

Automatic Screw / Bolt Presenter

General Catalog





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Features of **OHTAKE Automatic Screw / Bolt Presenters**

OHTAKE's automatic screw presenters make use of a horizontal rail system, which supports a wide range of screw materials and shapes, diverse workstyles, and workpiece dimensions. This unique mechanism and advanced technology can hugely contribute to the efficiency of your production line.



Compatible with line changes for adjustments to screw diameter and shape, significantly improving QC and productivity

Automatic screw presenters dramatically increase the speed of tightening screws. Through ease of use and employing the world's first swappable rail mechanism, these devices allow you to work with screws of varying diameters and formats. Even if changing a workpiece entails different screw diameters, all you need to do is swap in a new rail. There is no need to replace the present mechanism itself, reducing equipment costs. The horizontal rail mechanism offers speedy and stable screw feeding, highly versatile design, and ease of use in our OHTAKE automatic screw presenters, driving highly efficient screw-tightening work.



Speedy and Smooth



Fixed-Point Pick Up



Fixed-Quantity Pick Up





Supports screws with washers and special formats

The horizontal rail enables the smooth presenting of numerous types of special screws, including those with washers and with short under-head lengths.



Normal screw







Other key features

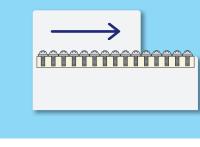
- · Easy to handle and operate: Simply install to get up and running. All you have to do is push the
- · Adding screws is a snap. Simply insert in bulk in the scooping chamber.
- It takes only 5 seconds with a single hex wrench to swap the rail and accommodate the screw diameter changes (NJ/NSB type). Simply loosen the rail-tightening screws, swap in a new rail, and adjust the position while tightening the screws back into place.
- · In the event that too many screws are inserted or have become clogged, the unit automatically cuts the power to the drive motor and shuts off.





The horizontal rail provides a stable, orderly array of screws

Unlike gravity-based present mechanisms, this one uses vibration to convey screws in a horizontal rail, doing away with problems like screw-clogging and allowing stable presenting, even for screws with attached washers.





The average screw present time is 2 per second

Achieve a three- to fivefold increase in working speed based on traditional manual work. Average screw pick up of 2 per second greatly improves working efficiency.



Supports standard bits from various screwdriver manufacturers

No need to attach a specialized bit to electric screwdrivers. Simply use the standard bits you are accustomed to using. Bring magnetized bits perpendicular with the V-shaped groove of the bit guide, engaging the screw head and allowing it to be caught by simply pulling it close. Supports suctionstyle screwdrivers.



Makes work easier

Now you can tighten screws with one hand, improving the stability and efficiency of assembly work.



Accommodate different screw diameters by simply swapping rails

It supports numerous screw types with ease—all you need to do is to swap in the rail for a given screw diameter. For example, NSB models support up to 8 screw diameters in a single device.

Some models require exchanging parts in addition to swapping the rail.





Selection Process Select by use

First, select from "manual," "robotic," or "fixed-quantity pick up."

Select by workpiece diameter

Select models based on the diameter of the workpiece (as indicated by •).

3 Select by workpiece length (based on the longest ones)

Select models based on the length of the workpiece—under-head length for feeders and total length for screw hoppers.

Select by workpiece material

Select models based on the material of the workpiece.

