Description of the Smart Grasping example program

# Main Routine:

NW0: Calling the "INIT" subroutine

The controller's "First Scan" command starts an initialization run. This process enters data into a structure that is used to establish and monitor an open connection between the controller and the Smart Grasp.  
  
 Timeout = time after which a connection failure is reported  
 DestAddr = IP address and port to which the controller should connect.

NW1: Starting the connection between the controller and Smart Grasp

Setting the bit that starts the connect

NW2: Stop the connection between the controller and Smart Grasp

reset the bit that starts the connect

NW3: When the connection is started, a timer is started.

NW4: Set the bit to start reading in NW12

NW5: Push to open a socket connection using a massage box

The massage box is set up as follows.

Ein Bild, das Text, Elektronik, Screenshot, Display enthält.

KI-generierte Inhalte können fehlerhaft sein. Ein Bild, das Text, Screenshot, Display, Software enthält.

KI-generierte Inhalte können fehlerhaft sein.

Timer to maintain the connection to the Smart Grasping Box.  
The time is always set in milliseconds.

Nw6: Opening the connection between Smart Grasping and the controller

The length of the MSG source element should be 8 bytes + the number of characters in the address (i.e. for the address 192.168.1.101?port=42001 it would be 8+24=32).

8 is the offset in the struct 2 x 4 bytes = 8 bytes offset

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NW7: Close the connection between Smart Grasping and the controller.

Ein Bild, das Text, Elektronik, Screenshot, Display enthält.

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KI-generierte Inhalte können fehlerhaft sein.

Message box settings.

NW8: ADD-On Instruction is executed.

NW9: Send data to Smart Grasping Box

The data frame has a length of 80 bytes. The header of 16 bytes is added together to determine the length of the data frame to be written.

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Message box settings.

NW10: Time to keep the “Read Data” signal pending for 500 ms.

NW11: Edge after the time from NW10 has elapsed to automatically clear the “Read Data” signal

NW12: Data reading with a massage box

Ein Bild, das Text, Elektronik, Screenshot, Display enthält.

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KI-generierte Inhalte können fehlerhaft sein.

Message box settings.

NW13: Reset the outputs

NW14: Check whether data has arrived in the data block and output that the data transfer is OK.

## Subroutines

INIT:

This subroutine contains a timer that is used to monitor for a connection loss between the controller and the Grasping Kit. It also specifies the IP address with which the Grasping Kit communicates.

Panel:

This subroutine contains input and output data. These can be used by HMIs from various manufacturers to control the example program.

Request\_Response:

This subroutine contains an erasure matrix which is used at the required time to delete old data.