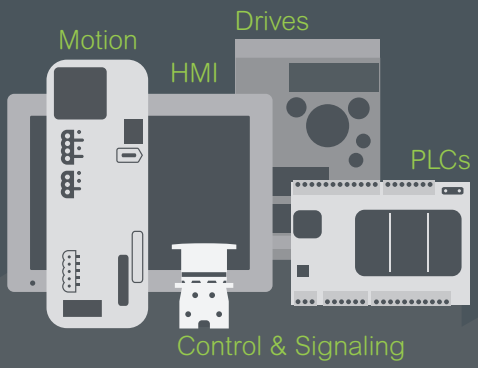
Catalog | July 2023

Introducing the **Easy** Series

Essential automation & control products

When just enough is just right!



Easy Lexium 18

Easy Lexium 18 Servo drives & BCH18 Servo motors

www.se.com

Life Is On Schneider Electric

Content

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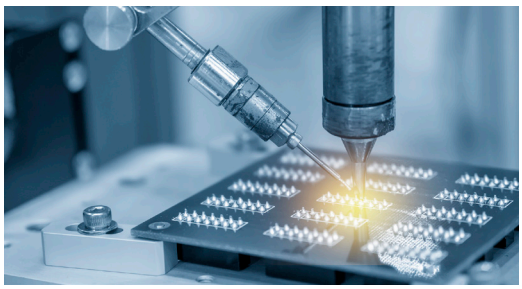
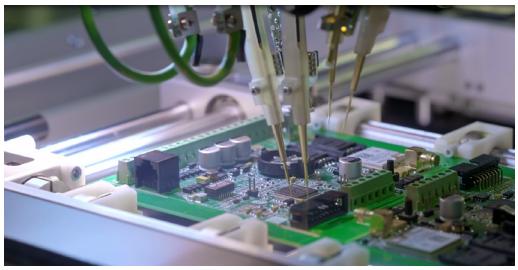
Easy Lexium 18 range

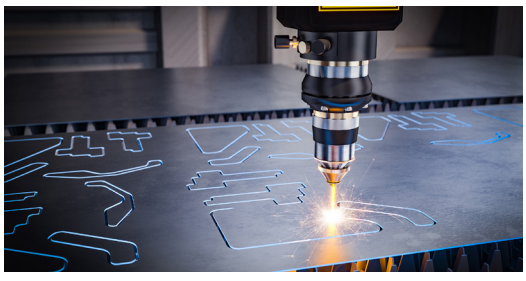


E&E application



Semicon application

Packaging application



Material Working application

Widely used in various machinery

A user-oriented range of products

Easy Lexium 18 servo drive and BCH18 servo motor combinations are specially designed for easy integration & commissioning in your machine. They provide the right level of performance for the majority of various motion control machines.

Fit for purpose

- Easy Lexium 18 servo drives have 10 digital inputs (including 2 fast inputs), 6 digital outputs.
- The servo drives embed an internal braking resistor, 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 18 range

The Easy Lexium™ 18 range is defined by AC-servo drives for combination with AC-servo motors according to customer’s application.

- The Easy Lexium 18 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 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 Single phase 220Vac, 200Vac -15%...240Vac +10% mains supply voltage *(1),*
    - and from 2.0 kW (*2.68 hp)* up to 3.0 kW (*4.02 hp)* with Three phase 220Vac, 200Vac -15%...240Vac +10% mains supply voltage
- BCH18 motors provide a nominal torque from 0.16 N-m *(1.42 lb-in)* to 28.6 N-m *(253,13 lb-in)* 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 inertia levels of motor offered.
- The Easy Lexium 18 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			
Electrical and Electronic	**Semicon**	**Packaging**	**Material Working**
Typical applications			
- Die Cutting - Winding - Testing - Glue Dispenser	- Flying Probe Checking - Wafer Testing - Cristal Growing Furnance	- Labeling - Folding - Sealing - Strapping	- Laser Cutting - Bending - Beading - Carving

Mounting and maintenance

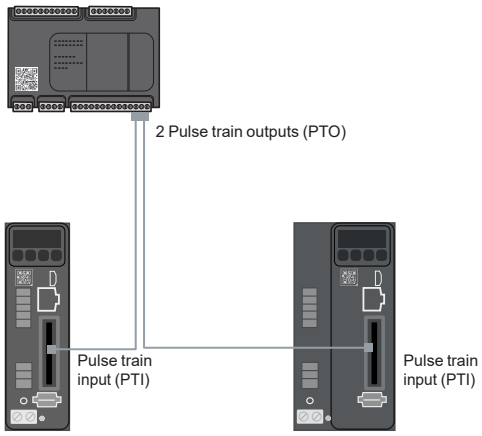
Connecting the servo drives is simplified by identified plug-in connectors for Power and Encoder, easily accessed on the front panel of the drive *(see Description page 5)*.

(1) See table of combinations page 4.

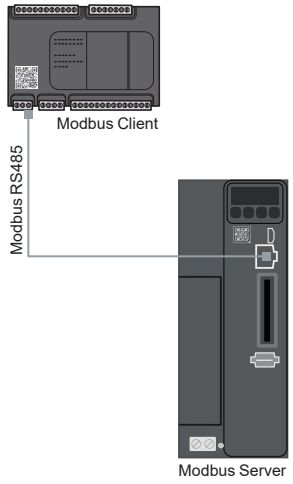
Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

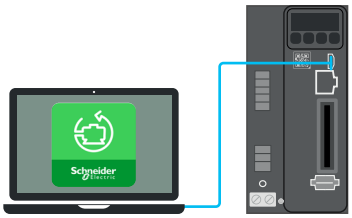
Functions, Configuration software



Easy Lexium 18 servo drives controlled by Easy Modicon M200 logic controller via the PTI interface



Easy Lexium 18 servo drives controlled by Easy Modicon M200 logic controller using the standard Modbus RTU protocol, via the CN4 interface (RJ45 connector)



Configuration with SoMove setup software, via CN3 interface (Mini-B USB connector)

DIA3ED2140906EN

Functions

Easy Lexium 18 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 Lexium18 servo drive is controlled with numerous digital and analog signals, accessible via the "CN1 IO" interface:

- 2 digital inputs for high-performance position capture
- 8 digital inputs
- 6 digital outputs
- 2 analog inputs
- 2 analog outputs

Control mode

Via the PTI /Analog input interface

- Easy Lexium 18 servo drives can be managed by a machine controller, Easy Modicon M200 logic controller *(1)* with 2 pulse-train-outputs (PTO) interface to the PTI/Analog interface located on servo drive
- Control via Scripting)

The Easy Lexium18 servo drives support Script Programing.
User can program their own motion profiles and logics by using integrate d key words, such as Position / Velocity demand, Position / Velocity / Current actual value, DI / DO / timer status / internal variables, other elements and so on.
By this powerful control mode Easy Lexium18 can fulfill complex motion tasks without Motion Controller.

Via Modbus RTU

The LXM18 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.

Operating mode

- Torque mode
- Velocity mode
- Electronic Gear mode
- Motion Sequence mode
- Scripting mode

Configuration software

The drives can be configured by using the SoMove setup software via their integrated HMI interface (Type-C):

- 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.

