

Plug connectors

Type ZKBX ZKBG
ZKCX ZKCG

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Designs

- 2 or 3 pole protective contact
- available with or without rectifier
- square and rectangular designs
- colour: black

Construction

- junction box with cable gland
- fastening with central M3 screw
- connection with screw terminal
- protection class according to DIN VDE 0470/DIN EN 60529 when properly installed: IP 65
- cable entry can be rotated by inserting the contact carrier accordingly
- supplied with seal

Application examples

- connector plugs for solenoids and electromagnets with plug bases
- suitable for AC or DC power supplies

Standards

- designed to DIN EN 175301-803



Fig. 1: type Z KB X 211 B01



Fig. 2: type Z KB G 211 A02
(with rectifier)







Fig 3: type Z KC X 209 B01
type Z KC G 209 B01
(with rectifier)

Technical data of the series Z KB X, Z KB G, Z KC X, Z KC G

Plug connectors must not be connected or separated whilst connected to an electrical power supply.

Tightening torque of the central screw is 50 - 60 Ncm

Type	Plug contacts			Cable gland Size	Cable diameter (mm)	Max. cross-section lead ends	Rectifier Input max. 230 V ~	Form	Dim. Fig.	Temp. range observe derating!
	Qty	Rated current (A)	Reference voltage (V)							
Z KB X 211 B01 ⁴⁾	3 + Earth	16 ¹⁾	250 AC 300 DC	PG 11 ²⁾	4,5 - 12	4 x 1,5 mm ²			12	-30 ... 90°C ⁴⁾
Z KB G 211 A02	2 + Earth	2 ³⁾	250 AC/DC	PG 11 ²⁾	4,5 - 11	3 x 1,5 mm ²	Output ⁴⁾ max. 205 V		11	-40 ... 90°C
Z KC X 209 B01	2 + Earth	16 ¹⁾	250 AC 300 DC	PG 9	4,5 - 7	3 x 1,5 mm ²			10	-40...125°C ⁴⁾
Z KC G 209 B01	2 + Earth	2 ³⁾	250 AC/DC	PG 9	4,5 - 7	3 x 1,5 mm ²	Output ⁴⁾ max. 205 V		10	-40 ... 90°C

1) The indicated current applies only for a reference temperature of 75°C for type Z KB X and 45°C for type Z KC X.

Ampacity for higher reference temperatures with connected cable diameter of 1.5 mm²

for plug connector Z KB X according to fig. 4

for plug connector Z KC X according to fig. 5

2) An adjustment to the cable diameter is possible through removal of the respective rubber bands (see fig. 10-12)

3) The indicated current applies only for a reference temperature of 30°C. Ampacity for higher reference temperatures according to fig. 6 and 7. In Switzerland limited to 1.5 A (dotted line) by SEV-directive 1011. Output voltage according to fig. 8.

4) The type with 3 contacts is also used for devices with 2 contacts

Information for the application of the types Z KB G and Z KC G with rectifier:

Please take care that the AC circuits are largely free of peak voltages. If big inductances and capacities are switched in close vicinity of the devices, it must be ensured that voltage peaks will be made ineffective by appropriate switching means (inductor or filter chains).

AC side switching should be the objective.

Connector load diagrams (without rectifier)

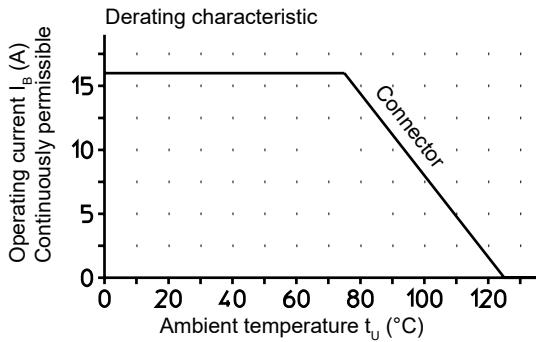


Fig. 4
Derating characteristic for the plug connector type Z KB X 211 B01

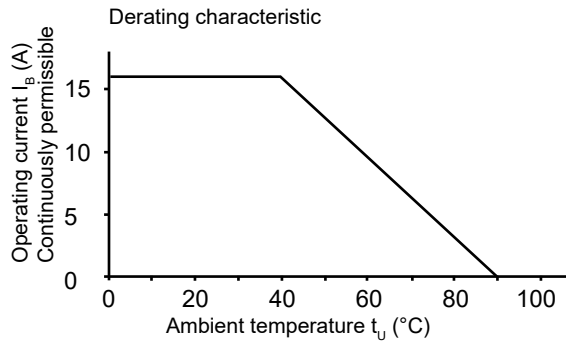


Fig. 5
Derating characteristic for the plug connector type Z KC X 209 B01

Connector load diagrams and connection scheme (with rectifier)

