

# Set Model Configuration This set includes the driver, motor and cable with motor connector.

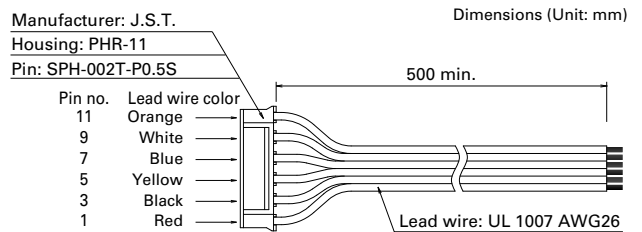
## Unipolar Bundled driver model no.: US1D200P10

Motor size	Single shaft			Dual shaft			Basic step angle	Rated current (A/phase)	Page	
	Set model no.	Set configuration items		Set model no.	Set configuration items				Specifications	Dimensions
		Motor model no.	Cable with motor connector model no.		Motor model no.	Cable with motor connector model no.				
28 mm sq.	DU14S281S	SH2281-5271	L —	DU14S281D	SH2281-5231	L —	1.8°	1	p. 15	p. 23
	DU14S285S	SH2285-5271	L —	DU14S285D	SH2285-5231	L —	1.8°	1	p. 15	p. 23
42 mm sq.	DU15S421S	SF2421-12U41	C 4835774-1	DU15S421D	SF2421-12U11	C 4835774-1	1.8°	1.2	p. 15	p. 23
	DU15S422S	SF2422-12U41	C 4835774-1	DU15S422D	SF2422-12U11	C 4835774-1	1.8°	1.2	p. 15	p. 23
	DU15S423S	SF2423-12U41	C 4835774-1	DU15S423D	SF2423-12U11	C 4835774-1	1.8°	1.2	p. 16	p. 23
	DU15S424S	SF2424-12U41	C 4835774-1	DU15S424D	SF2424-12U11	C 4835774-1	1.8°	1.2	p. 16	p. 23
	DU15S141S	SH1421-0441	L —	DU15S141D	SH1421-0411	L —	0.9°	1.2	p. 16	p. 23
	DU15S142S	SH1422-0441	L —	DU15S142D	SH1422-0411	L —	0.9°	1.2	p. 16	p. 23
	DU15S144S	SH1424-0441	L —	DU15S144D	SH1424-0411	L —	0.9°	1.2	p. 17	p. 23
56 mm sq.	DU16H711S	103H7121-0440	L —	DU16H711D	103H7121-0410	L —	1.8°	2	p. 17	p. 24
	DU16H713S	103H7123-0440	L —	DU16H713D	103H7123-0410	L —	1.8°	2	p. 17	p. 24
	DU16H716S	103H7126-0440	L —	DU16H716D	103H7126-0410	L —	1.8°	2	p. 17	p. 24

Motors marked with an (L) are lead wire types. Either a 300 mm or a 305 mm or greater lead wire is attached to the motor.  
Motors marked with a (C) are connector types. Cables with connectors for motors as shown below are included.

● Cable with motor connector (Supplied only with connector-type motors)

**Bundled cable (Unipolar 42 mm sq. motors only, model no.: 4835774-1)**



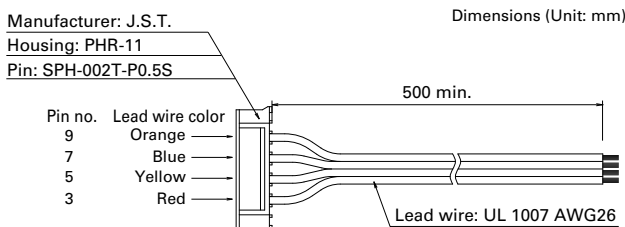
## Bipolar Bundled driver model no.: BS1D200P10

