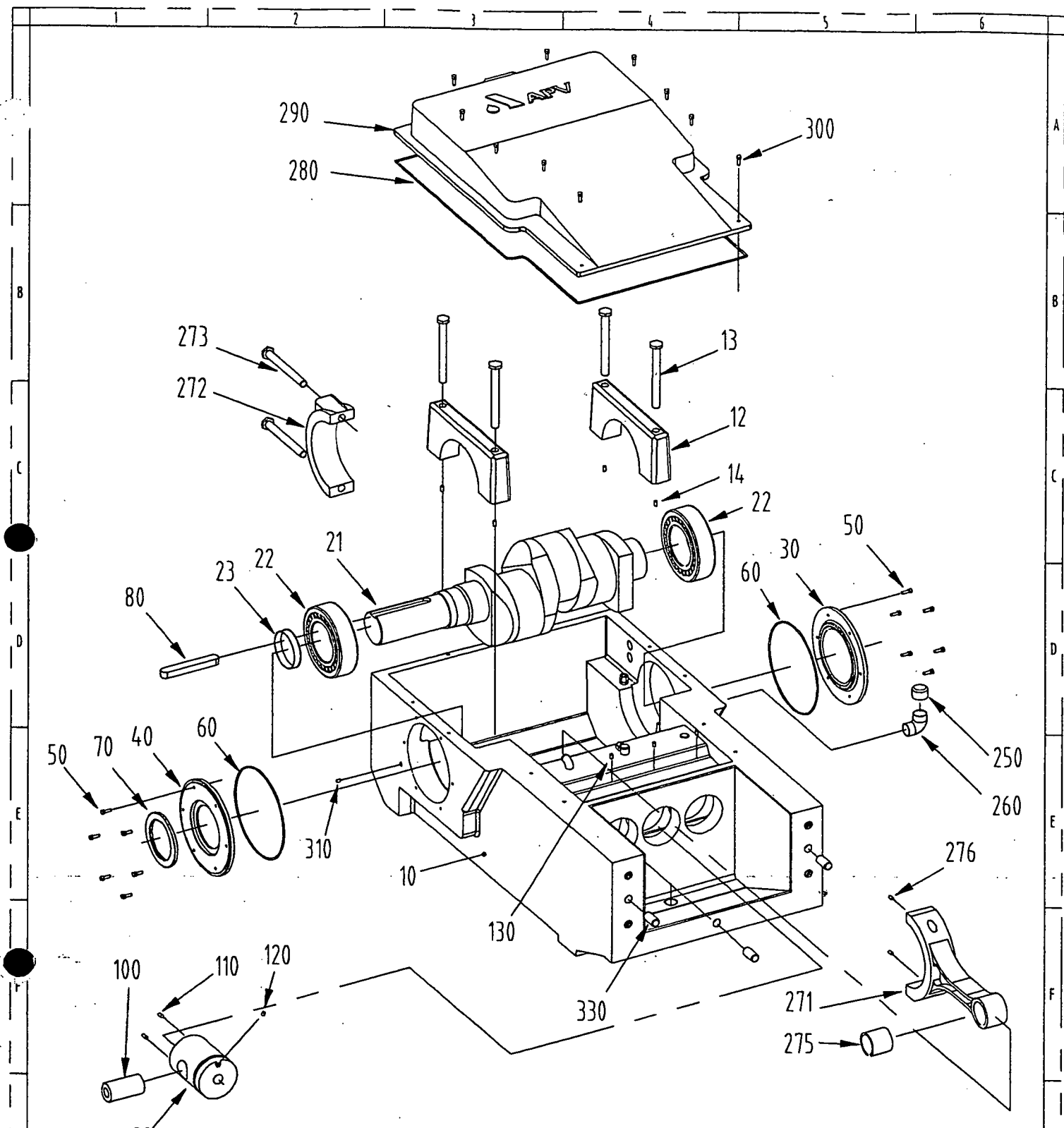
MATERIAL NO.
J96110021


Lubrication system

DRAWING NO.
724567/98177-1

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0260	JK001703	1,000	Slide valve
0270	JK206251	500,000	Pipe
0280	JT50502	1,000	Name plate
0320	J84120022	3,000	Plug
0380	J23420016	1,000	Cooling coil
0390	J80120034	1,000	O-ring
0400	JT80655	3,000	Hexagon head screw
0410	J71220001	1,000	Air filter
0510	J84220026	1,000	Reducer
0520	J84220029	1,000	Nipple pipe
0530	J84120044	1,000	Reducer
0540	JT86106	1,000	Packing
0550	J84120041	1,000	Hose nipple
0560	JT17506	1,000	Union nut
0570	J84220018	1,000	Hose
0580	JK001160	1,000	Hose clamp

LAST PAGE



								 APV APV Homogeniser GmbH Postfach 10 01 64 - D-23519 Lübeck A Siebe Group Company	
00-98	04.06	BDo							
00-96	14.10	HN							
Anderungen	Datum	Name	Anderungen	Datum	Name				
Ra in µm	Überl. zeichnen DIN 3141	Maße ohne Toleranzangabe	Code						
✓	~	DIN ISO 2718-01	A	X					
			B						
			C						
05	✓	CAD	Name	Datum	Teil-Nr.:	Modell-Nr.:	Material	Gewicht kg	
	✓	Gez.	HN	14.10.96					
	✓	Bearb.	BDo	22.06.98					
	✓	Gepr.	NSF	14.10.96					
18	✓	Maßstab	%						
11	✓	Urspr.			Zeichnungs-Nr.:	98533-4		Blatt v.	Alle Rechte nach DIN 34 vorbehalten

