

# Operating Manual

## **DELTA CU3**

### Valve-Net Device Net Control Unit



Read and understand this manual prior to operating or servicing this product.



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Delta CU3 Valve-Net Device**Net** is an APV Trademark  
 “DeviceNet is a trade mark of Open DeviceNet Vendor Association, Inc. ODVA”



## 8.1 General description

### DeviceNet in general

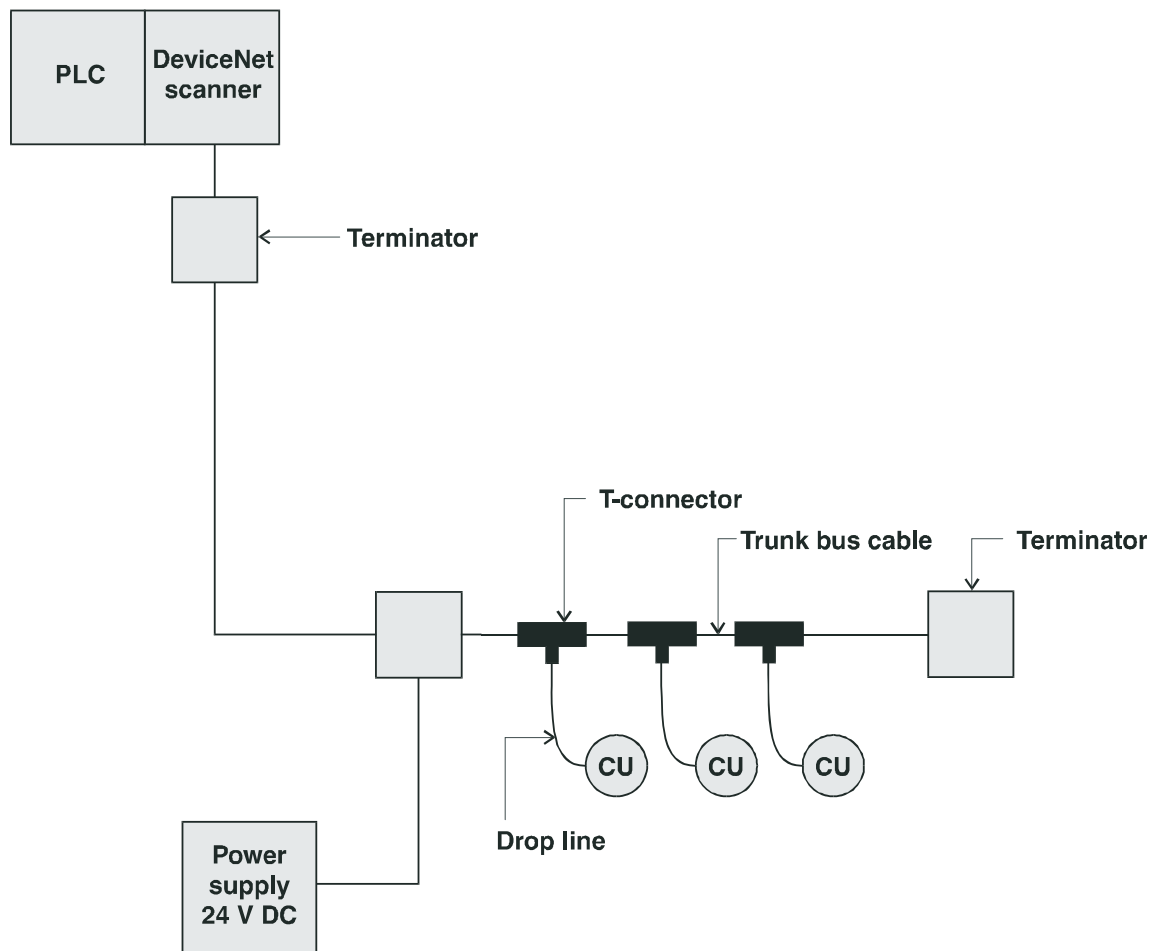
DeviceNet is a low-cost communication link to connect devices/nodes to a network and eliminate expensive hardwiring. DeviceNet provides improved communication between devices as well as important device-level diagnostics.

DeviceNet is a simple networking solution that reduces costs as well as time to wire and install industrial automation devices, while providing interchangeability of similar components from multiple vendors.

DeviceNet is an open network standard.

More information of DeviceNet: [WWW.ODVA.ORG](http://WWW.ODVA.ORG)

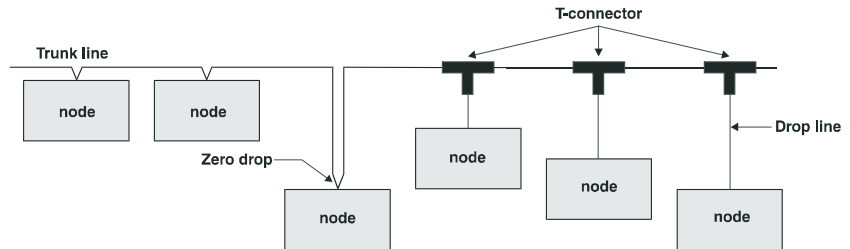
### 8.1.1 Installation principle



## 8.2 Cable and power supply

### 8.2.1 General features of DeviceNet

- Trunk line, drop line configuration



- Node removal without breaking trunk line
- Node removal and replacement under power
- Up to 64 addressable nodes
- Signal and DC Power in same cable
- Selectable Data Rates (125K, 250K, 500K)
- Both Sealed and Open-Style connections
- Zero node separation

### 8.2.2 Speeds, distance and drops

Data Rate	Trunk Length (thick cable)	Drop Length	
		Max drop	Cumulative
125K	500m (1640 ft)	6m (20 ft)	156m (512 ft)
250K	250m (820 ft)	6m (20 ft)	78 (256 ft)
500K	100m (328 ft)	6m (20 ft)	39m (128 ft)

#### Network terminating

Device Net requires a terminating resistor at each end of the trunk:

- 121 ohm
- 1/4 Watt
- 1 % metal film

Terminating resistors should only be installed at the two ends of the trunk line.

For further information please see the DeviceNet Standard.

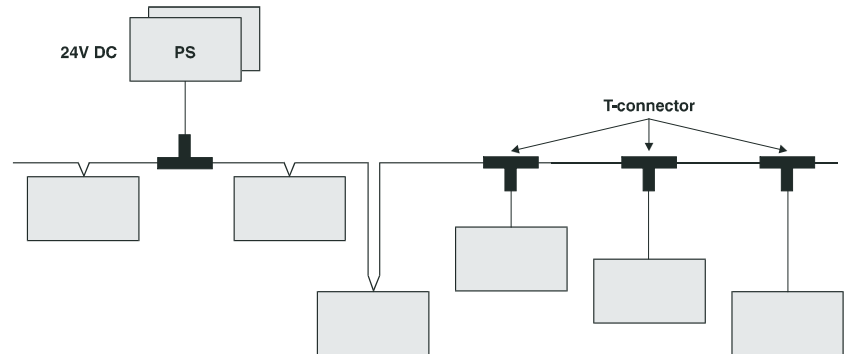


#### Note:

Thin cable may be used as trunk. Maximum distance is 100 meters, regardless of data rate.

