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# MilkoScan™ FT+ Spare Parts Manual

6002 9177 / Rev. 7



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| <b>Rev.</b> | <b>Date of Issue</b> | <b>Revised Material</b>      |
|-------------|----------------------|------------------------------|
| 1           | 2008-08-15           | First issue.                 |
| 2           | 2009-04-02           | Spare parts updated.         |
| 3           | 2009-05-27           | Minor changes.               |
| 4           | 2010-03-03           | Major update.                |
| 5           | 2011-10-10           | Major update of spare parts. |
| 6           | 2016-02-19           | Major update.                |
| 7           | 2016-12-08           | Section 22-27 updated.       |
|             |                      |                              |
|             |                      |                              |
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# 1 General

This document contains Spare Parts for MilkoScan™ FT+.



## Warning

***Please read Safety Precautions in the Service Manual prior to maintenance or exchange of spare parts.***

***The system may only be repaired by FOSS personnel or by other personnel approved by FOSS.***

## 1.1 Explanation of Definitions

Explanation of definitions used in this manual:

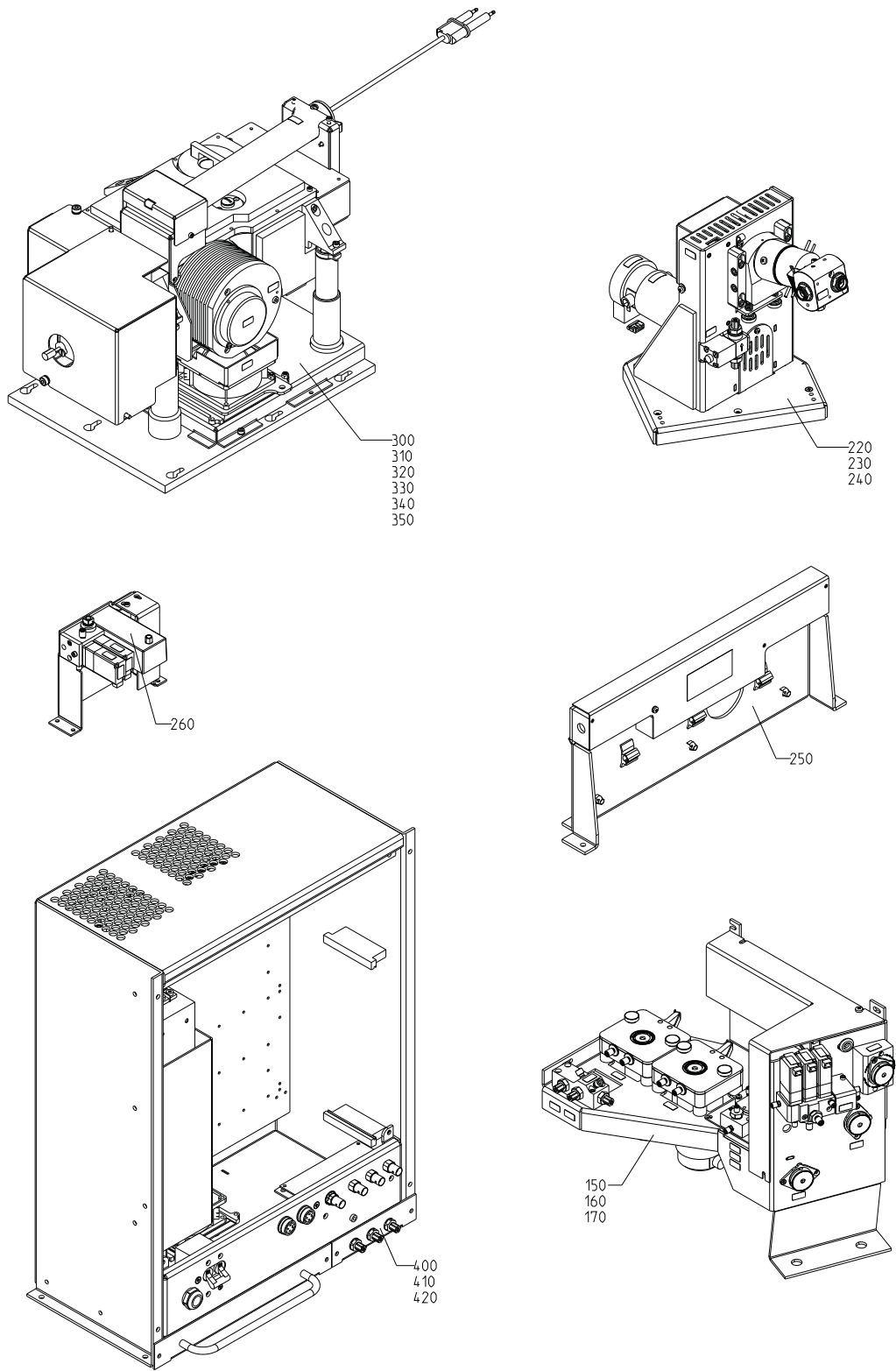
- Drawing No.                      FOSS drawing number.
- Page                                Drawing page in FOSS database.
- Part No.                          Spare part number for ordering.
- Prod. No.                         FOSS production number.

### Note:

When ordering new spare parts, please use the Part No. stated in this manual for the parts in question.

## **2 Assembly Identification**

| <b>Pos.</b> | <b>Description</b>                 |
|-------------|------------------------------------|
| 150-1       | Heat Exchanger                     |
| 160-1       | Tube Pump                          |
| 170-1       | Input Selector Unit                |
| 170-2       | Input Selector Unit, El.Connection |
| 170-3       | Input Selector Unit, Tubing        |
| 220-1       | Homogenzier                        |
| 230-1       | H-Pump Baseplate                   |
| 240-1       | H-Pump Unit                        |
| 240-2       | H-Pump Unit                        |
| 250-1       | Sample Heater                      |
| 260-1       | H-Stage 30 Bar                     |
| 300-1       | Accumulator assy                   |
| 320-1       | Cuvette Unit                       |
| 320-2       | Cuvette Unit                       |
| 330-1       | Source Unit                        |
| 340-1       | Vibration Damper                   |
| 350-1       | Interferometer Unit                |
| 350-2       | Interferometer Unit                |
| 400-1       | El Baseplate Unit                  |
| 410-1       | Power Supply Unit                  |
| 420-1       | EL Box Unit                        |

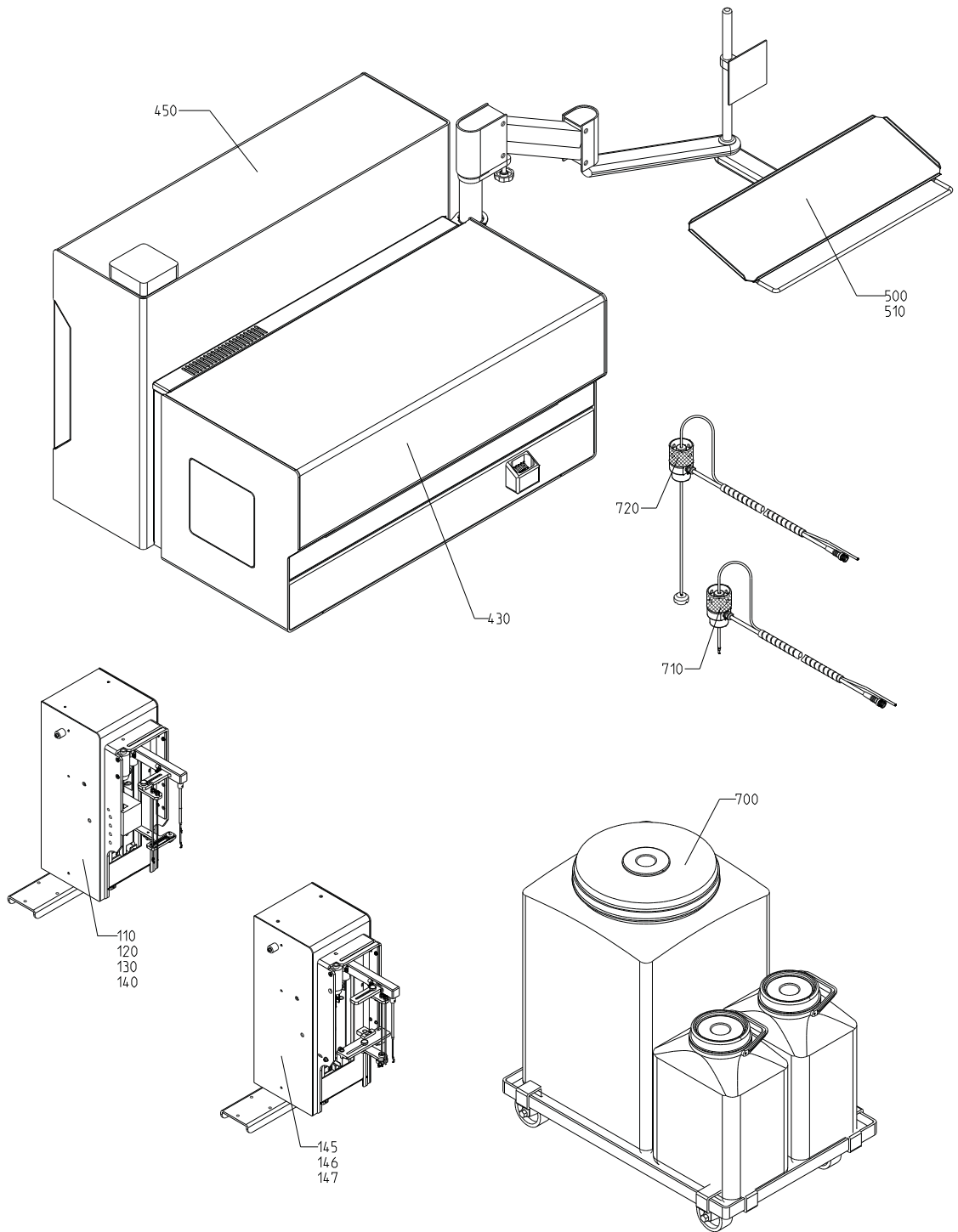


60026992 Doc. no. 20000035042 Doc. Ver. 09 Doc. Type 95

1

Fig. 1

| <b>Pos.</b> | <b>Description</b>                   |
|-------------|--------------------------------------|
| 100-1       | Pipette Arm Unit                     |
| 120-1       | Pipette front plate                  |
| 130-1       | Pipette Unit                         |
| 140-1       | Pipette Kit                          |
| 145-1       | Pipette Front Plate                  |
| 146-1       | Pipette Arm Unit                     |
| 147-1       | Pipette Unit                         |
| 148-1       | Pipette kit Msc FT+                  |
| 430-1       | Lid Unit                             |
| 450-1       | Cabinet                              |
| 500-1       | Monitor Arm                          |
| 510-1       | Monitor Cables                       |
| 600-1       | Basic Unit                           |
| 600-2       | Basic Unit                           |
| 600-3       | Basic Unit, El. Connection           |
| 700-1       | Container Trolley                    |
| 710-1       | Container Lid, Waste System          |
| 720-1       | Container Lid, Buffer/Diluent System |



60027086 Doc. no. 20000042459 Doc. Ver. 08 Doc. Type 95

2

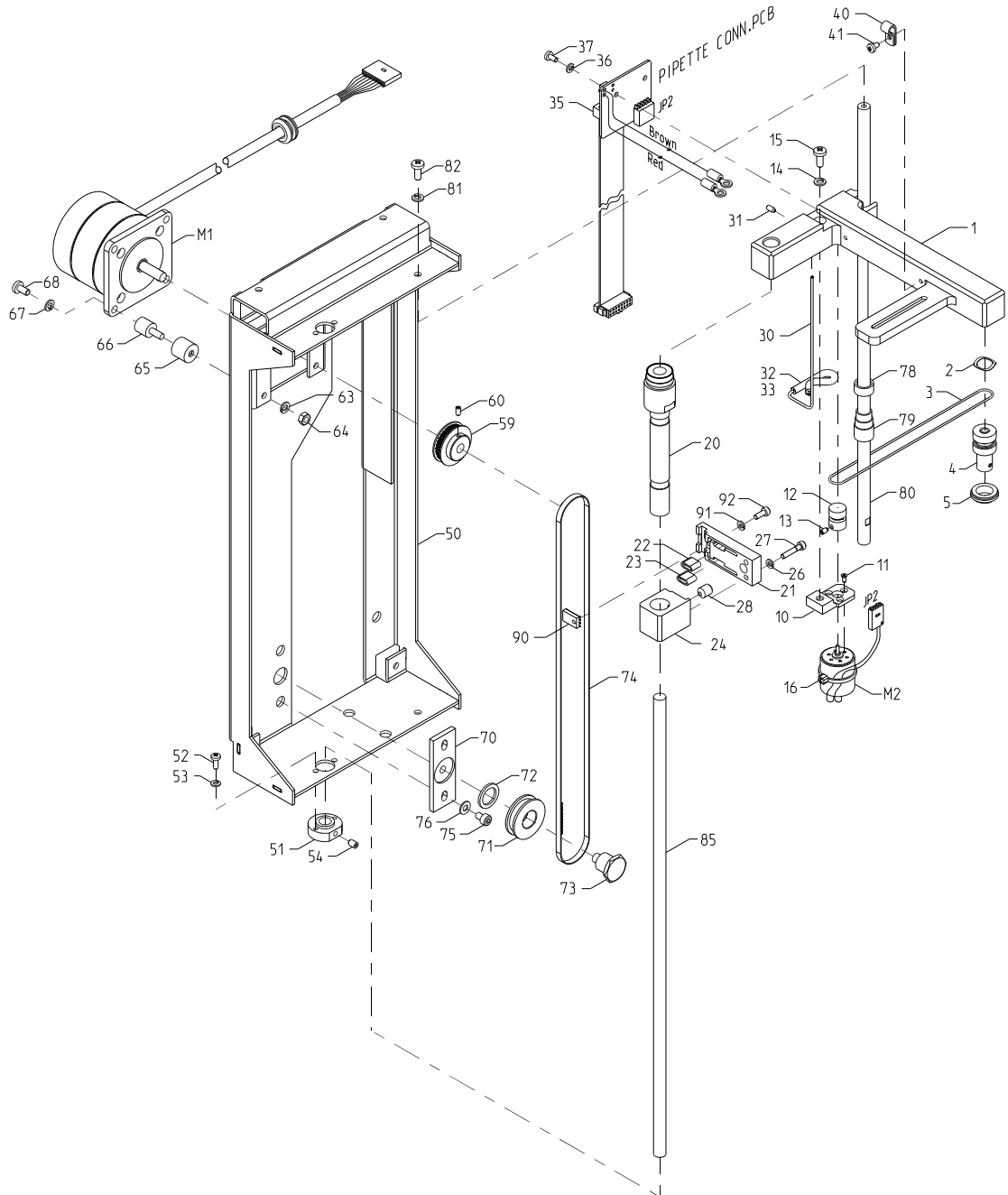
Fig. 2

### 3 Pipette Arm Unit

**Drawing No.:** 01010640

**Page:** 100-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>                | <b>Prod. No.</b> |
|-------------|-----------------|-----------------------------------|------------------|
| 2           | 00327957        | Spring                            |                  |
| 3           | 00504548        | Belt                              |                  |
| 4           | 00504936        | Shaft CP.                         |                  |
| 5           | 00503755        | Union                             |                  |
| 13          | 00103275        | Allen screw                       |                  |
| 14          | 00109108        | Springwasher                      |                  |
| 15          | 00820365        | Screw m4x10                       |                  |
| 16          | 00049254        | Cable ties 2.5mm x 100mm Pa natur |                  |
| 20          | 00504928        | Housing                           |                  |
| 21          | 00503557        | Bar                               |                  |
| 22          | 60045822        | Silic. Ø4x7                       | 00094789         |
| 23          | 60045822        | Silic. Ø4x7                       | 00094789         |
| 35          | 00588459        | Pcb assy Pipette Connection PCB   |                  |
| 36          | 00299313        | Washer                            |                  |
| 37          | 00820209        | Screw m3x06                       |                  |
| 40          | 00053207        | Nylon clamp                       |                  |
| 41          | 00820191        | Screw m3x05                       |                  |
| 54          | 00108084        | Allen screw                       |                  |
| 59          | 01010611        | Gear wheel                        |                  |
| 60          | 00144592        | Allen screw                       |                  |
| 66          | 00329458        | Damper                            |                  |
| 67          | 00109108        | Springwasher                      |                  |
| 68          | 00820357        | Screw m4x08                       |                  |
| 71          | 00321331        | Pulley                            |                  |
| 73          | 00503680        | Pin                               |                  |
| 74          | 00328559        | Belt                              |                  |
| 75          | 00256701        | Allen screw                       |                  |
| 76          | 00109397        | Washer                            |                  |
| 78          | 00090902        | Silic. Ø8x12                      |                  |
| 79          | 00514505        | Slide Bushing                     |                  |
| 81          | 00109108        | Springwasher                      |                  |
| 82          | 00820365        | Screw m4x10                       |                  |
| 90          | 00503573        | Lock                              |                  |
| 91          | 00299313        | Washer                            |                  |
| 92          | 00705251        | Screw                             |                  |
| M1          | 00528737        | Motor cpl.                        |                  |
| M2          | 01010679        | Motor cpl.                        |                  |



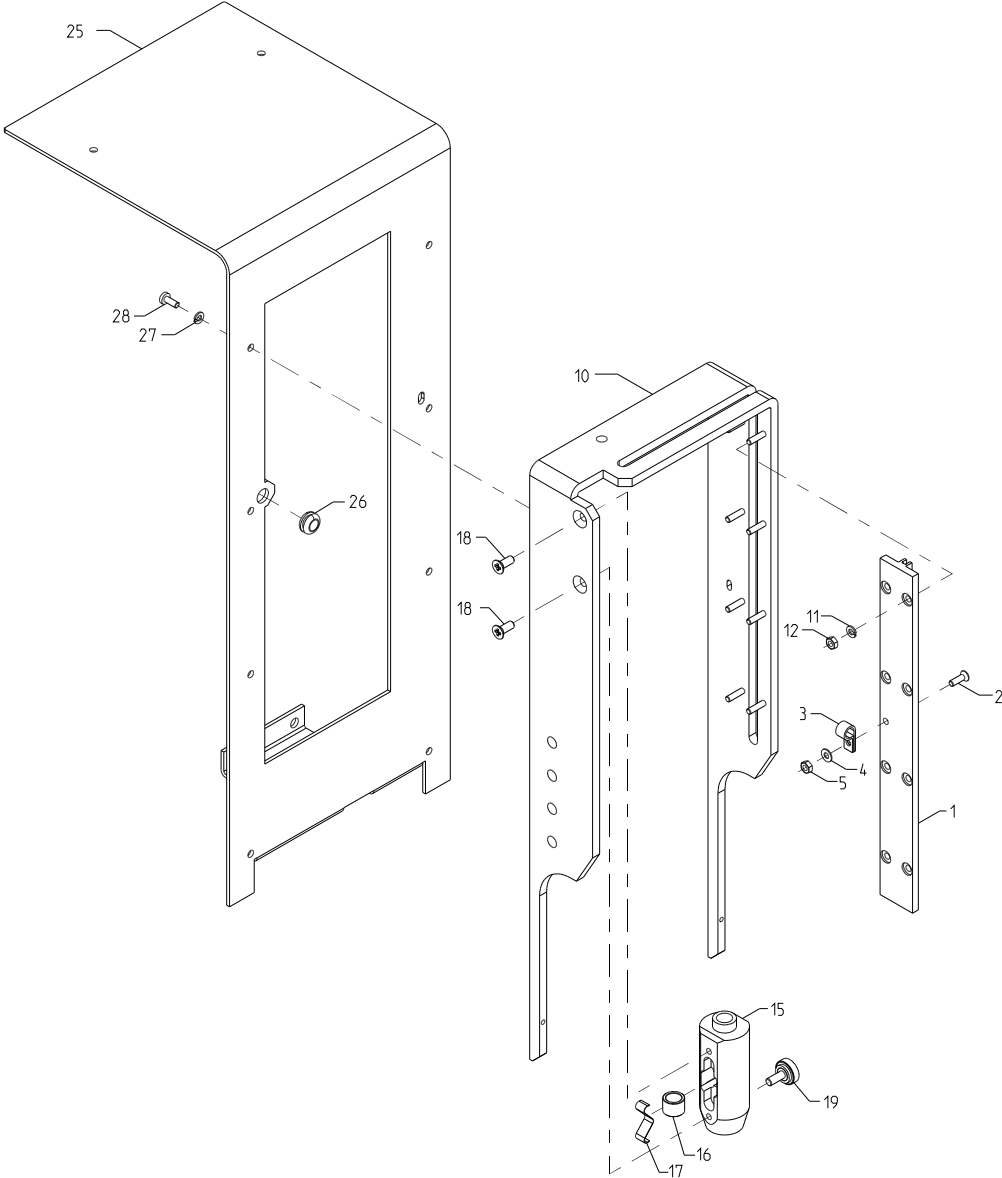
01010640 Doc. no. 20000009142 Doc. Ver. 04 Doc. Type 95

Fig. 3

## **4 Pipe Front Plate**

**Drawing No.: 01010650      Page: 120-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 2           | 00821298        | Screw m3x10        |                  |
| 3           | 00053207        | Nylon clamp        |                  |
| 4           | 00296640        | Washer             |                  |
| 5           | 00153403        | Nut                |                  |
| 16          | 00136978        | Bush               |                  |
| 18          | 00821439        | Screw m4x10        |                  |
| 19          | 00219253        | Screw              |                  |
| 26          | 00325191        | Bushing            |                  |



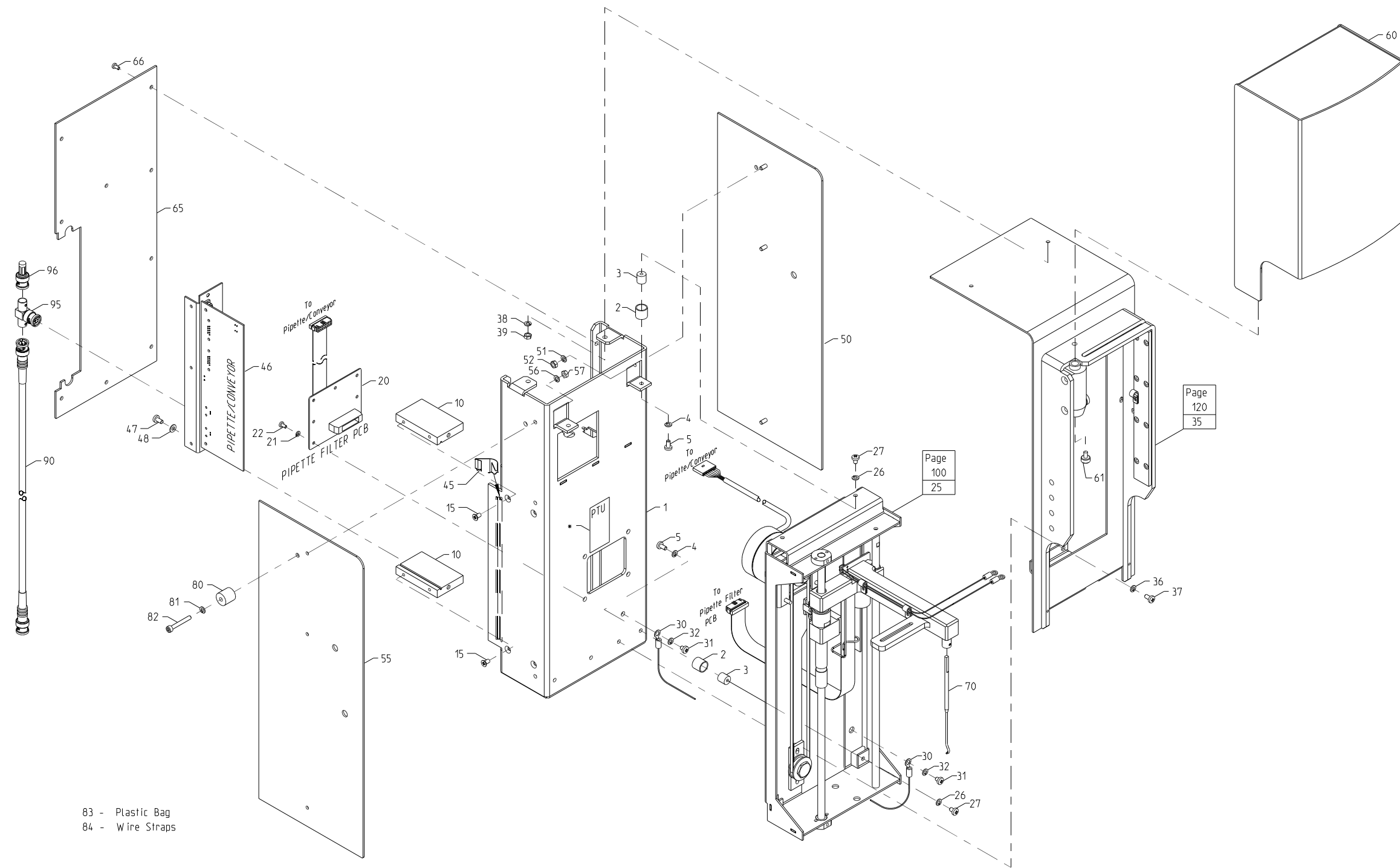
01010650\_IS1 3.1- Dokument: 4.FF.1.25

Fig. 4

## 5 Pipette Unit

**Drawing No.: 01010655****Page: 130-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>            | <b>Prod. No.</b> |
|-------------|-----------------|-------------------------------|------------------|
| 3           | 01010643        | Damper                        |                  |
| 4           | 00109108        | Springwasher                  |                  |
| 5           | 00820365        | Screw m4x10                   |                  |
| 20          | 00588434        | Pcb assy Pipette Filter PCB   |                  |
| 21          | 00299313        | Washer                        |                  |
| 22          | 00820209        | Screw m3x06                   |                  |
| 26          | 00109108        | Springwasher                  |                  |
| 27          | 00820340        | Screw m4x06                   |                  |
| 30          | 01010729        | Wire                          |                  |
| 31          | 00820332        | Screw m4x05                   |                  |
| 32          | 00109108        | Springwasher                  |                  |
| 36          | 00109108        | Springwasher                  |                  |
| 37          | 00820357        | Screw m4x08                   |                  |
| 38          | 00109108        | Springwasher                  |                  |
| 39          | 00051433        | Nut m4                        |                  |
| 45          | 00847103        | EMC-list                      |                  |
| 46          | 00588475        | Pcb assy Pipette/Conveyor PCB |                  |
| 47          | 00820357        | Screw m4x08                   |                  |
| 48          | 00109397        | Washer                        |                  |
| 61          | 00503797        | Screw                         |                  |
| 66          | 00820209        | Screw m3x06                   |                  |
| 70          | 00504498        | Stirrer cpl.                  |                  |
| 80          | 00503805        | Stay                          |                  |
| 81          | 00109108        | Springwasher                  |                  |
| 82          | 00367912        | Allen screw                   |                  |
| 90          | 01010857        | Arcnet cable                  |                  |



