

Fieldbus modules, FD67 Series

Input, output and analogue modules with IP67 ingress protection



IP67 Ingress protection

Fully configurable I/O points

Compact, robust construction



Technical data Fieldbus nodes, input and output modules

Operating temperature: +0°C to +50°C

Storage temperature: -20°C to +75°C Consult our Technical Service for use below +2°C. Electromagnetic compatibility: EN 50081, EN 50082

Voltage tolerance: IEC 60664-1

Isolation resistance: IEC 60512-2

Conductivity: $\leq 5 \text{ m } \Omega$

Vibration protection: EN60068-2-6 15g

Shock protection: EN60068-2-27 50g/ 11ms

Degree of protection: IP 67 to EN 60629

Materials

Housing: PBT 30% Glass fibre (UL94, V0) M12 Contact carrier: SPS (UL94 V0) 7/8" Contact carrier: TPE PA 6.6 (UL94 V2) Contact: CuZn, nickel undercoated and gold plated M12 O-ring: Viton 7/8" O-ring: NBR Light comb and light ring: PC (UL94 V0)

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System layout example

Example system layout







-A	Analogue input modules	
and the second s	Analogue input – current (4 x M12)	FD67AICM120004
100	Analogue input – voltage (4 x M12)	FD67AIVM120004
-	Analogue output modules	
and the second se	Analogue output – current (4 x M12)	FD67A0CM120004
and the second s	Analogue output – current (4 x M12)	FD67A0VM120004
- 4-	Output module	
See 1	Multipole driver (16 outputs)	FD67D0DSC0016
650		

Options selector



Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under '**Technical Data**'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.



Fieldbus node



Node	Model
Profibus-DP	FD67NDPM127804
DeviceNet	FD67NDNM127804
CANopen	FD67NC0M127804

Profibus	
Supported Baud rates	9,6 / 19,2 / 45,45 / 93,75 / 187,5 / 500 / 1500 / 3000 / 6000 / 12000 kBaud
Protocol	Profibus DP according to IEC 61158
Operating modes	Poll
Vendor I.D	064D hex
Profibus address	0 to 99 via BCD-Rotary switches
DeviceNet	
Supported Baud rates	125 / 250 / 500 kBit/sec
Protocol	DeviceNet in accordance with ODVA Specification
Operating modes	Poll / Change of State / Cycle
Vendor-ID	640 Dez
DeviceNet address	0 to 63 via BCD Rotary switches
Max. number output bytes	70
Max. number input bytes	210 (including diagnostics)
Max. explicit message size	210
CANopen	
Supported Baud rates	10 / 20 / 50 / 100 / 125 / 250 / 500 / 800 / 1000 kBit/sec
Protocol	CANopen in accordance with CiA specification
Operating modes	Synchronous
Vendor-ID	118 Dez
DeviceNet address	0 to 99 via BCD Rotary switches
Technical data	
Operating voltage	11,0 V to 30,2 V DC
Power input	~ 70 mA
Sensor supply	
Max. current	4 A per slot
Over voltage protection	Yes – Suppression diode
Overload / short circuit protection	Electronic short circuit detection. Tripping time <10 ms
Polarity protection	
Module electronics	Yes
Sensors	Yes
Actuators	Yes
Actuator supply	
	4 A per line
Max total current	
Over voltage protection	Sunnaccion diada
Overload / short circuit protection	Electronic short circuit detection Trinning time <10 ms
Connections	
Power	7/8"_5nin
	M12- (A-coded) 5 nin
Profibus	M12 (R-coded) 5 pin
System connection	M12- (A-coded) 6 pin
Woight	450 g
Torques	HUU Y M12 Connector 0.5 Nm
τοι μασο	M E ving scraw 2 Nm
	Mit Fining Scrow 2 Mill M3 Eiving scrow 1 2 Nm

8 x M12 Modules



Node	Model
16 PNP Inputs (8 x M12)	FD67DIM120016
16 Outputs / PNP inputs (8 x M12)	FD67DI0M120016

