



Tetra Alcross  
Design Program

**Consumption Data:**

**Electric power to MCC:**

**Voltage/cycles:** 400 V AC

**Installed power:**

50 Hz

57,0 kW

**Production electric power approx:**

41,0 kW \*)

**CIP electric power approx:**

45,0 kW \*)

**Cooling Water Temperature inlet:**

6 deg.C

**Cooling Water Temp.outlet approx.:**

10 deg.C

**Cooling water Temperature outlet CIP:**

50 deg.C

**Cooling water flow production:**

6 225 l/h

**Cooling water flow CIP:**

787 l/h

**Supply pressure:**

3 bar

**CIP water**

**Capacity flow:**

36,0 m3/h

**Consumption:**

see note \*\*)

10,0 m3

**Temperature:**

10 deg.C

**Supply pressure:**

3 bar

**Shaft Seal water**

**Consumption:**

120 l/h

**Supply pressure:**

3 bar

**Steam for CIP Heating**

**Consumption:**

200 kg

**Capacity:**

280 kg/h

**Proposed cleaning agents**

Consumptions for one full CIP

**from JohnsonDiversey**

Cleaning plan CPS 06.01.01.02

Divos 1 5,5 kg

Divos 124 46,8 kg

**or from Ecolab**

Cleaning plan CPS 06.01.02.02

Ultrasil 67 2,3 kg

Ultrasil 69 New 4,7 kg

Ultrasil 78 2,3 kg

Ultrasil 115 11,7 kg

Cleaning agents listed above are based on our standard procedures and for guidance only.

Consult your local supplier for advice regarding availability and local legislation.

\*) figures are based on motor efficiency 93%

\*\* ) Based on well water according to water specification. Use of RO, soft water etc. can increase the consumption by up to 50%.

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Tetra Alcross  
Design Program

**Configuration Data:**

	<b>Pump Type</b>	<b>Installed kW</b>	<b>Prod. kW</b>	<b>CIP kW</b>	<b>No Hous.</b>	<b>Cooler m2</b>
<b>Stage 01</b>	LKH	22	19,1	19,1	4 S3	2,0
<b>Stage 02</b>	LKH	22	19,1	19,1	4 S3	2,0

	<b>Pump Type</b>	<b>Installed kW</b>	<b>Produc kW</b>	<b>CIP kW</b>
<b>Feed 1</b>	LKH	7,5	2,0	5,3
<b>Permeate</b>	LKH	4	0,7	1,2

<b>Total membrane elements</b>	24	<b>pcs.</b>
<b>BTD size</b>	300	<b>Litre</b>
<b>Plant Hold up volume approx:</b>	800	<b>Litre</b>
<b>Shipping weight excl. Packing</b>	2500	<b>kg approx.</b>

**Water Quality for CIP and Shaft Seal Water**

In addition to General Tetra Pak D&B Water Quality Demand the water used should be within the limits of the following specification:

Iron (Fe):	< 0,05 ppm
Manganese (Mn):	< 0,02 ppm
Silica (SiO <sub>2</sub> ):	< 5 ppm
Aluminium (Al):	< 0,05 ppm
German hardness:	< 20 dH
Chlorine (active chlorine as in bleach):	< 2 ppm
Fouling index (Silt Density Index):	< 3 SDI
Turbidity:	< 0,5 NTU
Conductivity of well water	> 5 microSiemens/cm
Conductivity of demineralised water	> 20 microSiemens/cm
Silicone	none
Total plate count (30 deg C)	< 1000 cfu/ml
Total amount of coliform bacteria:	< 1 in 100 ml

It is recommended to install a 10 micron filter in the supply line. Use stainless steel piping after the filter.

**Test Certifikat**  
Test Certificate

for

**MULTITUBE-HEATEXCHANGER 2 m<sup>2</sup>**  
**AISI 316L**

Tegning nr. (drawing no.)  
Serie nr  
Serial No

W-021-101-25  
55730 / 25417  
T5845810130 SO118712611 TAG 01-05

		Rørside Tube side	Svøbside Shell side	
			Køling Cooling	Opvarmning Heating
Maks Tryk Max pressure	PS	40 [bar G]	20 [bar G]	3 [bar G]
Maks Temperatur Max Temperature	TS	85 [ C]	-10 [°C]	143 [°C]
Indhold Volume	V	6,8 [liter]	4,9 [liter]	
Prøvningstryk Test pressure	PT	57 [bar]	30 [bar]	

Holdetid for rørside prøvningstryk

Holding time for tube side test pressure \_\_\_\_\_ min. 45

Prøvet af (initialer) / dato

Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Holdetid for svøbside prøvningstryk

Holding time for shell side test pressure \_\_\_\_\_ min. 45

Prøvet af (initialer) / dato

Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Visuel inspektion af svejsninger  
og overflader

Visual inspection of welds and surfaces \_\_\_\_\_

Prøvet af (initialer) / dato

Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Udstyret er trykprøvet og visuelt inspiceret og har opfyldt kvalitetskontrollen.

The equipment have been tested and inspected and has passed the quality control.

12-11-2013 Driftassistent

Dato/date Titl/ title

**WILA MASKINFABRIK A/S**  
Mads Clausens Vej 14 · 8600 Silkeborg  
Tlf. 86 80 84 43 · Fax 86 80 84 3  
CVR-nr. 27 23 03 50  
Hans Bisballe Jensen  
mail@wila.dk - www.wila.dk

**Test Certifikat**  
Test Certificate

for

**MULTITUBE-HEATEXCHANGER 2 m<sup>2</sup>**  
**AISI 316L**

Tegning nr. (drawing no.)  
Serie nr  
Serial No

W-021-101-25  
55730 / 25417  
T5845810130 SO118712611 TAG 02-05

		Rørside Tube side	Svøbside Shell side	
			Køling Cooling	Opvarmning Heating
Maks Tryk Max pressure	PS	40 [bar G]	20 [bar G]	3 [bar G]
Maks Temperatur Max Temperature	TS	85 [ C]	-10 [°C]	143 [°C]
Indhold Volume	V	6,8 [liter]	4,9 [liter]	
Prøvningstryk Test pressure	PT	57 [bar]	30 [bar]	

Holdetid for rørside prøvningstryk

Holding time for tube side test pressure \_\_\_\_\_ min. 45

Prøvet af (initialer) / dato

Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Holdetid for svøbside prøvningstryk

Holding time for shell side test pressure \_\_\_\_\_ min. 45

Prøvet af (initialer) / dato

Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Visuel inspektion af svejsninger  
og overflader

Visual inspection of welds and surfaces \_\_\_\_\_

Prøvet af (initialer) / dato

Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Udstyret er trykprøvet og visuelt inspiceret og har opfyldt kvalitetskontrollen.

