

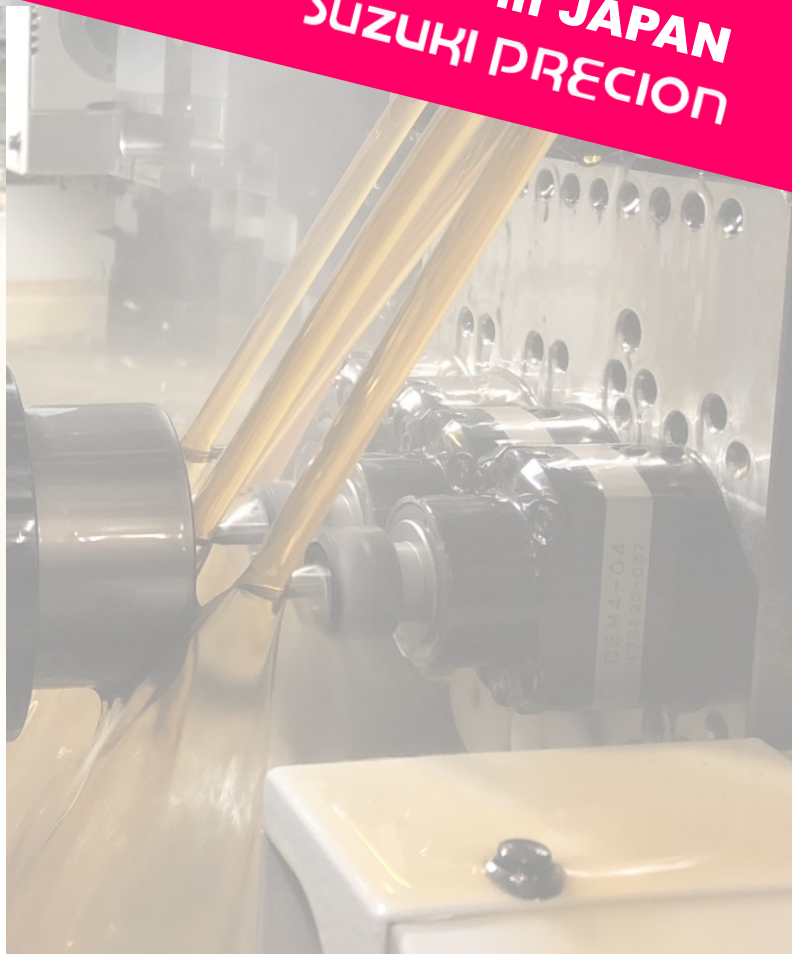
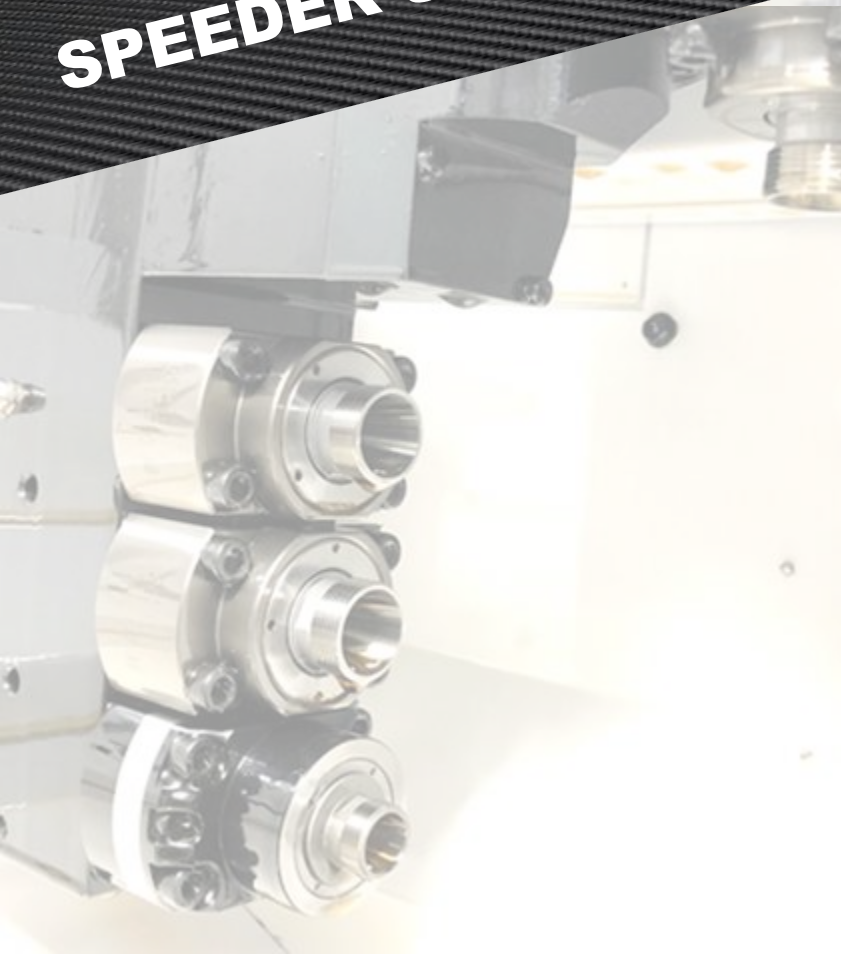
CATALOG

***IB* · SPINDLE**

4 Times Speeder Spindle

SPEEDER SPINDLE

**Made in JAPAN
SUZUKI PRECISION**



Enable high-speed machining with a Swiss-Type CNC lathe.

4 times speeder spindle **「 IB · SPINDLE 」**

We are both a Spindle Maker and contracted precision parts manufacturer.

This spindle is developed by ideas of our Swiss-Type CNC lathe department.

“IB Spindle” is four times speeder spindle.

We will continue to supply products which suit customers' needs in the future.





About safety in use

IB Spindle is the four times speeder spindle solely developed by Suzuki Precion Co., Ltd. Please assign a well-trained operator with an in-depth knowledge in machining when utilizing this product.

The operation manual should be read thoroughly by the assigned operator to understand safety and other contents therein before using this product.

1. Handling precautions

- This IB Spindle is designed 20mm longer in length from the tool post to the tip of the spindle, compared to the stock spindles.
Please pay attention to the interference to the tool post/workpiece.

2. How to use

- Operate the same as other general stock spindles. Please be sure to clean any dirt/debris from this product and from machine contact surface before its usage.
- A RPM of IB Spindle is four times more of a machine speed setting.
- Use of proper cutting fluids.
※ Usage of water soluble cutting fluid will void the warranty.
- Rated RPM of IB Spindle is 24,000min⁻¹.
Exceeding this will cause overload to the bearings/gears.
Please conduct machining within the rated RPM range.

3. Product warranty

- The warranty term of this product is one(1) year from purchase, based on the proper understanding of the manual and proper usage, accordingly.
We encourage periodical maintenance for the long life of this product.
Please contact our customer service or your distributor for details.

