

M8 and M12 cord sets

A-coded cord sets

CON



- A-coded single ended and double ended
- M12 and M8 version
- Straight or right angle plug
- 3 or 4 wires for M8 version, 3, 4 or 5 wires for M12 version
- Female or male plug
- PVC cable jacket
- Operating temperature: -25°C - +80°C (-13°F - +176°F)
- Standard lengths of 2 m or 5 m (customized cord sets to specific lengths are also available)
- IP67 protection degree
- UL approved
- Made in Europe



Description

M8 and M12 cord sets, with 3 wires, 4 wires or 5 wires. They come in straight or angled versions, single ended or double ended and in

customized cable lengths. UL approved high-quality connection cable in PVC jacket.

Part selection key

CON	-	Family name	
<input type="checkbox"/>	1	M12	Side 1
	5	M8	
<input type="checkbox"/>	3	3 pin/wire (BN, BU, BK)	Only for M12
	4	4 pin/wire (BN, BU, BK, WH)	
	5	5 pin/wire (BN, BU, BK, WH, GY)	
N	-	Not shielded	
<input type="checkbox"/>	F	Female	Side 1
	M	Male	
<input type="checkbox"/>	A	Angled	Side 1
	S	Straight	
<input type="checkbox"/>	-	Open ended wires	Side 2
	1	M12	
	5	M8	
	-	Open ended wires	
<input type="checkbox"/>	F	Female	Side 2
	M	Male	
<input type="checkbox"/>	-	Open ended wires	Side 2
	A	Angled	
	S	Straight	
<input type="checkbox"/>	2	Cable length: 2 m	On request
	5	Cable length: 5 m	
	10	Cable length: 10 m	
	xx	Cable length: xx m	

Part selection - M8 Female, 3 wires

Plug type	Cable length	Jacket	Part number
Angled	2 m	PVC	CON53NFA2
	5 m	PVC	CON53NFA5
Straight	2 m	PVC	CON53NFS2
	5 m	PVC	CON53NFS5

Part selection - M8 Female, 4 wires

Plug type	Cable length	Jacket	Part number
Angled	2 m	PVC	CON54NFA2
	5 m	PVC	CON54NFA5
Straight	2 m	PVC	CON54NFS2
	5 m	PVC	CON54NFS5

Part selection - M12 Female, 3 wires

Plug type	Cable length	Jacket	Part number
Angled	2 m	PVC	CON13NFA2
	5 m	PVC	CON13NFA5
Straight	2 m	PVC	CON13NFS2
	5 m	PVC	CON13NFS5

Part selection - M12 Female, 4 wires

Plug type	Cable length	Jacket	Part number
Angled	2 m	PVC	CON14NFA2
	5 m	PVC	CON14NFA5
Straight	2 m	PVC	CON14NFS2
	5 m	PVC	CON14NFS5

Part selection - M12 Female, 5 wires

Plug type	Cable length	Jacket	Part number
Angled	2 m	PVC	CON15NFA2
	5 m	PVC	CON15NFA5
Straight	2 m	PVC	CON15NFS2
	5 m	PVC	CON15NFS5

Part selection - Double ended

Housing side 1	Plug type Side 1	Housing side 2	Plug type side 2	No of wires	Cable length	Jacket	Part number
M8 Female	Straight	M12 Male	Straight	3	2 m	PVC	CON53NFS1MS2
					5 m	PVC	CON53NFS1MS5
M8 Female	Straight	M12 Male	Straight	4	2 m	PVC	CON54NFS1MS2
					5 m	PVC	CON54NFS1MS5
M12 Female	Straight	M12 Male	Straight	4	2 m	PVC	CON14NFS1MS2
					5 m	PVC	CON14NFS1MS5
M12 Female	Angled	M12 Male	Straight	4	2 m	PVC	CON14NFA1MS2
					5 m	PVC	CON14NFA1MS5

Features

M8 - Electrical data

	3 wires version	4 wires version
Rated operational voltage (U_b)	60 V AC / 60 V DC	60 V AC / 60 V DC
Rated current	≤ 3 A (UL: 2.5 A)	≤ 3 A (UL: 2.5 A)
Contact resistance	≤ 5 m Ω	≤ 5 m Ω
Rated impulse voltage	1.5 KV	1.5 KV
Insulation resistance	10^9 Ω	10^9 Ω

M12 - Electrical data

	3 or 4 wires version	5 wires version
Rated operational voltage (U_b)	250 V AC / DC (UL: 60 V AC / DC)	60 V AC / DC
Rated current	≤ 4 A	≤ 4 A
Contact resistance	≤ 5 m Ω	≤ 5 m Ω
Rated impulse voltage	2.5 KV	1.5 KV
Insulation resistance	10^9 Ω	10^9 Ω

Environmental data

Ambient temperatures	
Fixed installation	-25°C - +80°C (-13°F - +176°F) UL: 50°C (122 °F)
Flexible installation	-5°C - +80°C (+23°F - +176°F) UL: 50°C (122 °F)
Categorization	
Pollution degree	3
Degree of protection	IP67
Pins	EN IEC 61076-2-104 (M8 housing) EN IEC 61076-2-101 (M12 housing)