The equipment have been tested and inspected and has passed the quality control.

12-11-2013

Driftassistent

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Mads Clausens Vej 14 · 8600 Silkeborg  
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Dato/date

Titel/ title

CVR-Navn/name 27230350

mail@wila.dk - www.wila.dk

**Test Certifikat**  
Test Certificate

for

**MULTITUBE-HEATEXCHANGER 1 m<sup>2</sup>**  
**AISI 316L**

Tegning nr. (drawing no.)

W-01-76-38/25

Serie nr  
Serial No

55730 / 25417  
T5845810130 SO118712611 TAG 17-05

		Rørside Tube side	Svøbside Shell side	
			Køling Cooling	Opvarmning Heating
Maks Tryk Max pressure	PS	40 [bar G]	20 [bar G]	3 [bar G]
Maks Temperatur Max Temperature	TS	85 [ C]	-10 [°C]	143 [°C]
Indhold Volume	V	4,5 [liter]	2,5 [liter]	
Prøvningstryk Test pressure	PT	57 [bar]	30 [bar]	

Holdetid for rørside prøvningstryk  
Holding time for tube side test pressure \_\_\_\_\_ min. \_\_\_\_\_ 45 \_\_\_\_\_

Prøvet af (initialer) / dato  
Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Holdetid for svøbside prøvningstryk  
Holding time for shell side test pressure \_\_\_\_\_ min. \_\_\_\_\_ 45 \_\_\_\_\_

Prøvet af (initialer) / dato  
Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Visuel inspektion af svejsninger  
og overflader  
Visual inspection of welds and surfaces \_\_\_\_\_

Prøvet af (initialer) / dato  
Tested by (initials) / date \_\_\_\_\_ Kent \_\_\_\_\_

Udstyret er trykprøvet og visuelt inspiceret og har opfyldt kvalitetskontrollen.  
The equipment have been tested and inspected and has passed the quality control.

12-11-2013 Driftassistent

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Dato/date Titel/ title

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## FLOW DIAGRAM SYMBOLS

Rev	Description	Designer	Appr. By	Date
3	atmospheric pressure added	MBN	MBN	040428

### PIPING SYMBOLS

- PROCESS MEDIA, RED
- CLEANING MEDIA, MAGENTA
- SERVICE MEDIA, CYAN
- ELECTRICAL CONTROL, GREEN
- AIR CONTROL, BLUE
- LIQUID CONTROL, ORANGE
- FLEXIBLE HOSE
- PIPE WITH HEATING OR COOLING JACKET
- CAP ON PIPE END
- UNION
- INSULATED PIPE
- LIMIT OF DELIVERY
- X ORIFICE

### DENOMINATION

- A AIR
- IA INSTRUMENT AIR
- SA SANITARY AIR
- C CONDENSATE
- D DRAIN
- S STEAM
- W WATER
- CW COOLING WATER
- HW HOT WATER
- IW ICE WATER
- SW SOFTENED WATER
- TW TOWER WATER
- GW GLYCOL WATER
- G GAS
- R RETURN
- C CIRCULATION
- CIP PR CLEANING PRESSURE LINE
- CIP R CLEANING RETURN LINE

### INSTRUMENTS

- COMMON INSTRUMENT LOCALLY MOUNTED
  - COMMON INSTRUMENT PANEL MOUNTED OR SOFT-WARE FUNCTION
  - DUMMY
- FIRST LETTER**  
Measured or initiation variable
- DENSITY
  - FLOWRATE (L/h), MASSFLOW (KG/H) OR VOLUME (L)
  - POSITION
  - LEVEL
  - PRESSURE/VACUUM
  - PRESSURE DIFFERENCE
  - QUALITY\*
  - TEMPERATURE
  - WEIGHT
  - FREQUENCY/SPEED
- SECOND LETTER**  
Display of output function
- CONTROLLING
  - SENSING ELEMENT
  - INDICATING
  - RECORDING
  - SWITCHING
  - TRANSMITTING
  - CONVERTING
- THIRD LETTER**  
Qualifying letter
- HIGH
  - MEDIUM
  - LOW
- \*TYPE OF QUALITY**
- BRX BRIX
  - pH
  - CONO CONDUCTIVITY
  - TURB TURBIDITY

### HYGIENIC VALVES

- ASEPTIC VALVE GENERAL SYMBOL
- MANUAL PLUG COCK 2-WAY
- MANUAL PLUG COCK 3-WAY
- MANUAL SANITARY CONTROL VALVE
- FLOW CONTROL VALVE
- SANITARY MODULATING VALVE
- SANITARY NON-RETURN VALVE
- SANITARY MANUAL VALVE
- SANITARY AUTOMATIC VALVE
- SANITARY MANUAL BUTTERFLY VALVE
- SANITARY AUTOMATIC BUTTERFLY VALVE NORMALLY CLOSED, NC
- SANITARY AUTOMATIC BUTTERFLY VALVE NORMALLY OPEN, NO
- SANITARY MIXPROOF VALVE CLEANING OF SPINDLE AND CHAMBER
- SANITARY MIXPROOF VALVE
- SANITARY MIXPROOF VALVE TANK OUTLET
- ASEPTIC SAMPLING VALVE
- SANITARY SAMPLING VALVE
- AIR BLOW VALVE