Motor size	Single shaft			Dual shaft			Basic step angle	Rated current (A/phase)	Page	
	Set model no.	Set configuration items		Set model no.	Set configuration items				Specifications	Dimensions
		Motor model no.	Cable with motor connector model no.		Motor model no.	Cable with motor connector model no.				
28 mm sq.	DB14S281S	SH2281-5771	L —	DB14S281D	SH2281-5731	L —	1.8°	1	p. 18	p. 23
	DB14S285S	SH2285-5771	L —	DB14S285D	SH2285-5731	L —	1.8°	1	p. 18	p. 23
42 mm sq.	DB14S421S	SF2421-10B41	C 4835775-1	DB14S421D	SF2421-10B11	C 4835775-1	1.8°	1	p. 18	p. 23
	DB14S422S	SF2422-10B41	C 4835775-1	DB14S422D	SF2422-10B11	C 4835775-1	1.8°	1	p. 18	p. 23
	DB14S423S	SF2423-10B41	C 4835775-1	DB14S423D	SF2423-10B11	C 4835775-1	1.8°	1	p. 19	p. 23
	DB14S424S	SF2424-10B41	C 4835775-1	DB14S424D	SF2424-10B11	C 4835775-1	1.8°	1	p. 19	p. 23
	DB16S141S	SH1421-5241	L —	DB16S141D	SH1421-5211	L —	0.9°	2	p. 19	p. 23
	DB16S142S	SH1422-5241	L —	DB16S142D	SH1422-5211	L —	0.9°	2	p. 19	p. 23
	DB16S144S	SH1424-5241	L —	DB16S144D	SH1424-5211	L —	0.9°	2	p. 20	p. 23
50 mm sq.	DB16H671S	103H6701-5040	L —	DB16H671D	103H6701-5010	L —	1.8°	2	p. 20	p. 24
	DB16H673S	103H6703-5040	L —	DB16H673D	103H6703-5010	L —	1.8°	2	p. 20	p. 24
56 mm sq.	DB16H711S	103H7121-5740	L —	DB16H711D	103H7121-5710	L —	1.8°	2	p. 20	p. 24
	DB16H713S	103H7123-5740	L —	DB16H713D	103H7123-5710	L —	1.8°	2	p. 21	p. 24
	DB16H716S	103H7126-5740	L —	DB16H716D	103H7126-5710	L —	1.8°	2	p. 21	p. 24
60 mm sq.	DB16H781S	103H7821-5740	C 4837961-1	DB16H781D	103H7821-5710	C 4837961-1	1.8°	2	p. 21	p. 24
	DB16H782S	103H7822-5740	C 4837961-1	DB16H782D	103H7822-5710	C 4837961-1	1.8°	2	p. 21	p. 24
	DB16H783S	103H7823-5740	C 4837961-1	DB16H783D	103H7823-5710	C 4837961-1	1.8°	2	p. 22	p. 24
	DB16S161S	SH1601-5240	L —	DB16S161D	SH1601-5210	L —	0.9°	2	p. 22	p. 24
	DB16S162S	SH1602-5240	L —	DB16S162D	SH1602-5210	L —	0.9°	2	p. 22	p. 24

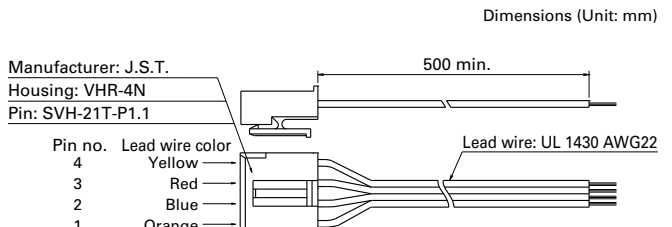
Motors marked with an (L) are lead wire types. Either a 300 mm or a 305 mm or greater lead wire is attached to the motor.  
Motors marked with a (C) are connector types. Cables with connectors for motors as shown below are included.