GAULIN 15/24
Kurbelgehäuse
BASE

*** A P V S Y S T E M S P A R T S L I S T ***

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DATE 21.06.2001

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GROUP 033

PAGE 1

MATERIAL NO.
J96220022

Power Frame

DRAWING NO.
98533-4

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0010	J00120070	1,000	Power Frame
0012	J15420007	2,000	Cap, connecting rod
0013	J82020031	4,000	Hexagon head screw
0014	J82220053	4,000	Pin
0021	J14220014	1,000	Crankshaft
0022	J04920009	2,000	Roller bearing
0023	J14120005	1,000	Ring
0030	J15420005	1,000	Bearing cover
0040	J15420006	1,000	Bearing cover
0050	JT80645	12,000	Hexagon head screw
0060	J80120019	2,000	O-ring
0070	J41520009	1,000	Seal, shaft
0080	J08320006	1,000	Key, tongue
0090	J00820004	3,000	Crosshead
0100	J11620002	3,000	Crosshead pin
0110	J82020030	6,000	Pointed screw
0120	J82020030	3,000	Pointed screw
0130	J82020047	3,000	Hexagon head screw
0260	JT84416	1,000	Angle
0271	J00620004	3,000	Connecting rod
0272	J00520003	3,000	Cap, connecting rod
0273	J82020017	6,000	Hexagon head screw
0275	J04920011	3,000	Slide bearing

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

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GROUP 033

PAGE 2

MATERIAL NO.
J96220022

Power Frame

DRAWING NO.
98533-4

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0276	JT83201	6,000	Pin
0280	J80220001	3,000	Packing, base frame/cover
0290	J01420002	1,000	Cover, Crank Case
0300	JT80647	6,000	Hexagon head screw
0310	JT81215	2,000	Pointed screw
0330	JT83207	2,000	Dowel Pin

LAST PAGE

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

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COPENHAGEN

GROUP 038

PAGE 1

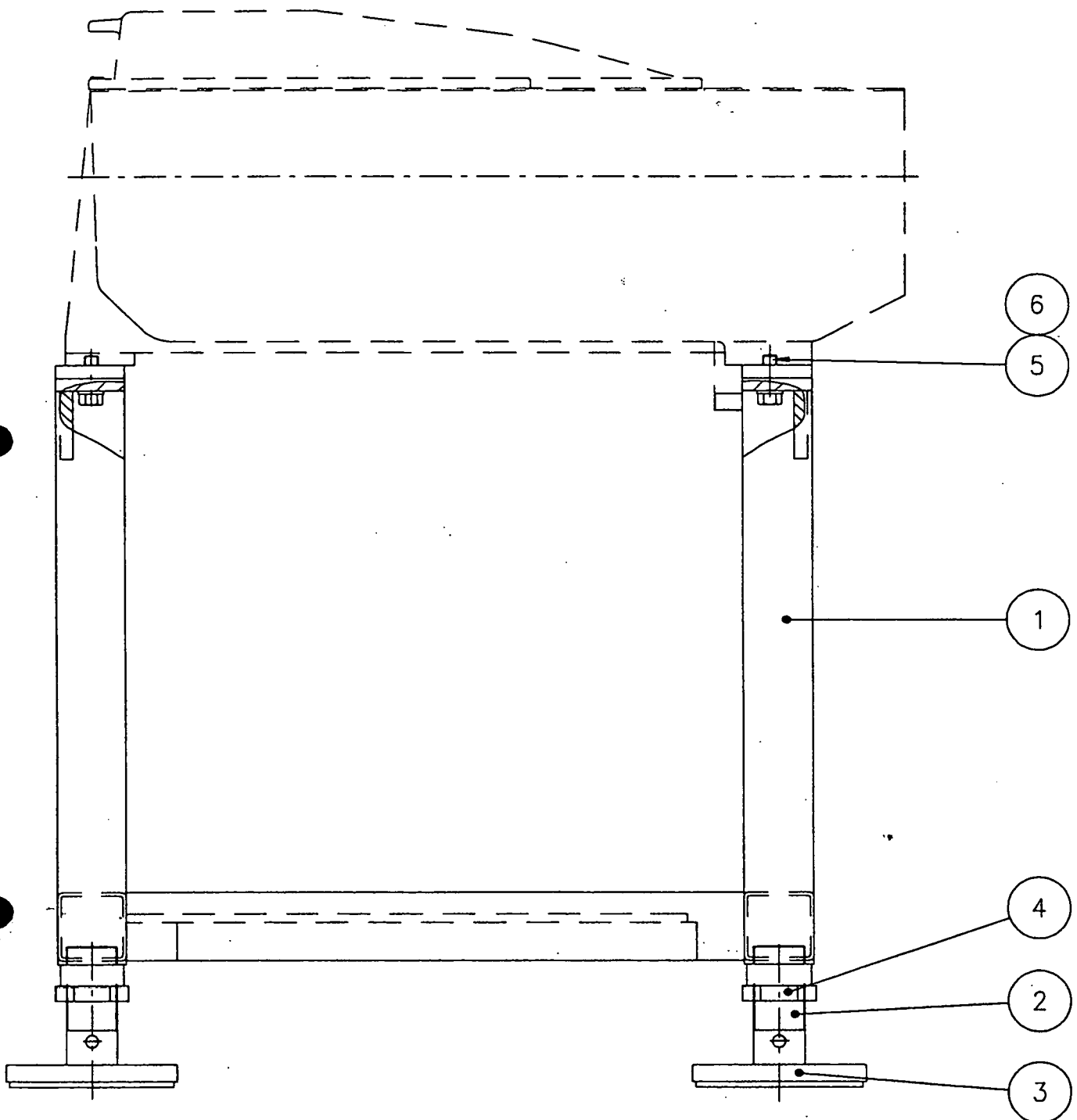
MATERIAL NO.
J93820011

Transmission

DRAWING NO.
96275-0

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J12920004	1,000	Shaft
0002	J04920006	1,000	Ball bearing
0003	J04920014	1,000	Roller bearing
0004	J01220003	1,000	Bearing cover
0005	J15420011	1,000	Bearing cover
0006	J15420012	1,000	Bearing cover
0007	J80120022	2,000	O-ring
0008	JT80645	8,000	Hexagon head screw
0009	J41520011	1,000	Seal, shaft
0010	J84120018	2,000	Plug
0011	J04920020	2,000	Bushing
0012	J82020034	2,000	Screw
0013	JT79127	2,000	Nut
0014	J81420001	2,000	Fork piece
0017	J18920003	2,000	Stud
0018	JT79104	6,000	Nut
0019	JT83110	6,000	Washer
0020	JT521117	1,000	V-belt pulley
0021	J06710142	1,000	Pulley
0022	J06710079	1,000	Clamping Bush, TL
0023	J06710003	1,000	Clamping Bush, TL
0024	J06610013	4,000	V-belt