### NON-HYGIENIC VALVES

- NORMALLY OPEN VALVE WAY
  - NORMALLY CLOSED VALVE WAY
  - MANUAL SHUT-OFF VALVE
  - MANUAL CHANGE-OVER VALVE
  - MANUAL CONTROL VALVE
  - AIR RELEASE VALVE
  - VACUUM RELEASE VALVE
  - PRESSURE RELEASE VALVE
  - CONSTANT FLOW/PRESSURE VALVE
  - NON-RETURN VALVE
  - AUTOMATIC SHUT-OFF VALVE
  - AUTOMATIC CHANGE-OVER VALVE
  - AUTOMATIC MODULATING VALVE 2-WAY
  - AUTOMATIC MODULATING VALVE 3-WAY
  - SOLENOID VALVE
- ACTUATOR FUNCTIONS**
- HAND ACTUATOR
  - MODULATING ACTUATOR
  - ON/OFF ACTUATOR
  - SOLENOID ACTUATOR
  - ELECTRIC MOTOR
  - SPRING
  - FLOAT
  - TOP UNIT
  - FEEDBACK UNIT

### PUMPS

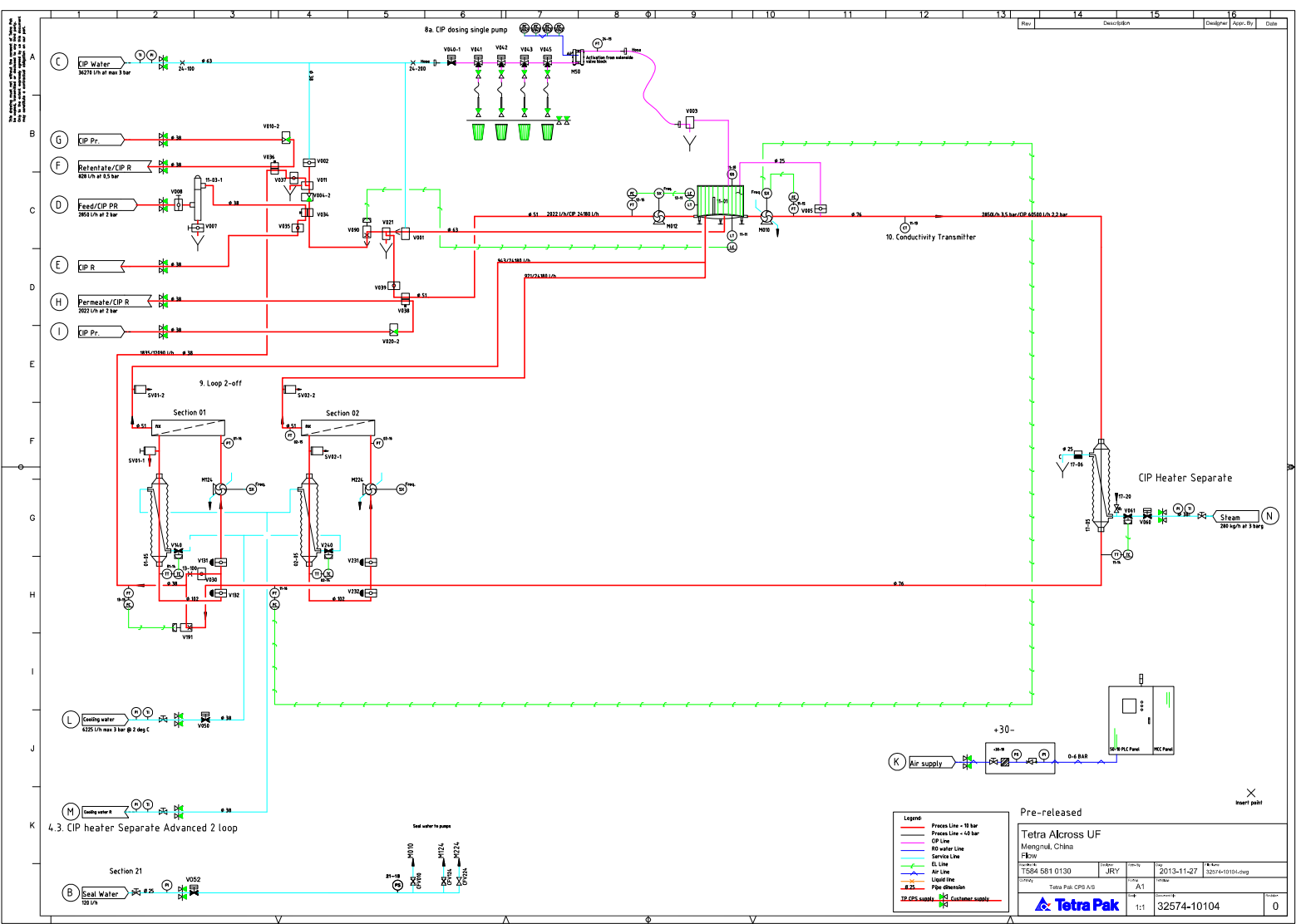
- CENTRIFUGAL PUMP
- POSITIVE PUMP
- VACUUM PUMP
- LIQUID RING PUMP
- SCREW PUMP

### COMPONENTS

- STEAM TRAP
- FILTER, STRAINER
- SIGHT GLASS
- AGITATOR
- CLEANING DEVICE
- EJECTOR/INJECTOR
- DRAIN/FUNNEL Atmospheric pressure
- EXPANSION VESSEL
- SILENCER
- PLATE HEAT EXCHANGER
- TUBULAR HEAT EXCHANGER
- STATIC MIXER

PSD Flow Diagram Symbols				
Project No.	Customer	Date	Econ	Rev. No.
	MBN	2004-04-28		
Company		Form		Version
Tetra Pak Dairy & Beverage Systems AB		A1		
Scale		Document No.		Revision
1:1		1217604 -01		1





4.3. CIP heater Separate Advanced 2 loop

**Legend**

- Process Line - 10 bar
- Process Line - 40 bar
- CIP Line
- RO water Line
- Service Line
- EL Line
- Air Line
- Liquid Line
- Pipe diameter
- CSP supply
- Customer supply

Pre-released

**Tetra Across UF**  
Mingnui, China

Project No.	TS84 581 0130	Client	JRY	Date	2013-11-27	Drawn by	32574-1010/Coop
Company	Tetra Pak CPS A/S		Scale	A1			
			Sheet No.	1:1	32574-10104	Total	
							0

insert point



Tetra Pak Cheese and Powder Systems A/S

Tetra Alcross UF,Item list.