01010655\_JS1 3.2- Dokument:3.FP.1.53

Fig. 5

## 6 Pipette Kit

*Drawing No.:* 60027206      *Page:* 140-1

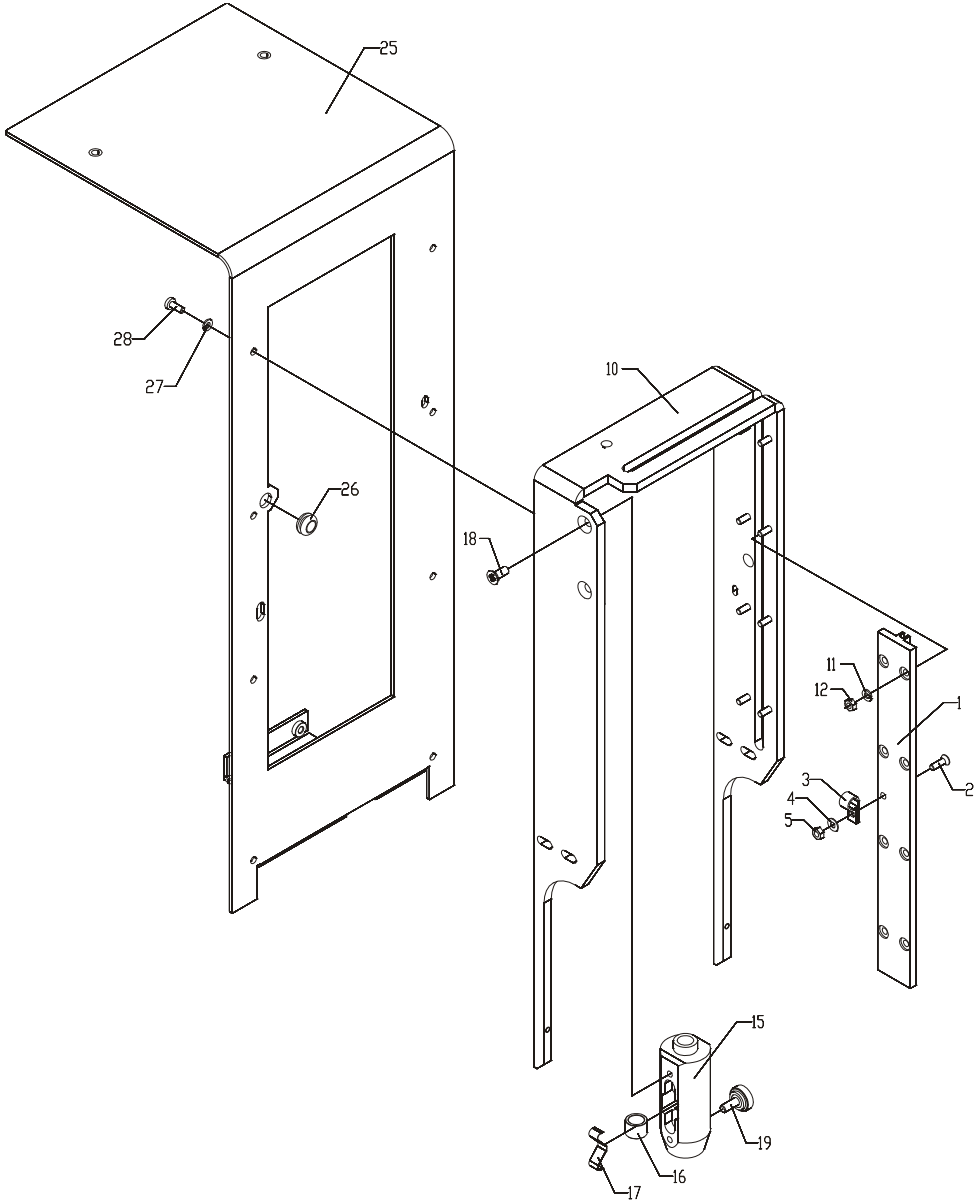
| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>   | <b>Prod. No.</b> |
|-------------|-----------------|----------------------|------------------|
| 3           | 00291724        | Allen screw M4x12    |                  |
| 4           | 00109108        | Springwasher         |                  |
| 5           | 00109108        | Springwasher         |                  |
| 6           | 00051433        | Nut m4               |                  |
| 7           | 60026732        | Pipette, complete    |                  |
| 10          | 00217612        | Finger screw         |                  |
| 11          | 00357897        | Springwasher         |                  |
| 12          | 00705012        | Screw                |                  |
| 15          | 00531673        | Cable assembly       |                  |
| 25-13       | 60015338        | O-ring ø006.00xø1.00 |                  |
| 25-14       | 60026693        | Scraper housing      |                  |
| 25-15       | 60027286        | O-ring ø005.28xø1.78 |                  |
| 26          | 00821744        | Allen screw          |                  |



## **7 Pipette Front Plate**

**Drawing No.: 60030536****Page: 145-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 2           | 00821298        | Screw m3x10        |                  |
| 3           | 00053207        | Nylon clamp        |                  |
| 4           | 00296640        | Washer             |                  |
| 5           | 00153403        | Nut                |                  |
| 16          | 00136978        | Bush               |                  |
| 18          | 00821439        | Screw m4x10        |                  |
| 19          | 00219253        | Screw              |                  |
| 26          | 00325191        | Bushing            |                  |



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Fig. 7

## 8 Pipette Arm Unit

**Drawing No.: 60030537**

**Page: 146-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>                | <b>Prod. No.</b> |
|-------------|-----------------|-----------------------------------|------------------|
| 2           | 00327957        | Spring 14,0x10,2x,15 L+m          |                  |
| 3           | 60069332        | Red PUR O-ring Ø89x1.2 SH 94      |                  |
| 4           | 00504936        | Shaft CP.                         |                  |
| 5           | 00503755        | Union                             |                  |
| 13          | 00103275        | Allen screw                       |                  |
| 14          | 00109108        | Springwasher                      |                  |
| 15          | 00820365        | Screw m4x10                       |                  |
| 16          | 00049254        | Cable ties 2.5mm x 100mm Pa natur |                  |
| 20          | 00504928        | Housing                           |                  |
| 21          | 00503557        | Bar                               |                  |
| 22          | 60045822        | Silic. Ø4x7                       | 00094789         |
| 23          | 60045822        | Silic. Ø4x7                       | 00094789         |
| 35          | 00588459        | Pcb assy Pipette Connection PCB   |                  |
| 36          | 00299313        | Washer                            |                  |
| 37          | 00820209        | Screw m3x06                       |                  |
| 40          | 00053207        | Nylon clamp                       |                  |
| 41          | 00820191        | Screw m3x05                       |                  |
| 49          | 00108084        | Allen screw                       |                  |
| 59          | 01010611        | Gear wheel                        |                  |
| 60          | 00144592        | Allen screw                       |                  |
| 66          | 00329458        | Damper                            |                  |
| 67          | 00109108        | Springwasher                      |                  |
| 68          | 00820357        | Screw m4x08                       |                  |
| 71          | 00321331        | Pulley                            |                  |
| 73          | 00503680        | Pin                               |                  |
| 74          | 00328559        | Belt                              |                  |
| 75          | 00710624        | Allen screw                       |                  |
| 76          | 00109397        | Washer                            |                  |
| 78          | 00090902        | Silic. Ø8x12                      |                  |
| 79          | 00514505        | Slide Bushing                     |                  |
| 81          | 00109108        | Springwasher                      |                  |
| 82          | 00820365        | Screw m4x10                       |                  |
| 90          | 00503573        | Lock                              |                  |
| 91          | 00299313        | Washer                            |                  |
| 92          | 00705251        | Allen screw M3x8                  |                  |
| M1          | 00528737        | Motor cpl.                        |                  |
| M2          | 01010679        | Motor cpl.                        |                  |

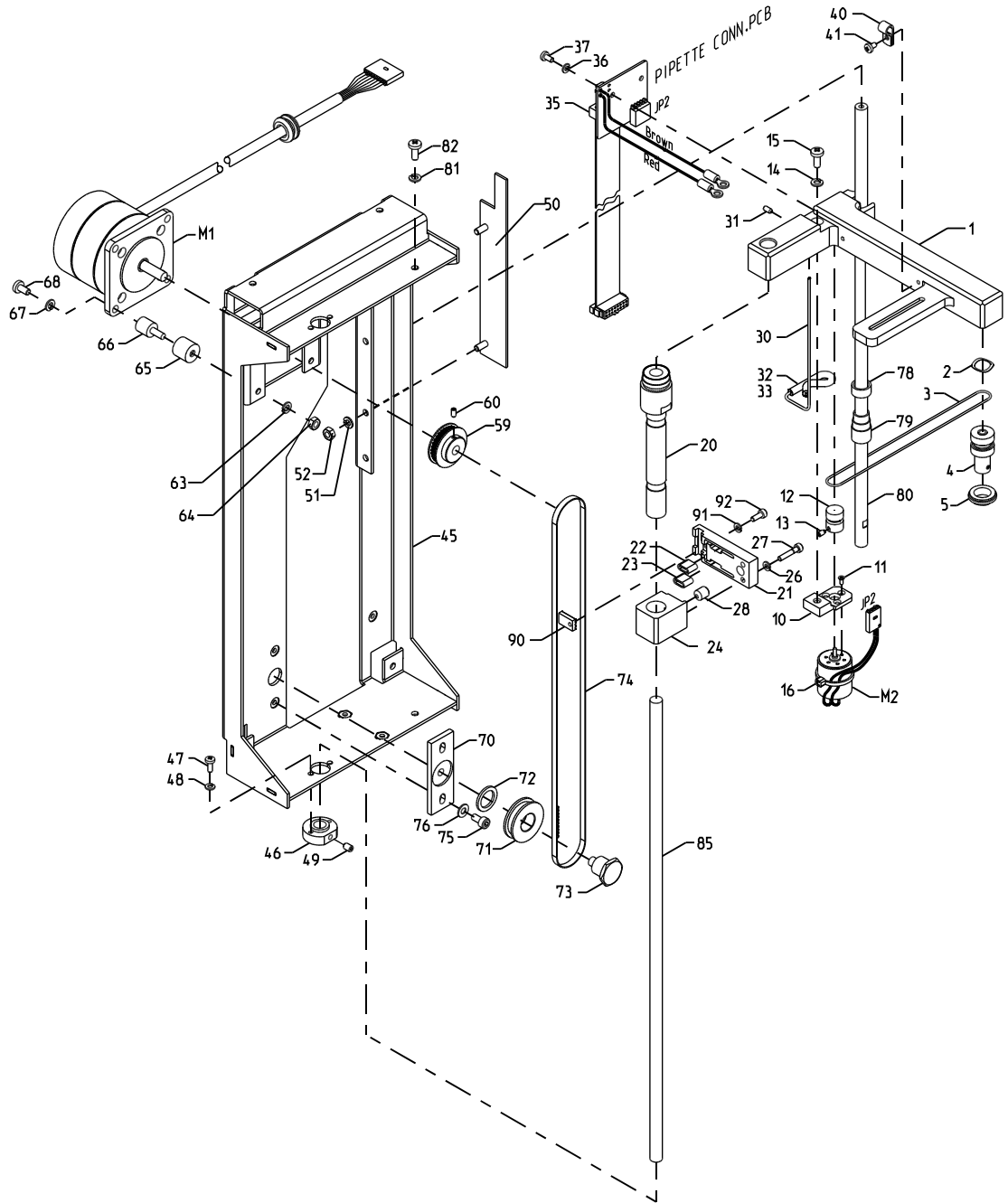


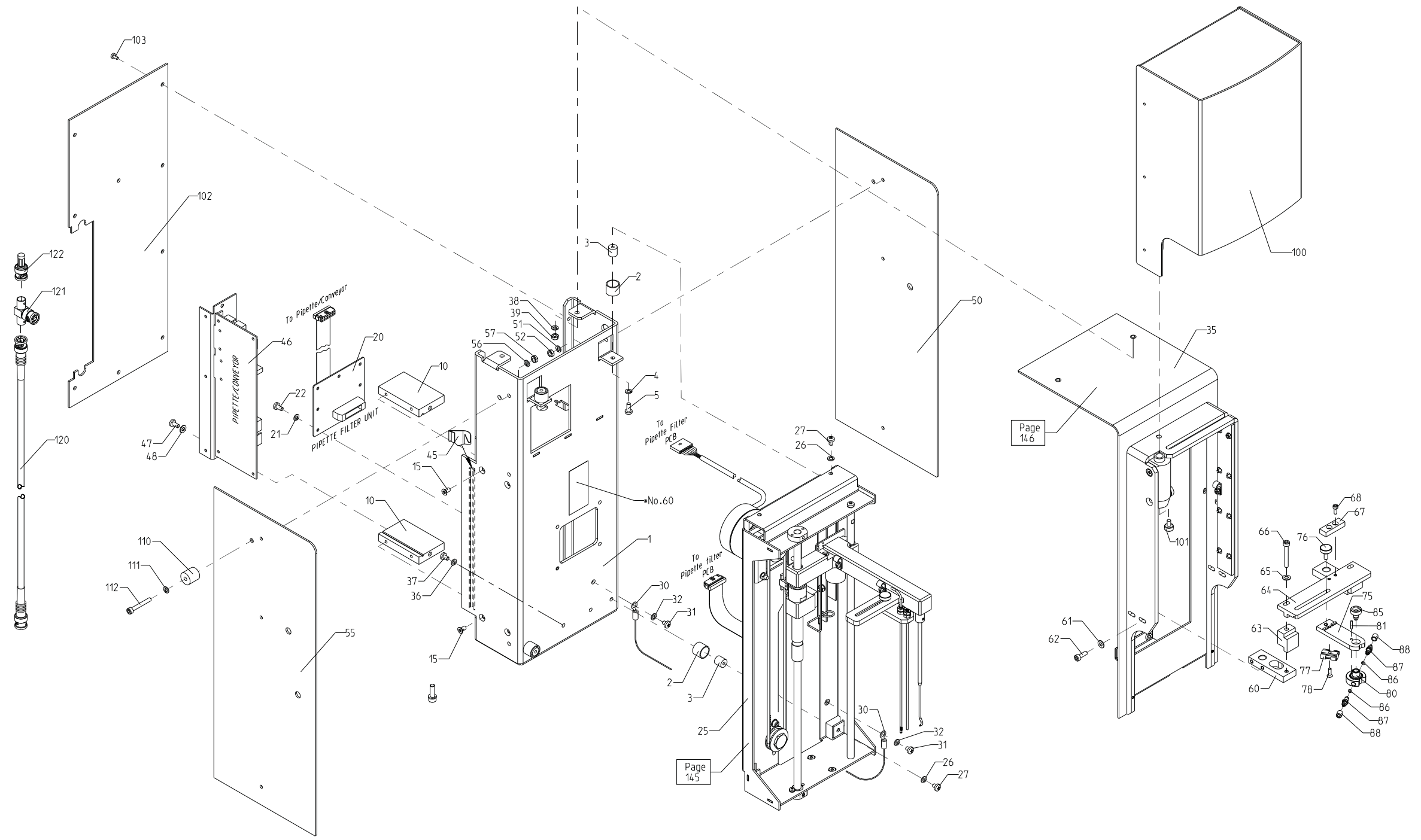
Fig. 8

## 9 Pipette Unit

**Drawing No.:** 60029409

**Page:** 147-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>            | <b>Prod. No.</b> |
|-------------|-----------------|-------------------------------|------------------|
| 3           | 01010643        | Damper                        |                  |
| 4           | 00109108        | Springwasher                  |                  |
| 5           | 00820365        | Screw m4x10                   |                  |
| 20          | 00588434        | Pcb assy Pipette Filter PCB   |                  |
| 21          | 00299313        | Washer                        |                  |
| 22          | 00820209        | Screw m3x06                   |                  |
| 26          | 00109108        | Springwasher                  |                  |
| 27          | 00820340        | Screw m4x06                   |                  |
| 30          | 01010729        | Wire                          |                  |
| 31          | 00820332        | Screw m4x05                   |                  |
| 32          | 00109108        | Springwasher                  |                  |
| 36          | 00109108        | Springwasher                  |                  |
| 37          | 00820357        | Screw m4x08                   |                  |
| 38          | 00109108        | Springwasher                  |                  |
| 39          | 00051433        | Nut M4                        |                  |
| 45          | 00847103        | EMC-list                      |                  |
| 46          | 00588475        | Pcb assy Pipette/Conveyor PCB |                  |
| 47          | 00820357        | Screw m4x08                   |                  |
| 48          | 00109397        | Washer                        |                  |
| 101         | 00503797        | Screw                         |                  |
| 103         | 00820209        | Screw m3x06                   |                  |
| 110         | 00503805        | Stay                          |                  |
| 111         | 00109108        | Springwasher                  |                  |
| 112         | 00367912        | Allen screw M04.0x030         |                  |
| 120         | 01010857        | Arcnet cable                  |                  |



• Pos. 200 - text see 60027086\_kl

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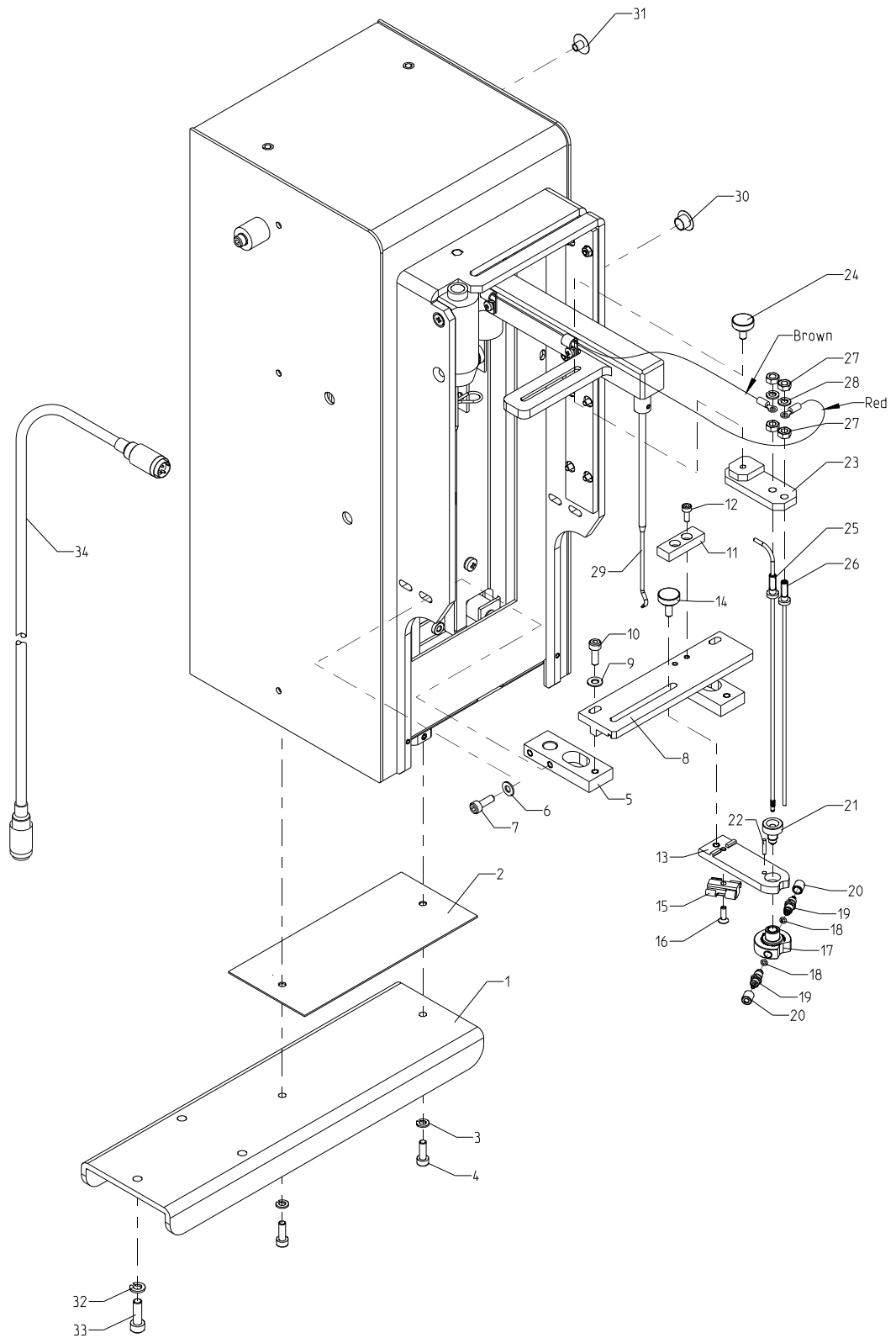
147-1

Fig. 9

## 10 Pipette Kit

*Drawing No.: 60062001**Page: 148*

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>  | <b>Prod. No.</b> |
|-------------|-----------------|---------------------|------------------|
| 3           | 00109108        | Springwasher        |                  |
| 4           | 00291724        | Allen screw M4x12   |                  |
| 13          | 60029259        | Scraper arm         |                  |
| 14          | 00219253        | Screw               |                  |
| 17          | 60029264        | Rinse chamber       |                  |
| 18          | 60015102        | O-ring ø002.3xø0.90 |                  |
| 19          | 00530295        | Stub                |                  |
| 20          | 00219121        | Union               |                  |
| 21          | 60029263        | Scraper screw       |                  |
| 22          | 00201699        | Pin                 |                  |
| 24          | 00217612        | Finger screw        |                  |
| 25          | 60029282        | Pipette, complete   |                  |
| 26          | 00528646        | Sensor complete     |                  |
| 27          | 00051433        | Nut M4              |                  |
| 28          | 00109108        | Springwasher        |                  |
| 29          | 00514703        | Stirrer             |                  |
| 34          | 00531673        | Cable assembly      |                  |



60062001 Doc. no. 20000050483 Doc. Ver. 01 Doc. Type 95

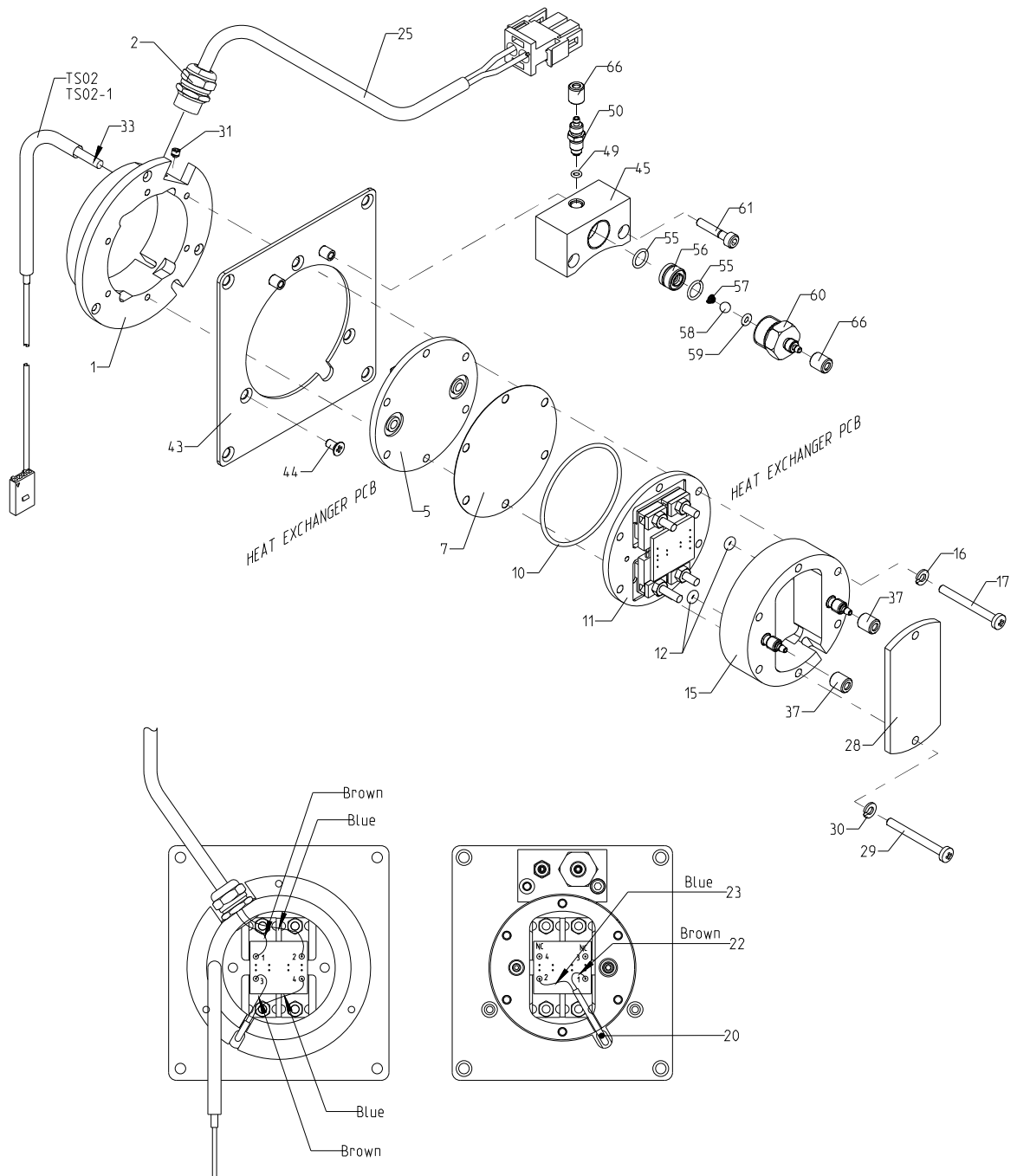
Fig. 10

# 11 Heat Exchanger

**Drawing No.:** 60026992

**Page:** 150-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>                                  | <b>Prod. No.</b> |
|-------------|-----------------|---|------------------|
| 5           | 60046185        | Heat shield   | 01010511         |
| 6           | 00060251        | Silic. Comp.  |                  |
| 7           | 60000275        | Disc  |                  |
| 10          | 00537266        | O-ring  |                  |
| 11          | 60046191        | Heat shield   | 60000309         |
| 12          | 00078949        | O-ring  |                  |
| 16          | 00299313        | Washer  |                  |
| 17          | 00820290        | Screw m3x30   |                  |
| 25          | 01010528        | Cable PWR HEU                                       |                  |
| 29          | 00820290        | Screw m3x30   |                  |
| 30          | 00299313        | Washer  |                  |
| 31          | 00140525        | Allen screw   |                  |
| 33          | 00060251        | Silic. Comp.  |                  |
| 37          | 00219121        | Union   |                  |
| 44          | 00821272        | Screw m3x06   |                  |
| 49          | 60015102        | O-ring $\varnothing 002.3 \times \varnothing 0.90$  |                  |
| 50          | 00530295        | Stub  |                  |
| 55          | 60015338        | O-ring $\varnothing 006.00 \times \varnothing 1.00$ |                  |
| 57          | 00540781        | Spring  |                  |
| 58          | 00176750        | Ruby ball   |                  |
| 59          | 60015759        | O-ring $\varnothing 002.50 \times \varnothing 1.20$ |                  |
| 60          | 60026476        | Inlet checkvalve                                    |                  |
| 61          | 00108480        | Allen screw M03.0x016                               |                  |
| 66          | 00219121        | Union   |                  |
| TS02-1      | 00325548        | Thermistor  |                  |



