Bipolar DC input driver (model: BS1D200P10) and stepping motor

RoHS

Size			28 mm sq. (1.8° full step angle)		42 mm sq. (1.8° full step angle)	
	Motor size					
	Motor length		32 mm	51.5 mm	33 mm	39 mm
Single shaft	Set order no.		DB14S281S	DB14S285S	DB14S421S	DB14S422S
	Motor model no.		SH2281-5771	SH2285-5771	SF2421-10B41	SF2422-10B41
Dual shaft	Set order no.		DB14S281D	DB14S285D	DB14S421D	DB14S422D
	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		× 10^{-4}kg·m²	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

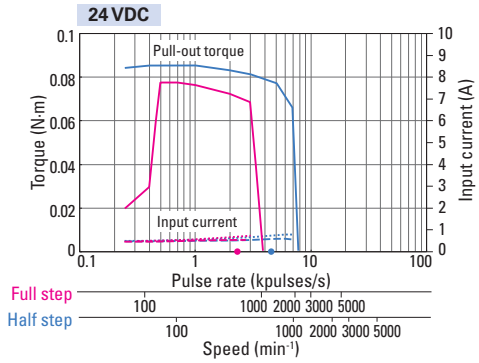
(1) For the driver mass, see ▶p. 26 (2) Load is exerted to the shaft end.

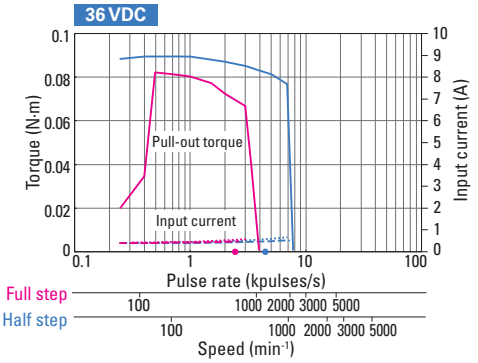
Characteristics

With rubber coupling used

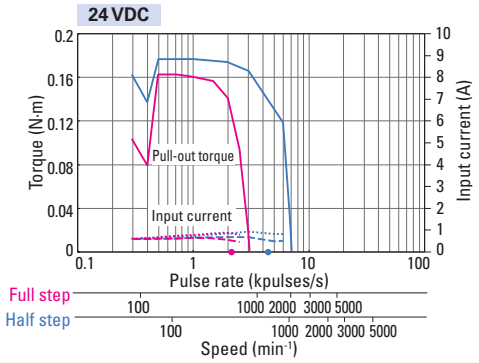
Pull-out torque Full step —— Half step —— fs: Maximum starting pulse rate with no load Full step ● Half step ●
Input current (with no load) Full step - - - Half step - - - Input current (with load) Full step ····· Half step ·····