Doc No: IL584 584 0130

ORDER TEXT


Sales Administrator : HEI  
Process Engineer : DBE  
Automation Engineer : DAJ

Date/Sign	Description	Rev.

This ITEM LIST refers to the following drawings:  
Flowdiagram drwg.no: 32574-10104  
Installation drwg.no:

Machine Type: Tetra Alcross UF  
Drawing Spec: T584 581 0130  
Machine No: T584 581 0130  
Designed by: Tetra Pak Cheese and Powder Systems A/S  
Søren Nymarksvej 13  
DK-8270 Højbjerg  
Manufactured by: Tetra Pak Cheese and Powder Systems A/S  
Søren Nymarksvej 13  
DK-8270 Højbjerg

Year of manufacture: 2014

<b>Tetra Alcross UF</b>		Order. No.			Doc. No.	RevNo.
		<b>118712116</b>				
<b>Mengnui China</b>		Sign.	<b>LUND SWEDEN</b>	File	Doc. No.	RevNo.
CreateDate	Department	<b>Dorte Beck</b>				
<b>2013-10-10</b>	<b>Filtration</b>	Appr.				
		-				

Tetra Alcross UF, Item list.						Doc No: IL584 584 0130
Label	No	Article No.	Denomination	Type		Doc No
	1	S 2569464-0100	Tetra Alcross US 100			No doc.
	1	S 2636086-0100	Feed module 1			No doc.
	24	T 6-31826-0029-9	Filter	6438-HFK131-VVH HpHt		No doc.
	24	T 6-32571-7013-1	ATD	SS 6.3" for O-ring		No doc.
	8	T 6-32571-7014-1	End plug	SS 6.3" for O-ring		No doc.
	80	T 6-31816-0028-6	O-ring	22.20x3.00 NBR		No doc.
	1	S 2565669-0100	CCP T Alcross			1228796-0101
	1	S 3078248-0100	Machine Sign			No doc.
	2	A 359605-0005	Mandatory Sign ISO, Hearing Protection			No doc.
	2	A 359705-0003	Warning Sign ISO, Dangerous Chemicals			No doc.
	2	A 90194-0143	Warning Sign ISO, Hot Surface			No doc.
	25	A 90511-8562	Stripe	Blue, height 50mm Supplied on roll length 25m		No doc.
	6	A 90511-0144	Logotype	"Tetra Pak" 30x225.68mm, white For stripe 50mm		No doc.
	1	S 2982557-0100	Documentation			No doc.
	1	A 2982558-0101	Shipping			No doc.
	1	S 2797729-0100	Packing			No doc.
	3	A 6-31801-5932-3	Cable track	120x5x2500mm EN 1.4301 According to drawing 31801-5932 Rev.02		No doc.
	2	A 6-31801-5932-1	Cable track	75x4x2500mm EN 1.4301 According to drawing 31801-5932 Rev.02		No doc.
	6	A 6-31801-5932-2	Cable track	53x4x2500mm EN 1.4301 According to drawing 31801-5932 Rev.02		No doc.
			Common Feed module			
	1	S 2749214-0101	Pipes & fittings Module 1			No doc.
	1	S 2576329-0100	Machine body			No doc.
11 01	1	T 2642088-0100	Tank	300L Double BTD		No doc.
11 10	1	T 90511-0919	Safety interlock Switch	440G-T27127		TLS-GD2.pdf
11 10B	1	T 90511-0920	Fork	For Switch 440G-A27011		
M010	1	S 2588966-0100	Centrifugal pump	LKH-25-ISO Cl-7.5/8.6kW EPDM iscr		1214246-0101
			Impeller	Ø190		No doc.
			Fittings	Heavy duty clamp Ø76.1/63.5mm		No doc.
			Motor	7,5 kW		No doc.
			Power supply	3x50x380-420D/660-690Y		No doc.
			Shroud	Yes		
			Legs	Yes		No doc.
			Shaft Seal	DMS		No doc.
			Elastomer	EPDM		No doc.
			Special	Impeller screw		No doc.
			AL article no.:	9613380776		
			Configuration	P(1):PCL25EDSBC5IH2NLC190SYNNAEDNNNN		
CFV010	1	A 90503-8200	Constant flow valve	Flow restrictor G 1/2 REG-1200-D 0.5l/mi		1221586-0101

