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
For inquiries, please visit our website

This is the online center for customer support. You can submit technical inquiries and requests for specifications and price.



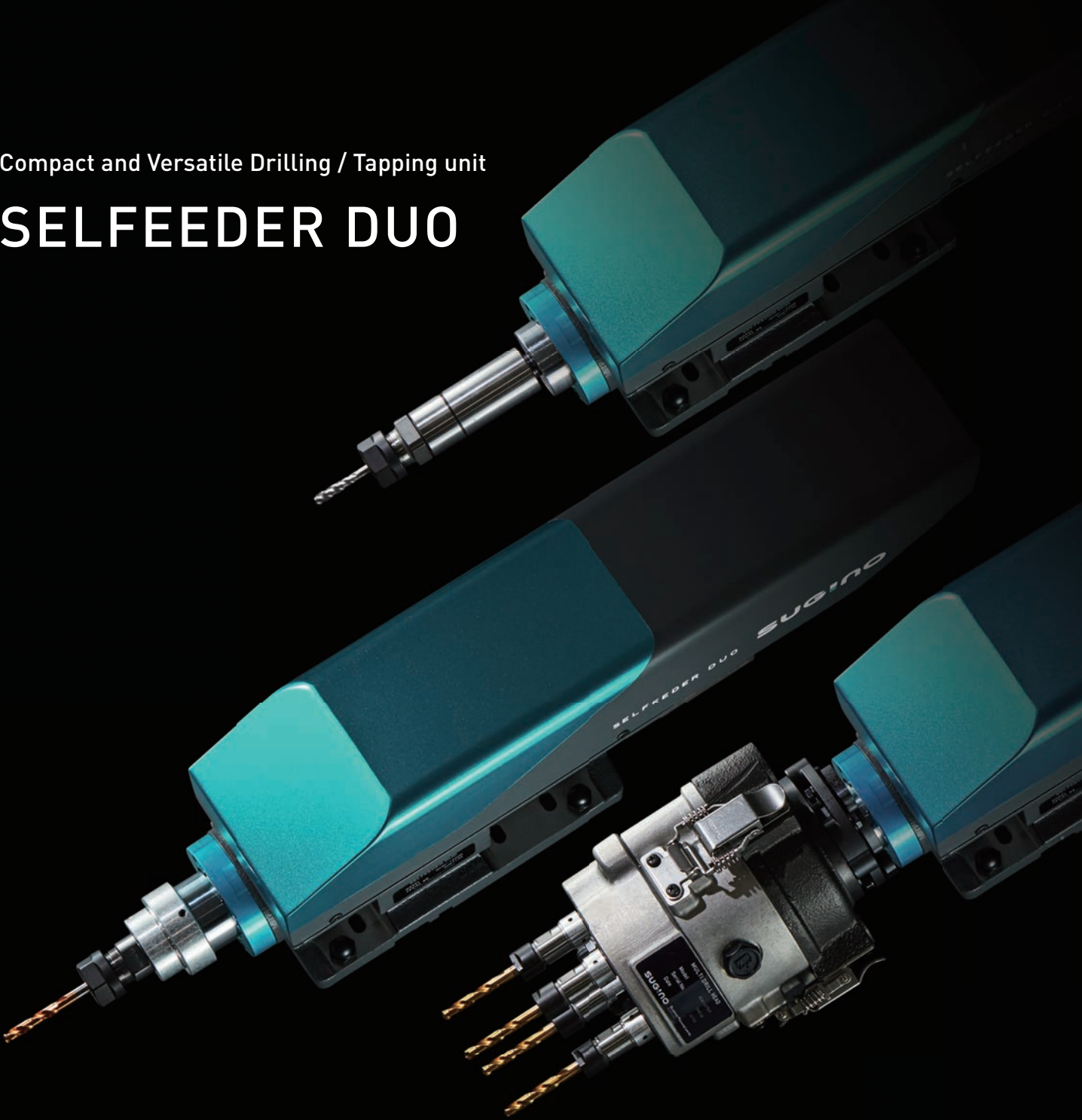
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Compact and Versatile Drilling / Tapping unit

SELFEEDEr DUO



Versatility for special-purpose machines !

