ZIMMER group

SOFTWARE SETTING

E-Gripper
Techman

DDOC00580

THE KNOW-HOW FACTORY

ZIMMER group

Content

1. Supporting documents

Notice:

Read through the installation and operating instructions carefully before using the product!
The installation and operating instructions contain important notes. They must be read and understood by all persons who work with or handle the product during any phase of the product's lifetime.

- Software data
- Performance data of the gripper
- Technical data sheets of the gripper
- General Terms and Conditions of Business, including warranty information

2. Personnel qualification

Installation, commissioning and maintenance may only be performed by qualified personnel. These personnel must have read and understood the installation and operating instructions in full.

3. Software „HRC-03-101016"

3.1 Settings

► Please check the connection of the TM robot with gripper HRC-03-101016.
The HRC-03-101016 uses an analog feedback signal. This feedback signal can be used to track the position of the gripper jaws. In addition, the configuration can be used to inform the gripper at which position the gripper should stop to grip the desired part.

3.2 Configuration

In order to complete the configuration, the gripper needs some information about the part to be gripped.
The following information must be provided to the gripper:

- Target value [mm] (left side [mm] + right side [mm])

Linke Seite   Rechte Seite
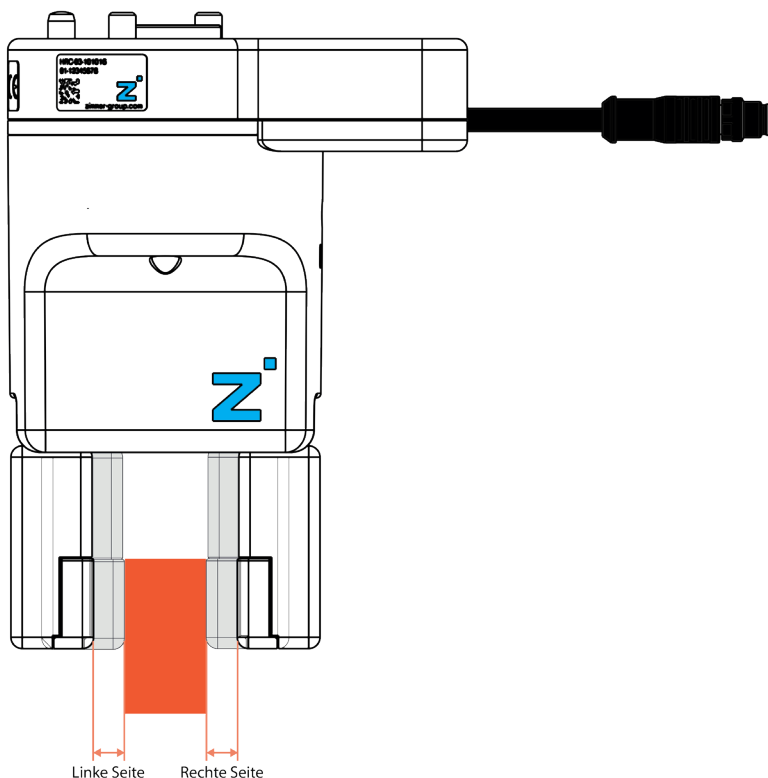
Item	Variable	Default Value
Combined distance of the griper-jaws in mm before gripping onto the work piece	var_target_value	5
Tolerance in mm to define the work piece as correct	var_tolerance	0.5

3.3 Hardware-Release

The gripper is suitable for robot release 3.0 or higher.

