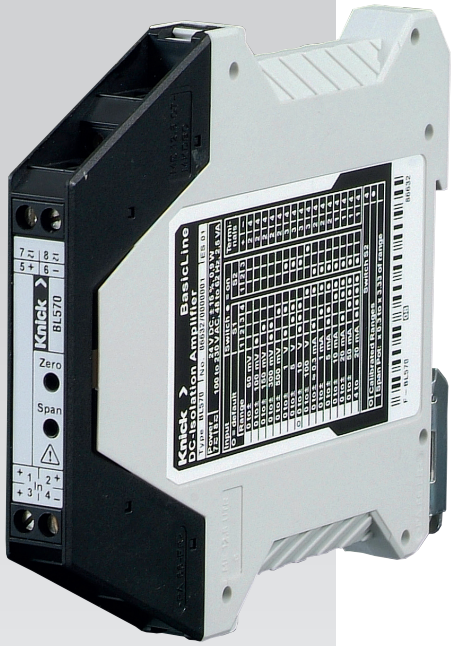
Universal Isolators



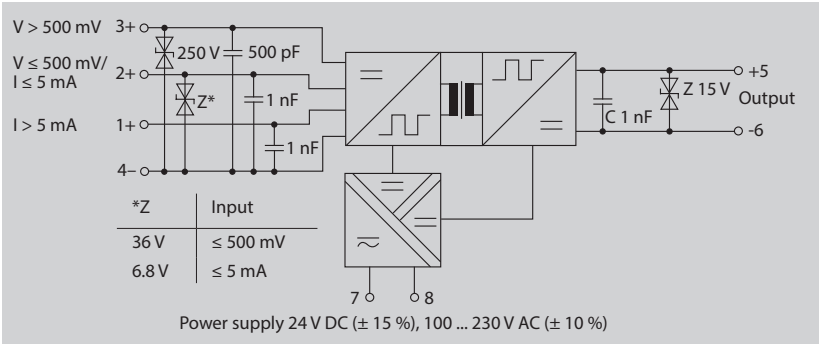
BasicLine BL 570

An isolator as versatile as its applications

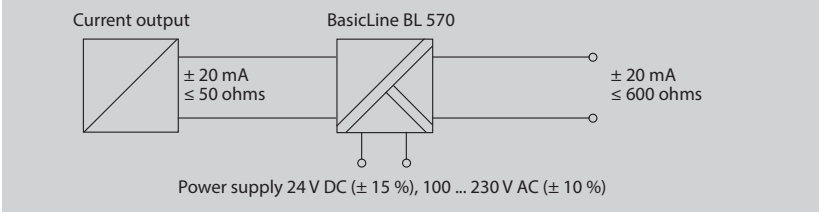
Facts

- Universal DC voltage and current measurement
- 480 switchable calibrated ranges without readjustment
- Voltage range anywhere between ± 20 mV and ± 200 V, individually adjustable
- Currents up to 100 mA are measured directly; higher currents via external shunt resistor
- Adjustable range offset
- Universal power adapter for 24 V DC supply or 100 ... 230 V mains supply
- 3-port isolation protects against incorrect measurements or damage
- Maximum reliability
- CE compliant and UL approved
- 3-year warranty
- Perfect price-performance ratio

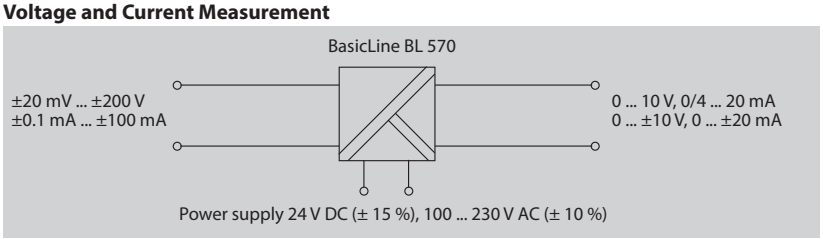
Block Diagram



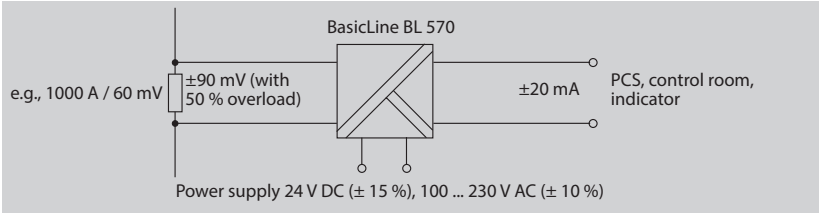
Electrical isolation



Voltage and Current Measurement



Simple Current Measurement



Input ranges	Output	Power supply
(±) 20 mV …(±) 200 V (±) 100 µA … (±) 100 mA	0 ... 20 mA / 0 ... 5 V / 0 ... 10 V ± 20 mA / ± 5 V / ± 10 V 4 ... 20 mA, 1 ... 5 V ; 2 ... 10 V	24 V DC or 100 ... 230 V AC mains supply