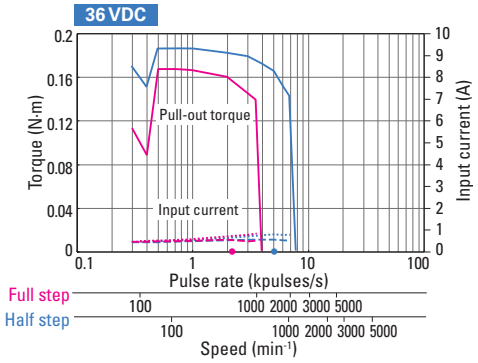
DB14S281S DB14S281D



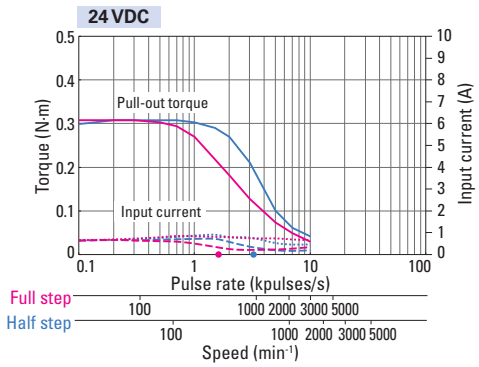


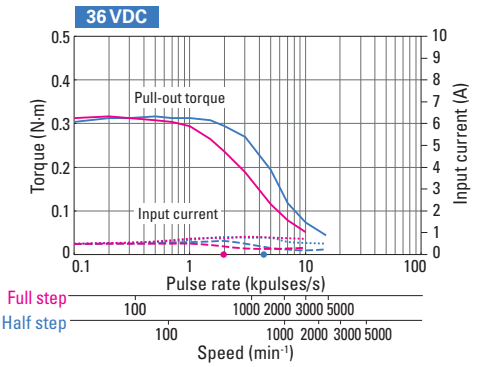
DB14S285S DB14S285D



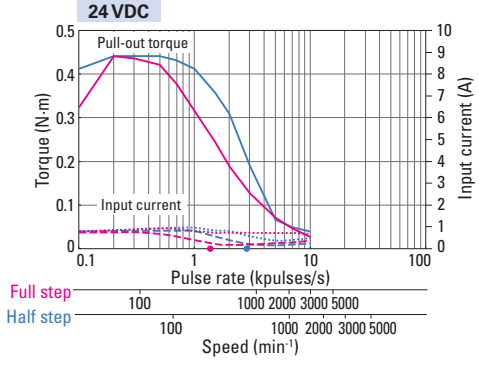


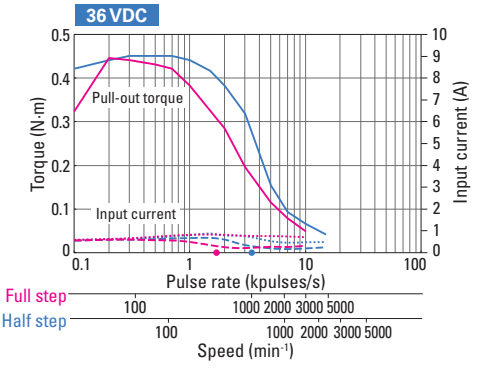
DB14S421S DB14S421D





DB14S422S DB14S422D





System configuration... ▶p. 10 Items included in a set... ▶p. 12 Motor dimensional drawing... ▶p. 22 to 23 Driver dimensional drawing... ▶p. 26

Data is measured under the drive conditions of SANYO DENKI. Drive torque may vary depending on the actual machine precision.

Bipolar DC input driver (model: BS1D200P10) and stepping motor

RoHS

Size	Motor size		42 mm sq. (1.8° full step angle)		42 mm sq. (0.9° full step angle)	
	Motor length		48 mm	59.5 mm	33 mm	39 mm
Single shaft	Set order no.		DB14S423S	DB14S424S	DB16S141S	DB16S142S
	Motor model no.		SF2423-10B41	SF2424-10B41	SH1421-5241	SH1422-5241
Dual shaft	Set order no.		DB14S423D	DB14S424D	DB16S141D	DB16S142D
	Motor model no.		SF2423-10B11	SF2424-10B11	SH1421-5211	SH1422-5211
Holding torque		N·m	0.56	0.8	0.23	0.34
Rotor inertia		× 10^{-4}kg·m²	0.063	0.094	0.044	0.066
Rated current		A/phase	1	1	2	2
Motor mass(1)		kg	0.38	0.51	0.24	0.29
Allowable thrust load		N	10	10	10	10
Allowable radial load(2)		N	30	20	25	24

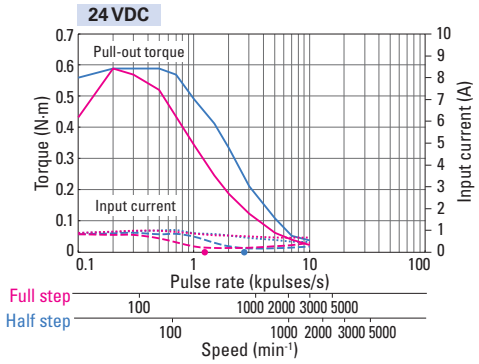
(1) For the driver mass, see ▶p. 26 (2) Load is exerted to the shaft end.

