Valve terminal bus node

Type	MVT-C-LK	MVT-C-EN	MVT-E-EN
Description	Class-B	Supports multiple bus protocols	Supports multiple bus protocols, with IO-Link master (2*Class-A)
Matching Festo valve Terminals	VTUG		
Terminals Field bus			
Protocol	IO-Link	Profinet, CC-Link IE, Ethernet/IP	Profinet, CC-Link IE, Ethernet/IP
Field bus, connection system	Class-B: 1*M12, A-CODE, 5 pin, Male	2*M12, D-CODE, 4 pin, Female	2* M12, D-CODE, 4 pin, Female
IO-Link Expansion port	-	-	2* M12, A-CODE, 5 pin, Female
Electrical isolation	yes	yes	yes
Transmission rate	-	100 Mbps	100 Mbps
Max. address volume, inputs	6 Byte	8 Byte	74 Byte
Max. address volume, outputs	6 Byte	6 Byte	74 Byte
Power supply			
Nominal operating voltage DC	24 V		
Operational voltage range DC	18 ... 30 V		
System Max. power supply	1 A	4 A	4 A
Valve Max. power supply	2 A	2 A	2 A
Intern power consumption nominal operating voltage	Less than 100 mA	Less than 200 mA	Less than 200 mA
Power supply, connection system	The bus interface includes power supply	M12*1, L-CODE, 5 pin, Male	M12*1, L-CODE, 5 pin, Male
Technical data			
Expansion port type	-	-	2*Class-A
Max. number of solenoid coils	48	48	48
Power supply, inputs (pin1&pin3)	-	-	IO-Link port Max 1.6 A
Input signal type	-	-	PNP type sensor, Travel switch, dry contact (SIO mode)
Power supply, outputs (pin2&pin3)	-	-	Max 2 A
Output signal type	-	-	PNP type loads
LED	Us: System voltage Ua: Auxiliary voltage LK: Communication status	Us: System voltage Ua: Auxiliary voltage NET: Bus communication failure MOD: System failure Lk1/Lk2: Network port connection status Act1/Act2: Network communication state	Us: System voltage Ua: Auxiliary voltage NET: Bus communication failure MOD: System failure Lk1/Lk2: Network port connection status Act1/Act2: Network communication state CH1/CH2: port1/port2 Status indication
Diagnosis			
Communication status	Communication failure alarm		
Power supply detection	Low voltage alarm		
System diagnostics	System failure alarm		
General parameters			
Dimensions	42*91*40 mm		
Type of mounting	On electrical interface		
Operation temperature	-5 ... +60 °C		
Storage temperature	-20 ... +70 °C		
Protection class	IP67		

Valve terminal bus node

Dimensions		
MVT-C-LK	MVT-C-EN	MVT-E-EN

Power port		
	Power port Male	**Power port Male**
	PW	**PW**
	1, System power Us+ 2, Auxiliary power Ua− 3, System power Us− 4, Auxiliary power Ua+ 5, Protective earthing PE	1, System power Us+ 2, Auxiliary power Ua− 3, System power Us− 4, Auxiliary power Ua+ 5, Protective earthing PE

Bus port		
Class-B port Male	**Bus port Female**	**Bus port Female**
Link	**Link**	**Link**
1, System power 24V+ 2, Auxiliary power 24V+ 3, System power 0V 4, C/Q 5, Auxiliary power 0V	1, Transmitter TD+ 2, Receiver RD+ 3, Transmitter TD− 4, Receiver RD−	1, Transmitter TD+ 2, Receiver RD+ 3, Transmitter TD− 4, Receiver RD−

Signal port		
		Signal port Female
		CH
		1, System power 24V+ 2, I/O 3, System power 0V 4, C/Q 5, Protective earthing PE

Valve terminal bus node

Type	MVT-C-EC	MVT-E-EC
Description	Support the EtherCAT protocol	Support the EtherCAT protocol With IO-Link master interface (2*Class-A)
Matching Festo valve Terminals	VTUG series	
Field bus		
Protocol	EtherCAT	EtherCAT
Field bus, connection system	2*M12, D-CODE, 4 pin, Female	2* M12, D-CODE, 4 pin, Female
IO-Link Expansion port	-	2*M12, A-CODE, 5 pin, Female
Electrical isolation	yes	yes
Transmission rate	100 Mbps	100 Mbps
Max. address volume, inputs	7 Byte	74 Byte
Max. address volume, outputs	6 Byte	74 Byte
Power supply		
Nominal operating voltage DC	24 V	
Operational voltage range DC	18 ... 30 V	
System Max. power supply	4 A	4 A
Valve Max. power supply	2 A	2 A
Intern power consumption nominal operating voltage	Less than 200 mA	Less than 200 mA
Power supply, connection system	M12*1, L-CODE, 5pin, Male	M12*1, L-CODE, 5 pin, Male
Technical data		
Expansion port type	-	2*Class-A
Max. number of solenoid coils	48	48
Power supply, inputs (pin1&pin3)	-	IO-Link port Max 1.6 A
Input signal type	-	PNP type sensor, Travel switch, dry contact (SIO mode)
Power supply, outputs (pin2&pin3)	-	Max 2 A
Output signal type	-	PNP type loads
LED display		
	Us: system power Ua:auxiliary power Run: running status ERR: Module status Lk1/Lk2: Network port connection status	Us:system power Ua: auxiliary power Run: running status ERR: Module status Lk1/Lk2: Network port connection status CH1/CH2:Port connection status: port1/port2 status indication
Diagnosis		
Communication status	Communication failure alarm	
Power supply detection	Low voltage alarm	
System diagnostics	System failure alarm	
General parameters		
Dimensions	42*91*40mm	
Type of mounting	On electrical interface	
Operation temperature	-5 ... +60 °C	
Storage temperature	-20 ... +70 °C	
Protection class	IP67	

Valve terminal bus node

Dimensions	MVT-C-EC	MVT-E-EC
	42 33.6 84.5 91 40 26 33	42 33.6 84.5 91 40 26 33

Power port		
	Power port Male 2 — 1 5 3 — 4 **PW** 1, System power Us+ 2, Auxiliary power Ua− 3, System power Us− 4, Auxiliary power Ua+ 5, Protective earthing PE	Power port Male 2 — 1 5 3 — 4 **PW** 1, System power Us+ 2, Auxiliary power Ua− 3, System power Us− 4, Auxiliary power Ua+ 5, Protective earthing PE

Bus port		
	Bus port Female 4 3 — 1 2 **Link** 1, Transmitter TD+ 2, Receiver RD+ 3, Transmitter TD− 4, Receiver RD−	Bus port Female 4 3 — 1 2 **Link** 1, Transmitter TD+ 2, Receiver RD+ 3, Transmitter TD− 4, Receiver RD−

Signal port		
		Signal port Female 4 — 5 3 — 1 2 **CH** 1, System power 24V+ 2, I/O 3, System power 0V 4, C/Q 5, Protective earthing PE