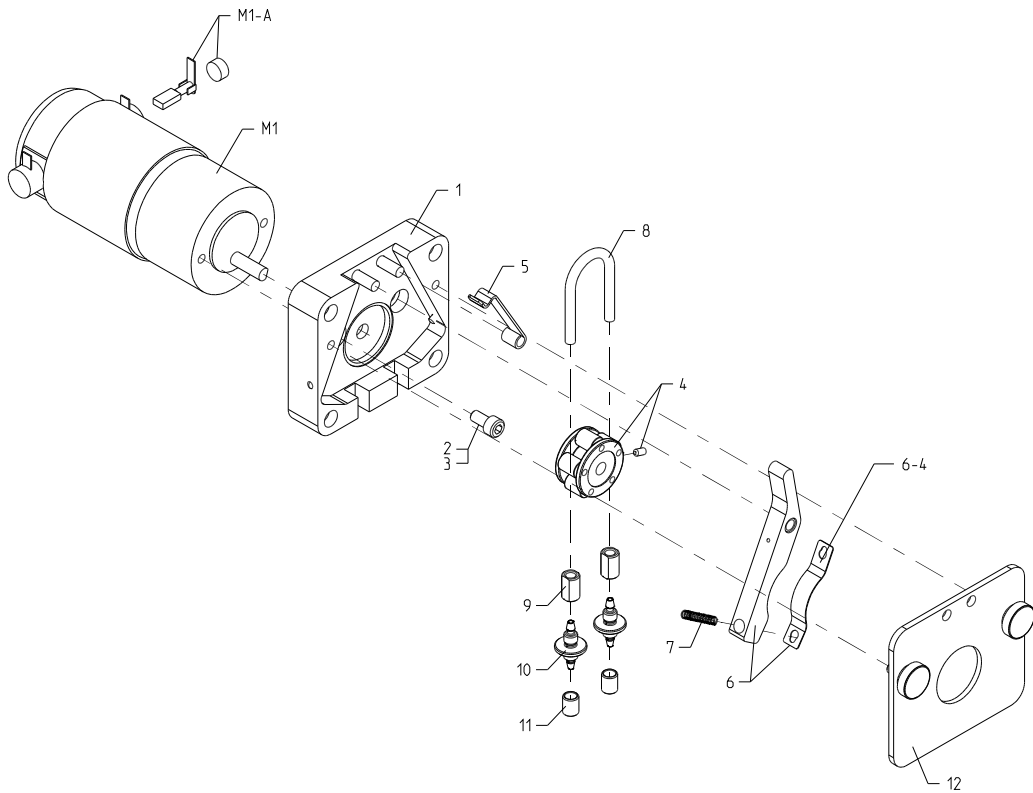
60026992 Doc. no. 20000042449 Doc. Ver. 02 Doc. Type 95

Fig. 11

## 12 Tube Pump

**Drawing No.:** 01010455      **Page:** 160-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 2           | 00148163        | Glue loctite 243   |                  |
| 3           | 00231837        | Allen screw M5x10  |                  |
| 4           | 00495705        | Roller wheel       |                  |
| 6           | 00495689        | Yoke cpl.          |                  |
| 6-4         | 00495085        | Band               |                  |
| 7           | 00495739        | Spring             |                  |
| 8           | 00400754        | Marprenne Ø2.8/4.4 |                  |
| 9           | 00538058        | Union              |                  |
| 10          | 00495499        | Hose connection    |                  |
| 11          | 00495135        | Union              |                  |
| M1          | 01010022        | Gear motor DC      |                  |
| M1-A        | 01010043        | Carbon Brush       |                  |



175 δ L/rev.  
P=max.1,5bar

Fig. 12

## 13 Input Selector Unit

**Drawing No.:** 60026995

**Page:** 170-1

| Pos. | Part No. | Description                              | Prod. No. |
|------|----------|--|-----------|
| 2    | 00231332 | Bush                                     |           |
| 6    | 00329458 | Damper                                   |           |
| 7    | 00109108 | Springwasher                             |           |
| 8    | 00051433 | Nut M4                                   |           |
| 15   | 60039978 | Liquid Distributor                       |           |
| 15-1 | 60039592 | Valve block                              |           |
| 16   | 00299313 | Washer                                   |           |
| 17   | 00708826 | Allen screw                              |           |
| 25   | 00588293 | Input Selector PCB                       |           |
| 26   | 00299313 | Washer                                   |           |
| 27   | 00820209 | Screw m3x06                              |           |
| 30   | 60028342 | Ground wire                              |           |
| 31   | 00357897 | Springwasher                             |           |
| 32   | 00231837 | Allen screw M5x10                        |           |
| 33   | 00299313 | Washer                                   |           |
| 34   | 00227348 | Allen screw M03.0x006                    |           |
| 35   | 00109108 | Springwasher                             |           |
| 36   | 00820399 | Screw m4x16                              |           |
| 40   | 00821280 | Screw M3x8                               |           |
| 45   | 00229351 | Plug pin                                 |           |
| 51   | 00821280 | Screw M3x8                               |           |
| 52   | 60028049 | Termosensor house, cpl                   |           |
| 53   | 60015274 | O-ring Ø005.00xØ1.00 FPM (Viton)         |           |
| 54   | 60015276 | Guiding ring ZBH-5                       |           |
| 58   | 60037801 | Valveblock for INP                       |           |
| 59   | 00219147 | Allen screw M3x12                        |           |
| 60   | 60004964 | Unbracoscrew M03.0x030                   |           |
| 61   | 60028150 | Thermistor assy                          |           |
| 63   | 60026359 | Wireholder                               |           |
| 64   | 60024840 | Allen screw M2x5                         |           |
| 68   | 60015102 | O-ring ø002.3xø0.90                      |           |
| 69   | 00530295 | Stub                                     |           |
| 70   | 00198499 | O-ring Ø003.00xØ1.00 Nitrile p5          |           |
| 71   | 01011094 | Union                                    |           |
| 84   | 00495135 | Union                                    |           |
| 85   | 00219121 | Union                                    |           |
| 101  | 00820357 | Screw m4x08                              |           |
| H1   | 60046201 | Heat Exchanger                           | 60026992  |
| M1   | 60046184 | Tube pump                                | 01010455  |
| M2   | 60046184 | Tube pump                                | 01010455  |
| TC02 | 01010495 | Temp sensor                              |           |
| V1-A | 00533729 | Tube Valve Ø1.5                          |           |
| V2-A | 60039084 | Repair kit Bürkert 6126 2/2 EPDM,sp.rock |           |
| V3-A | 60039084 | Repair kit Bürkert 6126 2/2 EPDM,sp.rock |           |
| V4-A | 60039084 | Repair kit Bürkert 6126 2/2 EPDM,sp.rock |           |
| V5-A | 00533729 | Tube Valve Ø1.5                          |           |
| V6   | 60028029 | Magnet system                            |           |
| V6-A | 60034900 | Repair kit for mini 2/2 vejs 24 DC       |           |
| V7   | 60028029 | Magnet system                            |           |
| V7-A | 60034900 | Repair kit for mini 2/2 vejs 24 DC       |           |
| V8-A | 00533729 | Tube Valve Ø1.5                          |           |

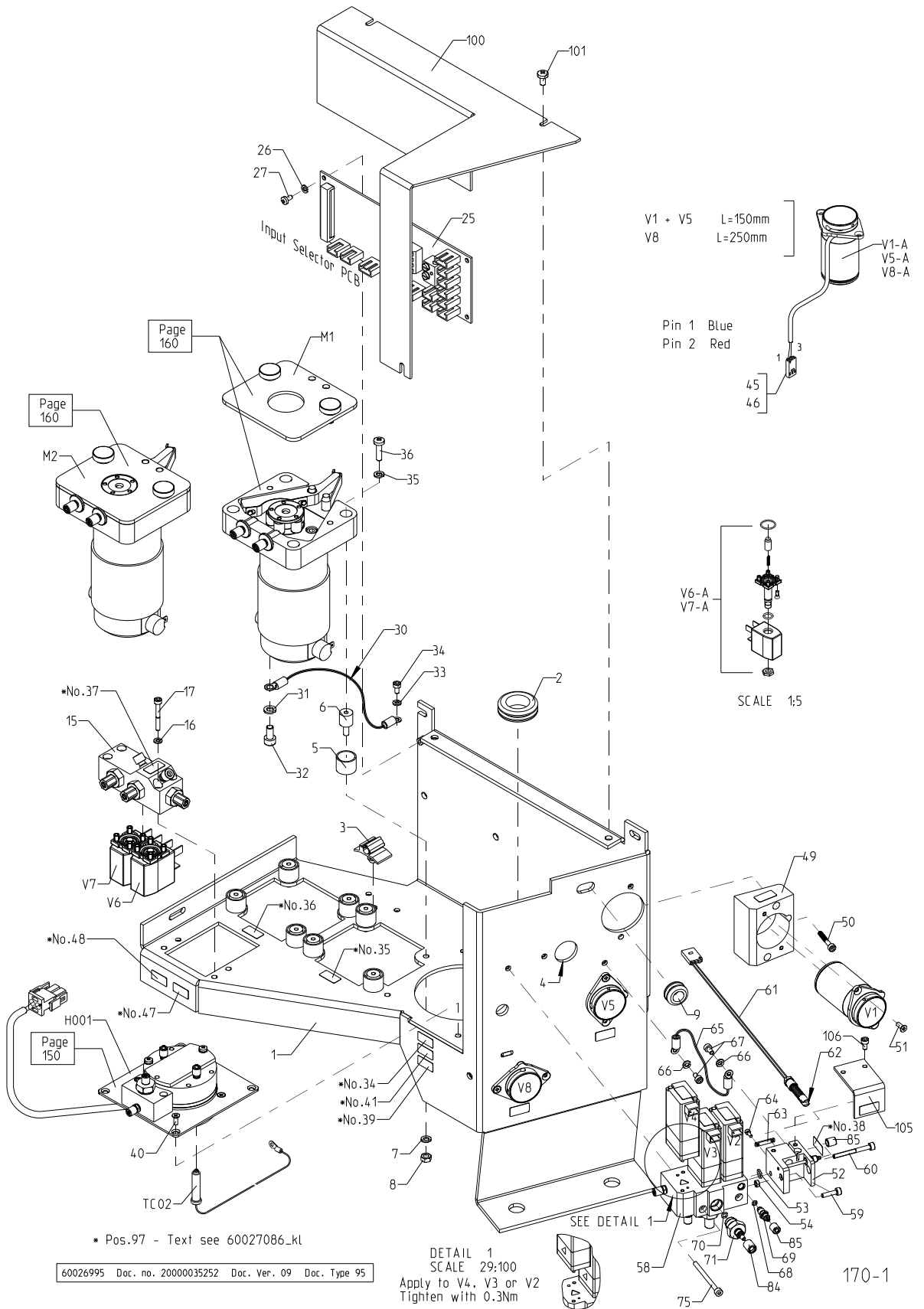
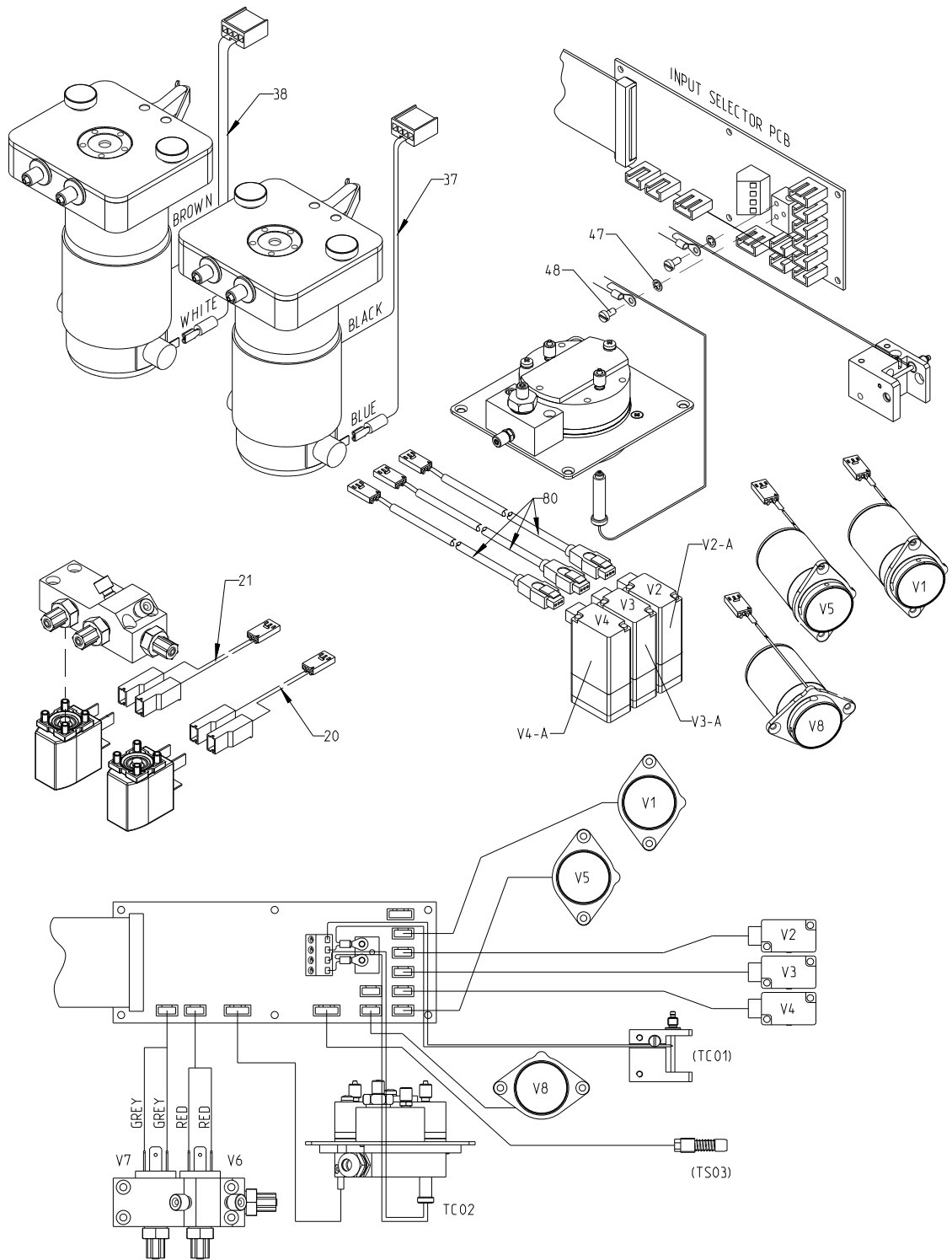


Fig. 13

## 14 Input Selector Unit, El. Connection

**Drawing No.: 60026995****Page: 170-2**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>                       | <b>Prod. No.</b> |
|-------------|-----------------|--|------------------|
| 20          | 01010562        | Cable input sel./valve 6                 |                  |
| 21          | 01010563        | Cable input sel./valve 7                 |                  |
| 37          | 01010564        | Cable input pump M1                      |                  |
| 38          | 01010855        | Cable waste pump M2                      |                  |
| 46          | 00447003        | Socket                                   |                  |
| 47          | 00049742        | Lock washer                              |                  |
| 48          | 00019430        | Screw m3x6                               |                  |
| 80          | 60027174        | Cable Valve, H-Bar 30 bar                |                  |
| V2          | 60038934        | Solenoid valve 2/2 24V (EPDM), sp.rocker |                  |
| V3          | 60038934        | Solenoid valve 2/2 24V (EPDM), sp.rocker |                  |
| V4          | 60038934        | Solenoid valve 2/2 24V (EPDM), sp.rocker |                  |



60026995 Doc. no. 20000035255 Doc. Ver. 03 Doc. Type 95

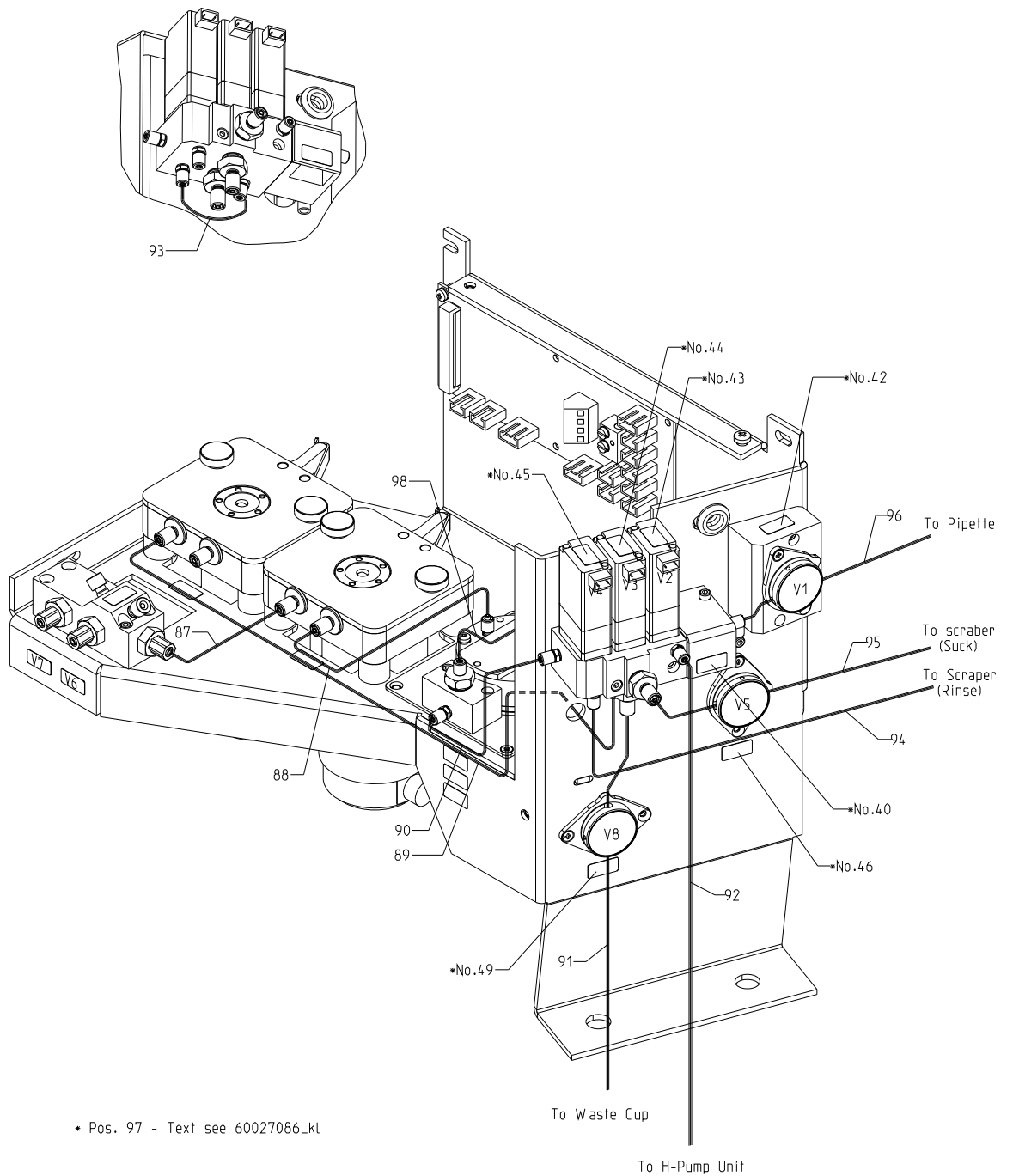
170-2

Fig. 14

## 15 Input Selector Unit, Tubing

**Drawing No.: 60026995****Page: 170-3**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>         | <b>Prod. No.</b> |
|-------------|-----------------|----------------------------|------------------|
| 87          | 00028613        | PVC Ø2/4                   |                  |
| 88          | 60045808        | Tube øø 01.4/03.1 Silicone | 00101287         |
| 89          | 00215301        | Silic. Ø2/4                |                  |
| 90          | 60045809        | Tube Tygon                 | 00183103         |
| 91          | 00215301        | Silic. Ø2/4                |                  |
| 92          | 60045809        | Tube Tygon                 | 00183103         |
| 93          | 60045809        | Tube Tygon                 | 00183103         |
| 94          | 60045808        | Tube øø 01.4/03.1 Silicone | 00101287         |
| 95          | 60045808        | Tube øø 01.4/03.1 Silicone | 00101287         |
| 96          | 60045809        | Tube Tygon                 | 00183103         |



60026995 Doc. no. 2000035256 Doc. Ver. 03 Doc. Type 95

170-3

Fig. 15

## 16 Homogenzier

**Drawing No.: 60024978****Page: 220-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>          | <b>Prod. No.</b> |
|-------------|-----------------|-----------------------------|------------------|
| 2           | 60038800        | H-plug 100 Bar              |                  |
| 2-14        | 60023668        | Seat, SNC-1                 |                  |
| 3           | 60038800        | H-plug 100 Bar              |                  |
| 3-14        | 60023668        | Seat, SNC-1                 |                  |
| 6           | 60025015        | Union                       |                  |
| 7           | 60015107        | O-ring Ø003.00xØ1.00        |                  |
| 10          | 00144592        | Allen screw                 |                  |
| 11          | 60015109        | O-RING 011.X1.78 FPM        |                  |
| A           | 60026439        | Repair kit A for plug SNC-1 |                  |
| B           | 60026421        | Repair kit B for plug SNC-1 |                  |

