

# Product: <u>GDM21AL-A0U-1KD</u>

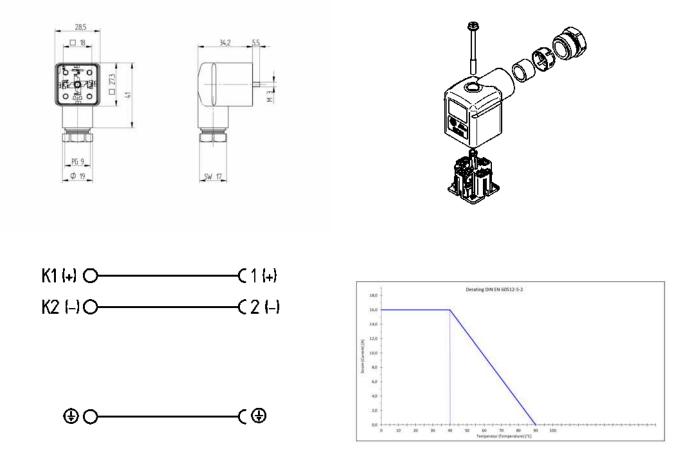


GDM Standard DIN Standard Field Attachable Connector: Form A, 3-pin (2+1PE; PE across cable outlet), UL 2238, black housing, screw type, PG9 with strain relief; without circuitry, 230 V AC/DC, 10 A

## **Product Description**

GDM Standard DIN Standard Field Attachable Connector: Form A, 3-pin (2+1PE; PE across cable outlet), UL 2238, black housing, screw type, PG9 with strain relief; without circuitry, 230 V AC/DC, 10 A

# **Technical Drawing**



# **Technical Specifications**

#### **Technical Data**

Product Family:	Valve Connectors
Product Sub Family:	GDM Standard with cURus
Brand:	Hirschmann
Connector Type:	Field attachable