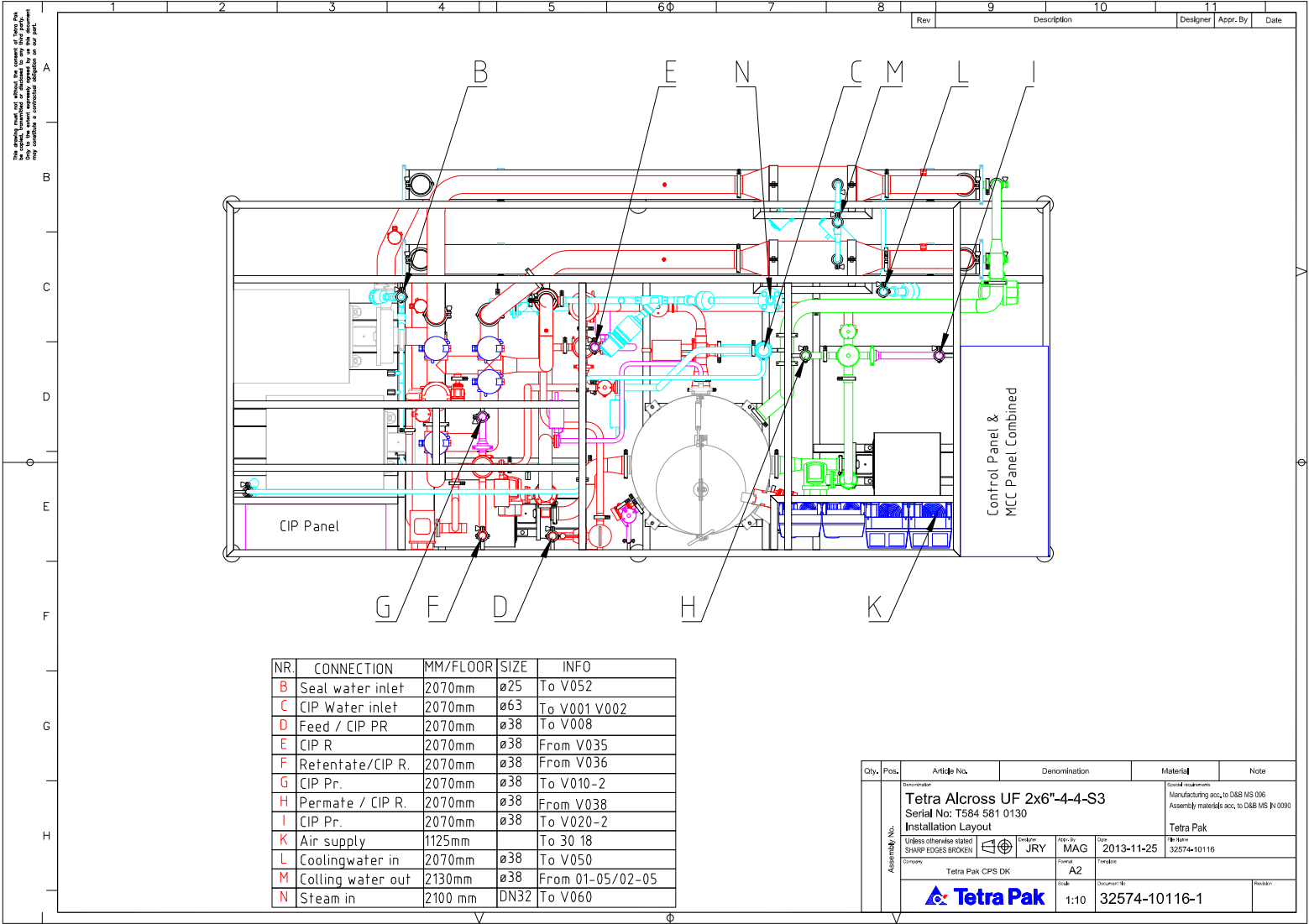
				<b>Tetra Alcross UF, Item list.</b>		<b>Doc No: IL584 584 0130</b>
Label	No	Article No.	Denomination	Type	Doc No	
M012	1	S 2588956-0100	Centrifugal pump	LKH-10-ISO Cl-4/4.6kW EPDM iscr		1214246-0101
			Impeller	Ø140		
			Fittings	Heavy duty clamp Ø63.5/51mm		
			Motor	4 kW		
			Power supply	3x50x380-420D/660-690Y		
			Shroud	Yes		
			Legs	Yes		
			Shaft Seal	Single shaft seal		
			Elastomer	EPDM		
			Special	Impeller screw		
			AL article no.:	9613233762		
			Configuration	P(1):PCL10ESSBC5GL2NLC140SYNNADCNNNN		
11 03 1	1	A 6-9612-92-6608	Strainer	LKSF-CL-W-38-74 micron EPDM		1210799-0101
11 11	1	A 90516-3222	Pressure transmitter	PMP51 ISO2852 Tri-CI.1-1/2" 0-0.1bar(g) 4-20mA, F15 SS house w/o display Cable gland M20x1.5 IP66/68		1229086-0101
12 11	1	A 90516-3222	Pressure transmitter	PMP51 ISO2852 Tri-CI.1-1/2" 0-0.1bar(g) 4-20mA, F15 SS house w/o display Cable gland M20x1.5 IP66/68		1229086-0101
11 15	1	A 90516-0540	Magnetic Flow meter	Promag 50H SMS W63.5 0-120000l/h PFA Display 20-55V AC/16-62V DC SS house Pulse signal / 4-20mA HART 0.5% cal.		1218415-0101
11 16	1	A 90516-3219	Pressure transmitter	PMP51 ISO2852 Tri-CI.1-1/2" 0-10bar(g) 4-20mA, F15 SS house w/o display Cable gland M20x1.5 IP66/68		1229086-0101
11-13	1	A 90503-4549	Conductivity meter	CLD132 ISO C151 2x4-20mA 24V AC/DC Display SS house w.5m cable Conductivity HART and temperature output		1218800-0101
24-100	1	A 6-32421-0722-1	Orifice plate	SMS63		No doc.
12-15	1	A 90516-0516	Magnetic Flow meter	Promag 50H SMS W38.0 0-42000l/h PFA Display 20-55V AC/16-62V DC SS house Pulse signal / 4-20mA HART 0.5% cal.		1218415-0101
V001	1	A 6-9613-32-0034	Single seat valve	Unique-SSV-W-63.5-300-NC-EPDM Maintainable actuator		1221121-0101
V002	1	A 6-9612-62-8354	Butterfly valve	LKB-W-38-316L-EPDM-P85-NC		1215850-0101
V003	1	A 6-9613-32-0514	Single seat valve	Unique SSV-W-25-210-NO-EPDM Maintainable actuator		1221122-0101
V004-2	1	A 6-9612-22-0008	Non-return valve	LKC-2-W-38.0-316L EPDM		1241273-0101
V005	1	A 6-9612-62-8353	Butterfly valve	LKB-W-25-316L-EPDM-P85-NC		1215850-0101
V007	1	A 6-9612-62-8164	Butterfly valve	LKB-W-63.5-316L-EPDM-M-0 handle 2p		1215850-0101
V008	1	A 6-9611-44-4511	Butterfly valve	LKB-W-38-316L-EPDM		1215850-0101
V008A	1	A 6-9612-04-5001	Handle	LKB 2-pos 8mm ISO25-63.5 DIN25-50.		No doc.
V008B	1	A 6-9612-04-7501	Mounting bracket	Handle 1.1 LKB 25-63.5		No doc.
V010-2	1	A 6-9612-22-0008	Non-return valve	LKC-2-W-38.0-316L EPDM		1241273-0101
V011	1	A 6-9613-32-0315	Single seat valve	Unique SSV-W-38-220-NC-EPDM Maintainable actuator		1221122-0101
V020-2	1	A 6-9612-22-0008	Non-return valve	LKC-2-W-38.0-316L EPDM		1241273-0101
V021	1	A 6-9613-32-1527	Single seat valve	Unique SSV-W-51-220-NC-EPDM Maintainable actuator		1221122-0101