Technical data			
Max. number of PNP inputs	16		
Max. number of outputs	16		
Operating voltage	24V DC ± 25%		
Power input	~ 50 mA		
Sensor supply			
Max. current	Max. 200 mA per M12 connection		
Overload / short circuit protection	Multifuse (For all M12 connections)	≤ 100 mA	Automatic restart
		> 100 mA	Reset necessary
	Time lag 1 s at $1k \ge 1$ A and 23°C ar	nbient temperature	
Reverse polarity protection			
Module electronics	Yes		
Sensors	Yes		
Actuators	Yes		
Outputs			
Max. current	0,5 A per channel		
Max. total current	4 A		
Over voltage protection	Yes (Varistor)		
Line length	0,75 mm ²	Max. 10 m	
	0,34 mm ²	Max. 5 m	
Cross section	Max. 1,5 mm ²		
Signal delay	10 ms		
Max. switching frequency with resistive load	50 Hz		
Max. switching frequency with inductive load	5 Hz		
Max. lamp load	10 W		
Overload / short circuit protection	Short circuit detection tripping time <10 ms		
PNP Inputs			
Input characteristic	IEC 1131-2, Typ 2		
Input filter	~ 1 ms		
Signal delay	10 ms		
Over voltage protection	Yes (Varistor)		
Connections			
System connection	M12 (A-coded) 6 pin		
Input / output connections	8 x M12 (A-coded) 5 pin		
Design information			
Weight	210 g		
Torques	M12 Connector	0,5 Nm	
	M4 Fixing screw	2 Nm	

8 x M12 with external power connection



Node	Model
16 Outputs / PNP inputs (8 x M12) with external power connection	FD67DI0M121216

Technical data	
Max. number of PNP inputs	16
Max. number of outputs	16
Operating voltage	24V DC ± 25%
Current consumption	~ 50 mA
Sensor supply	
Max. current	Max. 200 mA per M12 socket
Overload / short-circuit fuse	Multifuse (for each M12 socket) ≤ 100 mA Automatic restart
	> 100 mA Reset required
	Tripping time 1 s at 1 k \ge 1 A and 23°C ambient temperature
Reverse polarity protection	
Module electronics	Yes
Sensors	Yes
Actuators	Yes
Outputs	
Rated current	1,6 A per channel
Max. sum current	4 A
Overvoltage protection	Yes (Varistor)
Cable length	0,75 mm ² Max. 10 m
	0,34 mm ² Max. 5 m
Cable cross-section	Max. 1,5 mm ²
Signal delay	10 ms
Max. switching frequency with resistive load	50 Hz
Max. switching frequency with inductive load	5 Hz
Max. lamp load	10 W
Overload / short-circuit fuse	Electronic short-circuit detection, tripping time <10 ms
PNP Inputs	
Input characteristic	IEC 1131-2, type 2
Input filter	~ 1 ms
Signal delay	10 ms
Overvoltage protection	Yes (Varistor)
Connections	
System line	M12 connector (A-coded) 6-pole
I/O lines	8 x M12 round plug connector (A-coded) 5-pole
Design information	
Weight	210 g
Torques	M12 round plug connector 0,5 Nm
	M4 fastening screw 2 Nm

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Node	Model	
External power supply module	FD67PDM127804	

Technical data	
Number of outputs	4 – not switcheable (external actuator supply output)
Operating voltage	24V DC ± 25%
Current consumption	~ 30 mA
Reverse polarity protection	
Module electronics	Yes
Outputs	Yes
Outputs	
Rated current	4 A per system line connection
Max. sum current	9 A
Overvoltage protection	Yes (suppressor diode)
Cable length	0,5 mm ² Max. 5 m
Overload / short-circuit fuse	electronic short-circuit detection, tripping time <10 ms
Connections	
Power supply line	7/8" connector 5-pole
External actuator supply (output)	M12 connector (A-coded) 6-pole
Design information	
Weight	145 g
Torques	M12 round plug connector 0,5 Nm
	M4 fastening screw 2 Nm