Find details on the product pages

List of Models

1						2	2											3	4						
Use	Series	Appearance	Model	\$0.5 -\$1.0			pporte		ew and		T	y work	Ť	Т	T .	O M6.0	M8.0	Supported screw/bolt maximum under-head length	Supported materials	Capacity	Picking up type	Drive method	Supported screw hopper	Features	Pa N
			NJ-23						•	•	•	•						18mm						_	1-
			NJC-23 NJL-23						•	•	•	•	_					25mm		150cc	Rail + bit guide A	Cam (not adjustable)	NJ-80 / T-510J / RHP-160J / *MHP-80J	With counter _	4
	NJ	1.5	NJ-45								•					Special									-
		Asse	NJC-45													Ороска		18mm						With counter	1
			NJL-45										•	•	•			25mm						_	J _
	NOD	下街	NSB		•	•			•	•	•	•									Rail		am (screw- djustable) SR-80 / T-510S / *MHP-80S	_	
	NSB	**	NSBC		•	•	•	•	•	•	•	•							Ferrous/non-ferrous		+ bit guide B	Cam (screw-		With counter	1
Manual	NSBI	下	NSBI		•	•	•	•	•	•	•	•						20mm	(irrespective of material)		Rotating escaper + bit guide B	adjustable)		-	
Manuan		-	SS-12		•	•	•	•	•											Rail				_	1 -
	SS		SS-23							•	•									40cc -	+ bit guide C Rotating escaper			_	- '
			SSI-12M			•		•										16mm					None	_	-
	SSI-M	1	SSI-23M									•	+						Iron only Stainless: No (Uses magnet)		+ bit guide B	Solenoid		_	┤ .
			OM-26M	+					•	•												(VOL		_	-
	OM-26M	B	OM-26M (T063)						•	•	•	•	•	•	•			25mm		300cc	Rotating escaper + bit guide A	adjustment)	RHP-160M / *MHP-80M	Remaining quantity sensor	
			LS25-HM									•	•	•	•	•	•	25mm		1300cc	Rotating escaper			Remaining	-
	LS-HM	014	LS50-HM									•	•	•	•	•	•	50mm		1000cc	+ bit guide D		None	quantity sensor (optional)	
			NJR-23						•		•	•						18mm				Cam	NJ-80 / T-510J /	_	
	NJR	THE	NJRL-23 NJR-45								•	•	_			0		25mm 18mm		150cc	Slide	(not	RHP-160J /	_	4
			NJRL-45	+										•	•			25mm				adjustable)	*MHP-80J		+
	NSR	TAKE .	NSR		•	•	•	•	•	•	•	•						20mm	Ferrous/non-ferrous (irrespective of		Slide Cam (screw-		- SR-80 / T-510S / *MHP-80S		
	NSRI	景	NSRI		•	•	•	•	•	•	•	•						2011111	material)	3300	Rotating escaper	adjustable)		-	
Robotic	SSI-R	-3	SSI-12R		•	•	•	•	•									16mm		40cc	Rotating escaper		None	_	
	33I-N		SSI-23R							•	•	•						TOTHIN		4000	notating escaper		None	_]
			OM-26R						•	•	•	•	•	•	•	•							RHP-160M /	_] -
	OM-26R		OM-26R (T063)						•	•	•	•	•	•	•	•		25mm	Iron only	300cc	Rotating escaper	Solenoid	*MHP-80M	Remaining quantity sensor	
	LS-HR	O.	LS25-HR									•	•	•	•	•	•	25mm	Stainless: No (Uses magnet)	1300cc	Rotating escaper	(VOL adjustment)	None	Remaining quantity sensor	
	LOTIN	1	LS50-HR									•	•	•	•	•	•	50mm		1000cc	Hotating escaper		None	(optional)	
	MSF	1	MSF	•														5mm	Ferrous/non-ferrous (irrespective of material)	15cc	Rotating escaper		None	-	
	EN 4 00	'ai	FM-36									•	•	•	•	•		05	Ferrous/non-ferrous	150	1 -	Cam	NJ-80F / T-510F /	_	
Fixed-	FM-36		FME-36									•	•	•	•	•		25mm	(irrespective of material)	150cc	Lever	(not adjustable)	RHP-160F / *MHP-80F	Communication functionality	┤_
quantity pick up	LV		LV25									•	•	•	•	•	•	25mm	Iron only Stainless: No	1300cc	Lever	Solenoid	None	Remaining quantity sensor] -
	LV		LV50										•	•	•		•	50mm	(Uses magnet)	1000cc	Miscellaneous	(VOL None adjustment)		(optional)	

^{**}For the screw hoppers, the compatible length of the screw may differ from that of the feeder it is combined with. Please check the compatibility before use.
*Depending on the shape of the screw, the screw hopper may not be compatible with it.

