

Programmable logical valve control type PLVC

The programmable logic valve control type PLVC is intended for the control of complex hydraulic circuits. Movements with various pressure, speed, and acceleration profiles, within predefined ranges, can be controlled and saved. It can be described as a user programmable PLC with built-in amplifiers for proportional valves.

Analogous, digital and components connected via CAN-Bus (e.g. pressure sensors, joy-sticks, etc.) can be utilized for control or closed loop tasks, connected via cable or wireless. This high degree of flexibility is achieved by:

- Modular concept with various extensions and add-on's (basic and extension module, diagnosis display, CAN-Bus-power relays)
- Flexible programming
- Various interfaces (RS 232, CAN-Bus, Profi-Bus)



- Free parameter setting of all in- and out-puts
- Remote diagnosis via modem and mobile telephone
- Software function blocks (PLC programs)
- Remote control module

Main field of application is with machines for construction, lifting, logging, machine tools, and presses.

Nomenclature: Programmable logic valve control

Version: Modular concept with

- Basic module
- Extension modules
- CAN-Bus power relays
- Display
- Software

Basic type and main parameter

	PLVC 41	PLVC 2	PLVC 2x8
Number of inputs ¹⁾			
- Digital	27 (3 / 24)	13 (5 / 8)	17 (10 / 7)
- Analogous	28 (4 / 24)	12 (4 / 8)	23 (11 / 12)
- Frequency	3 (3 / -)	3 (3 / -)	3 (3 / -)
- Emergency stop	x	x	x
Number of outputs ¹⁾			
- Digital	16 (- / 16)	16 (8 / 8)	13 (- / 13)
- Analogous (PWM)	16 (4 / 16)	4 (4 / -)	16 (16 / -)
- Analogous (0 ... 10V)	1 (1 / -)	--	--
- Relay	8 (3 / 8)	4 (- / 4)	--
- Auxilliary voltage	1 (5V DC)	--	--
Interfaces			
RS 232	x	x	x
CAN-Bus	x	x (- / x)	x (x / x)
Profi-Bus	--	x	--
Power supply (10 ... 30V DC)	5A (10A)	5A	5A

¹⁾ Always max. number of inputs and outputs, figures in brackets apply to basic module and extensions

Basic type and main parameter (Continuation)

Software function packs (examples)

- Position indication
- CAN-Bus communication
- Position and flow control
- Malfunction indication
- Closed loop control
- Simultaneous movement
- Anti saturation control

- Overload detection
- Load sensing control
- Pressure control

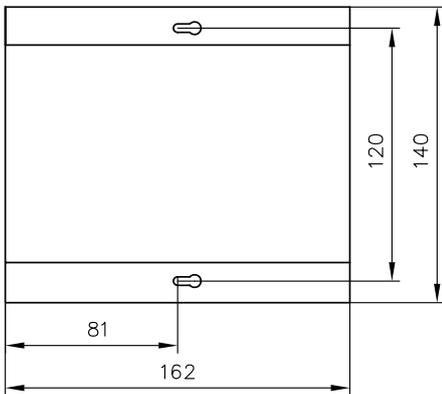
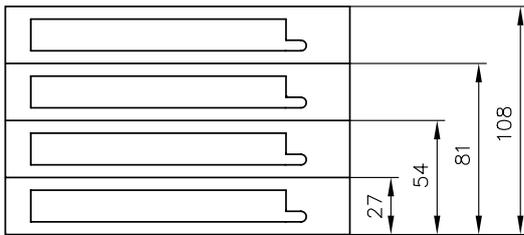
The PLC programming via the instruction list IL, the function block diagram FBD and the structured text ST enables easy and quick customization by the customer.

Additional peripherals, connected via CAN-Bus

- CAN-Bus power relays (relays for high power consumers)
- CAN-Bus knot (to integrate non CAN-Bus capable components)
- CAN-Display for user and diagnostic texts

Dimensions

Basic and extension module type PLVC 4



Additional information

- Programmable logical valve control

type PLVC 2	D 7845-2	• Prop. pressure valve type PM, PMZ	D 7625
type PLVC 4	D 7845-4	type PMV	D 7485/1
type PLVC 2x8	D 7845 M	type PDV	D 7486
type CAN HMI	D 7845 HMI	type PDM	D 7486, D 7584/1
type CAN HMI-XS	D 7845 XS	• Prop. flow control valve type SE, SEH	D 7557/1
- Lifting module type HMT etc. D 7650, Sk 7650 ++, Sk 7758 ++
- Prop. directional spool valve type PSL, PSV D 7700 ++
- See also chapter "Equipment for special applications" (Industrial trucks, Mobile hydraulics, Proportional valves)