4 x M12 Modules



Node	Model
8 PNP Inputs (4 x M12)	FD67DIM120008
8 Outputs / PNP inputs (4 x M12)	FD67DI0M120008

Technical data		
Max. number of PNP inputs	8	
Max. number of outputs	8	
Operating voltage	24V DC ± 25%	
Power input	~ 50 mA	
Sensor supply		
Max. current	Max. 200 mA per M12 connection	
Overload / short circuit protection	Multifuse (For all M12 connections)	≤ 100 mA Automatic restart
		> 100 mA Reset necessary
	Time lag 1 s at 1k \ge 1 A and 23°C ambie	ent temperature
Polarity protection		
Module electronics	Yes	
Sensors	Yes	
Actuators	Yes	
Outputs		
Max. current	0,5 A per channel	
Max. total current	4 A	
Under voltage protection	Yes (Varistor)	
Line length	0,75 mm ²	Max. 10 m
	0,34 mm ²	Max. 5 m
Cross section	Max. 1,5 mm ²	
Signal delay	10 ms	
Max. switching frequency with resistive load	50 Hz	
Max. switching frequency with inductive load	5 Hz	
Max. lamp load	10 W	
Overload / short circuit protection	Short circuit detection time lag <10 ms	
PNP Inputs		
Input characteristic	IEC 1131-2, Typ 2	
Input filter	~ 1 ms	
Signal delay	7 ms	
Under voltage protection	Yes (Varistor)	
Connections		
System connection	M12- (A-coded) 6 pin	
Input / output connections	4 x M12- (A- coded) 5 pin	
Design information		
Weight	145 g	
Torques	M12 Connector	0,5 Nm
	M4 Fixing screw	2 Nm



8 x M8 Modules



Node	Model
8 PNP Inputs (8 x M8)	FD67DIM080008
8 Outputs / PNP inputs (8 x M8)	FD67DI0M080008

Technical data		
Max. number of PNP inputs	8	
Max. number of outputs	8	
Operating voltage	24V DC ± 25%	
Power input	~ 30 mA	
Sensor supply		
Max. current	Max. 200 mA per M12 connection	
Overload / short circuit protection	Multifuse (For all M8 connections)	
	Time lag 1 s at 1k \ge 1 A and 23°C ambi	ent temperature
Polarity protection		
Module electronics	Yes	
Sensors	Yes	
Actuators	Yes	
Outputs		
Current	0,5 A per channel	
Max. current total	4 A	
Over voltage protection	Yes (Varistor)	
Line length	0,75 mm ²	Max. 10 m
	0,34 mm ²	Max. 5 m
Cross section	Max. 1,5 mm ²	
Signal delay	10 ms	
Max. switching frequency with resistive load	50 Hz	
Max. switching frequency with inductive load	5 Hz	
Max. lamp load	10 W	
Overload / short circuit protection	Short circuit protection tripping time <10	ms
PNP Inputs		
Input characteristic	IEC 1131-2, Typ 2	
Input filter	~ 1 ms	
Signal delay	7 ms	
Over voltage protection	Yes (Varistor)	
Connections		
System connection	M12- (A-coded) 6 pin	
Input / output connections	8 x M8- 3 pin	
Design information		
Weight	165 g	
Torques	M8 Connector	0,5 Nm
	M4 Fixing screws	2 Nm

4 x M12 Analogue input modules



Node	Model
Analogue input voltage (4 x M12)	FD67AIVM120004
Analogue input current (4 x M12)	FD67AICM120004

