Operating instructions and Spare Part List

PBC 1 Powder Bell Control
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Safety Recommendations

PBC 1 Control unit

Safety Recommendations for operating electrostatic powder coating equipment

1. This equipment can be dangerous when not operated according to the following standards:
   EN 50 050 (or VDE 0745, Part 100), EN 50 053, Part 2 (or VDE 0745, Part 102), and the Electrostatic powder coating information sheet - ZH 1/444.

2. All electrostatically conducting parts within 5 m of the coating position and especially the workpieces, must be grounded.

3. The floor of the coating area must be electrostatically conductive (normal concrete is generally conductive).

4. The operating personnel must wear electrostatically conducting footwear (e.g. Leather soles).

5. Connect the grounding cables (supplied - green/yellow) to the grounding terminals of the electrostatic powder coating equipment. The grounding cables must have a good metal-to-metal connection with the powder coating booth, powder recovery equipment and chain conveyor, and in particular with the workpiece hangers.

6. The power and powder cables for the Powder Bell must be laid out so that they are protected from mechanical damage.

7. The powder coating equipment should only switch on after the powder booth has been started up. If the booth switches off, then the powder coating equipment must also switch off.

8. The grounding connection of all conductive parts of the booth must be checked at least once a week.

9. When cleaning a gun or changing a nozzle the Control unit must be switched off.
Technical Data of the PBC 1 Control unit

Mains connection

Input voltages range: 100 V, 110 V, 120 V, 200 V, 230 V or 240 V
Tolerance (up to 230 V): +10% / -14% with reference to 230 V (198-253 V)

Voltage selection is made inside the electrical unit by resoldering the tag of the transformer. The value of the fuse for 100, 110 and 120 V is 1.0 AT and for the higher voltages is 0.5 AT.

The equipment is delivered for operation at 230 V from the factory!

Frequency: 50/60 Hz
Connected load: 50 VA
Rated output voltage (to gun): 10 V
Rated output voltage (to gun): 1.2 A
Type of protection: IP 54
Temperature range: +10° C to +40° C
(+50° F to +104° F)

Pneumatic data

Main compressed air input: 1/4” B.S.P (female thread)
Max. Input pressure: 10 bar
Min. Input pressure: 5 bar
Max. Water vapour in the compressed air: 1.3 g/m³
Max. Oil vapour in the compressed air: 0.1 [mg/kg]

Dimensions

Wide: 435 mm
Deep: 300 mm
High: 96 mm
Weight: 12 kg
PBC 1 Control unit

Field of application

The electrostatic PBC 1 Control unit is designed exclusively for controlling the PB 1 Powder Bell. Any use other than that is not according to the specifications of use. The manufacturer cannot be held responsible for any damage resulting from the non-compliance of these specifications. All risks must be carried by the user.

All settings for efficient powder coating on the PBC 1 are simply and reproducible. The Flowmeter measurements permit accurate setting for an optimum powder output. Spray voltage and Spray current can be regulated additionally, the setting values can be checked on the LED display even from a distance. The PBC 1 Control unit can be adapted to suit most voltages available.

Operating mode

With the PBC 1 Control unit automatic operation is foreseen as standard.

The following types of operation are possible with the PBC 1:

- **Manual operation** = The High-Voltage and the powder transport are switched on or off by means of the Main switch.

- **Automatic operation with external control** = The High-voltage and the powder transport are switched on or off by an external 24 V control signal. The preset High-Voltage can thereby be blocked or released externally.
Description of the PBC 1 Control unit

The potentiometer (8) has two functions. If the control knob is pushed in, the desired High-Voltage (7a) can be set on the H-V/Corona current meter display (7) in kV. When the control knob is pulled out, the current (7b) can be set in µA on the H-V/Corona current meter display (7). When the current control knob (8) is turned in the counter-clockwise to the stop, neither High-Voltage nor Corona current can be measured on the Bell. When the Powder Bell is switched on (externally or with the Main switch - 9), the lowest row of the H-V/Corona meter display the corresponding LED illuminates and displays the selected measuring function, Voltage (7a) on the left, Current (7b) on the right.

The Form air for the powder cloud shape is set with the control knob (5) and read on the flowmeter (6). The control knob (5) is turned in the clockwise or counter-clockwise direction, until the ball in the measuring cylinder of the flowmeter "floats" in the green sector.

