

Plug connectors

12

Product group

Z KB X Z KB G Z KC X Z KC G

Designs

- 2 or 3 pole and protective contact
- With and without rectifier
- Square and rectangle design
- Colour black

Construction

- Junction box with cable gland
- Fastening with central screw M3
- Connection with screw terminal
- Protection class according to DIN VDE 470/DIN EN 60529 when properly installed: IP 65
- Cable entry can be rotated by inserting the contact carrier accordingly
- Delivery with sealing

Application examples

- Direct connection to the DC or AC circuit of DC control solenoids, power transmission devices and similar

Standards

- Design according to DIN EN 175301-803



Fig. 1: type Z KB X 211 B01



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

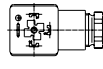
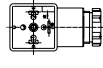
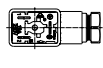


Fig 3: type Z KC X 209 B01
type Z KC G 209 B01
(with rectifier)

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

Plug connectors may not be connected or separated under electric voltage.

Tightening torque of the central screw is 50 Ncm max. 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+ Protective Contact	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+ Protective Contact	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+ Protective Contact	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+ Protective Contact	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 by simple removing of the respective rubber bands (see fig. 10)

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

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 sockets without rectifier

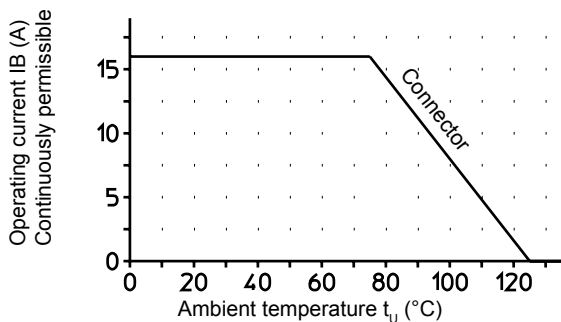


Fig. 4
Derating characteristic for the plug connector type Z KB X 211 B01

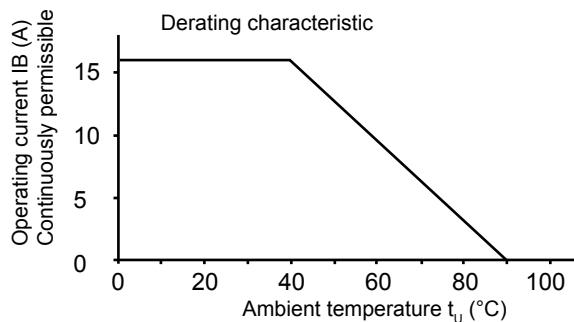


Fig. 5
Derating characteristic for the plug connector type Z KC X 209 B01

Diagrams and connection scheme for plug connectors with rectifiers

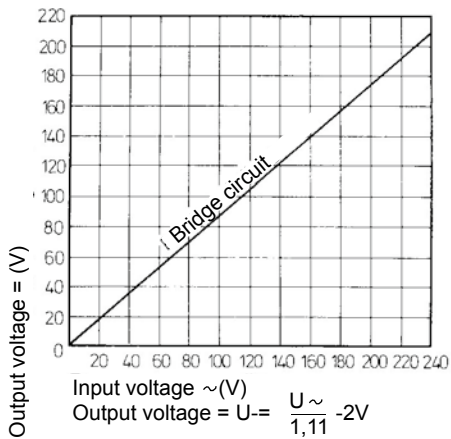


Fig. 6 MSM-Fo 0804.1386
Output voltage depending on the input voltage for the plug connector with rectifier type Z KB G 211 A02 type Z KC G 209 B01

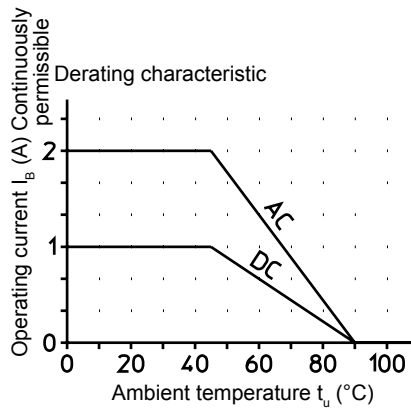


Fig. 7 Derating characteristic 100% ED for the plug connector with rectifier type Z KB G 211 A02

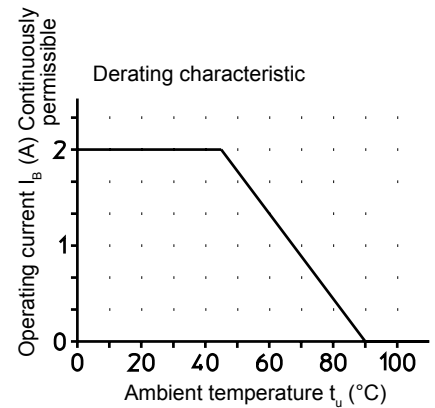


Fig. 8 Derating characteristic 100% ED for the plug connector with rectifier type Z KC G 209 B01

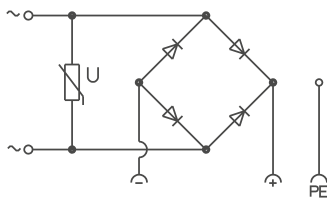


Fig. 9 Connection scheme Plug connector with bridge rectifier Type Z KB G 211 A02 Type Z KC G 209 B01