- SoMove setup software is used on Easy Lexium 18 servo drives to configure, adjust, debug, and maintain the drive.
- A configuration can be transferred from a PC to the Easy Lexium 18 servo drive via the CN3 interface (Type-C).
- SoMove setup software can be downloaded from Schneider website

(1) Please consult our catalog ref DIA3ED2140906EN

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

Easy Lexium 18 servo drives

LXM18P●U01M2X
LXM18P●U02M2X
LXM18P●U04M2X

LXM18P●U07M2X
LXM18P●U10M2X

LXM18P●U20M3X
LXM18P●U30M3X

Easy Lexium 18 servo drive and BCH18 motor combination

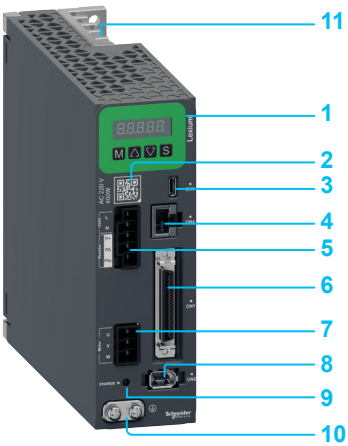
Servo drive reference	Servo motor reference (1)	Nominal Power		Flange size		Velocity		Current		Torque		Motor Inertia	Moment of inertia	Holding Brake
						Nominal	Max.	Nominal	Max.	Nominal	Peak			
		kW	*hp*	mm	*in*	rpm	rpm	A	A	N-m	N-m	kgcm²		
Single-phase supply voltage: 220Vac, 200Vac -15%...240Vac +10%														
LXM18PCU01M2X LXM18PDU01M2X	BCH18LBA5332A5C	0.05	*0.06*	40	*1.57*	3000	6000	1.1	3.4	0.16	0.48	0.02	Low	No
	BCH18LBA5332F5C	0.05	*0.06*	40	*1.57*	3000	6000	1.1	3.4	0.16	0.48	0.027	Low	Yes
	BCH18MBA5332A5C	0.05	*0.06*	40	*1.57*	3000	6000	1.1	3.9	0.16	0.56	0.04	Middle	No
	BCH18MBA5332F5C	0.05	*0.06*	40	*1.57*	3000	6000	1.1	3.9	0.16	0.56	0.046	Middle	Yes
	BCH18LB01332A5C	0.10	*0.13*	40	*1.57*	3000	6000	1.1	3.4	0.32	0.96	0.030	Low	No
	BCH18LB01332F5C	0.10	*0.13*	40	*1.57*	3000	6000	1.1	3.4	0.32	0.96	0.036	Low	Yes
	BCH18MB01332A5C	0.10	*0.13*	40	*1.57*	3000	6000	1.1	3.9	0.32	1.12	0.07	Middle	No
	BCH18MB01332F5C	0.10	*0.13*	40	*1.57*	3000	6000	1.1	3.9	0.32	1.12	0.076	Middle	Yes
	BCH18MD01332A5C	0.10	*0.13*	60	*2.36*	3000	6000	1.1	3.4	0.32	0.96	0.16	Middle	No
	BCH18MD01332F5C	0.10	*0.13*	60	*2.36*	3000	6000	1.1	3.4	0.32	0.96	0.22	Middle	Yes
LXM18PCU02M2X LXM18PDU02M2X	BCH18LD02332A5C	0.20	*0.27*	60	*2.36*	3000	6000	1.6	5.1	0.64	1.92	0.15	Low	No
	BCH18LD02332F5C	0.20	*0.27*	60	*2.36*	3000	6000	1.6	5.1	0.64	1.92	0.21	Low	Yes
	BCH18MD02332A5C	0.20	*0.27*	60	*2.36*	3000	6000	1.6	5.9	0.64	2.24	0.268	Middle	No
	BCH18MD02332F5C	0.20	*0.27*	60	*2.36*	3000	6000	1.6	5.9	0.64	2.24	0.328	Middle	Yes
	BCH18MF02332A5C	0.20	*0.27*	80	*3.15*	3000	6000	1.6	5.1	0.64	1.92	0.55	Middle	No
	BCH18MF02332F5C	0.20	*0.27*	80	*3.15*	3000	6000	1.6	5.1	0.64	1.92	0.68	Middle	Yes
LXM18PCU04M2X LXM18PDU04M2X	BCH18LD04332A5C	0.40	*0.54*	60	*2.36*	3000	6000	2.8	8.5	1.27	3.81	0.25	Low	No
	BCH18LD04332F5C	0.40	*0.54*	60	*2.36*	3000	6000	2.8	8.5	1.27	3.81	0.31	Low	Yes
	BCH18MD04332A5C	0.40	*0.54*	60	*2.36*	3000	6000	2.6	9.3	1.27	4.45	0.478	Middle	No
	BCH18MD04332F5C	0.40	*0.54*	60	*2.36*	3000	6000	2.6	9.3	1.27	4.45	0.54	Middle	Yes
	BCH18MF04332A5C	0.40	*0.54*	80	*3.15*	3000	6000	2.6	9.3	1.27	4.45	1.19	Middle	No
	BCH18MF04332F5C	0.40	*0.54*	80	*3.15*	3000	6000	2.6	9.3	1.27	4.45	1.33	Middle	Yes
LXM18PCU07M2X LXM18PDU07M2X	BCH18LF07332A5C	0.75	*1.01*	80	*3.15*	3000	6000	5.1	15.6	2.39	7.17	0.78	Low	No
	BCH18LF07332F5C	0.75	*1.01*	80	*3.15*	3000	6000	5.1	15.6	2.39	7.17	0.93	Low	Yes
	BCH18MF07332A5C	0.75	*1.02*	80	*3.15*	3000	6000	4.9	17.3	2.39	8.37	1.79	Middle	No
	BCH18MF07332F5C	0.75	*1.02*	80	*3.15*	3000	6000	4.9	17.3	2.39	8.37	1.9	Middle	Yes
LXM18PCU10M2X LXM18PDU10M2X	BCH18MM08132A6C	0.85	*1.15*	130	*5.12*	1500	3000	7.3	22	5.39	16.17	14	Middle	No
	BCH18MM08132F6C	0.85	*1.15*	130	*5.12*	1500	3000	7.3	22	5.39	16.17	14.7	Middle	Yes
	BCH18LF10332A5C	1.00	*1.34*	80	*3.15*	3000	6000	6.8	21.5	3.18	9.54	0.994	Low	No
	BCH18LF10332F5C	1.00	*1.34*	80	*3.15*	3000	6000	6.8	21.5	3.18	9.54	1.12	Low	Yes
	BCH18MF10332A5C	1.00	*1.34*	80	*3.15*	3000	6000	6.5	22.8	3.18	11.1	2.16	Middle	No
	BCH18MF10332F5C	1.00	*1.34*	80	*3.15*	3000	6000	6.5	22.8	3.18	11.1	2.32	Middle	Yes
	BCH18LH10332A6C	1.00	*1.34*	100	*3.94*	3000	6000	7.3	22	3.18	9.54	1.43	Low	No
	BCH18LH10332F6C	1.00	*1.34*	100	*3.94*	3000	6000	7.3	22	3.18	9.54	1.53	Low	Yes
LXM18PCU15M2X LXM18PDU15M2X	BCH18MM13132A6C	1.30	*1.76*	130	*5.12*	1500	3000	9.6	29.2	8.34	25	20.88	Middle	No
	BCH18MM13132F6C	1.30	*1.76*	130	*5.12*	1500	3000	9.6	29.2	8.34	25	21.54	Middle	Yes
	BCH18LH15332A6C	1.50	*2.01*	100	*3.94*	3000	6000	9.2	28.8	4.77	14.3	2.09	Low	No
	BCH18LH15332F6C	1.50	*2.01*	100	*3.94*	3000	6000	9.2	28.8	4.77	14.3	2.21	Low	Yes
Three-phase supply voltage: 220Vac, 200Vac -15%...240Vac +10%														
LXM18PCU20M3X LXM18PDU20M3X	BCH18MM18132A6C	1.80	*2.44*	130	*5.12*	1500	3000	14	42	11.5	32.2	27.79	Middle	No
	BCH18MM18132F6C	1.80	*2.44*	130	*5.12*	1500	3000	14	42	11.5	32.2	28.45	Middle	Yes
	BCH18LH20332A6C	2.00	*2.68*	100	*3.94*	3000	6000	13.2	41	6.37	19.1	2.64	Low	No
	BCH18LH20332F6C	2.00	*2.68*	100	*3.94*	3000	6000	13.2	41	6.37	19.1	2.74	Low	Yes
LXM18PCU30M3X LXM18PDU30M3X	BCH18MR24132A6C	2.40	*3.26*	180	*7.09*	1500	3000	18.6	56	15.1	45.1	46.32	Middle	No
	BCH18MR24132F6C	2.40	*3.26*	180	*7.09*	1500	3000	18.6	56	15.1	45.1	51.1	Middle	Yes
	BCH18LM30332A6C	3.00	*4.02*	130	*5.12*	3000	6000	18.6	56	9.8	29.4	7.63	Low	No
	BCH18LM30332F6C	3.00	*4.02*	130	*5.12*	3000	6000	18.6	56	9.8	29.4	8.3	Low	Yes