Number of Pisc         2+FE (FE across cable outlet)           Coding:         A           Shielding:         Inshielded           Attachment Type:         Central Screw           Rated Voltage (UL):         300 V           Rated Voltage (CSA):         300 V           Rated Current (UL):         300 V           Rated Current (UL):         10 A           Rated Current (UL):         10 A           Rated Current (CSA):         8           Rated Current (UL):         10 A           Insulation Resistance:         10 '10'           Insulation Resistance:         10 '10'           Straine Relef         Sorew           Calde Gland:         Conduct Cross Section:           Straine Relef         Sorey           Calde Gland:         Gen #m           Arbient Temperature (Ote)         Main Cristica           Straine Relef         Gen #m           Contact Cross Section:	Type of Contact / Gender:	Female
Coding:AShieldig:UnshieldedAttachment Type:Central ScrewRated Voltage (UL):300 VRated Voltage (CSA):300 VRated Impulse Voltage:200 VQorantig Voltage:200 VACDCRated Impulse Voltage:200 VACDCRated Impulse Voltage:10 ARated Current (CSA):8 ARated Current (CSA):8 ARated Current (CSA):50 ORated Current (CSA):50 OStaint Resistance:10 Po NmInsulation Resistance:50 OStaint ReliefConductor Cross Section:Staintellef:Camping CageStaintellef:Camping CageStaintellef:Go + 8 mmAmbient Temperature (Operation):96 + 8 mmOperating Temperature (DI):max. 75 °COperating Temperature (IDI):max. 75 °COperating Temperature (IDI):max. 75 °CNoter Degree / IP Rating*:105 INFINGTONALISCALISCALISCALISCALISCALISCALISCALISC	Connector Design:	Angled
Number         Unshielded           Attachment Type:         Central Screw           Rated Voltage (UL):         30 V           Rated Voltage (CSA):         30 V           Rated Impulse Voltage:         4.0 KV           Operating Voltage:         230 V AC/DC           Rated Current':         10 A           Rated Current':         10 A           Rated Current (CSA)':         8 A           Contact Resistance:         10 nOhm           Insulation Resistance:         > 10 *0 Ohm           Rated Current (CSA)':         8 A           Contact Resistance:         > 10 *0 Ohm           Insulation Resistance:         > 10 *0 Ohm           Cable Gland:         > Corew           Cable Gland:         Cerw           Conductor Cross Section:         Cise 1.5 mm <sup>2</sup> Striah-Relief:         Camping Cage           Suitable Cables:         40 * C + 125 *C           Operating Temperature (Operation:         max + 75 *C           Operating Temperature (SA):         Files	Number of Pins:	2+PE (PE across cable outlet)
Atachment Type:         Central Screw           Atachment Type:         Central Screw           Rated Voltage (UL):         300 V           Rated Voltage (CSA):         300 V           Rated Implies Voltage:         40 kV           Operating Voltage:         230 V AC/DC           Rated Current*:         10 A           Rated Current (UL)*:         10 A           Rated Current (SA)*:         8 A           Contact Resistance:         10 Polm           Insulation Resistance:         10 Polm           Voltage Scale         50           Type of Connection:         Scaw           Cable Gland:         PG9 with strain relief           Conductor Cross Section:         0 S - 1.5 mm²           Strain-Relief:         Gabe Glang           Suitable Cables:         0 S - 1.5 mm²           Strain-Relief:         Gabe Glang           Strain-Relief:         Gabe Glang           Strain-Relief:         0 S - 1.5 mm²           Conductor Cross Section:         0 S - 1.5 mm²           Strain-Relief:         0 S - 1.5 mm²           Contage Scale         0 S - 1.5 mm²           Strain-Relief:         0 S - 1.5 mm²           Operating Temperature (Operation)*         40 * C - 125 *C	Coding:	A
Rated Voltage (UL)300 VRated Voltage (CSA):300 VRated Impulse Voltage:4.0 KVOperating Voltage:300 VAC/DCRated Current':0.0 ARated Current (UL)':0.4Rated Current (CSA):8.4Contact Resistance:10.0 NInsulation Resistance:>10% ONVoltage:5.0Contact Resistance:>10% ONVoltage:5.0Contact Resistance:>10% ONStain Resistance:>10% ONVoltage Connection:\$10% ONStain Resistance:>10% ONStain Resistance:>10% ONStain Resistance:\$10% ONStain Resistance:\$10% ONStain Resistance:\$10% ONStain Resistance:\$10% ONStain Resistance:\$10% ONOperating Temperature (Operating)\$10% ONStain Resistance:\$10% ONOperating Temperature (Operating)\$10% ONProtection Degree // IP Rating:\$10% IN 175301-803-A, ISO 4400Pollution Degree:\$10% IN IN 168064-1 (VDE 0110-1)	Shielding:	Unshielded
