

Multi-Axis Controller V26



The V26 is a robust joystick commonly used in electro-hydraulic applications. Long life and high reliability is ensured by the latest contactless hall-technology. With many outputs and grip options the V26 series is hugely customisable.

Technical data

Mechanical life V26	10 million operating cycles
Supply voltage	See interface
Operation temperature	-40°C to +85°C
Degree of protection	IP22
Functional safety	PLd compatible (EN ISO 13849, complies SIL2 to DIN EN IEC 61508)



	V26	T	-R	+R	-B	-E...	-S...	-X
Basic unit								
V26 2-axis								
Grip / Palm Grip								
Knob (included in basic unit!)								
T Dead man								
H Signal button								
D Push button								
B... Palm Grip B... (see page Palm Grip 154)								
Axis 1								
R Friction brake								
Axis 2								
R Friction brake								
Cover housing								
B Cover housing (included in basic unit!)								
Interface (description see on the following pages)								
E0xx Switching output								
E1xx Voltage output								
E2xx Current output								
E3xx CAN-interface								
E4xx CANopen Safety interface								
E9xx Other outputs								
Plug connectors								
S... Standard plug connectors (see page 120)								
Special model								
X Special / customer specified								

Digital output	
Supply voltage	9-32 V DC
Current carrying capacity	Direction signal 150 mA
	Zero position signal 500 mA
Mounting depth A	105 mm
Wiring	Cable 500 mm long without plug connector
	Optional with plug connector (<i>standard plug connectors see page 120</i>)
2 direction signals + 1 zero position signal (galvanically isolated) per axis	
	2 axis
	E002 2

Voltage output (not stabilized)	
Supply voltage	4,75-5,25 V DC
Mounting depth A	105 mm
Wiring	Cable 500 mm long without plug connector
	Optional with plug connector (<i>standard plug connectors see page 120</i>)
0,5...2,5...4,5 V redundant per axis	
	2 Achsen
	E103 2
Output options	
Characteristic:	
Inverse dual	1
Dual	2
Inverse dual with dead zone +/- 3° (standard)	3
Dual with dead zone +/- 3°	4

Voltage output	
Supply voltage	9-32 V DC (*11,5-32)
Mounting depth A	105 mm
Option	Input for capacitive sensor
Wiring	Cable 500 mm long without plug connector
	Optional with plug connector (<i>standard plug connectors see page 120</i>)
0,5...2,5...4,5 V redundant per axis	
	2 axis
	E111 2
0...5...10 V redundant per axis, supply voltage 11,5 - 32 V DC	
	2 axis
	E131 2
Output options	
Characteristic:	
Inverse dual	1
Dual	2
Inverse dual with dead zone +/- 3° (standard)	3
Dual with dead zone +/- 3°	4
<i>Voltage output with other value on request!</i>	

Current output

Supply voltage	9-32 V DC		
Mounting depth A	105 mm		
Option	Input for capacitive sensor		
Wiring	Cable 500 mm long without plug connector		
	Optional with plug connector (<i>standard plug connectors see page 120</i>)		S
0...10...20 mA per axis, sensor redundant with error monitoring and error signal			
	2 axis	E203 2	
4...12...20 mA per axis, sensor redundant with error monitoring and error signal			
	2 axis	E211 2	
	Output options		
	Single		5
	Single with dead zone +/- 3° (standard)		6
<i>Current output with other value on request!</i>			

CAN

Supply voltage	9-36 V DC		
Idle current consumption	120 mA		
Mounting depth A	External digital output for LEDs 5-30 mA (dependent on the number of LEDs)		
	Digital switching output (potential-free) 100 mA		
	E3091: 105 mm		
	E3091X: 130 mm		
Protocol	E3101X - E3103X: 130 mm		
	E3104X - E3105X: 160 mm		
	CANopen CiA DS 301 or SAE J 1939 (based on)		
Baud rate	125 kBit/s to 1 Mbit/s (standard 250 kBit/s)		
Wiring	CAN (IN) cable 300 mm with plug connector M12 (male)		
	CAN (OUT) cable 300 mm with plug connector M12 (female)		
	External in-/outputs cable 300 mm without plug connector		
	External in-/outputs cable 300 mm without plug connector (additionally from 32 in-/outputs)		
	Optional with plug connector (<i>standard plug connectors see page 120</i>)		S
CAN expansion stage 1		E309	1
- 7 analoge Joystickachsen			
- 16 digitale Joystickfunktionen			
- Input for capacitive sensor			
With additional external in-/outputs			
	- 8 external LED-outputs (dimmable optional), 1 switching output (potential-free, 100 mA), 8 external digital inputs		2
	- 16 external LED-outputs (dimmable optional), 1 switching output (potential-free, 100 mA), 16* external digital inputs		3
*External LED-outputs can be used for LEDs in the grip			
*With the use of capacitive sensor, the external digital inputs are reduced by one input!			

CANopen Safety		
Supply voltage	9-36 V DC	
Idle current consumption	120 mA	
	External digital output for LEDs 5-30 mA (depending on the number of LEDs)	
	Digital switching output (potential-free) 100 mA	
Mounting depth A	E4091: 105 mm	
	E4091X: 130 mm	
	E4101X - E4103X: 130 mm	
	E4104X - E4105X: 160 mm	
Protocol	CANopen Safety EN50325-5	
Baud rate	125 kBit/s to 1 MBit/s (Standard 250 kBits)	
Wiring	CAN (IN) cable 300 mm with plug connector M12 (male)	
	CAN (OUT) cable 300 mm with plug connector M12 (female)	
	External in-/outputs cable 300 mm without plug connector	
	External in-/outputs cable 300 mm without plug connector (additionally from 32 in-/outputs)	
	Optional with plug connector (<i>standard plug connectors see page 120</i>)	S
CANopen Safety expansion stage 1		E409 1
- 7 analog joystick axis		
- 16 digital joystick functions		
- Input for capacitive sensor		
With additional external in-/outputs		
- 8 external LED-outputs (dimnable optional), 1 switching output (potential-free, 100 mA), 8 external digital inputs		2
- 16 external LED-outputs (dimnable optional), 1 switching output (potential-free, 100 mA), 16* external digital inputs		3
*External LED-outputs can be used for LEDs in the grip		
*With the use of capacitive sensor, the external digital inputs are reduced by one input!		
Other outputs		
Voltage output for PVG32	0,25...0,5...0,75Us, power supply 9-32V DC	
Mounting depth A	105 mm	
Option	Input for capacitive sensor	
Wiring:	1. cable 14 x 0,25 mm ² 300 mm long without plug connector	
	2. cable 14 x 0,25 mm ² 300 mm long without plug connector (optional for grip function)	
	Optional with plug connector (<i>standard plug connectors see page 120</i>)	S
	2 axis	E907 2
Attachments		
Z01 Mating connector (CAN) M12 (male insert) with 2 m cable	20201140	
Z02 Mating connector (CAN) M12 (female contact) with 2 m cable	20202298	