(1) Equipped with 23bit optic incremental encoder.

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

Easy Lexium 18 servo drives



Easy Lexium 18 servo drives

To order a Easy Lexium 18 servo drive, make up the reference as follows

Easy Lexium 18 AC servo drive		LXM18	•	•	•••	••	•
Product Line	Pro line		**P**				
Communication interface	I/O interface with PTI only			**C**			
	I/O interface with PTI, Analog and MODBUS RTU			**D**			
Continuous 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**		
	2.0 kW/*2.68 hp*				**U20**		
	3.0 kW/*4.02 hp*				**U30**		
Power Supply Voltage	Single phase, 220 Vac					**M2**	
	Three phases, 220 Vac					**M3**	
Special function	No built-in EMC filter						**X**

Dimensions, weight

Servo drive reference	Housing	Dimensions						Weight	
		H (height)		W (width)		D (depth)		kg	*lb*
		mm	*in*	mm	*in*	mm	*in*		
LXM18PCU01M2X **LXM18PDU01M2X** **LXM18PCU02M2X** **LXM18PDU02M2X** **LXM18PCU04M2X** **LXM18PDU04M2X**	Size 1	155.5	*6.12*	48	*1.89*	166.5	*6.55*	1.19	*2.62*
LXM18PCU07M2X **LXM18PDU07M2X** **LXM18PCU10M2X** **LXM18PDU10M2X** **LXM18PCU15M2X** **LXM18PDU15M2X**	Size 2	155.5	*6.12*	78	*3.07*	166.5	*6.55*	1.79	*3.95*
LXM18PCU20M3X **LXM18PDU20M3X** **LXM18PCU30M3X** **LXM18PDU30M3X**	Size 3	208	*8.19*	93	*3.66*	191.8	*7.55*	2.89	*6.37*

Description

On the drive front:

1 HMI interface, 7-segment display, 4 buttons (mode, value up, value down, set)
2 QR code: link to SE product maintenance page
3 Type-C connector for commissioning the servo drives (marked CN3)
4 RJ45 connector for Modbus RS485 (marked CN4)
5 Connector for power (marked L,N,P+, PBi, PBe) *(1)*
6 I/O interface (PTI/Analog interface, marked CN1)
7 Connector *(1)* for motor connection (marked U, V, W)
8 Connector for motor encoder (marked CN2)
9 Charge indicator LED
10 Protected earth ground connector (marked ⏚)

On the drive top

11 Heatsink and fan + fan cover on servo drive size 2 and 3
Heatsink on servo drive size 1

(1) Removable spring terminals are supplied with Easy Lexium 18 servo drives.

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

Connection accessories for Easy Lexium 18 servo drives

VW3M4B01

Connection accessories for Easy lexium 18 servo drives

Designation	Description	For use with	Reference	Weight kg/ *lb*
Connectors				
Connector set for power & motor	Servo drive power input and output connector kit	LXM18PCU●●● LXM18PDU●●●	**VW3M4B01**	0. 012 *0.026*
IO connector	SCSI 50-pin IO connector kit	LXM18PCU●●● LXM18PDU●●●	**VW3M4B11**	0.300 *0.066*
Connector kit for encoder	Firewire 1394 6-pin encoder connector kit	LXM18PCU●●● LXM18PDU●●●	**VW3M4B21**	0.008 *0.018*

490NTW000●●
490NTC000●●
490NTW000●●U

Modbus TCP network cordsets				
Description	**Type of port**	**Length m** ***ft*** *(2)*	**Reference**	**Weight kg** ***lb***
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**	–

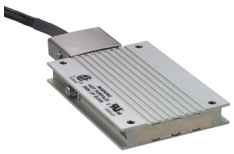
(1) Unshielded, non-grounded cable. Only for use on temporary connections. For permanent connections, use cable reference BMXXCAUSBH018.
(2) Also available in 40 and 80 m/131 and 262 ft lengths.

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

Braking resistor for Easy Lexium 18 servo drives

PF106005



VW3A760●R●●

PF151249A

VW3A773●

Braking resistor

Internal braking resistor

The built-in braking resistor absorbs the braking energy. If the DC bus voltage in the servo drive exceeds a specified value, this braking resistor is activated. The restored energy is converted into heat by the braking resistor.
It enables maximum transient braking torque.

External braking resistor

When the servo motor has to be braked frequently, an external braking resistor is required to dissipate the excess braking energy. In this case, the internal braking resistor must be deactivated.
Several external braking resistors can be connected in parallel. The servo drive monitors the power dissipated in the braking resistor.

> To optimize the size of the braking resistor, the DC buses on Easy Lexium 18 servo drives in the same installation can be connected in parallel. Machines with high inertia, driving loads, and machines with fast cycles

> The operating temperature around the unit can be between 0 and + 50°C/*+ 32 and + 122 °F*.