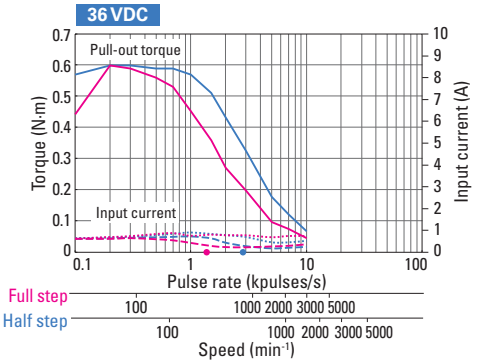
Characteristics

With rubber coupling used

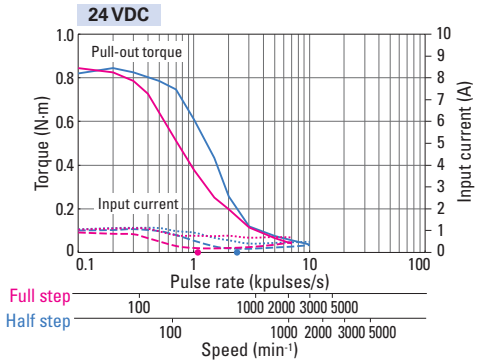
Pull-out torque Full step —— Half step —— fs: Maximum starting pulse rate with no load Full step ● Half step ●
Input current (with no load) Full step - - - Half step - - - Input current (with load) Full step ····· Half step ·····

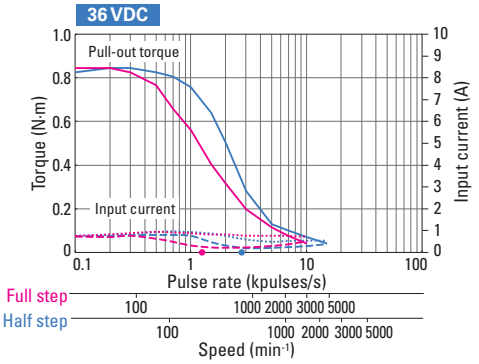
DB14S423S DB14S423D



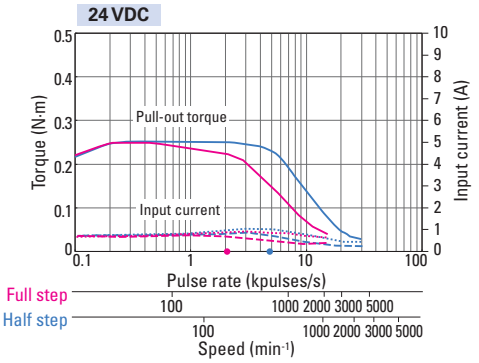


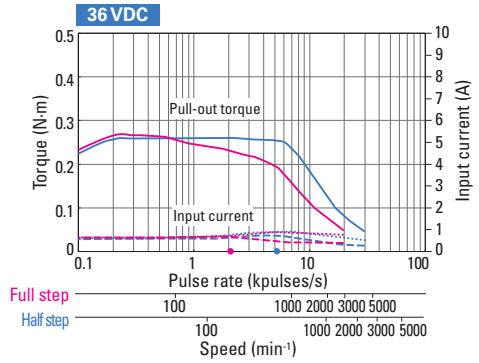
DB14S424S DB14S424D



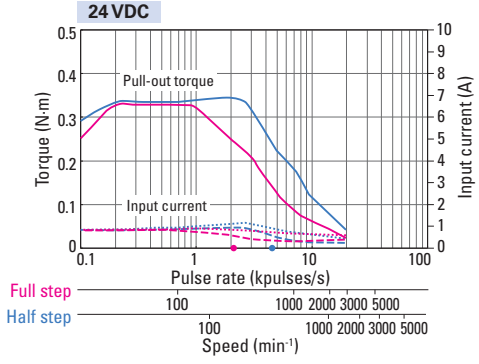


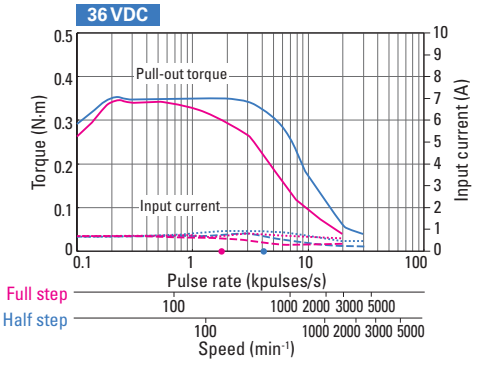
DB16S141S DB16S141D





DB16S142S DB16S142D





System configuration... ▶p. 10 Items included in a set... ▶p. 12 Motor dimensional drawing... ▶p. 22 to 23 Driver dimensional drawing... ▶p. 26