LAST PAGE



15KW/D.56

STEL
SUB-BASE
RAHMEN
BÂTI

	Dato	Sign.	Erstatter
Tegn.	08-05-96	HEJ/CV	Nr. 720834
Kontr.	28-7-99	HEJ	
Rev.	01-06-99	HEJ/CV	Mat. no.: 96310003

Erstatter af



APV HOMOGENISERS AS
COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 046

PAGE 1

MATERIAL NO.
J96310003

Sub-Base Assembly

DRAWING NO.
720834

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J06810005	1,000	Sub-Base
0002	J43110000	4,000	Foot, frame
0003	J43210003	4,000	Dampening Pad
0004	JK000217	4,000	Lock nut
0005	J82020023	4,000	Hexagon head screw
0006	JT83110	4,000	Washer

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DATE 21.06.2001

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GROUP 064

PAGE 1

MATERIAL NO.
J96420042

Wiper Box, Assembly

DRAWING NO.
98922-2

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0010	J18220052	3,000	Crosshead cover
0020	J18220044	3,000	Crosshead cover z
0030	J09420003	3,000	Guiding ring
0040	J03420002	3,000	Scraper ring
X 0050	J801739	X 3,000	O-ring
X 0070	J801729	X 3,000	O-ring
X 0080	J80420063	3,000	U-ring
0110	JT84805	2,000	Plug
X 0120	J801584	X 3,000	O-ring
0130	J82020039	9,000	Hexagon head screw
0140	J82020049	6,000	Hexagon head screw

LAST PAGE

*** APV SYSTEMS PARTS LIST ***

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 037

PAGE 1

MATERIAL NO.
J93710276

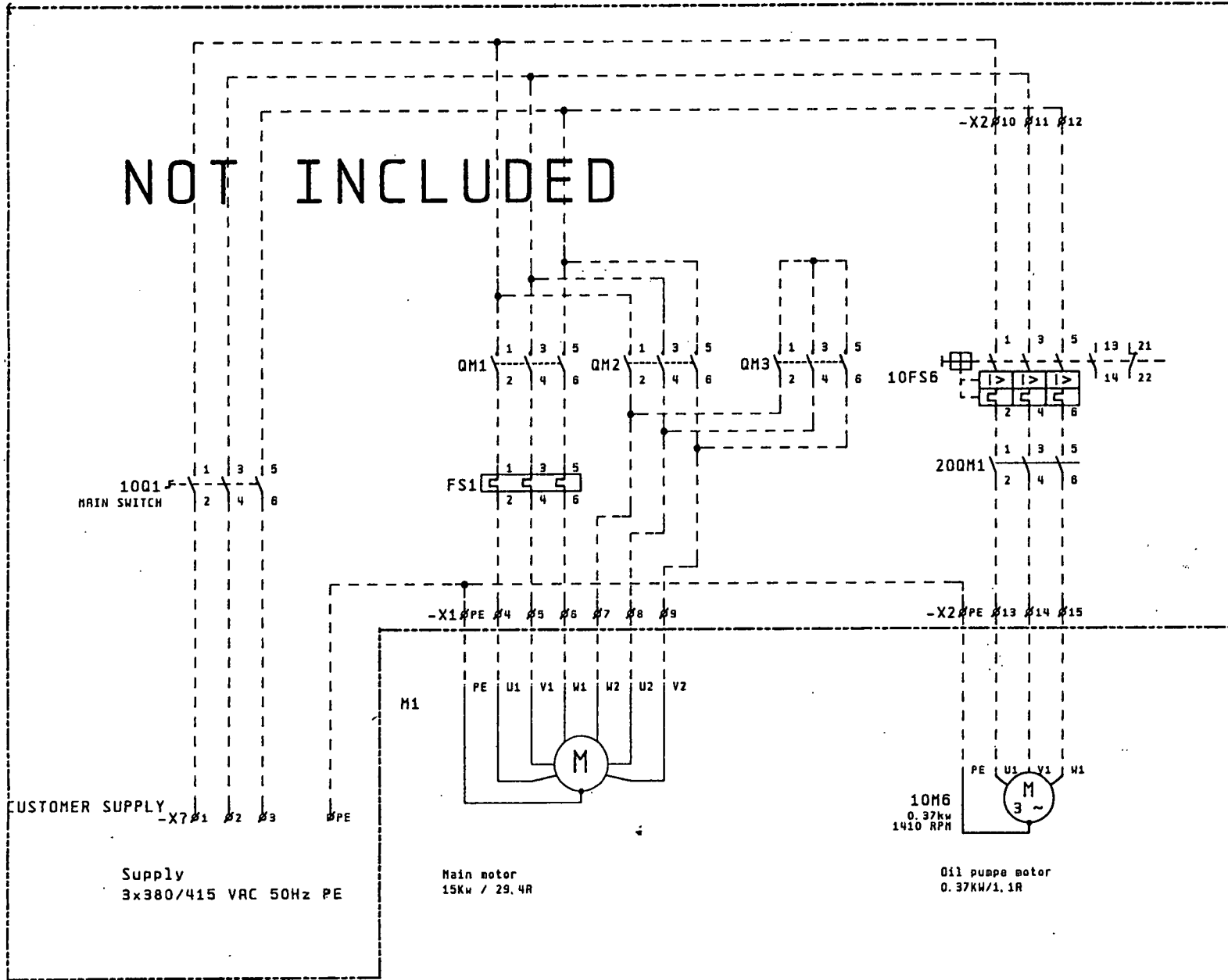
Electrical Power End Kit Assembly

DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J05610025	1,000	Motor, foot mouting
0002	J71320125	1,000	Pressure Switch
0003	JK000938	1,000	Solenoid valve
0004	JK001632	1,000	Coil