## 8.2 Cable and power supply

### 8.2.3 Power and Signal



DeviceNet cable:

Two twisted pair

- Signal pair: low loss, high velocity with foil shield
- Power pair: up to 8A capacity with foil shield
  - *NOTE: Class II NEC Code limits current to 4A on any segment*
- Overall braid with drain wire

Nodes can be powered direct from bus

Opto-isolation for self powered devices

- e.g. drive, PCL, weigh scale, etc.

Multiple power supplies can be used

- used for additional power or as back-up

## 8.2 Cable and power supply

### 8.2.4 Solenoid Valve

The solenoid valve is equipped with a manual override. The override handle cannot be locked. Two throttling seat valves provide the facility to change the opening and closing speed. Please note that the seat valve controlling the inlet air must never be completely closed. An air-filter inside the tower protects the solenoid valve. See also section 8.3.8, 8.3.9 and 8.3.10 for details.



Air supply for solenoid valves.

Air pressure: 6 - 8 bar

**Important see chapter technical data**

### 8.2.5 NOT element

The spring force of the air actuator can be increased by the compressed air by installing a logical NOT element which directs the compressed air to the spring side of the actuator. For correct positioning. See section 8.5

### 8.2.6 Adaptor

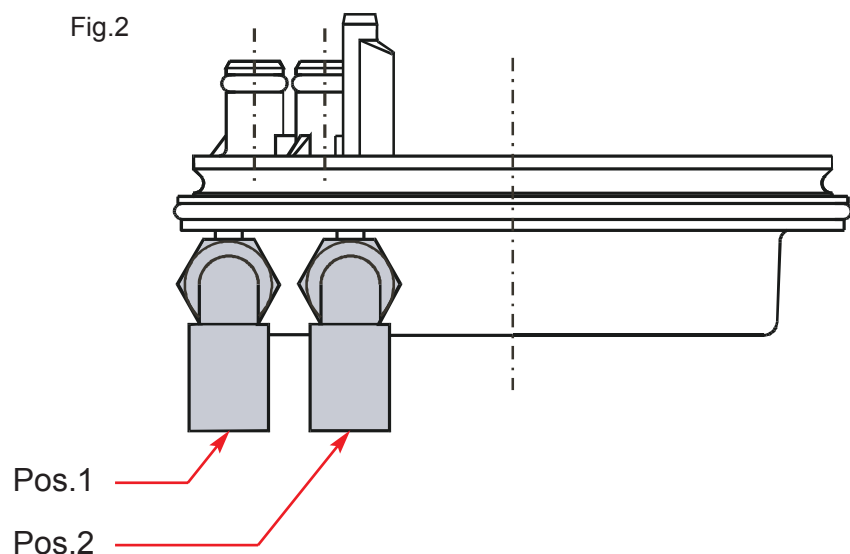
The complete control unit is composed of a control unit top and an adaptor unit. The adaptor unit consists of an adaptor and an actuator screw and these are different from valve to valve. Since the control unit can be installed to different types of valve, different adaptor units are necessary. It is the different types of valve which determine the adaptor unit to be combined with the control unit top. Section 8.5 shows which adaptor unit is used with which valve.

The adapter shown on figure 2 is fitted with two air connectors for 6x1 mm air hose.

The adapter for DELTA SV/SVS and DELTA DKR valves has an internal air connection.

Two blind plugs are in pos. 1 and pos. 2.

Fig.2





## 8.2 Cable and power supply

The adapter shown in figure 3 is for the double seat valve DELTA DA3+ and DE3. It is either equipped with one (for DELTA DE3 and DA3+ with one solenoid valve) or three air connectors (for DELTA DA3+ with three solenoids).

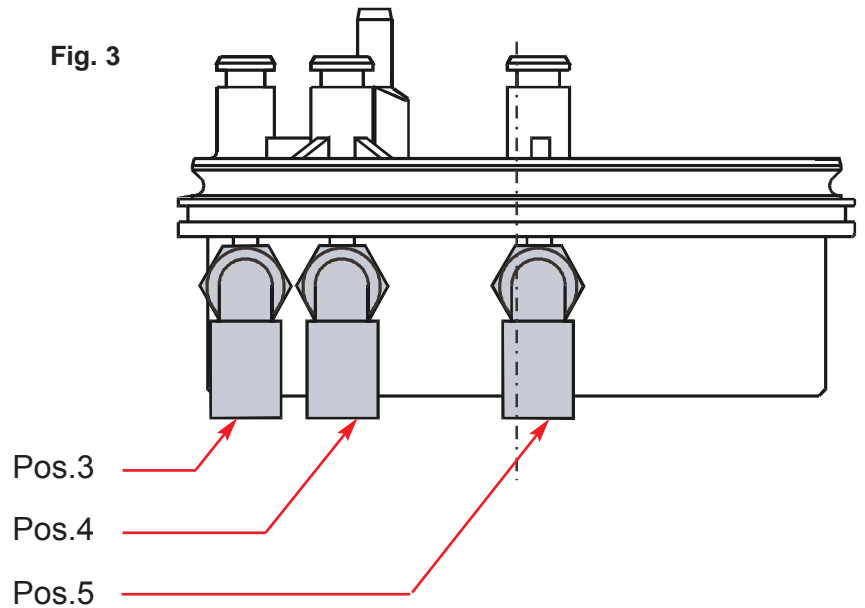
If fitted with one air connector pos. 4 and 5 are closed with a blind plug.

Pos. 3 air supply to open valve

Pos. 4 air supply to lift lower seat

Pos. 5 air supply to lift upper seat

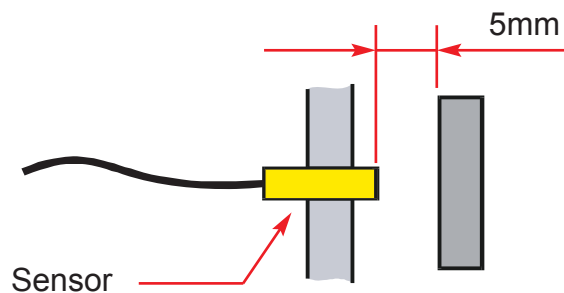
Fig. 3



### 8.2.7 External sensor

A 5V DC NPN sensor must be used.

Operating distance: 5 mm.