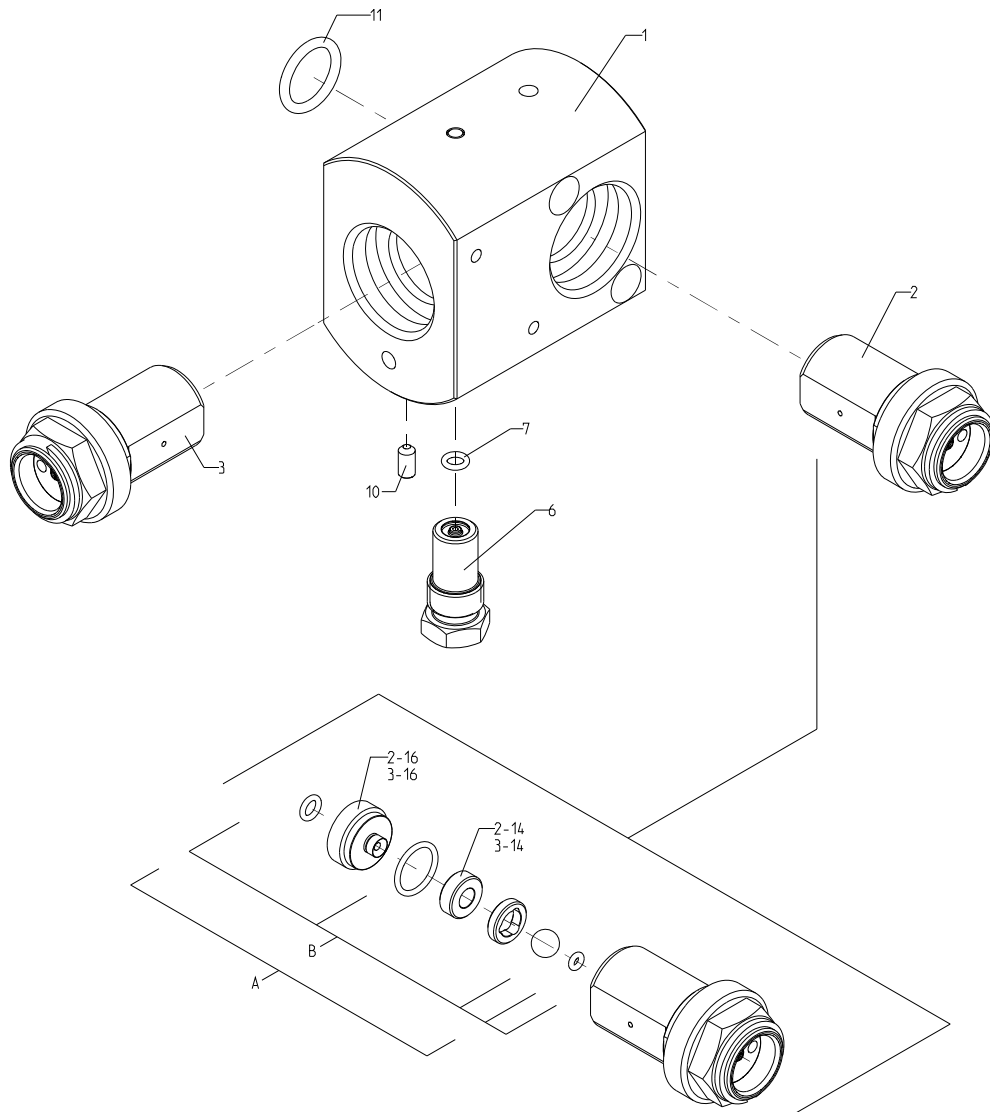
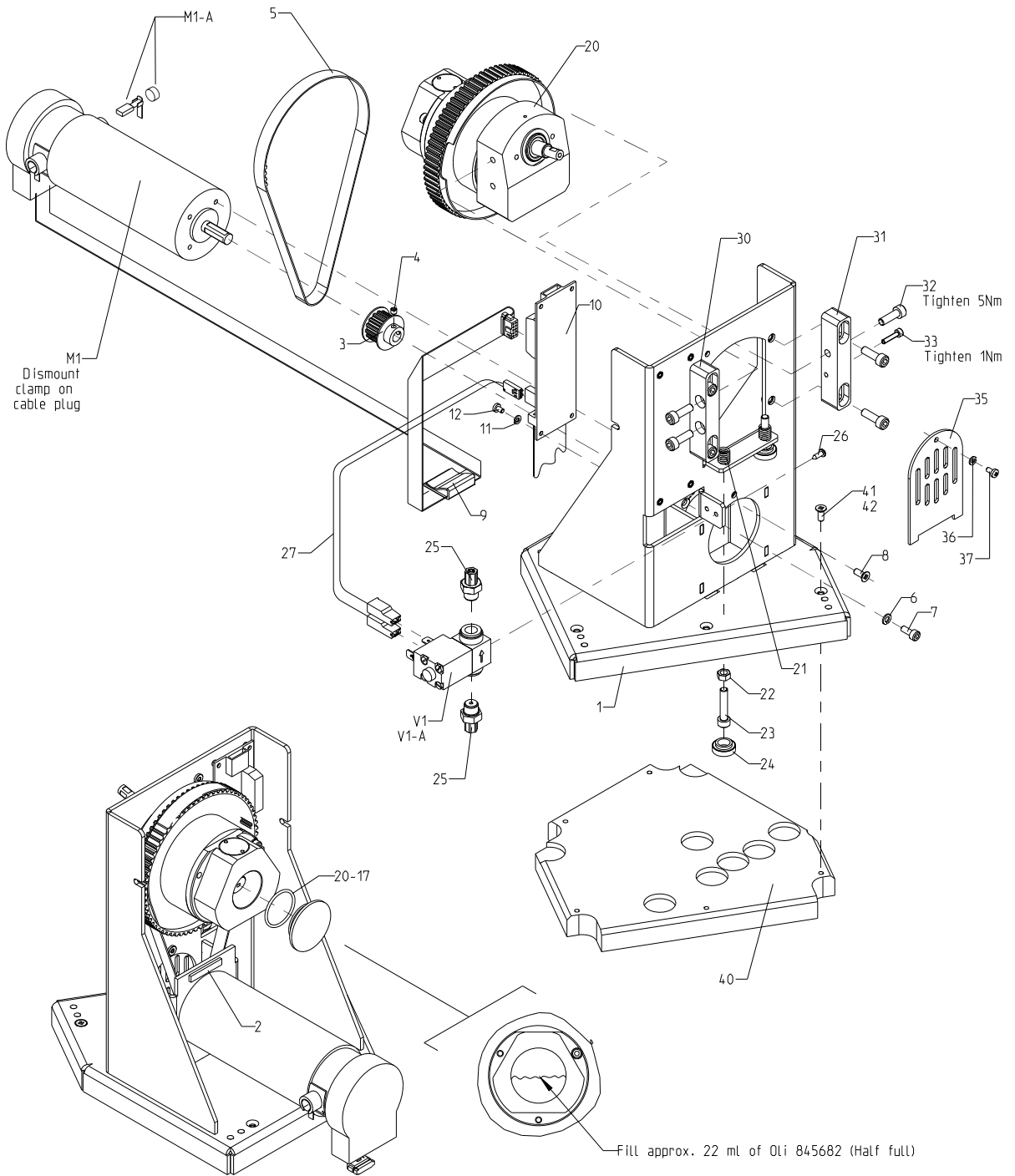


Fig. 16

## 17 H-Pump Baseplate

**Drawing No.: 60024985****Page: 230-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>               | <b>Prod. No.</b> |
|-------------|-----------------|----------------------------------|------------------|
| 2           | 60024519        | Packing                          |                  |
| 3           | 01010414        | Pulley                           |                  |
| 4           | 00101733        | Allen screw                      |                  |
| 5           | 01011009        | Belt                             |                  |
| 6           | 00109108        | Springwasher                     |                  |
| 7           | 00011569        | Allen screw M4x10                |                  |
| 8           | 00821439        | Screw m4x10                      |                  |
| 10          | 00588236        | H-Pumpe Connection PCB           |                  |
| 11          | 00299313        | Washer                           |                  |
| 12          | 00820191        | Screw m3x05                      |                  |
| 20          | 60046182        | Pump drive unit                  | 01010422         |
| 20-17       | 00054189        | O-ring ø25.12xø1.78              |                  |
| 25          | 00246306        | Union                            |                  |
| 26          | 00011379        | Screw                            |                  |
| 27          | 01010515        | Cable                            |                  |
| 36          | 00299313        | Washer                           |                  |
| 37          | 00820209        | Screw m3x06                      |                  |
| M1          | 01010415        | Motor DC                         |                  |
| M1-A        | 01010043        | Carbon Brush                     |                  |
| V1          | 00246371        | Valve                            |                  |
| V1-A        | 01015801        | Membrane for 2/2 w. magnetsystem |                  |



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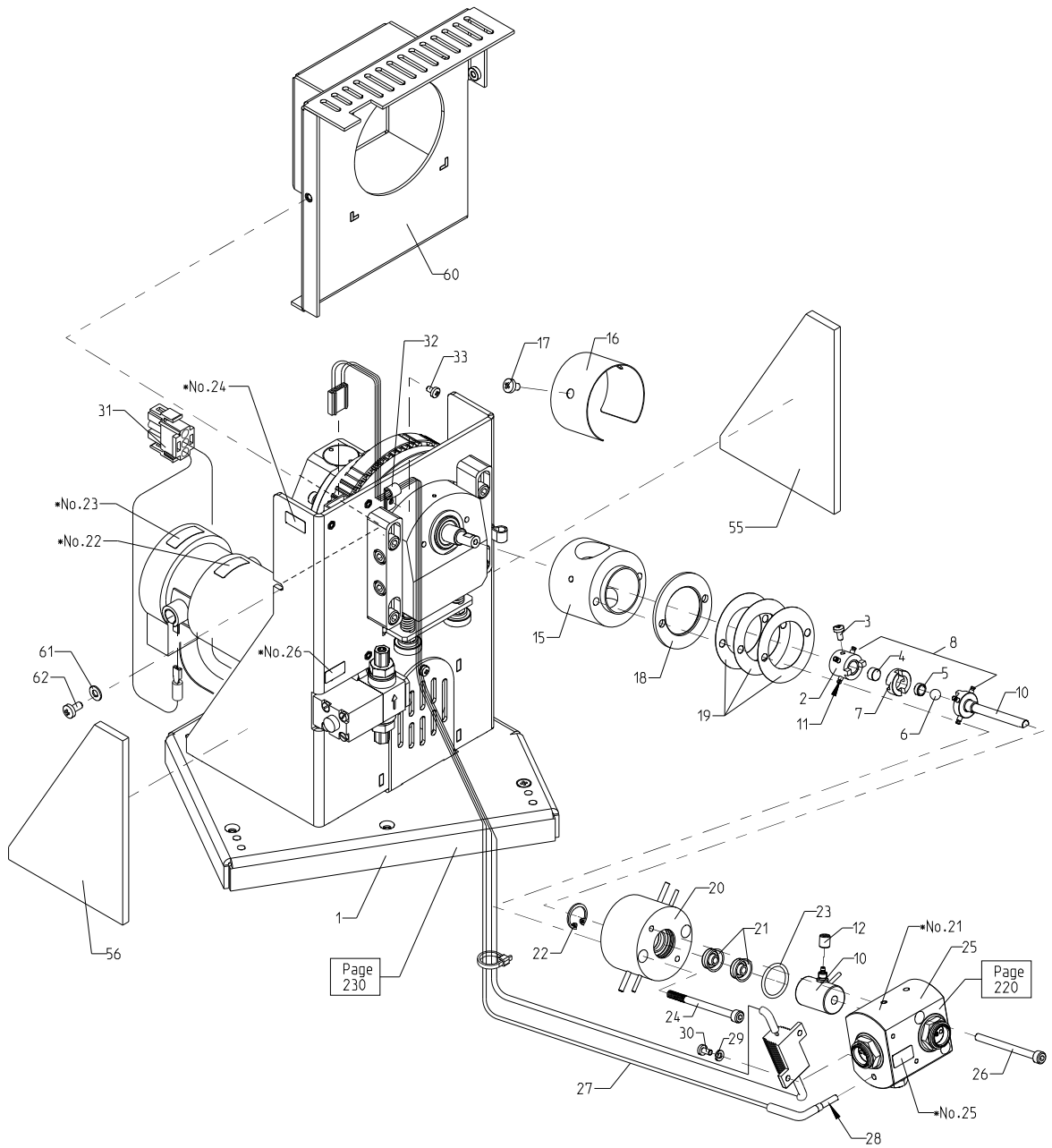
Fig. 17

## 18 H-Pump Unit

**Drawing No.:** 60024516

**Page:** 240-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>         | <b>Prod. No.</b> |
|-------------|-----------------|----------------------------|------------------|
| 2           | 00321984        | Pawl                       |                  |
| 3           | 00820209        | Screw m3x06                |                  |
| 4           | 00322024        | Pressure pad               |                  |
| 5           | 00322016        | Pressure pad               |                  |
| 6           | 00060749        | Ball 6 mm D                |                  |
| 7           | 00322032        | Cross                      |                  |
| 8           | 00131490        | Grease                     |                  |
| 10          | 60028008        | Piston/Cylinder            |                  |
| 11          | 00326363        | Spring                     |                  |
| 12          | 00219121        | Union                      |                  |
| 16          | 00325357        | Cover                      |                  |
| 17          | 00820340        | Screw m4x06                |                  |
| 18          | 00248682        | Disc                       |                  |
| 19          | 00240754        | Spacer                     |                  |
| 20          | 00462077        | Gasket holder              |                  |
| 21          | 00324137        | Gasket                     |                  |
| 22          | 00376228        | Retaining ring             |                  |
| 23          | 00124297        | O-ring                     |                  |
| 24          | 00337808        | Allen screw                |                  |
| 25          | 60046195        | Homogenizer                | 60024978         |
| 26          | 00504837        | Allen screw                |                  |
| 27          | 01010514        | Cable heat valve conn.     |                  |
| 28          | 00060251        | Silic. Comp.               |                  |
| 29          | 00299313        | Washer                     |                  |
| 30          | 00820209        | Screw m3x06                |                  |
| 31          | 01010518        | Cable DC-motor/motherboard |                  |
| 32          | 00053207        | Nylon clamp                |                  |
| 33          | 00820191        | Screw m3x05                |                  |
| 36          | 00820209        | Screw m3x06                |                  |



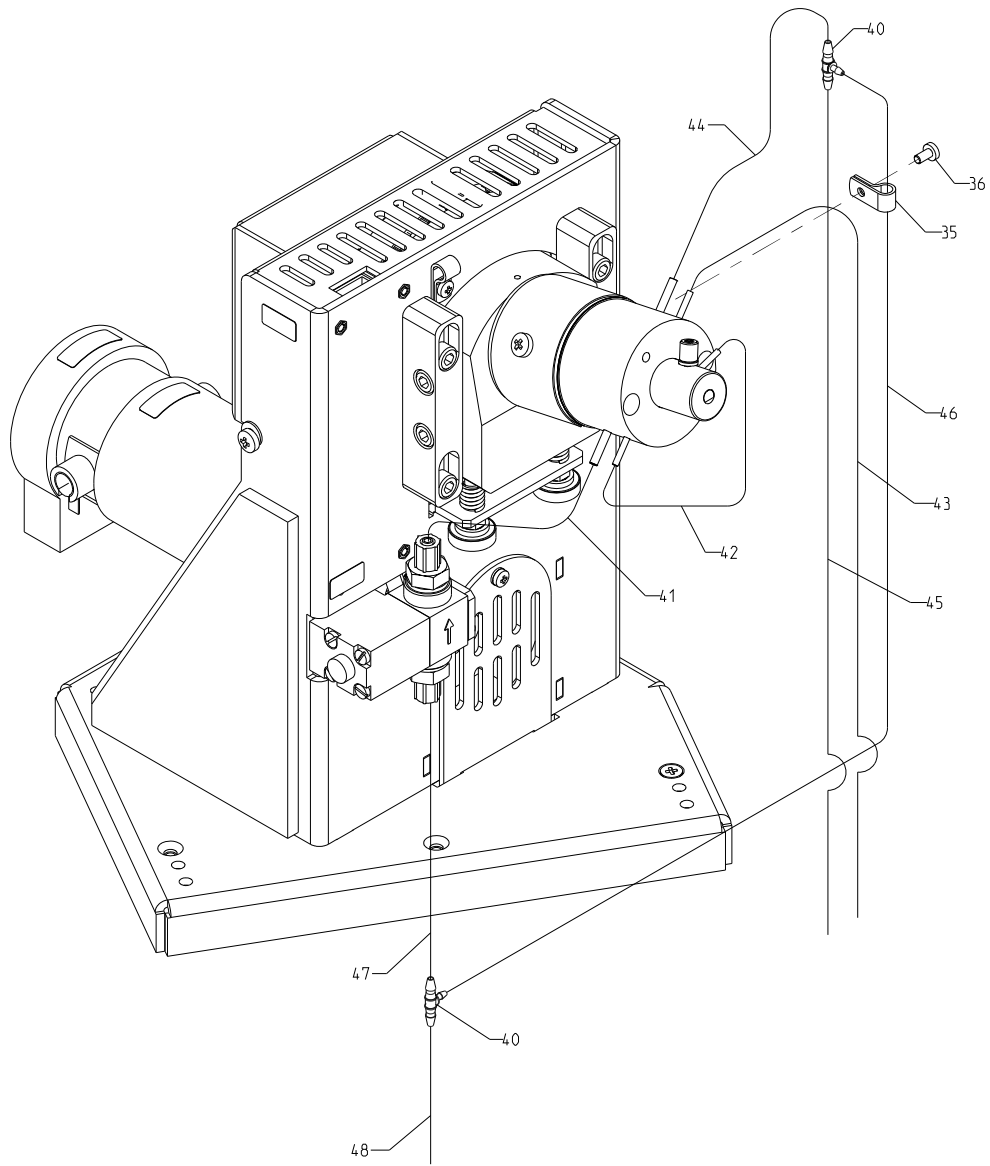
\* Pos.50 - Text see 60027086\_kl

Fig. 18

## 19 H-Pump Unit

**Drawing No.: 60024516****Page: 240-2**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>         | <b>Prod. No.</b> |
|-------------|-----------------|----------------------------|------------------|
| 35          | 00053207        | Nylon clamp                |                  |
| 40          | 01015706        | T-piece                    |                  |
| 41          | 00028613        | PVC Ø2/4                   |                  |
| 42          | 60045808        | Tube øø 01.4/03.1 Silicone | 00101287         |
| 43          | 60045808        | Tube øø 01.4/03.1 Silicone | 00101287         |
| 44          | 00215301        | Silic. Ø2/4                |                  |
| 45          | 00215301        | Silic. Ø2/4                |                  |
| 46          | 60045808        | Tube øø 01.4/03.1 Silicone | 00101287         |
| 47          | 00215301        | Silic. Ø2/4                |                  |
| 48          | 00215301        | Silic. Ø2/4                |                  |



60024516 Doc. no. 20000035005 Doc. Ver. 04 Doc. Type 95

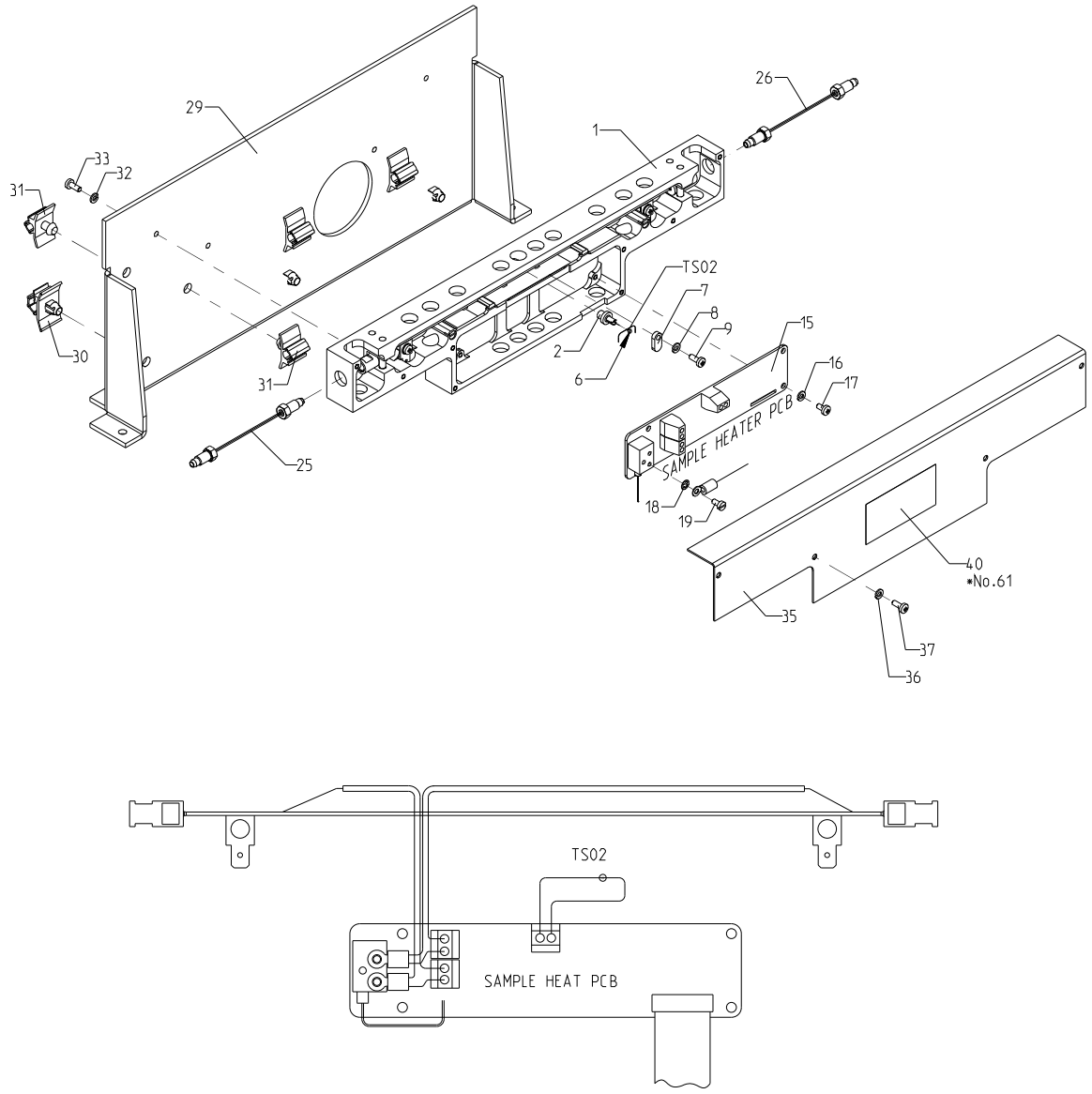
240-2

Fig. 19

## 20 Sample Heater

**Drawing No.: 60024919****Page: 250-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>   | <b>Prod. No.</b> |
|-------------|-----------------|----------------------|------------------|
| 15          | 00588210        | Sample Heat PCB      |                  |
| 16          | 00299313        | Washer               |                  |
| 17          | 00820209        | Screw m3x06          |                  |
| 18          | 00049742        | Lock washer          |                  |
| 19          | 00019430        | Screw m3x6           |                  |
| 25          | 60027213        | Tube assembly, Short |                  |
| 26          | 60027214        | Tube assembly, Long  |                  |
| 36          | 00299313        | Washer               |                  |
| 37          | 00820217        | Screw m3x08          |                  |



\* Text see 60027086\_kl

60024919 Doc. no. 20000035265 Doc. Ver. 05 Doc. Type 95

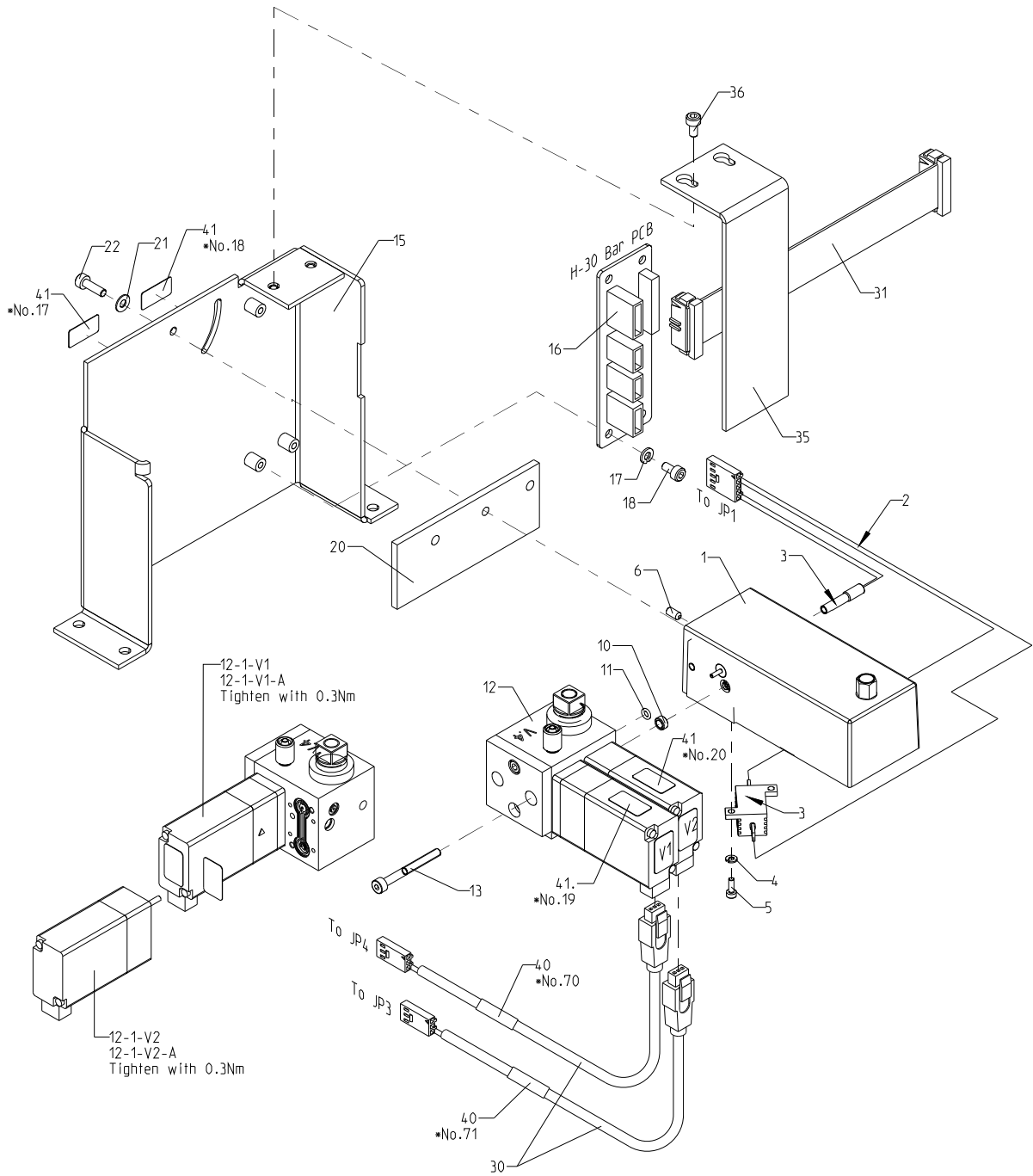
Fig. 20

## 21 H-Stage 30 Bar

**Drawing No.:** 60024249

**Page:** 260-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>                           | <b>Prod. No.</b> |
|-------------|-----------------|--|------------------|
| 1           | 60024246        | Heating element for H30-stage                |                  |
| 2           | 01010586        | Cable NTC + resistor                         |                  |
| 3           | 00060251        | Silic. Comp.                                 |                  |
| 4           | 00306985        | Disc   |                  |
| 5           | 00424317        | Allen screw                                  |                  |
| 6           | 00144592        | Allen screw                                  |                  |
| 10          | 60015276        | Guiding ring ZBH-5                           |                  |
| 11          | 60015423        | O-ring Ø002.50xØ1.00                         |                  |
| 12          | 60046203        | H-Stage                                      | 60027046         |
| 12-1-V1     | 60038934        | Solenoid valve 2/2 24V (EPDM),<br>sp.rocker  |                  |
| 12-1-V1-A   | 60039084        | Repair kit Bürkert 6126 2/2 EPDM,<br>sp.rock |                  |
| 12-1-V2     | 60038934        | Solenoid valve 2/2 24V (EPDM),<br>sp.rocker  |                  |
| 12-1-V2-A   | 60039084        | Repair kit Bürkert 6126 2/2 EPDM,<br>sp.rock |                  |
| 13          | 60004964        | Unbracoscrew M03.0x030                       |                  |
| 16          | 00588335        | PCB Assy. H-30 Bar                           |                  |
| 17          | 00299313        | Washer                                       |                  |
| 18          | 00227348        | Allen screw M03.0x006                        |                  |
| 21          | 00296640        | Washer                                       |                  |
| 22          | 00201160        | Allen screw M03.0x010                        |                  |
| 30          | 60027174        | Cable Valve, H-Bar 30 bar                    |                  |
| 31          | 01010550        | Cable H-30 bar pcb                           |                  |