Rated Voltage (CSA):300 VRated Impulse Voltage:4.0 kVOperating Voltage:230 V AC/DCRated Current*:10 ARated Current (UL)*:10 ARated Current (CSA):8 AContact Resistance:5.10 mOhmInsulation Resistance:5.10 mOhmInsulation Resistance:5.00 mOhmCable Gland:6.50 mOhmCable Gland:0.25 - 1.5 mm²Contact Cross Section:0.25 - 1.5 mm²Strain-Relief:0.25 - 1.5 mm²Sutable Cables:0.6 - 8 mmAmbient Temperature (Operation):40 °C - +125 °COperating Temperature (CSA):max. + 75 °CProtection Degree / IP Rating*:IP63 (IP67Design Stander:ID1 NEN 175301-803-A, ISO 4400Pollution Degree:3 acc. to DIN EN 60664-1 (VDE 0110-1)	Attachment Type:	Central Screw
Rated Impulse Voltage:4.0 kVOperating Voltage:230 V AC/DCRated Current:10 ARated Current:10 ARated Current (LL)*:8 AContact Resistance:5 10 mOhmInsulation Resistance:> 10*9 OhmMating Cycles:\$ 50Contact Resistance:> 6 90 with strain reliefConductor Cross Section:0.25 - 1.5 mm²Strain-Relief:Camping CageSuitable Cables:0 6 - 8 mmAmbient Temperature (Operation):40 °C - +125 °COperating Temperature (CSA):max. + 75 °CProtection Degree / IP Rating:10-65 / IP67Design Stander:DINEN 175301-803-A, ISO 4400Pollution Degree:3 ac: to DIN EN 66664-1 (VDE 0110-1)	Rated Voltage (UL):	300 V
Operating Voltage:         230 V AC/DC           Rated Current*:         10 A           Rated Current (UL)*:         10 A           Rated Current (CSA)*:         8 A           Contact Resistance:         5 10 mOhm           Insulation Resistance:         > 10*9 Ohm           Mating Cycles:         > 50           Type of Connection:         Screw           Conduct Pross Section:         0.25 - 1.5 mm²           Strain-Relief:         Camping Cage           Suitable Cables:         0 6 - 8 mm           Ambient Temperature (Operation):         max + 75 °C           Operating Temperature (CSA):         max + 75 °C           Protection Degree / IP Rating*:         IP65, IP67           Design Standard:         DIN EN 175301-803-A, ISO 4400           Pollution Degree:         3 ac. to DIN EN 60664-1 (VDE 0110-1)	Rated Voltage (CSA):	300 V
Rated Current*:I0 ARated Current (UL)*:I0 ARated Current (UL)*:8 AContact Resistance:\$ 10 mOhmInsulation Resistance:> 10*9 OhmMating Cycles:\$ 50Type of Connection:ScrewCable Gland:PG9 with strain reliefConduct Pross Section:0.25 - 1.5 mm²Strain-Relief:Clamping CageStrain-Relief:0 6 - 8 mmAnbient Temperature (UL):wax + 75 °COperating Temperature (UL):max + 75 °COperating Temperature (CSA):PK5. IP67Protection Degree / IP Rating*:DINE NT 5301-803-A, ISO 4400Pollution Degree:3 acc. to DIN EN 60664.1 (VDE 0110-1)	Rated Impulse Voltage:	4.0 KV
Rated Current (UL)*:10 ARated Current (CSA)*:8 AContact Resistance:\$10 mOhmInsulation Resistance:>10*9 OhmInsulation Resistance:\$10 mOhmMating Cycles:\$50Type of Connection:ScrewCable Gland:PG9 with strain reliefConductor Cross Section:0.25 + 1.5 mm²Strah-Relief:Clamping CageStrah-Relief:06 + 8 mmAmbient Temperature (Operation)*40 * C + 125 * COperating Temperature (UL):max + 75 * COperating Temperature (CSA):165, IP67Protection Degree / IP Rating**IP65, IP67Disign Standard:DIN EN 175301-803-A, ISO 4400Pollution Degree:3 ac: to DIN EN 60664-1 (VDE 0110-1)	Operating Voltage:	230 V AC/DC
Rated Current (CSA)*:B AContact Resistance:< 10 mOhm	Rated Current*:	10 A
Contact Resistance:         \$10 mOhm           Insulation Resistance:         >10*9 Ohm           Mating Cycles:         \$50           Type of Connection:         Screw           Cable Gland:         PG9 with strain relief           Conductor Cross Section:         0.25 - 1.5 mm²           Strain-Relief:         Camping Cage           Mathient Temperature (Operation):         06 - 8 mm           Operating Temperature (UL):         max. + 75 °C           Operating Temperature (SAS):         inx. + 75 °C           Protection Degree / IP Rating**:         IP65, IP67           Dising Standard:         Dis NIT 5301-803-A, ISO 4400           Pollution Degree:         Sac. to DIN EN 066641 (VDE 0110-1)	Rated Current (UL)*:	10 A
Insulation Resistance:         > 10*9 Ohm           Mating Cycles:         ≤ 50           Type of Connection:         Screw           Cable Gland:         PG9 with strain relief           Conductor Cross Section:         0.25 - 1.5 mm²           Strain-Relief:         Clamping Cage           Suitable Cables:         Ø 6 - 8 mm           Ambient Temperature (Operation)*         -40 °C - +125 °C           Operating Temperature (CSA):         max. + 75 °C           Protection Degree / IP Rating**:         IP65, IP67           Design Standard:         DIN EN 175301-803-A, ISO 4400           Protection Degree:         3 acc. to DIN EN 160664-1 (VDE 0110-1)	Rated Current (CSA)*:	8 A
Mating Cycles:50Type of Connection:ScrewCable Gland:PG9 with strain reliefConductor Cross Section:0.25 - 1.5 mm²Strain-Relief:Clamping CageSuitable Cables:Ø 6 - 8 mmAmbient Temperature (Operation):40°C - +125 °COperating Temperature (UL):max. + 75 °COperating Temperature (CSA):P65, IP67Protection Degree / IP Rating**:IDN EN 175301-803-A, ISO 4400Besign Standard:0 ac. to DIN EN 60664-1 (VDE 0110-1)	Contact Resistance:	≤ 10 mOhm