⇨ **ATTENTION: The software does not work with older grippers!**

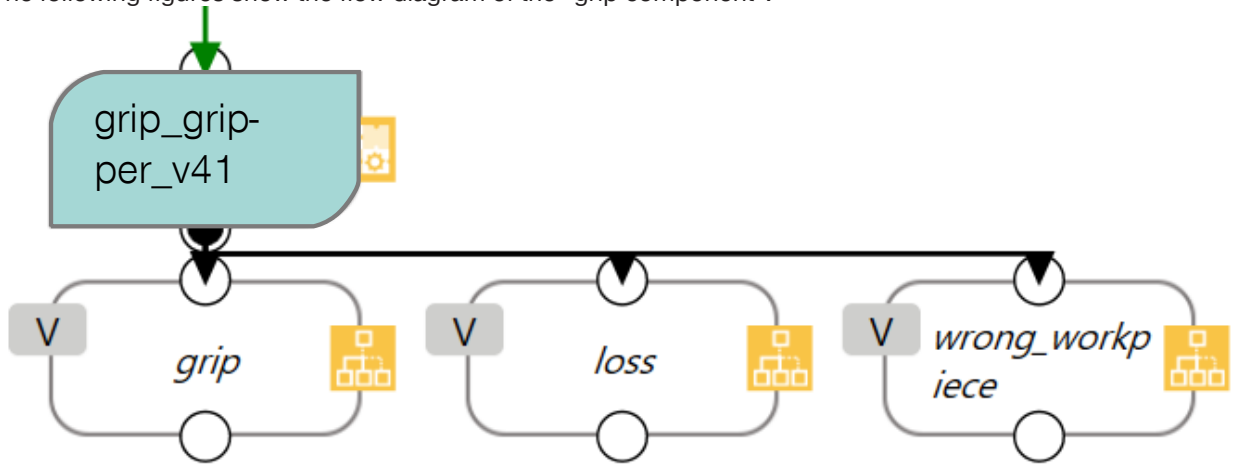## 3.4 Menu bar and flow chart of the software

The following components appear in the left menu bar for selection:
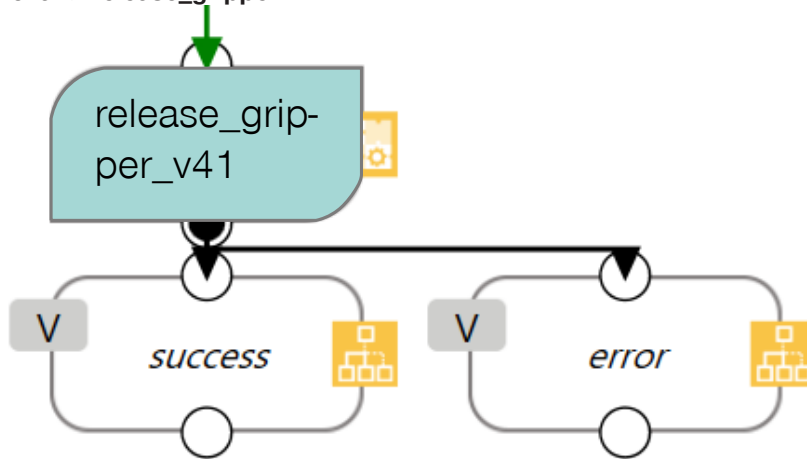
grip_gripper   release_gripper

3.4.1 Flowchart "grip_gripper"

The following figures show the flow diagram of the "grip component".

