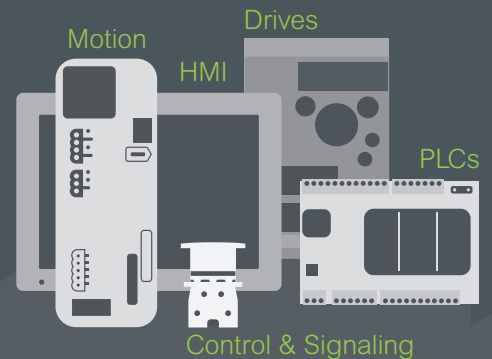




Introducing the **Easy Series**

Essential automation & control products

When just enough is just right!



Easy Lexium 16

Easy Lexium 16 Servo drives & BCH16 Servo motors

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Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

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Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

Specially designed for simple machines

A user-oriented range of products

Easy Lexium 16 servo drive and BCH16 servo motor combinations are specially designed for easy integration & commissioning in your machine. They provide the right level of performance for the majority of simple motion control machines.

Fit for purpose

- Easy Lexium 16 servo drives have 6 digital inputs and 3 digital outputs as standard.
- The servo drives incorporate auto-tuning and position control.

Easy throughout the whole life cycle

- Easy to select and order thanks to the “just enough” number of references
- Easy to mount and wire up
- Easy to set up and commission thanks to SoMove software
- Easy to tune due to easy, comfortable and auto-adaptive tuning function
- Easy to connect to our range of Easy Modicon M200 and Easy Modicon M100 logic controllers

Robustness

- Motor shafts have degree of protection IP 65 as standard
- The motors can operate in temperatures from 0 to 40 °C/ 32 to 104 °F
- The drive printed circuit boards are coated for enhanced robustness in polluted environments

Widely available everywhere

- Fast delivery through a large distribution network
- Fast access to information and support through the Partner Relationship Management tool and a dedicated network of engineers

Easy Lexium 16 range

The Easy Lexium™ 16 range is defined by AC-servo drives for combination with AC-servo motors according to customer's application.

- The Easy Lexium 16 range offers predefined combinations to suit the requirements of motion control applications and optimize the installation's performance.
 - The combinations of servo motors with servo drives are based on the power class: both the servo motor and servo drive have the same power class (1).
 - The combination of each servo drive with its related servo motor is designed to cover a nominal power range from 0.1 kW (0.3 hp) up to 1.5 kW (2.01 hp) with 200..230 V mains supply voltage (1).
- BCH16 motors provide a nominal torque from 0.16 Nm to 28.6 Nm and a nominal speed from 1,000 to 3,000 rpm, depending on the model. They are suitable for a wide variety of applications due to the different levels of motor inertia offered.
- The Easy Lexium 16 servo drives have degree of protection IP 20.

Applications

Simple machines with Position Control Applications (Low or high speed speed positioning, simple movement, P2P applications)

Segments	Textile	Electronic	Packaging	Pharmaceutical
Typical applications	<ul style="list-style-type: none"> - Leather cutting - Printing - Sewing 	<ul style="list-style-type: none"> - Robot arm - Conveyor - Pick & Place 	<ul style="list-style-type: none"> - Labeling - Folding - Sealing - Strapping 	<ul style="list-style-type: none"> - Sorting - Warehouse

Configuration software

The drives can be configured using the SoMove setup software via their integrated HMI interface (USB mini-B).

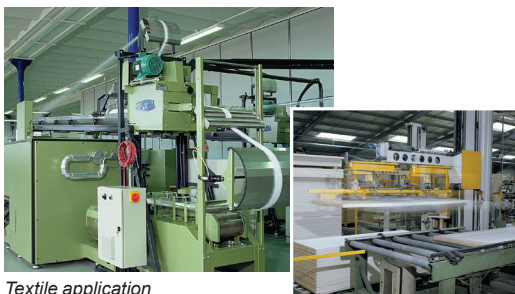
SoMove software is used

- for commissioning, parameter setting, diagnostics and maintenance
- for fast device replacement in existing machine installations
- for configuring and optimizing control loops in automatic or manual mode using the Oscilloscope function.

Mounting and maintenance

Connecting the servo drives is simplified by identified plug-in connectors, which are easily accessed on the front panel of the drive (see Description).

(1) See table of combinations page 4.



Textile application



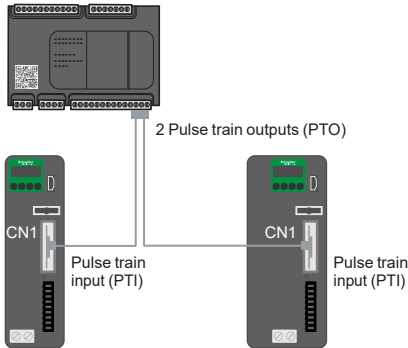
Material handling application



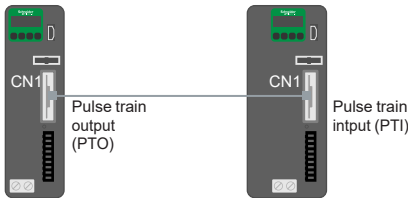
Packaging application



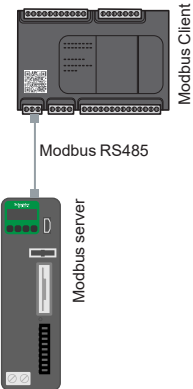
Pharmaceutical application



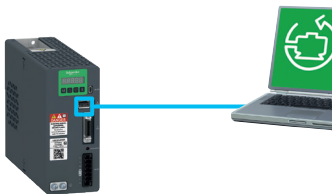
Easy Lexium 16 servo drives controlled by Easy Modicon M200 logic controller via the PTI/PTO interfaces



Easy Lexium 16 drive controlling another Easy Lexium 16 drive, via the CN1 interfaces



Easy Lexium 16 servo drives controlled by Easy Modicon M200 logic controller using the standard Modbus RTU protocol, via the CN4 interface



Configuration with SoMove setup software, via the CN3 interface



DIA3ED2140906EN

Functions

Easy Lexium 16 servo drives feature numerous functions enabling them to be used in a wide range of motion control applications.

Drive functions

Drive functions activated by the commissioning software or directly by the HMI interface

- Jog mode: Velocity movement
- “Easy tuning” one-button tuning mode: this function is used to optimize application performance.
- “Auto-adaptive tuning” with this function the drive could calculate inertia ratio automatically and adjust system performance with selected stiffness.
- “Comfort tuning” with predefined settings for different mechanical systems such as spindle axes (e.g. portal axes), transportation belts, vertical axes (e.g. cantilever axes)

Control via I/O interface

The Easy Lexium 16 servo drive is controlled with digital signals, accessible via the “CN1 IO” interface:

- 6 digital inputs
- 3 digital outputs

Operating modes

Via the PTI/PTO interfaces (CN1 connector)

- Without any fieldbus, Easy Lexium 16 servo drives can be managed by a machine controller, Easy Modicon M200 logic controller (1): 2 pulse-train-outputs (PTO) interface to the CN1 PTI interface on each servo drives
- Without the use of a machine controller, an Easy Lexium 16 servo drive can control another Easy Lexium 16 via the CN1 PTO/PTI interface located on front face of each servo drives. It means the primary Easy Lexium 16 gives out pulse train from its PTO (CN1) then connect those pulse train to the secondary Easy Lexium 16 via its PTI interface (CN1).

■ Control via internal Dynamic PLC (DYC mode)
 The Easy Lexium 16 servo drive is controlled with internal Dynamic PLC. User may program their own motion profiles and logics using integrated position / velocity commands, device position / velocity / current status, DI / DO / timer / internal variables and other elements.
 By this powerful operating mode Easy Lexium 16 can fulfil complex motion tasks without the use of a motion controller.

Via Modbus RTU

The LXM16 servo drives can communicate with the PLC through a RS485 cable by using the standard Modbus RTU protocol.
 The interface for RS485 is RJ45 connector.

- Parameters for RS485 communication setup:
 - RS485 transmission baud rate: 9600 / 19200 / 38400
 - Modbus Server address: 1...31
 - Modbus frame format: <8, N, 1> / <8, E, 1> / <8, O, 1> / <8, N, 2>
- The LXM16 servo drives with RS485 option supports 3 function codes:
 - FC 03 (0x03) – Read holding register
 - FC 16 (0x10) – Write multiple registers
 - FC 23 (0x17) – Read / Write multiple registers

If a request with an unknown function code is received, an error message is returned.