## 8.3 Functional description

### 8.3.1 PLC Connection

Black	<b>1</b>	Power GND
Blue	<b>2</b>	DeviceNet low
Shield	<b>3</b>	Shield
White	<b>4</b>	DeviceNet high
Red	<b>5</b>	Power +

Colors shown are DeviceNet dropcable

### 8.3.2 Cable and plug

Male plug - front



Female plug - front



Pin	Colour DeviceNet cable	Colour SDS cable	Function
1	Shield	Shield	Screen / Ground
2	Red	Brown	Bus Power V+
3	Black	Blue	Bus Power V-
4	White	Black	DeviceNet high
5	Blue	White	DeviceNet low



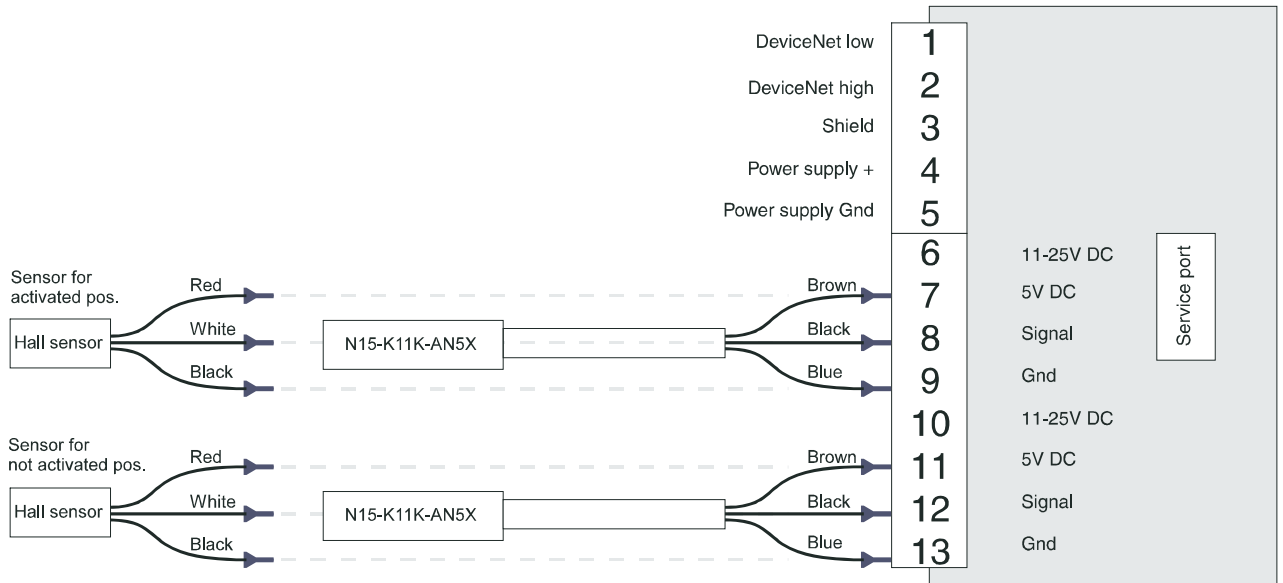
Since the screw connections on the plugs are made of stainless steel and thus may feel a little tight, it is a good idea to lubricate them with some grease for easier installation.

We recommend the grease type Klüber UH1184-201, which can be used with stainless steel.

## 8.3 Functional description

### 8.3.3 Cable connection, APV Valve-Net DeviceNet

DA3+ and DE3 comes with external sensors, other valves comes with build-in Hall sensors.



### 8.3.4 LED status indications

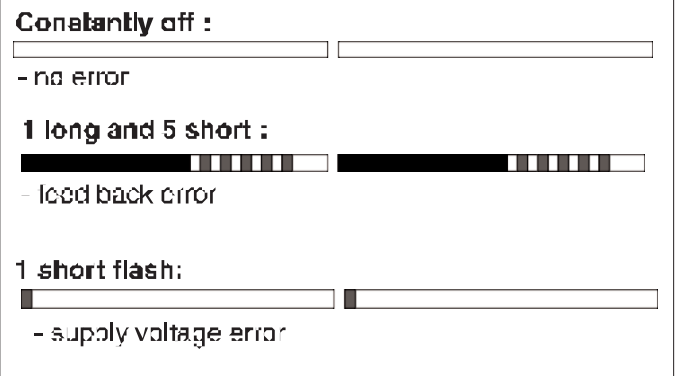
On the Valve-Net there are four LEDs to indicate errors and operating status.

- Red:** Error condition
- Green:** Solenoid operating status
- 1st Yellow:** Activated position switch status
- 2nd Yellow:** Not activated position switch status

The LEDs use different flashing signals to show different messages.




#### Flash sequences for error indication:

#### Red-LED







## 8.3 Functional description

### Yellow-LED

<b>Constantly on :</b>	
	position sensor signal OK
<b>1 short flash :</b>	
	- no position sensor signal
<b>1 short pause :</b>	
	- position sensor signal unexpectedly activated

### Green-LED

<b>Constantly on :</b>	
	- solenoid valve activated and OK
<b>1 short flash :</b>	
	- Lower seatlift
<b>2 short flash :</b>	
	Upper seatlift
<b>1 short pause :</b>	
	- solenoid power consumption too low

### 8.3.5 Set-up of DeviceNet communications

#### Definition of DeviceNet communication

Description of the DeviceNet behaviour is shown in the EDS file (Electronic Data Sheet).

ValveNet DeviceNet conforms to the DeviceNet specifications of "Group 2 only" devices.

The Valve-Net DeviceNet supports:

- Poll
- Explicit messaging

Poll data: One byte output, one byte input

Default baudrate: 125 Kbps.

Vendore ID: 686

Device type: 0

Product code: 1

Revision: 3.1

Product name: APV Valve-Net DeviceNet

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## 8.3 Functional description

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### 8.3.6 Set up slave address

DeviceNet address can be set by a terminal connect to the service port on the CU.

Register for DeviceNet address is No.12

to read address: "R12 <CR>"

to write address: W12 XX <CR>  
Where XX is the new address

#### Service port

Serial channel:

Default communication:

9600, 8bit, 1stop bit, No parity. No flowcontrol.

All received characters are echoed back.

RS232 communication adapter pinout on 9 pol D-sub female:

Pin 2	TX data
Pin 3	RX data
Pin 5	Ground
Pin 9	5V DC max 100 mA.

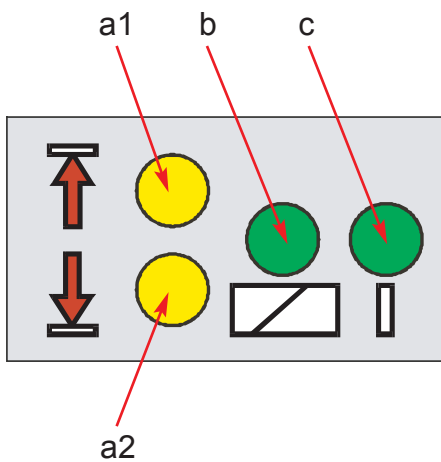
Connection to standard PC Comm-port:

Com Port	Serial adapter
----------	----------------

Pin:		Pin:
2	-	2
3	-	3
5	-	5

Normally the Serial Adapter is connected directly to the PC comport, and a flat ribbon cable connects the adapter to the DeviceNet unit.