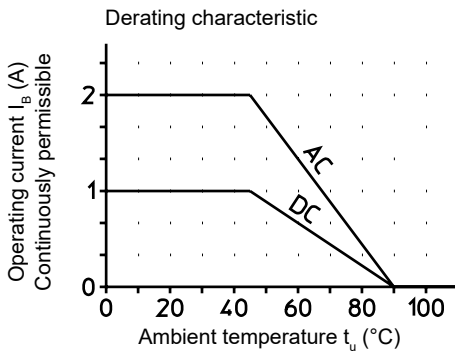


Fig. 6
Derating characteristic 100% ED for the plug connector with rectifier type Z KB G 211 A02

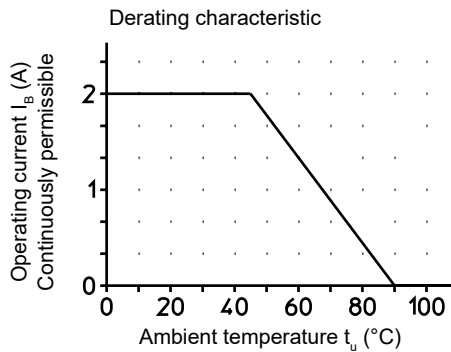


Fig. 7
Derating characteristic 100% ED for the plug connector with rectifier type Z KC G 209 B01

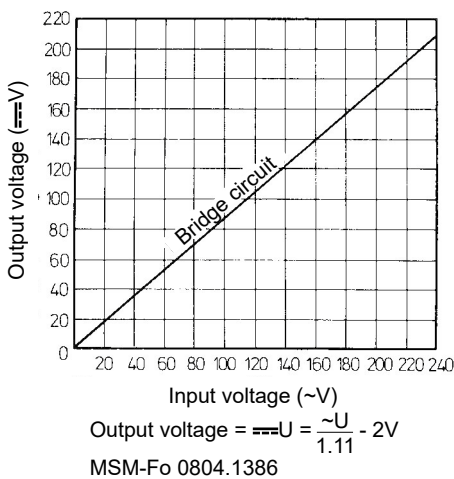


Fig. 8
Output voltage depending on the input voltage for the plug connector with rectifier
Type Z KB G 211 A02
Type Z KC G 209 B01

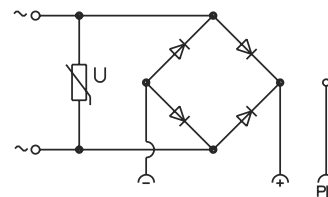


Fig. 9
Connection scheme
Plug connector with bridge rectifier
Type Z KB G 211 A02
Type Z KC G 209 B01