LAST PAGE

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DRG. NO. 1-01.155



APV HOMOGENISERS A/S
RANNIE
2620 ALBERTSLUND DENMARK

C		
B		
A		
Dec. JRP	02.05.2001	

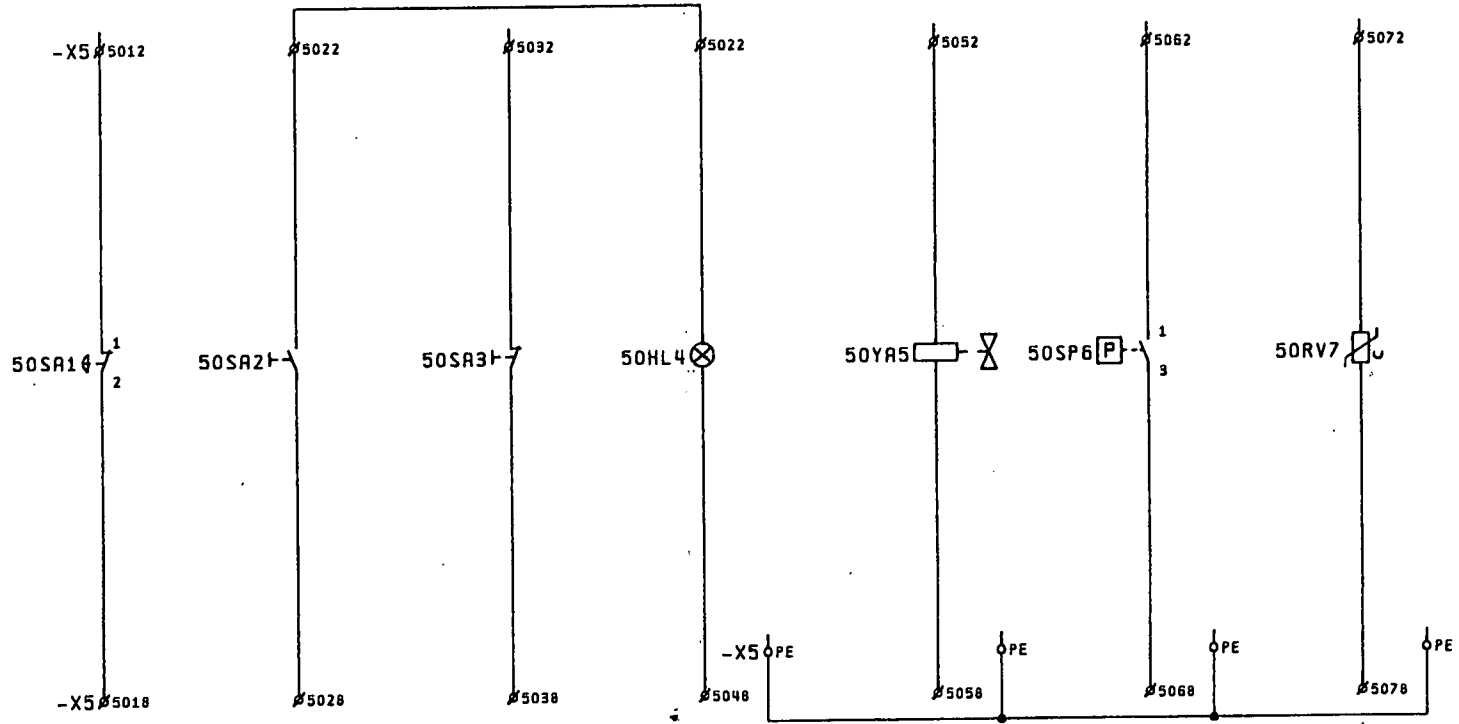
Standard
Main motor control

Project
APV 25.56

Filenavn: 1-01.155.ec
Drawing no.:

1-01.155

Page: 10
0205017



Emergency stop Start main motor Stop main motor Main motor running 24VDC 3W Cooling water valve 24VDC 0.75A Oil pressure swits Thermistor Main motor

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DRWG. NO
1-01.15



APV HOMOGENISERS A/S
RANNIE
2020 ELECTRICIAN NUMBER

C		
B		
A		
Dec	JAP	10.04.2001

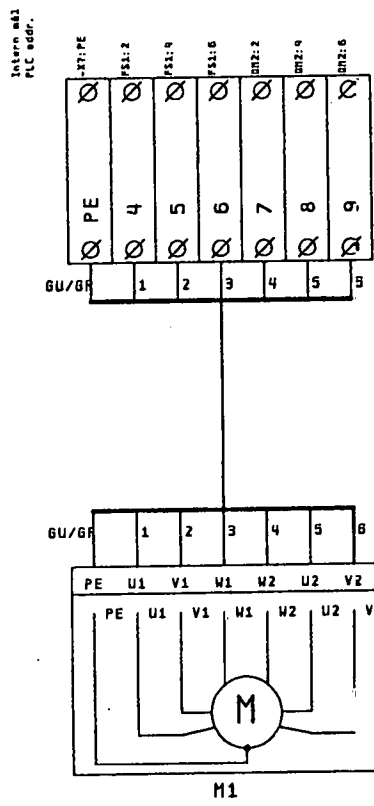
Standard
Electric components

Project
APV 25.56

File name: 1-01.15SEC
Drawing no.:
1-01.155

Page: 50
020501.P

-X1



Main motor

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SI 10-1
ON GRND



APV HOMOGENISERS A/S
RANNIE
1630 BILDETS HVR NEMHØV

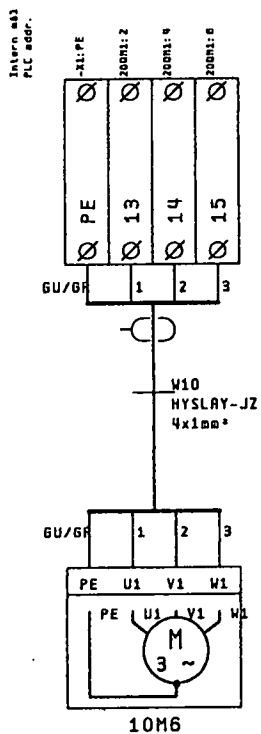
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A		
Rev	JAP	01.02.2001

