

Application Note

FESTO

YHBP - Servopneumatic Balancerkit Design diagram PLb

Example design diagram for a PLb Servopneumatic Balancerkit.

YHBP-...

Title YHBP - Servopneumatic Balancerkit - Design diagram PLb
Version 1.10
Document no. 100361
Original en
Author Festo

Last saved 25.01.2022

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1 Components/Software used

Type/Name	Software/firmware version	Date of manufacture
Servo-pneumatic balancer kit	General	--
Application software YHBP (GSAY-A8-F0-Z4-1.0)	0.80.2	--
Firmware controller (CECC-D-BA)	1.4.0	--

Table 1.1: 1 Components/Software used

2 Description of the application

This application note is showing a basic example design diagram for the YHBP balancer kit with PLb. The diagram is similar to the configuration which can be ordered as a pre-configured cabinet CMCB-D1-CC-S0. All components outside the scope of delivery of the YHBP can be replaced with similar components by different suppliers.

2.1 Additional application notes

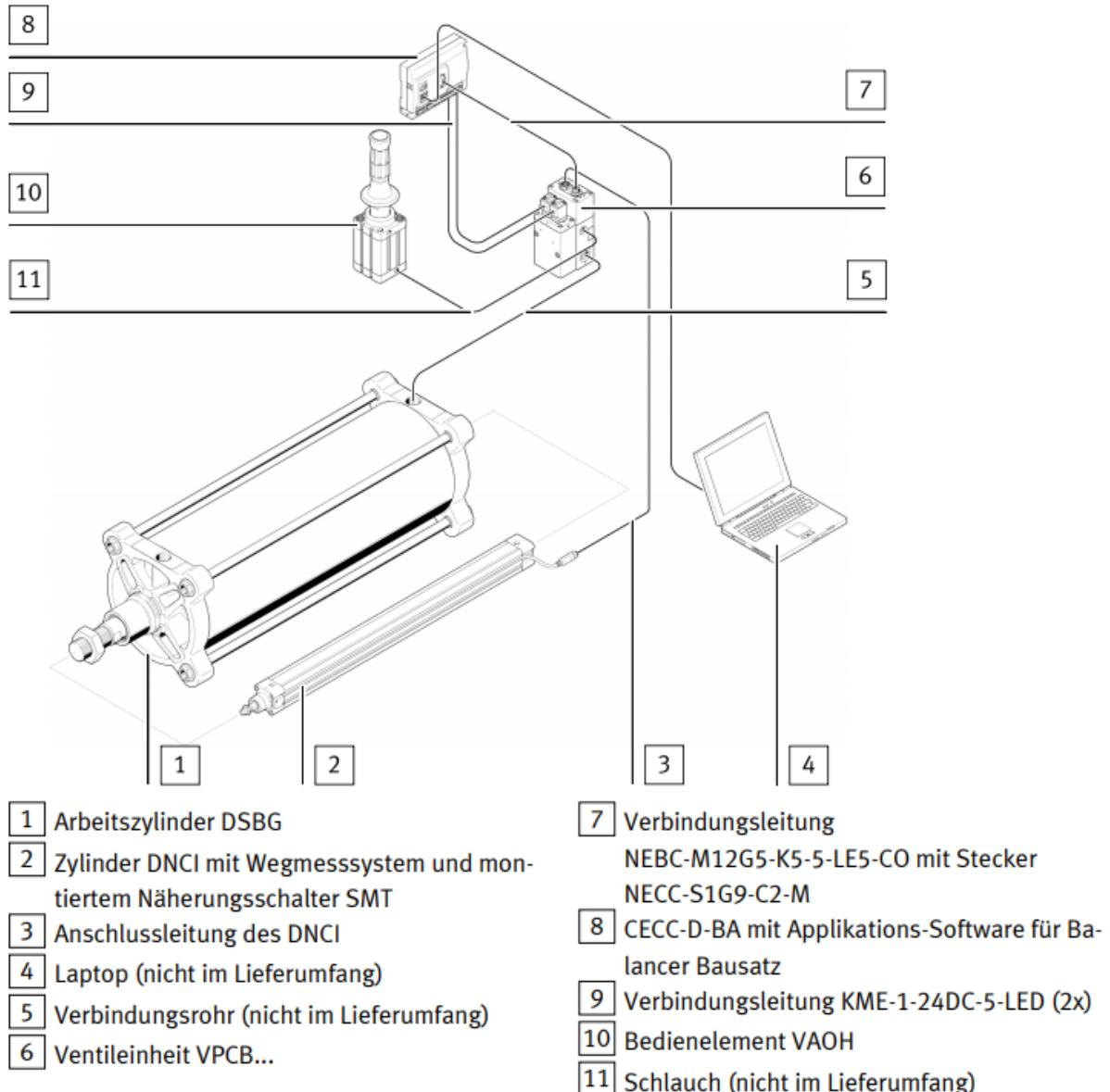
Apart from this application note, other application notes on commissioning and safety functions are also available:

