

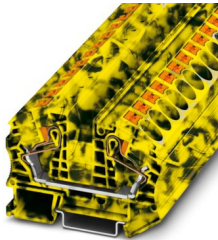
# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Feed-through terminal block, nom. voltage: 1000 V, nominal current: 76 A, number of connections: 2, connection method: Push-in connection, Rated cross section: 16 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 25 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: black/yellow

## Your advantages

- Time-saving conductor connection thanks to tool-free direct-connection technology
- Convenient plugging with lower insertion force
- High conductor pull-out forces due to the spring design
- Vibration-resistant and maintenance-free conductor connection
- Full flexibility thanks to the standardized CLIPLINE complete bridging, marking, and testing accessories
- Optimized for manual and automated wiring

## Commercial data

Item number	1077090
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2211
GTIN	4055626789101
Weight per piece (including packing)	30.846 g
Weight per piece (excluding packing)	30.846 g
Customs tariff number	85369010
Country of origin	PL

# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

## Technical data

### Product properties

Product type	Feed-through terminal block
Product family	PT
Area of application	Railway industry
	Machine building
	Plant engineering
Number of connections	2
Number of rows	1

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	2.43 W

### Connection data

Number of connections per level	2
Nominal cross section	16 mm <sup>2</sup>
Connection method	Push-in connection
Stripping length	18 mm ... 20 mm
Internal cylindrical gage	A7
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>
Cross section AWG	20 ... 4 (converted acc. to IEC)
Conductor cross-section flexible	0.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	20 ... 4 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Nominal cross section	16 mm <sup>2</sup>
Nominal current	76 A
Maximum load current	85 A (with 25 mm <sup>2</sup> conductor cross-section, rigid)
Nominal voltage	1000 V

### Connection cross sections directly pluggable

Conductor cross-section rigid	2.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	2.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	2.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>

### Ex data

# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

## Rated data (ATEX/IECEX)

Identification	⊕ II 2 GD Ex eb IIC Gb
Operating temperature range (1)	-60 °C ... 85 °C
Operating temperature range (2)	-40 °C ... 110 °C
Ex-certified accessories	3212060 D-PT 16 N 1206612 SZF 3-1,0X5,5 3022276 CLIPFIX 35-5 3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-12 / 3005950
Bridge data	60.5 A (16 mm <sup>2</sup> )
Ex temperature increase for bridging with bridge	40 K (65.5 A / 16 mm <sup>2</sup> ) 550 V
Rated insulation voltage	500 V
output	(Permanent)

## Ex level General

Rated voltage	550 V
Rated current	65.5 A
Maximum load current	78 A
Contact resistance	0.31 mΩ

## Ex connection data General

Nominal cross section	16 mm <sup>2</sup>
Rated cross section AWG	6
Connection capacity rigid	0.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>
Connection capacity AWG	20 ... 4
Connection capacity flexible	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Connection capacity AWG	20 ... 6

## Dimensions

Width	12.2 mm
End cover width	2.2 mm
Height	75.4 mm
Depth on NS 35/7,5	52.6 mm
Depth on NS 35/15	60.1 mm

## Material specifications

Color	multicolored (RAL -)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3

# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

## Electrical tests

### Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

### Temperature-rise test

Requirement temperature-rise test	Increase in temperature $\leq 45$ K
Result	Test passed
Short-time withstand current 16 mm <sup>2</sup>	1.92 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

## Mechanical properties

### Mechanical data

Open side panel	Yes
-----------------	-----

## Mechanical tests

### Mechanical strength

Result	Test passed
--------	-------------

### Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	5 N
Result	Test passed

### Test for conductor damage and slacking

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	0.5 mm <sup>2</sup> / 0.3 kg
	16 mm <sup>2</sup> / 2.9 kg
	25 mm <sup>2</sup> / 4.5 kg
Result	Test passed

## Environmental and real-life conditions

### Service life

# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

Insertion/withdrawal cycles	100
-----------------------------	-----

## Aging

Temperature cycles	192
Result	Test passed

## Needle-flame test

Time of exposure	30 s
Result	Test passed

## Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	30.6 m/s <sup>2</sup>
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

## Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	300 m/s <sup>2</sup>
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

## Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
----------------------------------	---------------

## Mounting

Mounting type	NS 35/7,5
	NS 35/15

# PT 16 N-FE - Feed-through terminal block

1077090

<https://www.phoenixcontact.com/us/products/1077090>



## Drawings

Circuit diagram



# PT 16 N-FE - Feed-through terminal block




1077090


<https://www.phoenixcontact.com/us/products/1077090>


## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1077090>

 <b>CSA</b> Approval ID: 158887				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	600 V	70 A	20 - 4	-
C	600 V	70 A	20 - 4	-

 <b>EAC</b> Approval ID: RU C-DE.BL08.B.00644				
---	--	--	--	--

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	600 V	85 A	20 - 4	-
C	600 V	85 A	20 - 4	-

 <b>LR</b> Approval ID: LR2371832TA				
---	--	--	--	--

 <b>cUL Recognized</b> Approval ID: E192998				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	550 V	85 A	20 - 4	-

 <b>EAC Ex</b> Approval ID: RU C-DE.AB72.B.02351				
--	--	--	--	--

 <b>IECEX</b> Approval ID: IECEX SEV13.0005U				
--	--	--	--	--

 <b>UL Recognized</b> Approval ID: E192998				
--	--	--	--	--

# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	550 V	85 A	20 - 4	-



**ATEX**

Approval ID: SEV13ATEX0159U



**CCC**

Approval ID: 2020322313000631



**EAC Ex**

Approval ID: KZ 7500525010101950

# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

## Classifications

### ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

### ETIM

ETIM 10.0	EC000897
-----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# PT 16 N-FE - Feed-through terminal block



1077090

<https://www.phoenixcontact.com/us/products/1077090>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	0.19 kg CO2e
---------	--------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)