SELFEEDER has been used in many drilling/tapping processes.
Now Brand-new SELFEEDER is born.

STRONG POINT 01

Both Drilling and Tapping with one unit

Servo motors are installed on both spindle and feed axis.
Tapping is also available by changing tool, holder, multi-spindle head.

Collet Chuck
Spindle Nose Specification

Jacobs taper
Spindle Nose Specification

Adjustable
Spindle Nose Specification

Multi-spindle head

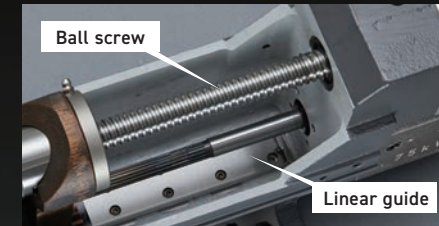
Tap Holder

Stub Holder

STRONG POINT 02

Compact & High rigidity

High rigidity and high precision machining are achieved even with a width of 136 mm slim body.



STRONG POINT 03

Selectable servo motor

Rotation speed and torque can be selected.

※A motor spacer and a coupling may need to be replaced for changing the servo motor.

SELFEEDER DUO

A total of 600K units of SELFEEDER series has been sold worldwide.
Latest model SELFEEDER DUO contributes to the next generation manufacturing by "Shorter cycle time", "Lower running cost", "Greener to environment".

Basic specification

SELFEEDEr DUO, a highly versatile unit that achieves both drilling and tapping with one unit, offers seven types of spindle and motor sets that meet a variety of machining conditions.



Specification Chart / Drilling and tapping dual-purpose type

Model	Spindle speed	Spindle torque	Chuck type (Collet chuck)	Chucking capacity	Max. drilling size			Max. tapping size		Spindle AC servo motor	AC servo motor for feed	Thrust	Rapid approach speed	Weight
	min ⁻¹	N·m			AL★ (ADC)	FC★ (FC200)	ST★ (S45C)	AL★ (ADC)	ST★ (S45C)					
				mm	mm			mm		kW	kW	N	mm/sec	kg
SD3-7100B	Max. 10,000	3,000min ⁻¹ or less 2.4 3,000~10,000min ⁻¹ 2.4~0.7	ER11	0.5 ~ 7.0	7	5	4	—	—	0.75				32
SD3-1650B	Max. 5,000	3,000min ⁻¹ or less 2.4 3,000~5,000min ⁻¹ 2.4~1.5	(ER11) (ER20) ER25	(0.5 ~ 7.0) (0.5 ~ 13.0) 0.5 ~ 16.0	12	9	8	M6	M5	0.75	0.75	2,320	Max. 200	32
SD3P-1630B	Max. 3,000	3,000min ⁻¹ or less 6.4	ER25	0.5 ~ 16.0	14	12	10	M12	M7	2.0 3,000min ⁻¹ rated				35
SD3P-1620B	Max. 2,000	2,000min ⁻¹ or less 9.5	ER25	0.5 ~ 16.0	16	13	11	M14	M10	2.0 2,000min ⁻¹ rated				36