References

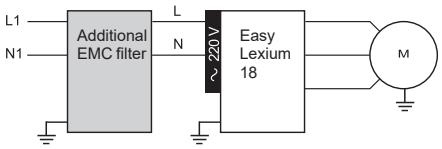
Power rating range	Ohmic value (Ω)	Continuous power (W)	Connection	Degree of protection	Reference	Weight kg *lb*
100 W, 200 W, 400 W	72	400	3 m cable *(9.84 ft)*	IP65	**VW3A7607R30**	1.620 *3.571*
750 W, 1 kW, 1.5 kW	27	400	0.75 m cable *(2.46 ft)*	IP65	**VW3A7603R07**	0.930 *2.050*
2 kW, 3 kW	16	960	M6 terminal	IP20 UL	**VW3A7733**	4.000 *8.818*

***NOTE**: The total continuous power dissipated in the external braking resistor(s) must be less than or equal to the nominal power of the Easy Lexium 18 servo drive.*

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

Additional EMC input filters



Easy Lexium 18 servo drive with additional EMC filter

VW3A442●

Additional EMC input filters

Applications

Easy Lexium 18 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

> Additional EMC filters can only be used on TN (neutral connection) or TT (neutral to ground) systems.

> Easy Lexium 18 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 (*1 x EMC filter and a single Easy Lexium 18 servo drive)*	Nominal power	Line current	Reference	Weight kg *lb*
Single phase 220Vac, 200Vac -15%...240Vac +10%				
LXM18PCU01M2X **LXM18PDU01M2X** **LXM18PCU02M2X** **LXM18PDU02M2X** **LXM18PCU04M2X** **LXM18PDU04M2X** **LXM18PCU07M2X** **LXM18PDU07M2X**	0.5 to 0.75 kW *(0.13 to 1.01 hp)*	9 A	**VW3A4420**	0.600 *1.323*
LXM18PCU10M2X **LXM18PDU10M2X** **LXM18PCU15M2X** **LXM18PDU15M2X**	1 and 1.5 kW *(1.34 and 2.01 hp)*	16 A	**VW3A4421**	0.775 *1.709*
Three-phase supply voltage: 220Vac, 200Vac -15%...240Vac +10%				
LXM18PCU20M3X **LXM18PDU20M3X** **LXM18PCU30M3X** **LXM18PDU30M3X**	2 and 3 kW *(2.68 and 4.02 hp)*	25 A	**VW3A4423**	1.350 *2.976*

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

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

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

GV2P●●

+

LC1●●●●●

+

LXM18P●●●●●●●

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 18 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.

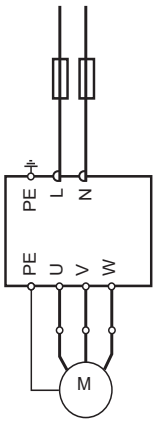
Combinations

Servo drive		Circuit-breaker		Contactor
Reference	**Nominal power (kW/*hp*)**	**Reference**	**Rating (A)**	**Reference** *(1) (2)*
Circuit-breakers for single drive installation according to IEC 60364-5-52				
Single phase 220Vac, 200Vac -15%...240Vac +10%				
LXM18PCU01M2X **LXM18PDU01M2X**	0.1/*0.13*	GV2P14	10	LC1K0610●●
LXM18PCU02M2X **LXM18PDU02M2X**	0.2/*0.27*	GV2P14	10	LC1K0610●●
LXM18PCU04M2X **LXM18PDU04M2X**	0.4/*0.54*	GV2P14	10	LC1K09●●
LXM18PCU07M2X **LXM18PDU07M2X**	0.75/*1.01*	GV2P14	10	LC1K09●●
LXM18PCU10M2X **LXM18PDU10M2X**	1.0/*1.34*	GV2P14	10	LC1K09●●
LXM18PCU15M2X **LXM18PDU15M2X**	1.5/*2.01*	GV2P16	14	LC1D18●●
Three-phase supply voltage: 220Vac, 200Vac -15%...240Vac +10%				
LXM18PCU20M3X **LXM18PDU20M3X**	2.0/*2.68*	GV2P16	14	LC1D18●●
LXM18PCU30M3X **LXM18PDU30M3X**	3.0/*4.02*	GV2P20	18	LC1D32●●

(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 ∿	*230*	*240*
LC1K	*50/60 Hz*	*P7*	*U7*
	Volts ∿	*230*	*230/240*
LC1D	*50 Hz*	*P5*	*U5*
	60 Hz	*–*	*U6*
	50/60 Hz	*P7*	*U7*

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



Easy LXM18 servo drive, BCH18 servo motor with fuse protection

Protection using class J fuses (UL certification)

Servo drive		Fuse to be placed upstream (A)
Reference	**Nominal power (kW/*hp*)**	
Single phase 220Vac, 200Vac -15%...240Vac +10%		
LXM18PCU01M2X, LXM18PDU01M2X	0.1/*0.13*	5
LXM18PCU02M2X, LXM18PDU02M2X	0.2/*0.27*	20
LXM18PCU04M2X, LXM18PDU04M2X	0.4/*0.54*	20
LXM18PCU07M2X, LXM18PDU07M2X	0.75/*1.01*	40
LXM18PCU10M2X, LXM18PDU10M2X	1.0/*1.34*	40
LXM18PCU15M2X, LXM18PDU15M2X	1.5/*2.01*	40
Three-phase supply voltage: 220Vac, 200Vac -15%...240Vac +10%		
LXM18PCU20M3X, LXM18PDU20M3X	2.0/*2.68*	80
LXM18PCU30M3X, LXM18PDU30M3X	3.0/*4.02*	80

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

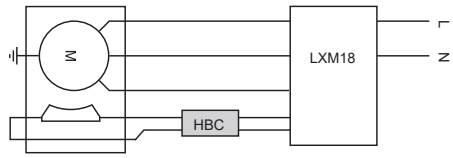
BCH18 servo motors, Holding brake controller

40 mm/1.58 in

80 mm/3.15 in

130 mm/5.12 in

VW3M3103



Servo motor with integrated holding brake

BCH18 servo motors

Presentation

BCH18 motors are synchronous AC servo motors,

- Available in several 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 8 mm *(0.31 in)* or 14 mm *(0.55 in)*
  - 80 mm *(3.15 in)* – Shaft diameter 14 mm *(0.55 in)* or 19 mm *(0.75 in)*
  - 100 mm *(3.94 in)* – Shaft diameter 22 mm *(0.87 in)*
  - 130 mm *(5.12 in)* – Shaft diameter 22 mm *(0.87 in)*, 24 mm *(0.94 in)* or 28 mm *(1.102 in)*
  - 180 mm *(7.09 in)* – Shaft diameter 35 mm *(1.38 in)*
- available with or without holding brake (depending on model)
- available with low or middle motor inertia

Depending on flange size, the BCH18 motors are supplied:

- with micro plastic connectors
- with military connectors

Description

BCH18 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 18 servo drives.

Schneider Electric has taken particular care over the compatibility of BCH18 servo motors and Easy Lexium 18 servo drives. This compatibility is only possible when using cables and connectors sold by Schneider Electric (see pages 13 to 15).

Holding brake controller (HBC)

BCH18 servo motors can be equipped with an electromagnetic holding brake.

Warning: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, 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 18 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 ⎓ power supply Max. power 0.05 kW/*0.07 hp* IP 20 For mounting on 55 mm/*2.17 in* ⊔ rail	**VW3M3103**	0.600 *1.323*

Integrated encoder

BCH18 servo motors are equipped with a 23 bit optic incremental encoder which measures the servo motor speed via associated Easy Lexium 18 servo drive. This information is used by the servo drive's position and speed controller.