## 8.3 Functional description



### 8.3.7 LEDs (Pos. 2)

There are four LEDs which have the following functions:

- a) Valve position. The LED lights up for valve at activated position (a1) and valve at not-activated position (a2). This is used to provide information during operation and to set the position sensors. Please note 8.2.5
- b) Lights up when there is a signal to the solenoid valve.
- c) Status information

### 8.3.8 Throttling function (Pos. 3a and 3b)

The throttling function consists of two small seat valves placed on the base console next to the solenoid valve. Their function is to make the valve open and close more slowly. This is an advantage if there is a risk of pressure surge or if it is desirable for other reasons. Please note that the seat valve controlling the inlet air must never be completely closed.

### 8.3.9 Manual activation of the solenoid valve (Pos. 4)

The solenoid valve can be activated manually by turning the handle placed on the top of the solenoid valve. This is used for adjusting the Hall sensor or for by-passing the control system to activate the valve.

### 8.3.10 Removal of control unit from valve (Pos. 5)

The control unit is released by turning the ribbed ring from the "lock" to the "un-lock" symbol. Then the control unit can be easily lifted off. Removal of the control unit shuts off the air supply.

### 8.3.11 Adjustment of feed-back indication (Pos. 6)

After dismantling of the CU, check that the position of the Hall sensors are properly adjusted.

The procedure is as follows:

The Hall sensors must be adjusted to transmit a signal for activated position and not-activated position valve respectively. In this case it is an advantage to use manual activation (Pos. 4).

Turn the adjustment screws (Pos. 6) up/down until the correct LED just lights up. Check that it is in fact the correct LED that lights up. To allow for small fluctuations, turn the adjustment screws two revolutions in the direction in which the LED remains lit.

Control unit for DELTA DA3+ and DE3 valves are fitted with external proximity switches.

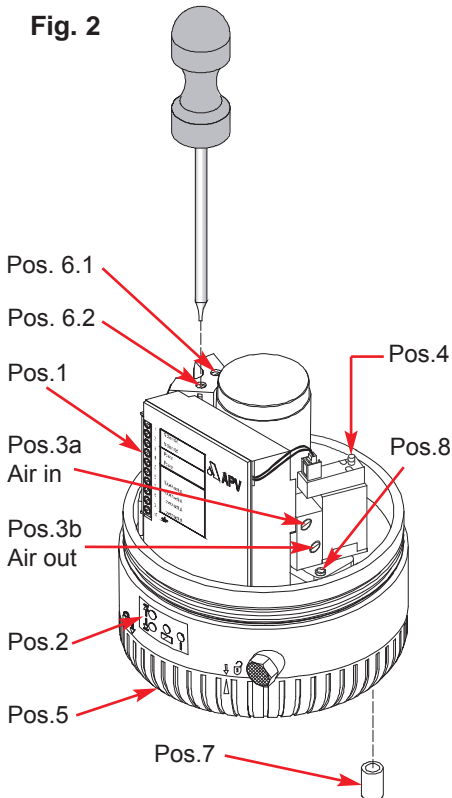



Fig. 2


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## 8.3 Functional description


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### Hall sensors

The Hall sensor for activated position is fitted on screw in groove marked  pos. 6.1

The Hall sensor for not-activated position is fitted on screw in groove marked  pos. 6.2


The LED for activated sensor is marked 


The LED for not-activated sensor is marked 

### Proximity switches

For DA3+ and DE3 external Proximity switches is used. Activated position sensor inserted in low sensor pocket.

Not activated position sensor in upper sensor pocket.

The LED for activated sensor is marked 

The LED for not-activated sensor is marked 

### 8.3.12 Pressure relief valve (Pos. 7)

The pressure relief valve ensures that no pressure builds up in the cap.

### 8.3.13 Removal of the electronic box (pos. 1)

The electronic box can be removed by loosen two screws. One screw placed between the two guides for the Hall sensors, and the other is placed on the right side of the electronic box. Remove the cable (plug) from the solenoid valve.

During assembly it should be secured, that the wires for the hall sensors are not tangled, preventing them from sliding up and down unobstructed in the wire tracks.

### 8.3.14 Removal of solenoid valve (pos. 8)

Remove the cable (plug) from the solenoid valve. Loosen the 2 screws which are fixing the solenoid valve, manifold and gasket.

During assembly it is to be ensured, that the gasket is positioned very precisely between the edges at the manifold. The torque for the 2 screws for the solenoid valve is 1,3 Nm, max. 1,6 Nm.

## 8.4 Electrical data

### 8.4.1 Power supply



The complete unit is power supplied from the DeviceNet.  
 Supply voltage: 11-25 V DC, as specified for the DeviceNet  
 Supply current: Max. 45mA at 24V DC supply,  
 without active solenoid.  
 Max. 80mA at 24V DC supply,  
 with one solenoid active

Electrical connection: Direct cable PG  
 Dropcable: The unit is supplied with 0.5M dropcable.

### 8.4.2 General technical data

Ambient temperature : -20.....+70°C

Enclosure rating: IP 67

CE: EMC 89/336/EEC

**Control air :** quality acc. to DIN/ISO 8573-1

**- solid partice content :** quality class 3,  
 maximum number of particeles per m<sup>3</sup>  
 10 000 of size 0,5µm < d < 1,0µm  
 500 of size 1,0µm < d < 5,0µm

**- water content :** quality class 4,  
 max. pressure dew point +3°C  
 (for installations at lower temperatures  
 or higher altitudes additional measures  
 must be considered to reduce the  
 pressure dew point accordingly)

**- oil content :** quality class 1,  
 max. 0,01mg/m<sup>3</sup>  
 (the used oil must be compatible with  
 Polyurethan elastomer materials)

## 8.5 Warnings

If welding is done close to the control unit, the following precautions should be taken:

- always ground the welding torch close to the welding point
- remove the cable for the control unit from the welding point so that the magnetic field around the welding arc does not enter the cable and damage the electronics.







Translation of original manual

rev. 1



Your local contact:



APV  
Zeichenstraße 49  
D-59425 Unna

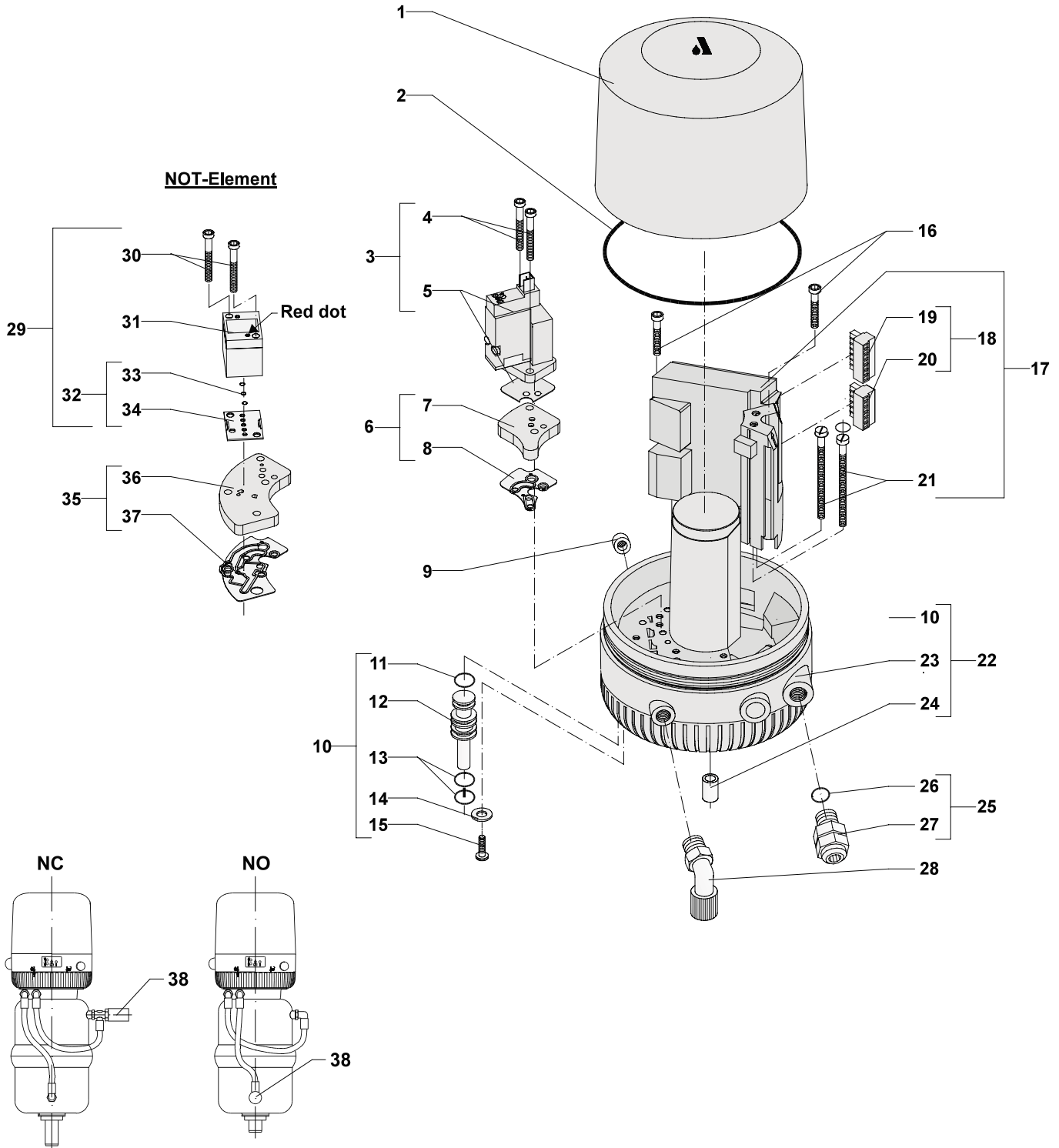
Phone: +49(0) 23 03/ 108-0 Fax: +49(0) 23 03 / 108-210

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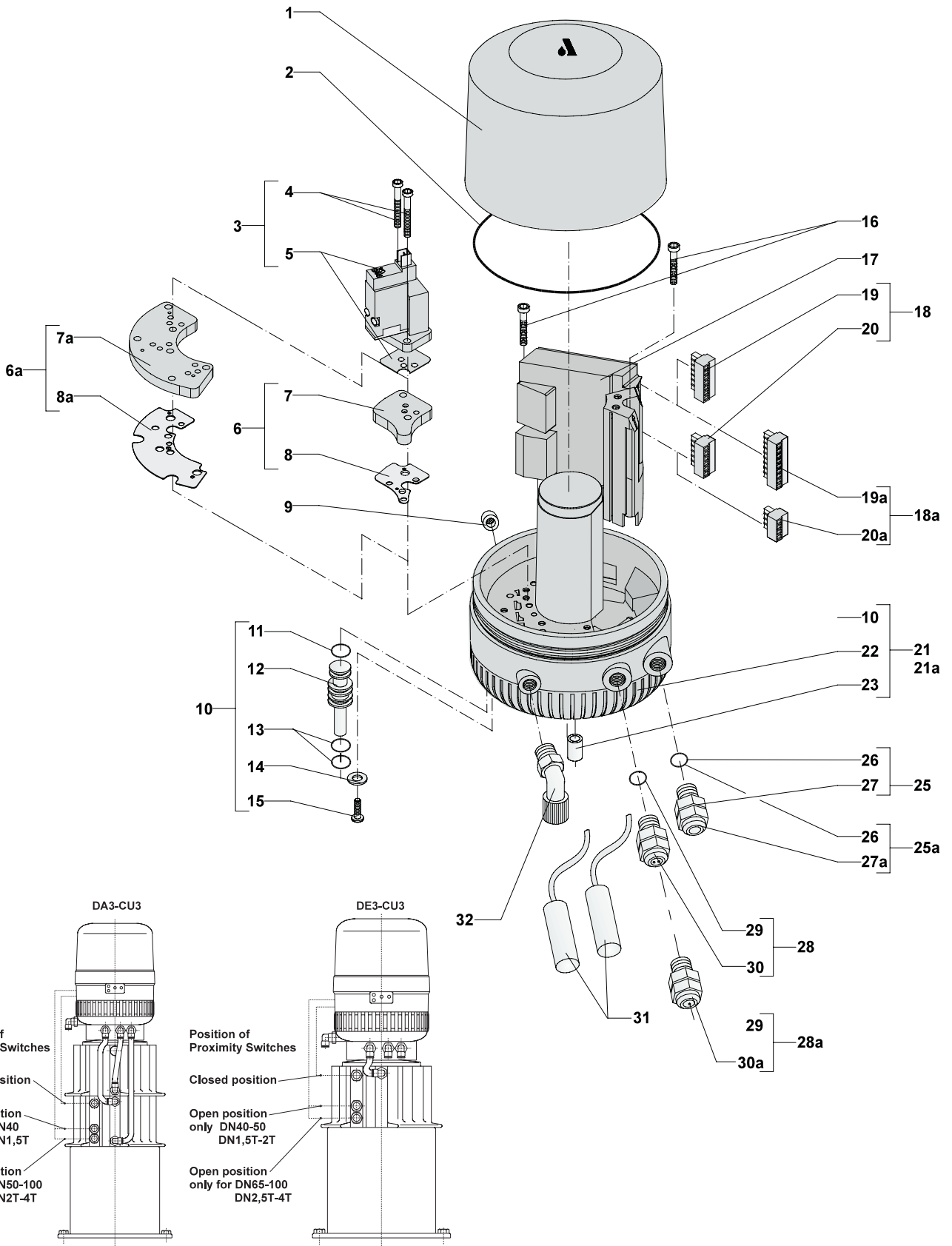
Pos	Stk/Qty	Matr./Dim	Benævnelse	Description	Del nr. / Part No.
-	-		Styreenhed - Standard	Control unit - Standard	804611
-	-		Styreenhed - NOT-element	Control unit - NOT-element	804612
<b>1</b>	1		Hætte	Cap	273998
<b>2</b>	1	Ø105x2.5 /NBR	O-ring	O-Ring	-
<b>3</b>	1		Magnetventil komplet	Solenoid Valve complete	773949
- 4	2		TORX-skrue	TORX-screw	-
- 5	1		Magnetventil og pakning	Solenoid Valve and Gasket	-
<b>6</b>	1		Manifold sæt	Manifold kit	808361
- 7	1		Manifold	Manifold	-
- 8	1		Pakning til manifold	Gasket for Manifold	-
<b>9</b>	1		Lyddæmper	Sound Damper	773223
<b>10</b>	1		Stempel sæt	Piston kit	808362
- 11	1	Ø7.65x1.78 /NBR	O-ring	O-Ring	-
- 12	1		Stempel	Piston	-
- 13	2	Ø9.25x1.78 /NBR	O-ring	O-Ring	-
- 14	1	Ø4.3 A2 /DIN 9021	Skive	Washer	-
- 15	1	40x12 /WN 1451	Skrue	Screw	-
<b>16</b>	2	40x45 /WN 1452	TORX-skrue	TORX-screw	773225
<b>17</b>	1		Elektronikboks komplet	Electronic Box complete	804649
- 18	1		Stik sæt	Plug kit	808383
- 19*	1		Stik til klemrække, 5 ledninger	Plug for terminal block, 5 wire	-
- 20*	1		Stik til klemrække, 8 ledninger	Plug for terminal block, 8 wire	-
21	2		Justerskrue	Adjusting Screw	-
<b>22</b>	1		Sokkel sæt	Base kit	808310
- 23	1		Sokkel	Base	-
- 24	1		Overtryksventil	Pressure relief Valve	-
<b>25</b>	1		Kabelforskrunding sæt	Cable Inlet kit	808365
- 26	1	Ø12.42x1.78 /NBR	O-ring	O-Ring	-
- 27	1		Kabelforskrunding	Cable Inlet	-
<b>28</b>	1		Drejelig vinkel	Elbow Connector	773222
<b>29</b>	1		NOT-element sæt	NOT-element Complet	808366
- 30	2	40x50 /WN 1452	TORX-skrue	TORX-screw	-
- 31	1		NOT-element	NOT-element	-
- 32	1		Paknings sæt	Gasket kit	808368
- 33**	3	Ø3.68x1.78 /NBR	O-ring	O-Ring	-
- 34	1		Pakning	Gasket	-
<b>35</b>	1		Manifold sæt	Manifold kit	808369
- 36	1		Manifold	Manifold	-
- 37	1		Pakning til manifold	Gasket for Manifold	-
<b>38***</b>	1		Reduktionsventil	Reduction Valve	773406