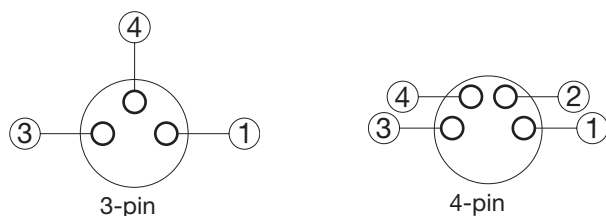
Structure

Housing

Dimensions	M8 versions	M12 versions
Cable outer diameter	PVC 4.4 mm ± 0.15 mm	PVC 5.2 mm ± 0.15 mm
Wire cross section	0.25 mm ²	0.34 mm ²
Materials		
Cable PVC	Gray	Gray
Contact material	CuSn	CuSn
Contact plating	Pre-nickelled and gold plated	Pre-nickelled and gold plated
Contact bearer material	PA black	PA black
Moulded body material	TPU	TPU
O-ring sealing	FKM	FKM
Coupling screw	Zinc alloy die casting, nickel plated	Zinc alloy die casting, nickel plated
Weight	2 m version approx. 100 g 5 m version approx. 200 g	2 m version approx. 100 g 5 m version approx. 200 g
Tightening torque	0.4 Nm	0.6 Nm

Connection and wiring

M8



M12

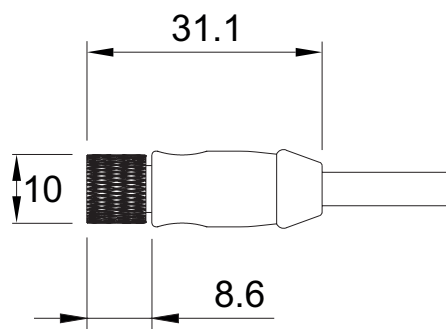


Color code

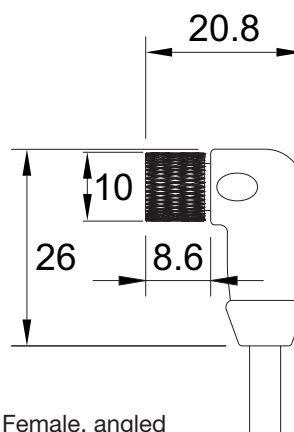
1	BN: Brown
2	WH: White
3	BU: Blue
4	BK: Black
5	GY: Grey