grip_grip-
per_v41

V grip
V loss
V wrong_workp
iece

3.4.2 Flowchart "release_gripper"
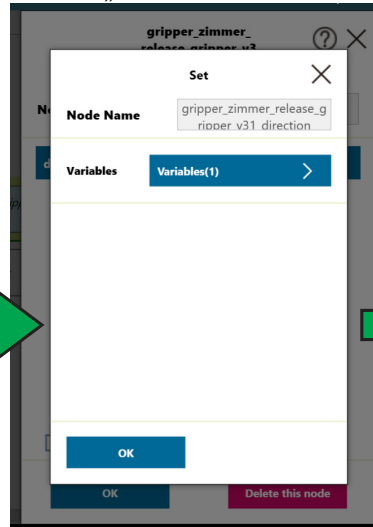

release_grip-
per_v41

V success
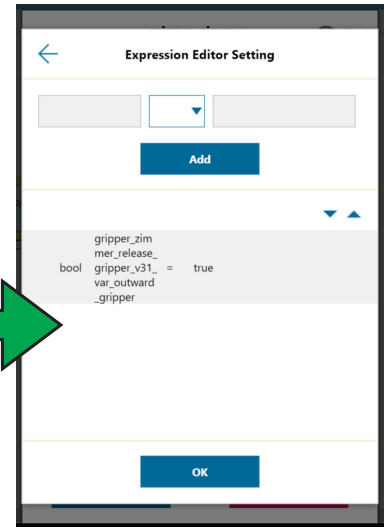V error

3.4.3 Setting options within the "Release Component
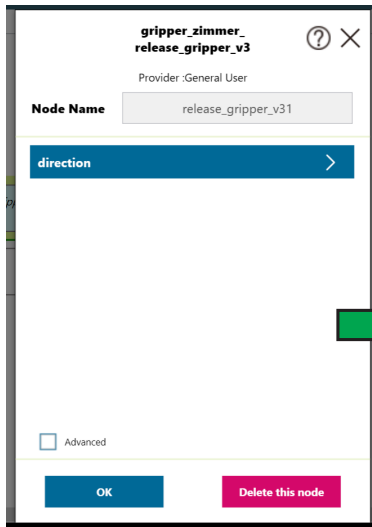
▶ Click "direction"   ▶ Click „variables"   ▶ Select the first variable

**gripper_zimmer_
release_gripper_v3**

Provider :General User

| Node Name | release_gripper_v31 |

| direction | > |

☐ Advanced

| OK | Delete this node |

Set

| Node Name | gripper_zimmer_release_g ripper_v31_direction |

| Variables | Variables(1) > |

OK

Delete this node

Expression Editor Setting

| | ▼ | |

Add

▼ ▲

| bool | gripper_zim mer_release_ gripper_v31_ var_outward _gripper | = | true |

OK

▶ Click on the ✎ icon   ▶ „true" for external gripping"   ▶ „false" for internal gripping

Expression Editor Setting

| | ▼ | |

Add

▼ ▲

| ✎ bool | gripper_zim mer_release_ gripper_v31_ var_outward _gripper | = | true | ✕ |

OK

Edit Expression

bool/gripper_zimmer_release_gripper_v31_var_outward_gripp=
true
✕

| Normal | Modbus | Robot |

Variable		▼	Insert
Function	Byte_ToInt16()	▼	Insert
Math	abs()	▼	Insert
Boolean Value	true	▼	Insert
Reserved	newline	▼	Insert

OK

Edit Expression

bool/gripper_zimmer_release_gripper_v31_var_outward_gripp=
false
✕

| Normal | Modbus | Robot |

Variable		▼	Insert
Function	Byte_ToInt16()	▼	Insert
Math	abs()	▼	Insert
Boolean Value	false	▼	Insert
Reserved	newline	▼	Insert

