



**Control  
technology**





## 7 Control technology

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## blueMaster compact

The smart controller for sluggish and agile hot runner systems. Automatically optimises control in the background and is operated via app or directly on the device.

### TECHNICAL DATA

#### blueMaster compact 3

Control circuits	3
Operating voltage	230 V <sub>AC</sub> *
Mains connection	Safety plug
Max. load	3,600 W
Dimensions (W × H × D)	170 × 125 × 300 mm
Weight	approx. 5.0 kg

#### blueMaster compact 6

Control circuits	6
Operating voltage	2 × 230 V <sub>AC</sub> *
Mains connection	16 A CEE plug
Max. load	7,000 W
Dimensions (W × H × D)	170 × 125 × 300 mm
Weight	approx. 5.0 kg

\*Volts alternating current

### NOTE

- Load and thermocouple connector on the device with mixed assignment (see diagram)
- Reduction input/fault signal output (see diagram).

### Product description

- Operation via app or display
- Automatic control parameter optimization
- Heat-up function (unites soft start and heat-up ramp)
- Graphical display of temperature
- Four operating modes per circuits: regulation, control, master mode, monitor
- Load fuses accessible from the outside; there is no need to open the housing

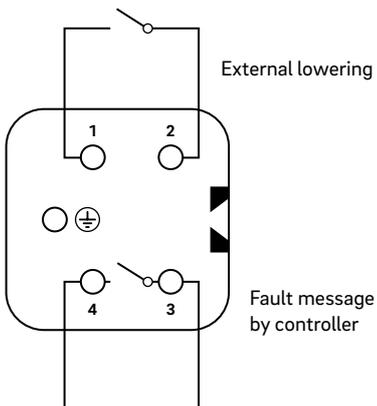
### blueMaster compact versions:

Order designation	Quantity of control circuits	Version
312.0103.00	3	With display
312.0153.00	6	With display

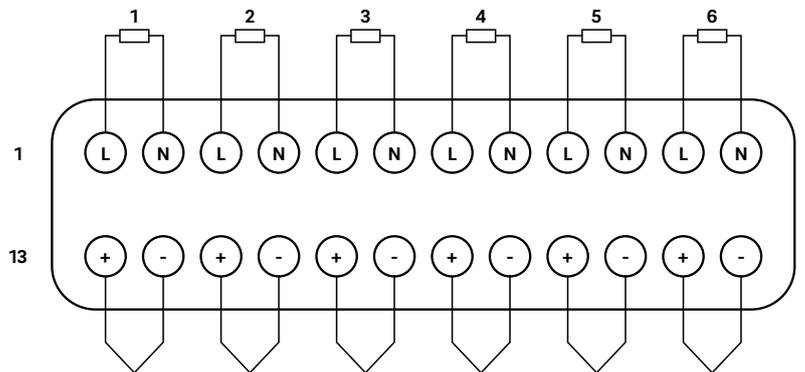
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**Lowering input/fault signal output**



**Load and thermocouple connector**





## blueMaster pro control unit

Our premium controller, which assists with the setup of new moulds thanks to the assistance function. Operation directly on the device or from anywhere using a browser.

### TECHNICAL DATA

#### blueMaster pro (general)

Operating voltage	380 V <sub>AC</sub> *
Dimensions (W × H × D)	350 × 220 × 400 mm
Weight	approx. 20.0 kg

#### blueMaster pro 6

Control circuits	6
Max. load	7,300 W

#### blueMaster pro 12

Control circuits	12
Max. load	14,500 W

#### blueMaster pro 18

Control circuits	18
Max. load	22,000 W

#### blueMaster pro 24

Control circuits	24
Max. load	22,000 W

\*Volts alternating current

### NOTE

- Connection via 32 A CEE plug
- By default, separate load and thermocouple connectors
- Customized wiring available
- Lowering input/fault signal output (see diagram).

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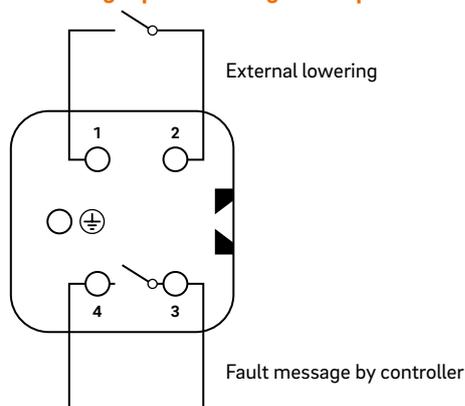
### Product description

- Operation directly on the device or using a browser
- Automatic control optimization
- Heat-up function (unites soft start and heat-up ramp)
- Graphical display of temperature profile
- Four operating modes per circuits: regulation, control, master mode, monitor
- Load fuses accessible from the outside
- OPC-UA interface as per Euromap 82.2
- Assistance function to set up new moulds
- Mould storage
- User accounts with different authorizations

### blueMaster pro versions:

Order designation	Quantity of control circuits	Version
312.0200.01	6	blueMaster pro 6
312.0250.01	12	blueMaster pro 12
312.0300.01	18	blueMaster pro 18
312.0350.01	24	blueMaster pro 24

### Lowering input/fault signal output





We will gladly carry out the configuration of your device according to your specifications – please contact us!