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

BCH18 servo motors

BCH18 servo motors

To order a BCH18 servo motor, make up the reference as follows:

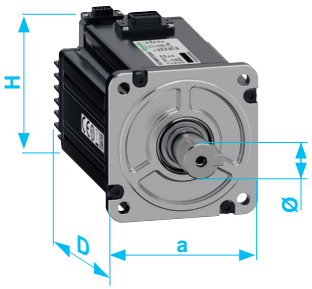
Brushless servo motor BCH18		●	●	●●	●	●	●	●	●	C
Inertia	Low inertia	**L**								
	Middle inertia	**M**								
Flange size	40 mm *(1.58 in)* – Shaft diameter 8 mm *(0.31 in)*		**B**							
	60 mm *(2.36 in)* – Shaft diameter 8 mm *(0.31 in)* or 14 mm *(0.55 in)*		**D**							
	80 mm *(3.15 in)* – Shaft diameter 14 mm *(0.55 in)* *or* 19 mm *(0.75 in)*		**F**							
	100 mm *(3.94 in)* – Shaft diameter 22 mm *(0.87 in)*		**H**							
	130 mm *(5.12 in)* – Shaft diameter 22 mm *(0.87 in)*, 24 mm *(0.94 in)* or 28 mm *(1.102 in)*		**M**							
	180 mm *(7.09 in)* – Shaft diameter 35 mm *(1.38 in)*		**R**							
Nominal power	50 W *(0.06 hp)*			**A5**						
	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**						
	1.3 kW *(1.74 hp)*			**13**						
	1.5 kW *(2.01 hp)*			**15**						
	1.8 kW *(2.41 hp)*			**18**						
	2.0 kW *(2.68 hp)*			**20**						
	2.4 kW *(3.22 hp)*			**24**						
	3.0 kW *(4.02 hp)*			**30**						
Winding type (Power supply 220 Vac)	Optimized in terms of torque (1000 rpm/1500 rpm)				**1**					
	Optimized in terms of torque and speed of rotation (2000 rpm)				**2**					
	Optimized in terms of speed of rotation (3000 rpm)				**3**					
Shaft end	Parallel keyed shaft (shaft & housing IP 65)					**3**				
Encoder	23 bit optic incremental encoder						**2**			
Holding brake	Without holding brake							**A**		
	With holding brake							**F**		
Connections	Micro plastic connectors								**5**	
	Military connectors								**6**	
Mechanical interface	Motor compatible with Asian style mounting standards									**C**

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

BCH18 servo motors

BCH18 servo motors

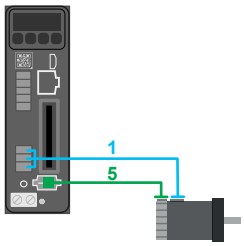


Dimensions (overall)												Weight	
Servo motor	Continuous power		Equipment	Ø (shaft)		a (flange)		H (heigth)		D (depth)			
	kW	hp		mm	*in*	mm	*in*	mm	*in*	mm	*in*	kg	*lb*
BCH18LBA5332A5C	0.05	*0.06*	Without brake	8	*0.31*	40	*1.57*	50.75	*2.00*	74.90	*2.95*	0.35	*0.77*
BCH18LBA5332F5C	0.05	*0.06*	With brake	8	*0.31*	40	*1.57*	50.75	*2.00*	118.90	*4.68*	0.60	*1.32*
BCH18MBA5332A5C	0.05	*0.06*	Without brake	8	*0.31*	40	*1.57*	50.75	*2.00*	75.20	*2.96*	0.26	*0. 57*
BCH18MBA5332F5C	0.05	*0.06*	With brake	8	*0.31*	40	*1.57*	50.75	*2.00*	118.90	*4.68*	0.52	*0.57*
BCH18LB01332A5C	0.1	*0.13*	Without brake	8	*0.31*	40	*1.57*	50.75	*2.00*	83.80	*3.30*	0.41	*0.90*
BCH18LB01332F5C	0.1	*0.13*	With brake	8	*0.31*	40	*1.57*	50.75	*2.00*	127.80	*5.03*	0.65	*1.43*
BCH18MB01332A5C	0.1	*0.13*	Without brake	8	*0.31*	40	*1.57*	50.75	*2.00*	89.10	*3.51*	0.40	*0.88*
BCH18MB01332F5C	0.1	*0.13*	With brake	8	*0.31*	40	*1.57*	50.75	*2.00*	132.80	*5.23*	0.69	*1.52*
BCH18MD01332A5C	0.1	*0.13*	Without brake	8	*0.31*	60	*2.36*	68.60	*2.70*	69.20	*2.72*	0.65	*1.43*
BCH18MD01332F5C	0.1	*0.13*	With brake	8	*0.31*	60	*2.36*	68.60	*2.70*	108.70	*4.28*	1.05	*2.31*
BCH18LD02332A5C	0.2	*0.16*	Without brake	14	*0.55*	60	*2.36*	68.60	*2.70*	76.70	*3.02*	0.85	*1.87*
BCH18LD02332F5C	0.2	*0.16*	With brake	14	*0.55*	60	*2.36*	68.60	*2.70*	116.20	*4.57*	1.20	*2.65*
BCH18MD02332A5C	0.2	*0.16*	Without brake	14	*0.55*	60	*2.36*	68.60	*2.70*	77.90	*3.07*	0.85	*1.87*