\* Reservedel til elektronikboks  
Spare part for Electronic Box

\*\* Reservedel for NOT-element  
Spare part for NOT-element

\*\*\* Reduktionsventilen, som medfølger til montering af aktuatoren, reducerer lufttrykket til 5 bar.  
The pressure reducing valves included for mounting in the actuator reduce the air pressure to 5 Bar









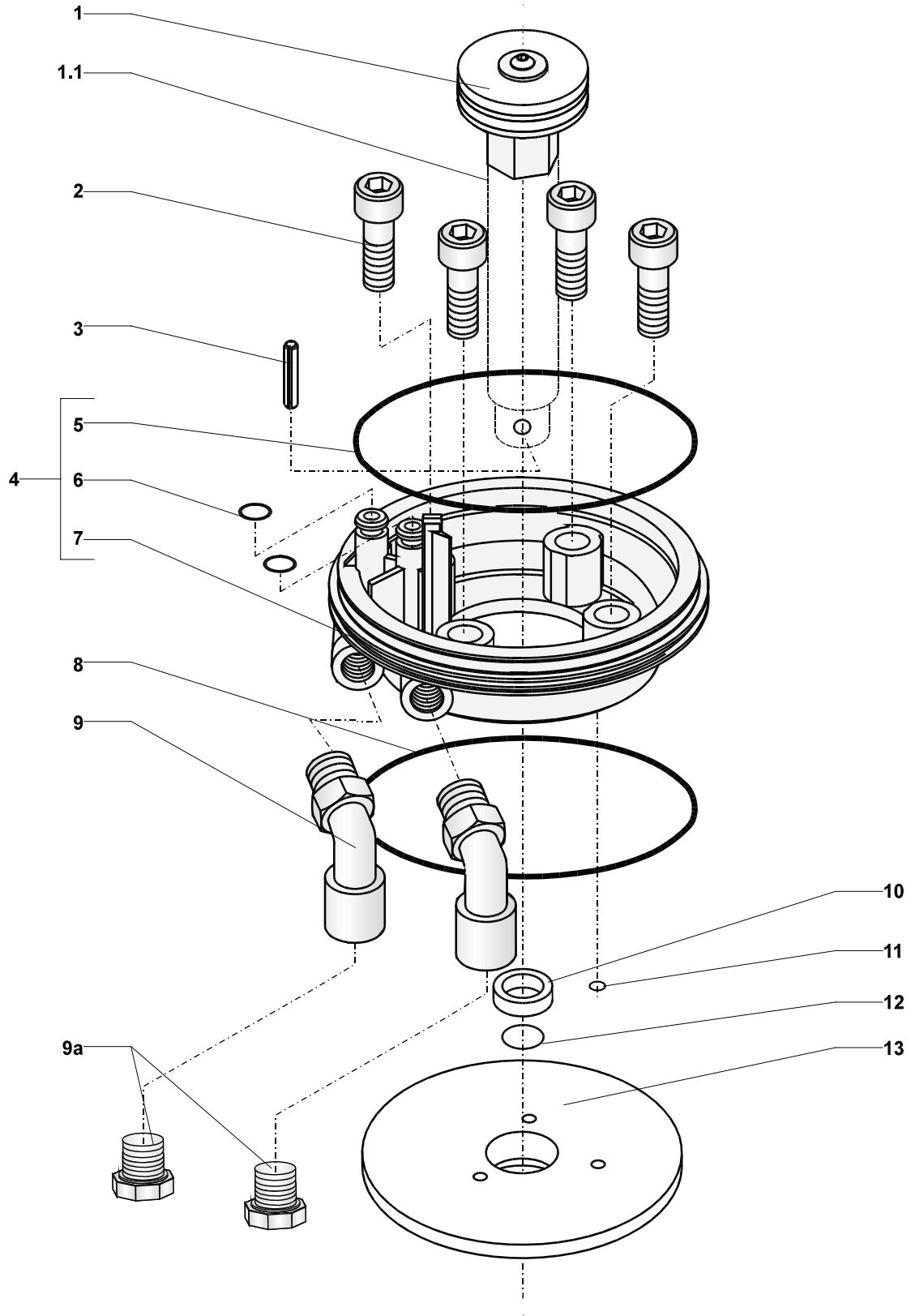
**Styreenhed / Control unit**
**DELTA CU3 for DA3+ / DE3 - DeviceNet**

