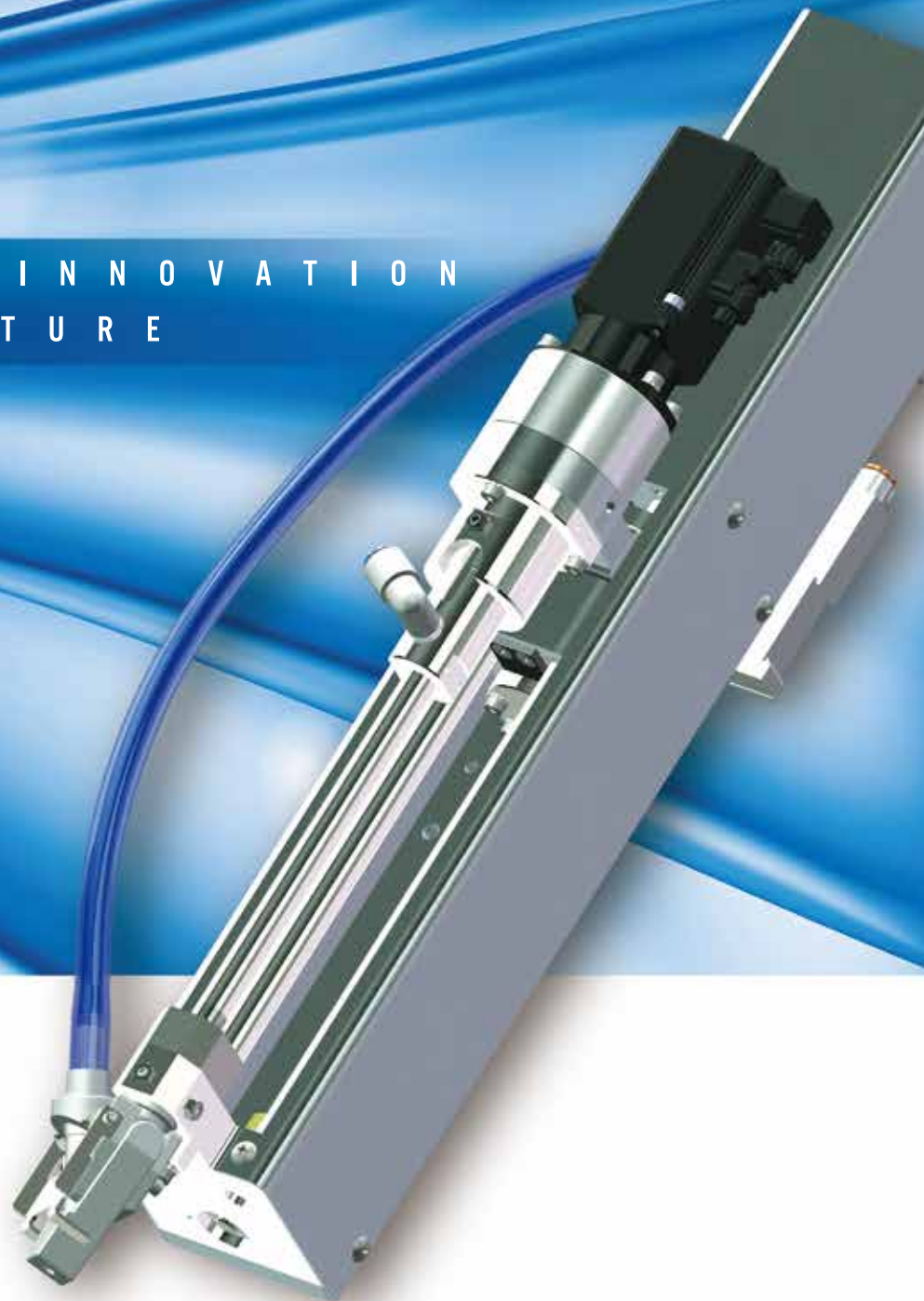


**NITTOSEIKO**

Single spindle screw driving machine

**FEEDMAT** FM series

F A S T E N I N G I N N O V A T I O N  
f o r T H E F U T U R E







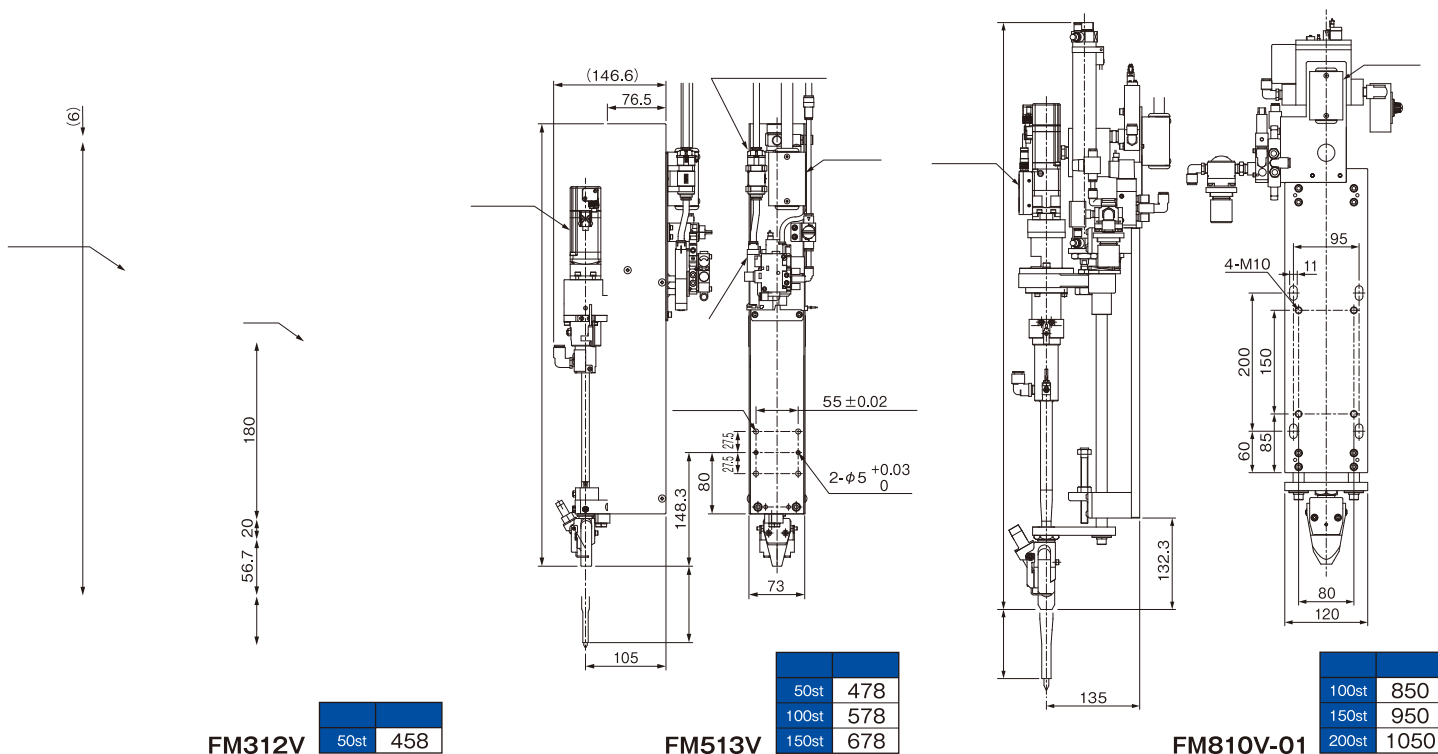
## Specifications of controller

Model	<b>SD75-T1</b>
	Single phase 200-230VAC 50/60Hz, [Single phase 100-115VAC 50/60Hz]
	RS-422
	EEPROM
	Standard user port, 2-pos. [I/O addition possible]
	Standard user port, 4-pos. [I/O addition possible]
	[CC-Link]
	25K steps (including 5K steps used for the system)
	110×210×270mm
	Approx. 3.0kg
	[Handy typ

※1) External input/output may be used as a screw-driving system depending on the device configuration.

※2) PNP type also available. (Need to specify at order timing, NPN or PNP.)

※3) GX Developer and GX Works are products of Mitsubishi Electric.



## Feature

Screws are held mechanically. This type features a simple and low-cost structure. It is perfect for flat workpieces with no uneven surfaces or obstructions.

