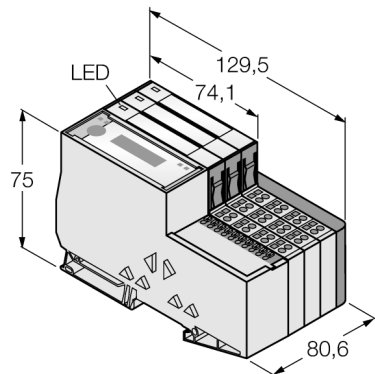


Economy Set for Simple I/O Communication via PROFIBUS-DP in IP20

TI-BL20-E-DPV1-S-6



- A special software (function module) for integration in PLC systems is not required.
- Cable max. 50 m between interface and read/write head
- 2 decimal rotary coding switches for the adjustment of the Profibus address
- Maximum transmission rate to the fieldbus 12 Mbps
- Sub-D female, 9-pin, for fieldbus connection
- Screw terminals for voltage supply
- LEDs for display of supply voltage, group and bus errors as well as status and diagnostics
- Connection of up to 6 read/write heads via BL ident extension cables
- Mixed operation of HF and UHF read/write heads

Type designation	TI-BL20-E-DPV1-S-6
Ident no.	1545128
Number of channels	6
Dimensions (W x L x H)	80.6 x 129.5 x 75 mm
Rated voltage from the supply terminal	24 VDC
Supply voltage	24 VDC
System power supply	24 VDC / 5 VDC
Field supply	24 VDC
Admissible range	18...30 VDC
Max. field supply current	8
Max. system supply current	1
Fieldbus transmission rate	9.6 kbps ... 12 Mbps
Fieldbus address range	1...126
Fieldbus addressing	via DIP switch
Service interface	PS/2 socket
Fieldbus connection technology	Push-in clamps
Voltage supply connection	Push-in terminals
Fieldbus termination	via DIP switch
Transmission rate	115.2 kbps
Electrical isolation	Electronics and field level isolated via opto-couplers
Output connectivity	Screw, tension spring
Sensor supply	0.25 A per channel, short-circuit proof
Number of diagnostics bytes	3
Number of diagnostics bytes	4
Number of parameter bytes	5
Number of parameter bytes	8
Number of input bytes	24
Number of output bytes	24
Relative humidity	15...95 %, no condensation allowed
Vibration test	Acc. to EN 61131
Shock test	Acc. to IEC 60068-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	Acc. to EN 50082-2
Protection class	IP20
Included in delivery	2 x end brackets BL20-WEW-35/2-SW, 1 x end plate BL20-ABPL

Functional principle

BL ident can be integrated into your plant structure in many different ways.

Various fieldbus standards, such as PROFIBUS-DP, EtherNet/IP, Ethernet Modbus TCP, EtherCAT, DeviceNet, CANopen and PROFINET IO allow flexible integration.

BL ident simple electronic modules (BL20-2RFID-S, BL67-2RFID-S) can be integrated into existing control or host systems without function block, since standard input/output process data is used for communication.

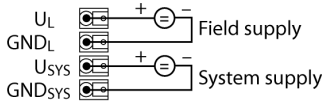
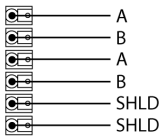
Programmable gateways with peripheral pre-processing function relieve the control system and fieldbus level.

Preassembled sets (2, 4, 6 or 8-port), easily mounted, available for all fieldbus networks.