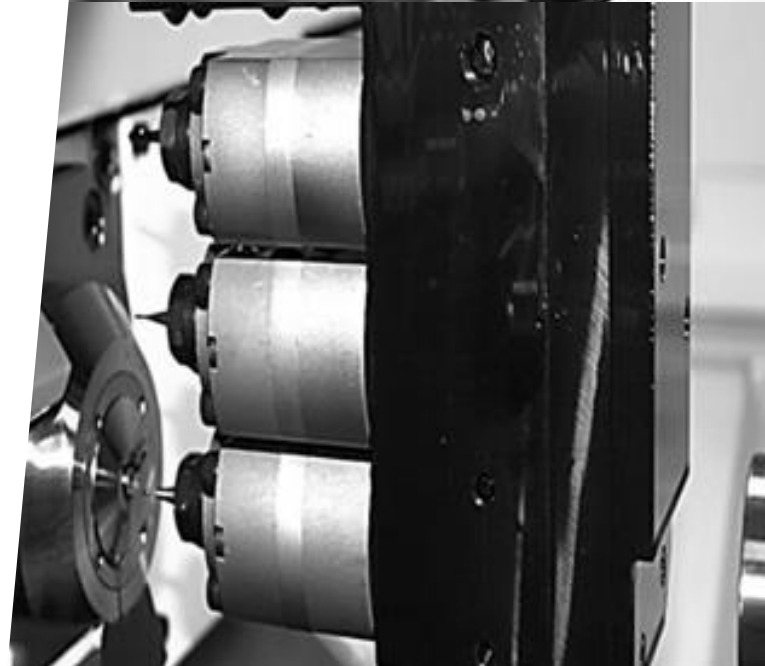
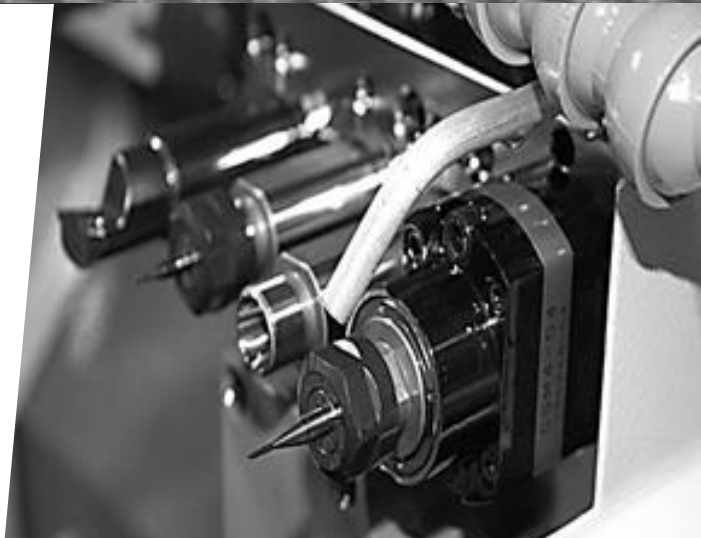
IB•SPINDLE

SPEEDER SPINDLE

Dramatically reduce your machining time with these IB Spindle Speeders.

These high speed live tools for Swiss CNC lathes feature:

- 1:4 speed multiplier
- 24,000min⁻¹ maximum capability
- ER 11 output



- It only takes ONE WRENCH to install on your existing machines.
- No additional controller or extension cable needed, your machine will be 4 times faster.
- The run-out accuracy of the spindle is Less than 3µm.
- Will enhance your production ability in different areas. Perfect for Micro Drilling and small diameter milling.

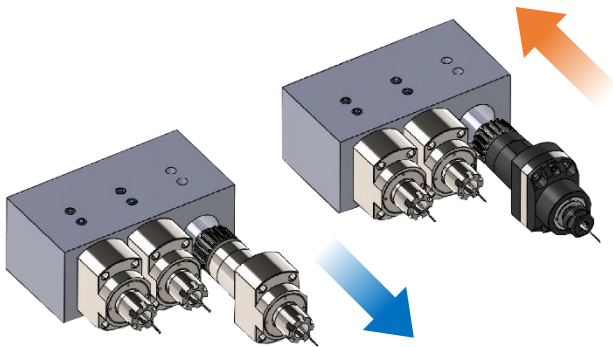
Specification



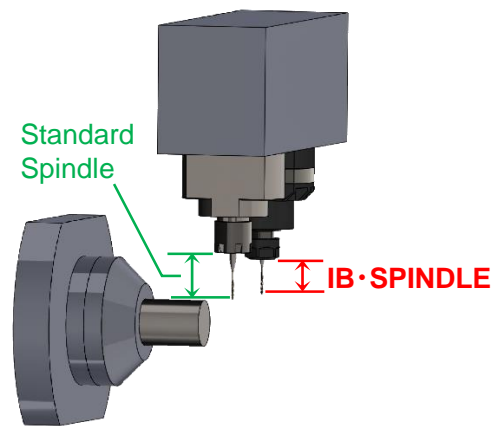
The run-out accuracy of the spindle is Less than 3 μ m.



No additional driving unit or transmitter needed.



It only takes ONE WRENCH to install on your existing machines.



Cutting tool overhang is amazingly 20mm shorter than a standard spindle.

Products



CITIZEN

Compatible machines
A , L , M , D , MC



star

Compatible machines
SV , SR , SB , SW



TSUGAMI

Compatible machines
B0 , BW , SS , S

CITIZEN

Enhance The Efficiency Of Your CNC Automatic Lathes
And Support Productivity With Dependable Technology

IB·SPINDLE
SPEEDER SPINDLE



Wide Variety Of Tooling Lineup Accommodating Citizen CNC Automatic
Lathes A / L / M / D / MC Series



CSM4-01



CSM4-02



CSM4-03



CSM4-04



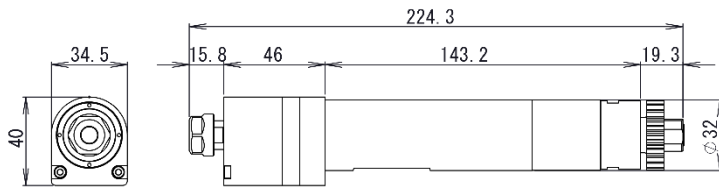
CSM4-05



CSM4-07

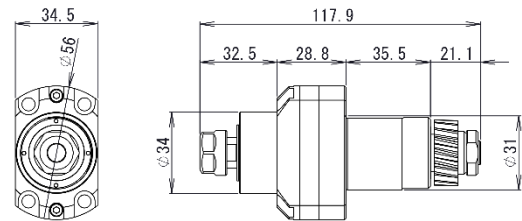
IB · SPINDLE CITIZEN

- Chuck model: ER11
- RPM: 24,000min-1
- Cap bolt for installation is included.

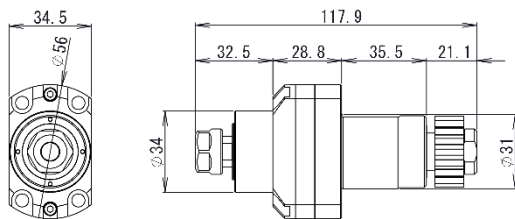


Model No.	CSM4-01
Compatible machines	C20 / 32 L20VII · VIII · IX / L20VIII · IX Evolution L20X Innovation M20 / M32 V

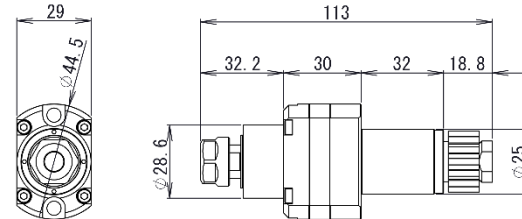
! Cap bolt for installation is not included.



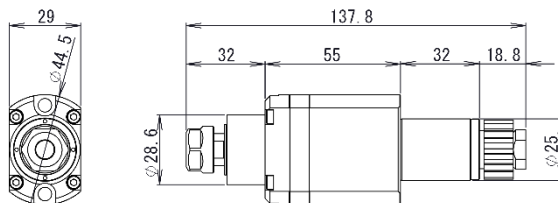
Model No.	CSM4-02
Compatible machines	L20-VIII · IX Evolution L20X Innovation



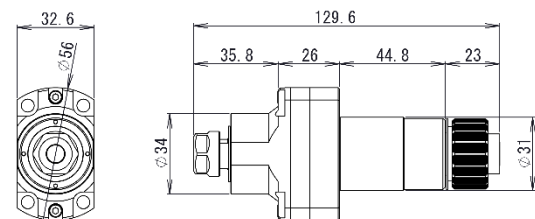
Model No.	CSM4-03
Compatible machines	A20VII Evolution / A20VII(A20-3F7) L20XII Innovation / L20VIII · IX · X · XII / L32VIII · IX · X · XII M32 III · V · VII · VIII Innovation D25



Model No.	CSM4-04
Compatible machines	L12VII Innovation / L20E VIII · IX Evolution L20X Innovation / L20XII Innovation L20VIII · IX · X · XII M16 V · VII · VIII (A20/A32※U153B OP) M20 / M32 (Y265274 OP)