Data is measured under the drive conditions of SANYO DENKI. Drive torque may vary depending on the actual machine precision.

Bipolar DC input driver (model: BS1D200P10) and stepping motor

RoHS

Size	Motor size	42 mm sq. (0.9° full step angle)	50 mm sq. (1.8° full step angle)		56 mm sq. (1.8° full step angle)
	Motor length	48 mm	39.8 mm	51.3 mm	41.8 mm
Single shaft	Set order no.	DB16S144S	DB16H671S	DB16H673S	DB16M711S
	Motor model no.	SH1424-5241	103H6701-5040	103H6703-5040	SM2561C20B41
Dual shaft	Set order no.	DB16S144D	DB16H671D	DB16H673D	DB16M711D
	Motor model no.	SH1424-5211	103H6701-5010	103H6703-5010	SM2561C20B11
Holding torque	N·m	0.48	0.28	0.49	0.75
Rotor inertia	× 10^{-4}kg·m²	0.089	0.057	0.118	0.14
Rated current	A/phase	2	2	2	2
Motor mass(1)	kg	0.38	0.35	0.5	0.49
Allowable thrust load	N	10	15	15	20
Allowable radial load(2)	N	20	79	75	113

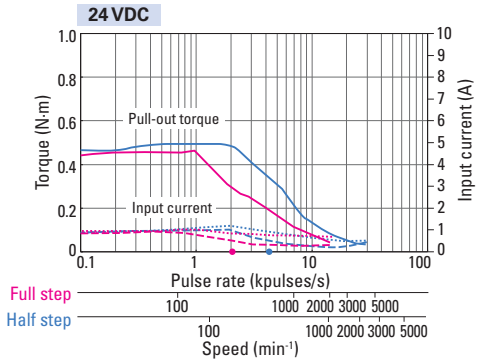
(1) For the driver mass, see ▶p. 26 (2) Load is exerted to the shaft end.

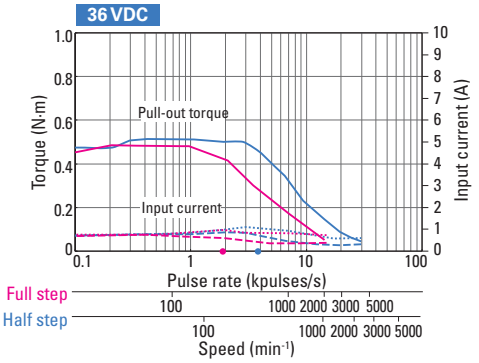
Characteristics

With rubber coupling used

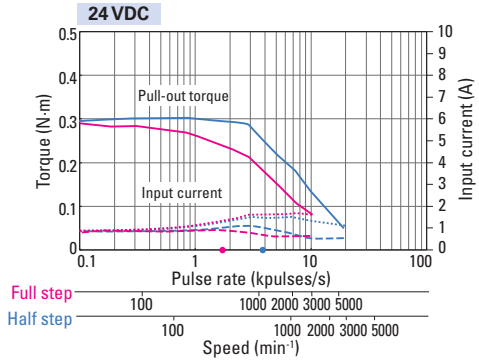
Pull-out torque Full step —— Half step —— fs: Maximum starting pulse rate with no load Full step ● Half step ●
Input current (with no load) Full step - - - Half step - - - Input current (with load) Full step ····· Half step ·····