\* Text see 60028086\_kl

60024249 Doc. no. 20000035077 Doc. Ver. 08 Doc. Type 95

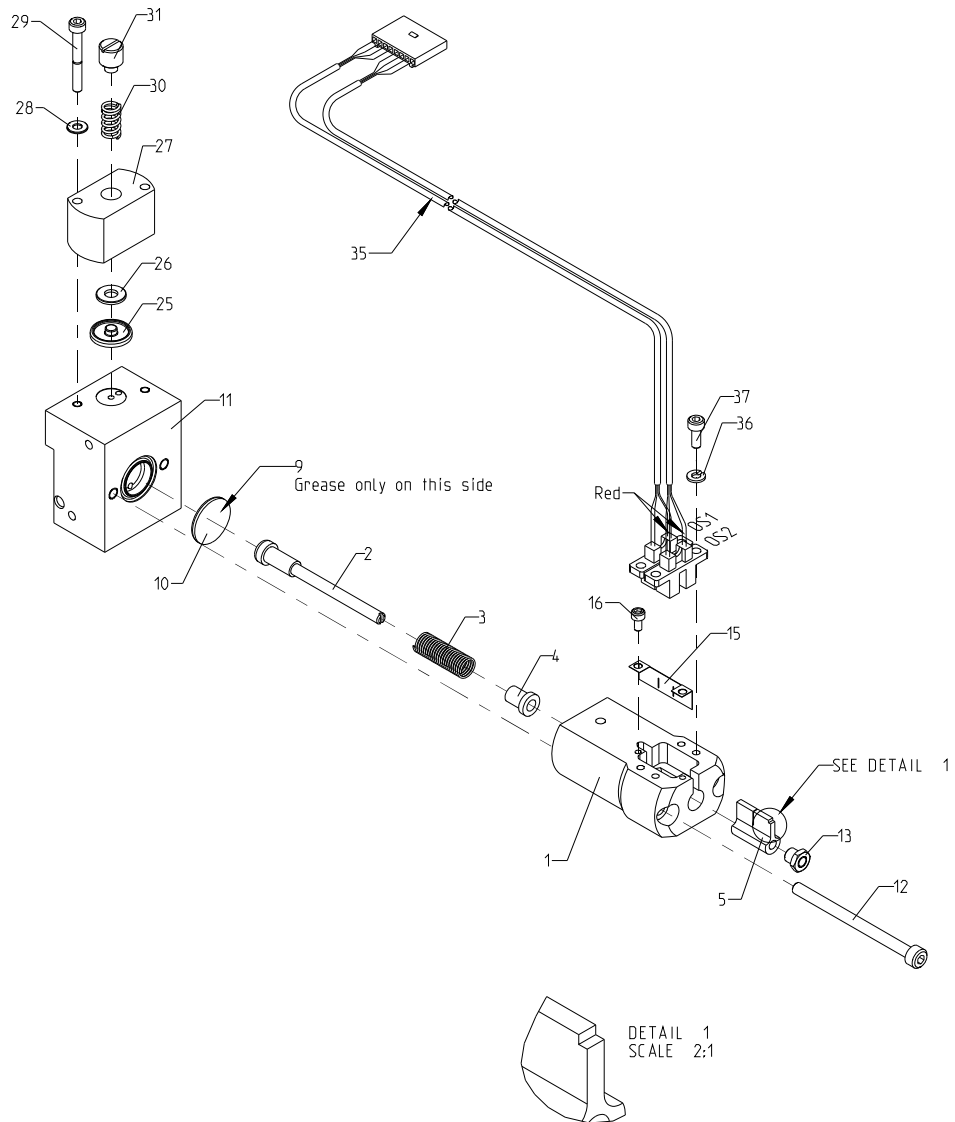
260

Fig. 21

## 22 Accumulator - With Filter

**Drawing No.: 60065219****Page: 300-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 3           | 01010467        | Spring             |                  |
| 9           | 60036123        | Grease 3g          |                  |
| 10          | 60031319        | Membrane           |                  |
| 12          | 00243451        | Allen screw M4x55  |                  |
| 13          | 60035669        | Lock nut           |                  |
| 15          | 01010429        | Aperture           |                  |
| 16          | 00189449        | Allen screw        |                  |
| 25          | 60027829        | Membrane           |                  |
| 28          | 00000554        | Washer ø3,2        |                  |
| 29          | 00708826        | Allen screw        |                  |
| 30          | 00325639        | Spring             |                  |
| 31          | 00328690        | Adj. Screw         |                  |
| 35          | 01010691        | Optocoupler        |                  |
| 36          | 00299313        | Washer             |                  |
| 37          | 00705251        | Allen screw M3x8   |                  |



60065219 Doc. no. 20000050698 Doc. Ver. 01 Doc. Type 95

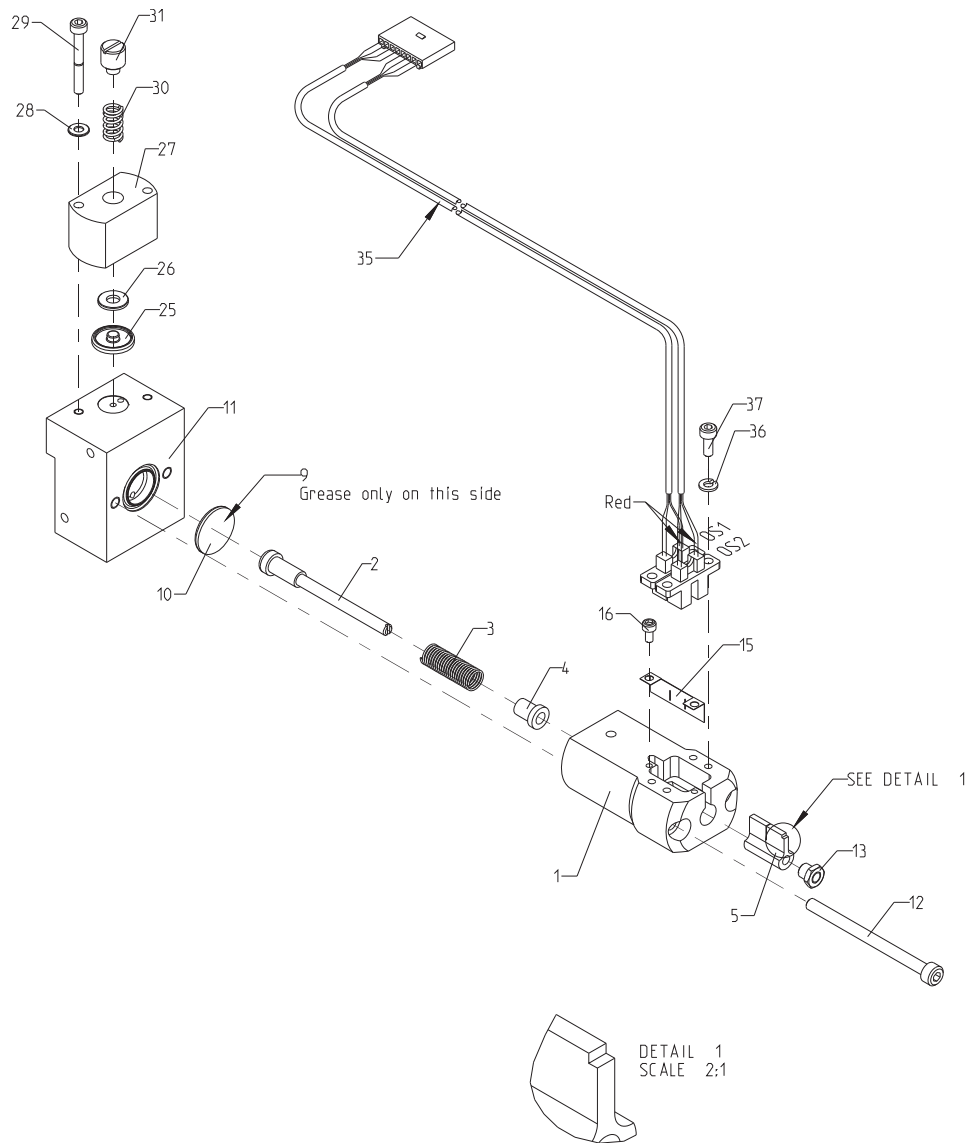
300

Fig. 22

## 23 Accumulator - Without Filter

*Drawing No.: 60027122**Page: 300-1*

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 3           | 01010467        | Spring             |                  |
| 9           | 60036123        | Grease 3g          |                  |
| 10          | 60031319        | Membrane           |                  |
| 11          | 60025062        | Accumulator        |                  |
| 12          | 00243451        | Screw m4x55        |                  |
| 13          | 60035669        | Lock nut           |                  |
| 15          | 01010429        | Aperture           |                  |
| 16          | 00189449        | Allen screw        |                  |
| 25          | 60027829        | Membrane           |                  |
| 28          | 00000554        | Washer             |                  |
| 29          | 00708826        | Allen screw        |                  |
| 30          | 00325639        | Spring             |                  |
| 31          | 00328690        | Adj. Screw         |                  |
| 35          | 01010691        | Optocoupler        |                  |
| 36          | 00299313        | Washer             |                  |
| 37          | 00705251        | Screw              |                  |



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300

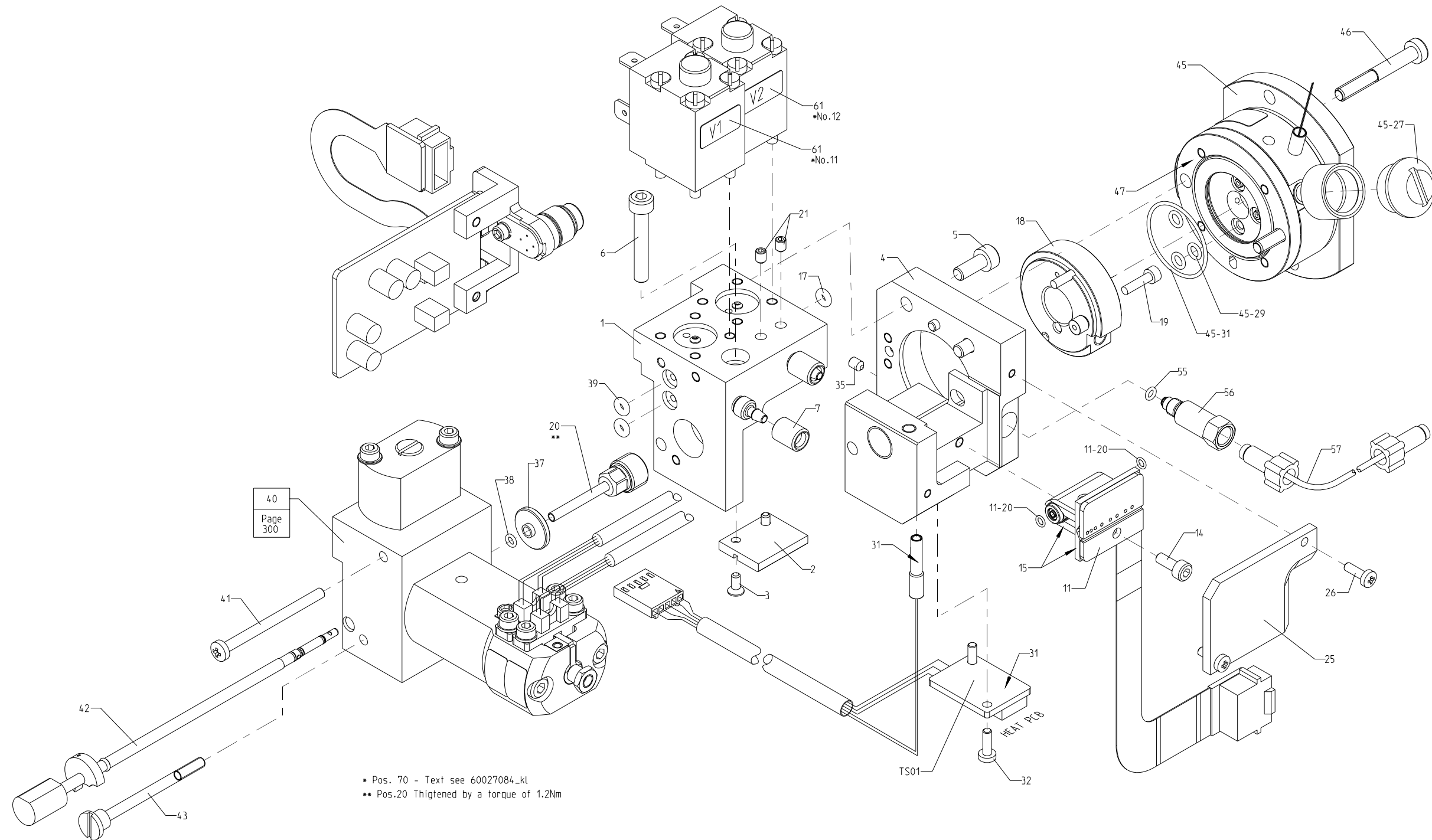
Fig. 23

## 24 Cuvette Unit - With Filter

**Drawing No.: 60065771**

**Page: 320-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>             | <b>Prod. No.</b> |
|-------------|-----------------|--------------------------------|------------------|
| 1           | 60058783        | Manifold, glued                |                  |
| 2           | 60025271        | Adjusting disc                 |                  |
| 3           | 00821801        | Screw                          |                  |
| 4           | 60058782        | Manifold, pressed              |                  |
| 5           | 00011569        | Allen screw M4x10              |                  |
| 6           | 00367706        | Allen screw M4x25              |                  |
| 7           | 00495135        | Union                          |                  |
| 11          | 60039215        | Conductivity Conn. Type 76150  |                  |
| 11-20       | 60026947        | O-ring ø002.0xø0.70            |                  |
| 14          | 00705251        | Allen screw M3x8               |                  |
| 15          | 00060251        | Silic. Comp.                   |                  |
| 17          | 60026943        | O-ring ø002.0xø1.8             |                  |
| 18          | 60058768        | Manifold Centre, glued         |                  |
| 19          | 00373365        | Allen Screw M02.5x010          |                  |
| 20          | 60026120        | Union                          |                  |
| 21          | 00460550        | Unbracoscrew                   |                  |
| 25          | 60025067        | Cover                          |                  |
| 26          | 00820118        | Screw m2.5x08                  |                  |
| 31          | 00060251        | Silic. Comp.                   |                  |
| 32          | 00820118        | Screw m2.5x08                  |                  |
| 35          | 00460550        | Unbracoscrew                   |                  |
| 37          | 60025063        | Disc                           |                  |
| 38          | 60015102        | O-ring ø002.3xø0.90            |                  |
| 39          | 60026943        | O-ring ø002.0xø1.8             |                  |
| 40          | 60065219        | Accumulator assy               |                  |
| 41          | 00820316        | Screw m3x40                    |                  |
| 42          | 60066062        | Filter pin assy                |                  |
| 42-A        | 60069754        | Tube ø3.00x0.25x 20 closed end |                  |
| 45          | 60065220        | Cuvette for Msc FT+            |                  |
| 46          | 60065829        | Allen screw M4x30 SS, low head |                  |
| 47          | 00060251        | Silic. Comp.                   |                  |
| 55          | 60015102        | O-ring ø002.3xø0.90            |                  |
| 56          | 60025066        | Hose fitting                   |                  |
| 57          | 00555391        | Tube connection                |                  |
| TS01        | 00588798        | Heat PCB                       |                  |
| TS02-3      | 00325548        | Thermistor                     |                  |
| V1          | 00499749        | Magnet system                  |                  |
| V1-A        | 00533737        | Repair Kit                     |                  |
| V2          | 00499749        | Magnet system                  |                  |
| V2-A        | 00533737        | Repair Kit                     |                  |



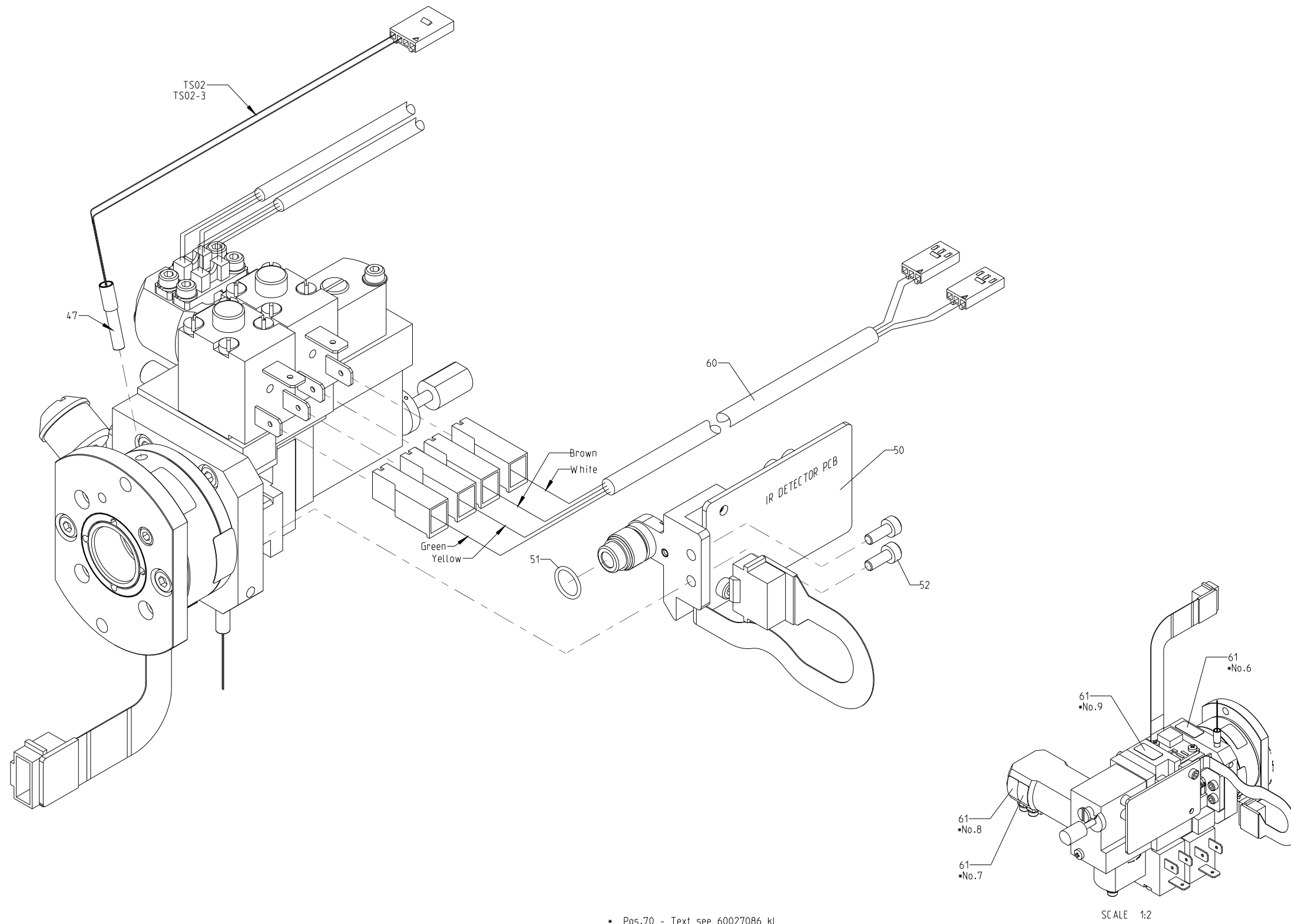
60065771 Doc. no. 2000050712 Doc. Ver. 05 Doc. Type 95

320-1

Fig. 24

**25 Cuvette Unit - With Filter****Drawing No.: 60065771      Page: 320-2**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>  | <b>Prod. No.</b> |
|-------------|-----------------|---------------------|------------------|
| 50          | 60065769        | IR Detector PCB     |                  |
| 51          | 60026945        | O-ring ø008.0xø1.0  |                  |
| 52          | 00705251        | Allen screw M3x8    |                  |
| 60          | 60027265        | Cable Valve         |                  |
| TS02        | 01010754        | NTC, cuvette sens.2 |                  |



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320-2

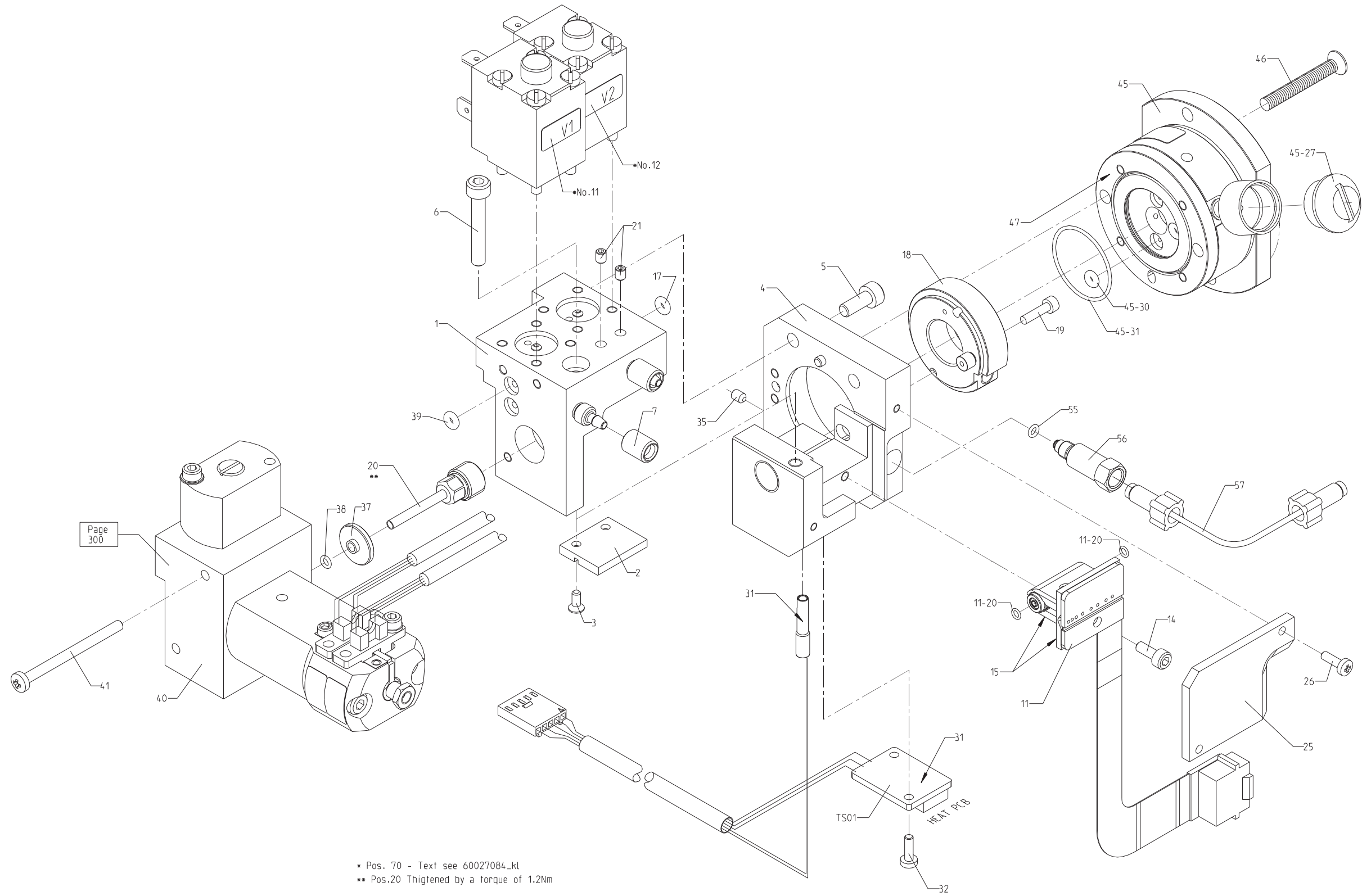
Fig. 25

## 26 Cuvette Unit - Without Filter

**Drawing No.:** 60027140

**Page:** 320-1

| Pos.   | Part No. | Description                      | Prod. No. |
|--------|----------|----------------------------------|-----------|
| 1      | 60046205 | Manifold, glued                  | 60027237  |
| 2      | 60025271 | Adjusting disc                   |           |
| 3      | 00821801 | Screw                            |           |
| 4      | 60027264 | Manifold, pressed                |           |
| 5      | 00011569 | Allen screw                      |           |
| 6      | 00367706 | Allen screw                      |           |
| 7      | 00495135 | Union                            |           |
| 11     | 60039215 | Conductivity Conn. Type 76150    |           |
| 11-20  | 60026947 | O-ring ø002.0xø0.70              |           |
| 14     | 00705251 | Screw                            |           |
| 15     | 00060251 | Silic. Comp.                     |           |
| 17     | 60026943 | O-ring ø002.0xø1.8               |           |
| 18     | 60038509 | Manifold Centre, glued P/d 76150 |           |
| 19     | 00373365 | Allen Screw                      |           |
| 20     | 60026120 | Union                            |           |
| 21     | 00460550 | Unbracoscrew                     |           |
| 25     | 60025067 | Cover                            |           |
| 26     | 00820118 | Screw m2.5x08                    |           |
| 31     | 00060251 | Silic. Comp.                     |           |
| 32     | 00820118 | Screw m2.5x08                    |           |
| 35     | 00460550 | Unbracoscrew                     |           |
| 37     | 60025063 | Disc                             |           |
| 38     | 60015102 | O-ring ø002.3xø0.90              |           |
| 39     | 60026943 | O-ring ø002.0xø1.8               |           |
| 41     | 00820316 | Screw m3x40                      |           |
| 45     | 60038200 | Cuvette Type 76150               |           |
| 45-27  | 01010760 | Drying cartridge                 |           |
| 45-30  | 00243667 | O-ring                           |           |
| 45-31  | 00534065 | O-ring                           |           |
| 46     | 00821512 | Screw m4x30                      |           |
| 47     | 00060251 | Silic. Comp.                     |           |
| 55     | 60015102 | O-ring ø002.3xø0.90              |           |
| 56     | 60025066 | Hose fitting                     |           |
| 57     | 00555391 | Tube connection                  |           |
| TS01   | 00588798 | Heat PCB                         |           |
| TS02-3 | 00325548 | Thermistor                       |           |
| V1     | 00499749 | Magnet system                    |           |
| V1-A   | 00533737 | Repair Kit                       |           |
| V2     | 00499749 | Magnet system                    |           |
| V2-A   | 00533737 | Repair Kit                       |           |