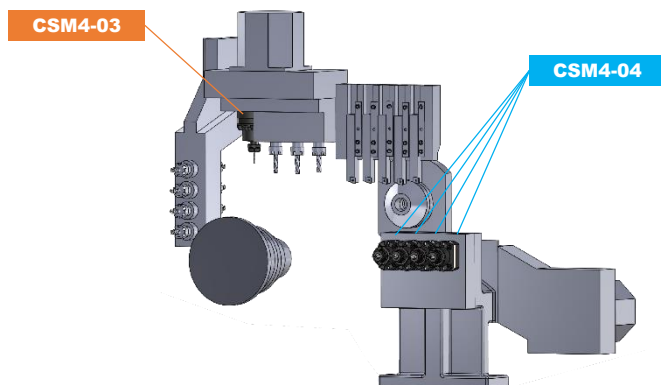


Model No.	CSM4-05
Compatible machines	L20X · XII Innovation L20X · XII

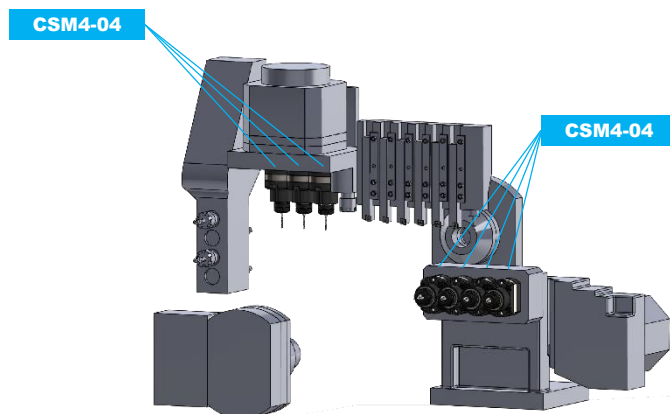


Model No.	CSM4-07
Compatible machines	MC20

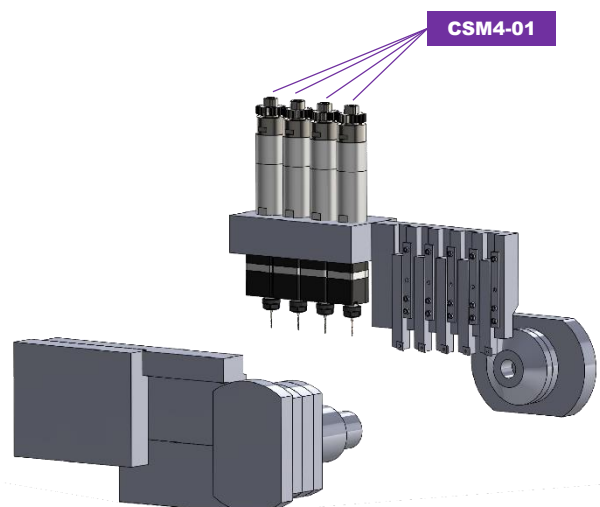
Install Information



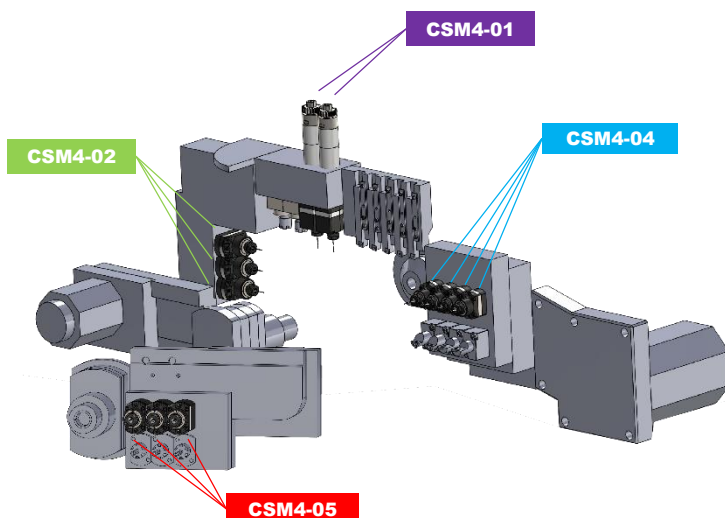
- Cincom A20VII Evolution Line
- Cincom A32VII Evolution Line