Economy Set for Simple I/O Communication via PROFIBUS-DP in IP20

TI-BL20-E-DPV1-S-6

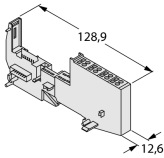
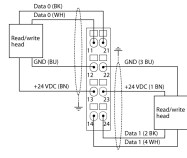
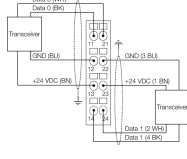
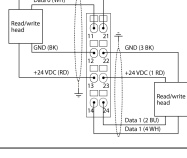
Anschlussübersicht

	Power Supply The U_{SYS} system supply feeds power to the gateway and the I/O modules. The U_L field supply feeds power to the sensors and actuators.	Pin Assignment 
	PROFIBUS-DP Fieldbus cable (example): D9T451-2M (ident no. 6915759) or RSSW-451-2M (ident no. 6914229)	Pin Assignment 

Economy Set for Simple I/O Communication via PROFIBUS-DP in IP20

TI-BL20-E-DPV1-S-6

Compatible base modules

Dimension drawing	Type	Pin configuration
	BL20-S4T-SBBS	.../S2500 Connectors  .../S2501 Connectors  Connectors .../S2503 
	6827046	
	Tension spring connection	
	BL20-S4S-SBBS	
	6827047	
	Screw connection	

Economy Set for Simple I/O Communication via PROFIBUS-DP in IP20

TI-BL20-E-DPV1-S-6

LED display

LED	Color	Status	Meaning
D		OFF	Error report or diagnostics active.
	RED	ON	Failure of MODBUS communication Check if more than 2 adjacent electronic modules are pulled. Relevant modules are located between gateway and this module.
	RED	FLASHING (0.5 Hz)	Upcoming module diagnostics
RW0/RW1		OFF	No tag, no active diagnostics
	GREEN	ON	Tag available
	GREEN	FLASHING (2 Hz)	Data exchange with tag enabled
	RED	ON	Read/write head error
	RED	FLASHING (2 Hz)	Short-circuit in the supply line of read/write head

Economy Set for Simple I/O Communication via PROFIBUS-DP in IP20

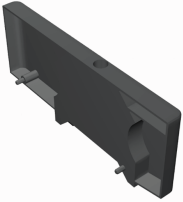
TI-BL20-E-DPV1-S-6

I/O Data Mapping

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Channel 0	0	DONE	BUSY	ERROR	XCVR CON	XCVR ON	TP	TFR	Reserved
	1	Error Code							
	2	Error Code 1							
	3	Reserved							
	4	READ DATA (8 Byte)							
	5								
	...								
	10								
	11								
	12	DONE	BUSY	ERROR	XCVR CON	XCVR ON	TP	TFR	Reserved
Channel 1	13	Error Code							
	14	Error Code 1							
	15	Reserved							
	16	READ DATA (8 Byte)							
	17								
	...								
	22								
	23								
	24	DONE	BUSY	ERROR	XCVR CON	XCVR ON	TP	TFR	Reserved
	25	Error Code							
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Channel 0	0	XCVR	NEXT	TAG ID	READ	WRITE	TAG INFO	XCVR INFO	RESET
	1	Reserved					Byte Count 2	Byte Count 1	Byte Count 0
	2	Address high byte							
	3	Address low byte							
	4	WRITE DATA (8 Byte)							
	5								
	...								
	10								
	11								
	12	XCVR	NEXT	TAG ID	READ	WRITE	TAG INFO	XCVR INFO	RESET
Channel 1	13	Reserved					Byte Count 2	Byte Count 1	Byte Count 0
	14	Address high byte							
	15	Address low byte							
	16	WRITE DATA (8 Byte)							
	17								
	...								
	22								
	23								
	24	XCVR	NEXT	TAG ID	READ	WRITE	TAG INFO	XCVR INFO	RESET
	25	Reserved					Byte Count 2	Byte Count 1	Byte Count 0

Economy Set for Simple I/O Communication via PROFIBUS-DP in IP20
 TI-BL20-E-DPV1-S-6

Accessories

Type code	Ident no.		Dimension drawing
BL20-ABPL (2 PCS.)	6827123	End plate for a BL20 station after the last I/O module (2 pieces)	
BL20-WEW-35/2-SW (10 PCS.)	6827124	End bracket for fixation of a BL20 station (10 pieces)	
ZBW5-2BETÄTIGUNGSWERKZEUG	6827125	Tension spring tool	