- Pos. 70 - Text see 60027084\_kl
- Pos.20 Thightened by a torque of 1.2Nm

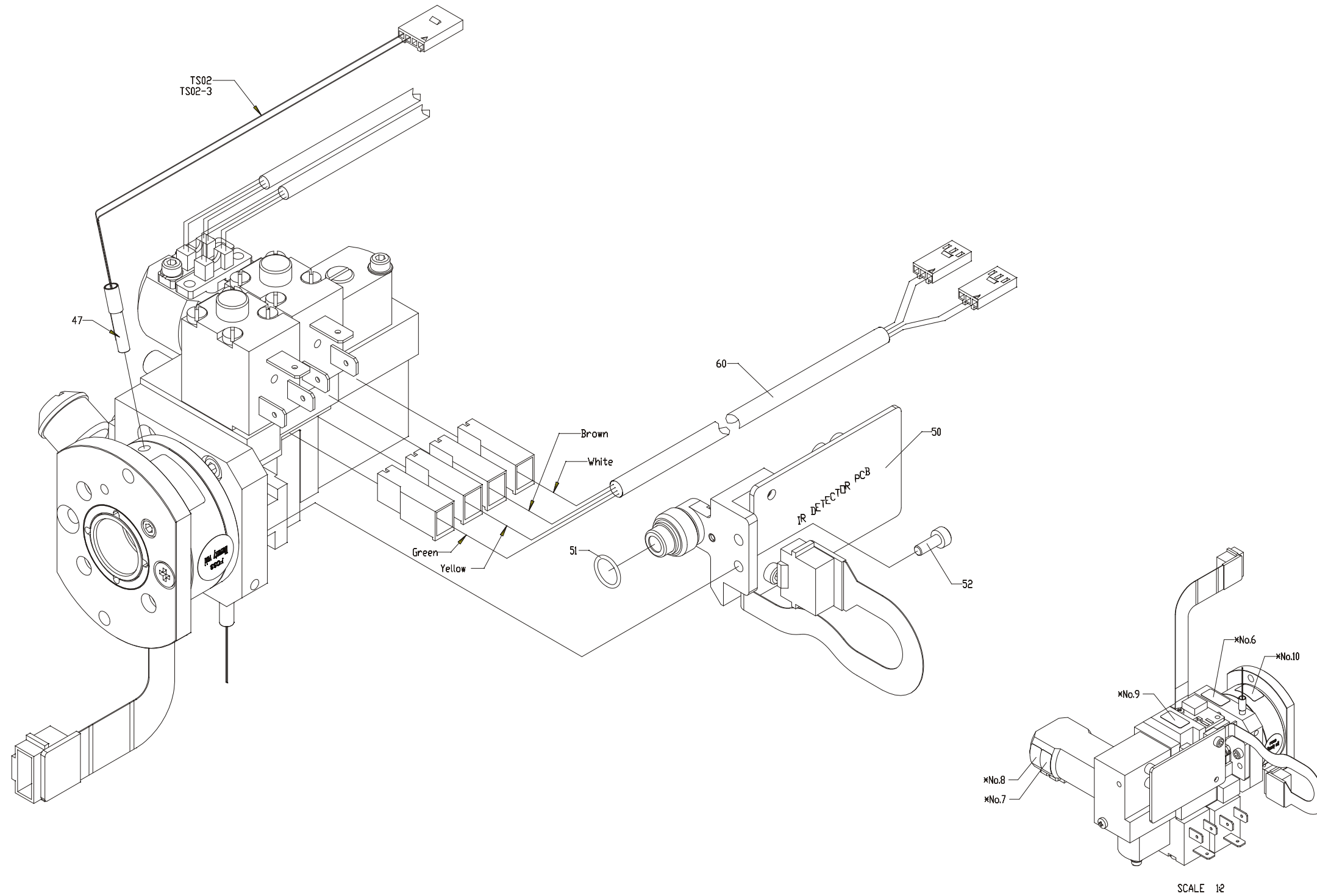
60027140\_IS1 7.0 Dokument:3.AU.1.71

320-1

Fig. 26

**27 Cuvette Unit - Without Filter****Drawing No.: 60027140**      **Page: 320-2**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>  | <b>Prod. No.</b> |
|-------------|-----------------|---------------------|------------------|
| 50          | 60027876        | IR Detector PCB     |                  |
| 51          | 60026945        | O-ring ø008.0xø1.0  |                  |
| 52          | 00705251        | Screw               |                  |
| 60          | 60027265        | Cable Valve         |                  |
| TS02        | 01010754        | NTC, cuvette sens.2 |                  |



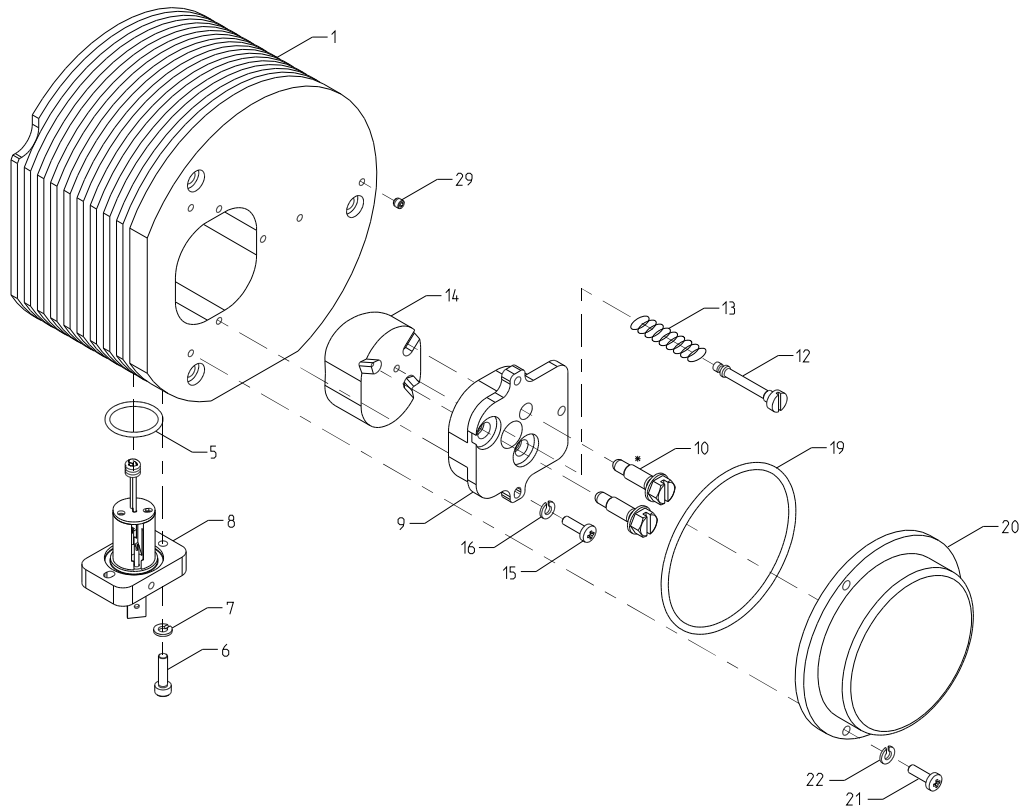
\* Pos.70 - Text see 60027086\_kl

Fig. 27

320-2

**28 Source Unit****Drawing No.: 01010723      Page: 330-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 5           | 00209452        | O-ring             |                  |
| 6           | 00219147        | Allen screw M3x12  |                  |
| 7           | 00299313        | Washer             |                  |
| 8           | 60048339        | Source assembly    | 60043805         |
| 11          | 00158246        | Glue loc. 222      |                  |
| 19          | 00536581        | O-ring             |                  |
| 21          | 00820225        | Screw m3x10        |                  |
| 22          | 00299313        | Washer             |                  |



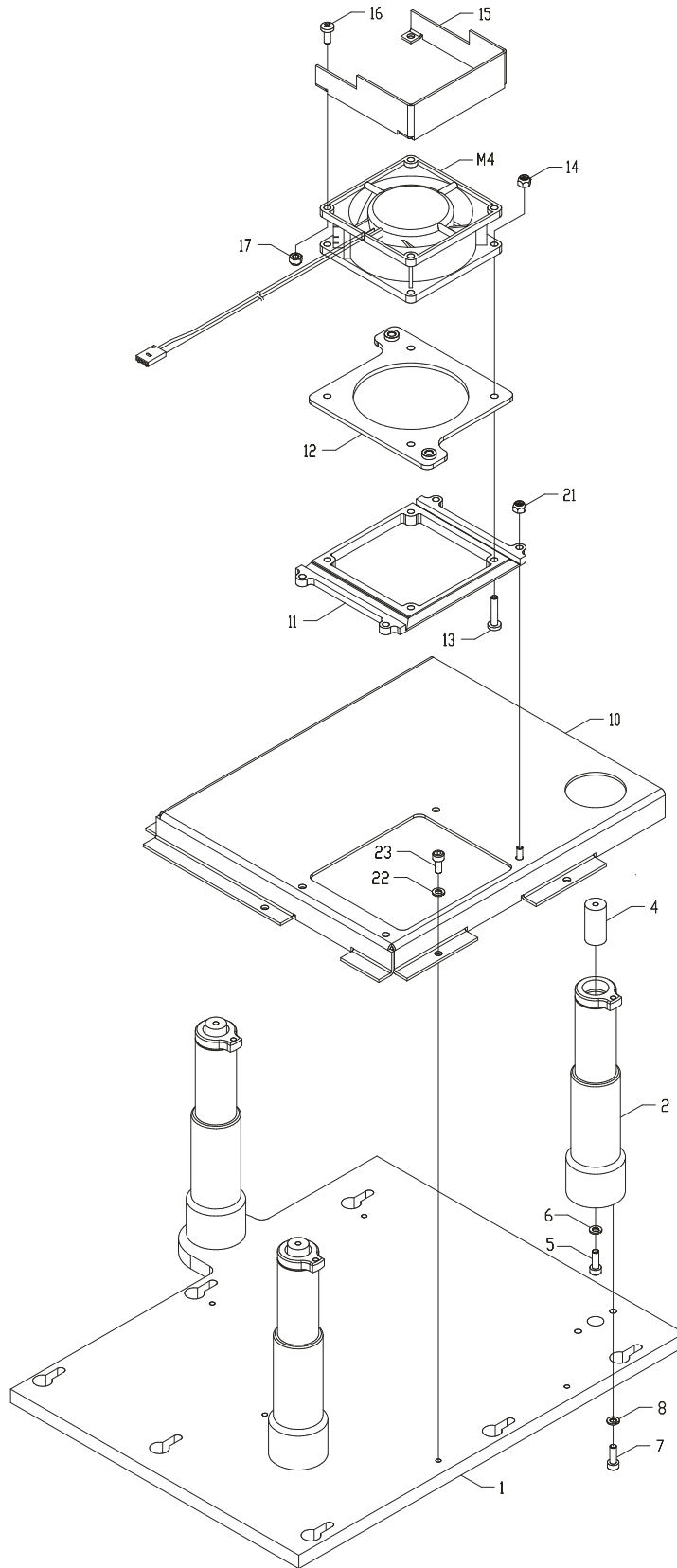
\* Glue with loctite 222 pos.11

*Fig. 28*

## 29 Vibration Damper

**Drawing No.: 01010670****Page: 340-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 4           | 00536540        | Damper             |                  |
| 5           | 00291724        | Allen screw M4x12  |                  |
| 6           | 00109108        | Springwasher       |                  |
| 11          | 00538082        | Foot               |                  |
| 13          | 00820415        | Screw m4x20        |                  |
| 14          | 00111872        | Lock nut m4        |                  |
| 16          | 00820365        | Screw m4x10        |                  |
| 17          | 00111872        | Lock nut m4        |                  |
| 21          | 00111872        | Lock nut m4        |                  |
| 22          | 00109108        | Springwasher       |                  |
| 23          | 00011569        | Allen screw M4x10  |                  |
| M4          | 01010513        | Fan cpl.           |                  |



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*Fig. 29*

## 30 Interferometer Unit

**Drawing No.:** 60026949

**Page:** 350-1

| Pos. | Part No. | Description                      | Prod. No.          |
|------|----------|----------------------------------|--------------------|
| 9    | 00227728 | Stay                             |                    |
| 15   | 00536466 | Stopper with o-ring              |                    |
| 20   | 01010646 | IF-gasket pcb                    |                    |
| 21   | 00588152 | Interferometer PCB               |                    |
| 22   | 00227348 | Allen screw M03.0x006            |                    |
| 23   | 01010647 | IF-gasket pcb                    |                    |
| 25   | 00201160 | Allen screw M03.0x010            |                    |
| 31   | 00011569 | Allen screw M4x10                |                    |
| 32   | 00109397 | Washer                           |                    |
| 48   | 01010726 | O-ring                           |                    |
| 49   | 01000425 | Ring                             |                    |
| 53   | 00053207 | Nylon clamp                      |                    |
| 54   | 00705251 | Allen screw M3x8                 |                    |
| 55   | 00296640 | Washer                           |                    |
| 56   | 00416693 | Screw                            |                    |
| 57   | 00109108 | Springwasher                     |                    |
| 61   | 00060251 | Silic. Comp.                     |                    |
| 65   | 60046198 | Linear Motor,                    | Type 7615060026950 |
| 66   | 00201152 | Allen screw M04.0x016            |                    |
| 70   | 01000560 | Fixed mirror                     |                    |
| 71   | 00219147 | Allen screw M3x12                |                    |
| 75   | 01011047 | Beamsplitter                     |                    |
| 76   | 00219147 | Allen screw M3x12                |                    |
| 77   | 60046190 | Mirror assembly                  | 01010767           |
| 78   | 01015197 | O-ring                           |                    |
| 79   | 00588194 | Laser Detector PCB               |                    |
| 80   | 00820027 | Screw m2x05                      |                    |
| 81   | 00495788 | Bolt                             |                    |
| 83   | 00219147 | Allen screw M3x12                |                    |
| 84   | 00108480 | Allen screw M03.0x016            |                    |
| 85   | 60046200 | IFU Thermostat                   | 60026951           |
| 86   | 00060251 | Silic. Comp.                     |                    |
| 87   | 00367912 | Allen screw M04.0x030            |                    |
| 88   | 00109108 | Springwasher                     |                    |
| 92   | 00053207 | Nylon clamp                      |                    |
| 93   | 00705251 | Allen screw M3x8                 |                    |
| 94   | 00296640 | Washer                           |                    |
| 95   | 01010727 | O-ring                           |                    |
| 97   | 01010790 | Allen screw M3x14                |                    |
| 98   | 00333625 | O-ring                           |                    |
| 99   | 01000462 | Si. cartridge                    |                    |
| 99-3 | 01000632 | Filter for Si.Cartridge          |                    |
| 99-6 | 01015633 | Label                            |                    |
| 99-8 | 01011078 | Grease apiezon L-type ultra high |                    |
| 103  | 60046189 | Mirror assembly                  | 01010735           |
| 107  | 00256701 | Allen screw M04.0x006            |                    |
| 110  | 00588251 | Detector Connection PCB          |                    |
| 111  | 00227348 | Allen screw M03.0x006            |                    |
| 112  | 00299313 | Washer                           |                    |

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|       |          |                       |
|-------|----------|-----------------------|
| 116   | 01010643 | Damper                |
| 117   | 00256701 | Allen screw M04.0x006 |
| 122   | 01010713 | Spring                |
| 123   | 00227348 | Allen screw M03.0x006 |
| 125   | 00293712 | Profile               |
| 126   | 00293712 | Profile               |
| 135   | 60027299 | Laser power supply    |
| 137   | 00820290 | Screw m3x30           |
| 139   | 00820209 | Screw m3x06           |
| 141   | 01010716 | Spring                |
| 142   | 00227348 | Allen screw M03.0x006 |
| 147-2 | 60026941 | O-ring ø012.0xø1.0    |
| 147-3 | 60025039 | Lens                  |
| 147-4 | 60026939 | O-ring ø015.0xø1.0    |
| 170   | 00201137 | Allen screw M04.0x020 |
| 172   | 00367706 | Allen screw M4x25     |
| 182   | 00005967 | Nut m4                |
| LA02  | 60027290 | Laser Lamp            |

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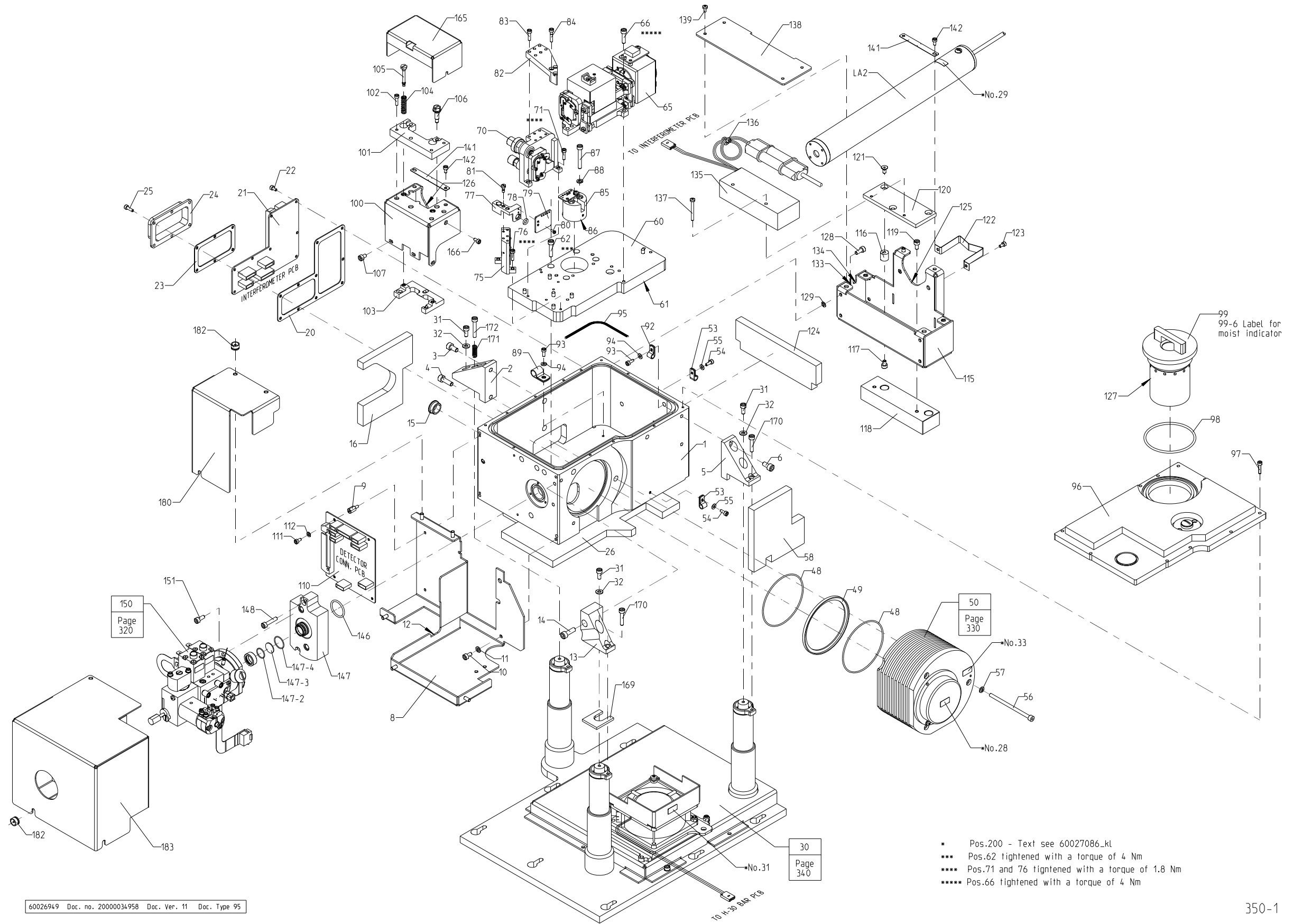
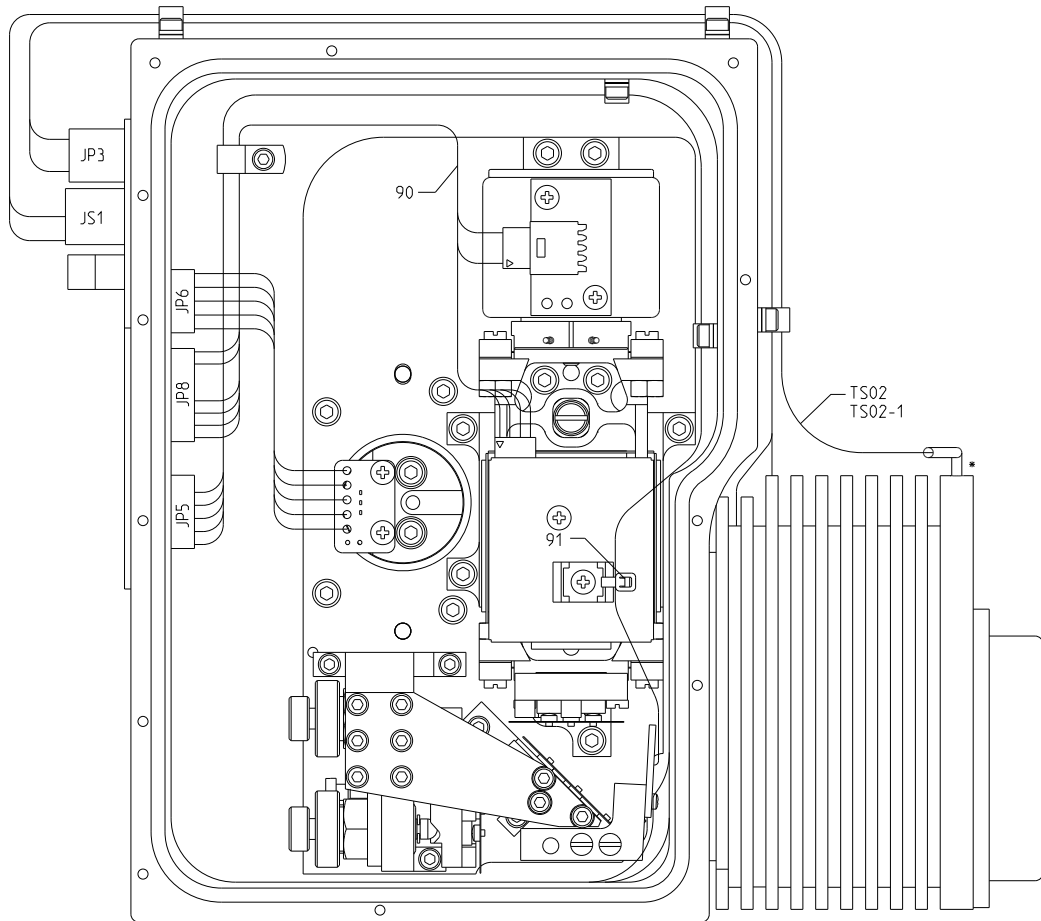


Fig. 30

**31 Interferometer Unit****Drawing No.: 60026949      Page: 350-2**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 90          | 01010683        | Cable linear motor |                  |
| TS02-1      | 00514679        | Thermistor         |                  |