Technical data				
Max. number of inputs	4			
Operating voltage	24V DC ± 25%			
Power input	~ 50 mA			
Sensor supply				
Max. current	Max. 200 mA per M12 connection			
Overload / short circuit protection	Multifuse (For all M12 connections)	≤ 100 mA	Automa	atic restart
		> 100 mA	Reset n	necessary
	Time lag 1 s at $1k \ge 1$ A and 23° C ambie	ent temperature	e	
Polarity protection				
Module electronics	Yes			
Analogue inputs	No			
Inputs	Voltage		Cu	rrent
Conversion time	~ 2 ms per channel		~ 2	2 ms per channel
Conversion type	successive approximation		suc	ccessive approximation
Signal delay	2,5 + conversion time of the number of ac	tive channels	2,5	5 + conversion time of the number of active channels
PIN 2	Positive differential voltage at input		Pos	sitive differential current at input
PIN 4	Negative differential voltage at input		Ne	gative differential current at input
Range	-10V to +10V (15 Bit with sign)		0 n	nA to 20 mA (15 Bit)
	0 to 10 V (15 Bit without sign)		4 n	nA to 20 mA (15 Bit)
Max. analogue input	-12 V or +12 V		22	mA
Input impedance	~ 1 M0hm		~ 3	300 Ohm
Data format	16 Bit, Motorola or Intel		16	Bit, Motorola or Intel
Relative measuring error	$< \pm 0,3\%$ from range limit		< =	± 0,3% from range limit
Relative measuring error at 55 °C	$< \pm 0,5\%$ from range limit		< =	± 0,5% from range limit
Relative measuring error – EMC conditions	$< \pm$ 1% from range limit		< =	± 1% from range limit
Calibration	Self-calibration		Sel	If-calibration
Cable length	30 m max.		30	m max.
Connections				
System connection	M12 (A-coded) 6pin			
Input connections	4 x M12 (A-coded) 5pin			
Design information				
Weight	140 g			
Torques	M12 Connector	0,5 Nm		
	M4 Fixing screw	2 Nm		



4 x M12 - Analogue output modules



Node	Model
Analogue output voltage (4 x M12)	FD67A0VM120004
Analogue output current (4 x M12)	FD67A0CM120004

Technical data		
Max. number of outputs	4	
Operating voltage	24V DC ± 25%	
Power input	~ 75 mA	
Actuator supply		
Voltage supply on Pin 1	Max. 1,6 A per M12 connection (Total current f	or entire module max. 4 A)
Overload / short circuit protection	Yes, with automatic restart after 1 second	
Max. Cable diameter	Max. 1.5 mm ²	
Polarity protection		
Module electronics	Yes	
Analogue outputs	No	
Outputs	Voltage	Current
Conversion time	~ 1 ms per channel	~ 1 ms per channel
Signal delay	~ 2 ms + conversion time of active channels	~ 2 ms + conversion time of active channels
PIN 4	Analogue voltage output	Analogue current output
PIN 2	Not used	Not used
Measuring range	-10 V to +10 V (11 bits with start bit)	0 to 20 mA (11 bits)
	0 to 10 V (11 bits)	4 to 20 mA (11 bits)
Max. analogue output voltage	+10 V or -10V	20 mA
Data format	16 bits, Motorola or Intel	16 bits, Motorola or Intel
Relative error of output value	$< \pm 0,3\%$ from range limit	$< \pm 0.3\%$ from range limit
Relative error of output value at 55°C	$< \pm 0,5\%$ from range limit	$< \pm 0,5\%$ from range limit
Relative error of output value – EMC conditions	$< \pm 2\%$ from range limit	$< \pm 0,5\%$ from range limit
Load resistance	≥ 500 0hm	≤ 500 0hm
Max. capacitive load	1 μF	1 μF
Damping period	Max. resistive load: 0,070 ms	Max. resistive load : 0,020 ms
	Max. capacitive load: 0,800 ms	Max. capacitive load: 2,100 ms
Nonlinearity	$< \pm 0,3\%$ from range limit	$< \pm 0,3\%$ from range limit
Output ripple	$< \pm 0,3\%$ from range limit	$< \pm 0,3\%$ from range limit
Cable length	30 m max.	30 m max.
Connections		
System connection	M12- (A-coded) 6 pin	
Input / output connections	4 x M12- (A-coded) 5 pin	
Design information		
Weight	140 g	
Torques	M12 Connector 0,5 Nm	
	M4 Fixing screws 2 Nm	