Dimensions in mm

M8

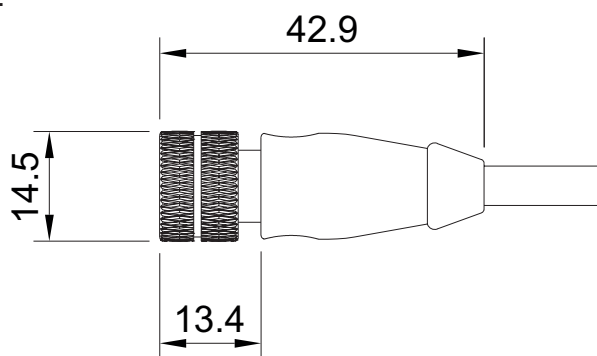


Female, straight

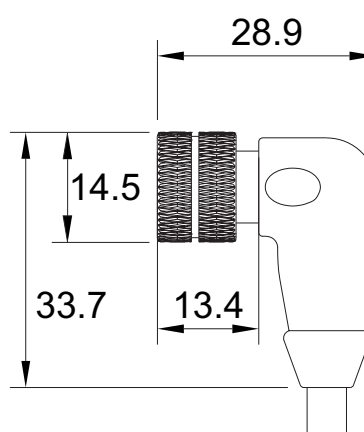


Female, angled

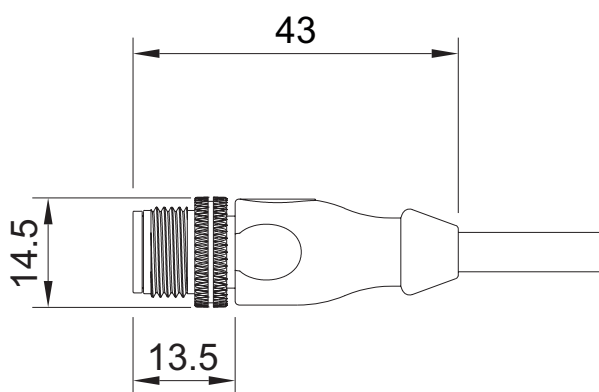
M12



Female, straight

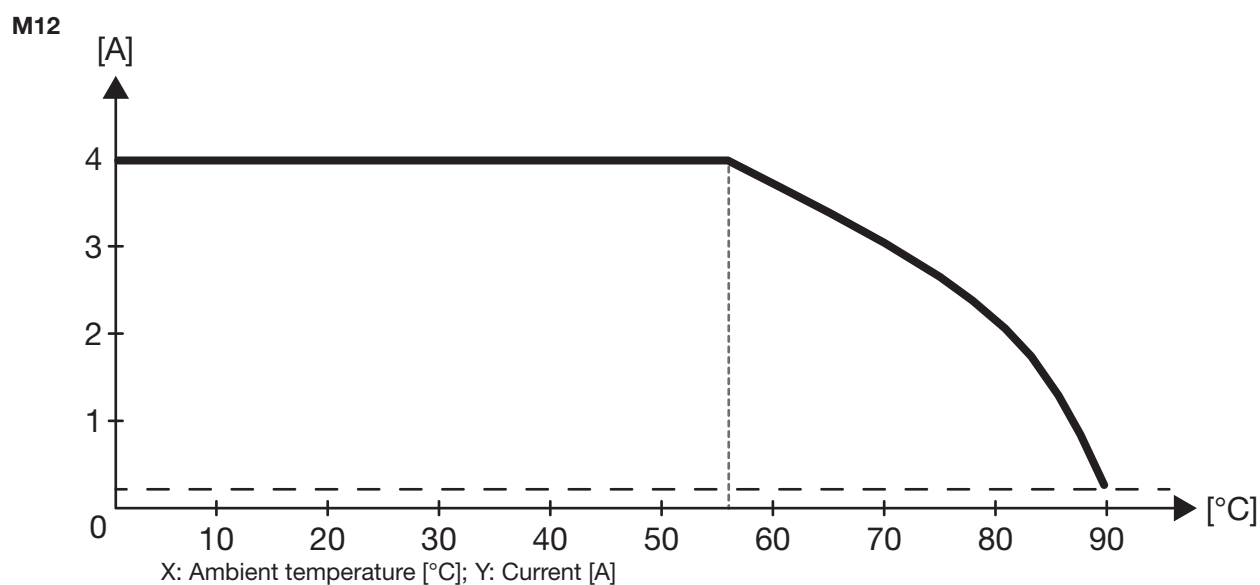
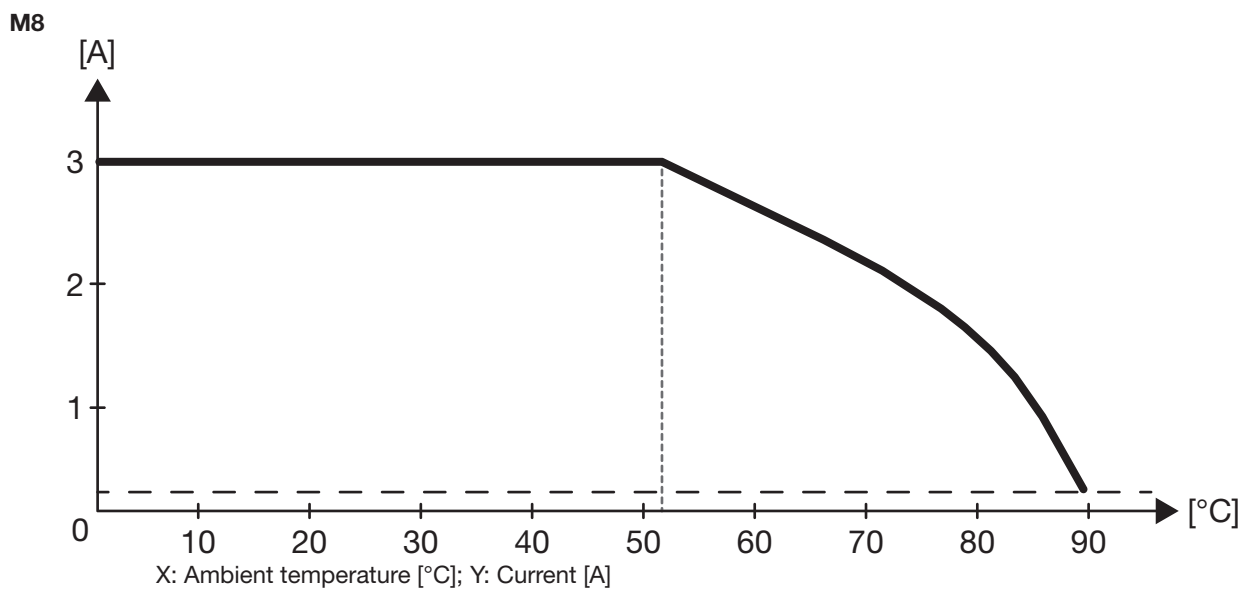


Female, angled





Male, straight

Derating curve (DIN EN 60512-5-2)



Compatibility and conformity

Approvals and markings

General reference	
CE-marking	
Approvals	

Delivery contents and accessories

Delivery contents

- Connection cable: CON...
- 2 label holders
- Packaging: Plastic bag

Further information

Carlo Gavazzi website	www.gavazziautomation.com	
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