				<b>Tetra Alcross UF, Item list.</b>		<b>Doc No: IL584 584 0130</b>	
Label	No		Article No.	Denomination	Type		Doc No
V034	1	A	6-9613-00-3160	Mixproof valve	Unique-NS-38/38-22-90 EPDM		1219603-0101
V035	1	A	6-9612-62-8708	Butterfly valve	LKB-W-38-316L-EPDM-P85-NO		1215850-0101
V036	1	A	6-9613-00-3160	Mixproof valve	Unique-NS-38/38-22-90 EPDM		1219603-0101
V037	1	A	6-9612-62-8708	Butterfly valve	LKB-W-38-316L-EPDM-P85-NO		1215850-0101
V038	1	A	6-9613-10-0322	Mixproof valve	Unique-SeatClean-38/51-22-90-EPDM Without CIP		1219603-0101
V039	1	A	6-9612-62-8709	Butterfly valve	LKB-W-51-316L-EPDM-P85-NO		1215850-0101
V090	1	A	6-9612-55-3708	Regulating valve	SPC-2-W-51-NO-Kvs=32.0-E%-EPDM		1215537-0101
30 18	1	A	90510-8628	Pressure regulator	FR G3/8-10 IDO228/1 1.5-10bar(g) 5um Switch 0.45MPa Pressure gauge		1224023-0101
				<b>CIP dosing</b>			
CIP	1	T		CIP Unit NGI	CIP Unit NGI ordered acc. To CIP Matrix		
24-200	1	A	6-32002-0013-1	Orifice plate	SMS25		No doc.
				<b>Heating section</b>			
17 05	1	T	W-01-76-38-25	CIP heater	Wila Heat-exchanger 1m2 ø129x2,0 L=500mm Inlet/outlet ø76,1 W1ø38, W2ø25		No doc.
17 05A	1	T		pressure certificate for 17-05			No doc.
17 06	1	A	6-31801-2772-2	Steam trap	FT47-4.5TV, DN20, PN40		1241199-0101
17 20	1	A	6-31801-5960-1	Vacuum breaker	VB21 G1/2" PN25		1248349-0101
11 14	1	A	90510-5633	Temperature transmitter	TPT12 4-20mA Measuring range 0-160 deg. C		No doc.
11 14 A	1	A	90503-7251	Welding adapter	ISO228/1-G1/8 for Pt-100 1.4404 R=19		No doc.
11-14B	1	A	344254-0150	Sensor cable, EVT094	Cable length 15 m		No doc.
V060	1	A	90503-1597	Seat valve	2000/F80 W DN40 316L/PTFE 10bar NC Kv 38.0		1218030-0101
V061	1	A	90512-8333	Regulating valve	8802YG/90E/8792 W DN40 NC SS/PTFE Kvs 34 SMS 3008 38,0		1226927-0101
				<b>Loop 1</b>			
	1	S	2741803-0100	Basic Loop Assembly 1			No doc.
M124	1	S	2588988-0100	Centrifugal pump	LKH-60-ISO CI-22/25kW EPDM iscr		1214246-0101
				Impeller	Ø200		
				Fittings	ISO clamp Ø101.6/101.6mm		
				Motor	22 kW		
				Power supply	3x50x380-420D/660-690Y		
				Shroud	Yes		
				Legs	Yes - pads		
				Shaft Seal	DMS		
				Elastomer	EPDM		
				Special	Impeller screw		
				AL article no.:	9613380774		
				Configuration	P(1):PCL60EDSBC5MH2NLC200SYANNAFFNNNN		
CFV124	1	A	90503-8200	Constant flow valve	Flow restrictor G 1/2 REG-1200-D 0.5l/mi		1221586-0101