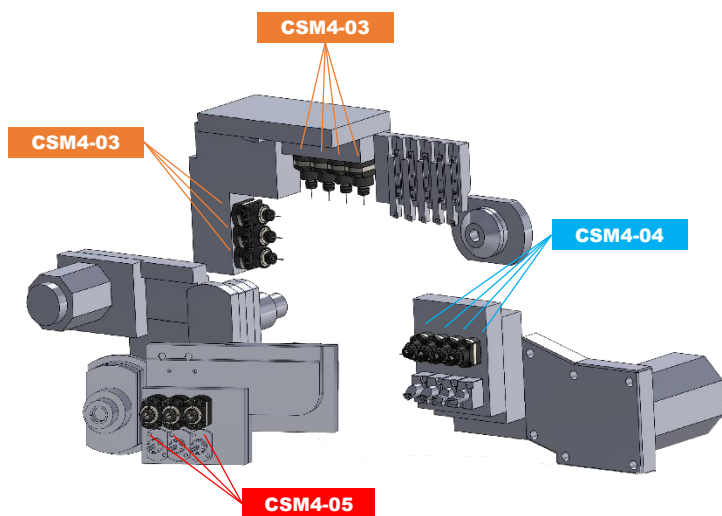
- Cincom L12VII Innovation Line



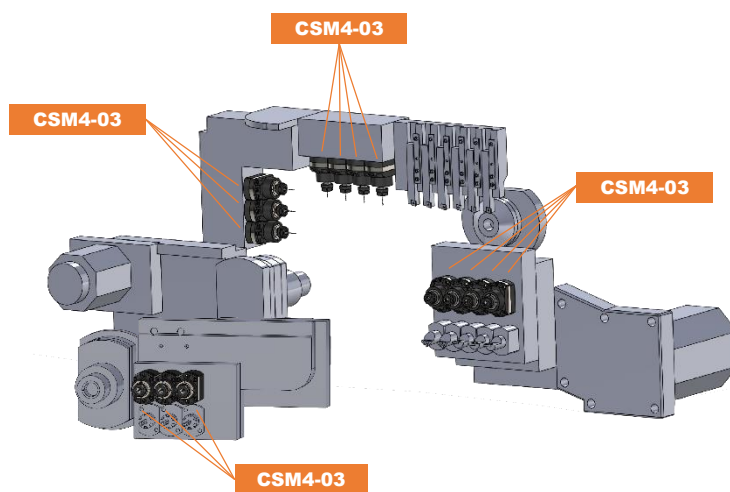
- Cincom L20



- Cincom L20E • IX Evolution Line
- Cincom L20X Innovation Line

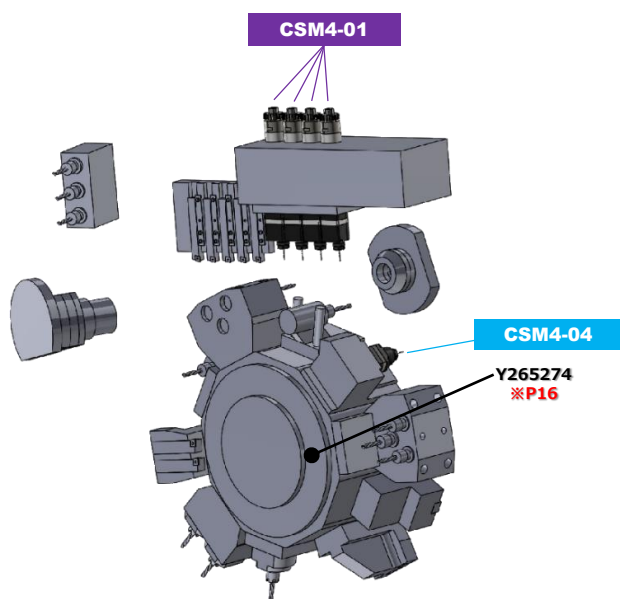


- Cincom L20VII • IX • X • XII

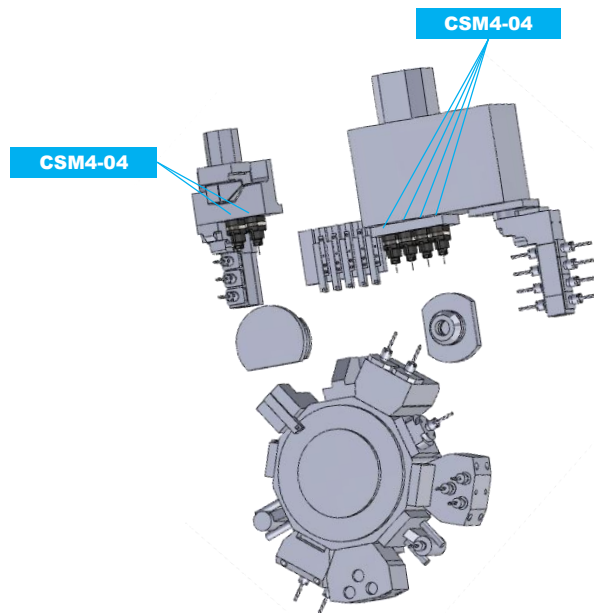


- Cincom L32VII • IX • X • XII

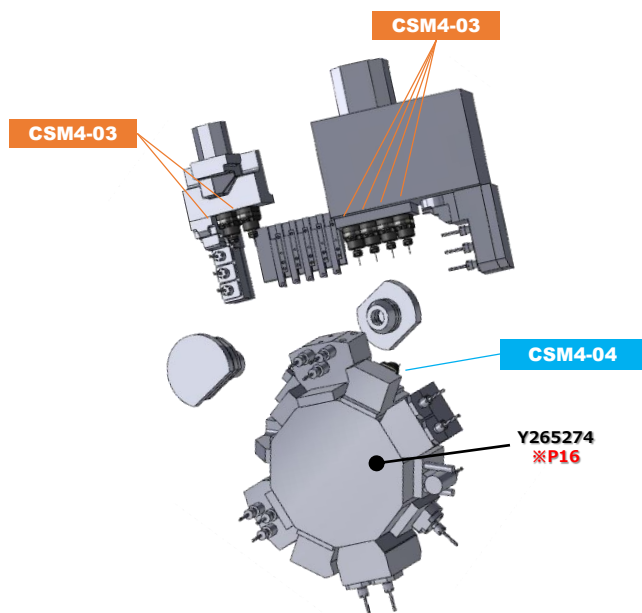
Install Information



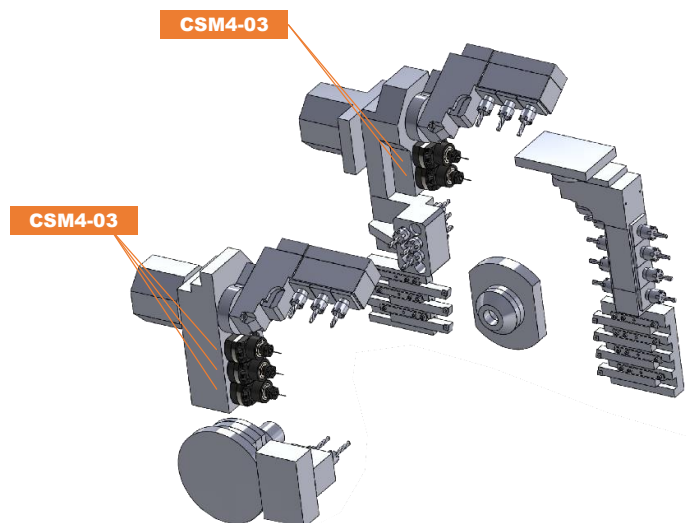
•Cincom M20Ⅲ・Ⅴ/ M32Ⅲ・Ⅴ



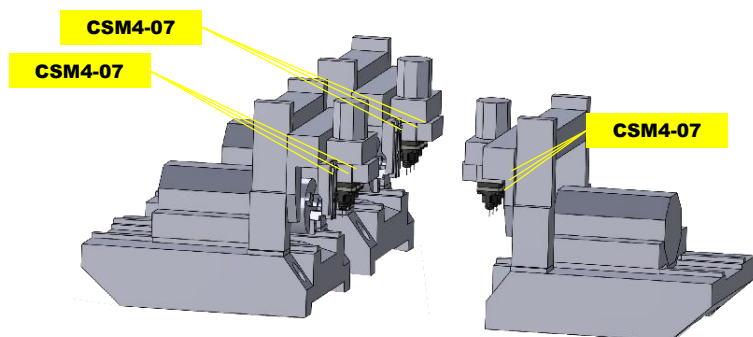
•Cincom M16Ⅴ・Ⅶ・Ⅷ



•Cincom M32Ⅲ・Ⅴ・Ⅶ・Ⅷ



•Cincom D25Ⅶ・Ⅷ



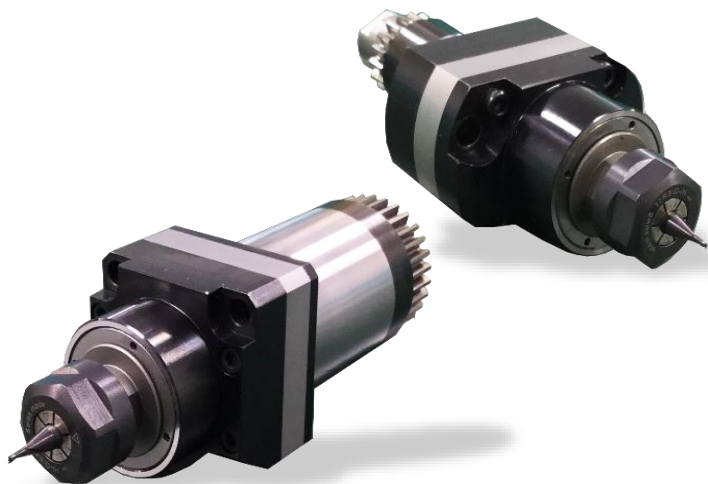
•Cincom MC20

MEMO

star

Enhance The Efficiency Of Your CNC Automatic Lathes
And Support Productivity With Dependable Technology

IB·SPINDLE
SPEEDER SPINDLE



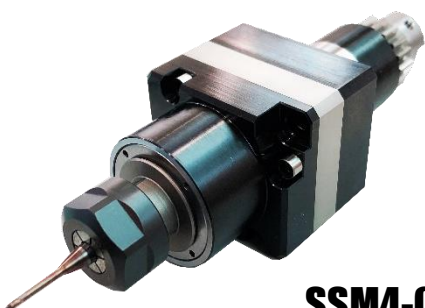
Wide Variety Of Tooling Lineup Accommodating star CNC Automatic
Lathes SV / SR / SW / SB Series



SSM4-01

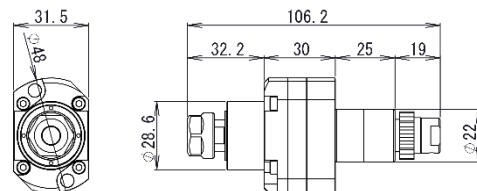
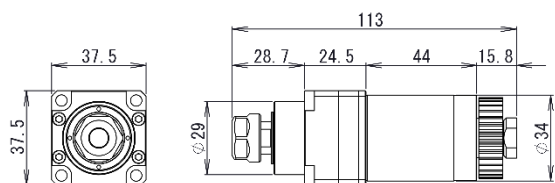


SSM4-02



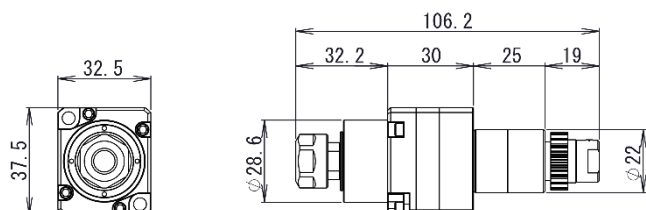
SSM4-04

- Chuck model: ER11
- RPM: 24,000min-1
- Cap bolt for installation is included.