1 x D-sub connector



Node	Model	
Multipole driver (16 outputs)	FD67D0DSC0016	

Technical data	
Number of outputs	16
Operating voltage	$24V DC \pm 25\%$
Power input	~ 50 mA
Polarity protection	
Module electronics	Yes
Actuators	Yes
Outputs	
Rated current	60 mA per channel
Overvoltage protection	Yes (Zener diode)
Cable length	Max. 0,5 m (pre-wired)
Cable cross-section	Max. 0,25 mm ²
Signal delay	10 ms
Max. switching frequency at resistive load	50 Hz
Max. switching frequency at inductive load	5 Hz
Overload / short-circuit fuse	Electronic short-circuit detection, tripping time <1 ms
Line break	Detection by "Sens" wire
Design information	
Weight	165 g
Torque – M4 fastening screw	2 Nm
Connections	
System connection	M12- (A-coded) 6 pin
Input / output connections	Customized and pre-wired

Dimensions

Fieldbus node



8 x M12 Modules



8 x M12 with external power connection





4 x M12 Power distribution module







4 x M12 – Analogue input modules 4 x M12 – Analogue output modules







1 x D-sub connector





FD67 Cables & connectors selection chart





System cables – node to module and module to module	M12 Female straight	M12 Female 90°
M12 Male straight	FD675U16S86S11 (0.3 m)	-
ini 2 maio ob algin	FD675U16S86S13 (1.0 m)	-
and in the second se	FD675U16S86S15 (2,0 m)	-
and a second sec	FD675U16S86S17 (3,0 m)	-
	FD675U16S86S19 (4,0 m)	-
	FD675U16S86S1B (5,0 m)	-
M12 Male 90°		FD675U16A86A11 (0,3 m)
	-	FD675U16A86A13 (1,0 m)
		FD675U16A86A15 (2,0 m)
	_	FD675U16A86A17 (3,0 m)
ALL	_	FD675U16A86A19 (4,0 m)
1.000	_	FD675U16A86A1B (5,0 m)







Visual indication of electrical connection

M12 I/O Connections to	M12 Female straight	M12 Female 90°	Open end	M12 Male 90°	Valve connector
modules			\leq		
M12 Male straight	FD673U14S84S11 (0,3 m)	FD673U14S84A11 (0,3 m)	FD673U14S74004 (1,5 m)	_	VE1FBCSCM1203 0,3 m cable, type 'C' connector
	FD673U14S84S13 (1,0 m)	FD673U14S84A13 (1,0 m)	FD673U14S74007 (3,0 m)	-	VE1FBCSCM1210 1 m cable, type 'C' connector
And the Party of t	FD673U14S84S15 (2,0 m)	FD673U14S84A15 (2,0 m)	FD673U14S7400B (5,0 m)	-	VE1FBCSBM1203 0,3 m cable, industrial connector
THE R. LEWIS CO.	-	-	-	_	VE1FBCSBM1210 1 m cable, industrial connector
	-	-	-	-	VE1FBCSAM1203 0,3 m cable, type 'A' connector
	_	-	-	-	VE1FBCSAM1210 1 m cable, type 'A' connector
M12 Male straight	FD674U15S85S11 (0,3 m)	FD674U15S85A11 (0,3 m)	_	_	_
shielded	FD674U15S85S13 (1,0 m)	FD674U15S85A13 (1,0 m)	-	_	_
	FD674U15S85S15 (2,0 m)	FD674U15S85A15 (2,0 m)	-	-	-
Open end	FD673U84S74004 (1.5 m)	FD673U84A74004 (1.5 m)	_	_	-
	FD673U84S74007 (3.0 m)	ED673U84A74007 (3.0 m)	-	_	_
\geq	FD673U84S7400B (5,0 m)	FD673U84A7400B (5,0 m)	-	-	-





Note: Other cable lengths available on request.





