

2-Phase Hybrid Stepping Motor Driver

**HIGH TORQUE, SILENT ROTATION
SERVEX FSD2U2P14-01 DC24V**

Features

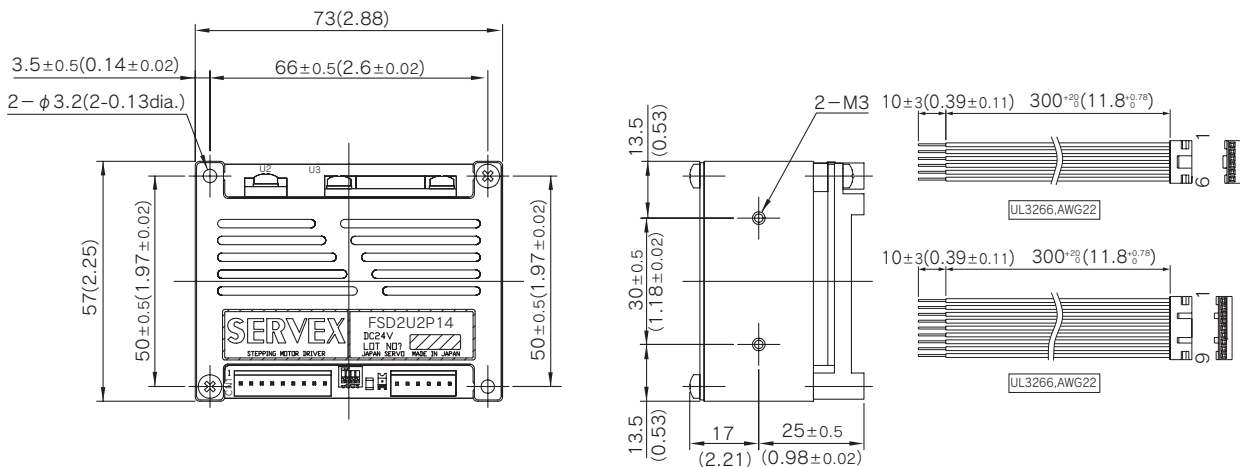
1. Ultra-compact driver measuring a mere 2.2 x 2.9 x 1.7 inches.
2. Uni-polar constant current driver.
3. Micro-stepping feature may be used to be selected from any one of 1/1 (full-step), 1/2 (micro-step), and 1/4 (micro-step) settings.
4. Through the use of 3-bit external signals, electric current settings may be specified to any one of 8 different setting from 0.33-2A/phase.
5. Input commands may be selected from either direction-of-rotation separate serial pulse signals or a combination of directional signals and pulse signals.

Applicable motors

See page 3

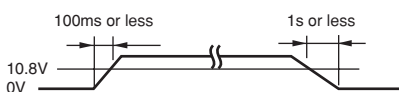


Dimensions Unit = mm (inch)



Power supply specifications

Motor Power supply voltage(VM) : 10.8V~33.0V



Motor output current; About 2A max.(different depending on the drive parameters of the motor being used)

Connector specifications

	FSD2U2P14-01 side	User side		Maker
	Maker Model	Applicable Housing	Applicable terminal(real)	
CN3	IL-G-9P-S3T2-SA	IL-G-9S-S3C2-SA	IL-G-C2-SC-10000	J.A.E
CN2	IL-G-6P-S3T2-SA	IL-G-6S-S3C2-SA	IL-G-C2-SC-10000	J.A.E

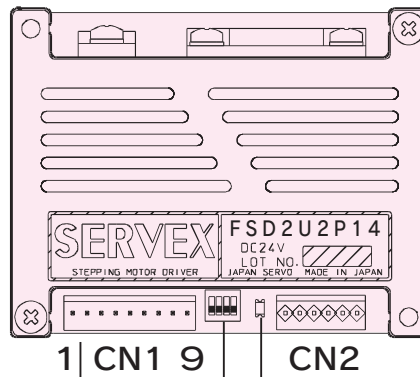
Required operating environment conditions

	In operation	At rest	Comments
Ambient temperature (°C)	0~+50	-20~60	
Ambient humidity(%)	35~85	35~85	Non condensation

Functions, Setting and Connections

Connector No.	Terminal No.	Name	Function
CN1	1	VM	Motor power supply 12-30Vdc
	2	P.GND	Power grounding
	3	CW	The CW direction drive pulse or the step command pulse (Switch No.1)
	4	CCW	The CCW direction drive pulse or the direction signal (Switch No.1)
		Motor current (A)	0.33 0.57 0.81 0.19 1.28 1.52 1.76 2.00
	7	C0	H L H L H L H L
	6	C1	H H L L H H L L
	5	C2	H H H H L L L L
		Motor current saving mode (A)	0.25 0.39 0.51 0.70 0.81 0.98 1.12 1.29
8	HOFF	Motor on/off (Hi : off)	
9	GND	Signal Grounding	

Connector No.	Terminal No.	Name	Function
CN2	1	A	To Motor phase A
	2	A.COM	To Motor phase A common line
	3	\bar{A}	To Motor phase \bar{A}
	4	B	To Motor phase B
	5	B.COM	To Motor phase B common line
	6	\bar{B}	To Motor phase \bar{B}



Power supply input display LED

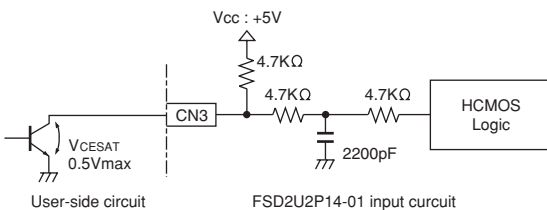
Switch No.	Name	Function	Switch Settings	
			OFF	ON
1	SEL	Drive pulse format	CW/CCW pulse	Step pulse/direction signal
2	SAVE	Automatic power saving	saving	not saving
3	MS0	Step angle	See below table	
4	MS1			

Setting of step angle (changing on power is not available.)

	MS0	ON	OFF	ON	OFF
MS1	ON	ON	ON	OFF	OFF
Division of step angle	1/2	1/1	1/4	1/2	

Input circuit

CW, CCW, C0, C1, C2, HOFF



Input signal specifications

Item	Signal	Specification	
		MIN	MAX
High level input voltage	$V_{ih}(V)$	3.5	5.3
Low level input voltage	$V_{il}(V)$	0.0	0.8
Rise time	$T_r(\mu s)$	-	25
Fall time	$T_f(\mu s)$	-	15
Input pulse range	$T_w(\mu s)$	18	-
Direction of rotation change timing	$T_d(\mu s)$	10	-

Note)Specified the voltage waveform between the user circuit ground and the FSD2U2P14-01 terminal