Supplementary air is set with the control knob (3) and is thereby mixed with the conveying air. The sum of these two airs is displayed on the flowmeter (4). The ball in the flowmeter (4) must be set in the green sector again.

The conveying air, and thereby, the powder output are set with the control knob (1). The setting can be read on the compressed air display (2). (see page 8 for more information).

For a better understanding of the relationships of powder coating it is recommended that these Operating Instructions are read through thoroughly in order to become familiar with the functioning of the other components.
Connection of the PBC 1 Control unit

If the control unit is not supplied as an integral part of an APS System, then some cables and hoses must be connected.

1. The thick black hose for compressed air from the ADU Air Distributor Unit or another air distributor must be connected to the input **1.1 IN (10)** on the rear of the Control module.
2. The red hose for conveying air must be connected to the corresponding output **1.2 (9)** on the rear of the control module.
3. The black hose for supplementary air must be connected to the corresponding output **1.3 (8)** on the rear of the Control module.
4. The black hose for form air must be connected to the corresponding output **1.4 (7)** on the rear of the Control module.

Connections on the rear of the PBC 1 Control module

![Diagram of PBC 1 Control module connections](image)

1. Bell socket (A Bell)
2. Solenoid valve cable (B) or external control connection
3. Fuse holder - F1
4. Grounding cable connection
5. Fuse holder - F2 (only in N. America)
6. Mains connection (C)
7. Form air connection (1.4)
8. Supplementary air connection (1.3)
9. Conveying air connection (1.2)
10. External compressed air input (1.1 IN)

Figure 3
Preparation for Start-up

a) Mains voltage selection by resoldering the Transformer

⚠️ WARNING ⚠️ Remove the plug from the Mains before starting work on the PBC 1 Control unit!

The PBC 1 Control unit is designed for operation on 230 V.

If the place of operation has another voltage, then the wire on the transformer is to be resoldered by an electrician, according to the following instruction:

⚠️ NOTICE ⚠️ When the input voltage more than 10% higher than the set voltage, damage may be done to internal components. If the voltage is 14% or more below the selected voltage then the unit can operate erratically.

1. Remove all electrical and pneumatic connections on the rear of the control module.
2. Unscrew the fixing screw on the rear of the PBC 1 Control unit housing.
3. Slide out the control module and place on a clean, flat surface.
4. Unscrew both screws holding the cover plate of the electrical parts with a Philips-type screwdriver. Carefully unscrew the coverplate.
5. Unsolder the black wire from the 230 V transformer contact and resolder the contact onto the desired voltage again. Never unsolder the 0 V wire.
6. Replace the cover plate of the electrical parts again and screw tight. When replacing the cover plate take care with the housing gasket!
7. Re-insert the module into the housing and slide back into place. Tighten the retaining screw.
8. Re-fasten all electrical and pneumatic connections.

Figure 4
**b) Connect the Powder bell PB 1-A**

1. Connect the low voltage cable (1) with the 7 pin plug onto the "A Bell" connection on the rear of the control module.
2. Connect the Form air hose (8) on the Form air output 1.4 and on the Powder Bell.
3. Connect the powder hose (6) onto the Bell and the Injector (5).
4. Connect the cable for external control (if present) according to the wiring diagram on page 16.
c) Function check

See "Troubleshooting Guide " Page 12 / 13 on malfunctioning

1. Start the BSC 1 control unit so that the Bell rotates.
2. Switch on the Main switch (9) on the control module. The PBC 1 is under power when the green lamp in the Main switch illuminates.
3. Push the control knob in for High-Voltage (8), and turn all the way to the left to the stop.
4. The lower, left-hand red LED High-Voltage display (7) illuminates.
5. Set the conveying air on the pressure gauge (2) to the desired powder output (See also the Table on page 8). Maximum pressure = 3.5 bar.
6. Check, if the ball in the flowmeter (4) for the supplementary air “floats” in the green sector. When necessary adjust the supplementary air with the control knob (3) into the green sector.
7. Adjust the form air with the corresponding control knob (5). The ball must “float” in the green sector with the symbol for the type of nozzle used.

![Figure 7](image)

If all settings are made correctly, then the control unit is ready to operate.
If a function does not work as expected, check the malfunction in the "Troubleshooting Guide ", pages 12 / 13.

d) Switching off

1. Switch off the control unit.
   The settings for High-Voltage, form air, and powder output can be left as they are.
Setting the powder output / Setting table for PI Injector

In order to set the conveying air and the supplementary air correctly on the PBC 1 and thereby the powder output, the amount of powder to be applied should be determined first. From the desired powder output in g/min. the necessary conveying air pressure can be seen in the Table below and set on the pressure gauge (2).

