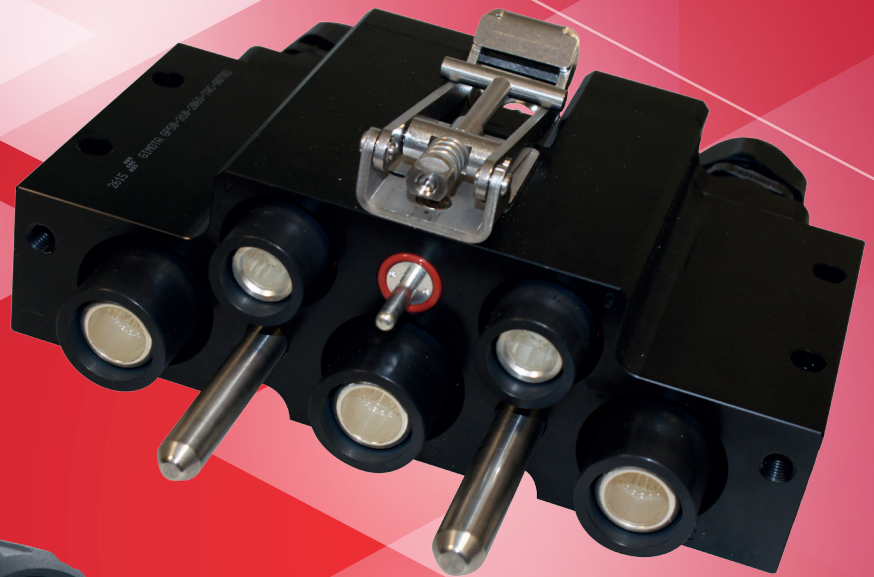# GIMOTA AG

GP Power Connectors
2016

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GP - Power connectors

GP Power Connectors from Gimota Inc. are designed for high-power connections with high current and tension requirements. They can be used for example in connections between driving motors and power converters, inter-car connections/jumper cables as well as for inverters and battery connections.

With an applicable tension of up to 3600VAC and 1000A current the GP connectors fulfills most od the requirements and can be individually adapted to the specific application engineering needs. The connector can be realized in different combinations from 1 pole to 12 poles, for cable cross sections from 50mm² up to 240mm², as well as different cable terminations with strain relief, special mating mechanisms and separate grounding contacts are available on demand.

The sturdy connector achieves an ingress protection of IP66/67/69 according DIN EN 60529 in mated condition and are designed for harsh environment as conceivable in railway applications.

The materials used for the GP connector system are conform with the RoHS regulations and are compliant with the European Norm EN 50467 "Railway applications - rolling stock - electrical connectors requirements and test methods". The contact inserts comply with the fireprotection class according UNI CEI 11170-3 LR4 und NFF 16-102/4.

GP Power Connectors are individually designed and adapted to the project specific needs and generally made to order. This allows high flexibility in covering all kind of requirements. It is our pleasure to realise the most economic and appropriate solution with our customers.

Electrical properties

Rated insulation voltage	[V] AC	... 3600
Rated current	[A]	... 1000
Test voltage	[V] AC	... 9500
Overvoltage category		OV4
Pollution degree [1]		PD4
Insulation resistance	[MΩ]	... 5000

Conforms European norm EN50467 "Railway applications - rolling stock - electrical connectors requirements and test methods"
[1] - Protection class: IP67 (mated connectors)

Mechanical properties

Number of contacts		1 - 12
Strand/wire adaptation		Crimp version
Wire cross-section mm²	mm²	50 - 240
Connecting life cycle of contacts (silver)	mating cycles	< 200
Contact material		4 µm Ag over Cu-alloy

Mechanical properties shell part

|		
Housing		Aluminium alloy black
Cable strain relief		diffrent cable terminations
Insulators	Thermoplastic	Fire behaviour according to UNI CEI 11170-3 LR4 and NFF 16-102 exigency 4.
Operating temperatur	[°C]	- 55 ... +100
Ingress protection (IEC EN 60529) fully tightened		up to IP69

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Example: 8 pole connector

Number of contacts		8
Wire cross-section	mm²	8 x 240
Rated voltage	[V] DC	2100
Rated current	[A]	1000
Cable strain relief	MS3057	Cable clamp type C

Example: 5 pole connector

Number of contacts		5
Wire cross-section	mm²	3 x 150 / 2 x 50
Rated voltage	[V] DC	3600
Rated current	[A]	675
Cable strain relief		ANAMET (Anaconda)
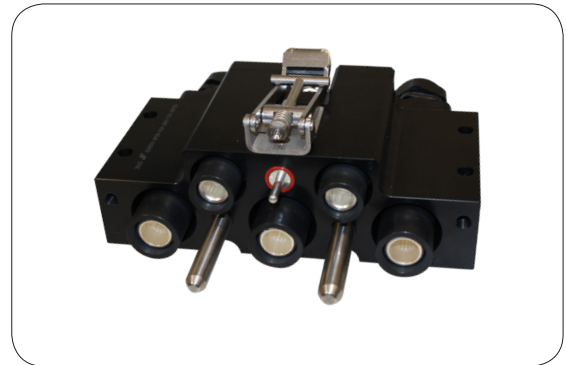
Example: 2 pole connector

Number of contacts		2
Wire cross-section	mm²	3 x 185
Rated voltage	[V] DC	1000
Rated current	[A]	1000
Cable strain relief	MS3057	Cable clamp type C

Example: single pol connector

Number of contacts		1
Wire cross-section	mm²	1 x 240
Rated voltage	[V] DC	1500
Rated current	[A]	1000
Coding	yes	8

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