*MHP-80 is only compatible with iron screws (due to the use of a magnet).

	Horizontal rail	Rotating escaper (Robotic)	Rotating escaper (Manual)	Sliding escaper	Lever	Miscellaneous
Take out type	Screw flow Pick-up position	Screw flow Pick-up position	Screw flow Pick-up position	Screw flow Pick-up position	Push the lever and pick up on the palm	Please refer to the pages for corresponding models.

	Bit guide A	Bit guide B	Bit guide C	Bit guide D	
Manual -	Dit galde A	Adjustable	Bit galde D		
pick-up point bit guide types					

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Features

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Bolt Presenters

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FAQ

P 25 FAQ

Signals obtained from signal line

Automatic screw feeder's AC adapter plug formats

NJ/NJR Series

All-Around Screw Presenter

Supports wider screw diameters than the NS/NSR series and has greater capacity, making it even more useful.



Supported under-head length

Longest:
18/25mm

Capacity
Approx.
150cc

Non-ferrous materials: supported

*For details, please refer to each product's specifications

Manual NJ-23 NJ-45 NJL-23 NJL-45

NJC-23 NJC-45

Robotic NJR-23 NJR-45 NJRL-23 NJRL-45



Supports standard bits from various screwdriver manufacturers

- Bit screwdrivers
- Suction screwdrivers

Large stock

Supports a stock of 150cc.

Special screws supported

Allows you to stably present SW screws or those with washers.

■ Long-running operation when combined with screw hopper

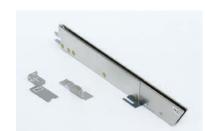
Use a screw hopper for long-running unmanned operations.

Smooth screw feeding

- Provides ongoing, timely presenting of screws to match robot operations.
- The NJ type allows the screw pick-up signal to be sent through an external outlet.
- The NSR type allows for a signal to be sent through an external outlet to notify whether a screw is present at a screw pick-up point.



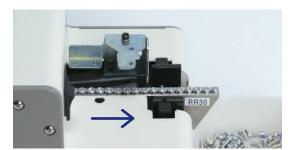
NJ Series: Swap rail set (passing plate, rail)



NJR Series: Swap rail set (passing plate, escaper, rail)



*NJ Series: Swap rail set (retainer plate for countersunk screws)



Sample applications / NJ + RR (rail for robotic devices)

Swap rails in/out.

This single unit supports a wide range of screws. For example, the NJ-23 supports four types of screws in a single unit. Allows the angle of rail inclination to be adjusted based on the screw being used.

Example usage of combining NJ and RR rails

Use as a horizontal presenter for continuous presenting to robotic devices. If you are seeking the same functionality in a different model, please contact us.