Pos	Stk/Qty	Matr./Dim	Benævnelse	Description	Del nr. / Part No.
-	-		Styreenhed - 1 magnetventil	Control unit - 1 Solenoid Valve	804613
-	-		Styreenhed - 3 magnetventiler	Control unit - 3 Solenoid Valves	804614
<b>1</b>	1		Hætte	Cap	273998
<b>2</b>	1	Ø105x2.5 /NBR	O-ring	O-Ring	-
<b>3</b>	1		Magnetventil sæt	Solenoid Valve kit	773949
- 4	2		TORX-skrue	TORX-screw	-
- 5	1		Magnetventil	Solenoid Valve	-
<b>6</b>	1		Manifold sæt - 1 magnetventil	Manifold - 1 Solenoid Valve	808361
- 7	1		Manifold	Manifold	-
- 8	1		Pakning	Gasket	-
<b>6a</b>	1		Manifold sæt - 3 magnetventiler	Manifold - 3 Solenoid Valves	808371
- 7a	1		Manifold	Manifold	-
- 8a	1		Pakning	Gasket	-
<b>9</b>	1		Lyddæmper	Sound Damper	773223
<b>10</b>	1		Stempel sæt	Piston kit	808362
- 11	1	Ø7.65x1.78 /NBR	O-ring	O-Ring	-
- 12	1		Stempel	Piston	-
- 13	2	Ø9.25x1.78 /NBR	O-ring	O-Ring	-
- 14	1	Ø4.3 A2 /DIN 9021	Skive	Washer	-
- 15	1	40x12 /WN 1451	Skrue	Screw	-
<b>16</b>	2	40x45 /WN 1452	TORX-skrue	TORX-screw	773225
<b>17</b>	1		Elektronikboks - 1 magnetventil	Electronic Box - 1 Solenoid Valve	804650
<b>18</b>	1		Stik sæt - 1 magnetventil	Plug kit - 1 Solenoid Valve	808383
- 19	1		Stik til klemrække, 5 ledninger	Plug for terminal block, 5 wire	-
- 20	1		Stik til klemrække, 8 ledninger	Plug for terminal block, 8 wire	-
<b>17a</b>	1		Elektronikboks - 3 magnetventiler	Electronic Box - 3 Solenoid Valves	804651
<b>18a</b>	1		Stik sæt - 3 magnetventiler	Plug kit - 3 Solenoid Valves	808383
- 19a	1		Stik til klemrække, 5 ledninger	Plug for terminal block, 5 wire	-
- 20a	1		Stik til klemrække, 8 ledninger	Plug for terminal block, 8 wire	-
<b>21</b>	1		Sokkel sæt - 1 magnetventil	Base kit - 1 Solenoid Valve	808311
<b>21a</b>	1		Sokkel sæt - 3 magnetventiler	Base kit - 3 Solenoid Valves	808312
<b>22</b>	1		Sokkel	Base	-
<b>23</b>	1		Overtryksventil	Pressure relief Valve	-
<b>25</b>	1		Kabelforskrunding sæt (4-8 mm)	Cable Inlet kit (4-8 mm)	808365
- 26	1	Ø12.42x1.78 /NBR	O-ring	O-Ring	-
- 27	1		Kabelforskrunding	Cable Inlet	-
<b>25a</b>	1		Kabelforskrunding sæt (5-10 mm)	Cable Inlet kit (5 10 mm)	808372
- 26	1	Ø12.42x1.78 /NBR	O-ring	O-Ring	-
- 27a	1		Kabelforskrunding	Cable Inlet	-
<b>28</b>	1		Kabelforskrunding f. 2 induktiv føler	Cable Inlet f. 2 Proximity switch	808373
- 29	1	13.00 x 2.00/NBR 70	O-ring	O-Ring	-
- 30	1		Kabelforskrunding	Cable Inlet	-
<b>28a</b>	1		Kabelforskrunding f. 1 induktiv føler	Cable Inlet f. 1 Proximity switch	808380
- 29	1	Ø18.77x1.78 NBR 70	O-ring	O-Ring	-
- 30a	1		Kabelforskrunding	Cable Inlet	-
<b>31</b>	2		Induktiv føler (5V NPN)	Proximity Switch (5V NPN)	773479