OK

⇨ **ATTENTION: All windows must be confirmed with "OK"!**

3.4.4 Setting options within the "Grip Component

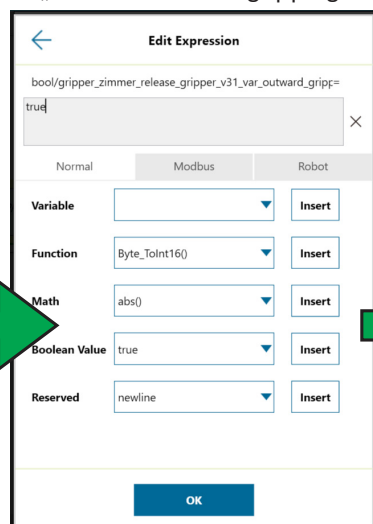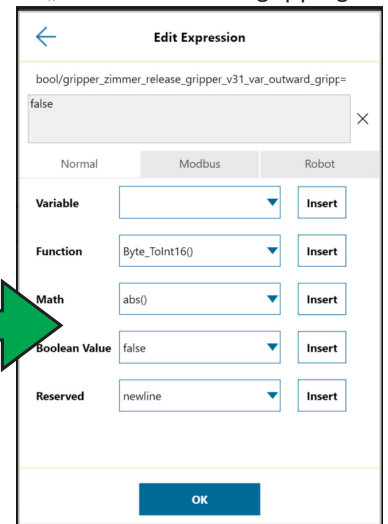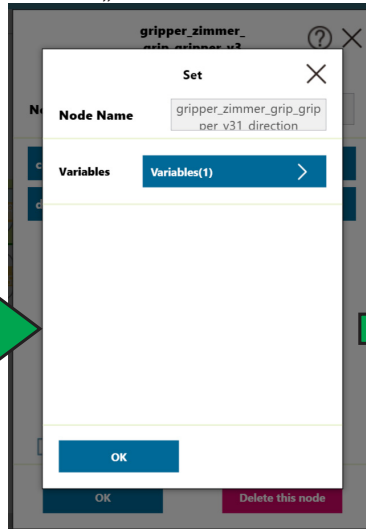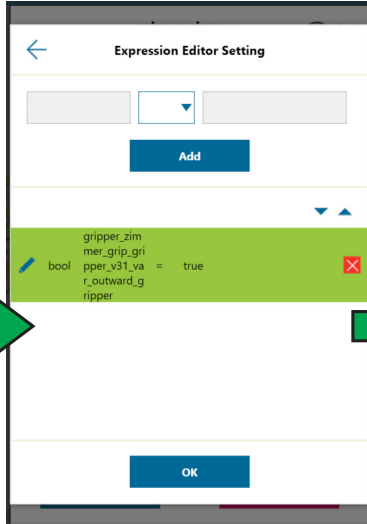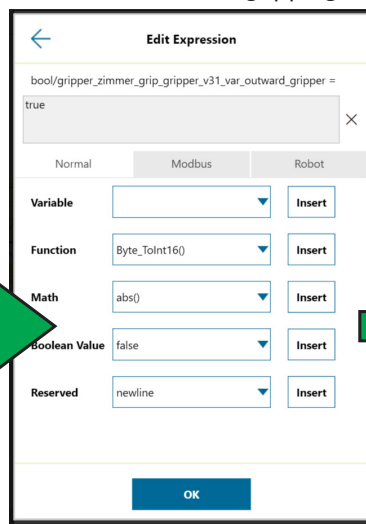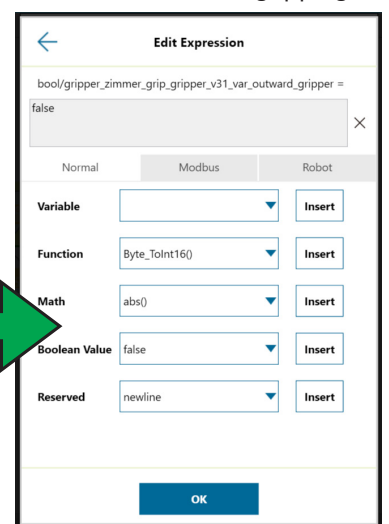► Click „direction"
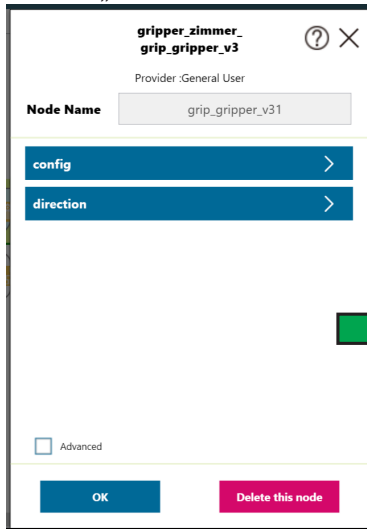
► Click „variables"
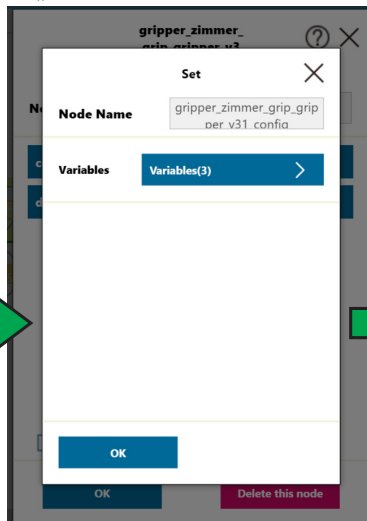