The maximum Servers can be connected to a Client is 32. This varies with respect to the type of Client, quality of cables, using twisted pair cable or not, grounding and EMC condition, etc.

Configuration tool

SoMove setup software is used on Easy Lexium 16 servo drives in the same way as it is on other Schneider Electric drives and starters, to configure, adjust, debug, and maintain the drive.

- A configuration can be transferred from a PC to the Easy Lexium 16 servo drive via the CN3 interface (USB mini-B).
- SoMove setup software can be downloaded from our [website](http://www.schneider-electric.com)

(1) Please consult our catalog re.f DIA3ED2140906EN

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

Easy Lexium 16 servo drives

Easy Lexium 16 servo drive and BCH16 motor combination

Output power	Servo drive reference	Servo motor reference	Encoder type	With holding brake	Inertia	Nominal torque	Max peak torque	Flange size	Shaft Ø	Nominal speed of rotation	Max speed of rotation	
kW/hp					kg.cm ²	N.m	N.m	mm (in.)	mm (in.)	min ⁻¹	min ⁻¹	
Single-phase supply voltage: 200/230 VAC												
0.1/0.13	LXM16DU01M2X LXM16MU01M2X	BCH16LB01330A5C2	2500 ppr	No	0.041	0.32	0.95	40	8	3000	5000	
		BCH16LB01330F5C2	2500 ppr	Yes	0.047			(1.58)	(0.31)			
		BCH16LB01332A5C2	23 bit	No	0.041							
		BCH16LB01332F5C2	23 bit	Yes	0.047							
0.2/0.27	LXM16DU02M2X LXM16MU02M2X	BCH16HC02330A5C2	2500 ppr	No	0.42	0.64	1.91	60	11	3000	5000	
		BCH16HC02330F5C2	2500 ppr	Yes	0.48			(2.36)	(0.43)			
		BCH16HC02332A5C2	23 bit	No	0.42							
		BCH16HC02332F5C2	23 bit	Yes	0.48							
		BCH16HD02330A5C2	2500 ppr	No	0.42	0.64	1.91	60	14	3000	5000	
		BCH16HD02330F5C2	2500 ppr	Yes	0.48			(2.36)	(0.55)			
		BCH16HD02332A5C2	23 bit	No	0.42							
		BCH16HD02332F5C2	23 bit	Yes	0.48							
0.4/0.54	LXM16DU04M2X LXM16MU04M2X	BCH16HD04330A5C2	2500 ppr	No	0.67	1.27	3.81	60	14	3000	5000	
		BCH16HD04330F5C2	2500 ppr	Yes	0.73			(2.36)	(0.55)			
		BCH16HD04332A5C2	23 bit	No	0.67							
		BCH16HD04332F5C2	23 bit	Yes	0.73							
0.75/1.01	LXM16DU07M2X LXM16MU07M2X	BCH16HF07330A5C2	2500 ppr	No	1.51	2.39	7.16	80	19	3000	5000	
		BCH16HF07330F5C2	2500 ppr	Yes	1.64			(3.15)	(0.74)			
		BCH16HF07332A5C2	23 bit	No	1.51							
		BCH16HF07332F5C2	23 bit	Yes	1.64							
1.0/1.34	LXM16DU10M2X LXM16MU10M2X	BCH16LF10330A5C2	2500 ppr	No	1.24	3.18	9.55	80	19	3000	5000	
		BCH16LF10330F5C2	2500 ppr	Yes	1.37			(3.15)	(0.74)			
		BCH16LF10332A5C2	23 bit	No	1.24							
		BCH16LF10332F5C2	23 bit	Yes	1.37							
		BCH16LH10330A6C2	2500 ppr	No	2.65	3.18	9.55	100	19	3000	5000	
		BCH16LH10330F6C2	2500 ppr	Yes	2.75			(3.94)	(0.74)			
		BCH16LH10332A6C2	23 bit	No	2.65							
		BCH16LH10332F6C2	23 bit	Yes	2.75							
		BCH16LJ10330A6C2	2500 ppr	No	2.65	3.18	9.55	100	22	3000	5000	
		BCH16LJ10330F6C2	2500 ppr	Yes	2.75			(3.94)	(0.86)			
		BCH16LJ10332A6C2	23 bit	No	2.65							
		BCH16LJ10332F6C2	23 bit	Yes	2.75							
0.85/1.14	LXM16DU15M2X LXM16MU15M2X	BCH16HM10230A6C2	2500 ppr	No	10.88	4.77	14.31	130	22	2000	3000	
		BCH16HM10230F6C2	2500 ppr	Yes	11.58			(5.12)	(0.86)			
		BCH16HM10232A6C2	23 bit	No	10.88							
		BCH16HM10232F6C2	23 bit	Yes	11.58							
1.5/2.01	LXM16DU15M2X LXM16MU15M2X	BCH16HM15230A6C2	2500 ppr	No	14.8	7.16	21.48	130	22	2000	3000	
		BCH16HM15230F6C2	2500 ppr	Yes	15.5			(5.12)	(0.86)			
		BCH16HM15232A6C2	23 bit	No	14.8							
		BCH16HM15232F6C2	23 bit	Yes	15.5							



LXM16DU01M2X
LXM16DU02M2X
LXM16DU04M2X



LXM16MU01M2X
LXM16MU02M2X
LXM16MU04M2X



LXM16DU07M2X
LXM16DU10M2X
LXM16DU15M2X

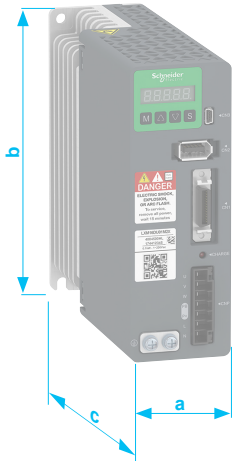


LXM16MU07M2X
LXM16MU10M2X
LXM16MU15M2X

References, dimensions, weight, description

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors



Easy Lexium 16 servo drives

To order a Easy Lexium 16 servo drive, make up the reference as follows

Easy Lexium 16 servo drive	L	X	M	1	6	•	•••	M2X	
Communication interface	I/O interface, PTI, PTO						D		
	I/O interface, PTI, PTO, Modbus						M		
Power	0.1 kW/0.13 hp							U01	
	0.2 kW/0.27 hp							U02	
	0.4 kW/0.54 hp							U04	
	0.75 kW/1.01 hp							U07	
	1 kW/1.34 hp							U10	
	1.5 kW/2.01 hp							U15	
Supply voltage	200...230 V ~								M2X

Dimensions, weight

Servo drive reference	Housing	Dimensions						Weight	
		a (width)		b (height)		c (depth)		kg	lb
		mm	in.	mm	in.	mm	in.		
LXM16DU01M2X LXM16MU01M2X LXM16DU02M2X LXM16MU02M2X LXM16DU04M2X LXM16MU04M2X	Size 1	52	2.05	150	5.9	155.2	6.11	1.000	2.20
LXM16DU07M2X LXM16MU07M2X LXM16DU10M2X LXM16MU10M2X LXM16DU15M2X LXM16MU15M2X	Size 2	65	2.56	150	5.9	185.2	7.29	1.500	3.31

Description

On the drive front:

- HMI interface, 7-segment display, 4 buttons (mode, value up, value down, set)
- USB mini-B connector for commissioning the servo drives (marked CN3)
- Connector for motor encoder (marked CN2)
- IO interface (PTI/PTO interface) (marked CN1)
- Charge indicator LED
- Connector for power (marked CNP) (1)
- Protected earth connector (marked ⊕)

On the drive side

- Heatsink on servo drive size 1
- Heatsink and fan + fan cover on servo drive size 2

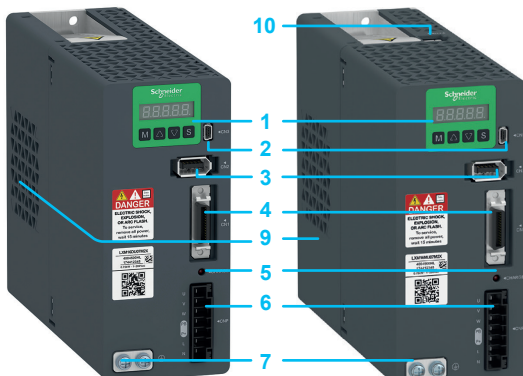
On the drive top

- RJ45 connector for Modbus RS485 (marked CN4)



LXM16DU01M2X
LXM16DU02M2X
LXM16DU04M2X

LXM16MU01M2X
LXM16MU02M2X
LXM16MU04M2X



LXM16DU07M2X
LXM16DU10M2X
LXM16DU15M2X






LXM16MU07M2X
LXM16MU10M2X
LXM16MU15M2X

(1) Removable spring terminals are supplied with each Easy Lexium 16 servo drive.