## Specifications of tool unit

[ ] : Optional

Model		FM510C	FM810C-01	FM810C-02
Applicable screws (※1, ※2)	Category	Machine screw, Tapping screw		Hexagon bolt
	Nom Dia.	2~5mm		5~8mm
	Length	Max. 20, [25]mm		Max. 30, [40]mm
Tightening torque(※3)		0.3~4N·m		4~22N·m
Driver		KX driver, [NX driver]		
Tightening stroke		50, 100, [150]mm		100, 150, 200mm
Screw holding system		Chuck type		
Error detection		Torque failure (Thread stripping)		
		Screw shortage in screw feeder		Screw shortage in screw feeder
		[Screw height fault (Proximity sensor)] (※4)		
Working air supply		Clean air from 0.4 to 0.5 MPa		
Power supply (Tool Unit, Screw Feeder)		Single phase 200-230VAC 50/60Hz, [Single phase 100-115VAC 50/60Hz]		Single phase 200VAC 50 or 60Hz, [others than 200VAC]
Tool unit weight(※5)		Approx. 4.5kg		Approx. 14.0kg
Screw feeder		FF311DR/FF503H		FF801H
Controller		SD75-T1		

※1) Products will be built up based on specification of screws, therefore it can be used for one kind of screws only. ※2) Application range of screws will be changed by type of screw head, or size. Please contact us to make sure for it. ※3) The type of driver varies depending on target torque. ※4) It can be detected more than 2mm the faulty screw height. ※5) It's a mass (weight) when the stroke is 100mm, and it isn't include the feeder and controller.

## Specifications of controller

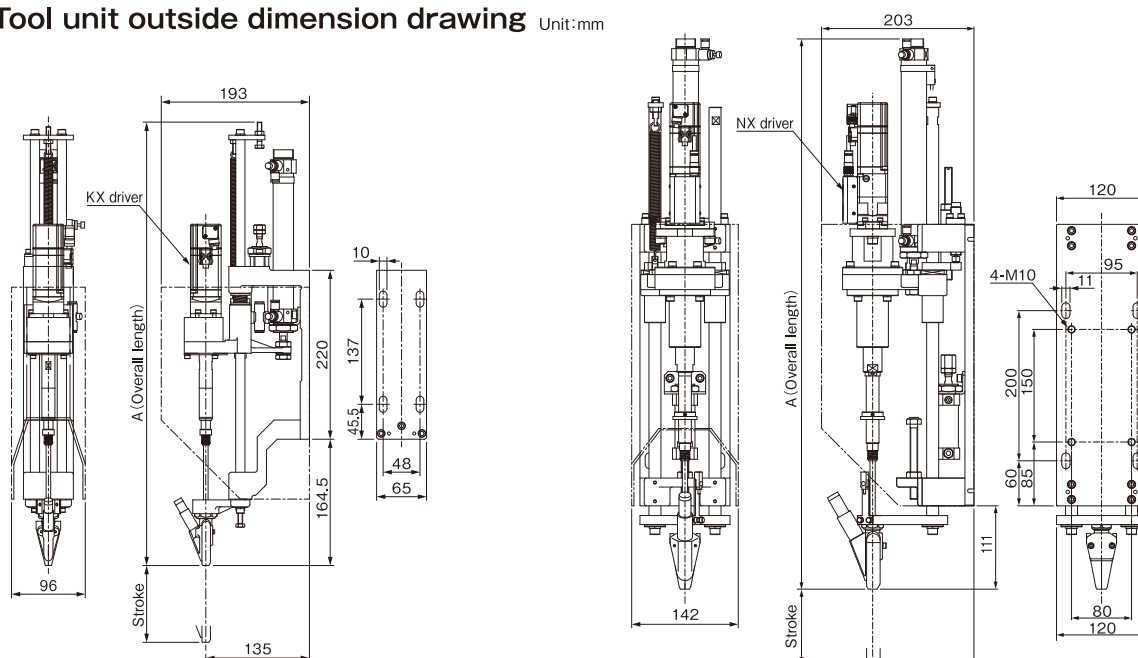
[ ] : Optional

Model	SD75-T1
Supply voltage	Single phase 200-230VAC 50/60Hz, [Single phase 100-115VAC 50/60Hz]
Communication port for operation panel	RS-422
Memory	EEPROM
External output (※1, ※2)	Standard user port, 2-pos. [I/O addition possible]
External output (※1, ※2)	Standard user port, 4-pos. [I/O addition possible]
Field network	[CC-Link]
PLC program	25K steps (including 5K steps used for the system)
Outside dimensions (W×H×D)	110×210×270mm
Weight	Approx. 3.0kg
Operation panel	[Handy type touch panel] Connection cable: 3m
PC software	[GX Developer or GX Works (Ver.2 or later)] (※3)