● Cable with motor connector (Supplied only with connector-type motors)

**Bundled cable (Bipolar 42 mm sq. motors only, model no.: 4835775-1)**



**Bundled cable (Bipolar 60 mm sq. motors only, model no.: 4837961-1)**



Size	Motor size	28 mm sq./Basic step angle 1.8°		42 mm sq./Basic step angle 1.8°		
	Motor length	32 mm	51.5 mm	33 mm	39 mm	
Single shaft	Set model no.	DB14S281S	DB14S285S	DB14S421S	DB14S422S	
	Configuration item: motor model no.	SH2281-5771	SH2285-5771	SF2421-10B41	SF2422-10B41	
Dual shaft	Set model no.	DB14S281D	DB14S285D	DB14S421D	DB14S422D	
	Configuration item: motor model no.	SH2281-5731	SH2285-5731	SF2421-10B11	SF2422-10B11	
Holding torque		N·m	0.07	0.145	0.29	0.43
Rotor inertia		$\times 10^{-4} \text{kg}\cdot\text{m}^2$	0.01	0.022	0.031	0.046
Rated current		A/phase	1	1	1	1
Motor mass *1		kg	0.11	0.2	0.23	0.3
Allowable thrust load		N	3	3	10	10
Allowable radial load *2		N	42	49	38	34

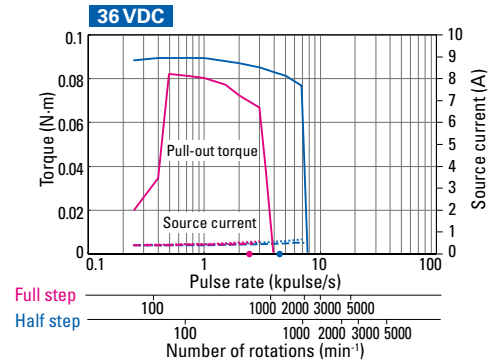
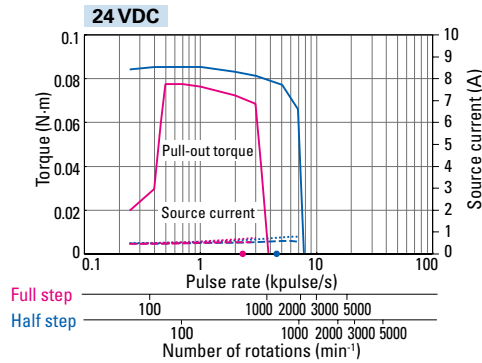
\*1 Driver mass ▶ p. 28 \*2 The load point is at the tip of the output shaft.

### Characteristics diagram

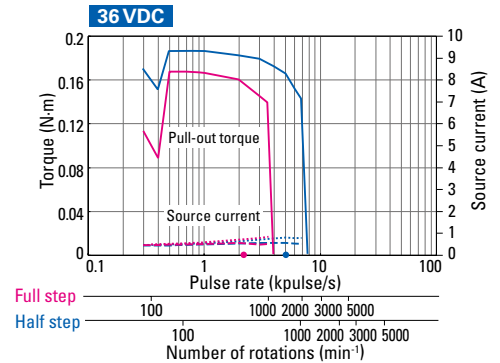
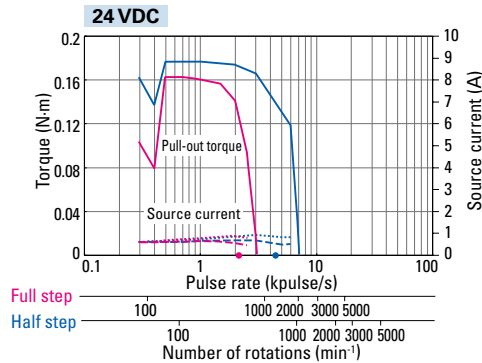
With rubber coupling

— Pull-out torque    — Full step Source current (no load)    — Half step    ● fs : Maximum self-start frequency when not loaded    ● Full step Source current (load applied)    ● Half step  
- - - Full step    - - - Half step

