



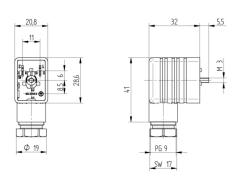
Product: GML 209 NJ LED 230 black ☑

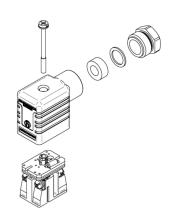
GML Industrial Standard Field Attachable Connector: Form B, 3-pin (2+1PE), UL 1977, translucent housing with black cable gland, screw type, PG9; with red LED, 230 V AC/DC, 10 A

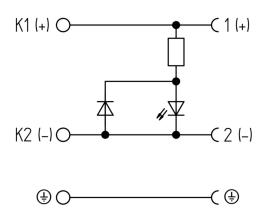
Product Description

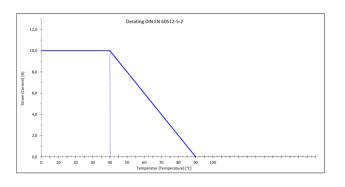
GML Industrial Standard Field Attachable Connector: Form B, 3-pin (2+1PE), UL 1977, translucent housing with black cable gland, screw type, PG9; with red LED, 230 V AC/DC, 10 A

Technical Drawing









Technical Specifications

Technical Data

Product Family:	Valve Connectors	
Product Sub Family:	GML Industrial Standard	
Brand:	Hirschmann Field attachable	
Connector Type:		

Number of Pins: 2+PE Coding: B Shielding: Unshielded Attachment Type: Central Screw Rated Voltage: 250 V AC/DC Rated Voltage (US): 250 V Rated Journal (UL): 250 V Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current (UL): 8 A Rated Current (UL): 8 A Rated Current (CSA): 8 A Contact Resistance: \$ 10 mOhm Insulation Resistance: \$ 10°9 Ohm Mating Cycles: \$ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - 90 °C Operating Temperature (IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 6064-1 (2008/01); VDE 0110-1 Clearance / Creepage Distance: DIN EN 6064-1 (2008/01); VDE 0110-1	Type of Contact / Gender:	Female	
Coding: B Shielding: Unshielded Attachment Type: Central Screw Rated Voltage: 250 V AC/DC Rated Voltage (UL): 250 V Rated Voltage (CSA): 250 V Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current: 10 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: > 10 nOhm Insulation Resistance: > 10*9 Ohm Mating Cycles: \$ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: 0.4.5 - 7 mm Ambient Temperature (Operation)*: 25 "C - +90 "C Operating Temperature (UL): max. + 90 "C Protection Degree / IP Rating***: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1 <td>Connector Design:</td> <td>Angled</td>	Connector Design:	Angled	
Shielding: Unshielded Attachment Type: Central Screw Rated Voltage: 250 V AC/DC Rated Voltage (UL): 250 V Rated Voltage (CSA): 250 V Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current: 10 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: > 10 mOhm Insulation Resistance: > 100°9 Ohm Mating Cycles: < 50	Number of Pins:	2+PE	
Attachment Type: Central Screw Rated Voltage: 250 V AC/DC Rated Voltage (UL): 250 V Rated Voltage (CSA): 250 V Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current*: 10 A Rated Current (UL)*: 8 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10^9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (VDE 0110-1)	Coding:	В	
Rated Voltage: 250 V AC/DC Rated Voltage (UL): 250 V Rated Voltage (CSA): 250 V Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: < 10 mOhm	Shielding:	Unshielded	
Rated Voltage (UL): 250 V Rated Voltage (CSA): 250 V Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current*: 10 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10°9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Attachment Type:	Central Screw	
Rated Voltage (CSA): 250 V Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current*: 10 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10°9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Greepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Rated Voltage:	250 V AC/DC	
Rated Impulse Voltage: 4.0 kV (PCBA 2.0 kV) Operating Voltage: 230 V AC/DC Rated Current*: 10 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10*9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)**: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Rated Voltage (UL):	250 V	
Operating Voltage: 230 V AC/DC Rated Current*: 10 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10^9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Rated Voltage (CSA):	250 V	
Rated Current*: 10 A Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10^9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Rated Impulse Voltage:	4.0 kV (PCBA 2.0 kV)	
Rated Current (UL)*: 8 A Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10^9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Operating Voltage:	230 V AC/DC	
Rated Current (CSA)*: 8 A Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10*9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Rated Current*:	10 A	
Contact Resistance: ≤ 10 mOhm Insulation Resistance: > 10^9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Rated Current (UL)*:	8 A	
Insulation Resistance: > 10^9 Ohm Mating Cycles: ≤ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Rated Current (CSA)*:	8 A	
Mating Cycles: \$ 50 Type of Connection: Screw Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Contact Resistance:	≤ 10 mOhm	
Type of Connection: Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Insulation Resistance:	> 10^9 Ohm	
Cable Gland: PG9 Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Mating Cycles:	≤ 50	
Conductor Cross Section: 0.25 - 1.5 mm² Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Type of Connection:	Screw	
Suitable Cables: Ø 4.5 - 7 mm Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Cable Gland:	PG9	
Ambient Temperature (Operation)*: -25 °C - +90 °C Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Conductor Cross Section:	0.25 - 1.5 mm ²	
Operating Temperature (UL): max. + 90 °C Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Suitable Cables:	Ø 4.5 - 7 mm	
Protection Degree / IP Rating**: IP65 Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Ambient Temperature (Operation)*:	-25 °C - +90 °C	
Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Operating Temperature (UL):	max. + 90 °C	
Clearance / Creepage Distance: DIN EN 60664-1 (2008/01); VDE 0110-1	Protection Degree / IP Rating**:	IP65	
	Pollution Degree:	3 acc. to DIN EN 60664-1 (VDE 0110-1)	
Overvoltage Category: III acc. to DIN EN 60664-1 (VDE 0110-1)	Clearance / Creepage Distance:	DIN EN 60664-1 (2008/01); VDE 0110-1	
	Overvoltage Category:	III acc. to DIN EN 60664-1 (VDE 0110-1)	