Name	Contents
YHBP - Servo-pneumatic Balancer Kit – Software Update and backup	Update of the application software of the CECC-D-BA Balancer controller. Backup and restore of configuration-files and reading of log-data.
YHBP - Servo-pneumatic Balancer Kit - Commissioning	Explanation of the commissioning steps for the servo-pneumatic balancer kit.
YHBP - Servo-pneumatic Balancer Kit - Operation	Explanation of the operating modes of the servo-pneumatic balancer: - Normal operation - User-specific special functions: - Monitoring functions (not safety-oriented) - Sample applications
YHBP-Servo pneumatic Balancer Kit - SLS-SSC-PLb-CatB	Application note for the servo-pneumatic kit for implementation of Safely Limited Speed (SLS) and Safely Stop and Close (SSC) with PL b, Category B
YHBP - Servo pneumatic Balancer Kit - SLS-SSC-PLd-Cat3	Application note for the servo-pneumatic kit for implementation of Safely Limited Speed (SLS) and Safely Stop and Close (SSC) with PL d, Category 3
YHBP - Servo pneumatic Balancer Kit - Description of host function blocks in CODESYS V3	Application note describing the different host function blocks for communication with the YHBP system.

Table 2.1: Additional application notes

3 Basic information

3.1 Overview



3.2 Operating panel

When using the preassembled control cabinet CMCB a operating panel is needed to operate the cabinet. The connection can be found in the connection diagram. Handle active has to be connected to 24V as well and is not connected to a switch in this case.

An example configuration using Eaton components could look like this:



A1

B1

C1

D1

E1

F1

ID	Name	Characteristic	Description
A1:	System enable	latching	
B1:	Operation enable	latching	Switching the operating modes of the CECC and connecting the closing valves
C1:	Reset	spring return	Reset of the CECC
D1:	Switch ctrl mode	latching	Switching between position hold mode/load guided mode
E1:	Custom input 1/2	3 Pos. Switch (latching)	Left: custom input 1, Right: custom input 2, Middle: off
F1:	Custom input 3/4	3 Pos. Switch (spring return)	Left: custom input 1, Right: custom input 2, Middle: off

Order code for eaton configurator:

200429F012CB8D00

Part List:

Quantity	Art.-Nr.	Type	Description
1	197636	M22-I6-200429F012CB8D00	Aufbaugehäuse
1	197538	M22-PVLT30	Not-Halt/Aus-Taste, bel.,drehentr.
1	216573	M22-CLEDC-R	LED-Element,Boden,rot
2	216387	M22-CKC01	Oeffner-Kontakt,Cage Clamp,Boden
2	216823	M22-WRLK-W	Leuchtwahltaste,2 Stellungen,weiss
4	216572	M22-CLEDC-W	LED-Element,Boden,weiss
9	216386	M22-CKC10	Schließer-Kontakt,Cage Clamp,Boden
1	216931	M22-DL-B	Leuchtdrucktaste,flach,blau
1	216843	M22-WRLK3-W	Leuchtwahltaste,3 Stellungen,weiss
1	216833	M22-WLK3-W	Leuchtwahltaste,3 Stellungen,weiss

Additional: To mount 3 closing contacts in one bottom connector (needed for operation enable in this case) a bridge for the middle connector is needed (Eaton order ID: 216405, M22-XW). A LED cannot be mounted in the operation enable in this case.