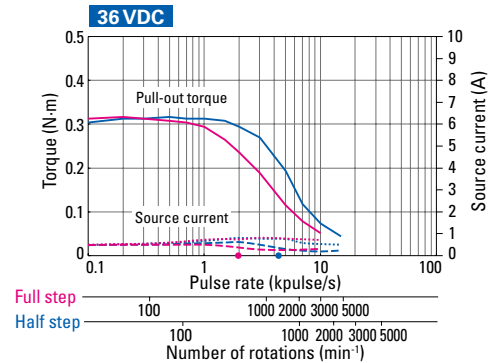
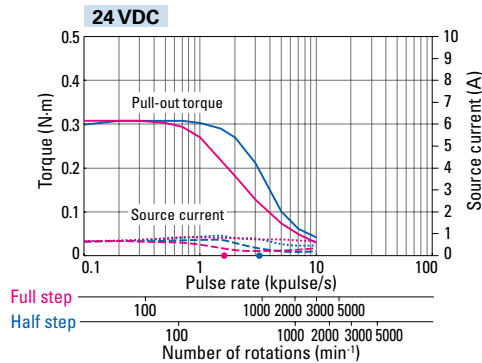
#### DB14S281S DB14S281D



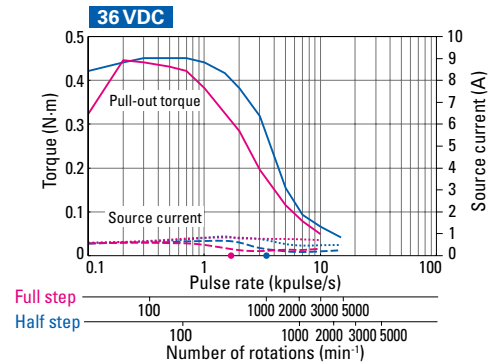
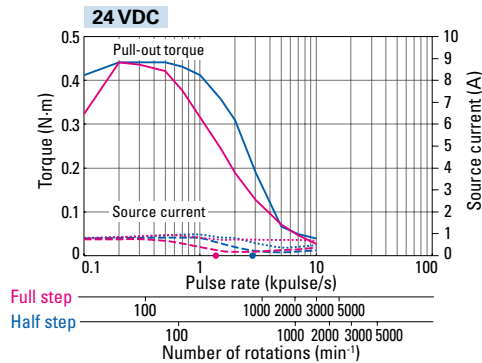
#### DB14S285S DB14S285D



#### DB14S421S DB14S421D



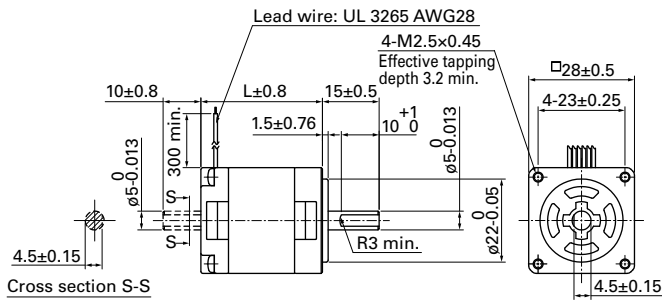
#### DB14S422S DB14S422D



# Stepping Motor: Dimensions

(Unit: mm)

## 28 mm sq.



Note: A unipolar motor is illustrated; bipolar motors have four lead wires.

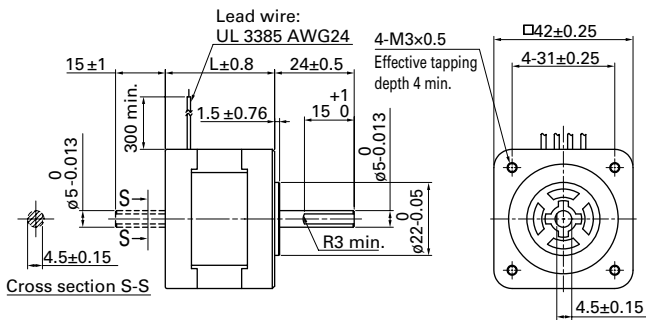
### Unipolar

Set model no.		Motor model no.		Motor length (L)
Single shaft	Dual shaft	Single shaft	Dual shaft	
DU14S281S	DU14S281D	SH2281-5271	SH2281-5231	32
DU14S285S	DU14S285D	SH2285-5271	SH2285-5231	51.5

### Bipolar

Set model no.		Motor model no.		Motor length (L)
Single shaft	Dual shaft	Single shaft	Dual shaft	
DB14S281S	DB14S281D	SH2281-5771	SH2281-5731	32
DB14S285S	DB14S285D	SH2285-5771	SH2285-5731	51.5

## 42 mm sq.



Note: A bipolar motor is illustrated; unipolar motors have six lead wires.