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

Connection accessories

Connection accessories					
Designation	Description	For use with	Reference	Weight kg/lb	
Connectors					
 VW3M4A11	SCSI-26 connector for creating control cordsets (CN1)	1 x SCSI-26 connector 1 x shielded chassis 1 x connector housing 2 x screw for fix to connection port 2x screw for connector housing	LXM16DU●●● LXM16MU●●●	VW3M4A11 0.100/ 0.220	
	Connector for connection of power supply, external braking resistor and motor power output (CNP)	1 x connector	LXM16DU●●● LXM16MU●●●	VW3M4A21 0.100/ 0.220	
	10-pin connector for creating encoder cordsets (CN2) For cable cross-section : 2*0.5 mm ² + 3x2x0.2 mm ²	1 x IEEE1394 10-pin connector 1 x shielded chassis 1 x connector housing 2 x spring clamp for fix to connection port	LXM16DU●●● LXM16MU●●●	VW3M4A31 0.100/ 0.220	
Control cordsets					
 VW3M4A31	Pre-assembled control cordsets dedicated to 24VDC pulse train with interface module (CN1)	1 x pre-assembled control cordsets (Length: 1 m/3.28 ft.) 1 x interface module	LXM16DU●●● LXM16MU●●●	VW3M4A12 0.350/ 0.77	
	Pre-assembled control cordsets dedicated to 3.3 VDC pulse train with interface module (CN1)	1 x pre-assembled control cordsets (Length: 1 m/3.28 ft.) 1 x interface module	LXM16DU●●● LXM16MU●●●	VW3M4A15 0.350/ 0.77	
 VW3M4A12 VW3M4A15	Power cordset kit Power cordset shield connection plate	1 x grounding chassis 1 x spring clamp connector	LXM16DU●●● LXM16MU●●●	VW3M2A31 0.200/ 0.44	
	Programming cables				
 TCSXCNAMUM3P BMXXCAUSBH018	Designation	Description	Length m/ft	Reference	
	Programming cables	Transferring a configuration from a PC to the Easy Lexium 16 servo drive via the CN3 interface (USB mini-B) on Easy Lexium 16 servo drives	3 m/ 9.84 ft 1.8 m/ 5.90 ft	TCSXCNAMUM3P (1) BMXXCAUSBH018	0.065/ 0.143 0.065/ 0.143
Modbus TCP network cordsets					
 490NTW000●●● 490NTC000●●● 490NTW000●●●U	Description	Type of port	Length m/ft (2)	Reference	
	Straight shielded twisted pair cordsets (conforming to EIA/TIA-568, category 5 and IEC1180/EN50173, class D standards)	2 RJ45 connectors	2/ 6.56	490NTW00002	–
			5/ 16.40	490NTW00005	–
			12/ 39.37	490NTW00012	–
	Crossed shielded twisted pair cordsets	2 RJ45 connectors	5/ 16.40	490NTC00005	–
			15/ 49.21	490NTC00015	–
	Straight shielded twisted pair cordsets (conforming to UL and CSA 22.1 standards)	2 RJ45 connectors	2/ 6.56	490NTW00002U	–
			5/ 16.40	490NTW00005U	–
			15/ 49.21	490NTW00012U	–
	Crossed shielded twisted pair cordsets	2 RJ45 connectors	5/ 16.40	490NTC00005U	–

(1) Unshielded, non-grounded cable. Only for use on temporary connections. For permanent connections, use cable reference BMXXCAUSBH018.
 (2) Also available in 40 and 80 m/131 and 262 ft lengths.

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

External braking resistors

External braking resistor

Applications

- > Machines with high inertia, driving loads, and machines with fast cycles.
- > When the servo motor has to be braked frequently, an external braking resistor is required to dissipate the excess braking energy.
- > Several external braking resistors can be connected in parallel. The servo drive monitors the power dissipated in the braking resistor.
- > The degree of protection of the casing is IP 65 for VW3A7602R●● to VW3A7608R●● braking resistors.
- > The operating temperature around the unit can be between 0 and + 50°C/+ 32 and + 122 °F.

References

For use with Servo drives	Ohmic value Ω	Continuous power PPr W	Peak energy EPk				Length of connection cable m/ ft	Reference	Weight kg/ lb	
			115 V Ws	230 V Ws	400 V Ws	480 V Ws				
LXM16DU07M2X LXM16MU07M2X	27	100	4,200	3,800	1,900	1,900	0.75/ 2.46	VW3A7602R07	0.630/ 1.389	
LXM16DU10M2X LXM16MU10M2X							2/ 6.56		VW3A7602R20	0.780/ 1.720
LXM16DU15M2X LXM16MU15M2X	200	200	9,700	7,400	4,900	4,300	0.75/ 2.46	VW3A7603R07	0.930/ 2.050	
							3/ 9.84		VW3A7603R30	1.200/ 2.646
							400		25,500	18,100
	72	100	5,500	3,700	2,500	2,300	2/ 6.56	VW3A7605R07	1.470/ 3.241	
							3/ 9.84		VW3A7605R30	0.850/ 1.874
							200		14,600	9,600
LXM16DU04M2X LXM16MU04M2X	200	200	14,600	9,600	6,600	6,000	2/ 6.56	VW3A7606R20	1.080/ 2.381	
LXM16DU07M2X LXM16MU07M2X							3/ 9.84		VW3A7606R30	1.200/ 2.646
LXM16DU10M2X LXM16MU10M2X							400		36,600	24,700
LXM16DU15M2X LXM16MU15M2X	100	100	4,400	4,400	2,900	2,900	2/ 6.56	VW3A7607R20	1.470/ 3.241	
							3/ 9.84		VW3A7607R30	1.620/ 3.571
							0.75/ 2.46		VW3A7608R07	0.410/ 0.904
	100	100	4,400	4,400	2,900	2,900	3/ 9.84	VW3A7608R30	0.760/ 1.676	

Note: The total continuous power dissipated in the external braking resistor(s) must be less than or equal to the nominal power of the Lexium 16 servo drive.

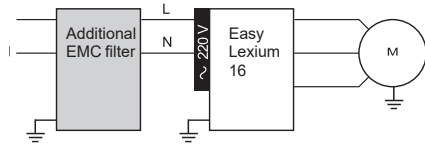


VW3A760●R●●

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

Additional EMC input filters



Easy Lexium 16 servo drive with additional EMC filter

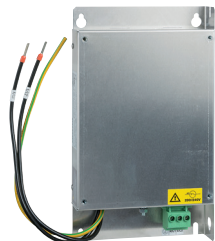
Additional EMC input filters

Applications

- > Easy Lexium 16 servo drives require external input filters to comply with the EMC standard for variable speed electrical power drive “products” IEC/EN 61800-3, edition 2, category C3 in environment 2, and to comply with the European directive on EMC (electromagnetic compatibility).
- > Additional EMC filters are mounted next to the device. They have tapped holes for mounting in an enclosure.
- > The maximum servo motor cable length conforming to IEC/EN 61800-3 category C3 (1) in environment 2 is 25 m/82.02 ft.
- > Use according to the type of line supply
- > Integrated or additional EMC filters can only be used on TN (neutral connection) or TT (neutral to ground) systems.
- > Easy Lexium 16 servo drives cannot be used on IT (impedance grounded or isolated neutral) systems. Standard IEC/EN 61800-3, appendix D2.1, states that on IT systems, filters can cause permanent insulation monitors to operate in a random manner.
- > If a machine has to be installed on an IT system, an isolation transformer must be inserted in order to recreate a TT system on the secondary side.