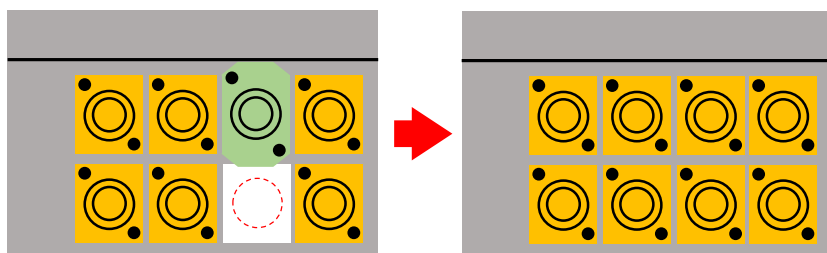
Model No.	SSM4-01
Compatible machines	SV12 / SV16 / SV20 / SV38R SR16 / SR20 / SR20J / SR20RIV SR32JTypeN SB12R / SB16R / SB20R SW20

Model No.	SSM4-02
Compatible machines	SB12R / SB16R / SB20R SR10J / SR20J / SR16 / 20R SR20R II / SR20 III / SR20RIVA/B SR32J / SR32JTypeN / SR38TypeA/B / SW12R II / ECAS12/20

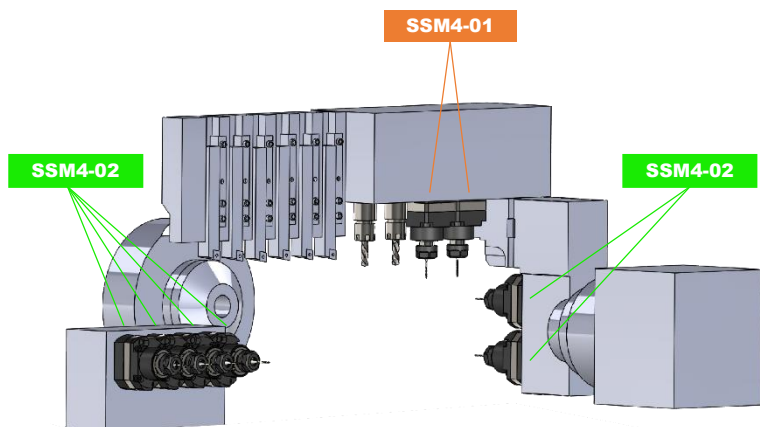


Model No.	SSM4-04
Compatible machines	SW12R, SW20, SV20R, SB16/20R SR20J, SR20RIV, SR38, SR38J

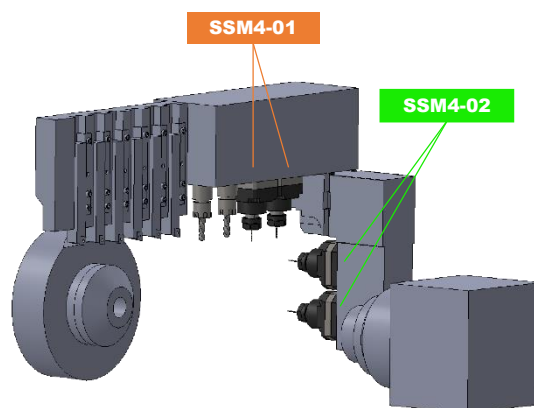
More flexible tooling layout without interference thanks to the new design