Product Line

Device	Input	Output	Order No.
BasicLine BL 570 Input and output adjustable	0 … ±20 mV/200 V 0 … ±0.1 mA/100 mA	0 … 20 mA, 4 … 20 mA 0 … 10 V, 0 … ±10 V 0 … ±20 mA	**BL 570**

Accessories		Download
BasicSoft SW 113	Adjustment tool for the BasicLine BL 570 universal isolator	**www.knick-international.com**

Specifications

Input

Voltage	(±) 20 mV ... (±) 200 V Calibrated steps	60 mV, 100 mV, 150 mV, 300 mV, 500 mV, 1 V, 5 V, 10 V, 100 V, uni-/bipolar	
Current	(±) 0.1 mA ... (±)100 mA Calibrated steps	1 mA, 5 mA, 10 mA, 20 mA, 50 mA, uni-/bipolar and 4 … 20 mA[1)]	
Input resistance	Current input	≤ 5 mA > 5 mA	approx. 100 ohms approx. 5 ohms
	Voltage input		approx. 1 Mohm
Overload capacity	Current input	≤ 5 mA > 5 mA	≤ 60 mA ≤ 300 mA
	Voltage input	≤ 500 mV > 500 mV	Suppressor diode 36 V, ≤ 20 mA Suppressor diode 250 V, ≤ 3 mA

Output

Ranges	0…20 mA / 0…5 V / 0…10 V, ±20 mA / ±5 V / ±10 V / 4...20 mA, 1...5 V ; 2...10 V, calibrated switching	
Offset	–100 %, –50 %, 0 %, 50 %, 100 % output span, calibrated	
Load	Output current Output voltage	≤ 12 V (600 ohms at 20 mA) ≤ 10 mA (1 kohm at 10 V)
Residual ripple	< 10 mV_{rms}	

Transmission behavior

ZERO pot	± 25 % output span adjustable
SPAN pot	0.33 … 3.30 x final value of input range (max. V_{in} = 200 V)
Gain error	< 0.25 % full scale (DC)
Cutoff frequency	> 100 Hz
Temperature coefficient[2)]	< 0.005 %/K full scale

Power supply

Power supply	24 V DC (± 15%); 0.9 W / 100 ... 230 V AC (± 10%), 48 ... 62 Hz, 2.5 VA

Isolation

Galvanic isolation	3-port isolation between input, output and power supply
Test voltage	1.5 kV AC
Working voltage	300 V AC/DC (basic insulation) with overvoltage category II / pollution degree 2 according to EN 61010-1

Standards and approvals

Conformity	CE compliant
EMC [3)]	Product standard EN 61326
Approval	UL Listed, File No. E340287, Standard: UL 61010-1 and CAN/CSA C22.2 No. 61010-1

Further data

Ambient conditions	Stationary operation, weatherproof, relative humidity 5 ... 95 %, no condensation, max. altitude 2000 m, water or wind-driven precipitation (rain, hail, snow) excluded	
Ambient temperature	Operation: 0 ... +55 °C	Transport, storage: –25 ... +85 °C
Housing	Modular housing, screw terminals, IP 20 protection	
Mounting	35-mm mounting rail, EN 60715	
Dimensions	12.5 mm x 111 mm x 99 mm	
Wire cross-section	Max. 2.5 mm^2, 24-14 AWG	
Weight	Approx. 150 g	

1) Input 4 ... 20 mA: Offset switching not calibrated
2) Average TC in specified operating temperature range, reference temperature 23 °C
3) Slight deviations are possible while there is interference

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72
Астана +7(7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395) 279-98-46
Киргизия (996)312-96-26-47
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Казахстан (772)734-952-31
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Таджикистан (992)427-82-92-69
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

Эл. почта kci@nt-rt.ru || Сайт: http://knick.nt-rt.ru