Standard
-X1

Project
APV 25.56

Filenavn: 1-01.1556f	
Drawing no.:	
1-01.155	Page: 60
	07.501.P

-X2



Oil pumpe
motor

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DRWG. NO.
1-01.155



APV HOMOGENISERS A/S
RANNIE
2670 BILBERTS LIND DENMARK

C		
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A		
Rev	JRP	01.02.2001

Standard
-X2

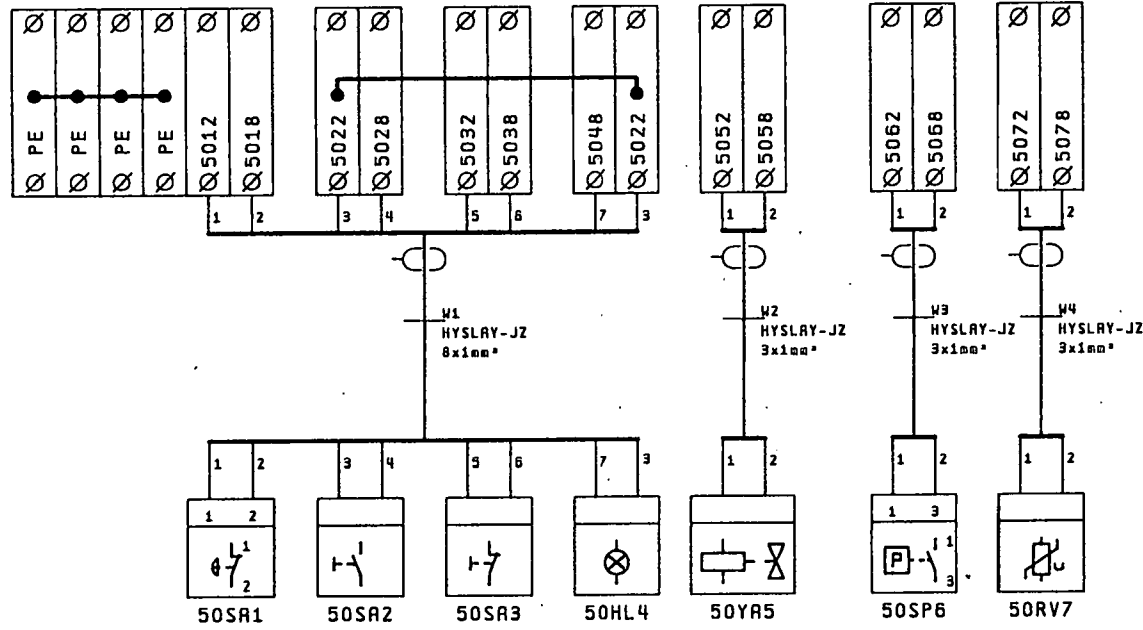
Project
APV 25.56

Filenavn: 1-01.335EC
Drawing no.:
1-01.155

Page: 61
0205013

-X5

Intern 001
PLC addr.



Emergency stop Start main motor Stop main motor Main motor running Cooling water valve Oil pressure switch Thermistor main motor

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151 10-1
ON 0980



APV HOMOGENISERS A/S
RANNIE
2620 AARFYSUND DENMARK

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A		
Dec	JAP	02.02.2001

Standard
-X5

Project
APV 25.56

Filenavn: 1-01.1556C
Drawing no.:
1-01.155

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Page:	62
	02.05.013

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APV SYSTEMS

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COPENHAGEN

GROUP 037

PAGE 1

MATERIAL NO.

JK1-01.155EC

Start-stop

DRAWING NO.

JK1-01.155ED

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
	J08810150	1,000	Wiring cabinet
	J93710275	1,000	Start-stop
	JK002856	1,000	Diagram pocket
	JK109190	1,000	Guard
1068	J05610025	1,000	Motor, foot mouting