If the conveying air pressure is increased on the control knob (1), the powder output also increases correspondingly. If the ball does not “float” in the green sector in the flowmeter (4) thereby, the supplementary air pressure must either be increased or decreased with the control knob (3).

If by certain operations a conveying air pressure over 2.5 bar is set, then supplementary air is no longer required and the control knob (3) can be turned completely to the left.

After every setting of the conveying air pressure the ball must "float" in the green sector (4-5 m³/h) of the flowmeter (4)! (See also "Operation of the Injectors and the influence on supplementary air")

The values in the table below are approximate and only serve as a guideline for the various settings as conditions in different workshops can vary greatly!

---

**Specifications:**
- Powder hoses: ø 11 mm - Length = 6 m and 12 m
- Powder: PES 31.9010 S
- Constant air volume: 4 m³/h (Conveying air + Supplementary air)

<table>
<thead>
<tr>
<th>g/min.</th>
<th>(6 m)</th>
<th>(12 m)</th>
<th>g/min.</th>
<th>(6 m)</th>
<th>(12 m)</th>
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<td>bar</td>
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<tr>
<td>200</td>
<td>1.65</td>
<td>2.32</td>
<td>400</td>
<td>3.50</td>
<td></td>
</tr>
</tbody>
</table>
Repairing electrical parts on the Control unit

**WARNING**

The plug must be removed from the Mains socket before any repairs on the electrical section are made or when changing a fuse!

**a) Replace the bulb in the Main switch**

1. Turn the Main switch off and disconnect the Mains cable from the control module.
2. Unscrew the black retaining ring (1 - Fig. 8) from the Main switch on the front of the control module and remove the green switch grip.
3. Push the special rubber bulb extractor (supplied) against the defect bulb and turn counter-clockwise to the stop (Bayonet fitting). The bulb can now be removed easily.
4. Replace the new bulb (24 V / 2 W) so that the pins on the bulb fit into the slots of the bulb holder. Push the bulb carefully down with the rubber pad as far as it will go and turn clockwise.
5. Check that the bulb is seated correctly.
6. Replace the green switch grip and screw on the retaining ring (1 - Fig. 9) make sure that the white stripe on the switch grip is pointing upwards
7. Reconnect the Mains cable - the equipment is ready for operation again.

**b) Replacing Fuse - F1**

1. Unscrew the F1 fuse holder cap to the left, remove the defect fuse and replace with a new one. Screw the fuse holder cap onto the fuse holder.

**c) Replacing a potentiometer**

1. Remove all electrical and pneumatic connections on the rear of the control module.
2. Unscrew the retaining screw at the rear of the control module.
3. Slide out the module from the housing and place on a clean flat surface.
4. Unscrew both screws holding the cover plate of the electrical parts with a Philips-type screwdriver. Carefully remove the coverplate.
5. Unscrew the Allen screw on the potentiometer knob and pull of to the front.
6. Unscrew the potentiometer with a spanner and pulling out to the inside of the housing.

**IMPORTANT**

Do not pull out by the control knobs. Push the module out from behind.

7. When reassembling the potentiometer and the control module again they are to be reassemble in the reverse order as is described above. When replacing the cover plate care should be taken that the gasket is not displaced.
d) Setting a potentiometer stop:

1. The potentiometer stop is set at the factory and does not need to be set by the customer

e) Replacing a printed circuit board

1. Remove all electrical and pneumatic connections on the rear of the control module. (See also "c) Replacing a potentiometer" - Steps 1-4).
2. Loosen the two screws (2). Take care that the screws do not get lost.
3. Lift the board out carefully, making sure that the LED scale is not damaged in the process.
4. Carefully remove plugs A and B (Never pull on the wires).

The plug are to be marked A or B and must not be connected to the wrong socket on assembly!

Before reassembling the new CB 1 printed circuit board, check if the "jumpers" are set for the correct operating mode (EXTERNAL).

When reassembling the printed circuit board and the control module again, re-assembly is to be done in the reverse order as described above. When replacing the cover plate care should be taken that the gasket is not displaced.