References

For servo drive	Maximum servo motor shielded cable length conforming to EN 55011 class A Gr2 IEC/EN 61800-3 category C3 (1) in environment 2 Switching frequency 8 kHz m/ft	Reference	Weight kg/ lb
Single-phase supply voltage			
LXM16DU01M2X LXM16MU01M2X	25 / 82	VW3A4420	0.600/ 1.323
LXM16DU02M2X LXM16MU02M2X			
LXM16DU04M2X LXM16MU04M2X			
LXM16DU07M2X LXM16MU07M2X	25 / 82	VW3A4421	0.775/ 1.709
LXM16DU10M2X LXM16MU10M2X			
LXM16DU15M2X LXM16MU15M2X			



VW3A4420
VW3A4421

(1) Standard IEC/EN 61800-3: EMC immunity and conducted and radiated EMC emissions: Category C3 in environment 2: industrial premises.

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

Motor starters, Protection using class J fuses (UL certification)



Motor starters

Applications

The combinations listed below can be used to create a complete motor starter unit comprising a circuit-breaker, a contactor and a Easy Lexium 16 servo drive.

- The circuit-breaker provides protection against accidental short-circuits, disconnection and, if necessary, isolation.
 - The contactor activates and manages any safety functions, as well as isolating the servo motor on stopping.
- The servo drive controls the servo motor, provides protection against short-circuits between the servo drive and the servo motor and protects the motor cable against overloads. Overload protection is provided by the servo drive's motor thermal protection.

Combinations

Servo drive			Circuit-breaker		Contactor
Reference	Nominal power (kW/hp)	Mains number of phases	Reference	Rating (A)	Reference (1) (2)
Circuit-breakers for single drive installation according to IEC 60364-5-52					
Mains supply voltage: 200...230 V ~ 50/60Hz					
LXM16DU01M2X LXM16MU01M2X	0.1/0.13	1 phase	GV2P14	10A	LC1K0610●●
LXM16DU02M2X LXM16MU02M2X	0.2/0.27	1 phase	GV2P14	10A	LC1K0610●●
LXM16DU04M2X LXM16MU04M2X	0.4/0.54	1 phase	GV2P14	10A	LC1K09●●
LXM16DU07M2X LXM16MU07M2X	0.75/1.01	1 phase	GV2P14	10A	LC1K09●●
LXM16DU10M2X LXM16MU10M2X	1.0/1.34	1 phase	GV2P14	10A	LC1K12●●
LXM16DU15M2X LXM16MU15M2X	1.5/2.01	1 phase	GV2P16	14A	LC1D18●●

(1) Composition of the contactors:

LC1K0610●●: 3 poles + 1 N/O auxiliary contact

LC1K09●●, LC1K12●●: 4 poles

LC1D18●●: 3 poles + 1 N/O auxiliary contact + 1 N/C auxiliary contact

Please refer to [CONTACTORS AND PROTECTION RELAYS](#) page on our web site.

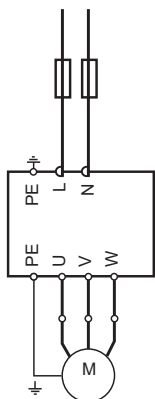
(2) Replace ●● with the control circuit voltage code given in the table below:

	Volts ~	220	230	240
LC1K	50/60 Hz	M7	P7	U7
	Volts ~	220/230	230	230/240
LC1D	50 Hz	M5	P5	U5
	60 Hz	M6	-	U6
	50/60 Hz	M7	P7	U7

For other available voltages between 24 V and 660 V, or a DC control circuit, please contact our Customer Care Center.

Protection using class J fuses (UL certification)

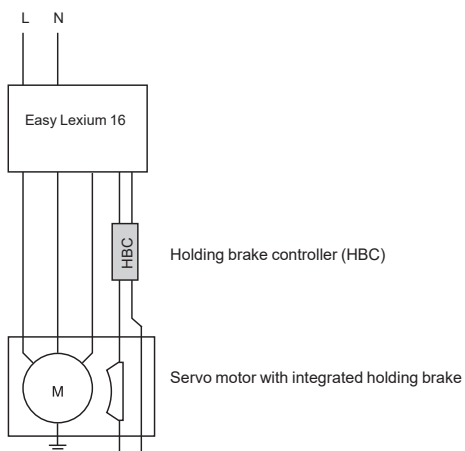
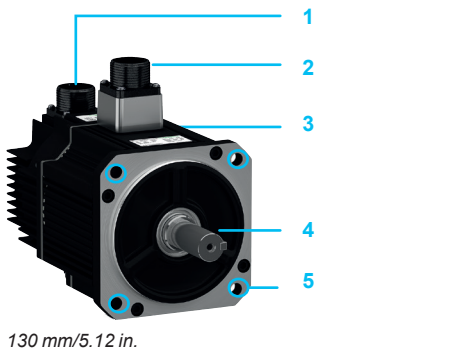
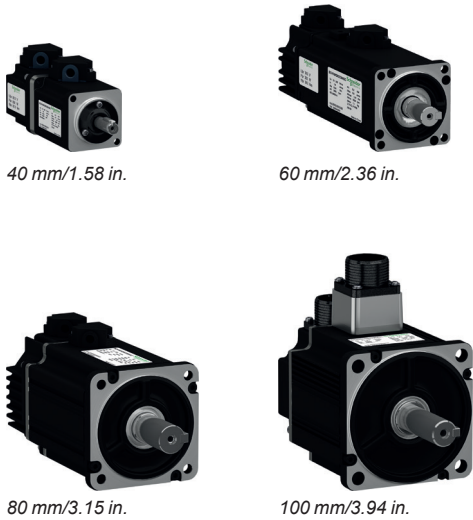
Servo drive		Fuse to be placed upstream (A)
Reference	Nominal power (kW/hp)	
Mains supply voltage: 200...230 V ~ 50/60Hz		
LXM16DU01M2X LXM16MU01M2X	0.1/0.13	5
LXM16DU02M2X LXM16MU02M2X	0.2/0.27	5
LXM16DU04M2X LXM16MU04M2X	0.4/0.54	20
LXM16DU07M2X LXM16MU07M2X	0.75/1.01	20
LXM16DU10M2X LXM16MU10M2X	1.0/1.34	25
LXM16DU15M2X LXM16MU15M2X	1.5/2.01	40



Easy LXM16 servo drive,
BCH16 servo motor with fuse protection

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors



VW3M3103

BCH16 servo motors

Presentation

BCH16 motors are synchronous AC servo motors,

- equipped with a 2500 ppr incremental encoder or a 23 bit high resolution encoder (depending on model)
- Available in seven flange sizes and shaft diameters, some with two shaft diameters:
 - 40 mm (1.58 in.) – shaft diameter 8 mm (0.31 in.)
 - 60 mm (2.36 in.) – shaft diameter 11 mm (0.43 in.) or 14 mm (0.55 in.)
 - 80 mm (3.15 in.) – shaft diameter 19 mm (0.74 in.)
 - 100 mm (3.94 in.) – shaft diameter 19 mm (0.74 in.) or 22 mm (0.86 in.)
 - 130 mm (5.12 in.) – shaft diameter 22 mm (0.86 in.)
- available with or without holding brake (depending on model)
- available with low or high motor inertia

Depending on flange size, the BCH16 motors are supplied:

- with flying leads and terminal connectors
- with MIL connectors

Description

BCH16 servo motors, with a 3-phase stator and a rotor with rare earth permanent magnets, consist of:

- 1 Encoder connector (depending on model)
- 2 Power connector (depending on model)
- 3 Casing with RAL 9005 opaque black paint coating
- 4 A keyed shaft end with oil seal
- 5 4-point axial mounting flange (flange is mechanically compatible with Asian style servo motors)

Cables and connectors to be ordered separately, for connection to Easy Lexium 16 servo drives. Schneider Electric has taken particular care over the compatibility of BCH16 servo motors and Easy Lexium 16 servo drives. This compatibility is only possible when using cables and connectors sold by Schneider Electric (see pages 12 and 13).

Holding brake controller

BCH16 servo motors can be equipped with an electromagnetic holding brake.

⚠ Do not use the holding brake as a dynamic brake for deceleration, as this will quickly damage the brake.