Fieldbus connectors



Pre-wired Fieldbus connectors

Profibus Straight



2

Pre-wired Fieldbus connectors



Ma le

5

1

6

Shield

Female

3

2

6

Ma le

Shield

Female

2

6



Fieldbus power cables



Wireable Fieldbus power connectors





M12 Wireable IDC connectors 4 pin



M8 Wireable IDC connectors, 3 pin

Straight

6 Male

Female

3 Pin

1

4

3









0,25 ... 0,5 mm²



	9
Male	FD673023A73S10
Female	FD673093A73S10

90°



0,25 ... 0,5 mm²

1

3



M12 Wireable shielded connectors, 5 pin



M12 Female wireable shielded connectors, 5 pin

Straight		90°	
Female to PG7	FD674085SB5S10	Female to PG7	FD674085AB5S10
Female to PG9	FD674085SC5S10	Female to PG9	FD674085AC5S10
5 Pin		5 Pin	
10		10	
2		20	
3		3	
50		50	
Female		Female	
4 3		4 3	
5		5	
1 2		1 2	
PG7 4 6 mm, PG9 6 8 mm		PG7 4 6 mm, PG9 6 8 mm	

M12 4 pin to M8 3 pin tee connector



Male M12 to female M8 Tee connector FD673014S93S20







Male M12 to female M12 Tee connector FD673015S84S20





Wireable input or output 5 pin male plug - screw termination



Wireable input or output 5 pin male plug – screw termination VE1FBCRSM125P





M12 Pre-wired cables PUR, 4 pin





< 3

1





1/

M8 Pre-wired cables PUR, 3 pin

Male straight/female, straight 0,3 m FD673U23S93S11

Male straight/female, straight 1,0 m FD673U23S93S13

Male straight/female, straight 2,0 m FD673U23S93S15

Male straight/female straight

Blue (-)

3

Т



Male straight/female 90°

Male straight/female 90° 0,3 m

Male straight/female 90° 1,0 m

Male straight/female 90° 2,0 m

FD673U23S93A11	
FD673U23S93A13	
FD673U23S93A15	

3 Pin









M12 Pre-wired cables PUR, 4 pin to 2 x 8 mm female











M8 Pre-wired cables PUR, 3 pin to 8 mm

M8 Straight to 8 mm, straight female

_



M8 Straight to 8 mm, straight female 1 m	FD673U23S33S13	M8 Straight to 8 mm 90° female 1 m	FD673U23S33A13
M8 Straight to 8 mm, straight female 3 m	FD673U23S33S17	M8 Straight to 8 mm 90° female 3 m	FD673U23S33A17
M8 Straight to 8 mm, straight female 5 m	FD673U23S33S1B	M8 Straight to 8 mm 90° female 5 m	FD673U23S33A1B







M8 Straight to 8 mm 90° female





M12 Pre-wired shielded cables 5 pin PUR female









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M12 to open end pre-wired cables PUR 4 pin

Male straight/open end	Female straight/open end
Male straight/open end 1,5 m FD673U14S74004	Female straight/open end 1,5 m FD673U84S74004
Male straight/open end 3,0 m FD673U14S74007	Female straight/open end 3,0 m FD673U84S74007
Male straight/open end 5,0 m FD673U14S7400B	Female straight/open end 5,0 m FD673U84S7400B
Male 90°/open end	Female 90°/open end
Male 90°/open end 1,5 m FD673U14A74004	Female 90°/open end 1,5 m FD673U84A74004
Male 90°/open end 3,0 m FD673U14A74007	Female 90°/open end 3,0 m FD673U84A74007
Male 90°/open end 5,0 m FD673U14A7400B	Female 90°/open end 5,0 m FD673U84A7400B
4 Pin 1 Brown (+) 1 White (0)	4 Pin 1 - Brown (+) . White (0)