				<b>Tetra Alcross UF, Item list.</b>		<b>Doc No: IL584 584 0130</b>
Label	No	Article No.	Denomination	Type	Doc No	
01 05	1	T	W-02-101,6-25-25	Loop cooler	Wila Heat-exchanger 2m2 ø209x2,0 L=410mm Inlet/outlet ø101,6 W1ø25, W2ø25	No doc.
01 05A	1	T		pressure certificate for 02 05		No doc.
01 14	1	A	90510-5633	Temperature transmitter	TPT12 4-20mA Measuring range 0-160 deg. C	No doc.
01 14A	1	A	90503-7251	Welding adapter	ISO228/1-G1/8 for Pt-100 1.4404 R=19	No doc.
01-14B	1	A	344254-0150	Sensor cable, EVT094	Cable length 15 m	No doc.
01 16	1	A	90516-3219	Pressure transmitter	PMP51 ISO2852 Tri-CI.1-1/2" 0-10bar(g) 4-20mA, F15 SS house w/o display Cable gland M20x1.5 IP66/68	1229086-0101
V131	1	A	6-9611-41-4551	Butterfly valve	LKB-W-101.6-316L-EPDM	1215850-0101
V131A	1	A	6-9612-57-8902	Top unit	Think Top PNP/NPN 8-30VDC 1xsol 24VDC 6m	1213513-0101
V131B	1	A	6-9612-37-4906	Actuator	LKLA-T-133-NC-100-101.6	1215850-0101
V131C	1	A	6-9612-28-5301	Mounting bracket	LKLA 133 LKB 100-125	No doc.
V132	1	A	6-9611-41-4551	Butterfly valve	LKB-W-101.6-316L-EPDM	1215850-0101
V132A	1	A	6-9612-57-8902	Top unit	Think Top PNP/NPN 8-30VDC 1xsol 24VDC 6m	1213513-0101
V132B	1	A	6-9612-37-4906	Actuator	LKLA-T-133-NC-100-101.6	1215850-0101
V132C	1	A	6-9612-28-5301	Mounting bracket	LKLA 133 LKB 100-125	No doc.
V140	1	A	90512-8332	Regulating valve	8802YG/70E/8792 W DN25 NC SS/PTFE Kvs 16 SMS 3008 25,0	1226927-0101
SV01-1	1	A	90512-6716	Sampling valve	Microport Septum type P EPDM	1226617-0101
SV01-2	1	A	90512-6716	Sampling valve	Microport Septum type P EPDM	1226617-0101
V191	1	A	6-9612-55-3705	Regulating valve	SPC-2-W-38-NO-Kvs=8.0-E%-EPDM	1215537-0101
V030	1	A	6-9612-62-8707	Butterfly valve	LKB-W-25-316L-EPDM-P85-NO	1215850-0101
13 100	1	A	6-32002-0013-1	Orifice plate	SMS25	No doc.
13 15	1	A	90503-1876	Magnetic Flow meter	Promag 50H ISO W25.0 0-18000l/h PFA Display 20-55V AC/16-62V DC SS house Pulse signal / 4-20mA HART 0.5% cal.	1218415-0101
21 18	1	A	90503-2249	Pressure switch	PTP31 G1/2" 0-4bar(g) 12-30V DC 4-wire 2PNP with display SS house IP66 Cable gland M12x1.5	1218198-0101
V050	1	A	90503-1597	Seat valve	2000/F80 W DN40 316L/PTFE 10bar NC Kv 38.0	1218030-0101
V052	1	A	90503-1596	Seat valve	2000/E63 W DN25 316L/PTFE 11bar NC Kv 19.0	1218030-0101
<b>Loop 2</b>						
M224	1	S	2588988-0100	Centrifugal pump	LKH-60-ISO CI-22/25kW EPDM iscr	1214246-0101
				Impeller	Ø200	No doc.
				Fittings	ISO clamp Ø101.6/101.6mm	No doc.
				Motor	22 kW	No doc.
				Power supply	3x50x380-420D/660-690Y	No doc.
				Shroud	Yes	No doc.
				Legs	Yes - pads	No doc.
				Shaft Seal	DMS	No doc.
				Elastomer	EPDM	No doc.
				Special	Impeller screw	No doc.