## blueMaster eco control unit

Compact and robust small controller with up to three control circuits. Automatically optimises control in the background. Ideal for single nozzles or the maintenance and service area.

### TECHNICAL DATA

#### blueMaster eco (general)

Operating voltage	230 V <sub>AC</sub> *
Mains connection	Safety plug
Dimensions (W × H × D)	177 × 70 × 235 mm
Weight	approx. 2.0 kg

#### blueMaster eco 1

Control circuits	1
Max. load	3,600 W

#### blueMaster eco 2

Control circuits	2
Max. load	3,600 W

#### blueMaster eco 3

Control circuits	3
Max. load	3,600 W

\*Volts alternating current

### NOTE

- Load and thermocouple connector on the device with mixed assignment (see diagram)
- Reduction input/fault signal output (see diagram).

### Product description

- Operation via touchscreen or rotary knob
- Automatic optimisation of control
- Heating function (combines soft start and heating ramp)
- Four operating modes per zone: control, regulation, master mode, monitor
- Load protection accessible from the outside – no need to open the housing
- Compact, robust metal housing

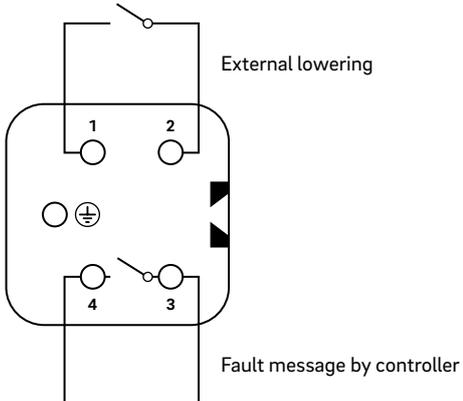
### blueMaster eco versions:

Order designation	Quantity of control circuits	Version
312.0600.00	1	blueMaster eco 1
312.0601.00	2	blueMaster eco 2
312.0602.00	3	blueMaster eco 3

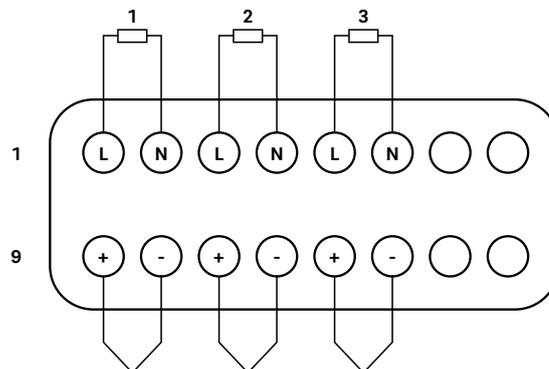
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### Lowering input/fault signal output



### Load and thermocouple connector





# Control unit blueMaster step

Single needle drive for stepper motor type SMA.

## TECHNICAL DATA

### blueMaster step (general)

Operating voltage	230 V <sub>AC</sub> *
Mains connection	Earthing contact plug
Dimensions (W × H × D)	350 × 220 × 400 mm
Weight	ca. 20.0 kg

### blueMaster step 4

Quantity of motors	4
Max. load	1,300 W

### blueMaster step 8

Quantity of motors	8
Max. load	2,400 W

### blueMaster step 12

Quantity of motors	12
Max. load	2,700 W

### blueMaster step 16

Quantity of motors	16
Max. load	3,200 W

\*Volts alternating current

## NOTE

Connection via 16 A earthing contact plug.

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User-friendly control unit for stepper motors as single needle drive. With assistance function for setting up new tools and recipe management via network. Can be operated on the device or via mobile unit, tablet, etc.

### Product description

- Operation of up to 16 stepper motors to drive valve gate needles
- Operation directly on the device or via mobile unit (e.g. tablet)
- Various, clear menu views
- Graphic display of needle positions
- Optimised for the operation of mixed systems (hot / cold runner system)
- Assistance function for setting up new moulds
- Tool memory
- Loading of tools via network or USB
- User accounts with different authorisations

Order designation	Quantity of motors	Variant
312.0500.00	4	blueMaster step 4
312.0501.00	8	blueMaster step 8
312.0502.00	12	blueMaster step 12
312.0503.00	16	blueMaster step 16





# Control unit ServoControl SCM

For servo motors as a needle drive on multi-drop sliding mechanism type ANES

## TECHNICAL DATA

### ServoControl SCM

<b>Interface</b>	48-pole industrial plug connector
<b>Operating voltage</b>	230 V <sub>AC</sub> *
<b>Dimensions (W × H × D)</b>	370 × 640 × 410 mm
<b>Weight</b>	30.0 kg

\*Volts alternating current

## NOTE

The cable set is not included in the scope of supply.