Type of Connection:ScrewCable Gland:PG9 with strain reliefConductor Cross Section:0.25 - 1.5 mm²Strain-Relief:Clamping CageStraible Cables:Ø 6 - 8 mmAmbient Temperature (Operation)*40 °C - +125 °COperating Temperature (ULL):max. + 75 °COperating Temperature (SAS):Pro5. IP67Protection Degree / IP Rating**:IP65. IP67Design Standard:DIN EN 175301-803-A, ISO 4400Beign Standard:3 cac. to DIN EN 60664-1 (VDE 0110-1)	Insulation Resistance:	> 10^9 Ohm
Cable Gland:PG9 with strain reliefConductor Cross Section:0.25 - 1.5 mm²Strain-Relief:Clamping CageSuitable Cables:Ø 6 - 8 mmAmbient Temperature (Operation)*40 °C - +125 °COperating Temperature (UL):max. + 75 °COperating Temperature (CSA):max. + 75 °CProtection Degree / IP Rating**:IP65, IP67Design Standard:DIN EN 175301-803-A, ISO 4400Buildin Degree:3 cc. to DIN EN 60664-1 (VDE 0110-1)	Mating Cycles:	≤ 50
Conductor Cross Section:0.25 - 1.5 mm²Strain-Relief:Clamping CageSuitable Cables:Ø 6 - 8 mmAmbient Temperature (Operation)*40 °C - +125 °COperating Temperature (UL):max. + 75 °COperating Temperature (CSA):max. + 75 °CProtection Degree / IP Rating**:IP65, IP67Design Standard:DIN EN 175301-803-A, ISO 4400Pollution Degree:3 ac. to DIN EN 60664-1 (VDE 0110-1)	Type of Connection:	Screw
Strain-Relief:       Clamping Cage         Suitable Cables:       Ø 6 - 8 mm         Ambient Temperature (Operation)*       -40 °C - +125 °C         Operating Temperature (UL):       max. + 75 °C         Operating Temperature (SAS):       max. + 75 °C         Protection Degree / IP Rating**:       IP65, IP67         Design Standard:       DIN EN 175301-803-A, ISO 4400         Suitable Cables:       Sac. to DIN EN 60664-1 (VDE 0110-1)	Cable Gland:	PG9 with strain relief
Suitable Cables:       Ø 6 - 8 mm         Ambient Temperature (Operation)*:       -40 °C - +125 °C         Operating Temperature (UL):       max. + 75 °C         Operating Temperature (CSA):       max. + 75 °C         Protection Degree / IP Rating**:       IP65, IP67         Design Standard:       DIN EN 175301-803-A, ISO 4400         Suitable Degree:       3 acc. to DIN EN 60664-1 (VDE 0110-1)	Conductor Cross Section:	0.25 - 1.5 mm²
Ambient Temperature (Operation)*       -40 °C - +125 °C         Operating Temperature (UL):       max. + 75 °C         Operating Temperature (CSA):       max. + 75 °C         Protection Degree / IP Rating**:       IP65, IP67         Design Standard:       DIN EN 175301-803-A, ISO 4400         Pollution Degree:       3 acc. to DIN EN 60664-1 (VDE 0110-1)	Strain-Relief:	Clamping Cage
Operating Temperature (UL):     max. + 75 °C       Operating Temperature (CSA):     max. + 75 °C       Protection Degree / IP Rating**:     IP65, IP67       Design Standard:     DIN EN 175301-803-A, ISO 4400       Pollution Degree:     3 acc. to DIN EN 60664-1 (VDE 0110-1)	Suitable Cables:	Ø 6 - 8 mm
Operating Temperature (CSA):     max. + 75 °C       Protection Degree / IP Rating**:     IP65, IP67       Design Standard:     DIN EN 175301-803-A, ISO 4400       Pollution Degree:     3 acc. to DIN EN 60664-1 (VDE 0110-1)	Ambient Temperature (Operation)*:	-40 °C - +125 °C
Protection Degree / IP Rating**:     IP65, IP67       Design Standard:     DIN EN 175301-803-A, ISO 4400       Pollution Degree:     3 acc. to DIN EN 60664-1 (VDE 0110-1)	Operating Temperature (UL):	max. + 75 °C
Design Standard:         DIN EN 175301-803-A, ISO 4400           Pollution Degree:         3 acc. to DIN EN 60664-1 (VDE 0110-1)	Operating Temperature (CSA):	max. + 75 °C
Pollution Degree: 3 acc. to DIN EN 60664-1 (VDE 0110-1)	Protection Degree / IP Rating**:	IP65, IP67
	Design Standard:	DIN EN 175301-803-A, ISO 4400
Clearance / Creepage Distance: DIN EN 60664-1 (2008/01): VDE 0110-1	Pollution Degree:	3 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)	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:	Black (cURus)
Flammability Class (Housing):	UL 94 5VA
Cable Gland Material:	PA GF
Cable Gland Gasket:	NBR
Cable Gland Color:	Black
Strain-Relief Material:	PA GF
Attachment Material:	Steel, Philips combi slot
Gasket Material:	NBR Captive

# 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:	E315587
UL:	UL 2238; cURus
VDE:	yes
SEV:	yes

#### Safety & Environmental Compliance

RoHS Compliant:	yes
Notes	
Note Derating:	Notice derating
Note Derating: Protection Degree / IP Rating Note:	Notice derating ** only if mounted and locked in combination with Hirschmann / Lumberg Automation connector.

#### Variants

Item # Item Description
18054 GDM21AL-A0U-1KD

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