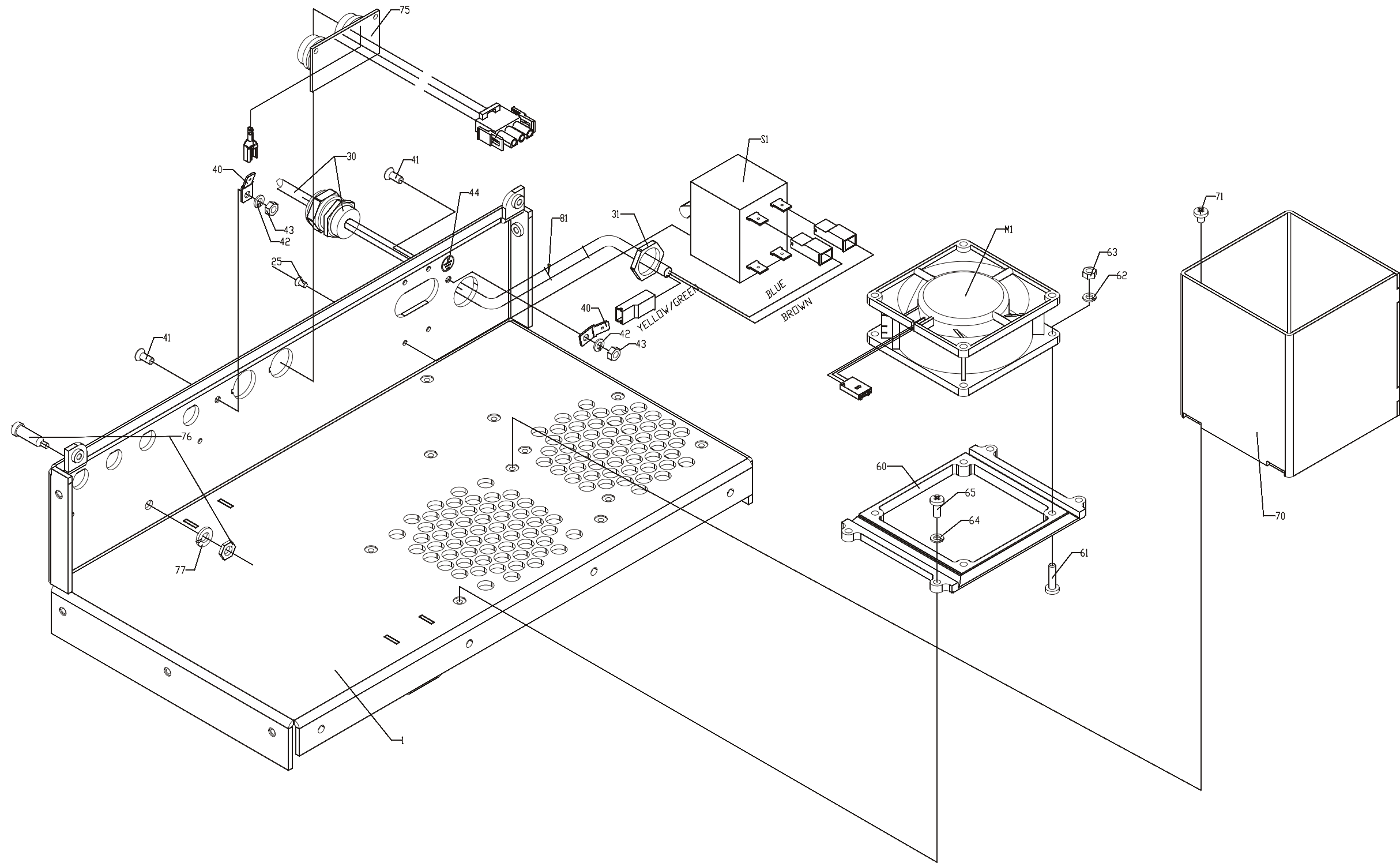
▪ Seal with silicon compound pos.52

Fig. 31

## **32 El. Baseplate Unit**

**Drawing No.: 60026970****Page: 400-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 25          | 00821272        | Screw m3x06        |                  |
| 30          | 01011013        | Power cable        |                  |
| 60          | 00538082        | Foot               |                  |
| 62          | 00109108        | Springwasher       |                  |
| 63          | 00051433        | Nut M4             |                  |
| 64          | 00109108        | Springwasher       |                  |
| 65          | 00820365        | Screw m4x10        |                  |
| 75          | 00588350        | Pip/Conv Power PCB |                  |
| 77          | 00372342        | Springwasher       |                  |
| M1          | 01010513        | Fan cpl.           |                  |
| S1          | 00517409        | Fuse/Switch        |                  |



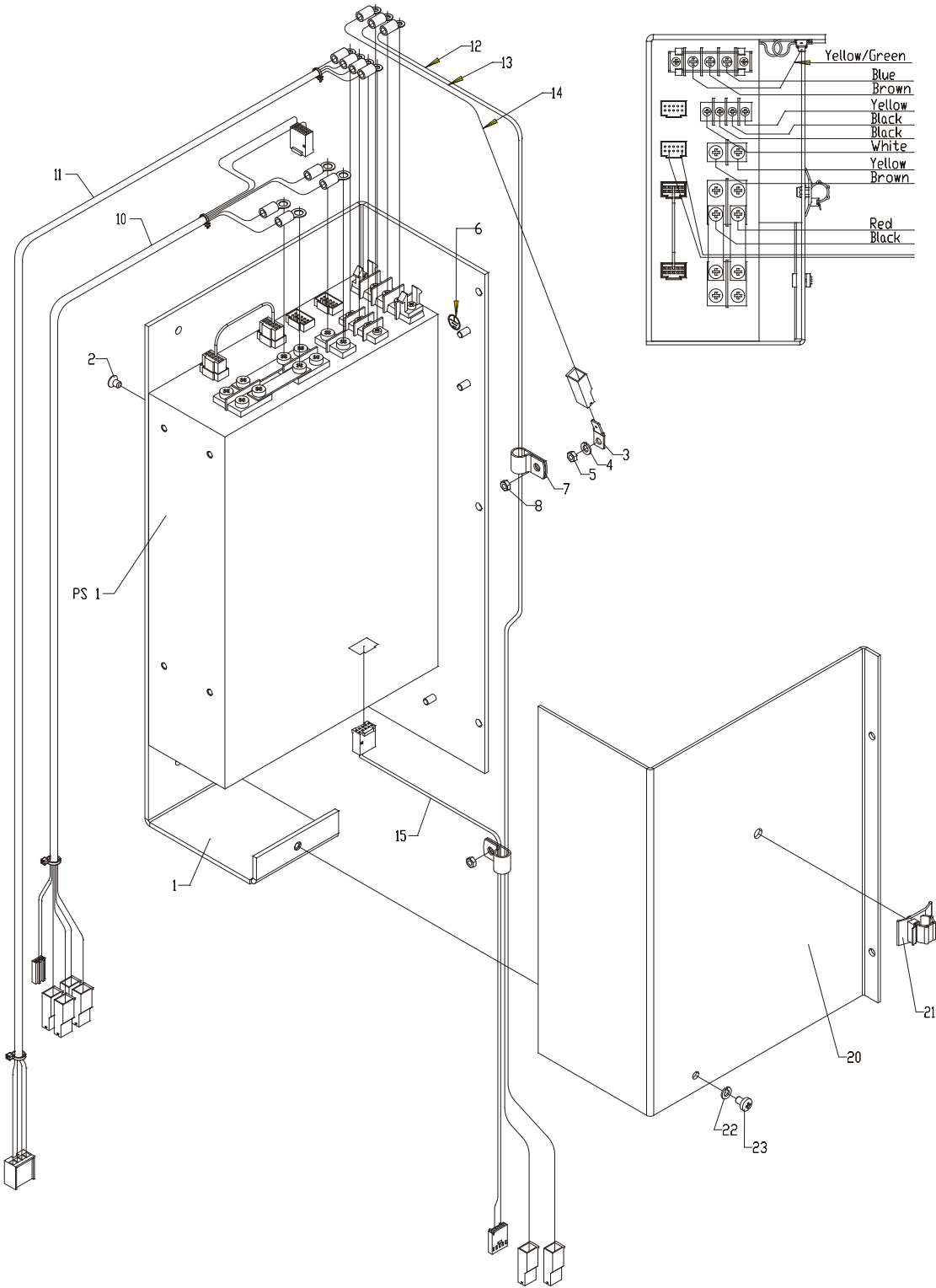
400

Fig. 32

### **33 Power Supply Unit**

**Drawing No.: 01010582      Page: 410-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>          | <b>Prod. No.</b> |
|-------------|-----------------|-----------------------------|------------------|
| 10          | 60003439        | Cable 1 power/motherboard   |                  |
| 11          | 60003440        | Cable 2 power/motherboard   |                  |
| 12          | 01055034        | Cable power supply - filter |                  |
| 13          | 01055035        | Cable power supply - filter |                  |
| 14          | 01055036        | Cable power supply - GND    |                  |
| 15          | 60003441        | Cable power supply conn.    |                  |
| 22          | 00109108        | Springwasher                |                  |
| 23          | 00820340        | Screw m4x06                 |                  |
| PS01        | 01015460        | Power Supply 800W Astec     |                  |



410

Fig. 33

## 34 El. Box Unit

**Drawing No.:** 60026971

**Page:** 420-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 10          | 00060251        | Silic. Comp.       |                  |
| 11          | 00299313        | Washer             |                  |
| 12          | 00820209        | Screw m3x06        |                  |
| 21          | 00109108        | Springwasher       |                  |
| 22          | 00820365        | Screw m4x10        |                  |
| 23          | 00109397        | Washer             |                  |
| 24          | 00051433        | Nut M4             |                  |
| 41          | 00512202        | EMC-list           |                  |
| 42          | 00588137        | Power PCB          |                  |
| 43          | 00299313        | Washer             |                  |
| 44          | 00555839        | Distance stay      |                  |
| 51          | 00109108        | Springwasher       |                  |
| 52          | 00820357        | Screw m4x08        |                  |
| 53          | 00109108        | Springwasher       |                  |
| 54          | 00051433        | Nut M4             |                  |
| 61          | 00588319        | Arcnet/Liquid PCB  |                  |
| 62          | 00820209        | Screw m3x06        |                  |
| 63          | 00299313        | Washer             |                  |
| 65          | 01015447        | Toothed Disc       |                  |
| 66          | 01015448        | Nut                |                  |
| 70          | 00524579        | Filter             |                  |
| 75          | 00820357        | Screw m4x08        |                  |
| 81          | 00508994        | Grommet            |                  |
| 82          | 00820357        | Screw m4x08        |                  |
| 83          | 00528570        | PVC Ø2.5/4.5 Blue  |                  |
| 84          | 00513606        | PVC                |                  |
| 85          | 00028613        | PVC Ø2/4           |                  |
| 90          | 60046207        | FTIR Control PCB   | 60029225         |
| R1          | 01010574        | Resistor cpl.      |                  |

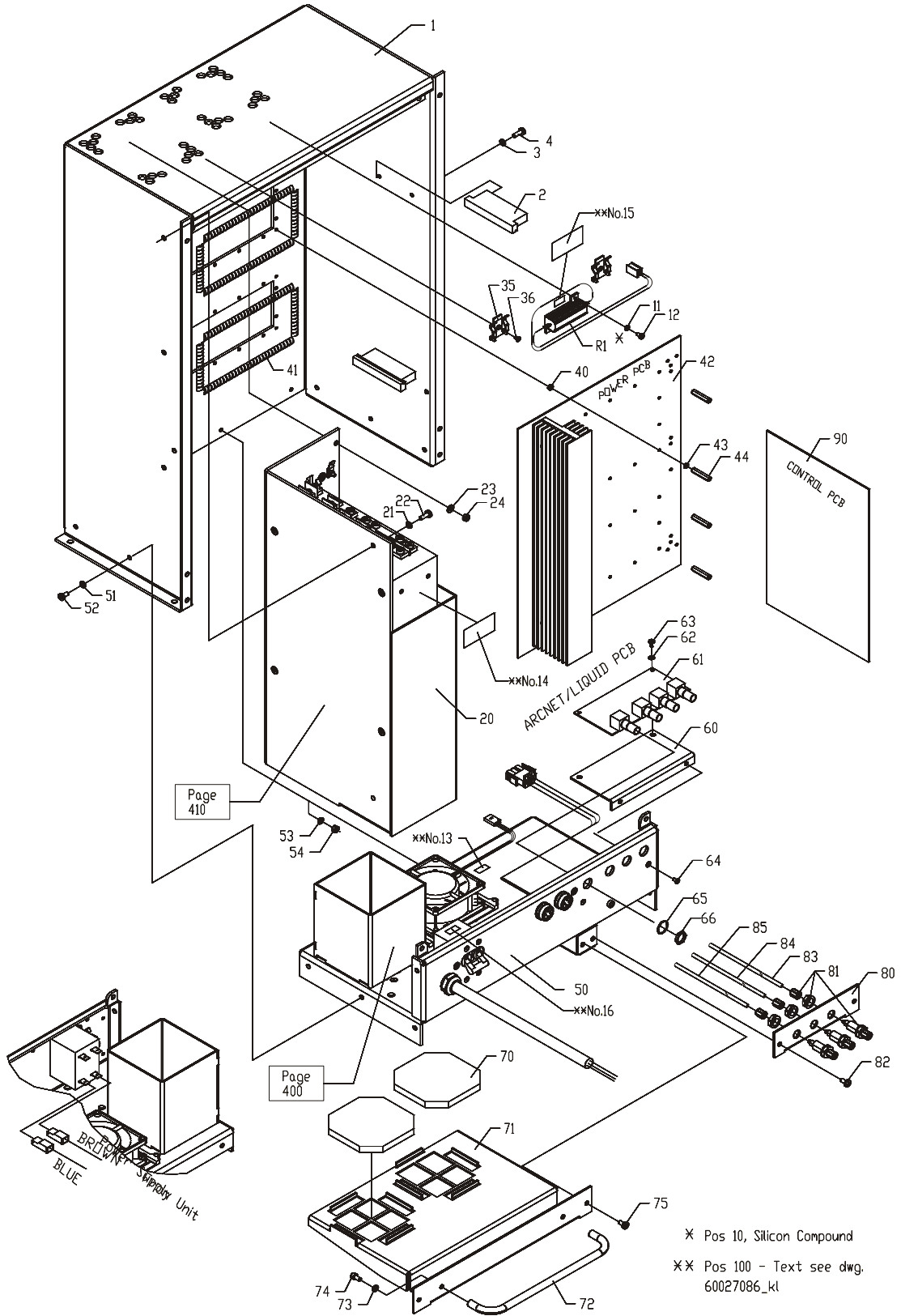
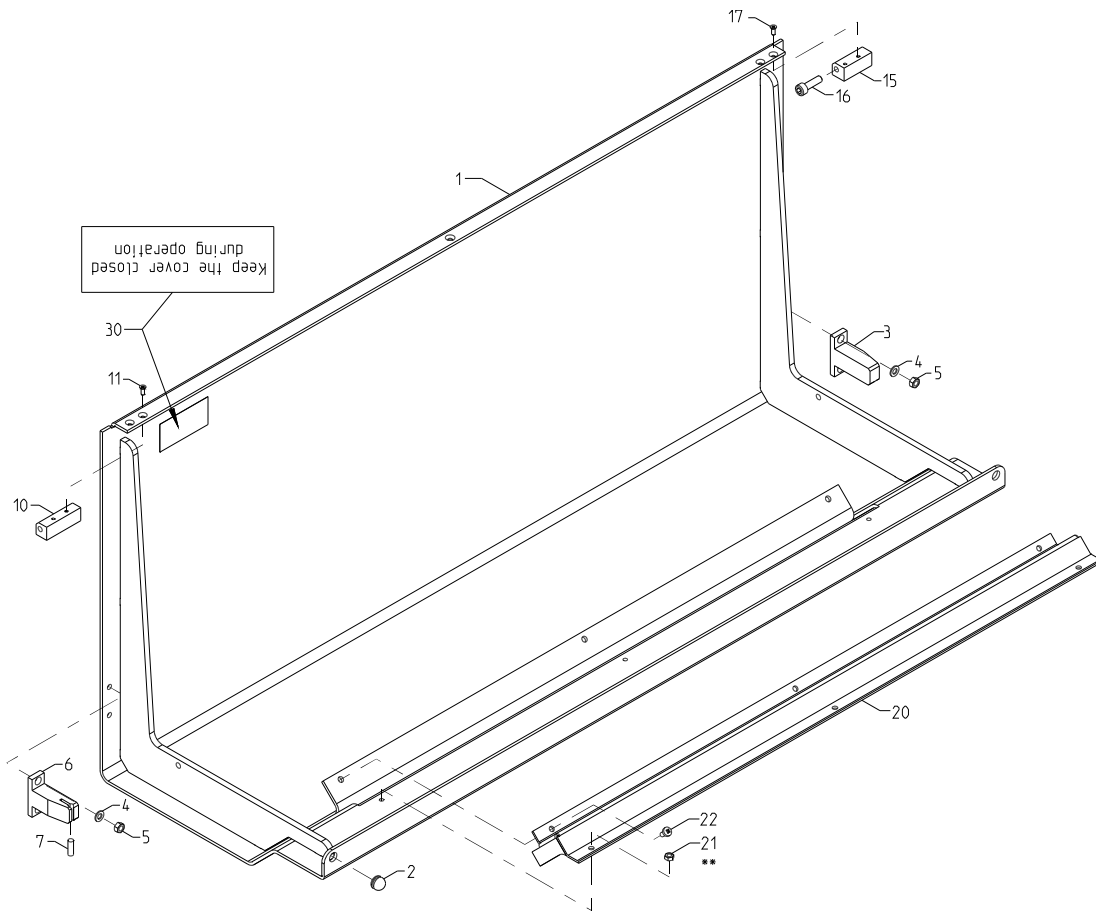


Fig. 34

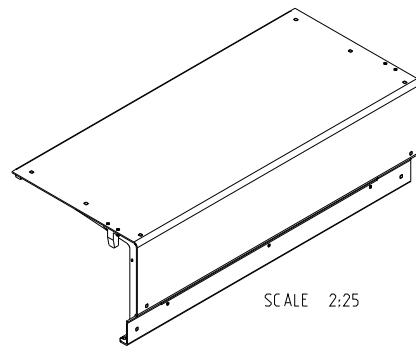
## 35 Lid Unit

**Drawing No.: 60067280****Page: 430-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 2           | 00141879        | Rubber pad         |                  |
| 4           | 00014456        | Washer             |                  |
| 5           | 00008839        | Nut M 5            |                  |
| 7           | 00089896        | Magnet             |                  |
| 11          | 00821280        | Screw M3x8         |                  |
| 16          | 00706440        | Allen screw        |                  |
| 17          | 00821280        | Screw M3x8         |                  |
| 21          | 00051433        | Nut M4             |                  |
| 22          | 00820357        | Screw m4x08        |                  |



\*\* Pos.21 Thightened by a torque af 1.9 Nm



60067280 Doc. no. 20000050735 Doc. Ver. 02 Doc. Type 95

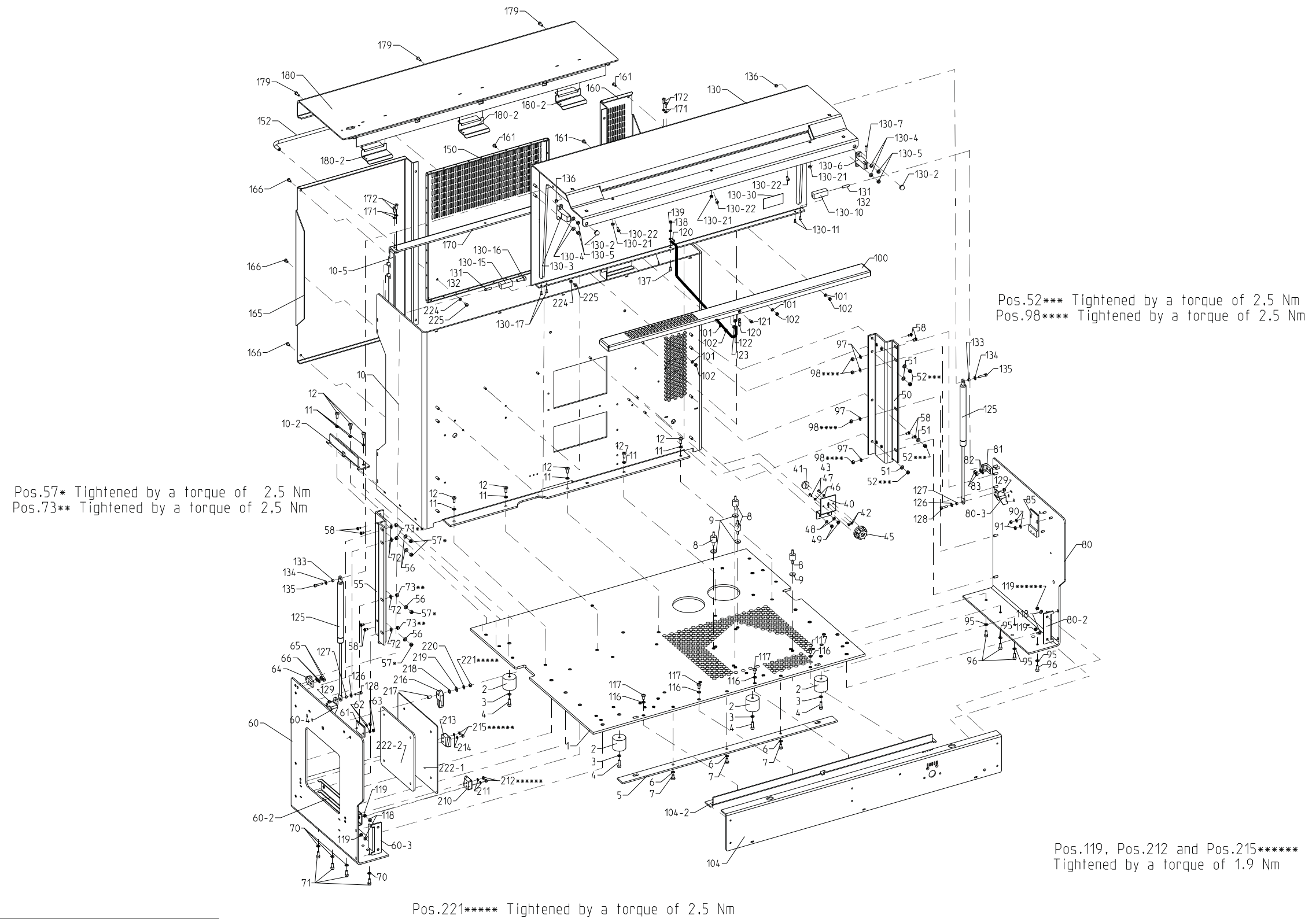
430

Fig. 35

## 36 Cabinet

**Drawing No.: 60054105****Page: 450-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>    | <b>Prod. No.</b> |
|-------------|-----------------|-----------------------|------------------|
| 2           | 00501759        | Leg                   |                  |
| 3           | 00357897        | Springwasher          |                  |
| 4           | 00705012        | Screw                 |                  |
| 8           | 01011010        | Damper                |                  |
| 9           | 01010799        | Dist. washer          |                  |
| 43          | 00144592        | Allen screw           |                  |
| 120         | 01010729        | Wire                  |                  |
| 121         | 00821439        | Screw m4x10           |                  |
| 122         | 00109108        | Springwasher          |                  |
| 123         | 00051433        | Nut M4                |                  |
| 125         | 00363788        | Damper                |                  |
| 126         | 00014456        | Washer                |                  |
| 127         | 01010537        | Dist. tube            |                  |
| 128         | 00201152        | Allen screw M04.0x016 |                  |
| 129         | 00111872        | Lock nut m4           |                  |
| 133         | 01010537        | Dist. tube            |                  |
| 134         | 00014456        | Washer                |                  |
| 135         | 00201137        | Allen screw M04.0x020 |                  |
| 136         | 00111872        | Lock nut m4           |                  |
| 166         | 00820357        | Screw m4x08           |                  |
| 179         | 00820373        | Screw m4x12           |                  |

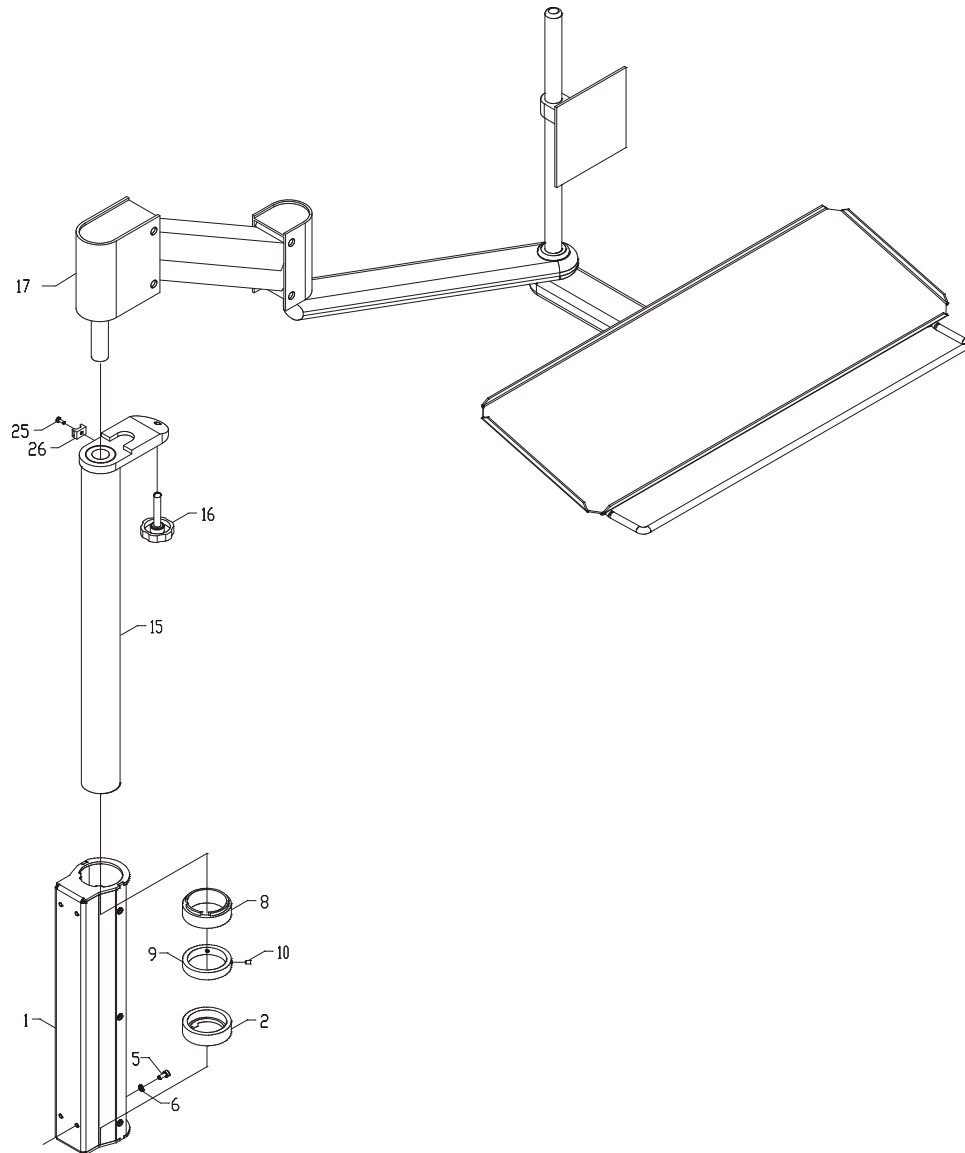


60054105 Doc. no. 20000039746 Doc. Ver. 07 Doc. Type 95

Fig. 36

**37 Monitor Arm****Drawing No.: 01010590      Page: 500-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 5           | 00011569        | Allen screw M4x10  |                  |
| 6           | 00109108        | Springwasher       |                  |
| 16          | 00534388        | Finger screw       |                  |