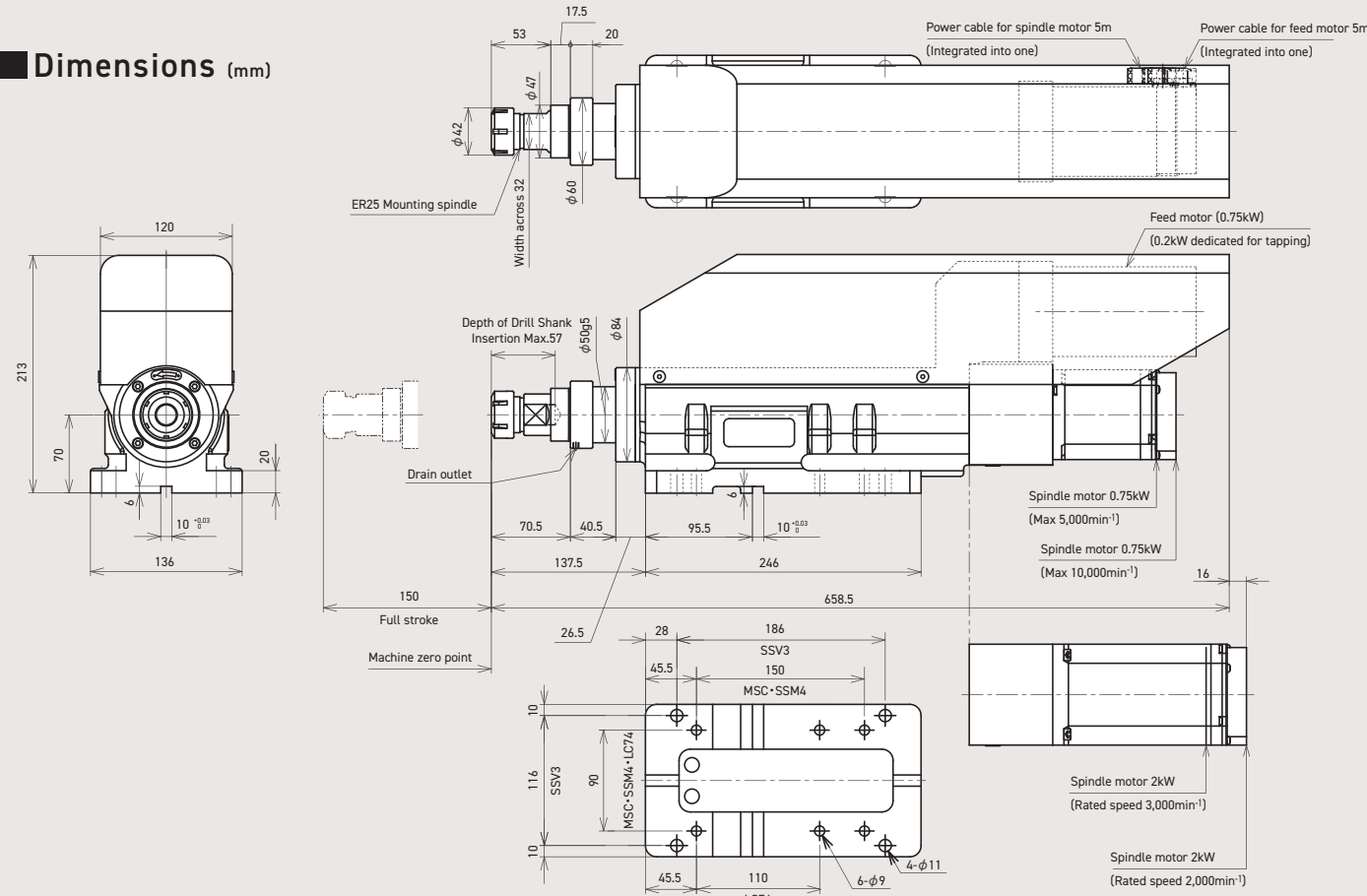
- Notes
- Select a model based on workpiece specifications, machinability, tool specifications and cutting speed. The drilling capacity shown above is for a depth equivalent to the drill diameter times two. Tapping capacities are conditional on the depth of tapping being limited to 1.5 times of the tap diameter.
 - ER collet is adopted for spindle nose. Use collet ER-GB when chucking a tap. Misalignment between a pre-hole and a tap can cause early tap damage. In case of tapping only, select a Jacobs taper type spindle and a tap holder shown on page 5.
 - A servo motor for feed is with a holding brake, "B" is added to the end of SELFEEDEr DUO model number.
 - AL★...Aluminium, FC★...Cast Iron, ST★...Steel