If a servo motor has a holding brake, it is necessary to provide an appropriate control logic (HBC, Holding Brake Controller), which releases the brake when power is supplied to the servo motor and immobilizes the servo motor shaft when it is stationary.

The holding brake controller amplifies the braking control signal (Digital output) transmitted by the Easy Lexium 16 servo drive, so that the brake is deactivated quickly. It then reduces this control signal so as to decrease the power dissipated by the holding brake.

References

Designation	Description	Reference	Weight kg/ lb
Holding brake controller	24 V $\overline{\text{---}}$ power supply Max. power 0.05 kW/0.07 hp IP 20, For mounting on 55 mm/2.17 in. \perp rail	VW3M3103	0.600/ 1.323

Integrated encoder

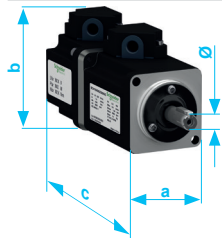
BCH16 servo motors are equipped with a 2500 ppr encoder or a 23 bit high resolution encoder (depending on model) which measures the servo motor speed via associated Easy Lexium 16 servo drive. This information is used by the servo drive's position and speed controller.

Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

BCH16 servo motors														
To order a BCH16 servo motor, make up the reference as follows:														
Brushless servo motor	B	C	H	16	•	•	••	•	•	•	•	C	2	
Inertia	Low inertia				L									
	High inertia				H									
Flange size	40 mm (1.58 in.) – Shaft diameter 8 mm (0.31 in.)				B									
	60 mm (2.36 in.) – Shaft diameter 11 mm (0.43 in.)				C									
	60 mm (2.36 in.) – Shaft diameter 14 mm (0.55 in.)				D									
	80 mm (3.15 in.) – Shaft diameter 19 mm (0.74 in.)				F									
	100 mm (3.94 in.) – Shaft diameter 19 mm (0.74 in.)				H									
	100 mm (3.94 in.) – Shaft diameter 22 mm (0.86 in.)				J									
	130 mm (5.12 in.) – Shaft diameter 22 mm (0.86 in.)				M									
Rated output	100 W (0.13 hp)						01							
	200 W (0.16 hp)						02							
	400 W (0.53 hp)						04							
	750 W (1.00 hp)						07							
	850 W (1.13 hp)						08							
	1 kW (1.34 hp)						10							
	1.5 kW (2.01 hp)						15							
Power supply ~ 220 V Winding type	1000/1500 rpm							1						
	2000 rpm							2						
	3000 rpm							3						
Shaft end	Keyed shaft (shaft & housing IP 65)								3					
Encoder	2500 ppr incremental encoder									0				
	23 bit high resolution encoder									2				
Holding brake	Without brake										A			
	With brake (option)										F			
Connections	Free leads with connectors with BCH16•B, BCH16•C, BCH16•D, BCH16•F motors											5		
	MIL connectors with BCH16•H, BCH16•J, BCH16•M, motors												6	
Mechanical motor design	Motor compatible with Asian style mounting standards												C	
Hardware version	RS02													2

Dimensions (overall) **Weight**



Servo motor	Power output W	Equipment	Ø (shaft)		a (flange)		b (height)		c (depth)		Weight	
			mm	in.	mm	in.	mm	in.	mm	in.	kg	lb
BCH16LB01330A5C2, BCH16LB01332A5C2	100	without brake	8	0.31	40	1.58	55	2.16	98.2	3.86	0.480	1.06
BCH16LB01330F5C2	100	with brake	8	0.31	40	1.58	55	2.16	131.3	5.17	0.700	1.54
BCH16LB01332F5C2	100	with brake	8	0.31	40	1.58	55	2.16	134.3	5.28	0.700	1.54
BCH16HC02330A5C2, BCH16HC02332A5C2	200	without brake	11	0.43	60	2.36	73	2.87	106.5	4.19	1.100	2.42
BCH16HC02330F5C2, BCH16HC02332F5C2	200	with brake	11	0.43	60	2.36	73	2.87	145	5.70	1.500	3.31
BCH16HD02330A5C2, BCH16HD02332A5C2	200	without brake	11	0.43	60	2.36	73	2.87	106.5	4.19	1.100	2.42
BCH16HD02330F5C2, BCH16HD02332F5C2	200	with brake	14	0.55	60	2.36	73	2.87	145	5.70	1.500	3.31
BCH16HD04330A5C2, BCH16HD04332A5C2	400	without brake	14	0.55	60	2.36	73	2.87	128.5	5.05	1.530	3.37
BCH16HD04330F5C2, BCH16HD04332F5C2	400	with brake	14	0.55	60	2.36	73	2.87	167	6.57	2.030	4.47
BCH16HF07330A5C2, BCH16HF07332A5C2	750	without brake	19	0.74	80	3.15	93	3.66	137	5.39	2.700	5.95
BCH16HF07330F5C2, BCH16HF07332F5C2	750	with brake	19	0.74	80	3.15	93	3.66	175.3	6.90	4.100	9.04
BCH16LF10330A5C2, BCH16LF10332A5C2	1000	without brake	19	0.74	80	3.15	93	3.66	142.2	5.60	3.050	6.72
BCH16LF10330F5C2, BCH16LF10332F5C2	1000	with brake	19	0.74	80	3.15	93	3.66	180.5	7.11	3.800	8.37
BCH16LH10330A6C2, BCH16LH10332A6C2	1000	without brake	19	0.74	100	3.94	153.4	6.04	139	5.47	3.800	8.38
BCH16LH10330F6C2, BCH16LH10332F6C2	1000	with brake	19	0.74	100	3.94	153.4	6.04	179.5	7.06	4.700	10.36
BCH16LJ10330A6C2, BCH16LJ10332A6C2	1000	without brake	22	0.86	100	3.94	153.4	6.04	139	5.47	3.800	8.38
BCH16LJ10330F6C2, BCH16LJ10332F6C2	1000	with brake	22	0.86	100	3.94	153.4	6.04	179.5	7.06	4.700	10.36
BCH16HM10230A6C2, BCH16HM10232A6C2	1000	without brake	22	0.86	130	5.12	144.5	5.69	144.3	5.68	5.700	12.56
BCH16HM10230F6C2, BCH16HM10232F6C2	1000	with brake	22	0.86	130	5.12	144.5	5.69	186.9	7.36	7.300	16.09
BCH16HM08130A6C2, BCH16HM08132A6C2	850	without brake	22	0.86	130	5.12	144.5	5.69	154.3	6.07	6.500	14.33
BCH16HM08130F6C2, BCH16HM08132F6C2	850	with brake	22	0.86	130	5.12	144.5	5.69	196.9	7.75	8.100	17.86
BCH16HM15230A6C2, BCH16HM15232A6C2	1500	without brake	22	0.86	130	5.12	144.5	5.69	159.3	6.27	7.300	16.09
BCH16HM15230F6C2, BCH16HM15232F6C2	1500	with brake	22	0.86	130	5.12	144.5	5.69	201.9	7.95	8.900	19.62

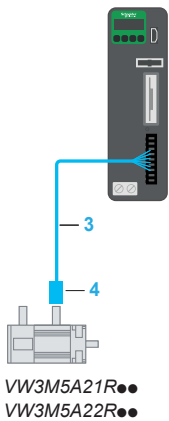
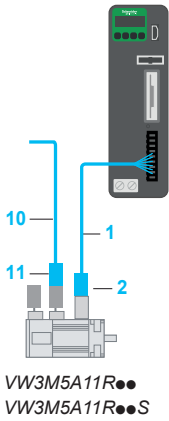
Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