Pos.5 og 6 are used to mount on cabinet

500

*Fig. 37*

## **38 Monitor Cables**

**Drawing No.:** -**Page:** 510-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>                 | <b>Prod. No.</b> |
|-------------|-----------------|------------------------------------|------------------|
| 1           | 01015436        | Cable USB ext. 1.8 m               |                  |
| 2           | 01010875        | Cable keyboard                     |                  |
| 3           | 01015169        | Cable VGA                          |                  |
| 4           | 01010872        | Cable, monitor/mains               |                  |
| 6           | 00049254        | Cable ties 2.5mm x 100mm Pa natur  |                  |
| 7           | 01015170        | Plug                               |                  |
| 8           | 01030778        | Cable audiu ext. 3.5mm Male/Female |                  |

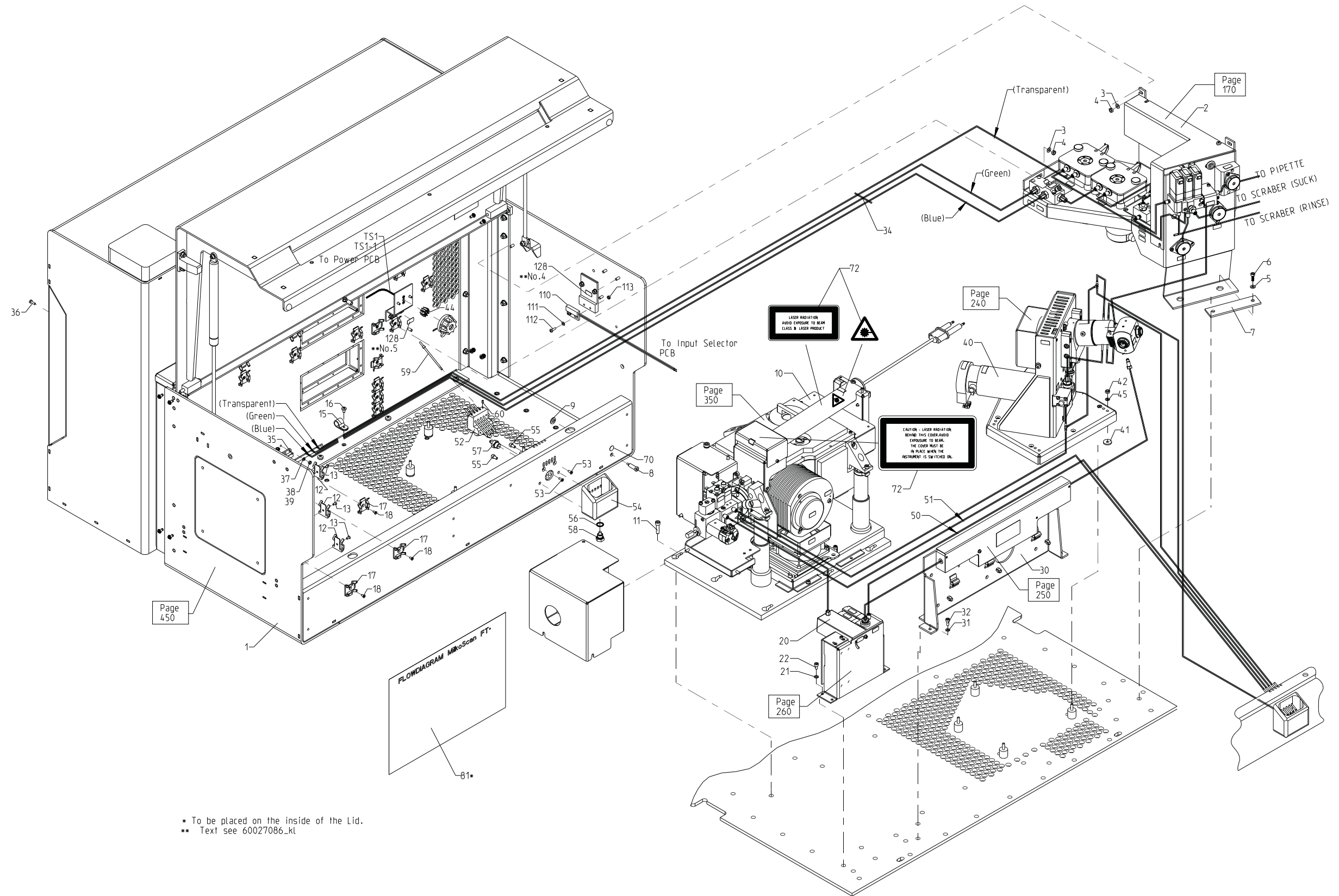
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## 39 Basic Unit

**Drawing No.:** 60027086

**Page:** 600-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>                | <b>Prod. No.</b> |
|-------------|-----------------|-----------------------------------|------------------|
| 3           | 00109397        | Washer                            |                  |
| 4           | 00051433        | Nut M4                            |                  |
| 5           | 00109397        | Washer                            |                  |
| 6           | 00291724        | Allen screw M4x12                 |                  |
| 10          | 60026949        | Interferometer Unit, Type 76150   |                  |
| 11          | 00201145        | Allen screw                       |                  |
| 15          | 00053256        | Nylon clamp                       |                  |
| 16          | 00820340        | Screw m4x06                       |                  |
| 21          | 00109108        | Springwasher                      |                  |
| 22          | 00710624        | Allen screw                       |                  |
| 30          | 60024919        | Sample Heater                     |                  |
| 31          | 00109108        | Springwasher                      |                  |
| 32          | 00011569        | Allen screw M4x10                 |                  |
| 36          | 00820225        | Screw m3x10                       |                  |
| 37          | 00299313        | Washer                            |                  |
| 38          | 00153403        | Nut                               |                  |
| 42          | 00051433        | Nut M4                            |                  |
| 45          | 00109108        | Springwasher                      |                  |
| 50          | 00215301        | Silic. Ø2/4                       |                  |
| 51          | 00215301        | Silic. Ø2/4                       |                  |
| 54          | 60024837        | Wastecup                          |                  |
| 55          | 00217612        | Finger screw                      |                  |
| 56          | 60002258        | Sealing ring                      |                  |
| 59          | 00505370        | Tube cpl.                         |                  |
| 60          | 00417196        | Allen screw                       |                  |
| 108         | 00011569        | Allen screw M4x10                 |                  |
| 109         | 00049254        | Cable ties 2.5mm x 100mm Pa natur |                  |
| 110         | 01010699        | Lid sensor                        |                  |
| 111         | 00296640        | Washer                            |                  |
| 112         | 00820225        | Screw m3x10                       |                  |
| 113         | 00153403        | Nut                               |                  |
| TS01-1      | 00325548        | Thermistor                        |                  |



60027086 Doc. no. 20000035044 Doc. Ver. 12 Doc. Type 95

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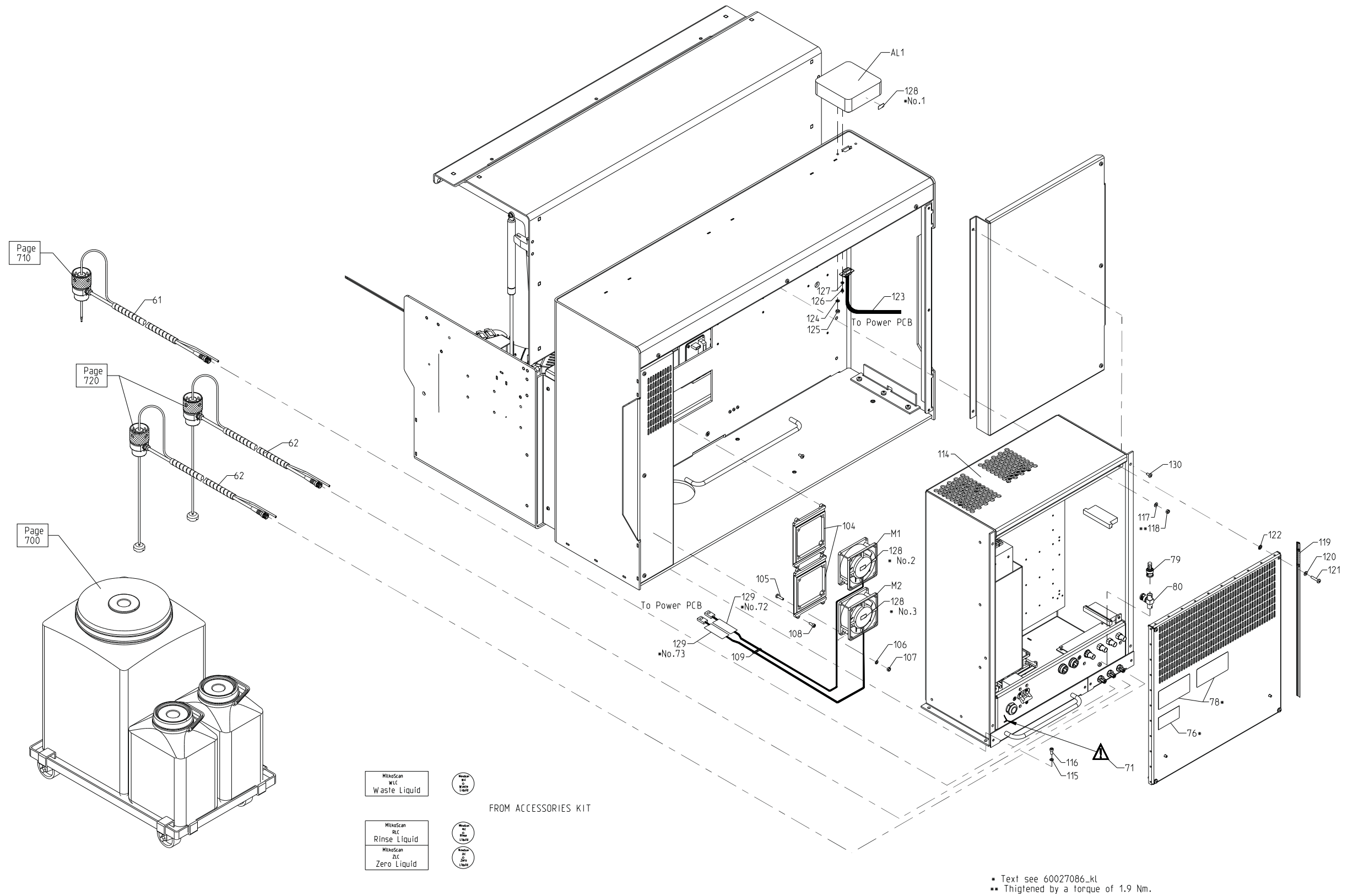
Fig. 38

## 40 Basic Unit

*Drawing No.:* 60027086

*Page:* 600-2

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>          | <b>Prod. No.</b> |
|-------------|-----------------|-----------------------------|------------------|
| 61          | 60046180        | Container Lid, Waste System | 00532275         |
| 62          | 60046181        | Container Lid, B/D System   | 00532283         |
| 79          | 00470161        | Connector BNC Termin 93 Ohm |                  |
| 80          | 01010042        | Plug bnc "T" adaptor        |                  |
| 104         | 00538082        | Foot                        |                  |
| 105         | 00820399        | Screw m4x16                 |                  |
| 106         | 00109108        | Springwasher                |                  |
| 107         | 00051433        | Nut M4                      |                  |
| 120         | 00182782        | Washer                      |                  |
| 121         | 00820415        | Screw m4x20                 |                  |
| 122         | 00525253        | Disc                        |                  |
| 126         | 00820183        | Screw m3x04                 |                  |
| 127         | 00299313        | Washer                      |                  |
| AL01        | 60028344        | Lamp                        |                  |
| M1          | 01010697        | Fan cpl.                    |                  |
| M2          | 01010697        | Fan cpl.                    |                  |



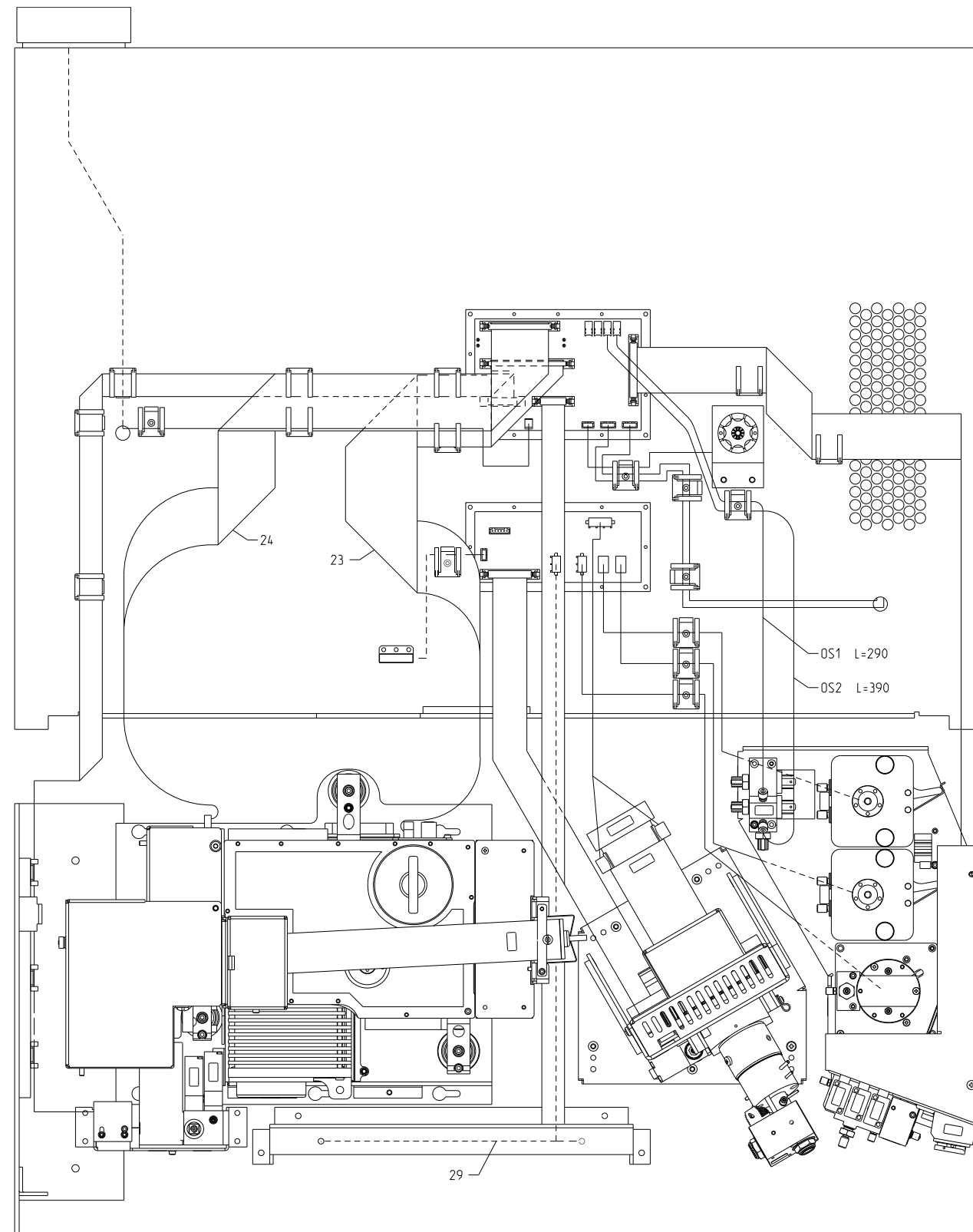
60027086 Doc. no. 20000035043 Doc. Ver. 07 Doc. Type 95

Fig. 39

600-2

**41 Basic Unit, El. Connection****Drawing No.: 60027086****Page: 600-3**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>        | <b>Prod. No.</b> |
|-------------|-----------------|---------------------------|------------------|
| 23          | 01010576        | Cable 50 IF/Motherboard   |                  |
| 24          | 01010577        | Cable 40 IF/Motherboard   |                  |
| 29          | 01010578        | Cable Sample Heater Power |                  |
| OS01        | 00507392        | Cable                     |                  |
| OS02        | 00507392        | Cable                     |                  |



60027086 Doc. no. 20000035045 Doc. Ver. 08 Doc. Type 95

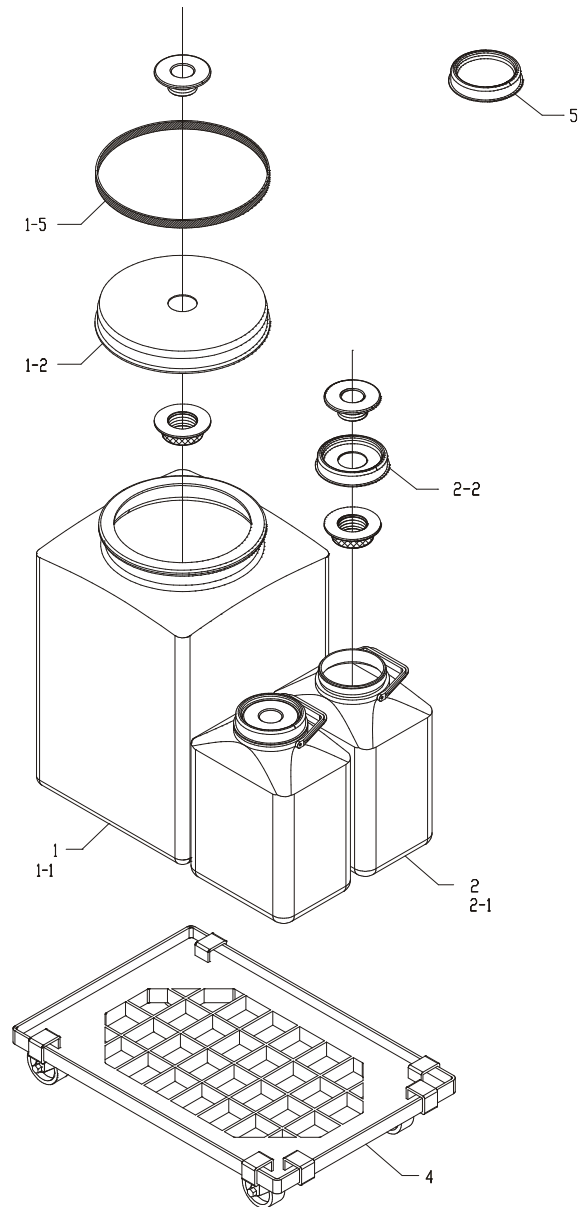
600-3

Fig. 40

## 42 Container Trolley

*Drawing No.: 00532267      Page: 700-1*

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b> | <b>Prod. No.</b> |
|-------------|-----------------|--------------------|------------------|
| 2-1         | 00532960        | Container          |                  |
| 2-2         | 00533182        | Lid                |                  |



Pos.10 Cover

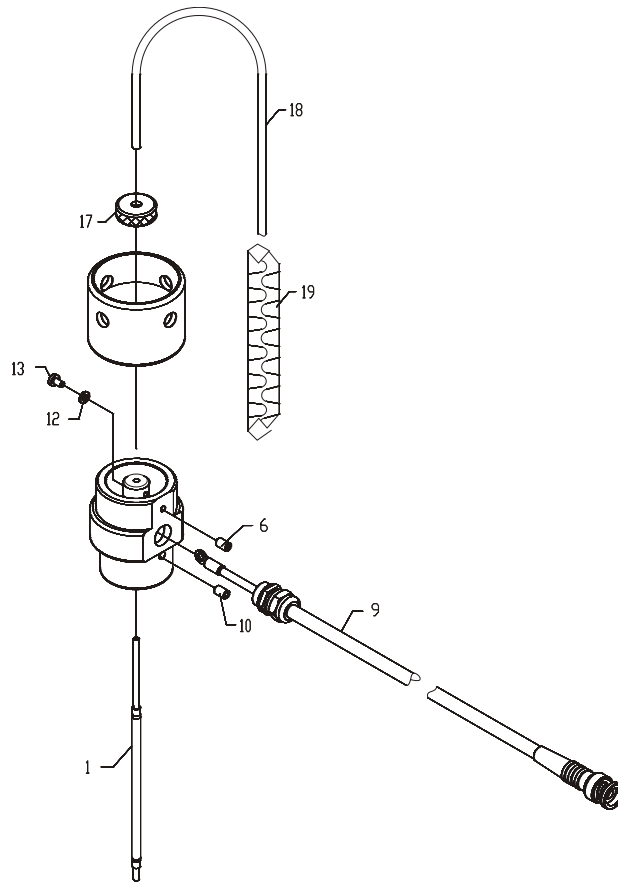
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*Fig. 41*

## 43 Container Lid, Waste System

**Drawing No.: 00532275****Page: 710-1**

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>       | <b>Prod. No.</b> |
|-------------|-----------------|--------------------------|------------------|
| 1           | 00532804        | Tube assmbly             |                  |
| 6           | 00417196        | Allen screw              |                  |
| 9           | 00533109        | Cable sensor             |                  |
| 10          | 00417196        | Allen screw              |                  |
| 12          | 00299313        | Washer                   |                  |
| 13          | 00820191        | Screw m3x05              |                  |
| 17          | 00533893        | Tube squeezer            |                  |
| 18          | 00528570        | PVC Ø2.5/4.5 Blue        |                  |
| 19          | 01015414        | Flex Helawrap 16 mm grey |                  |



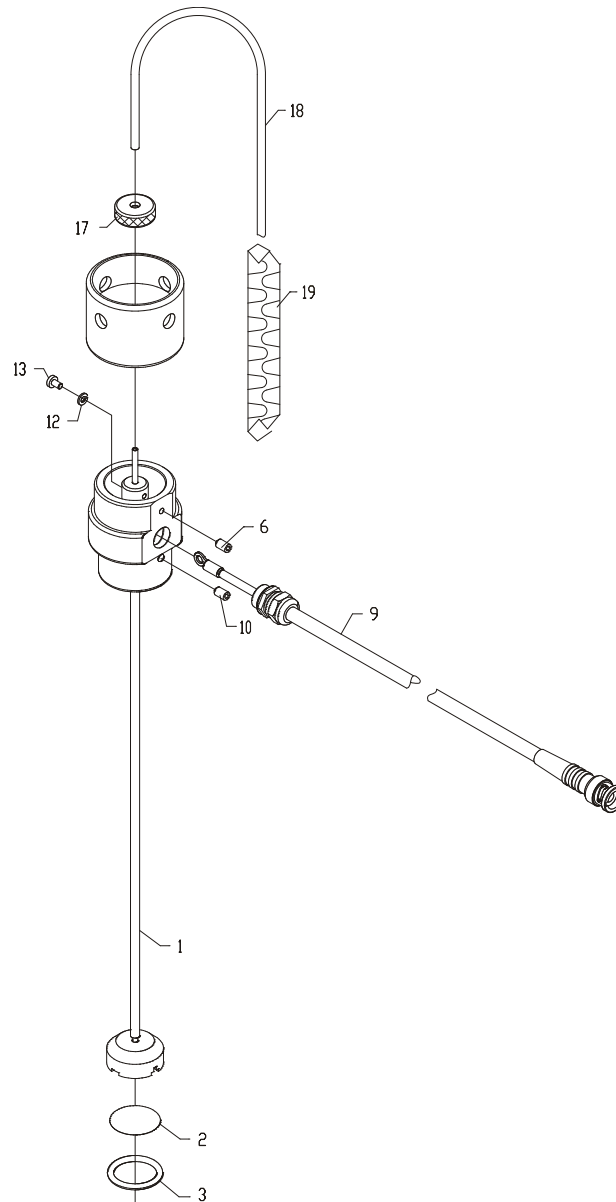
*Fig. 42*

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## 44 Container Lid, Buffer/Diluent System

**Drawing No.:** 00532283      **Page:** 720-1

| <b>Pos.</b> | <b>Part No.</b> | <b>Description</b>       | <b>Prod. No.</b> |
|-------------|-----------------|--------------------------|------------------|
| 1           | 00533232        | Pipette Assembly         |                  |
| 2           | 00216523        | Filter                   |                  |
| 3           | 00301853        | O-ring                   |                  |
| 6           | 00417196        | Allen screw              |                  |
| 9           | 00533109        | Cable sensor             |                  |
| 10          | 00417196        | Allen screw              |                  |
| 12          | 00299313        | Washer                   |                  |
| 13          | 00820191        | Screw m3x05              |                  |
| 17          | 00533893        | Tube squeezer            |                  |
| 18          | 00528570        | PVC Ø2.5/4.5 Blue        |                  |
| 19          | 01015414        | Flex Helawrap 16 mm grey |                  |



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Fig. 43

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| 00008839 | 72   | 00201699 | 20   |
| 00011379 | 34   | 00209452 | 56   |
| 00011569 | 34, 48, 52, 58, 60,<br>76, 80  | 00215301 | 30, 38, 80   |
| 00014456 | 72, 74   | 00216523 | 90   |
| 00019430 | 28, 40   | 00217612 | 12, 20, 80   |
| 00028613 | 30, 38, 70   | 00219121 | 20, 22, 26, 36   |
| 00049254 | 6, 16, 78, 80  | 00219147 | 26, 56, 60   |
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| 00053256 | 80   | 00229351 | 26   |
| 00054189 | 34   | 00231332 | 26   |
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| 00131490 | 36   | 00306985 | 42   |
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| 00495705 | 24             | 00588210 | 40                                       |
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| 01010699 | 80            | 60024919 | 80                 |
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| 01010716 | 61            | 60025039 | 61                 |
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| 60029263 | 20     |          |    |
| 60029264 | 20     |          |    |
| 60029282 | 20     |          |    |
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