

Binder LED – more than light!

# **Binder Connector Group**

# Leading in the Way of Development and Manufacturing Connectors for Industrial Applications and Automation Technology

The Binder Connector Group, headquartered in the German town of Neckarsulm, is part of a medium-sized group of companies and has offices in Germany, Switzerland, France, the United Kingdom, Sweden, the Netherlands, China, Singapore and the USA.

Our production sites boast an exceptionally high level of vertical integration and are where we develop, design and produce solutions that meet the highest possible standards of quality and

precision, including solutions that are built to meet specific customer requirements.

Today, this family-owned company is one of the leading manufacturers of circular connectors for industrial applications. We have what it takes to supply exactly the right product to suit every application. We mainly develop and produce industrial connectors as well as connectors for sensor and automation technology.

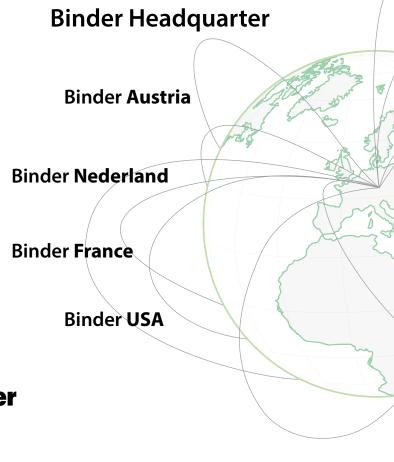
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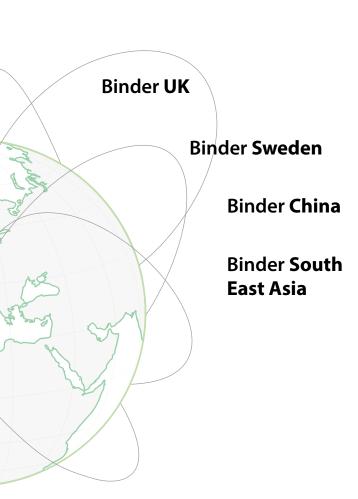
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# **Binder Connects the World**

As a world-leading manufacturer, our products are at the heart of our daily work. With a range of 5000 catalogue items, 3000 designs and 500 customised parts, we are able to supply exactly the suitable product for nearly every industrial electronics application.



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# Binder - On the Way to Becoming a Brand

A brand stands for sovereignty, credibility, trust and differentiation. A brand needs a face in the crowd.

Binder, one of the leading providers of circular connectors, has the target: to become a brand, in order to increase its degree of brand awareness, to improve its image and to distinct from the competitors.

We Want to Attract Attention.

We Want to be Liked.

We Want People to Talk about Binder.

We Want to have Fans.

#### Binder Stands for Reliability, Quality and Responsibility

Defined by traditional values, Binder is a company that customers, employees and service providers know they can always rely on.

Quality is also part of Binder's brand essence, and the soul of a brand.

# Our claim is highest quality:

- in our products
- in the employees we choose
- in the sense of reliability we demonstrate to our customers
- in the sense of responsibility we have towards our employees, customers and service providers

# To take, to show and to live responsibility means for us:

- to communicate at eye level
- to be on familiar terms with our employees
- respecting the environment and the resources is self-evident for us

Openness and honesty are the basis of our daily acting.



# The light-emitting diode – LED

The light-emitting diode (LED) is not only one of the most energy-efficient lamps available today, it is also suitable for maximum field of applications.

The LED is a semiconductor crystal that emits visible light when charged with electricity. A crystal measuring just a few millimetres is positioned on a reflector which conducts the light with total accuracy.

The reflector and crystal are affixed to a bracket containing the electrical contacts.

The bracket with the crystal and reflector is typically encapsulated in epoxy resin. The colour of the LED light depends on the composition of the crystal. For instance, white light is generated by converting a blue diode with a fl uorescent layer.



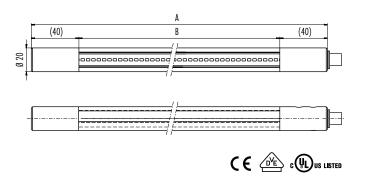
LIGHT IS MORE THAN JUST BRIGHTNESS.

THE MANUFACTURING OF A
PERFECT PRODUCT REQUIRES
THE BEST LIGHT OF AN LED.