## 8.5 Adaptor

## DELTA CU3





## 8.5 Adaptor

## DELTA CU3

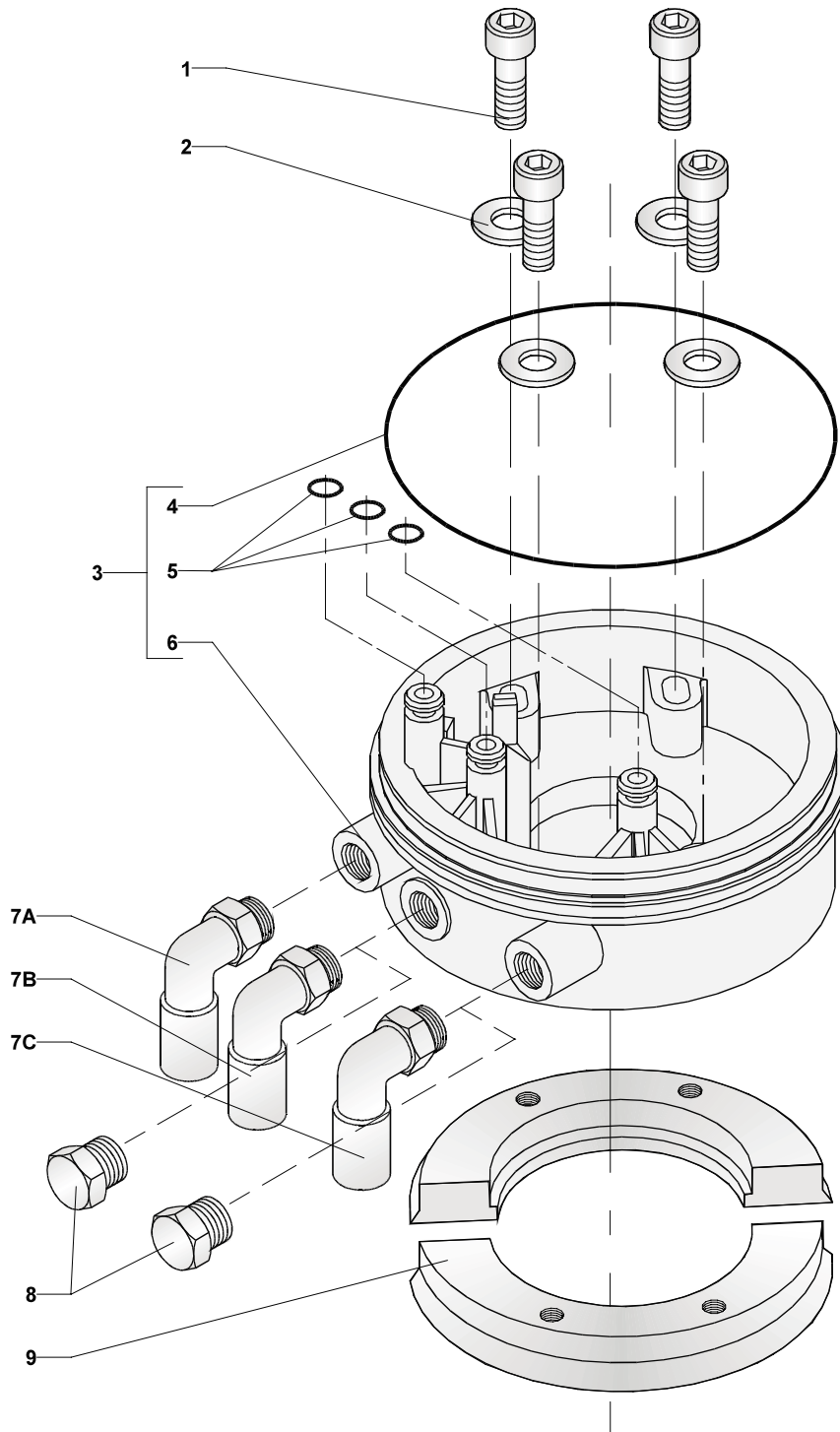
Pos.	Stk./Qty.	Matr./Dim	Benævelse	Description	DELTA	DELTA	VPS/VPL/	VPS-3A	VPS-3A	VPM
					SW4	SW4 125/150	VPB		Longstroke	
					Del nr. / Part No.					
-	-		Komplet adaptor	Complete adaptor	801192	08-48-362/93	801193	801198	801199	801191
1	1		Aktuatorskrue	Actuator screw	188645	188645	801241	801246	801247	801248
1.1	1		Forlængerstykke	Extension rod	----	15-26-057/93	----	----	----	----
2	4	M8x25/DIN912 A4	Skrue	Screw	701942	701942	----	----	----	----
	4	M5x18/DIN84 A2	Skrue	Screw	----	----	773353	773353	773353	773353
3	1		Split	Split pin	----	----	----	773357	773357	----
4	4		Adaptor sæt	Adaptor kit	808376	808376	808377	808377	808377	808377
- 5	1	Ø88.62x1.78 /NBR	O-ring	O-Ring	-	-	-	-	-	-
- 6	2	Ø5.28x1.78 /NBR	O-ring	O-Ring	-	-	-	-	-	-
- 7	1		Adaptor	Adaptor	-	-	-	-	-	-
8	1	Ø88x1.5 /NBR	O-ring	O-Ring	----	----	772123	772123	772123	772123
9	2		Drejelig vinkel	Elbow connector	773222	773222	773222	773222	773222	773222
9a	2		Prop	Plug	----	----	----	----	----	----
10	1		Pakning	Gasket	----	----	----	----	----	----
11	1	Ø13x2 /NBR70	O-ring	O-Ring	----	----	----	----	----	----
12	1		O-ring	O-Ring	----	----	----	----	----	----
13	1		Konsol	Konsol	----	----	----	----	----	801231

Pos.	Stk./Qty.	Matr./Dim	Benævelse	Description	SV/SVS NW 25-100 and 1"-4", DKR NW25-65 and 1" - 2,5"		SVS NW 125 - 250, DKR 80 - 125 and 3" - 4"		S2/D2	S3
					Del nr. / Part No.					
-	-		Komplet adaptor	Complete adaptor	801194	801195	801196	801197		
1	1		Aktuatorskrue	Actuator screw	801242	801243	801244	801245		
2	4	M8x25/DIN912 A4	Skrue	Screw	----	----	----	701942		
	4	M5x18/DIN84 A2	Skrue	Screw	773353	773353	----	----		
	4	M8x22/DIN912A480	Skrue	Screw	----	----	773356	----		
3	1		Split	Split pin	----	----	----	----		
4	4		Adaptor sæt	Adaptor kit	808378	808378	808379	807379		
- 5	1		O-ring	O-Ring	-	-	-	-		
- 6	2		O-ring	O-Ring	-	-	-	-		
- 7	1		Adaptor	Adaptor	-	-	-	-		
8	1	Ø90x2 /NBR	O-ring	O-Ring	771640	771640	----	----		
9	2		Drejelig vinkel	Elbow connector	----	----	773222	773222		
9a	2		Prop	Plug	750218	750218	----	----		
10	1		Pakning	Gasket	----	705918	----	----		
11	1	13X2 /NBR 70	O-ring	O-Ring	773354	773354	----	----		
12	1	Ø11 X 3 /NBR	O-ring	O-Ring	----	771978	----	----		
13	1		Konsol	Konsol	----	----	----	----		



## 8.5 Adaptor

## DELTA CU3 for DA3+ / DE3







## 8.5 Adaptor

## DELTA CU3 for DA3+ / DE3

Pos	Benævnelse	Description
7A	Luft for hovedcylinder	Air for main actuator
7B	Luft for sædeløft bund	Air for lower seat lift
7C	Luft for sædeløft top	Air for upper seat lift

### Adaptor for DA3+ / DE3 - 1 magnetventil / 1 Solenoid valve

Pos	Stk/Qty	Matr./Dim	Benævnelse	Description	Del nr. / Part No.
-	-		Adaptor komplet - 1 magnetventil	Adaptor complete - 1 solenoid Valve	801233
1	4	M5x25 A2	Skrue	Screw	-
2	4	9x5.48x1.0	Skive	Washer	-
3	1		Adaptor kit	Adaptor kit	808375
- 4	1	Ø88.62x1.78 /NBR	O-ring	O-Ring	-
- 5	3	Ø5.28x1.78 /NBR	O-ring	O-Ring	-
- 6	1		Adaptor	Adaptor	-
7A	1		Drejevinkel	Elbow connector	773222
8	2		Prop	Plug	750218
9	2		Monteringshalvpart	Adaptor half	274699

### Adaptor for DA3+ - 3 magnetventil / 3 Solenoid valve

Pos	Stk/Qty	Matr./Dim	Benævnelse	Description	Del nr. / Part No.
-	-		Adaptor komplet - 3 magnetventil	Adaptor complete - 3 solenoid Valve	801237
1	4	M5x25 A2	Skrue	Screw	-
2	4	9x5.48x1.0	Skive	Washer	-
3	1		Adaptor kit	Adaptor kit	808375
- 4	1	Ø88.62x1.78 /NBR	O-ring	O-Ring	-
- 5	3	Ø5.28x1.78 /NBR	O-ring	O-Ring	-
- 6	1		Adaptor	Adaptor	-
7A-B-C	3		Drejevinkel	Elbow connector	773222
8	-		Prop	Plug	-- -- --
9	2		Monteringshalvpart	Adaptor half	274699