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COPENHAGEN

GROUP 037

PAGE 1

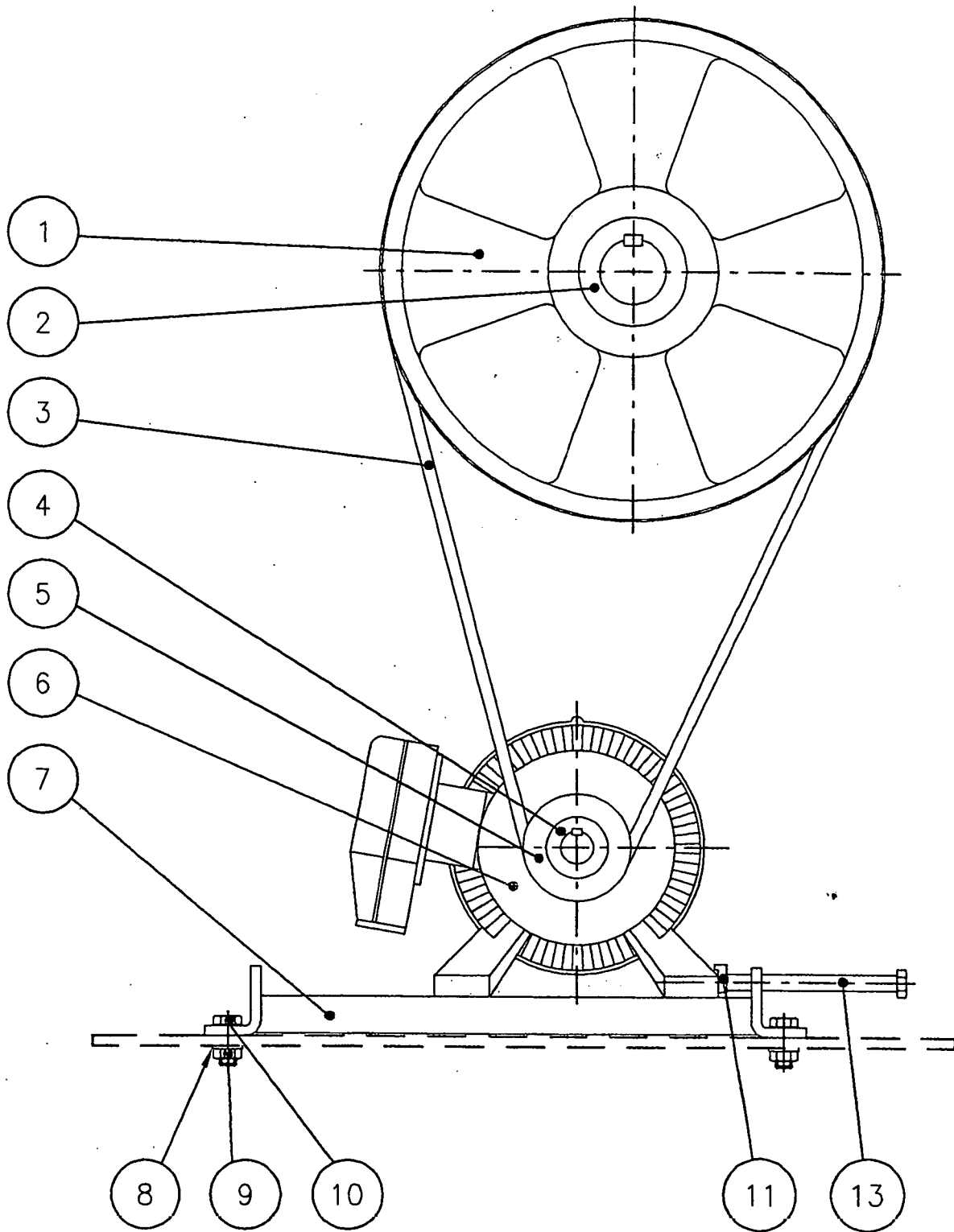
MATERIAL NO.
J93710275

Start-stop

DRAWING NO.

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
5015	J08810077	1,000	Instrumentation
5015	JK003050	1,000	Name plate
5025	J08810158	1,000	Instrumentation
5025	JK003120	1,000	Name plate
5035	J08810157	1,000	Instrumentation
5035	JK003121	1,000	Name plate
5045	J08810159	1,000	Instrumentation
5045	JK000299	1,000	Name plate
5055	JK001632	1,000	Coil
5065	J71320125	1,000	Pressure Switch

LAST PAGE



TRANSMISSION
 TRANSMISSION
 TRANSMISSION
 TRANSMISSION

	Dato	Sign.	Erstatter
Tegn.	18-11-97	HEJ/CP	Nr. 721913
Kontr.			
Rev.	08.02.00	LNI/CP	Mat. no.:

Erstattet af



APV HOMOGENISERS AS
 COPENHAGEN

APV SYSTEMS
COPENHAGEN

DATE 21.06.2001

GROUP 038

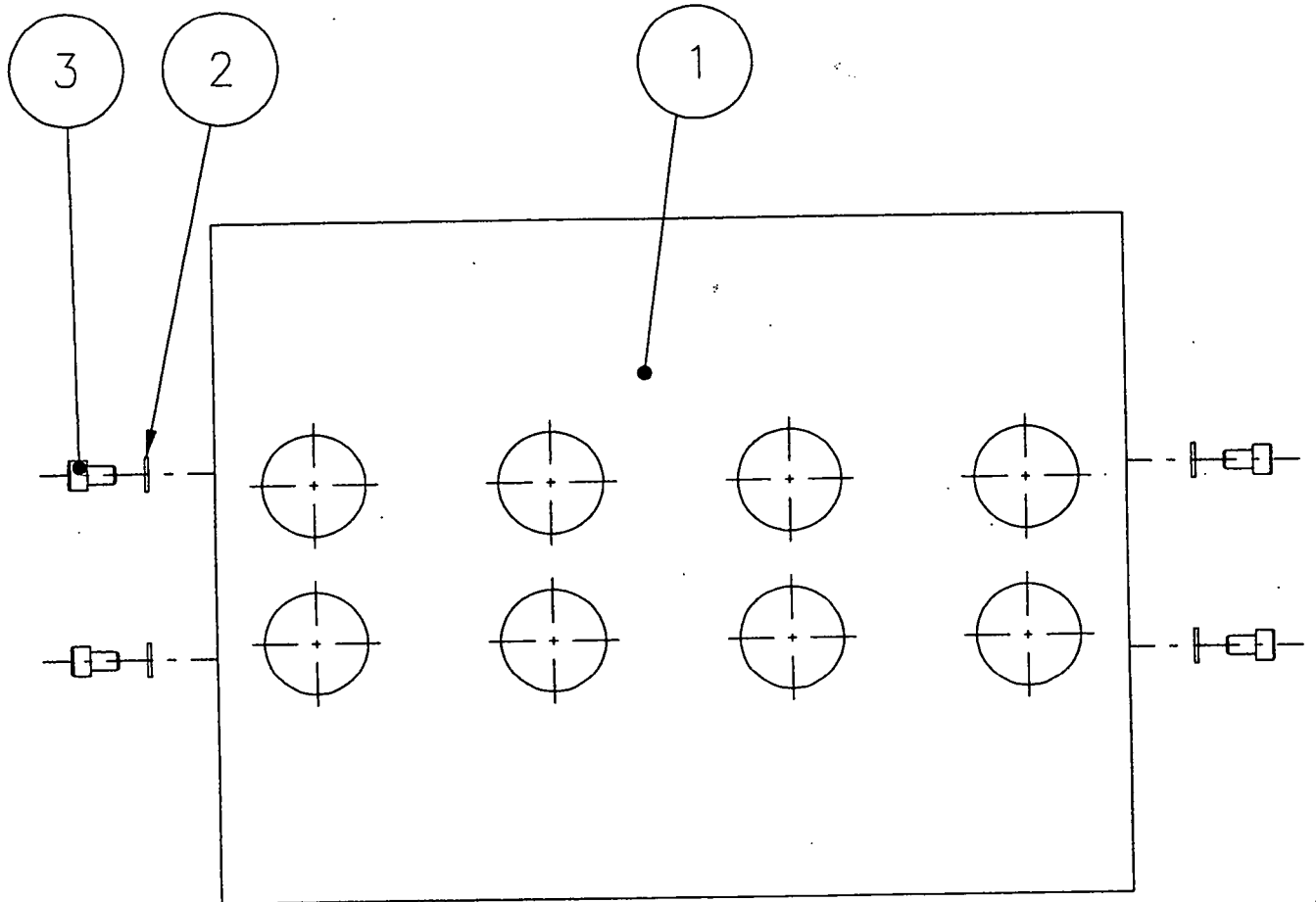
PAGE 1

MATERIAL NO.
JK1-01.155T Transmission

DRAWING NO.
721913

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J06710038	1,000	Pulley
0002	J06710036	1,000	Clamping Bush, TL
0003	JT002303	4,000	V-belt
0004	J06710058	1,000	Clamping Bush, TL
0005	J06710101	1,000	Pulley
0006	JK1-01.155M	1,000	Motor, foot mouting
0007	JK002172	2,000	Rail, MSP/SMP
0008	JK000472	4,000	Washer
0009	JK001698	4,000	Nut
0010	JK003291	4,000	Hexagon head screw
0011	J05710054	2,000	Fittings
0012	J18920003	2,000	Stud

LAST PAGE



15/24KW D.55H/66H

SIKKERHEDSSKÆRM
SAFETY SYSTEM
SICHERUNGSSYSTEM
SYSTEME DE SECURITE

	Dato	Sign.	Erstatter
Tegn.	02-09-97	LSL/CP	Nr. 721710
Kontr.	2/9-97	LSL	
Rev.			Mat. no.: 94210003

Erstattet af



APV HOMOGENISERS AS
COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 042

PAGE 1

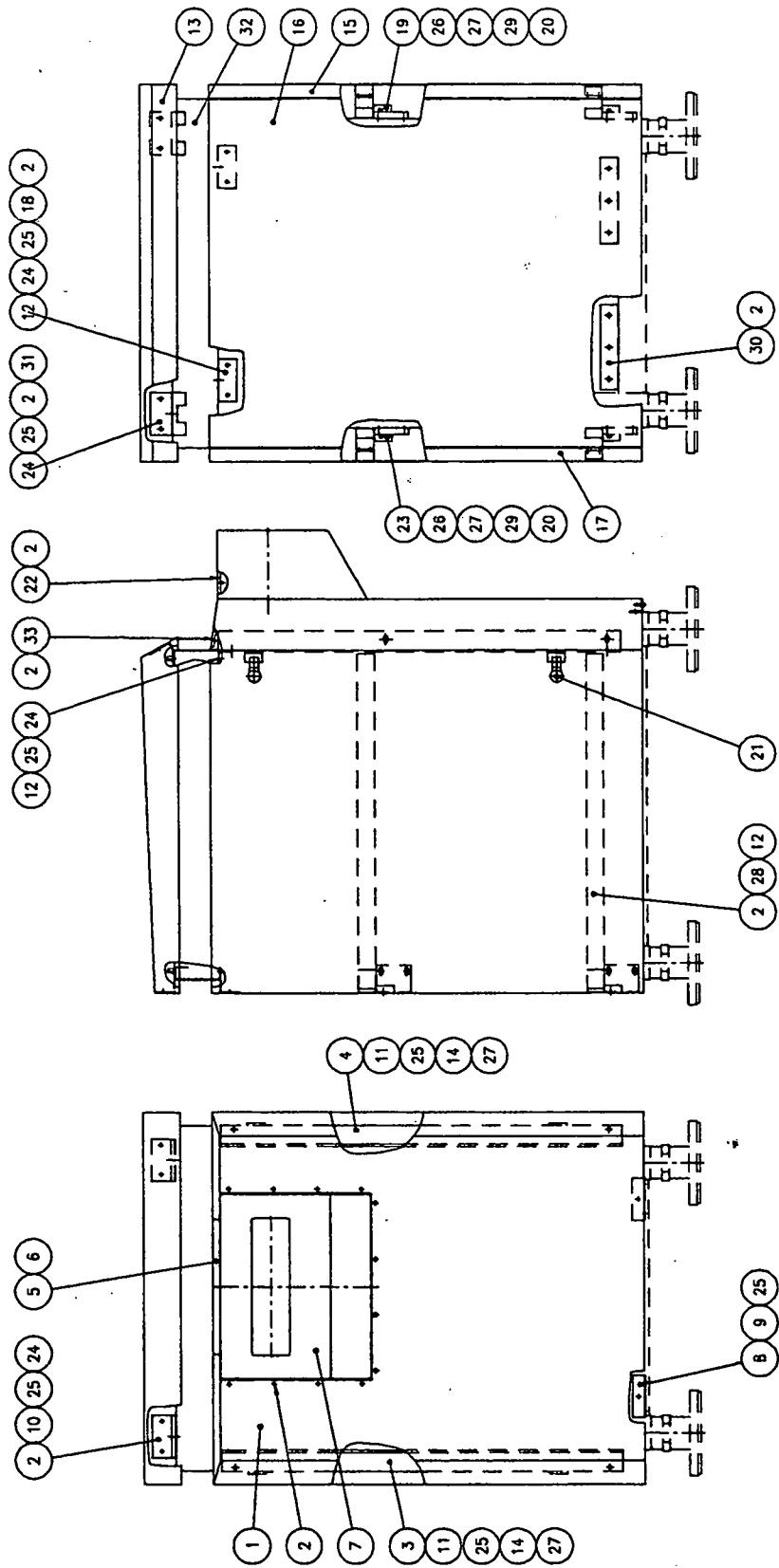
MATERIAL NO.
J94210003

Safety system

DRAWING NO.
721710

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J75010006	1,000	Guard, Liquid End
0002	JK003801	4,000	Washer
0003	JK002686	4,000	Cheese-head screw

LAST PAGE



15KW/D.56 RANNIE

KABINET
 CABINET
 KABINETT
 CAROSSERIE

	Dato	Sign.	Erstatter
Tegn.	02-05-96	HEJ/CP	Nr. 720842
Kontr.	1-9-99	HEJ	
Rev.	03-08-99	HEJ/CV	Mat. no.: 94510005

