HIRSCHMANN
A BELDEN BRAND

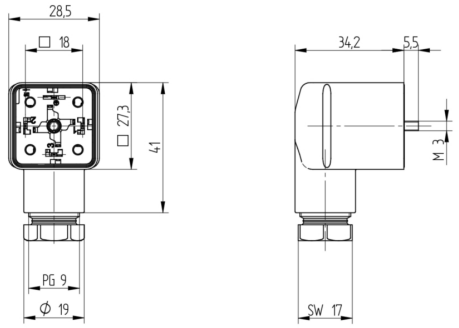
Product: GDM31AL-A0U-1KD

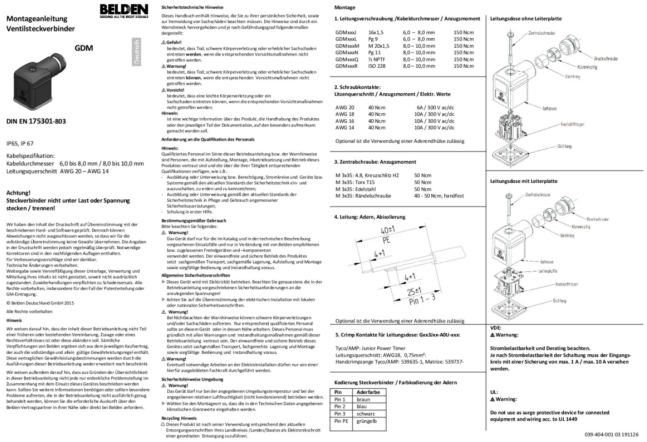
Form A, 18mm - Female 90° | #Contacts: 3+Ground (PE), Screw Type | No Protective Circuit | 250 V | Black Housing, Black PG9 Cable Gland | Included: Central Screw & Captive Gasket | Bulk Packaging | cULus 2238

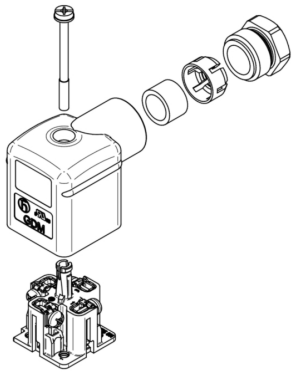
Product Description

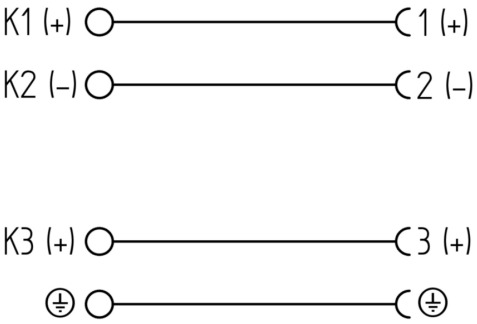
Form A, 18mm - Female Angled | #Contacts: 3+Ground (PE), Screw Type | No Protective Circuit | 250 V / 10A | Black Housing, Black PG9 Cable Gland | Included: Central Screw & Captive Gasket | Bulk Packaging | cULus 2238

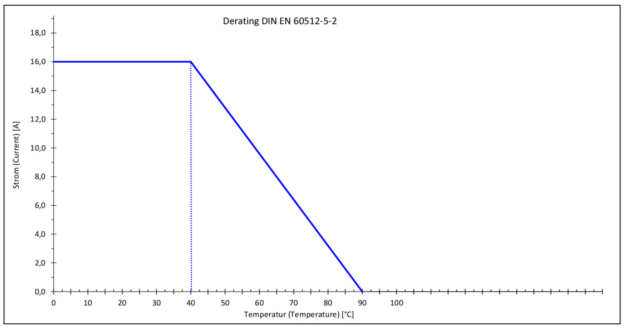
Technical Drawing











Technical Specifications

Product Life Cycle

Availability:	Active

Technical Data

Product Family:	Valve Connectors
Side 1 Product Sub Family:	GDM Standard
Brand:	Hirschmann
Connector Type:	Field Attachable
Connector Sub Type:	Form A
Side 1 Type of Contact/Gender:	Socket Contacts / Female
Connector Design:	Angled (90°) Body
Number of Pins:	3+PE (PE across cable outlet)
Coding, Side 1:	A
Shielding Type:	Unshielded
Attachment Type:	Central Screw, M 3 x 35
Voltage Rating:	250 V
Rated Voltage (UL):	300 V
Rated Voltage (CSA):	300 V
Rated Impulse Voltage:	4.0 kV
Operating Voltage:	230 V AC/DC
Current Rating:	10 A
Rated Current (UL)*:	10 A
Rated Current (CSA)*:	8 A
Side 1 Contact Resistance:	≤ 10 mOhm
Insulation Resistance:	> 10^9 Ohm
Mating Cycles:	≤ 50
Type of Connection:	Screw terminal
Cable Gland:	PG9 with strain relief
Cross Section:	0.25 - 1.5 mm²
Strain-Relief:	Clamping Cage
Suitable Cables:	Ø 6 - 8 mm
Ambient Temperature (Operation)*:	- 40 °C to + 125 °C [Connector] - 30 °C to + 90 °C [when mated with NBR gasket] - 15 °C to + 125 °C [when mated with FKM gasket] - 40 °C to + 125 °C [when mated with EPDM or MPQ gasket]
Operating Temperature (UL):	max. + 75 °C
Operating Temperature (CSA):	max. + 75 °C
Protection Degree / IP Rating**:	IP65, IP67
Side 1 Design Standard:	DIN EN 175301-803-A, ISO 4400
Side 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)

Materials

Contact Base Material:	Brass (CuZn)
Side 1 Contact Plating:	Copper-Tin Alloy (Cu/Sn)
Contact Bearer Material:	Glass-Fiber Reinforced Polyamide (PA GF)
Contact Bearer Color:	Black
Flammability Class (Contact Bearer):	UL 94 HB
Housing Material:	Glass-Fiber Reinforced Polyamide (PA GF)
Housing Color:	Black
Flammability Class (Housing):	UL 94 5VA
Cable Gland Material:	Glass-Fiber Reinforced Polyamide (PA GF)
Cable Gland Gasket:	Nitrile Butadiene Rubber (NBR)
Cable Gland Color:	Black
Flammability Class (Cable Gland):	UL 94 5VA
Strain-Relief Material:	PA GF
Attachment Material:	Steel Fastener (4.8 , Fe/Zn B)
Gasket Material:	Captive: GDMF Nitrile Butadiene Rubber (NBR), Included

Protection Circuitry

Protective Circuit:	No Protective Circuit

Additional Technical Data

Fastening Torque (Contact Screw):	(40-50) Ncm for conductor size 0.5 - 1.5 mm²; (30-40) Ncm for conductor size 0.38-0.34 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:	VDE-Reg.-Nr.: E349
SEV:	Yes

Safety & Environmental Compliance

REACH:	Yes
RoHS Compliant:	Compliant

Notes

Note Derating:	Notice derating
Protection Degree / IP Rating Note:	IP Rating tested according to IEC standard using combination of a Hirschmann or Lumberg Automation connector mounted and locked
Note:	Do not connect or disconnect under load.

Variants

Item #	Item Description	Central Screw	Gasket	Packaging
18060	GDM31AL-A0U-1KD	1 - Central Screw Steel, combi head	K - Flat captive NBR/SBR	D - Collect packaging 50 pieces, assembled

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