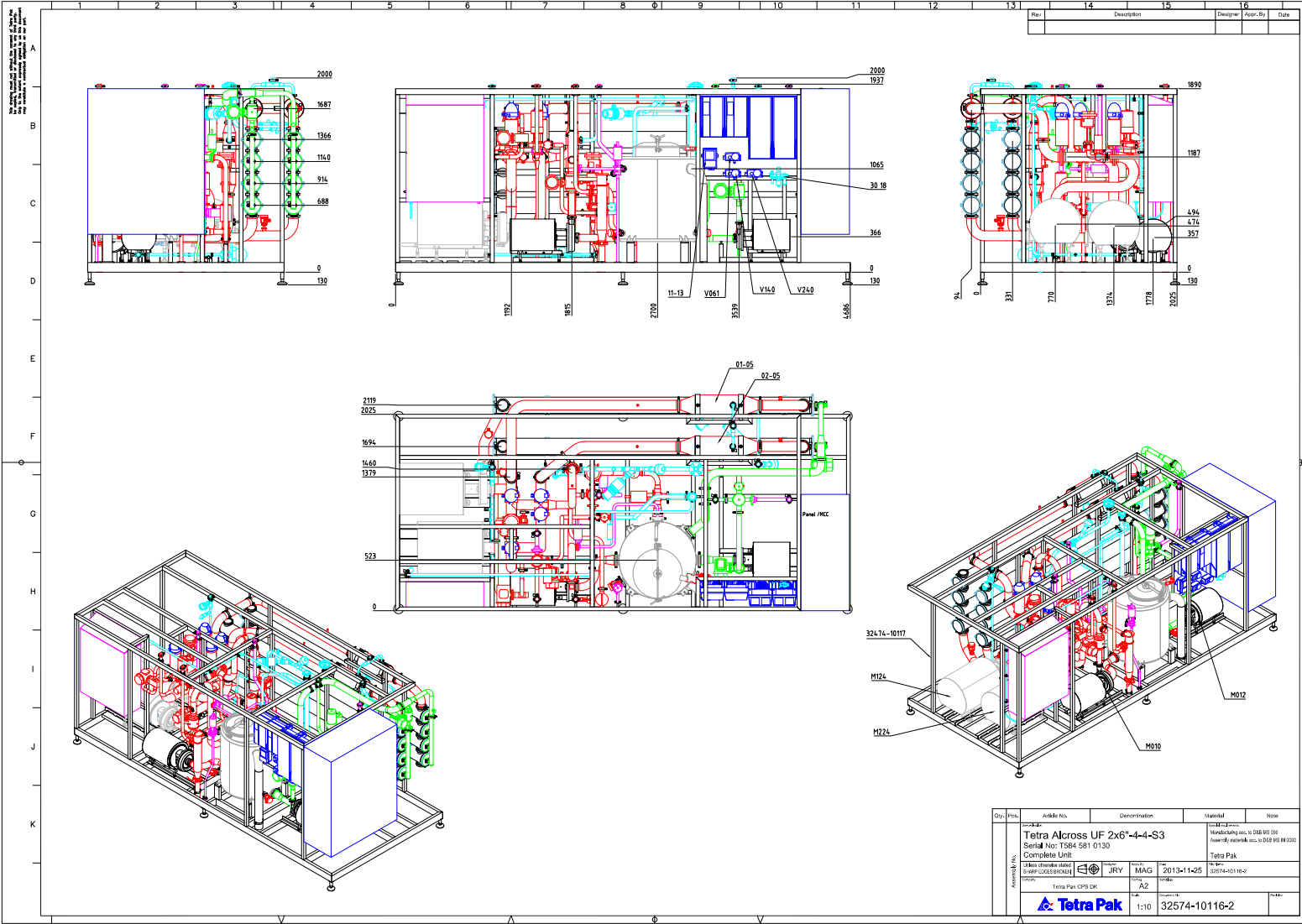
				<b>Tetra Alcross UF, Item list.</b>		<b>Doc No: IL584 584 0130</b>	
Label	No	Article No.	Denomination	Type	Doc No		
			AL article no.:	9613380774	No doc.		
			Configuration	P(1):PCL60EDSBC5MH2NLC200SYANNAFFNANN	No doc.		
CFV224	1	A 90503-8200	Constant flow valve	Flow restrictor G 1/2 REG-1200-D 0.5l/mi	1221586-0101		
02 05	1	T W-02-101,6-25-25	Loop cooler	Wila Heat-exchanger 2m2 ø209x2,0 L=410mm Inlet/outlet ø101,6 W1ø25, W2ø25	No doc.		
02 05A	1	T	pressure certificate for 02 05		No doc.		
02-14	1	A 90510-5633	Temperature transmitter	TPT12 4-20mA Measuring range 0-160 deg. C	No doc.		
02 14A	1	A 90503-7251	Welding adapter	ISO228/1-G1/8 for Pt-100 1.4404 R=19	No doc.		
02-14B	1	A 344254-0150	Sensor cable, EVT094	Cable length 15 m	No doc.		
02 15	1	A 90516-0516	Magnetic Flow meter	Promag 50H SMS W38.0 0-42000l/h PFA Display 20-55V AC/16-62V DC SS house Pulse signal / 4-20mA HART 0.5% cal.	1218415-0101		
02 16	1	A 90516-3219	Pressure transmitter	PMP51 ISO2852 Tri-CI. 1-1/2" 0-10bar(g) 4-20mA, F15 SS house w/o display Cable gland M20x1.5 IP66/68	1229086-0101		
V231	1	A 6-9611-41-4551	Butterfly valve	LKB-W-101.6-316L-EPDM	1215850-0101		
V231A	1	A 6-9612-57-8902	Top unit	Think Top PNP/NPN 8-30VDC 1xsol 24VDC 6m	1213513-0101		
V231B	1	A 6-9612-37-4906	Actuator	LKLA-T-133-NC-100-101.6	1215850-0101		
V231C	1	A 6-9612-28-5301	Mounting bracket	LKLA 133 LKB 100-125	No doc.		
V232	1	A 6-9611-41-4551	Butterfly valve	LKB-W-101.6-316L-EPDM	1215850-0101		
V232A	1	A 6-9612-57-8902	Top unit	Think Top PNP/NPN 8-30VDC 1xsol 24VDC 6m	1213513-0101		
V232B	1	A 6-9612-37-4906	Actuator	LKLA-T-133-NC-100-101.6	1215850-0101		
V232C	1	A 6-9612-28-5301	Mounting bracket	LKLA 133 LKB 100-125	No doc.		
V240	1	A 90512-8332	Regulating valve	8802YG/70E/8792 W DN25 NC SS/PTFE Kvs 16 SMS 3008 25,0	1226927-0101		
SV02-1	1	A 90512-6716	Sampling valve	Microport Septum type P EPDM	1226617-0101		
SV02-2	1	A 90512-6716	Sampling valve	Microport Septum type P EPDM	1226617-0101		

The design, layout and other details shown on this drawing are the property of Tetra Pak and are not to be reproduced or used in any way without the prior written consent of Tetra Pak.



NR.	CONNECTION	MM/FLOOR	SIZE	INFO
B	Seal water inlet	2070mm	ø25	To V052
C	CIP Water inlet	2070mm	ø63	To V001 V002
D	Feed / CIP PR	2070mm	ø38	To V008
E	CIP R	2070mm	ø38	From V035
F	Retentate/CIP R.	2070mm	ø38	From V036
G	CIP Pr.	2070mm	ø38	To V010-2
H	Permate / CIP R.	2070mm	ø38	From V038
I	CIP Pr.	2070mm	ø38	To V020-2
K	Air supply	1125mm		To 30 18
L	Coolingwater in	2070mm	ø38	To V050
M	Colling water out	2130mm	ø38	From 01-05/02-05
N	Steam in	2100 mm	DN32	To V060

Qty.	Pos.	Article No.	Denomination	Material	Note
		<b>Tetra Alcross UF 2x6"-4-4-S3</b> Serial No: T584 581 0130 <b>Installation Layout</b>		Serial numbers: Manufacturing acc. to D&B MS 006 Assembly materials acc. to D&B MS IN 0090 <b>Tetra Pak</b>	
		Unless otherwise stated SHARP EDGES BROKEN	Order: JRY Material: MAG Date: 2013-11-25	Part No: A2 Title:	Item No: 32574-10116
		<b>Tetra Pak CPS DK</b>		Scale: 1:10 Document: 32574-10116-1	



Qty.	Part	Article No.	Description	Material	Note
			<b>Tetra Across UF 2x6-4-4-S3</b>		
			Serial No: T584 581 0130		
			<b>Complete Unit</b>		
			Tetra Pak CPS OK		
			JRY	MAG	2013+1+25
			AZ		
					32574-10116-2
			<b>Tetra Pak</b>		
			1:10		32574-10116-2