Connection components: cordsets and connectors

Connection components for BCH16 servo motors

Designation	For use		For cable cross-section	Length		Reference	Weight										
	From servo drive	To servo motor		m	ft		kg/	lb									
Unshielded power cordsets																	
Equipped with one plastic connector (servo motor side), and a free lead (servo drive side) (item 1)	LXM16DU01M2X	BCH16LB01330A5C2	4G0.75 mm ²	1.5	4.92	VW3M5A11RA5	0.200/	0.44									
	LXM16MU01M2X	BCH16LB01332A5C2		3	9.84	VW3M5A11R03	0.300/	0.66									
	LXM16DU02M2X	BCH16LB01330F5C2		5	16.40	VW3M5A11R05	0.450/	0.99									
	LXM16MU02M2X	BCH16LB01332F5C2		10	32.81	VW3M5A11R10	0.900/	1.98									
	LXM16DU04M2X	BCH16HC02330A5C2		15	49.21	VW3M5A11R15	1.400/	3.08									
	LXM16MU04M2X	BCH16HC02332A5C2		20	65.62	VW3M5A11R20	1.700	3.74									
	LXM16DU07M2X	BCH16HC02330F5C2		25	82.02	VW3M5A11R25	2.100/	4.62									
	LXM16MU07M2X	BCH16HC02332F5C2		BCH16HD02330A5C2	BCH16HD02332F5C2	BCH16HD04330A5C2	BCH16HD04332A5C2	BCH16HD04330F5C2	BCH16HD04332F5C2	BCH16HF07330A5C2	BCH16HF07332A5C2	BCH16HF07330F5C2	BCH16HF07332F5C2	BCH16LF10330A5C2	BCH16LF10332A5C2	BCH16LF10330F5C2	BCH16LF10332F5C2
	LXM16DU10M2X	BCH16HM08130A6C2		4G2 mm ²	1.5	4.92	VW3M5A21RA5	0.200/	0.44								
	LXM16MU10M2X	BCH16HM08132A6C2			3	9.84	VW3M5A21R03	0.350/	0.77								
	LXM16DU15M2X	BCH16LH10330A6C2			5	16.40	VW3M5A21R05	0.800/	1.76								
	LXM16MU15M2X	BCH16LH10332A6C2			10	32.81	VW3M5A21R10	1.450/	3.19								
		BCH16LJ10330A6C2			15	49.21	VW3M5A21R15	2.150/	4.73								
		BCH16LJ10332A6C2			20	65.62	VW3M5A21R20	2.700/	5.95								
		BCH16HM10230A6C2			25	82.02	VW3M5A21R25	3.300/	7.27								
		BCH16HM10232A6C2			BCH16HM15230A6C2	BCH16HM15232A6C2											
	Equipped with one MIL connector (servo motor side), and a free lead (servo drive side) (item 3)																
	Equipped with one MIL connector (servo motor side), and a free lead (servo drive side) Integrating brake control (item 3)	LXM16DU10M2X			BCH16HM08130F6C2	6G2 mm ²	1.5	4.92	VW3M5A22RA5	0.300/	0.66						
		LXM16MU10M2X			BCH16HM08132F6C2		3	9.84	VW3M5A22R03	0.500/	1.10						
		LXM16DU15M2X			BCH16LH10330F6C2		5	16.40	VW3M5A22R05	0.900/	1.98						
		LXM16MU15M2X		BCH16LH10332F6C2	10		32.81	VW3M5A22R10	1.750/	3.85							
				BCH16LJ10330F6C2	15		49.21	VW3M5A22R15	2.550/	5.62							
				BCH16LJ10332F6C2	20		65.62	VW3M5A22R20	3.300/	7.27							
				BCH16HM10230F6C2	25		82.02	VW3M5A22R25	4.000/	8.81							
		BCH16HM10232F6C2	BCH16HM15230F6C2	BCH16HM15232F6C2													
Shielded power cordsets																	
Equipped with one plastic connector (servo motor side), and a free lead (servo drive side) (item 1)		LXM16DU01M2X	BCH16LB01330A5C2	4G0.75 mm ²	1.5		4.92	VW3M5A11RA5S	0.300/	0.66							
		LXM16MU01M2X	BCH16LB01332A5C2		3		9.84	VW3M5A11R03S	0.480/	1.05							
		LXM16DU02M2X	BCH16LB01330F5C2		5		16.40	VW3M5A11R05S	0.700/	1.54							
	LXM16MU02M2X	BCH16LB01332F5C2	10		32.81	VW3M5A11R10S	1.500/	3.30									
	LXM16DU04M2X	BCH16HC02330A5C2	15		49.21	VW3M5A11R15S	2.200/	4.85									
	LXM16MU04M2X	BCH16HC02332A5C2	20		65.62	VW3M5A11R20S	2.700/	5.95									
	LXM16DU07M2X	BCH16HC02330F5C2	25		82.02	VW3M5A11R25S	3.300/	7.27									
	LXM16MU07M2X	BCH16HC02332F5C2	BCH16HD02330A5C2		BCH16HD02332F5C2	BCH16HD04330A5C2	BCH16HD04332A5C2	BCH16HD04330F5C2	BCH16HD04332F5C2	BCH16HF07330A5C2	BCH16HF07332A5C2	BCH16HF07330F5C2	BCH16HF07332F5C2	BCH16LF10330A5C2	BCH16LF10332A5C2	BCH16LF10330F5C2	BCH16LF10332F5C2
	LXM16DU10M2X	BCH16HM08130A6C2	BCH16HM08132A6C2		BCH16LH10330A6C2	BCH16LH10332A6C2	BCH16LJ10330A6C2	BCH16LJ10332A6C2	BCH16HM10230A6C2	BCH16HM10232A6C2	BCH16HM15230A6C2	BCH16HM15232A6C2					



Easy Lexium 16

Easy Lexium 16 servo drives & BCH16 servo motors

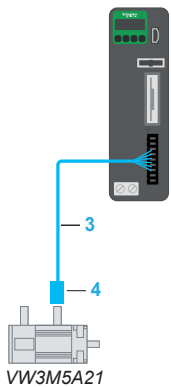
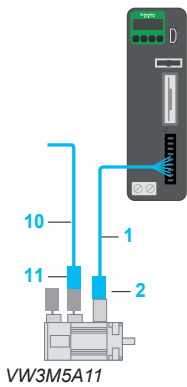
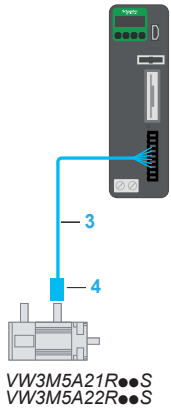
Connection components: cordsets and connectors

Connection components for BCH16 servo motors

Designation	For use		For cable cross-section	Length		Reference	Weight		
	From servo drive	To servo motor		m	ft		kg/	lb	
Shielded power cordsets									
Equipped with one MIL connector (servo motor side), and a free lead (servo drive side) (item 3)	LXM16DU10M2X	BCH16HM08130A6C2	4G2 mm ²	1.5	4.92	VW3M5A21RA5S	0.400/	0.88	
	LXM16MU10M2X	BCH16HM08132A6C2		3	9.84		VW3M5A21R03S	0.650/	1.43
	LXM16DU15M2X	BCH16LH10330A6C2		5	16.40		VW3M5A21R05S	1.150/	2.53
	LXM16MU15M2X	BCH16LH10332A6C2		10	32.81		VW3M5A21R10S	2.200/	4.85
		BCH16LJ10330A6C2		15	49.21		VW3M5A21R15S	3.300/	7.27
		BCH16LJ10332A6C2		20	65.62		VW3M5A21R20S	4.300/	9.47
		BCH16HM10230A6C2		25	82.02		VW3M5A21R25S	5.200/	11.46
		BCH16HM10232A6C2							
		BCH16HM15230A6C2							
		BCH16HM15232A6C2							
Equipped with one MIL connector (servo motor side), and a free lead (servo drive side) Integrating brake control (item 3)	LXM16DU10M2X	BCH16HM08130F6C2	6G2 mm ²	1.5	4.92	VW3M5A22RA5S	0.450/	0.99	
	LXM16MU10M2X	BCH16HM08132F6C2		3	9.84		VW3M5A22R03S	0.850/	1.87
	LXM16DU15M2X	BCH16LH10330F6C2		5	16.40		VW3M5A22R05S	1.450/	3.19
	LXM16MU15M2X	BCH16LH10332F6C2		10	32.81		VW3M5A22R10S	2.800/	6.17
		BCH16LJ10330F6C2		15	49.21		VW3M5A22R15S	4.100/	9.03
		BCH16LJ10332F6C2		20	65.62		VW3M5A22R20S	5.300/	11.68
		BCH16HM10230F6C2		25	82.02		VW3M5A22R25S	6.300/	13.88
		BCH16HM10232F6C2							
		BCH16HM15230F6C2							
		BCH16HM15232F6C2							