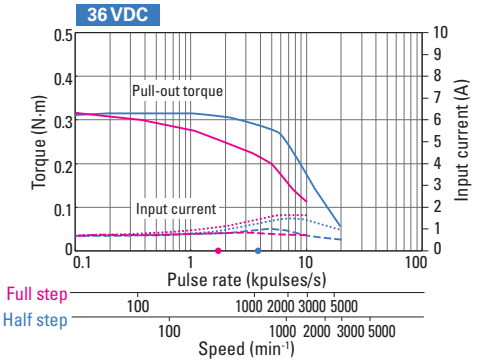
DB16S144S DB16S144D



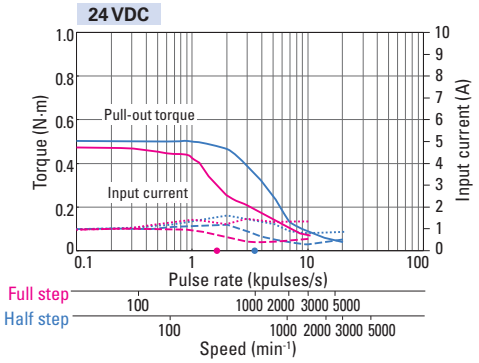


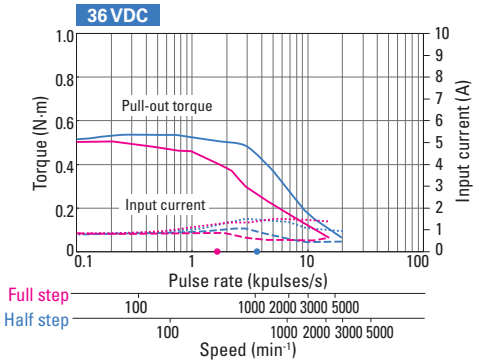
DB16H671S DB16H671D



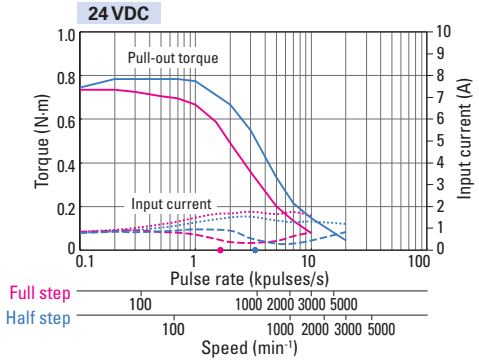


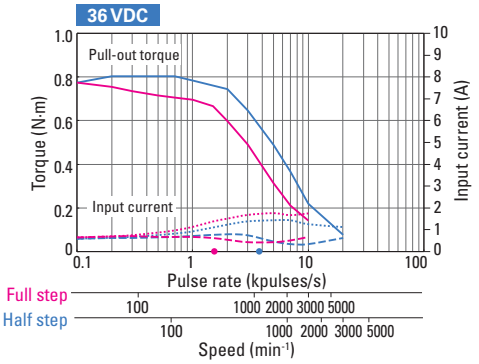
DB16H673S DB16H673D





DB16M711S DB16M711D





System configuration... ▶p. 10 Items included in a set... ▶p. 12 Motor dimensional drawing... ▶p. 22 to 23 Driver dimensional drawing... ▶p. 26

Data is measured under the drive conditions of SANYO DENKI. Drive torque may vary depending on the actual machine precision.

Bipolar DC input driver (model: BS1D200P10) and stepping motor

RoHS

Size	Motor size		56 mm sq. (1.8° full step angle)			60 mm sq. (0.9° full step angle)
	Motor length		53.8 mm	75.8 mm	85.8 mm	42 mm
Single shaft	Set order no.		DB16M712S	DB16M713S	DB16M714S	DB16S161S
	Motor model no.		SM2562C20B41	SM2563C20B41	SM2564C20B41	SH1601-5240
Dual shaft	Set order no.		DB16M712D	DB16M713D	DB16M714D	DB16S161D
	Motor model no.		SM2562C20B11	SM2563C20B11	SM2564C20B11	SH1601-5210
Holding torque		N·m	1.4	2.35	2.5	0.69
Rotor inertia		× 10^{-4}kg·m²	0.28	0.5	0.6	0.24
Rated current		A/phase	2	2	2	2
Motor mass(1)		kg	0.69	1.1	1.27	0.55
Allowable thrust load		N	20	20	20	15
Allowable radial load(2)		N	102	78	70	78

