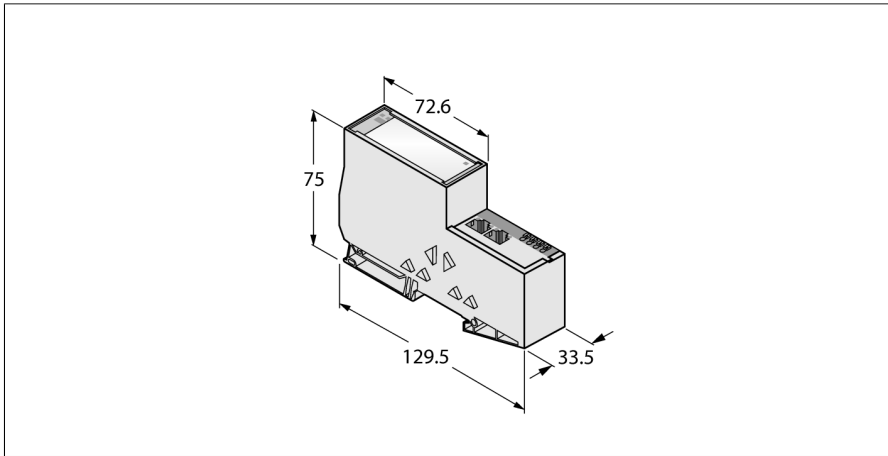


# Gateway for the BL20 I/O System

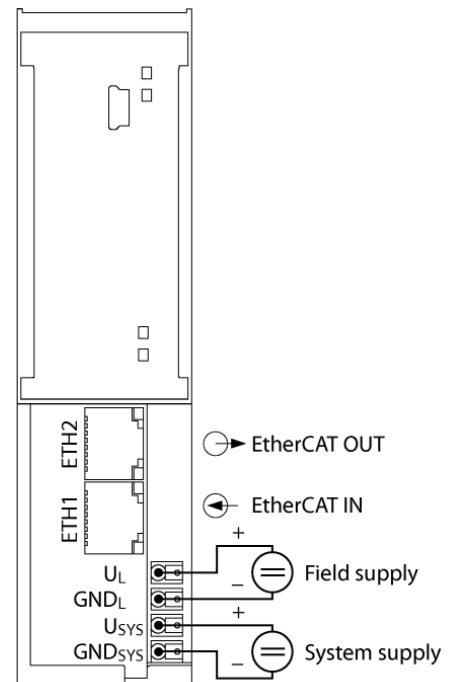
## Interface for EtherCAT — Second Generation

### BL20-E-GW-EC-20



- Protection class IP20
- 2 x end brackets BL20-WEW35/2-SW
- 1 x end plate BL20-ABPL
- LEDs for display of supply voltage, group and bus errors
- Gateway between the BL20 system and EtherCAT
- Modular Device Profile (MDP) supported
- 10/100 Mbps, Auto MDIX
- 2 × RJ45 female connectors

#### Field/System Supply



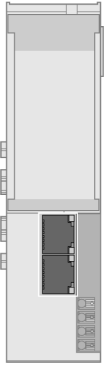
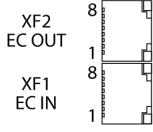
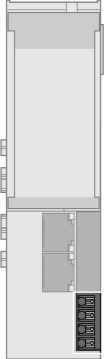
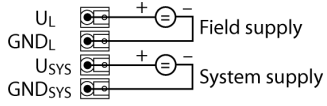
#### Functional principle

BL20 gateways are the head component of a BL20 station. They are designed to interface the modular fieldbus nodes to the higher level fieldbus (PROFIBUS-DP, DeviceNet, CANopen, Ethernet).


All BL20 electronic modules communicate over the internal module bus, the data of which is transferred to the fieldbus via the gateway, so that all I/O modules can be configured independently of the bus system.

ID	100037881
Supply voltage	24 VDC
System power supply	24 VDC / 5 VDC
Field supply	24 VDC
Admissible range	18...30 VDC
Nominal current from module bus	≤ 200 mA
Max. field supply current	8 A
Max. system supply current	0.7 A
Voltage supply connection	Push-in terminals
<b>System data</b>	
Max. number of I/O modules	32
Transmission rate	10/100 Mbps; full/half duplex; auto negotiation; auto crossing
Connection technology Ethernet	2 × RJ45 female connector
Service interface	Micro USB
<b>EtherCAT</b>	
Address allocation	automatic
MinCycleTime	125 µs
Diagnostics	CoE Emergencies, DiagnosisHistory
CAN over EtherCAT	acc. to modular device profile (ETG.5001.1)
<b>Dimensions (W x L x H)</b>	
Approvals	CE, cULus
Ambient temperature	0...+55 °C
Storage temperature	-25...+85 °C
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 60068-2-31
Electromagnetic compatibility	Acc. to EN 61131-2
Protection class	IP20
Included in delivery	2 x end brackets BL20-WEW-35/2-SW, 1 x end plate BL20-ABPL

## Connection overview

	<p><b>EtherCAT</b></p> <p>Fieldbus cable (example):          RJ45S-RJ45S-441-2M (ID 6932517) or          RJ45-FKSDD-441-0.5M/S2174 (ID 6914221)</p>	<p>Pin assignment</p>  <ul style="list-style-type: none"> <li>1 = TX +</li> <li>2 = TX -</li> <li>3 = RX +</li> <li>4 = n.c.</li> <li>5 = n.c.</li> <li>6 = RX -</li> <li>7 = n.c.</li> <li>8 = n.c.</li> </ul>
	<p><b>Power Supply</b></p> <p>The <math>U_{SYS}</math> system supply feeds power to the gateway and the I/O modules.</p> <p>The <math>U_L</math> field supply feeds power to the sensors and actuators.</p>	<p>Pin assignment</p>  <ul style="list-style-type: none"> <li><math>U_L</math> Field supply</li> <li><math>GND_L</math></li> <li><math>U_{SYS}</math> System supply</li> <li><math>GND_{SYS}</math></li> </ul>

## 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)	