Motor power connectors

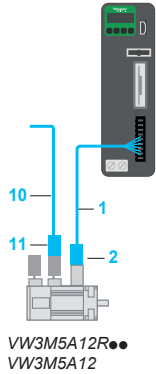
Plastic connector (item 2)	for creating power cordsets	BCH16LB01330A5C2	4G0.75 mm ²		VW3M5A11	0.150/	0.33
		BCH16LB01332A5C2					
		BCH16LB01330F5C2					
		BCH16LB01332F5C2					
		BCH16HC02330A5C2					
		BCH16HC02332A5C2					
		BCH16HC02330F5C2					
		BCH16HC02332F5C2					
		BCH16HD02330A5C2					
		BCH16HD02332A5C2					
		BCH16HD02330F5C2					
		BCH16HD02332F5C2					
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		BCH16HD04332A5C2					
		BCH16HD04330F5C2					
		BCH16HD04332F5C2					
		BCH16HF07330A5C2					
		BCH16HF07332A5C2					
		BCH16HF07330F5C2					
		BCH16HF07332F5C2					
	BCH16LF10330A5C2						
	BCH16LF10332A5C2						
	BCH16LF10330F5C2						
	BCH16LF10332F5C2						
Mil connector (item 4)	for creating power cordsets	BCH16HM08130A6C2	4G2.0 mm ²		VW3M5A21	0.300/	0.66
		BCH16HM08132A6C2					
		BCH16LH10330A6C2					
		BCH16LH10332A6C2					
		BCH16LJ10330A6C2					
		BCH16LJ10332A6C2					
		BCH16HM10230A6C2					
		BCH16HM10232A6C2					
		BCH16HM15230A6C2					
		BCH16HM15232A6C2					



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Easy Lexium 16 servo drives & BCH16 servo motors

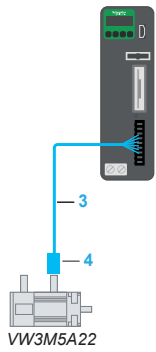
Connection components: cordsets and connectors



Connection components for BCH16 servo motors

Unshielded brake control cordsets

Designation	For use	For cable cross-section	Length		Reference	Weight		
			m	ft		kg	lb	
Equipped with one plastic connector (servo motor side), and a free lead (servo drive side) (item 10)	LXM16DU01M2X	BCH16LB01330F5C2	2x 0.5 mm ²	1.5	4.92	VW3M5A12RA5	0.100/	0.22
	LXM16MU01M2X	BCH16LB01332F5C2						
	LXM16DU02M2X	BCH16HC02330F5C2		3	9.84	VW3M5A12R03	0.200/	0.44
	LXM16MU02M2X	BCH16HC02332F5C2						
	LXM16DU04M2X	BCH16HD02330F5C2		5	16.40	VW3M5A12R05	0.300/	0.66
	LXM16MU04M2X	BCH16HD02332F5C2						
	LXM16DU07M2X	BCH16HD04330F5C2		10	32.81	VW3M5A12R10	0.400/	0.88
	LXM16MU07M2X	BCH16HD04332F5C2						
	LXM16DU10M2X	BCH16HF07330F5C2		15	49.21	VW3M5A12R15	0.650/	1.43
	LXM16MU10M2X	BCH16HF07332F5C2						
		BCH16LF10330F5C2		20	65.62	VW3M5A12R20	0.750/	1.65
		BCH16LF10332F5C2						
		25	82.02	VW3M5A12R25	0.850/	1.87		



Brake connectors

Designation	Use for	For use with	For cable cross-section	Reference	Weight	
					kg	lb
Plastic connector (item 11)	for creating brake control cordsets	BCH16LB01330F5C2	2x 0.5 mm ²	VW3M5A12	0.150/	0.33
		BCH16LB01332F5C2				
		BCH16HC02330F5C2				
		BCH16HC02332F5C2				
		BCH16HD02330F5C2				
		BCH16HD02332F5C2				
		BCH16HD04330F5C2				
		BCH16HD04332F5C2				
		BCH16HF07330F5C2				
		BCH16HF07332F5C2				
		BCH16LF10330F5C2				
		BCH16LF10332F5C2				
Mil connector (item 4)	for creating power & brake control cordsets	BCH16HM08130F6C2	6G2.0 mm ²	VW3M5A22	0.300/	0.66
		BCH16HM08132F6C2				
		BCH16LH10330F6C2				
		BCH16LH10332F6C2				
		BCH16LJ10330F6C2				
		BCH16LJ10332F6C2				
		BCH16HM10230F6C2				
		BCH16HM10232F6C2				
		BCH16HM15230F6C2				
		BCH16HM15232F6C2				

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Easy Lexium 16 servo drives & BCH16 servo motors

Connection components: cordsets and connectors

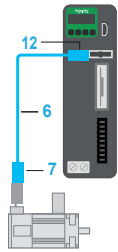
Connection components for BCH16 servo motors

Shielded encoder cordsets

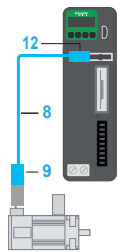
Designation	For use		For cable cross-section	Length		Reference	Weight	
	From servo drive	To servo motor		m	ft		kg	lb
Equipped with one plastic connector (item 7) (servo motor side), and VW3M4A31 connector (servo drive side) (item 12)	LXM16DU01M2X	BCH16LB01330A5C2	2x 0.5 mm ² + 3x2x 0.2 mm ²	1,5	4.92	VW3M8A11RA5	0.150/	0.33
	LXM16MU01M2X	BCH16LB01330F5C2		3	9.84	VW3M8A11R03	0.200/	0.44
	LXM16DU02M2X	BCH16HC02330A5C2		5	16.40	VW3M8A11R05	0.320/	0.71
	LXM16DU04M2X	BCH16HD02330A5C2		10	32.81	VW3M8A11R10	0.760/	1.67
	LXM16MU04M2X	BCH16HD02330F5C2		15	49.21	VW3M8A11R15	1.100/	2.42
	LXM16DU07M2X	BCH16HD04330A5C2		20	65.62	VW3M8A11R20	1.450/	3.19
	LXM16MU07M2X	BCH16HD04330F5C2		25	82.02	VW3M8A11R25	1.800/	3.96
	LXM16DU10M2X	BCH16HF07330A5C2						
	LXM16MU10M2X	BCH16HF07330F5C2						
	LXM16DU10M2X	BCH16LF10330A5C2						
LXM16MU10M2X	BCH16LF10330F5C2							
Equipped with one MIL connector (servo motor side) (item 9), and VW3M4A31 connector (item 12) (servo drive side)	LXM16DU10M2X	BCH16HM08130A6C2	2x 0.5 mm ² + 3x2x 0.2 mm ²	1,5	4.92	VW3M8A21RA5	0.180/	0.39
	LXM16MU10M2X	BCH16HM08130F6C2		3	9.84	VW3M8A21R03	0.250/	0.55
	LXM16DU15M2X	BCH16LH10330A6C2		5	16.40	VW3M8A21R05	0.380/	0.83
	LXM16MU15M2X	BCH16LH10330F6C2		10	32.81	VW3M8A21R10	0.850/	1.87
		BCH16LJ10330A6C2		15	49.21	VW3M8A21R15	1.300/	2.86
		BCH16LJ10330F6C2		20	65.62	VW3M8A21R20	1.750/	3.85
		BCH16HM10230A6C2		25	82.02	VW3M8A21R25	2.200/	4.85
		BCH16HM10230F6C2						
		BCH16HM15230A6C2						
		BCH16HM15230F6C2						
Equipped with one plastic connector (item 7) (servo motor side), and VW3M4A31 connector (item 12) (servo drive side) (item 6)	LXM16DU01M2X	BCH16LB01332A5C2	2x 0.5 mm ² + 1x2x 0.2 mm ²	1,5	4.92	VW3M8A12RA5		
	LXM16MU01M2X	BCH16LB01332F5C2		3	9.84	VW3M8A12R03		
	LXM16DU02M2X	BCH16HC02332A5C2		5	16.40	VW3M8A12R05		
	LXM16DU04M2X	BCH16HD02332A5C2		10	32.81	VW3M8A12R10		
	LXM16MU04M2X	BCH16HD02332F5C2		15	49.21	VW3M8A12R15		
	LXM16DU07M2X	BCH16HD04332A5C2		20	65.62	VW3M8A12R20		
	LXM16MU07M2X	BCH16HD04332F5C2		25	82.02	VW3M8A12R25		
	LXM16DU10M2X	BCH16HF07332A5C2						
	LXM16MU10M2X	BCH16HF07332F5C2						
	LXM16DU10M2X	BCH16LF10332A5C2						
LXM16MU10M2X	BCH16LF10332F5C2							
Equipped with one MIL connector (servo motor side) (item 9), and VW3M4A31 connector (item 12) (servo drive side) (item 8)	LXM16DU10M2X	BCH16HM08132A6C2	2x 0.5 mm ² + 1x2x 0.2 mm ²	1,5	4.92	VW3M8A22RA5		
	LXM16MU10M2X	BCH16HM08132F6C2		3	9.84	VW3M8A22R03		
	LXM16DU15M2X	BCH16LH10332A6C2		5	16.40	VW3M8A22R05		
	LXM16MU15M2X	BCH16LH10332F6C2		10	32.81	VW3M8A22R10		
		BCH16LJ10332A6C2		15	49.21	VW3M8A22R15		
		BCH16LJ10332F6C2		20	65.62	VW3M8A22R20		
		BCH16HM10232A6C2		25	82.02	VW3M8A22R25		
		BCH16HM10232F6C2						
		BCH16HM15232A6C2						
		BCH16HM15232F6C2						