# Binder LED - the best light

# Drawing



# **AVAILABLE VERSIONS**

Order Number	28 1200 000 04	28 1201 000 04	28 1202 000 04
Length (A)	250 mm	358 mm	412 mm
Length of lightening (B)	170 mm	278 mm	332 mm
Rated Power	5,7 W	9,1 W	13,6 W
Built-in LEDs	60	96	114
Illumination (1m)	95 Lux	152 Lux	227 Lux
luminous flux	227 lm	380 lm	569 lm
Power input	235 mA	375 mA	562 mA

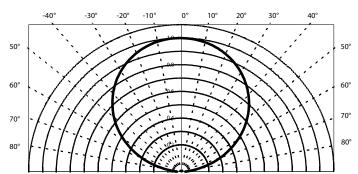
# Contact arrangement male insert (mating side)



1 = +24 V3 = 0 V DC

2,4 = free

# Light distribution curve IF = 80 mA $TS = 25 ^{\circ}\text{C}$



# **TECHNICAL SPECIFICATIONS**

Diameter20 mmColour of bodyAluAngle of light radiation120°Light yield48 lm/W

Lightcolour 4.000 K (nw) (3 Step Mac Adam)

Colour rendering (RA/CRI) > 90Voltage 24 V DCTemperature in use -25 °C /+60 °C

Storage temperature  $-40 \,^{\circ}\text{C}$  /+ 85  $\,^{\circ}\text{C}$  Degree of protection <sup>1)</sup> IP67, IP68 <sup>3)</sup>, IP69K

Durability 2) 50.000 h
M12 connection 4 pol/pin
Profinet per interface

 $<sup>^{\</sup>mbox{\tiny 1)}}$  Fully assembled with moulded Binder M12 female connector.

<sup>&</sup>lt;sup>2)</sup> Lifetime L70 life expectancy at 25 °C.

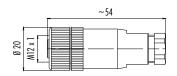
<sup>&</sup>lt;sup>3)</sup> 2m.



# **Original Binder Accessories**

# M12 female cable connector, screw clamp connection





#### **TECHNICAL SPECIFICATIONS**

Order Number 28 1206 000 00

Number of contacts 4

Cable outlet 4-6 mmDimensions connector  $20 \times 54 \text{ mm}$ 

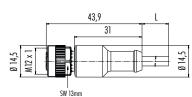
Material of housing PA

Wire gauge max. 0,75 mm<sup>2</sup> (max. AWG 20)

Degree of protection IP67

# M12 female cable connector, moulded





# **TECHNICAL SPECIFICATIONS**

Order Number 2m 28 1207 000 02 5m 28 1207 000 05

0vermolded yes

Dimensions connector 14,5 x 43,9 mm

Cable material PUR

Pins  $4 \times 0.34 \text{ mm}^2$ Length (other lengths on request) 2 m, 5 m

Degree of protection <sup>1)</sup> IP67, IP68 <sup>2)</sup>, IP69K

Contact arrangement female insert (mating side)



1 brown = +24 V 2 white = free 3 blue = 0 V DC 4 black = free



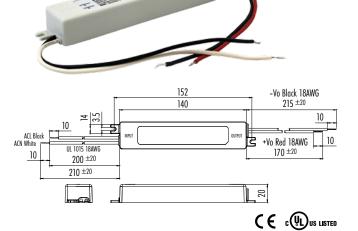
# **Accessories**

# Power supply, with NEMA plug 43,9 12.7 ±0.3 SW 13mm SW 13mm C € c (L) US LISTED

#### **TECHNICAL SPECIFICATIONS**

Order Number 28 1204 000 US 100-240 V, 50/60 Hz Input Output 24 V DC, 0.63 A Rated Power 25 W Ta/Ta 0°C /+ 60°C - 20°C /+ 85°C Tc/Tc Short-circuit proof yes Efficiency 83 % Feature CE, UL

# Power supply, assembly possible

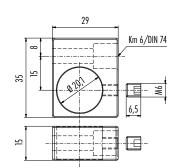


# **TECHNICAL SPECIFICATIONS**

28 1205 000 US Order Number Input 100-277 V, 47/63 Hz 24 V, 1.1 A Output Rated Power 25 W Ta/Ta - 40°C /+ 50°C Tc/Tc - 40°C /+ 85°C Short-circuit proof yes 86 % Efficiency CE, UL Feature

# Fixing elements, two pieces





# **TECHNICAL SPECIFICATIONS**

Order Number 28 1203 000 00

Material Alu anodized rounded edges

Fixing screw (material) PVC

LIGHT HEATS UP
LIGHT ILLUMINATES
LIGHT PROVIDES HAPPINESS

# LIGHT IS LIFE

# Most important in short form

# ■ LED light

Contacts	Length	Luminosity	Ordering-No.
4	250 mm	277 lm	28 1200 000 04
4	358 mm	380 lm	28 1201 000 04
4	412 mm	569 lm	28 1202 000 04

# ■ M12 female cable connector

Contacts	Cable outlet	Ordering-No.
4	4–6 mm	28 1206 000 00

# ■ M12 female cable connector, moulded

Contacts	Cable jacket	Luminosity	Ordering-No.
4	PUR	2 m	28 1207 000 02
4		5 m	28 1207 000 05

# ■ Power supply, with NEMA Plug

Ordering-No. 28 1204 000 US

# Power supply, assembly possible

Ordering-No. 28 1205 000 US

# Fixing elements

Material	Screw size	Ordering-No.
ΔΙτι	M6	28 1203 000 00

