

Product Data



JVL...integration in motion

# M12 Connection Cables for MAC motor Expansion Modules and the QuickStep motors



In order to ease installation of the MAC and QuickStep motors with M12 connectors, JVL has developed a series of readymade cables and adaptors etc.

In the table on the following center spread we have listed all items available and indicated which cables that should be used with which expansion module.

In the last columns cables for the QuickStep motors ar given.

All the cables and other items for easy installation can normally be delivered from stock.

Special length's of cables can be made to order.

It is recommended to use the protection caps for expansion module sockets not in use.

All the M12 connectors fulfil IP67 requirements.

If desired you can make most

of your own flexible or robot cables by means of the 5- and 8-pin male and female connectors.

LD0067-06GB



	expa	nector overview for MAC motor Ansion modules MAC00-X4 And QuickStep motors.	nector housing	(		EL.	(		-	3		1	X		11 00	I		100	R		-				and a second	1	
			ted to con		irection,   85, USB <u>+</u>		tion	d alone opera- with sequential rogramming		Profibus			s/CANope viceNet	n	High Spee mult			multiax	d RS48 is for SoftN(		N	ooth an VLAN ireless	d	Qu	uickStep r	motor	
		Expansion module type no.	nec		B4			R4		FP4		FC4	and FD4		FS	64		FR4	1		FB4 ;	and EW4	4	MIS	523xA1M	IzN075	
	Cable order no.	Connectors	- S	10 CC	OM1 CON	12 PWR	101	102 COM PWR	BUS1	BUS2 IO	WR B	SUS1 BU	52 IO P	WR	101 102	COM PWR	BUS1	BUS2	10 P	WR I/	/0 1	02 P	WR C	CAN RS485	105-8	101-4	PWR
		Cable Description						(F8) (F5) (M5)																[M5) (F5)	(F8)	RS485 (F8)	
	WI1000-M12F5V05N	M12, 5 pin female Cable 5m, Power	X			X <sup>(2)</sup>		X <sup>(2)</sup>			X <sup>(2)</sup>	X <sup>(1)</sup>	x	(2)		X <sup>(2)</sup>			>	< <sup>(2)</sup>		х	(2)	X <sup>(1)</sup>			X <sup>(2)</sup>
		M12, 5 pin female Cable 20m, Power	S× ∑			X <sup>(2)</sup>		X <sup>(2)</sup>			X <sup>(2)</sup>	X <sup>(1)</sup>	x	(2)		X <sup>(2)</sup>			)	< <sup>(2)</sup>		x	(2)	X <sup>(1)</sup>			X <sup>(2)</sup>
	WI1000-M12F8V05N	M12, 8 pin female Cable 5m, Basic I/O	× (P	х			х								х				х	;	ĸ						
		M12, 8 pin female Cable 20m, Basic I/O	<u>s</u> x	х			х								х				х		ĸ						
		M12, 5 pin male Cable 5m, Communication	× Called Ca		X <sup>(1</sup>			X <sup>(1)</sup>				х				X <sup>(1)</sup>								X <sup>(1)</sup>			
•1		M12, 5 pin male Cable 20m, Communication	×		X <sup>(1</sup>	1)		X <sup>(1)</sup>				х				X <sup>(1)</sup>								X <sup>(1)</sup>			
			Shie		< <sup>(1)</sup>			х		x			х		x		X <sup>(1)</sup>					x			х		
		M12, 8 pin male Cable 20m, Extended I/O	X	>	< <sup>(1)</sup>			х		x			х		x		x <sup>(1)</sup>	X <sup>(1)</sup>				x			х	X <sup>(1)</sup>	
		M12, 5 pin female Cable 5m, Power	X			х		x			х	X <sup>(1</sup>		х		Х				x			x :	X <sup>(1)</sup>			х
-		M12, 5 pin female Cable 20m, Power	× (PVC)			Х		x			X	X <sup>(1)</sup>		x		Х				x			X	X <sup>(1)</sup>			X
52.0			×	х			X							_	x				х		K		_				
		M12, 8 pin female Cable 20m, Basic I/O	× ab	х			x								х				х	;	K		_				
		M12, 5 pin male Cable 5m, Communication	x ×		X <sup>(1</sup>			X <sup>(1)</sup>				Х				X <sup>(1)</sup>							_	X <sup>(1)</sup>			
		M12, 5 pin male Cable 20m, Communication	× iel		X (1	1)		X <sup>(1)</sup>				х				X <sup>(1)</sup>	(1)	(1)					_	X <sup>(1)</sup>			
			- Shi		< <sup>(1)</sup>			X		X	_		X		X							Х	_		X	X <sup>(1)</sup>	
		M12, 8 pin male Cable 20m, Extended I/O	X	>	< <sup>(1)</sup>			x		X			х	_	X		x <sup>(1)</sup>	X <sup>(1)</sup>				х	_		х	x <sup>(1)</sup>	
		M12 5 pin female 0', solder terminal	S S			Х		X	<u> </u>		x	Х		X		X				x			х	X			X
		M12 8 pin female 0', solder terminal	hect	X			x							-	X				х		<						
		M12 5 pin male 0', solder terminal	L I		X			X				>	_	+		X							-+-	X			
P		M12 8 pin male 0', solder terminal		_	X			X					X		X		X	х			_	x			Х	X	
2-		M12 female 5 pin springcon for Ø4-8 cable M12 female 8 pin, screw, for Ø4-8 cable	N N	v		X	x	X			Х	X		X	x	X			x	X			x	X			X
1		M12 male 5 pin springcon for Ø4-8 cable	× iel	*	X			X				)		+		x			X				-+	X			
		M12 male 8 pin, screw, for Ø4-8 cable	5	_	X			X					x	+	x	^		x				x		^	х	v	
		IP67 protection cap for M12 for female connector			x x			x x		x x			X		x	Y		x	_			x	-	¥	x		<u> </u>
8		IP67 protection cap for M12 for male connector	SI I	x	A A	Y	X	× × ×	X		х	x	_	x	X	^ X	^	~	x	X	x		х	x	~	^	Y
		RS232 M12 5 pin male for MAC00-R4.	ario	~	Y	~	~	X	^ 		~			~		~											~
		RS232 M12 8 pin male 5m for FC4,FD4,FP4,B4			X			~		x			x		x							x					
		RS485 M12 8 pin male 5m			x																		i			х	
		RS485 M12 5 pin male 5m			X																		i	x			
		M12 cable, 5m, 5 pin female CANopen/DeviceNet	t X									х											Î	х			
		M12 cable, 15m, 5 pin female CANopen/DeviceNet	X									х											- i	x			
-		M12 cable, 5m, 5 pin male CANopen/DeviceNet	N Ze									)											i				
	WI1006-M12M5S15R	M12 cable, 15m, 5 pin male CANopen/DeviceNet	Nope									>															
1	WI1008-M12M5STR4	M12 5 pin male terminating resistor CANopen/DeviceNet	3									>									Qui	ckStep					
	WI1028-M12F5VG1	M12 connector profi 5 pin female, screw, B-coded	x						х											M		order no	. ↓				
199	WI1028-M12M5VG1	M12 connector profi 5 pin male, screw, B-coded	X							х										MI	S23x/	1M2N0	75 <sup>(3)</sup>			х	х
2	WI1026-M12F5S05R	M12 cable 5m, 5 p. female B coded profibus	su x						х											М	IS23x	A1M3N	075	x		х	х
	WI1026-M12F5S15R	M12 cable 15m. 5 p. female B coded profibus	ofib X						x											MI	S23x/	1M4N0	75 <sup>(3)</sup>		х	х	х
	WI1026-M12M5S05R	M12 cable 5m. 5 pin male B coded profibus	<del>ک</del> ×							х										М	IS23x	A1M5N	075	х	х	х	х
1	WI1026-M12M5S15R	M12 cable 15m. 5 pin male B coded profibus	x							х										М	IS23x	A1M6N	075	х	х	х	х
	WI1028-M12M4STR3	M12 4 pin male B code terminating Resistor Profi								х	T									М	IS23x	A1M7N	075	x	x	х	x