Manual Type









NJ-23 NJ-45

NJL-23 NJL-45

NJR-23 NJR-45 NJF

NJRL-23 NJRL-45 NJC

NJC-23 NJC-45

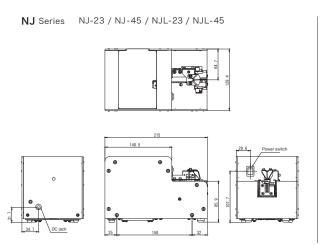
With a Counter

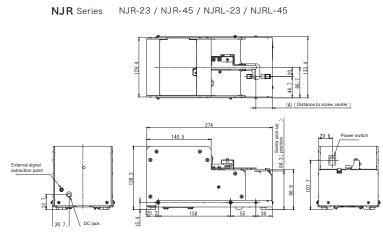
Compatibility Table

Supported screw		Mai	n component t	ype		Swap rail set type						
diameter (mm)	NJ Series	NJL Series	NJR Series	NJRL Series	NJC Series	NJ Series	NJL Series	NJR Series	NJRL Series	NJC Series		
2.0	NJ-2320	NJL-2320	NJR-2320	NJRL-2320	NJC-2320	R20SET	RL20SET	RR20SET	RRL20SET	R20SET		
2.3	NJ-2323	NJL-2323	NJR-2323	NJRL-2323	NJC-2323	R23SET	RL23SET	RR23SET	RRL23SET	R23SET		
2.6	NJ-2326	NJL-2326	NJR-2326	NJRL-2326	NJC-2326	R26SET	RL26SET	RR26SET	RRL26SET	R26SET		
3.0	NJ-2330	NJL-2330	NJR-2330	NJRL-2330	NJC-2330	R30SET	RL30SET	RR30SET	RRL30SET	R30SET		
3.5	NJ-4535	NJL-4535	NJR-4535	NJRL-4535	NJC-4535	R35SET	RL35SET	RR35SET	RRL35SET	R35SET		
4.0	NJ-4540	NJL-4540	NJR-4540	NJRL-4540	NJC-4540	R40SET	RL40SET	RR40SET	RRL40SET	R40SET		
5.0	NJ-4550	NJL-4550	NJR-4550	NJRL-4550	NJC-4550	R50SET	RL50SET	RR50SET	RRL50SET	R50SET		

Model Diagrams

Full diagrams of each model can be downloaded from our website.





Specifications

Model name	NJ-23	NJ-45	NJL-23	NJL-45	NJR-23	NJR-45	NJRL-23	NJRL-45	NJC-23	NJC-45	
Exterior dimensions		134(W)×21	5(D)×139(H)			134(W)×27	4(D)×139(H)		134(W)×21	5(D)×139(H)	
Volume (including the rail)		Approx. 3.7kgf Approx. 4.4kgf								Approx. 3.7kgf	
Power				AC10	0V-240V DC	15V 1A AC ac	lapter				
Drive motor					DC brus	sh motor					
Overload protection/recovery circuit	0	0	0	0	0	0	0	0	0	0	
External signal line	0	0	0	0	0	0	0	0	0	0	
Brush-overload protection mechanism	0	0	0	0	0	0	0	0	0	0	
Yield time	-	-	-	-		Approx. 1	.5sec		-	-	
Supported screw diameter	φ 2.0 - φ 3.0	φ 3.5 - φ 5.0	φ 2.0 - φ 3.0	φ 3.5 - φ 5.0	M2.0 - M3.0	M3.5 - M5.0	M2.0 - M3.0	M3.5 - M5.0	M2.0 - M3.0	M3.5 - M5.0	
Supported screw under-head length	Up to 18 m	nm in length	Up to 25 m	m in length	Up to 18 m	nm in length	Up to 25 m	nm in length	Up to 18 m	nm in length	
Screw capacity		Approx. 150cc									
Accessories and bundled items			Instructio	n manual, AC a	dapter, hex wr	rench, adjustin	g screwdriver,	earth wire			

^{*}If you are looking for equivalent parts for other models, please inquire.

NSB / NSR Series

Versatile Screw Presenter

Swapping rails allows you to accommodate various screw diameters with a single unit. Almost no screw is incompatible.



Supported under-head length

Longest:
20mm

Capacity
Approx.

Non-ferrous materials: supported

*For details, please refer to each product's specification

Manual NSB NSBC

Robotic NSR

Screws are moved smoothly, and durability has been improved dramatically

(Improved screw chamber >

Reduces strain on the motor for more efficient screw alignment.

< Adjustable rail angle >

Allows the angle of rail inclination to be adjusted based on the screw being used.

Allows for calibrating amplitude based on the type of screw being used.

⟨ No side-to-side vibration ⟩

Alleviates side-to-side rail vibration to achieve smooth screw conveyance.

Other key features

- Compact size does not take up space.
- Use a screw hopper for higher capacity.
- The NSB type allows for a screw pick-up signal to be sent through an external outlet.
- The NSR type allows for the sending out of a signal to notify whether a screw is present at a screw pick-up point through an external outlet.

A single unit supports 8 different screw diameters.

- The NSB type supports 8 types of screw diameters through simple rail-swapping (8 types: from M1.0 to M.30 by default).
- The NSR type supports this through simply swapping the rail and escaper. Clean up oil and other stains easily by removing the rail from behind.



NSB rail



NSR rails and escapers

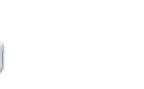
One-touch rail-swapping

Swapping rails based on changes in screw diameter is easy (NSB type).