BCH18MD02332F5C	0.2	*0.16*	With brake	14	*0.55*	60	*2.36*	68.60	*2.70*	117.40	*4.62*	1.25	*2.76*
BCH18MF02332A5C	0.2	*0.16*	Without brake	14	*0.55*	80	*3.15*	88.60	*3.49*	80.20	*3.16*	1.35	*2.98*
BCH18MF02332F5C	0.2	*0.16*	With brake	14	*0.55*	80	*3.15*	88.60	*3.49*	119.00	*4.69*	2.10	*4.63*
BCH18LD04332A5C	0.4	*0.53*	Without brake	14	*0.55*	60	*2.36*	68.60	*2.70*	92.80	*3.65*	1.15	*2.54*
BCH18LD04332F5C	0.4	*0.53*	With brake	14	*0.55*	60	*2.36*	68.60	*2.70*	132.30	*5.21*	1.55	*3.42*
BCH18MD04332A5C	0.4	*0.53*	Without brake	14	*0.55*	60	*2.36*	68.60	*2.70*	96.10	*3.78*	1.15	*2.54*
BCH18MD04332F5C	0.4	*0.53*	With brake	14	*0.55*	60	*2.36*	68.60	*2.70*	135.60	*5.34*	1.60	*3.53*
BCH18MF04332A5C	0.4	*0.53*	Without brake	14	*0.55*	80	*3.15*	88.60	*3.49*	98.00	*3.86*	1.95	*4.30*
BCH18MF04332F5C	0.4	*0.53*	With brake	14	*0.55*	80	*3.15*	88.60	*3.49*	136.80	*5.39*	2.70	*5.95*
BCH18LF07332A5C	0.75	*1.00*	Without brake	19	*0.75*	80	*3.15*	88.60	*3.49*	105.30	*4.15*	2.30	*5.07*
BCH18LF07332F5C	0.75	*1.00*	With brake	19	*0.75*	80	*3.15*	88.60	*3.49*	144.10	*5.67*	3.10	*6.83*
BCH18MF07332A5C	0.75	*1.00*	Without brake	19	*0.75*	80	*3.15*	88.60	*3.49*	113.70	*4.48*	2.50	*5.51*
BCH18MF07332F5C	0.75	*1.00*	With brake	19	*0.75*	80	*3.15*	88.60	*3.49*	152.50	*6.00*	3.25	*7.17*
BCH18MM08132A6C	0.85	*1.13*	Without brake	22	*0.87*	130	*5.12*	182.40	*7.18*	145.50	*5.73*	6.85	*15.10*
BCH18MM08132F6C	0.85	*1.13*	With brake	22	*0.87*	130	*5.12*	182.00	*7.17*	188.50	*7.42*	8.35	*18.41*
BCH18LH10332A6C	1	*1.34*	Without brake	22	*0.87*	100	*3.94*	152.20	*5.99*	140.00	*5.51*	3.60	*7.94*
BCH18LH10332F6C	1	*1.34*	With brake	22	*0.87*	100	*3.94*	152.20	*5.99*	180.50	*7.11*	4.50	*9.92*
BCH18LF10332A5C	1	*1.34*	Without brake	19	*0.75*	80	*3.15*	88.60	*3.49*	118.50	*4.67*	2.80	*6.17*
BCH18LF10332F5C	1	*1.34*	With brake	19	*0.75*	80	*3.15*	88.60	*3.49*	157.30	*6.19*	3.55	*7.83*
BCH18MF10332A5C	1	*1.34*	Without brake	19	*0.75*	80	*3.15*	88.60	*3.49*	128.70	*5.07*	3.00	*6.61*
BCH18MF10332F5C	1	*1.34*	With brake	19	*0.75*	80	*3.15*	88.60	*3.49*	167.50	*6.59*	3.75	*8.27*
BCH18MM13132A6C	1.3	*1.74*	Without brake	22	*0.87*	130	*5.12*	182.40	*7.18*	170.90	*6.73*	9.00	*19.84*
BCH18MM13132F6C	1.3	*1.74*	With brake	22	*0.87*	130	*5.12*	182.00	*7.17*	213.50	*8.41*	10.60	*23.37*
BCH18LH15332A6C	1.5	*2.01*	Without brake	22	*0.87*	100	*3.94*	152.20	*5.99*	159.00	*6.26*	4.50	*9.92*
BCH18LH15332F6C	1.5	*2.01*	With brake	22	*0.87*	100	*3.94*	152.20	*5.99*	199.50	*7.85*	5.40	*11.90*
BCH18MM18132A6C	1.8	*2.41*	Without brake	24	*0.94*	130	*5.12*	182.40	*7.18*	195.90	*7.71*	11.20	*24.69*
BCH18MM18132F6C	1.8	*2.41*	With brake	24	*0.94*	130	*5.12*	182.40	*7.18*	238.50	*9.39*	12.70	*28.00*
BCH18LH20332A6C	2	*2.68*	Without brake	22	*0.87*	100	*3.94*	152.20	*5.99*	174.00	*6.85*	5.30	*11.68*
BCH18LH20332F6C	2	*2.68*	With brake	22	*0.87*	100	*3.94*	152.20	*5.99*	214.50	*8.44*	6.20	*13.67*
BCH18MR24132A6C	2.4	*3.22*	Without brake	35	*1.38*	180	*7.09*	231.20	*9.10*	193.00	*7.60*	18.00	*39.68*
BCH18MR24132F6C	2.4	*3.22*	With brake	35	*1.38*	180	*7.09*	231.20	*9.10*	245.20	*9.65*	22.45	*49.49*
BCH18LM30332A6C	3	*4.02*	Without brake	28	*1.10*	130	*5.12*	182.40	*7.18*	208.90	*8.22*	10.30	*22.71*
BCH18LM30332F6C	3	*4.02*	With brake	28	*1.10*	130	*5.12*	182.40	*7.18*	251.50	*9.90*	11.80	*26.01*