M8 to open end pre-wired cables PUR 3 pin

Male	straight/open	end

			\leq
Male straight/open end 1,5 m	FD673U23S73004	Female straight/open end 1,5 m	FD673U93S73004
Male straight/open end 3,0 m	FD673U23S73007	Female straight/open end 3,0 m	FD673U93S73007
Male straight/open end 5,0 m	FD673U23S7300B	Female straight/open end 5,0 m	FD673U93S7300B



 //	\leq

Female straight/open end

Female 90°/open end

Male 90°/open end 1,5 m	FD673U23A73004	Female 90°/open end 1,5 m	FD673U93A73004	
Male 90°/open end 3,0 m	FD673U23A73007	Female 90°/open end 3,0 m	FD673U93A73007	
Male 90°/open end 5,0 m	FD673U23A7300B	Female 90°/open end 5,0 m	FD673U93A7300B	





8 mm to open end pre-wired cables PUR 3 pin





1

3



4 pin plug to 2 valve connections



0,3 m cable, type 'C' connector	VE1FBCTCM1203	
1 m cable, type 'C' connector	VE1FBCTCM1210	
0,3 m cable, industrial connector	VE1FBCTBM1203	
1 m cable, industrial connector	VE1FBCTBM1210	
0,3 m cable, type 'A' connector	VE1FBCTAM1203	
1 m cable, type 'A' connector	VE1FBCTAM1210	







3 pin plug to valve connection



0,3 m cable, type 'C' connector	VE1FBCSCM1203
1 m cable, type 'C' connector	VE1FBCSCM1210
0,3 m cable, industrial connector	VE1FBCSBM1203
1 m cable, industrial connector	VE1FBCSBM1210
0,3 m cable, type 'A' connector	VE1FBCSAM1203
1 m cable, type 'A' connector	VE1FBCSAM1210