Manual Type





Robotic Type



NSBC

With a Counter

Compatibility Table

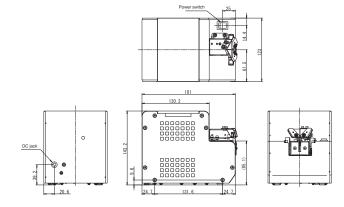
NSB

Supported	Mai	n component t	ype	S	wap rail set typ	e
screw diameter (mm)	NSB Series	NSR Series	NSBC Series	NSB Series	NSR Series	NSBC Series
1.0	NSB-10	NSR-10	NSBC-10	SR10SET	SRR10SET	SR10SET
1.2	NSB-12	NSR-12	NSBC-12	SR12SET	SRR12SET	SR12SET
1.4	NSB-14	NSR-14	NSBC-14	SR14SET	SRR14SET	SR14SET
1.7	NSB-17	NSR-17	NSBC-17	SR17SET	SRR17SET	SR17SET
2.0	NSB-20	NSR-20	NSBC-20	SR20SET	SRR20SET	SR20SET
2.3	NSB-23	NSR-23	NSBC-23	SR23SET	SRR23SET	SR23SET
2.6	NSB-26	NSR-26	NSBC-26	SR26SET	SRR26SET	SR26SET
3.0	NSB-30	NSR-30	NSBC-30	SR30SET	SRR30SET	SR30SET

Model Diagrams

Full diagrams of each model can be downloaded from our website.

NSB Series



Power switch 32 (A) (Distance to scow center)

NSR Series

Specifications

Model name	NSB	NSR	NSBC						
Exterior dimensions		123(W)×181(D)×145(H)							
Volume (including the rail)	Approx. 2.9kgf	Approx. 3.0kgf	Approx. 2.9kgf						
Power	AC100V - 240V DC15V 1A AC adapter								
Drive motor		DC brush motor							
Overload protection/recovery circuit	0	0	0						
External signal line	0	0	0						
Escaper electric break function	-	0	-						
Yield time	-	Approx. 1.5sec	-						
Supported screw diameter		M1.0-M3.0							
Supported screw under-head length		Up to 20 mm in length							
Screw capacity		Approx. 80cc							
Accessories and bundled items	Instruction manual, AC adapter, hex wrench, adjusting screwdriver, 0.35 mm gauge plate, earth wire	Instruction manual, AC adapter, hex wrench, adjusting screwdriver, earth wire	Instruction manual, AC adapter, hex wrench, adjusting screwdriver, 0.35 mm gauge plate, earth wi						

NSBI / NSRI Series

Versatile Screw Presenter

High-Precision, High-Speed, and High-Durability



Manual

Robotic NSRI NSRI-B (With brushless motor)



Features a rotary escaper

Separates screws one at a time, ensuring they do not intersect for smooth pick up.

Special screws supported

Allows you to stably present SW screws or those with

Dramatic improvements in motor durability

NSRI-B includes a brushless motor, which has a greatly improved lifecycle (3x greater).

• Flexible support for line changes

Supports screws of varying diameters. Easy installation and the portable size allow you to adapt to line or workpiece changes effortlessly.



NSRI-B robotic device installation example

NSRI-B robotic device installation example

- Easy installation-simply drop it into place-makes maintenance and replacement easy.
- NSRI/NSRI-B: Features a signal to notify whether a screw is at the pick-up point.



Rotating escaper

Escaper

- < High-speed screw supply > Rotating escaper accurately separates screws and supplies them at a high speed.

- < Supports low-profile screws >

Supports screws with as low a profile as 0.35mm by default (or 0.2mm by special order).

- < Clogging-free mechanism >

Separates screws one at a time, ensuring they do not clog at the pick-up outlet.