When problems arise or by uncertainty, please contact your ITW Gema Service Centre.
Making repairs to the pneumatic section of the Control module

1 Plug  
2 Solenoid valve, 3/8" B.S.P  
3 Pressure reducing valve  
4 Pressure gauge  
5 Throttle valve  
6 Supplementary air flowmeter  
7 Throttle valve  
8 Form air flowmeter  
9 Quick-release connection  
10 Threaded connection  
11 Pressure reducing valve  
12 Solenoid valve connection

Figure 10

a) Removing pneumatic tubes
Before replacing pneumatic parts all tube connections must be removed. This is done by pressing the pressure ring back with the thumb nail on the quick-release fitting on the tube connector. The tubing can now be removed.

b) Refitting the pneumatic tubes
This is done by pushing the plastic tubing as far as it will go into the quick-release fitting of the hose connector. The hose is now fixed securely.


c) Replacing a pneumatic part

1. Remove all electrical and pneumatic connections on the rear of the control module.
2. Unscrew the retaining screw on the rear of the PBC 1 Control unit housing.
3. Pull out control module completely and place on a flat surface.

⚠️ IMPORTANT Do not pull out by the control knobs. Push the module out from behind.

4. Release all the pneumatic tubes from the part to be replaced (See page 10, Fig. 11).
5. Dismantle the part and replace.
6. The pneumatic tubes can be reconnected again (See page 10, Fig. 12).
7. Re-assembly of the control module is to be done in the reverse order as described above.

d) Cleaning/Replacing a flowmeter

1. Remove all electrical and pneumatic connections on the rear of the control module.
2. Unscrew the retaining screw on the rear of the PBC 1 Control unit housing.
3. Pull out control module completely and place on a flat surface.

⚠️ IMPORTANT Do not pull out by the control knobs. Push the module out from behind.

4. Remove the upper and lower pneumatic tubes from the flowmeter (4) (See Page 10, Fig. 11).
5. Unscrew the flowmeter from the housing. The two countersunk screws must be unscrewed from the under side of the housing.
6. Unscrew the cover screw, with the rubber buffer (1) and the O-Ring (2) with a small screwdriver.
7. Tilt the flowmeter (4) until the "floating" ball (3) rolls out of the flowmeter tube (4).
8. Clean the ball (3) and the inside of the flowmeter with a soft cloth.

⚠️ NOTICE Do not submerse rubber parts in solvents!

9. Hold the flowmeter (4) horizontally and place the ball (3) in the flowmeter tube again.
10. Hold the flowmeter (4) upright and screw on the cover screw (1) with the O-Ring (2). The ball (3) must roll freely in the flowmeter tube.
11. Refit the flowmeter (4) into the control module housing with the two countersunk screws.
12. Refit the pneumatic tubes into the quick-release couplings again.

Reassemble the pneumatic unit in the PGC control module housing in the reverse order to that described above.

Figure 13

1. Cover screw
2. O-Ring
3. Ball
4. Flowmeter
## Troubleshooting guide

<table>
<thead>
<tr>
<th>Faults</th>
<th>Causes</th>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green switch does not illuminate although the control module is switched on</td>
<td>No power:</td>
<td>Connect the equipment to the Mains with the cable</td>
</tr>
<tr>
<td></td>
<td>– Control module is not connected to the Mains.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Fuse F1 defect</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>– External fuse defect</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>In the Equipment:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Lamp defect</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>– Printed circuit board (CB 1) defect</td>
<td>Mail in for repair</td>
</tr>
<tr>
<td></td>
<td>In the Bell:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Bell cable defect</td>
<td>Replace or mail in for repair.</td>
</tr>
<tr>
<td></td>
<td>– High-Voltage section defect</td>
<td>Mail in gun for possible repair.</td>
</tr>
<tr>
<td>The needle of the conveying air pressure gauge remains at zero when adjustments are made.</td>
<td>Operating error:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Module not switched on</td>
<td>Switch on.</td>
</tr>
<tr>
<td></td>
<td>– BSC 1 not in operation</td>
<td>Switch on.</td>
</tr>
<tr>
<td></td>
<td>In the module:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Solenoid valve defect</td>
<td>Replace.</td>
</tr>
<tr>
<td></td>
<td>– Printed circuit board defect</td>
<td>Mail in for repair</td>
</tr>
</tbody>
</table>
### Faults