Dimensions

Profibus connector - male



DeviceNet/CANopen connector - male



System connectors - male





Fieldbus power pre-wired connectors - male



Profibus connector - female



DeviceNet/CANopen connector - female



System connectors - female





Fieldbus power pre-wired connectors - female





Profibus connect



Fieldbus power wireable connector - male



Fieldbus power wireable tee connector



M12 Wireable Mosa connectors - male straight



M12 Wireable Mosa connectors - male 90°



M12 Wireable Mosa connectors – female straight

		ı İ	4	55		
Ø 15	M12x1					

M12 Wireable Mosa connectors – female 90°



Fieldbus power wireable connector – female



Terminating resistor





M8 Wireable Mosa connectors - male straight



M8 Wireable connectors – male 90°



M12 Wireable shielded connectors - male straight



M12 Wireable shielded connectors –male 90°



M12 to 2 x M8 Tee connector



M12 Pre-wired cables - female 90° connector



M8 Wireable Mosa connectors – female straight



M8 Wireable connectors – female 90°



M12 Wireable shielded connectors - female straight



M12 Wireable shielded connectors – female 90°



M12 to 2 x M12 Tee connector





M12 Pre-wired cables - male straight connector



M12 Pre-wired Tee connector



M8 Pre-wired cables - female 90° connector



M8 Pre-wired cables - male straight connector



8 mm Snap In - female straight connector



M8 Pre-wired cables – female straight connector



8 mm Snap In – female 90° connector





M12 Pre-wired cables - female straight connector

Technical data

M8 Connector

	Screw fixing		Snap-in	Field wireable Solder nins	Insulation displacement
	3 Pin without PE	4 Pin without PE	3/4 Pin without PE	3/4 Pin	3/4 Pin
Operating voltage	Max. 60 V a.c./d.c.	Max. 60 V a.c./d.c.	Max. 50 V a.c./d.c.	Max. 60 V a.c./d.c.	Max. 32 V a.c./d.c.
Rated impulse voltage	1500 V	1500 V	800 V	800 V	800 V
Pollution degree	3	3	3	3	3
Over voltage category	III	III	III	III	III
Insulation class	I	I	II	I	I
Current capacity (supply current) per contact	Max. 4A	Max. 4A	Max. 4A	Max. 4A	Max. 3A
Protection rating	IP67	IP67	IP67	IP67	IP67
Fixing	M8x1 mm (torque 0.6 Nm)	M8x1 mm (torque 0.6 Nm)	8 mm Snap-in	M8x1 mm (torque 0,6 Nm)	M8x1 mm (torque 0,6 Nm)
Temperature range	-25°C to + 85°C	-25°C to + 85°C	-25°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C
Housing	Plastic				
	Good chemical and oil resistance				
	The resistance to aggressive media should be individually proved for your application				

M12 Connector

	Screw fixing		Field wireable Screw pins		Insulation displacement
	3/4 Pin without PE	4 Pin with PE 5 Pin without PE	4/5 Pin with PE	5 Pin shielded	3/4 Pin without PE 3 Pin with PE
Operating voltage	Max. 250 V a.c./d.c.	Max. 125 V a.c./d.c.	250/125 V a.c./d.c.	125 V a.c./d.c.	Max. 32 V a.c./d.c.
Rated impulse voltage	2500 V	1500 V	2500/1500 V	1500 V	800 V
Pollution degree	3	3	3	3	3
Over voltage category	III	Ш	III	III	III
Insulation class	II	I	II	II	II
Current capacity (supply current) per contact	Max. 4A	Max. 4A	Max. 4A	Max. 4A	Max. 3A
Protection rating	IP67	IP67	-	-	IP67
Fixing	M12x1 mm (torque 0,6 Nm)	M12x1 mm (torque 0,6 Nm)	M12x1 mm (torque 0,6 Nm)	M12x1 mm (torque 0,6 Nm)	M12x1 mm (torque 0,6 Nm)
Temperature range	-25°C to + 85°C	-25°C to + 85°C	-25°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C
Housing	Plastic				
	Good chemical and oil resist	ance			
	The resistance to aggressive	e media should be individually	v proved for your application		

M12 Connector - 6 pin and B coded

	Screw fixing 6 Pin shielded/unshielded	Field wireable B Coded 3 pin with PE, unshielded	B Coded 5 pin shielded	
Operating voltage	Max. 24 V a.c./d.c.	Max. 32 V a.c./36 V d.c.	Max. 125 V a.c./d.c.	
Rated impulse voltage	1500 V	1500 V	1500 V	
Pollution degree	3	3	3	
Over voltage category	III	III	III	
Insulation class	II	I	1	
Current capacity (supply current) per contact	Max. 4A	Max. 1.5A	Max. 4A	
Protection rating	IP67	IP67	IP67	
Fixing	M12x1 mm (torque 0,6 Nm)	M12x1 mm (torque 0,6 Nm)	M12x1 mm (torque 0,6 Nm)	
Temperature range	-25°C to + 85°C	-25°C to + 85°C	-25°C to + 85°C	
Housing	Plastic			
	Good chemical and oil resistance			
	The resistance to aggressive media should be individually proved for your application			

7/8" Connector

	Screw fixing 4/5 Pin	5 Pin shielded with PE	Field wireable 4/5 Pin	
Operating voltage	250 V a.c./d.c.	300 V a.c./d.c.	250 V a.c./d.c.	
Rated impulse voltage	3000 V	1500 V	4000 V	
Pollution degree	3	3	3	
Over voltage category	III	III	II	
Insulation class	II	I	1	
Current capacity (supply current) per contact	5,3 A	5,3 A	9 A	
Protection rating	IP67	IP67	IP67	
Fixing	7/8"	7/8"	7/8"	
Temperature range	-30°C to +80°C	-20°C to +70°C	-40°C to +85°C	
Housing	Plastic			
	Good chemical and oil resistance			
	The resistance to aggressive media should be individually proved for your application			