Specification Chart / Dedicated for tapping

Model	Spindle Speed		Spindle torque	Rapid approach speed	Max. tapping size		Spindle AC servo motor	AC servo motor for feed	Thrust	Weight
	Fast approach speed	Pitch feed speed			AL★ (ADC)	ST★ (S45C)				
SD3-104TB	Non-rotating	Max.4,000min ⁻¹ for M1 to M5 tapping Max.3,000min ⁻¹ for M6 tapping	3,000min ⁻¹ or less 2.4 3,000~4,000min ⁻¹ 2.4~1.5	200	M6	M5	0.75	0.2	680	31
SD3P-310TB	Non-rotating	Max.4,000min ⁻¹ for M3 to M6 tapping Max.3,000min ⁻¹ for M7 to M12 tapping Max.3,000min ⁻¹ when tapping with multi-spindle head	3,000min ⁻¹ or less 6.4 3,000~4,000min ⁻¹ 6.4~4.8		M12	M7	2.0 3,000min ⁻¹ rated			34
SD3P-314TB	Non-rotating	Max.2,000min ⁻¹ for M14 or less tapping Max.3,000min ⁻¹ when tapping with multi-spindle head	2,000min ⁻¹ or less 9.5		M14	M10	2.0 2,000min ⁻¹ rated			35

- Notes
- Select model and spindle speed based on workpiece material, machinability, tap diameter and material, cutting speed, and other factors.
 - Tapping capacities are conditional on the depth of tapping being limited to 1.5 times of the tap diameter.
 - A servo motor for feed is with a holding brake, "B" is added to the end of SELFEEDEr DUO model number.
 - AL★...Aluminium, FC★...Cast Iron, ST★...Steel

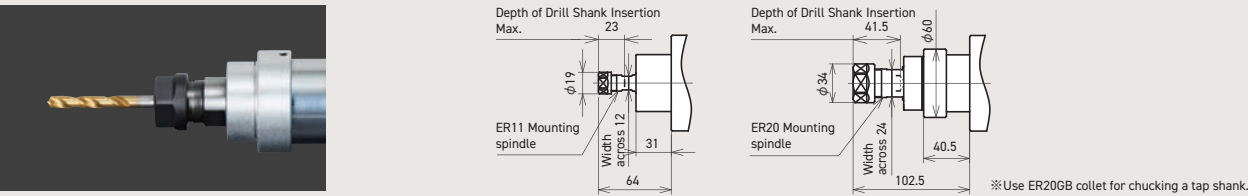
Dimensions (mm)



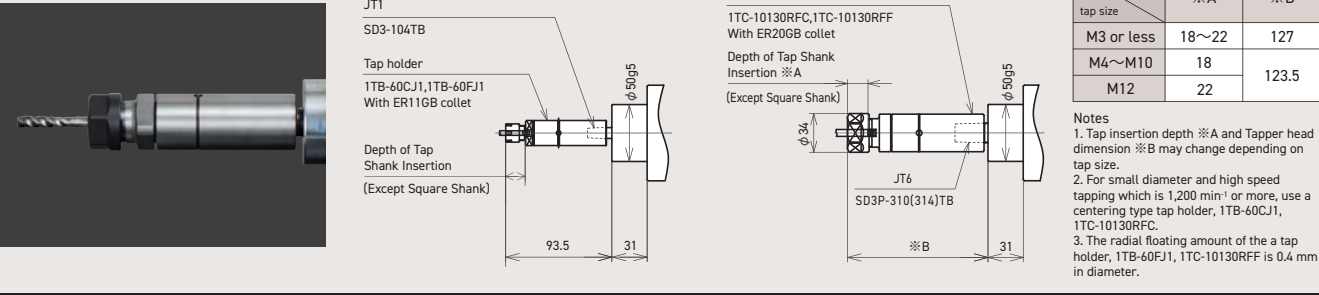
※ The mounting hole position on the base surface is the same as Selfeeder SSV3, MSC, SSM4 and Level clamp LC-74.