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

Connection components for BCH18 servo motors



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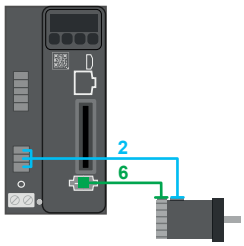


VW3M5B1●R●●

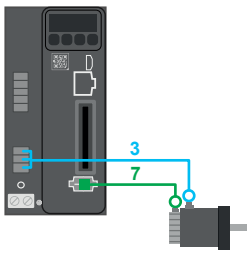
Unshielded Power cables

Designation	For use		For cable cross-section	Length		Reference	Weight	
	From servo drive	To servo motor		m	*ft*		kg	*lb*
Toward load, Plastic connector, size 0 - item 1								
Equipped with one plastic connector Size 0 (Motor end)	LXM18P●U01M2X	BCH18LB●● BCH18MB●●	4G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B01RA5**	0.060	*0.132*
				3	*9.84*	**VW3M5B01R03**	0.117	*0.257*
				5	*16.40*	**VW3M5B01R05**	0.193	*0.425*
				10	*32.81*	**VW3M5B01R10**	0.383	*0.844*
				15	*49.21*	**VW3M5B01R15**	0.573	*1.263*
				20	*65.62*	**VW3M5B01R20**	0.763	*1.682*
				25	*82.02*	**VW3M5B01R25**	0.953	*2.101*
Equipped with one plastic connector size 0, with brake (Motor end)	LXM18P●U01M2X	BCH18LB●● BCH18MB●●	6G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B02RA5**	0.078	*0.171*
				3	*9.84*	**VW3M5B02R03**	0.152	*0.336*
				5	*16.40*	**VW3M5B02R05**	0.252	*0.555*
				10	*32.81*	**VW3M5B02R10**	0.501	*1.104*
				15	*49.21*	**VW3M5B02R15**	0.750	*1.653*
				20	*65.62*	**VW3M5B02R20**	0.999	*2.202*
				25	*82.02*	**VW3M5B02R25**	1.248	*2.751*
Toward back, Plastic connector, Size 0 - item 1								
Equipped with one plastic connector size 0 (Motor end)	LXM18P●U01M2X	BCH18LB●● BCH18MB●●	4G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B03RA5**	0.060	*0.132*
				3	*9.84*	**VW3M5B03R03**	0.117	*0.257*
				5	*16.40*	**VW3M5B03R05**	0.193	*0.425*
				10	*32.81*	**VW3M5B03R10**	0.383	*0.844*
				15	*49.21*	**VW3M5B03R15**	0.573	*1.263*
				20	*65.62*	**VW3M5B03R20**	0.763	*1.682*
				25	*82.02*	**VW3M5B03R25**	0.953	*2.101*
Equipped with one plastic connector size 0, with brake (Motor end)	LXM18P●U01M2X	BCH18LB●● BCH18MB●●	6G*0.34mm² *(22 AWG)*	1.5	*4.92*	**VW3M5B04RA5**	0.078	*0.171*
				3	*9.84*	**VW3M5B04R03**	0.152	*0.336*
				5	*16.40*	**VW3M5B04R05**	0.252	*0.555*
				10	*32.81*	**VW3M5B04R10**	0.501	*1.104*
				15	*49.21*	**VW3M5B04R15**	0.750	*1.653*
				20	*65.62*	**VW3M5B04R20**	0.999	*2.202*
				25	*82.02*	**VW3M5B04R25**	1.248	*2.751*
Toward load, Plastic connector, Size 1 - item 2								
Equipped with one plastic connector size 1 (Motor end)	LXM18P●U01M2X LXM18P●U02M2X LXM18P●U04M2X LXM18P●U07M2X LXM18P●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)*	1.5	*4.92*	**VW3M5B11RA5**	0.097	*0.214*
				3	*9.84*	**VW3M5B11R03**	0.190	*0.418*
				5	*16.40*	**VW3M5B11R05**	0.313	*0.690*
				10	*32.81*	**VW3M5B11R10**	0.622	*1.372*
				15	*49.21*	**VW3M5B11R15**	0.931	*2.053*
				20	*65.62*	**VW3M5B11R20**	1.240	*2.734*
				25	*82.02*	**VW3M5B11R25**	1.549	*3.415*
Equipped with one plastic connector size 1, with brake (Motor end)	LXM18P●U01M2X LXM18P●U02M2X LXM18P●U04M2X LXM18P●U07M2X LXM18P●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)* +2*0.2mm² *(32 AWG)*	1.5	*4.92*	**VW3M5B12RA5**	0.110	*0.242*
				3	*9.84*	**VW3M5B12R03**	0.216	*0.475*
				5	*16.40*	**VW3M5B12R05**	0.356	*0.786*
				10	*32.81*	**VW3M5B12R10**	0.708	*1.562*
				15	*49.21*	**VW3M5B12R15**	1.060	*2.338*
				20	*65.62*	**VW3M5B12R20**	1.412	*3.114*
				25	*82.02*	**VW3M5B12R25**	1.764	*3.890*
Toward back, Plastic connector, Size 1 - item 2								
Equipped with one plastic connector size 1 (Motor end)	LXM18P●U01M2X LXM18P●U02M2X LXM18P●U04M2X LXM18P●U07M2X LXM18P●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)*	1.5	*4.92*	**VW3M5B13RA5**	0.097	*0.214*
				3	*9.84*	**VW3M5B13R03**	0.190	*0.418*
				5	*16.40*	**VW3M5B13R05**	0.313	*0.690*
				10	*32.81*	**VW3M5B13R10**	0.622	*1.372*
				15	*49.21*	**VW3M5B13R15**	0.931	*2.053*
				20	*65.62*	**VW3M5B13R20**	1.240	*2.734*
				25	*82.02*	**VW3M5B13R25**	1.549	*3.415*
Equipped with one plastic connector size 1, with brake (Motor end)	LXM18P●U01M2X LXM18P●U02M2X LXM18P●U04M2X LXM18P●U07M2X LXM18P●U10M2X	BCH18LD●● BCH18LF●● BCH18MD●● BCH18MF●●	4G*0.75mm² *(18 AWG)* +2*0.2mm² *(32 AWG)*	1.5	*4.92*	**VW3M5B14RA5**	0.110	*0.242*
				3	*9.84*	**VW3M5B14R03**	0.216	*0.475*
				5	*16.40*	**VW3M5B14R05**	0.356	*0.786*
				10	*32.81*	**VW3M5B14R10**	0.708	*1.562*
				15	*49.21*	**VW3M5B14R15**	1.060	*2.338*
				20	*65.62*	**VW3M5B14R20**	1.412	*3.114*
				25	*82.02*	**VW3M5B14R25**	1.764	*3.890*

Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

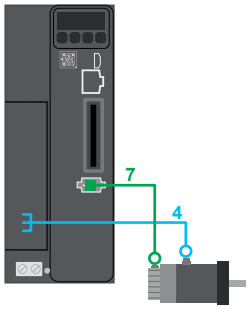
Connection components for BCH18 servo motors



VW3M5B2●R●●

Unshielded Power cables

Designation	For use		For cable cross-section	Length		Reference	Weight	
	From servo drive	To servo motor		m	ft		kg	lb
Military connector, Size 1 - item 3								
Equipped with one military connector size 1 (Motor end), and free wires (servo drive side)	LXM18P●U10M2X LXM18P●U15M2X	BCH18LH103●● BCH18LH153●● BCH18MM081●● BCH18MM131●●	4G*1.5mm² *(16 AWG)*	1.5	*4.92*	**VW3M5B21RA5**	0.291	*0.643*
				3	*9.84*	**VW3M5B21R03**	0.482	*1.062*
				5	*16.40*	**VW3M5B21R05**	0.735	*1.621*
				10	*32.81*	**VW3M5B21R10**	1.369	*3.019*
				15	*49.21*	**VW3M5B21R15**	2.003	*4.416*
				20	*65.62*	**VW3M5B21R20**	2.637	*5.814*
				25	*82.02*	**VW3M5B21R25**	3.271	*7.212*
Equipped with one military connector size 1, with brake (Motor end) and free wires (servo drive side)	LXM18P●U01M2X LXM18P●U02M2X LXM18P●U04M2X LXM18P●U07M2X LXM18P●U10M2X	BCH18LH103●● BCH18LH153●● BCH18MM081●● BCH18MM131●●	4G*1.5mm² *(16 AWG)* +2*0.5mm² *(20 AWG)*	1.5	*4.92*	**VW3M5B22RA5**	0.329	*0.725*
				3	*9.84*	**VW3M5B22R03**	0.556	*1.226*
				5	*16.40*	**VW3M5B22R05**	0.859	*1.895*
				10	*32.81*	**VW3M5B22R10**	1.617	*3.566*
				15	*49.21*	**VW3M5B22R15**	2.375	*5.237*
				20	*65.62*	**VW3M5B22R20**	3.133	*6.908*
				25	*82.02*	**VW3M5B22R25**	3.891	*8.579*