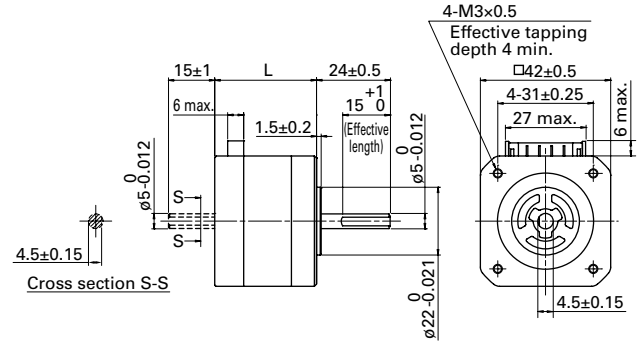
### Unipolar

Set model no.		Motor model no.		Motor length (L)
Single shaft	Dual shaft	Single shaft	Dual shaft	
DU15S141S	DU15S141D	SH1421-0441	SH1421-0411	33
DU15S142S	DU15S142D	SH1422-0441	SH1422-0411	39
DU15S144S	DU15S144D	SH1424-0441	SH1424-0411	48

### Bipolar

Set model no.		Motor model no.		Motor length (L)
Single shaft	Dual shaft	Single shaft	Dual shaft	
DB16S141S	DB16S141D	SH1421-5241	SH1421-5211	33
DB16S142S	DB16S142D	SH1422-5241	SH1422-5211	39
DB16S144S	DB16S144D	SH1424-5241	SH1424-5211	48

## 42 mm sq.



### Unipolar

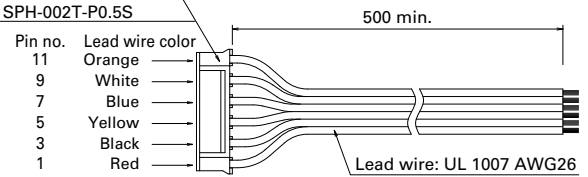
Set model no.		Motor model no.		Motor length (L)
Single shaft	Dual shaft	Single shaft	Dual shaft	
DU15S421S	DU15S421D	SF2421-12U41	SF2421-12U11	33±0.5
DU15S422S	DU15S422D	SF2422-12U41	SF2422-12U11	39±0.5
DU15S423S	DU15S423D	SF2423-12U41	SF2423-12U11	48±0.5
DU15S424S	DU15S424D	SF2424-12U41	SF2424-12U11	59.5±1

### Bipolar

Set model no.		Motor model no.		Motor length (L)
Single shaft	Dual shaft	Single shaft	Dual shaft	
DB14S421S	DB14S421D	SF2421-10B41	SF2421-10B11	33±0.5
DB14S422S	DB14S422D	SF2422-10B41	SF2422-10B11	39±0.5
DB14S423S	DB14S423D	SF2423-10B41	SF2423-10B11	48±0.5
DB14S424S	DB14S424D	SF2424-10B41	SF2424-10B11	59.5±1

### Motor cable Unipolar model no.: 4835774-1

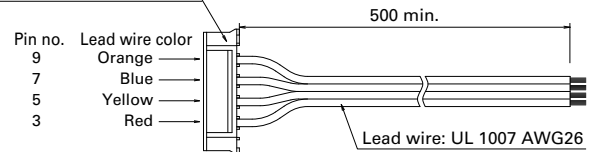
Manufacturer: J.S.T.  
 Housing: PHR-11  
 Pin: SPH-002T-P0.5S



This driver-motor cable is for motor model no. SF242□-12U□1.

### Motor cable Bipolar model no.: 4835775-1

Manufacturer: J.S.T.  
 Housing: PHR-11  
 Pin: SPH-002T-P0.5S



This driver-motor cable is for motor model no. SF242□-10B□1.