<table>
<thead>
<tr>
<th>Faults</th>
<th>Causes</th>
<th>Remedies</th>
</tr>
</thead>
</table>
| The gun does not spray powder in spite the Control module is switched on | No conveying air:  
  - Pressure reducing valve defect  
  - Solenoid valve defect  
  - Printed circuit board (CB 1) defect  
  - Too little or no High-Voltage  
  - Bell plug, Bell cable or Plug defect  
  - High-Voltage cascade defect | Replace  
Increase the High-voltage on the potentiometer  
Replace or mail in for repair  
Mail Shaft in for repair |
| Gun sprays powder, but powder does not adhere to the workpiece         | – Printed circuit board (CB 1) defect                                                   | Mail in for repair.                           |
| Gun sprays powder, High-Voltage is present, powder adheres but not on the workpiece | – Workpiece poorly or not grounded                                                        | Check grounding, see Safety Notice.           |
| Conveying air cannot be adjusted.                                      | The setting knob turns freely, the grubscrew is not screwed tight.                       | Tighten the grubscrew                        |
PBC 1 Wiring diagram – Manual operation for PB 1-A Powder Bell
(with external control, see the Plant wiring diagram supplied)
Spare Parts List

Ordering Spare Parts

When ordering spare parts for powder coating equipment, please indicate the following specifications:

1. Type and serial No. of your powder coating equipment.
2. Order number, quantity and description of each spare part.

**Example:**

1. **Type** PBC 1, **Serial No.** : xxxx.xxxx
2. **Order No.**: 235 954, 2 pieces, Bulb 24 V / 2 W

When ordering cable or hose material the length required must also be given. "Yard/Meterware" spare part numbers are always marked with an *. All wear parts are always marked with a #.

All dimensions of plastic hoses are given as external and internal diameter:

- e. g. ø 8 / 6 mm = 8 mm outside diameter (o/d) / 6 mm inside diameter (i/d).
### PBC 1 Control unit

#### Electrical parts

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC 1 Control module - complete</td>
<td>340 057</td>
</tr>
<tr>
<td>Mains connection</td>
<td>200 409</td>
</tr>
<tr>
<td>Knurled grounding nut - M6</td>
<td>200 433</td>
</tr>
<tr>
<td>Socket - 4 pin</td>
<td>205 249</td>
</tr>
<tr>
<td>Socket - 7 pin</td>
<td>200 093</td>
</tr>
<tr>
<td>Plug - 12 pin, B1-B12</td>
<td>338 770</td>
</tr>
<tr>
<td>Plug - 12 pin, A1-A12</td>
<td>338 761</td>
</tr>
<tr>
<td>Printed circuit board - CB 1</td>
<td>327 190</td>
</tr>
<tr>
<td>Potentiometer with micro-switch - complete</td>
<td>370 355</td>
</tr>
<tr>
<td>Washer</td>
<td>200 271</td>
</tr>
<tr>
<td>Nut - M12x1 mm</td>
<td>200 700</td>
</tr>
<tr>
<td>Regulating knob</td>
<td>200 069</td>
</tr>
<tr>
<td>Transformer</td>
<td>235 555</td>
</tr>
<tr>
<td>Fuse holder F1</td>
<td>200 131</td>
</tr>
<tr>
<td>Fine fuse - 0.5 A T for 200-240 V</td>
<td>201 073#</td>
</tr>
<tr>
<td>Fine fuse - 1.0 A T for 100-120 V</td>
<td>210 242#</td>
</tr>
<tr>
<td>Fuse holder - F2, (without neutral conductor)</td>
<td>200 131</td>
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<tr>
<td>Lamp unit</td>
<td>235 946</td>
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<tr>
<td>Contact unit</td>
<td>235 938</td>
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<tr>
<td>Adapter fixture</td>
<td>235 920</td>
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<tr>
<td>Bulb - 24 V / 2 W</td>
<td>235 954#</td>
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<tr>
<td>Switch</td>
<td>235 911</td>
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<tr>
<td>Mains cable - 1 plug</td>
<td>303 607</td>
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<tr>
<td>Mains cable - 2 plugs</td>
<td>343 366</td>
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<tr>
<td>Mains cable - 4 plugs (not shown)</td>
<td>343 374</td>
</tr>
<tr>
<td>Mains cable - 8 plugs (not shown)</td>
<td>343 382</td>
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<tr>
<td>Clamp nut - PG 7</td>
<td>230 537</td>
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<tr>
<td>Lead-through - PG 7</td>
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<tr>
<td>Cover plate</td>
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<tr>
<td>Sealing strip - ø 9x6 mm</td>
<td>100 269*</td>
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<tr>
<td>Socket cap</td>
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<tr>
<td>Gasket</td>
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</tbody>
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* Indicate length required