Erstattet af



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 COPENHAGEN

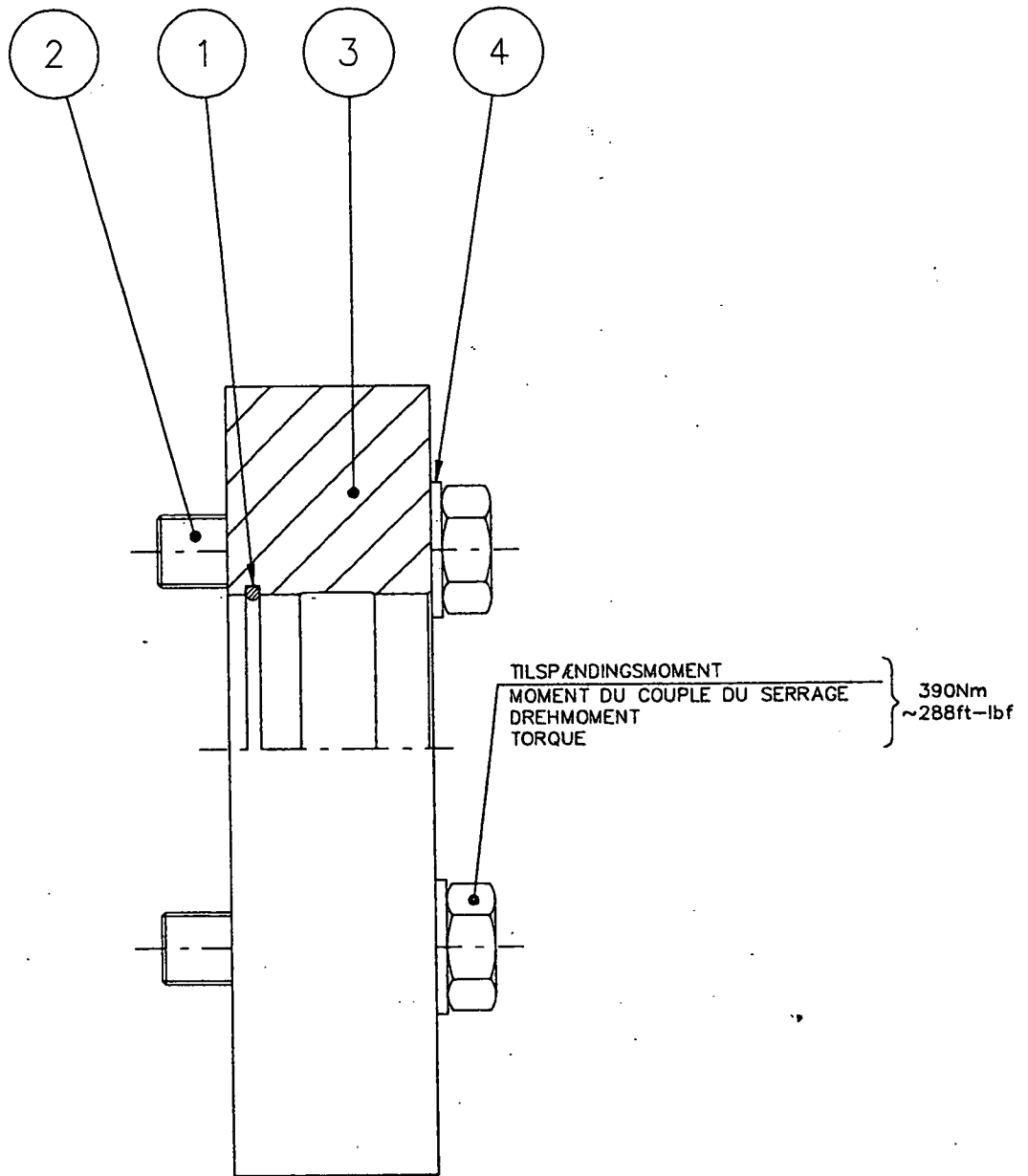
APV SYSTEMS
COPENHAGEN

DATE 21.06.2001
GROUP 045
PAGE 1

MATERIAL NO.
J94510005 Cladding

DRAWING NO.
720842

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	J75410048	1,000	Front plate
0002	JK003340	63,000	Lock nut
0003	J75910031	1,000	Elbow, cabinet
0004	J75910030	1,000	Elbow, cabinet
0005	J00310004	1,000	Cover
0006	JK001358	2,000	Slotted screw
0007	J75410047	1,000	Front box
0008	J75910000	2,000	Elbow, cabinet
0009	JK001071	4,000	Cheese-head screw
0010	J75910007	2,000	Angle
0011	JK001028	4,000	Cheese-head screw
0012	JK000952	12,000	Lock nut
0013	J75410049	1,000	Cover, cabinet BT
0014	JK002686	4,000	Cheese-head screw
0015	J75410050	1,000	Door, left
0016	J75410037	1,000	Back plate
0017	J75410051	1,000	Door, right
0018	J75910003	2,000	Angle
0019	J81410001	2,000	Hinge
0020	J82010005	4,000	Screw
0021	J81410014	4,000	Lock fittings
0022	J81410076	1,000	Fittings, cabinet BT
0023	J81410000	2,000	Hinge



15/24KW D.55/66

FORBRO
 INTERMEDIATE PART
 ZWISCHENSTÜCK
 BLOC INTERMÉDIAIRE

	Dato	Sign.	Erstatter
Tegn.	12-05-97	LSL/KL	Nr. 721437
Kontr.	13/1-97	LSL	
Rev.	03.12.97	LSL/KL	Mat. no.: 95510002

Erstattet af



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 COPENHAGEN

*** A P V S Y S T E M S P A R T S L I S T ***

APV SYSTEMS

DATE 21.06.2001

COPENHAGEN

GROUP 055

PAGE 1

MATERIAL NO.
J95510002

Front Bridge

DRAWING NO.
721437

POS NO.	ORDER NO.	QUANTITY	DESCRIPTION
0001	JK000066	3,000	O-ring
0002	J82010006	4,000	Hexagon head screw
0003	J00110002	1,000	Front Bridge
0004	J82110002	4,000	Washer

LAST PAGE