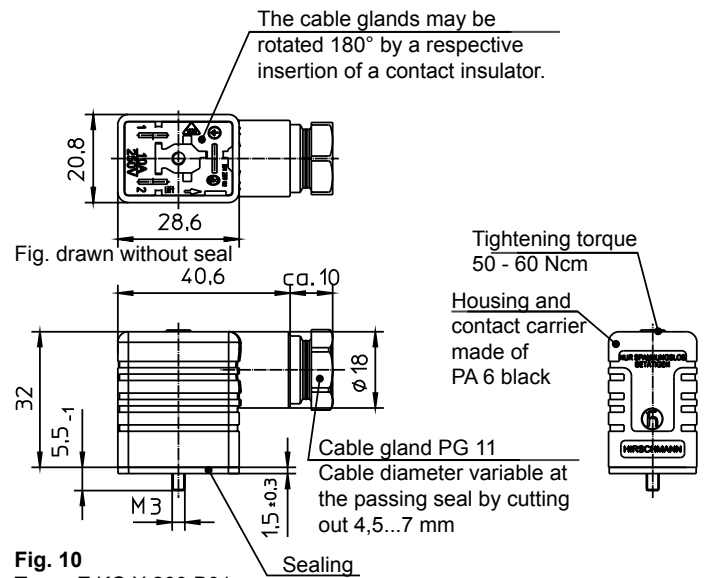


Fig. 10 Types Z KC X 209 B01 Z KC G 209 B01

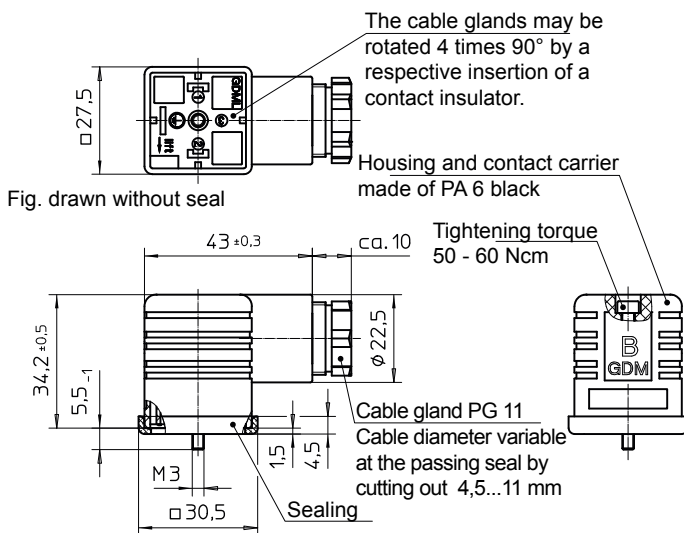


Fig. 11 Type Z KB G 211 A02

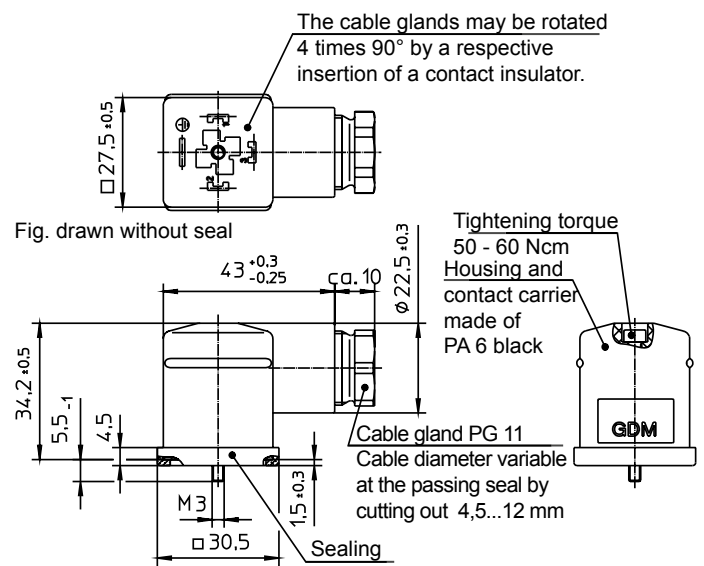



Fig. 12 Type Z KB X 211 B01

Information and remarks concerning European directives can be taken from the correspondent information sheet which is available under *Produktinfo.Magnet-Schultz.com*.

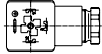
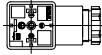
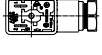
Note on the RoHS Directive

According to our current state of knowledge the devices pictured in this document do not contain any substances in concentration values or applications for which putting into circulation with products manufactured from them is prohibited in accordance to RoHS.

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 a FMEA gravity 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 installation can be taken also from the  –Technical Explanation, the effective DIN VDE0580 as well as the relevant specifications.

This part list 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 confirmed expressively.


Type code

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

Order example

Type Z KB X 211 B01

Specials designs

Please do not hesitate to ask us for application-oriented problem solutions. In order to find rapidly a reliable solution we need complete details about your application conditions. The details should be specified as precisely as possible in accordance with the relevant  -Technical Explanations.

If necessary, please request the support of our corresponding technical office.