Spindle

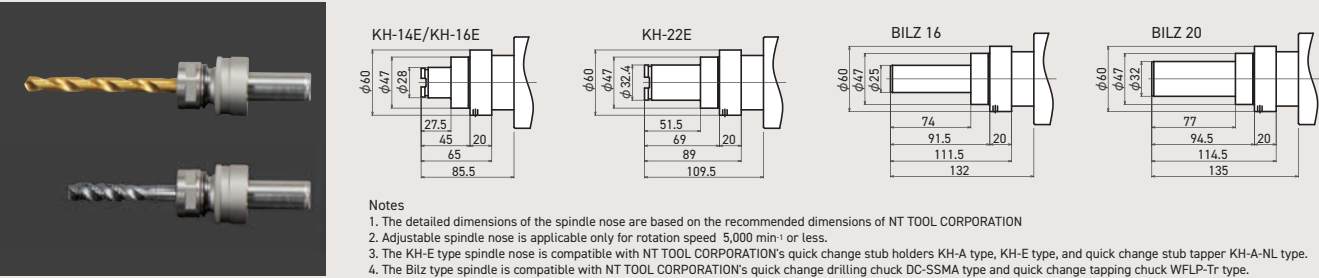
Collet Chuck Spindle Nose Specification



Jacobs Taper/Spindle specification & Tap holder



Adjustable Spindle Nose Specification Optional item for easy changeover between drilling and tapping .




Electrical accessories

The basic operation system parameters and machining operation patterns are pre-installed in the controller.
Operation can start on the same day as the installation date with a simple operation.

Standard accessories

SELFEEDE DUO



Machine in a photo is special color.

Cable for feed motor 5m

Cable for spindle motor 5m

Equipment installed in the control panel

Servo amplifier for feed-axis

Servo amplifier for spindle

I/O cable 2m

I/O cable 2m

Controller for feed axis / spindle control (Mitsubishi Electric PLC)

Optional item

Touch Panel

Attached cable 3m

Customer preparation

Control box

Relay

Earth Leakage Breaker

Power Supply DC24V

Magnetic Contactor

Power voltage is a 3-phase AC 200V, 50/60Hz.

Examples of special specification

1. Compatible with Customer-prepared servo motor made by Mitsubishi Electric Corporation or other makers. Please contact SUGINO for the servo motors that can be installed.

2. Overseas models available with overseas voltage specifications.

3. The touch panel TP-05 is not required when using a customer-prepared touch panel, made by Mitsubishi Electric Corporation equipped with a "multi-channel" function.

※Other than above, options that lead to cost reduction are available. For details, please contact SUGINO from the 2D code on page 7.

Servo amp for feed and spindle

High-performance, high-efficiency model. Complies with overseas standards and laws such as the United States, Europe, and China.

Controller for feed and spindle

The user area is available in the attached PLC. The PLC can control customer-prepared jigs fixture and coolant as well. The CC-Link unit for input / output signals can support various options.

Touch Panel TP-05

Equipped with a 4.5-inch screen, even beginners can easily create and operate programs.

Various proposals to utilize SELFEEDE DUO

Integrated line for machining, drilling, tapping, and washing

Our machining center "Self Center" and washing machine "JCC" can be connected by "Swing Arm Type Column Robot" and provided as an integrated line.



Machining

Robot

Special-purpose machine

Robot

Washing machine

Cutting

Transferring

Drilling/Tapping

Transferring

Washing/Deburring/Dry

Automatic drilling and tapping machine utilizing SELFEEDE DUO

This machine can be used on the same day only by supplying AC200V.



Machine in a photo is special color.

Multi-spindle head Quick change "Catch-Clip" Type

Multiple holes can be machined at the same time. "Catch-Clip" Multi-spindle heads require little changeover time.



Contact

Please feel free to contact us from the following.

Contact for price and model selection



Contact for drawing data of SELFEEDE DUO and Electrical Accessories



Contact information for direct confirmation of unclear points

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