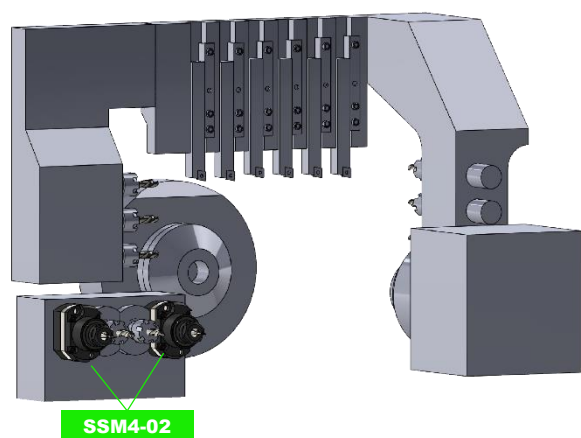
Install Information



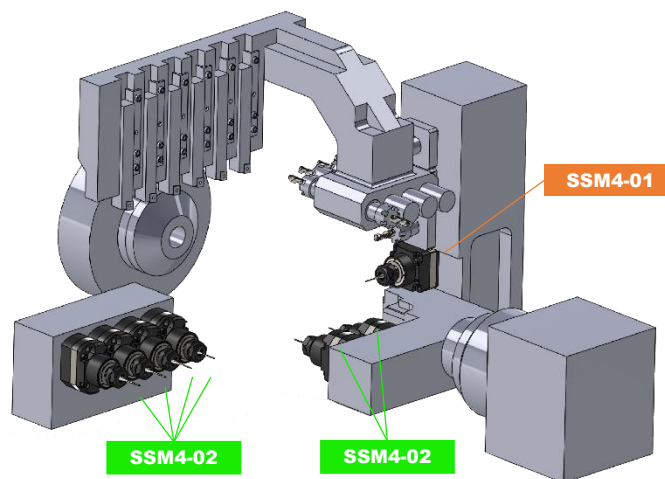
• SB-12R / 16R / 20R type E/N/G



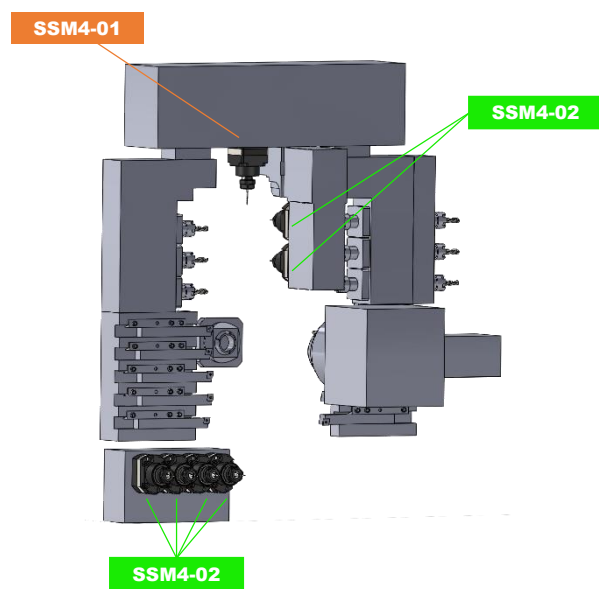
• SB-16R / 20R type C



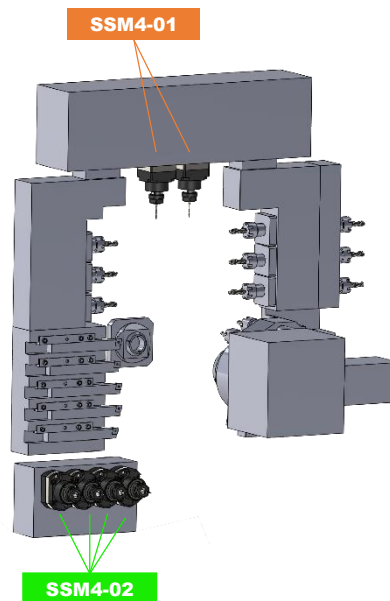
• SR-10J type C



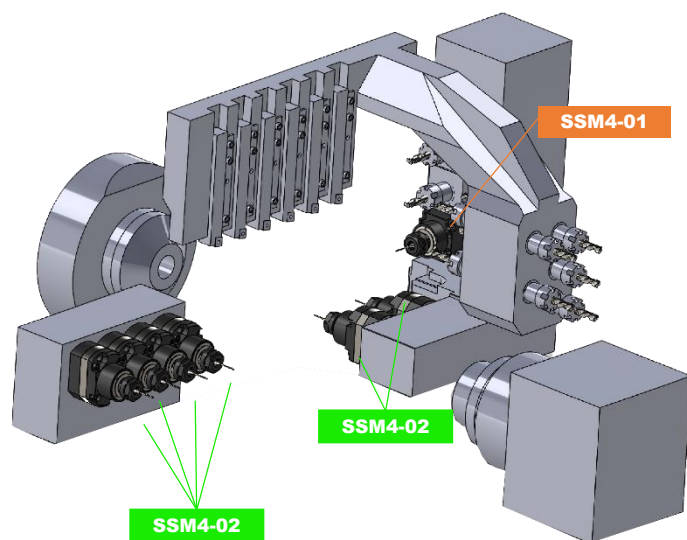
• SR-20J type C/N



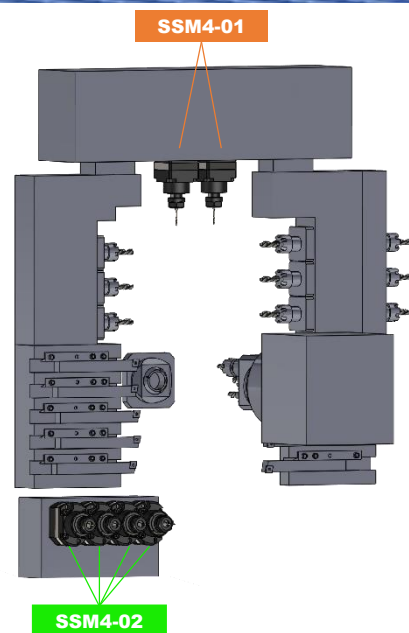
• SR-20RIV type A/B



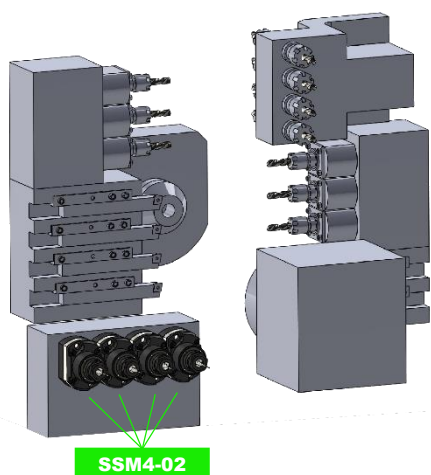
Install Information



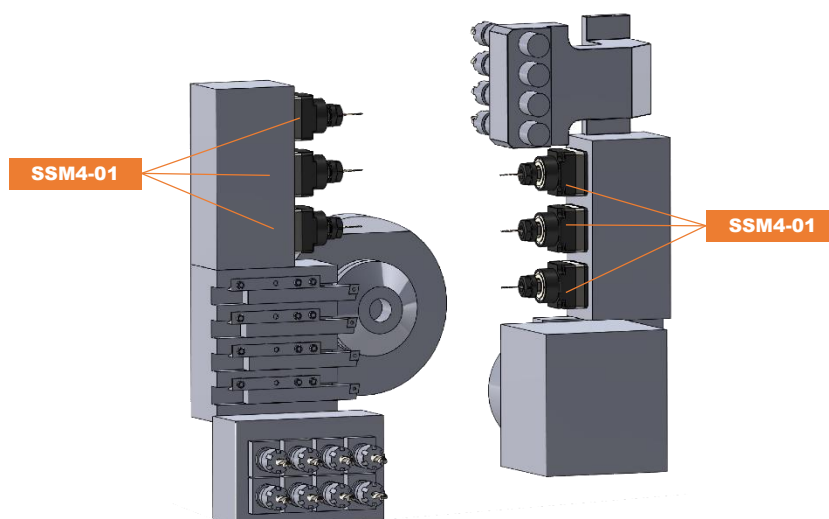
• SR-32J / 32J type N



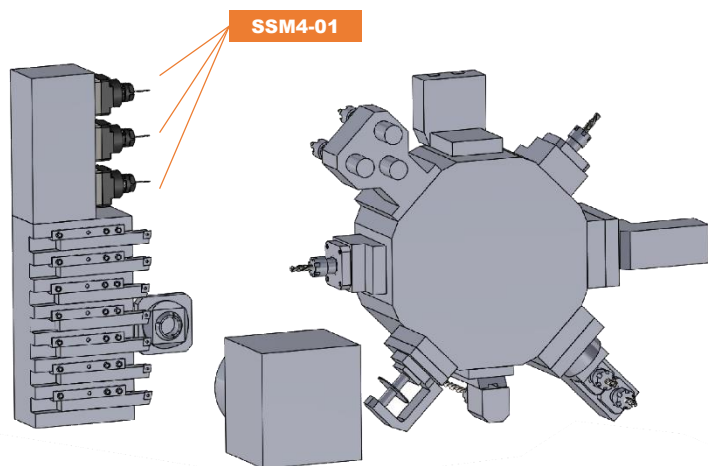
• SR-38 type A/B



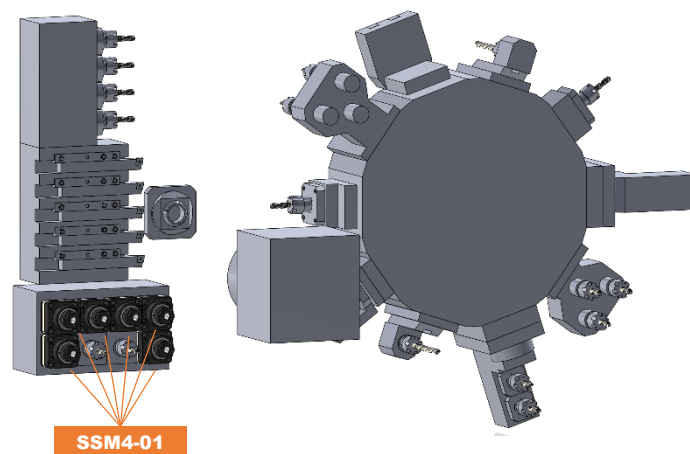
• SW-12R II



• SW-20



• SV-12 / SV-20 / SV-32 / SV-32J II



• SV-38R

TSUGAMI

Enhance The Efficiency Of Your CNC Automatic Lathes
And Support Productivity With Dependable Technology



IB-SPINDLE
SPEEDER SPINDLE

Wide Variety Of Tooling Lineup Accommodating TSUGAMI CNC Automatic
Lathes B0 / SS / S Series



3290-Y671



3290-Y681



3290-Y3671



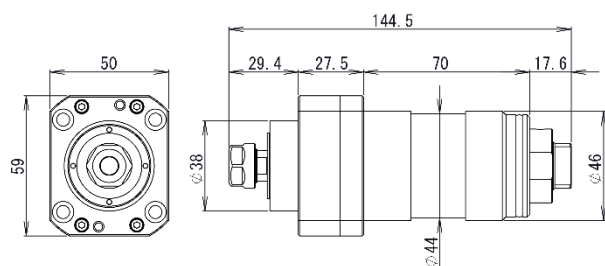
3220-Y7551-0101



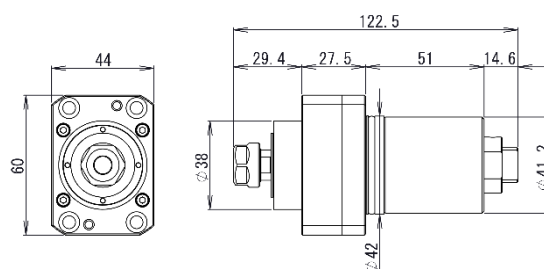
3281-Z06231-0101

IB · SPINDLE TSUGAMI

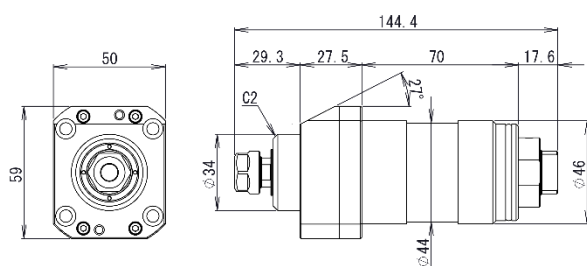
- Chuck model: ER11
- RPM: 24,000min-1
- Cap bolt for installation is included.