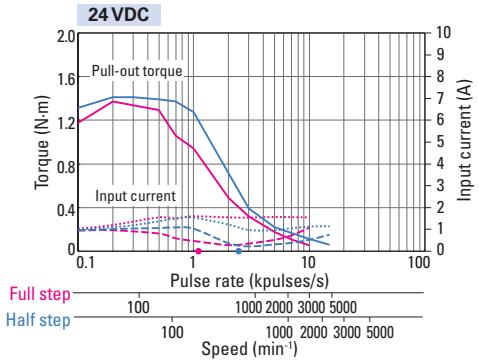
(1) For the driver mass, see ▶p. 26 (2) Load is exerted to the shaft end.

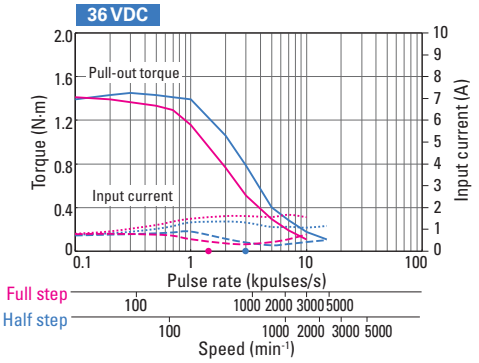
Characteristics

With rubber coupling used

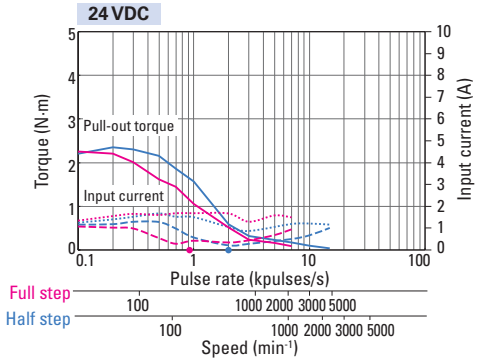
Pull-out torque Full step —— Half step —— fs: Maximum starting pulse rate with no load Full step ● Half step ●
Input current (with no load) Full step - - - Half step - - - Input current (with load) Full step ····· Half step ·····