Order designation	Quantity of motors
SCM1	1
SCM2	2
SCM3	3

Three user levels protect the ServoControl from faulty operation while allowing the adjustment of all parameters to suit your application. The ServoControl communicates with your injection moulding machine over freely programmable inputs and outputs.

### Product description

- Data and settings are backed up over the integrated USB interface
- Data can be transferred between multiple ServoControl units using USB storage
- User management with various different authorisation levels
- All movement and position data are easy and convenient to set with the user-friendly touchscreen
- 32 A CEE mains connection
- Depending on the version, up to three motors can be operated individually or synchronously
- Servo motors of different performance classes are available for driving the sliding mechanism (ANES)
- The sliding mechanism enables the tightest of cavity spacings and simultaneous closing of the cavities

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# Measuring device blueMaster check

The smart measuring device for hot runner diagnostics.

Efficient mould inspection anywhere, anytime.

## TECHNICAL DATA

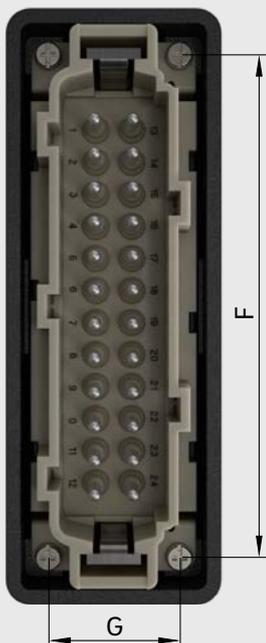
### blueMaster check

<b>Rechargeable battery</b>	Lithium phosphate, 3.2 V, 3.2 A
<b>Charging plug</b>	USB Mini-A
<b>Dimensions (W × H × D)</b>	120 × 90 × 60 mm
<b>Weight</b>	1.0 kg

\*Volts alternating current

## NOTE

- Smart device (smartphone/tablet) is not included. It can be purchased separately.
- Dimensions F and G refer to the distances between the screw connections for fixing the contact inserts in the housing. These are standardised across all manufacturers of industrial connectors.



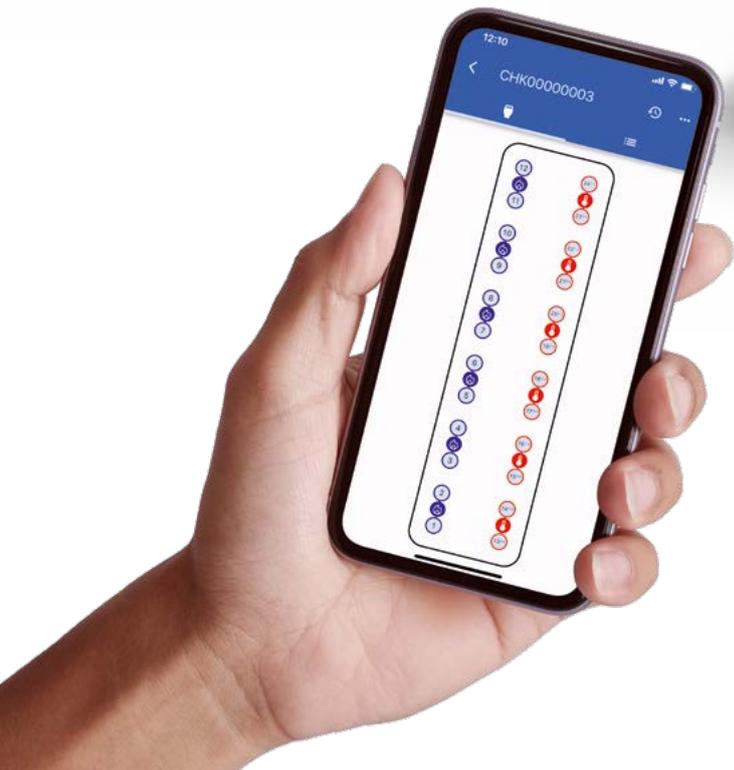
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With its simple app-based operation and precise functionality, the blueMaster check is revolutionizing the way you check your tools. Its mobility thanks to its built-in rechargeable battery and wireless communication with your smartphone or tablet make it the ideal companion in your working environment.

### Product description

- Easy to use with free app for Android and iOS
- Accurate inspection of injection moulds by attaching it to the tool
- Reliably differentiates between thermocouples and loads
- Detects thermocouple polarity for accurate analysis
- Compact and portable with built-in rechargeable battery
- Export measurement results to PDF or CSV for easy documentation
- Communicate wirelessly with your smartphone or tablet (not included)

Order designation	Version	F	G
312.0400.02	With 24-pin socket insert	104	27
312.0401.01	With 24-pin pin insert	104	27
312.0402.01	With 16-pin socket insert (large version)	77	27
312.0403.00	With 16-pin plug insert (large version)	77	27
312.0404.00	With 16-pin socket insert (small version)	66	16
312.0405.00	With 16-pin plug insert (small version)	66	16
312.0406.00	With 10-pin socket insert (large version)	57	27
312.0407.00	With 10-pin plug insert (large version)	57	27



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