► basic view "Vatiable 1"

► Click on the ✏ icon

► „true" for external gripping"
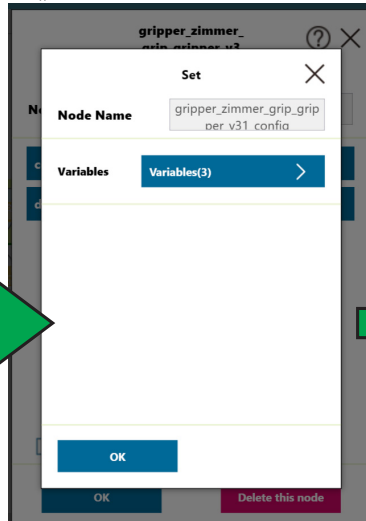

► „false" for internal gripping
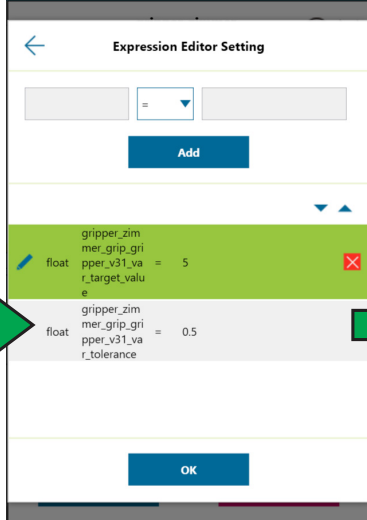

► Main menu item "config"
► „variable"
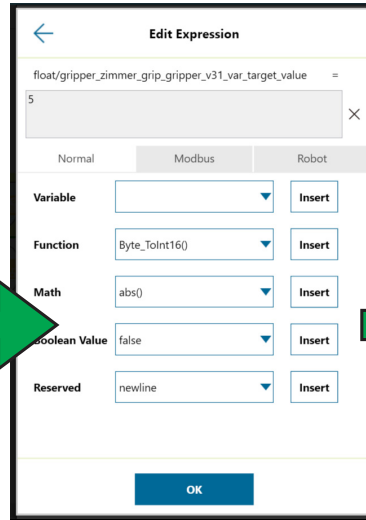

► „variable"

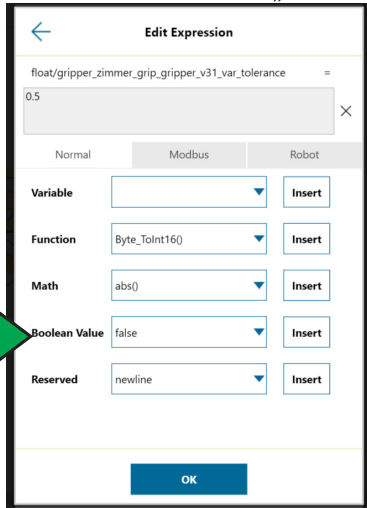► basic view

► Selection the „var_target_value"

► Click on the ✎ icon - „5"

► Selection the „var_tolerance"

► Click on the ✎ icon - „0.5"

⇨ **ATTENTION: All windows must be confirmed with "OK"!**

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