Motor encoder connectors

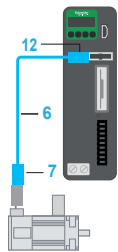
Designation	For use with	For cable cross-section	Reference	Weight	
				kg	lb
Plastic connector (item 7) for creating encoder cordsets	BCH16LB01330A5C2, BCH16LB1332A5C2	2x 0.5 mm ² + 1x2x0.2 mm ² 2x 0.5 mm ² + 3x2x0.2 mm ²	VW3M8A11	0.150/	0.33
	BCH16LB01330F5C2, BCH16LB01332F5C2				
	BCH16HC02330A5C2, BCH16HC02332A5C2				
	BCH16HC02330F5C2, BCH16HC02332F5C2				
	BCH16HD02330A5C2, BCH16HD02332A5C2				
	BCH16HD02330F5C2, BCH16HD02332F5C2				
	BCH16HD04330A5C2, BCH16HD04332A5C2				
	BCH16HD04330F5C2, BCH16HD04332F5C2				
	BCH16HF07330A5C2, BCH16HF07332A5C2				
	BCH16HF07330F5C2, BCH16HF07332F5C2				
	BCH16LF10330A5C2, BCH16LF10332A5C2				
	BCH16LF10330F5C2, BCH16LF10332F5C2				
Mil connector (item 9) for creating encoder cordsets	BCH16HM08130A6C2, BCH16HM08132A6C2	2x 0.5 mm ² + 1x2x0.2 mm ² 2x 0.5 mm ² + 3x2x0.2 mm ²	VW3M8A21	0.300/	0.66
	BCH16HM08130F6C2, BCH16HM08132F6C2				
	BCH16LH10330A6C2, BCH16LH10332A6C2				
	BCH16LH10330F6C2, BCH16LH10332F6C2				
	BCH16LJ10330A6C2, BCH16LJ10332A6C2				
	BCH16LJ10330F6C2, BCH16LJ10332F6C2				
	BCH16HM10230A6C2, BCH16HM10232A6C2				
	BCH16HM10230F6C2, BCH16HM10232F6C2				
	BCH16HM15230A6C2, BCH16HM15232A6C2				
	BCH16HM15230F6C2, BCH16HM15232F6C2				



VW3M8A11R●● (item 6)

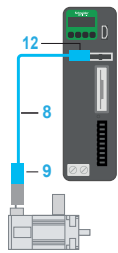


VW3M8A21R●● (item 8)



VW3M8A12R●● (item 6)

VW3M8A11 (item 7)



VW3M8A22R●● (item 8)

VW3M8A11 (item 9)

B	BCH16HF07332A5C2	4 11 12 13 15	BCH16LB01330F5C2	4 11 12 13 14 15	BCH16LJ10332F6C2	4 11 12 13 14 15	VW3A7608R30	7
BCH16HC02330A5C2							VW3M2A31	6
BCH16HC02330F5C2	BCH16HF07332F5C2	4 11 12 13 14 15	BCH16LB01332A5C2	4 11 12 13 14 15	BMXXCAUSBH018	6	VW3M4A11	6
BCH16HC02332A5C2	BCH16HM08130A6C2	4 11 12 13 15	BCH16LB01332F5C2	4 11 12 13 14 15	L		VW3M4A12	6
BCH16HC02332F5C2	BCH16HM08130F6C2	4 11 12 13 15	BCH16LF10330A5C2	4 11 12 13 14 15	LXM16DU01M2X	4	VW3M4A15	6
BCH16HD02330A5C2	BCH16HM08132A6C2	4 11 12 13 15	BCH16LF10330F5C2	4 11 12 13 14 15	LXM16MU01M2X	5 8 9 12 14 15	VW3M4A21	6
BCH16HD02330F5C2	BCH16HM08132F6C2	4 11 12 13 15	BCH16LF10332A5C2	4 11 12 13 14 15	LXM16DU02M2X	4	VW3M4A31	6
BCH16HD02332A5C2	BCH16HM10230A6C2	4 11 12 13 15	BCH16LF10332F5C2	4 11 12 13 14 15	LXM16MU02M2X	5 8 9 12 14 15	VW3M5A11	13
BCH16HD02332F5C2	BCH16HM10230F6C2	4 11 12 13 15	BCH16LH10330A6C2	4 11 12 13 14 15	LXM16DU04M2X	4	VW3M5A11R03	12
BCH16HD04330A5C2	BCH16HM10232A6C2	4 11 12 13 15	BCH16LH10330F6C2	4 11 12 13 14 15	LXM16MU04M2X	5 8 9 12 14 15	VW3M5A11R03S	12
BCH16HD04330F5C2	BCH16HM10232F6C2	4 11 12 13 15	BCH16LH10332A6C2	4 11 12 13 14 15	LXM16DU07M2X	4	VW3M5A11R05	12
BCH16HD04332A5C2	BCH16HM15230A6C2	4 11 12 13 15	BCH16LH10332F6C2	4 11 12 13 14 15	LXM16MU07M2X	5 8 9 12 14 15	VW3M5A11R05S	12
BCH16HD04332F5C2	BCH16HM15230F6C2	4 11 12 13 15	BCH16LJ10330A6C2	4 11 12 13 14 15	T		VW3M5A11R10	12
BCH16HF07330A5C2	BCH16HM15232A6C2	4 11 12 13 15	BCH16LJ10330F6C2	4 11 12 13 14 15	TCSXCNAMUM3P	6	VW3M5A11R10S	12
BCH16HF07330F5C2	BCH16HM15232F6C2	4 11 12 13 15	BCH16LJ10332A6C2	4 11 12 13 14 15	V		VW3M5A11R15	12
BCH16HF07330F5C2	BCH16LB01330A5C2	4 11 12 13 14 15	BCH16LJ10332F6C2	4 11 12 13 14 15	VW3A4420	8	VW3M5A11R20	12
	BCH16LB01332A5C2	11	BCH16LJ10332A6C2	4 11 12 13 14 15	VW3A4421	8	VW3M5A11R20S	12
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					VW3A7602R20	7	VW3M5A11R25	12
					VW3A7603R07	7	VW3M5A11R25S	13
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					VW3A7604R20	7	VW3M5A11R25S	13
					VW3A7604R30	7	VW3M5A11R25S	13
					VW3A7605R07	7	VW3M5A11R25S	13
					VW3A7605R30	7	VW3M5A11R25S	13
					VW3A7606R07	7	VW3M5A11R25S	13
					VW3A7606R20	7	VW3M5A11R25S	13
					VW3A7606R30	7	VW3M5A11R25S	13
					VW3A7607R07	7	VW3M5A11R25S	13
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							VW3M5A21R15S	13
							VW3M5A21R20	12
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DIA3ED2180401EN
August 2021 - V5.1