Dimensional drawings

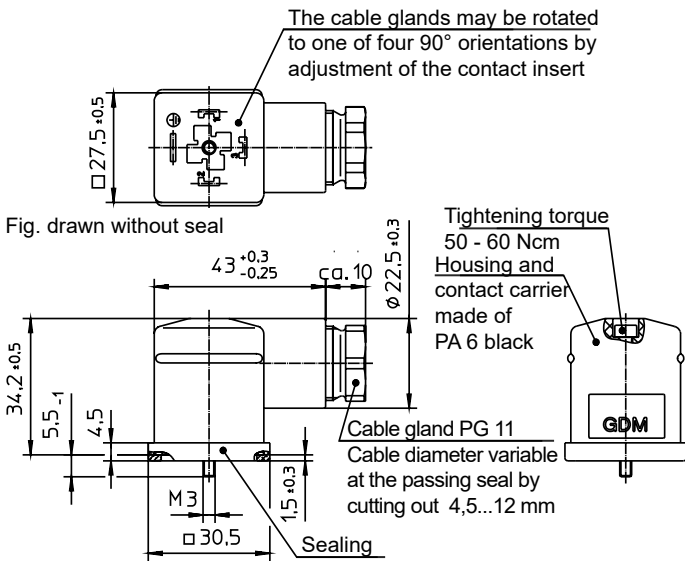


Fig. 10
Type Z KB X 211 B01

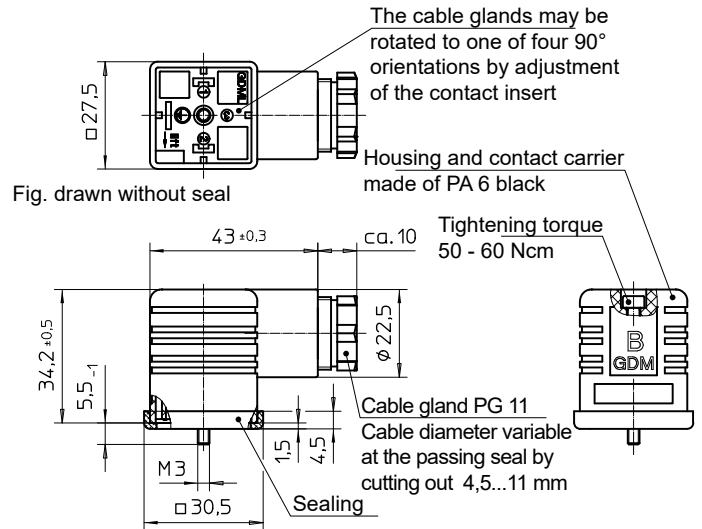


Fig. 11
Type Z KB G 211 A02

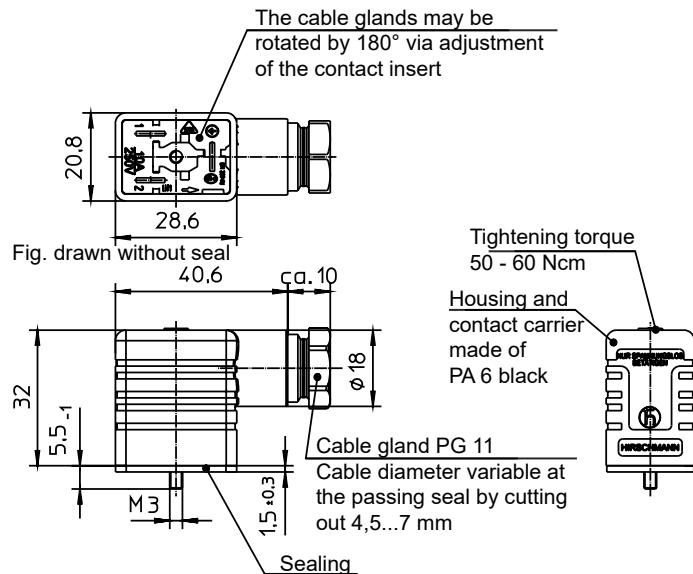
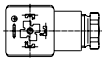
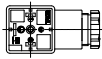
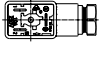


Fig. 12
Types Z KC X 209 B01
Z KC G 209 B01

Type code

Type	Form	Number of poles	Wiring	Supplier designation (Fa. Belden)
Z KB X 211 B01		3 + Earth	without	GDM 310B MSM incl. sealing
Z KB G 211 A02		2 + Earth	bridge rectifier, varistor	GDML 2011 GB1 black sealing NBR GDM 3-7
Z KC X 209 B01		2 + Earth	without	GM 209 NJ black sealing NBR GM 207-3
Z KC G 209 B01		2 + Earth	bridge rectifier, varistor	GML 209 NJ GB1 black sealing NBR GM 207-3

Order example

Type Z KB X 211 B01

Related products

[Holding current reduction plug - Type ZKDH](#)



Fig. 13: Holding current reduction plug type ZKDH

Our holding current reduction plug aims to reduce the power usage of solenoids by taking advantage of the reduced force required to hold the armature once actuation is complete. For further information please see the appropriate [datasheet](#).

Information and remarks concerning European directives can be taken from the corresponding information sheet which is available on the [magnetschultz.co.uk website](http://magnetschultz.co.uk).

Note on the RoHS Directive

According to our current state of knowledge, the devices shown in this document do not contain concentrations of hazardous substances which would result in them, or subsequent assemblies in which they are utilised, not complying with RoHS.

This datasheet is a document for technically qualified personnel. The present publication is for informational purposes only and shall not be construed as mandatory illustration of the products unless otherwise explicitly confirmed.

Please make sure that the described devices are suitable for your application. Our offers for these devices are based on the assumption of maximal 8 in an FMEA severity table, i. e. in case of malfunction of the device model as offered, there is, amongst others, no jeopardy of life or limb. Supplementary information concerning its proper usage and installation can be found in our [Technical Explanations \(GXX\)](#) document, as well as DIN VDE0580 and other relevant specifications. Further information regarding device selection can be found in our [Solenoid Selection Guide](#).

Special designs

Please do not hesitate to ask us for application-oriented solutions. In order to find a reliable solution we require details about your specific application and installation conditions. The details should be specified as precisely as possible in accordance with the relevant [Technical Explanations \(GXX\)](#) document.

Need more information or advice?

Email one of our technical experts at sales@magnetschultz.co.uk or call +44(0)1483 794700 now