M5 = 5-pole male connector, F5 = 5-pole female connector. M8 = 8-pole male connector, F8 = 8-pole female connector. All standard cables use foil shield and are not twisted pair. It is not recommended for bending applications Note 1: Standard cable can be used for RS485, CANopen and DeviceNet but only in low noise environments for point-to-point or small networks. We strongly recommend twisted pair and double shielded cable. Shield should be connected to connector housing. Note 2: For very noisy environments it is recommended to use double shielded power cable and shielded connector.

Note 3: Only for orders > 50 pcs. Note 4: Can also be delivered without shield connected to connector housing. Order A-type. eg. WI1000-M12F8A20N See also user manual for each module type for detailed cable information.

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## Product Data



M12 connectors

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## Color code for DeviceNet cables

Pin no.	Description	Color					
1	Drain	Colorless					
2	V+	Red					
3	V-/CAN_GND	Black					
4	CAN_H	White					
5	CAN_L	Blue					

## Color code for CANopen cables

Pin no.	Description	Color
3	CAN_GND	Black
4	CAN_H	White
5	CAN_L	Blue

5-pole connector							
Pin no.	Color						
1	Brown						
2	White						
3	Blue						
4	Black						
5	Grey						

Color code for standard cables

### 8-pole connector

Pin no.	Color
1	White
2	Brown
3	Green
4	Yellow
5	Grey
6	Pink
7	Blue
8	Red

### Color code for ProfiBus cables

Pin no.	Description	Color
1		
2	А	Green
3		
4	В	Red
5	Shield	Shield

### Recommended cable for making your own cables:

4-lead RS485 cable with double shield. Order no.: WH0039-N2x2x0.3+2xSC	20 martine and
2-lead CANopen cable. Order no.: WH0038-N2x0.75-CAN	
2-lead Profibus cable Order no.: WH0040-2Nx0.34-PROFI	



JVL Industri Elektronik A/S Blokken 42 DK-3460 Birkerød, Denmark Tel: +45 4582 4440 Fax: +45 4582 5550 E-mail: jvl@jvl.dk www.jvl.dk