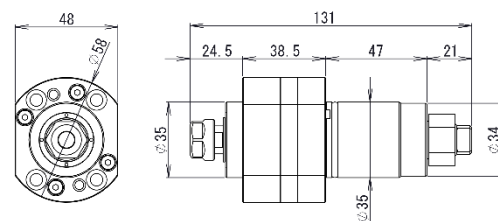
Model No.	3290-Y671
Compatible machines	B0265- II / B0265B- II / B0266- II B0325- II / B0325B- II / B0326- II



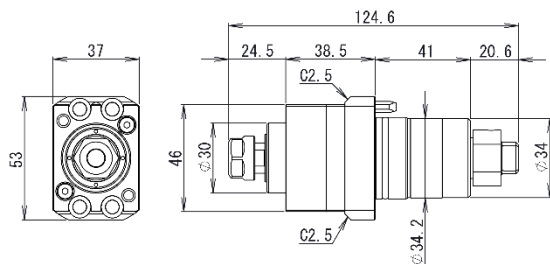
Model No.	3290-Y681
Compatible machines	B0265- II / B0265B- II / B0266- II B0325- II / B0325B- II / B0326- II SS267 / SS327 SS267-5AX / SS327-5AX



Model No.	3290-Y3671
Compatible machines	B0265- II / B0265B- II / B0266- II B0325- II / B0325B- II / B0326- II

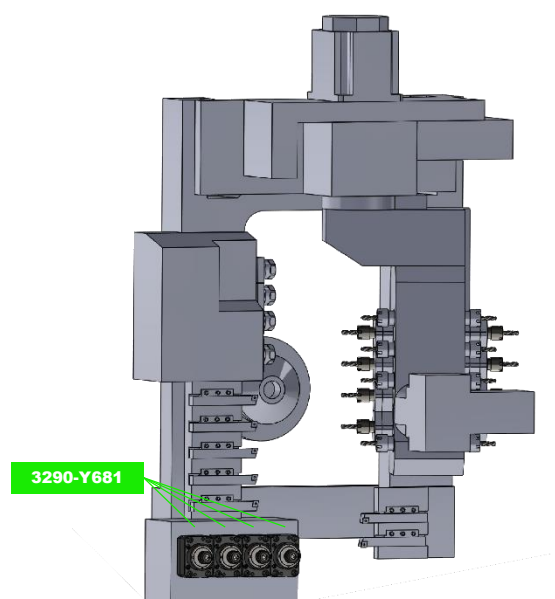


Model No.	3220-Y7551-0101
Compatible machines	B073-III / B0123-III / B0203-III / B074-III B0124-III / B0204-III B075-III / B0125-III / B0205-III / B0126-III / B0206-III P013 / P014 / P033 / P034 S205 / S206

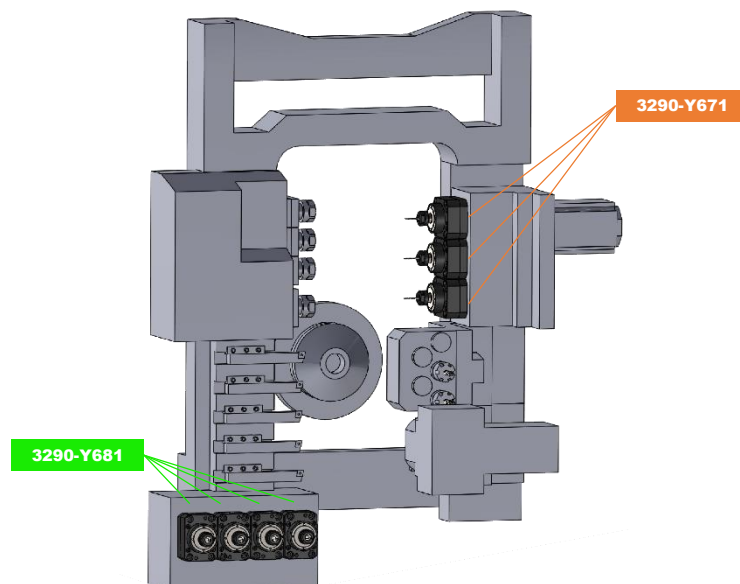


Model No.	3281-Z06231-0100
Compatible machines	S205A / S205 / S206

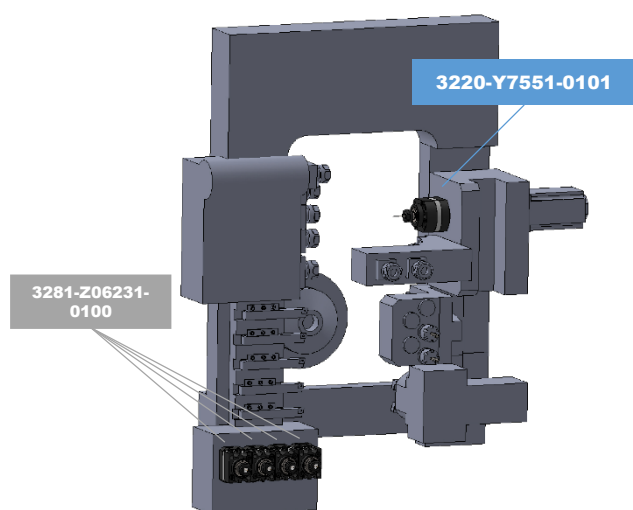
Install Information



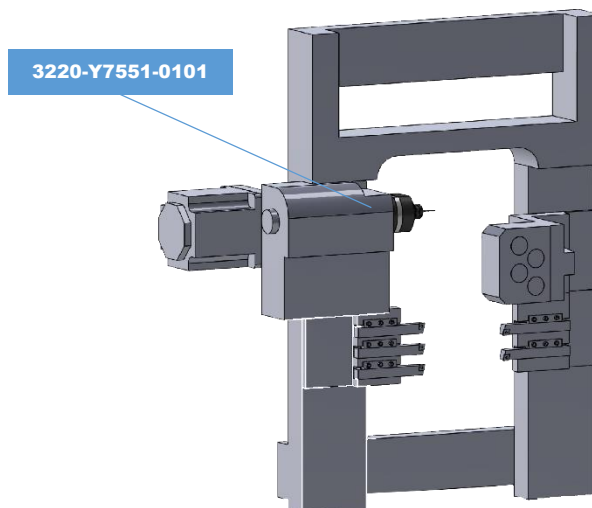
- SS267 / SS327 / SS267-5AX
SS327-5AX



- B0265 II / B0265B- II / B0325- II
B0325B- II / B0266- II / 0326- II



- S205A / S205 / S206



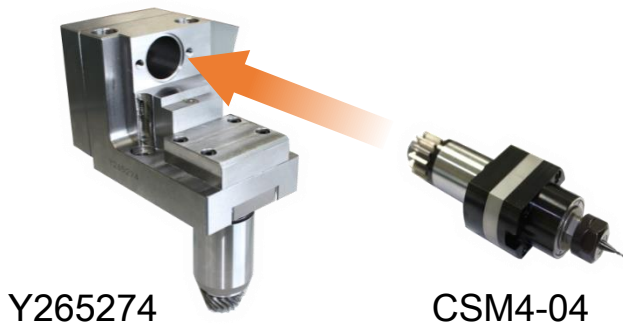
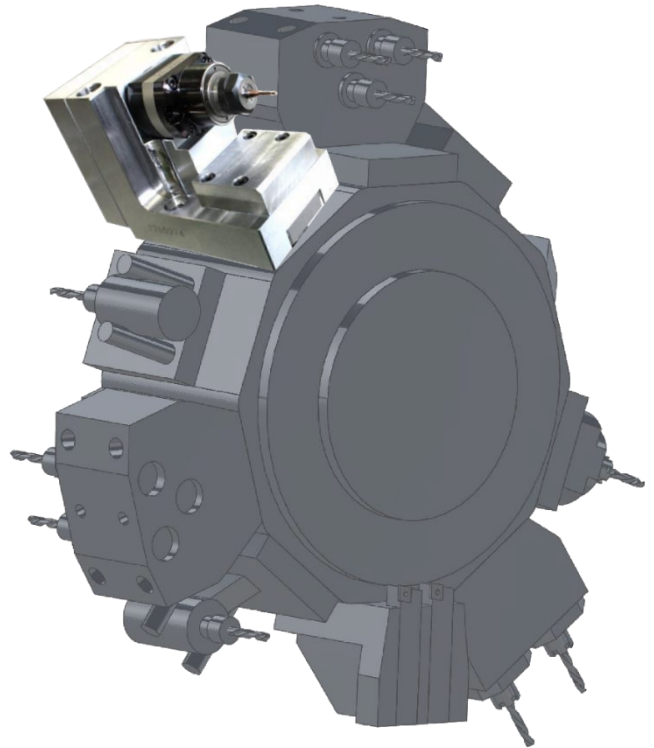
- B073-III / B074-III / B075-III
B0123-III / B0124-III / B0125-III / B0126-III
B0203-III / B0204-III / B0205-III / B0206-III

MEMO

CITIZEN

It enables high-speed machining on both front and back cutting with the M20/M32 turret.