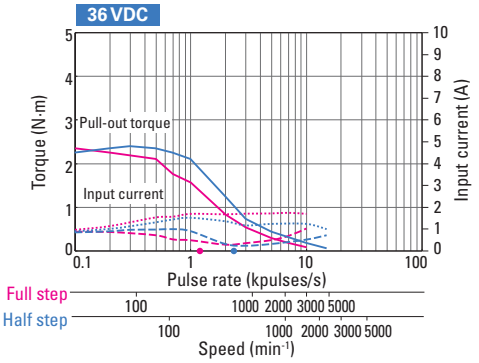
DB16M712S DB16M712D



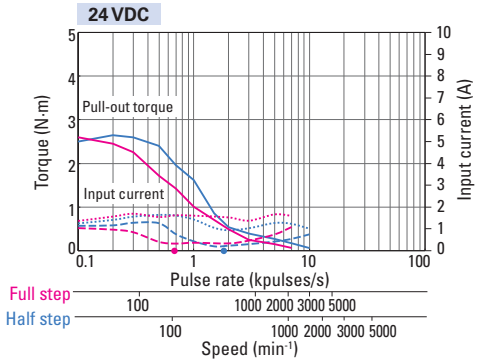


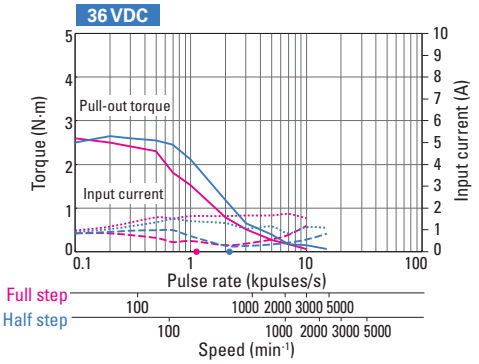
DB16M713S DB16M713D



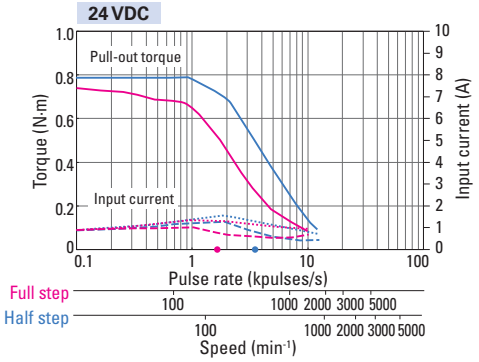


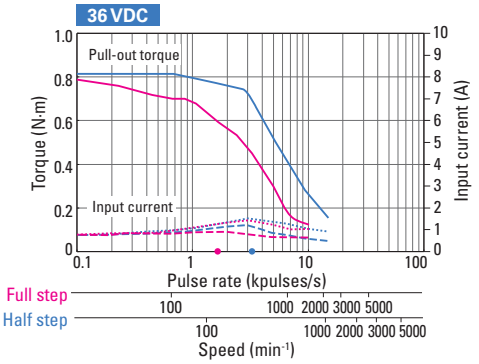
DB16M714S DB16M714D





DB16S161S DB16S161D





System configuration... ▶p. 10 Items included in a set... ▶p. 12 Motor dimensional drawing... ▶p. 22 to 23 Driver dimensional drawing... ▶p. 26

Data is measured under the drive conditions of SANYO DENKI. Drive torque may vary depending on the actual machine precision.

Bipolar DC input driver (model: BS1D200P10) and stepping motor

RoHS

Size	Motor size		60 mm sq. (0.9° full step angle)
	Motor length		54 mm
Single shaft	Set order no.		DB16S162S
	Motor model no.		SH1602-5240
Dual shaft	Set order no.		DB16S162D
	Motor model no.		SH1602-5210
Holding torque		N·m	1.28
Rotor inertia		× 10^{-4}kg·m²	0.4
Rated current		A/phase	2
Motor mass(1)		kg	0.8
Allowable thrust load		N	15
Allowable radial load(2)		N	65

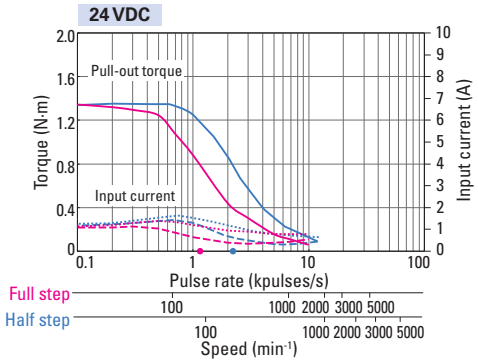
(1) For the driver mass, see ▶p. 26 (2) Load is exerted to the shaft end.

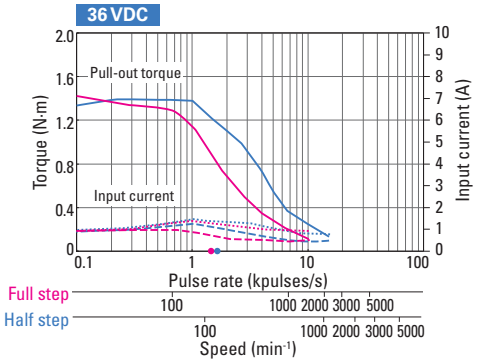
Characteristics

With rubber coupling used

Pull-out torque Full step — Half step —
Input current (with no load) Full step - - - Half step - - -
fs: Maximum starting pulse rate with no load Full step ● Half step ●
Input current (with load) Full step ····· Half step ·····

DB16S162S
DB16S162D





System configuration... ▶p. 10 Items included in a set... ▶p. 12 Motor dimensional drawing... ▶p. 22 to 23 Driver dimensional drawing... ▶p. 26

Data is measured under the drive conditions of SANYO DENKI. Drive torque may vary depending on the actual machine precision.