Materials

Contact Base Material:	CuZn	
Contact Plating:	Cu/Sn	
Contact Bearer Material:	PA GF	
Contact Bearer Color:	black	
Flammability Class (Contact Bearer):	UL 94 HB	
Housing Material:	PA GF	
Housing Color:	Translucent housing with black cable gland	
Flammability Class (Housing):	UL 94 HB	
Cable Gland Material:	PA GF	
Cable Gland Gasket:	NBR	
Cable Gland Color:	black	
Flammability Class (Cable Gland):	UL 94 HB	
Attachment Material:	Steel, Philips combi slot	
Gasket Material:	Sold separately	

Protection Circuitry

Total Electrical Control of the Cont	Function Indicator:	Red LED		
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Additional Technical Data

Fastening Torque (Contact Screw):	(40-50) Ncm for conductor size 0.25 - 1.5 mm²; (30-40) Ncm for conductor size 0.34 mm²; (25-30) Ncm for conductor size 0.25 mm²		
Fastening Torque (Cable Gland):	(150-200) Ncm		
Fastening Torque (Attachment):	(50-60) Ncm		

Approvals

UL-File: E95522	
UL:	UL 1977; UR
VDE:	yes
CSA:	yes

SEV:	yes

Safety & Environmental Compliance

RoHS Compliant:	yes			
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Notes

Note Derating:	Notice derating	
Protection Degree / IP Rating Note:	** only if mounted and locked in combination with Hirschmann / Lumberg Automation connector.	
Note:	Do not connect or disconnect under load.	

Variants

Item #	Item Description	
933931100	GML 209 N.I.I ED 230 black	

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