Use of front and back rotary tools on M20/32 series is possible with this brand new holder. By attaching this holder and IB-SPINDLE, you can run rotary tools 4 times faster. Quality and capability of small diameter drilling and milling operations is easily increased.



Y265274

CSM4-04

※Please purchase the holder from Citizen Machinery Ltd.

star

It enables high-speed machining on both front and back cutting with the SB&SR.

The "IB Spindle" enables your SB/SR/SW to accomplish a high speed front / back face machining. Simply attach the SSM4-02 to the adapter and its mechanical power generates a 4 times faster RPM. Quality and capability of small diameter drilling and milling operations is easily increased.



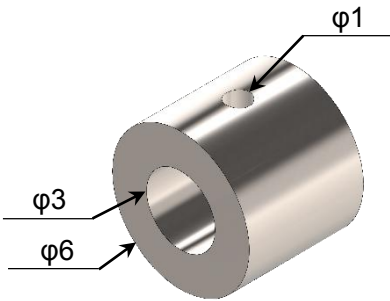
SSM4-02



87700155

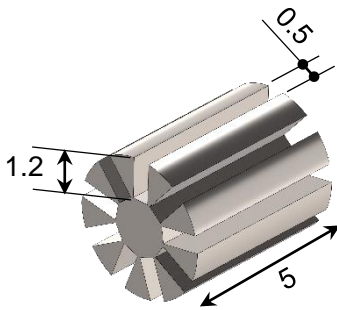
※We do not sell the 2 spindle front drilling adapter.
(Manufactured by star)

Examples (i)



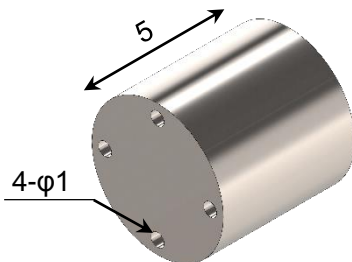
Method	Material
Φ1 cross drilling	SUY-1

	Standard Spindle	IB • Spindle
O/D	Φ1	
Tool material	Carbide drill	
RPM	4,000min ⁻¹	16,000min ⁻¹
Feed per Speed	F20	F80
Cycle Time	60sec	30sec



Method	Material
Slit milling	Titanium

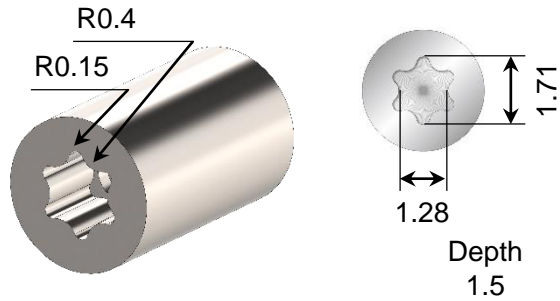
	Standard Spindle	IB • Spindle
O/D	Φ0.5	
Tool material	Carbide EM	
RPM	6,000min ⁻¹	24,000min ⁻¹
Feed per Speed	F20	F80
Cycle Time	86min	29min



Method	Material
Eccentricity drilling	SUY-1

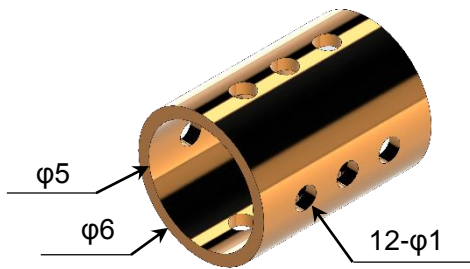
	Standard Spindle	IB • Spindle
O/D	Φ1	
Tool material	Carbide drill	
RPM	4,000min ⁻¹	16,000min ⁻¹
Feed per Speed	F20	F80
Cycle Time	10min	5min

Examples (ii)



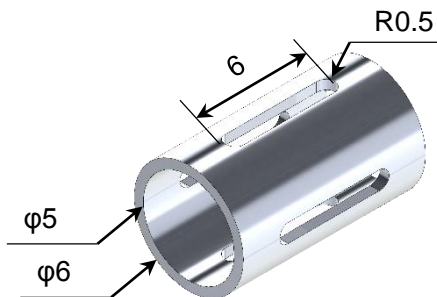
Method	Material
Torx	Titanium

	Standard Spindle	IB • Spindle
O/D	$\Phi 0.3$	
Tool material	Carbide EM	
RPM	$6,000\text{min}^{-1}$	$24,000\text{min}^{-1}$
Feed per Speed	F24	F60
Cycle Time	8min	3min



Method	Material
Cross drilling	Brass

	Standard Spindle	IB • Spindle
O/D	$\Phi 1$	
Tool material	Carbide drill	
RPM	$6,000\text{min}^{-1}$	$24,000\text{min}^{-1}$
Feed per Speed	F150	F600
Cycle Time	18sec	9sec



Method	Material
Cross milling	Aluminum

	Standard Spindle	IB • Spindle
O/D	$\Phi 1$	
Tool material	Carbide EM	
RPM	$6,000\text{min}^{-1}$	$24,000\text{min}^{-1}$
Feed per Speed	F60	F240
Cycle Time	36min	20min

Challenging The Limits Of Automatic Lathe Performance.

IB Spindle Supports Businesses Determined To Pursue The Advancement Of Machining.

Automobile Industry

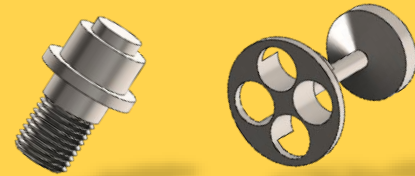
IB Spindle contributes significantly to reduce production time of parts for automotive field such as cars and motorcycles.



Valve • Shaft

Aerospace Industry

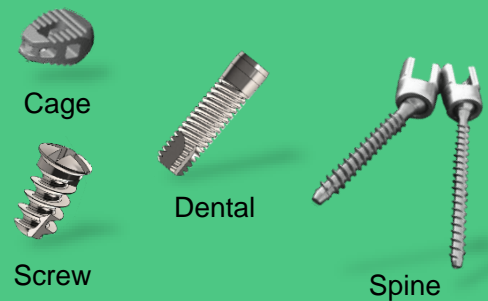
IB Spindle contributes to setting the standard to producing the highest quality of reliable parts for Aerospace as known as an industry with constant high demand for safety.



Screw • Sensor

Medical Device Industry

IB Spindle plays a significant role in improving a person's quality of life, such as with implants and minimally invasive surgical devices. They are specially made with high precision parts to assist in alleviating the patients' pain associated from recovery from illnesses.



Cage

Dental

Spine

Screw

Electronics Industry

IB Spindle contributes in micro machining, an essential technology for mobile devices and semiconductor manufacturing industries.



Connector • Case



Dramatically reduce your Swiss CNC machining time



SUZUKI PRECISION Co., Ltd.

113-2, Nojiri, Kanuma City, Tochigi

322-0251 Japan

URL : www-en.precion.co.jp

☎ (81)289-65-6001

Contact us

YouTube



SUZUKI SPEEDER SPINDLE



※We reserve the right to make modifications without notice to improve the performance of our products.