VW3M5B3●R●●
VW3M5B4●R●●

Military connector, Size 2 - item 4								
Equipped with one military connector size 2 (Motor end) and free wires (servo drive side)	LXM18P●U20M2X LXM18P●U30M2X LXM18P●U20M3X LXM18P●U30M3X	BCH18LH203●● BCH18LM303●● BCH18MM181●●	4G*2.5mm² *(14 AWG)*	1.5	*4.92*	**VW3M5B31RA5**	0.395	*0.871*
				3	*9.84*	**VW3M5B31R03**	0.687	*1.514*
				5	*16.40*	**VW3M5B31R05**	1.076	*2.372*
				10	*32.81*	**VW3M5B31R10**	2.049	*4.518*
				15	*49.21*	**VW3M5B31R15**	3.022	*6.663*
				20	*65.62*	**VW3M5B31R20**	3.995	*8.808*
				25	*82.02*	**VW3M5B31R25**	4.968	*10.953*
Equipped with one military connector size 2, with brake (Motor end) and free wires (servo drive side)	LXM18P●U20M2X LXM18P●U30M2X LXM18P●U20M3X LXM18P●U30M3X	BCH18LH203●● BCH18LM303●● BCH18MM181●●	4G*2.5mm² *(14 AWG)* + 2*0.5mm² *(20 AWG)*	1.5	*4.92*	**VW3M5B32RA5**	0.433	*0.955*
				3	*9.84*	**VW3M5B32R03**	0.763	*1.681*
				5	*16.40*	**VW3M5B32R05**	1.202	*2.651*
				10	*32.81*	**VW3M5B32R10**	2.301	*5.073*
				15	*49.21*	**VW3M5B32R15**	3.400	*7.496*
				20	*65.62*	**VW3M5B32R20**	4.499	*9.919*
				25	*82.02*	**VW3M5B32R25**	5.598	*12.342*
Military connector, Size 3- item 4								
Equipped with one military connector size 3 (Motor end) and free wires (servo drive side)	LXM18P●U30M2X LXM18P●U30M3X	BCH18MR241●●	4G*2.5mm² *(14 AWG)*	1.5	*4.92*	**VW3M5B41RA5**	0.443	*0.977*
				3	*9.84*	**VW3M5B41R03**	0.735	*1.620*
				5	*16.40*	**VW3M5B41R05**	1.124	*2.478*
				10	*32.81*	**VW3M5B41R10**	2.097	*4.623*
				15	*49.21*	**VW3M5B41R15**	3.070	*6.768*
				20	*65.62*	**VW3M5B41R20**	4.043	*8.913*
				25	*82.02*	**VW3M5B41R25**	5.016	*11.058*
Equipped with one military connector size 3, with brake (Motor end) and free wires (servo drive side)	LXM18P●U30M2X LXM18P●U30M3X	BCH18MR241●●	4G*2.5mm² *(14 AWG)* + 2*0.5mm² *(20 AWG)*	1.5	*4.92*	**VW3M5B42RA5**	0.481	*1.060*
				3	*9.84*	**VW3M5B42R03**	0.811	*1.787*
				5	*16.40*	**VW3M5B42R05**	1.250	*2.756*
				10	*32.81*	**VW3M5B42R10**	2.349	*5.179*
				15	*49.21*	**VW3M5B42R15**	3.448	*7.602*
				20	*65.62*	**VW3M5B42R20**	4.547	*10.025*
				25	*82.02*	**VW3M5B42R25**	5.646	*12.448*

VW3M5B10

VW3M5B11

VW3M5B12

VW3M5B21

VW3M5B22

Motor power connector kits

Designation	Description	Reference	Weight	
			kg	lb
Motor power connector kits	Motor power connector kit, plastic size 0	**VW3M5B10**	0.005	*0.011*
	Motor power connector kit, toward load, plastic size 1	**VW3M5B11**	0.007	*0.015*
	Motor power connector kit, toward back, plastic size 1	**VW3M5B12**	0.007	*0.015*
	Motor power connector kit, military size 1	**VW3M5B21**	0.100	*0.220*
	Motor power connector kit, military size 2	**VW3M5B22**	0.155	*0.342*

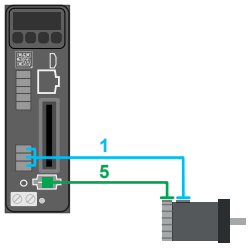
Easy Lexium 18

Easy Lexium 18 servo drives & BCH18 servo motors

Connection components for BCH18 servo motors

Shielded Encoder cables

Designation	For use		For cable cross-section	Length		Reference	Weight	
	From servo drive	To servo motor		m	ft		kg	lb
Toward load, Plastic connector - item 5								
Equipped with one plastic connector (Motor end) and Sunchu 6-pin connector (servo drive side)	LXM18P●U01M2X LXM18P●U02M2X LXM18P●U04M2X LXM18P●U07M2X LXM18P●U10M2X	40/60/80 mm flange *(1.58/ 2.36/ 3.15 in flange)*	2*0.5mm² *(20 AWG)* + 2*0.25 mm² *(24 AWG)*	1.5	*4.92*	**VW3M8B11RA5**	0.105	*0.232*
				3	*9.84*	**VW3M8B11R03**	0.200	*0.440*
				5	*16.40*	**VW3M8B11R05**	0.325	*0.717*
				10	*32.81*	**VW3M8B11R10**	0.639	*1.409*
				15	*49.21*	**VW3M8B11R15**	0.953	*2.101*
				20	*65.62*	**VW3M8B11R20**	1.267	*2.794*
				25	*82.02*	**VW3M8B11R25**	1.581	*3.486*
Toward back, Plastic connector - item 6								
Equipped with one plastic connector (Motor end) and Sunchu 6-pin connector (servo drive side)	LXM18P●U01M2X LXM18P●U02M2X LXM18P●U04M2X LXM18P●U07M2X LXM18P●U10M2X	40/60/80 mm flange *(1.58/ 2.36/ 3.15 in flange)*	2*0.5mm² *(20 AWG)* + 2*0.25 mm² *(24 AWG)*	1.5	*4.92*	**VW3M8B13RA5**	0.105	*0.232*
				3	*9.84*	**VW3M8B13R03**	0.200	*0.440*
				5	*16.40*	**VW3M8B13R05**	0.325	*0.717*
				10	*32.81*	**VW3M8B13R10**	0.639	*1.409*
				15	*49.21*	**VW3M8B13R15**	0.953	*2.101*
				20	*65.62*	**VW3M8B13R20**	1.267	*2.794*
				25	*82.02*	**VW3M8B13R25**	1.581	*3.486*
Military connector - item 7								
Equipped with one military connector (Motor end) and Sunchu 6-pin connector (servo drive side)	LXM18P●U10M2X LXM18P●U15M2X LXM18P●U20M2X LXM18P●U30M2X LXM18P●U20M3X LXM18P●U30M3X	100/130/180 mm flange *(3.94/ 5.12/ 7.09 in flange)*	2*0.5mm² *(20 AWG)* + 2*0.25 mm² *(24 AWG)*	1.5	*4.92*	**VW3M8B21RA5**	0.139	*0.306*
				3	*9.84*	**VW3M8B21R03**	0.233	*0.514*
				5	*16.40*	**VW3M8B21R05**	0.359	*0.790*
				10	*32.81*	**VW3M8B21R10**	0.673	*1.483*
				15	*49.21*	**VW3M8B21R15**	0.987	*2.175*
				20	*65.62*	**VW3M8B21R20**	1.301	*2.867*
				25	*82.02*	**VW3M8B21R25**	1.615	*3.559*



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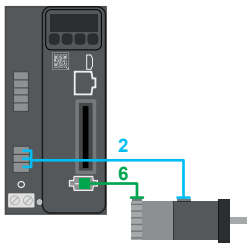

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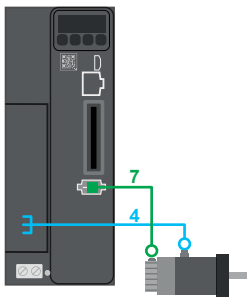

VW3M8B21R●●

Motor encoder connector kits

Designation	Description	Reference	Weight	
			kg	lb
Motor encoder connector kits	Plastic	**VW3M8B11**	0.005	*0.011*
	Military	**VW3M8B21**	0.035	*0.077*

VW3M8B11

VW3M8B21

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