※1) External input/output may be used as a screw-driving system depending on the device configuration.  
 ※2) PNP type also available. (Need to specify at order timing. NPN or PNP.)  
 ※3) GX Developer and GX Works are products of Mitsubishi Electric.



## Tool unit outside dimension drawing Unit:mm



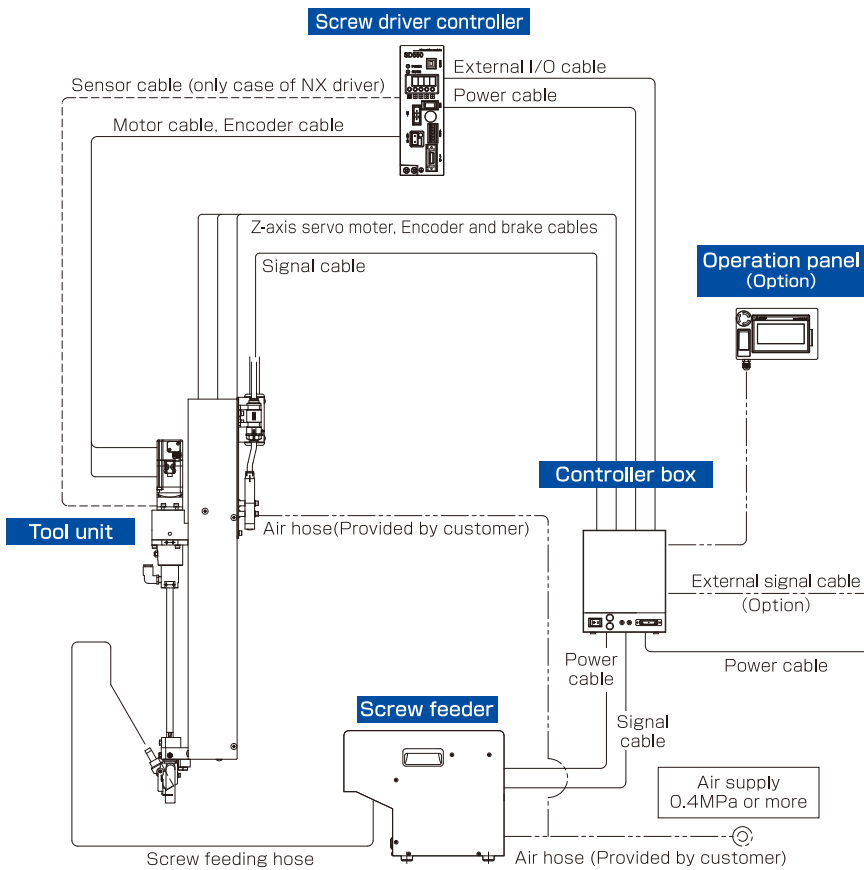
Stroke	A (Overall length)
50st	528
100st	578

**FM510C**

Stroke	A (Overall length)
100st	733
150st	833
200st	933

**FM810C-01**

## ■ Device configuration(FM513VZ)



## ■ Standard length of cable

Layout	Length
Tool unit ⇔ Screw driver controller	4m
Tool unit ⇔ Control box	4m
Control box ⇔ Screw feeder	3m
Control box ⇔ Screw driver controller	4m
Screw feeder ⇔ Tool unit	3m

## ■ Exmpl of machine configuration for FM513V



The device in the photo is an example of the configuration

## ■ Usage example

It's possible to mount for Yθ (linear & swivel) type and XY (cartesian) type, also articulated robot by other company.



Case of XY (cartesian) robot



Case of Yθ (linear & swivel) robot

※For more information, see our website or contact the nearest sales office

For introduction movie, go into here



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