# Wear parts
# PBC 1 Control unit

## Pneumatic parts

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Air input unit - complete</td>
<td>336 610</td>
</tr>
<tr>
<td>1</td>
<td>Quick-release coupling - ø 8 / 6 mm</td>
<td>203 181</td>
</tr>
<tr>
<td>3</td>
<td>Screw coupling for hose - ø 8 / 6 mm</td>
<td>201 316</td>
</tr>
<tr>
<td>4</td>
<td>Screw connection for hose - ø 8 / 6 mm</td>
<td>241 792</td>
</tr>
<tr>
<td>5</td>
<td>Quick-release coupling - ø 6 / 4 mm</td>
<td>200 840</td>
</tr>
<tr>
<td>6</td>
<td>Quick-release connector</td>
<td>241 784</td>
</tr>
<tr>
<td>7</td>
<td>Pressure reducing valve</td>
<td>235 830</td>
</tr>
<tr>
<td>8</td>
<td>Solenoid valve - complete, 24 V, 5 W</td>
<td>235 865</td>
</tr>
<tr>
<td>8.1</td>
<td>Solenoid valve coil - 24 V (for Item 8)</td>
<td>243 930</td>
</tr>
<tr>
<td>9</td>
<td>Pressure reducing valve</td>
<td>235 822</td>
</tr>
<tr>
<td>10</td>
<td>Control knob</td>
<td>200 069</td>
</tr>
<tr>
<td>11</td>
<td>Clamp nut - M14x1 mm</td>
<td>302 163</td>
</tr>
<tr>
<td>12</td>
<td>Pressure gauge (0-4 bar)</td>
<td>235 814</td>
</tr>
<tr>
<td>13</td>
<td>Throttle valve</td>
<td>238 244</td>
</tr>
<tr>
<td>14</td>
<td>Flowmeter (2-8 m³/h)</td>
<td>347 280</td>
</tr>
<tr>
<td>15</td>
<td>Flowmeter (0.5 -3.5 m³/h)</td>
<td>347 299</td>
</tr>
<tr>
<td>16</td>
<td>Plastic hose - ø 8 / 6 mm - black</td>
<td>103 756*</td>
</tr>
<tr>
<td>17</td>
<td>Plastic hose - ø 8 / 6 mm - red</td>
<td>103 500*</td>
</tr>
<tr>
<td>18</td>
<td>Plastic hose - ø 8 / 6 mm - black</td>
<td>103 756*</td>
</tr>
<tr>
<td>19</td>
<td>Plastic hose - ø 6 / 4 mm - black (Automatic)</td>
<td>103 144*</td>
</tr>
<tr>
<td></td>
<td>Plastic hose - ø 6 / 4 mm - transparent (Manual)</td>
<td>100 854*</td>
</tr>
<tr>
<td>20</td>
<td>Quick-release fitting - ø 8 mm</td>
<td>242 373</td>
</tr>
<tr>
<td>21</td>
<td>Adapter - 1/4&quot;-3/8&quot;</td>
<td>223 239</td>
</tr>
<tr>
<td>22</td>
<td>Elbow connector - 3/8&quot;-3/8&quot;</td>
<td>223 158</td>
</tr>
<tr>
<td>23</td>
<td>Y-connector - 3/8&quot;-ø 8 mm</td>
<td>235 873</td>
</tr>
<tr>
<td>24</td>
<td>Plastic hose - ø 6 / 4 mm black</td>
<td>103 144*</td>
</tr>
<tr>
<td>25</td>
<td>T-connector - ø 6 mm</td>
<td>237 310</td>
</tr>
<tr>
<td>26</td>
<td>Quick-release connector - 1/8&quot;-ø 6 mm</td>
<td>233 412</td>
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<tr>
<td>27</td>
<td>Quick-release connector - 1/8&quot;-ø 6 mm</td>
<td>240 087</td>
</tr>
<tr>
<td>28</td>
<td>Quick-release connector - 1/8&quot;-ø 8 mm</td>
<td>240 095</td>
</tr>
<tr>
<td>29</td>
<td>Solenoid valve cable with plug</td>
<td>336 602</td>
</tr>
</tbody>
</table>

* Indicate length required
Pneumatic parts

Figure 14