Manual Type





With Brushless Motor



NSRI

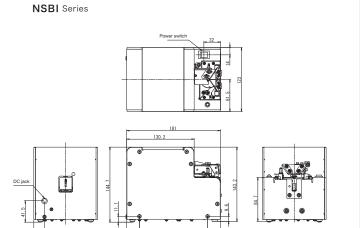
Compatibility Table

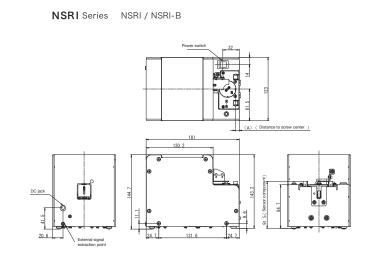
NSBI

Supported	Mai	n component t	уре	S	wap rail set typ	e
screw diameter (mm)	NSBI Series	NSRI Series	NSRI-B Series	NSBI Series	NSRI Series	NSRI-B Series
1.0	NSBI-10	NSRI-10	NSRI-10B	BI10SET	RI10SET	RI10SET2
1.2	NSBI-12	NSRI-12	NSRI-12B	BI12SET	RI12SET	RI12SET2
1.4	NSBI-14	NSRI-14	NSRI-14B	BI14SET	RI14SET	RI14SET2
1.7	NSBI-17	NSRI-17	NSRI-17B	BI17SET	RI17SET	RI17SET2
2.0	NSBI-20	NSRI-20	NSRI-20B	BI20SET	RI20SET	RI20SET2
2.3	NSBI-23	NSRI-23	NSRI-23B	BI23SET	RI23SET	RI23SET2
2.6	NSBI-26	NSRI-26	NSRI-26B	BI26SET	RI26SET	RI26SET2
3.0	NSBI-30	NSRI-30	NSRI-30B	BI30SET	RI30SET	RI30SET2

Model Diagrams

Full diagrams of each model can be downloaded from our website.





Specifications

Model name	NSBI	NSRI	NSRI-B				
Exterior dimensions		123(W)×181(D)×145(H)					
Volume (including the rail)		Approx. 3.0kgf					
Power	AC100V - 240V DC15V 1A AC adapter						
Drive motor	DC brush motor, stepper motor DC brushless motor, stepper motor						
Overload protection/recovery circuit	0	0	0				
External signal line	0	0	0				
Escaper S-shape controlling function	0	0	0				
Escaper rotation time lag adjustment function	-	-	0				
Yield time		Approx. 0.9sec					
Supported screw diameter		M1.0 - M3.0					
Supported screw under-head length	Up to 20 mm in length						
Screw capacity	Approx. 80cc						
Accessories and bundled items	Instruction manual, AC adapter, hex wrench, adjusting screwdriver, earth wire						

OM-26M / OM-26R Series

High-Speed and High-Capacity Iron-Screw Presenter

High-capacity model: 300cc (only supports iron screws)



*For details, please refer to each product's specification

Manual OM-26M

Robotic OM-26R OM-26RB (With brushless motor)



• Features a rotary escaper

Separates screws one at a time, ensuring they do not intersect for smooth pick up.

Supports standard bits from various screwdriver manufacturers

- Bit screwdrivers
- Suction screwdrivers

• Large capacity: 300 cc

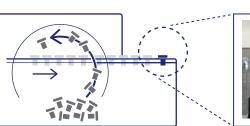
Supports a stock of approx. 780 M3.0 x 12mm washer-faced screws.

Special screws supported

Allows you to stably present SW screws or those with washers.

• Dramatic improvements in motor durability

OM-26RB is equipped with a brushless motor, which has a greatly improved lifecycle (3x greater).



Magnetically conveys screws along rails for a stable feeding

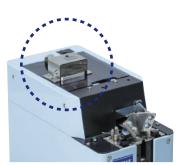


Rotating escaper

High-capacity screw stock (4x that of the NSB type)

Magnetically conveys screws along rails for a stable feed. Its design prevents screws from getting stuck.

The rotating escaper also isolates screws one at a time to prevent picking-up errors.



Optional: quantity sensor

OM-26R/M screw quantity sensor (TKA09452)

This is a screw quantity sensor (TKA09452) intended for use with the OM-26R/M Series Automatic Screw Feeder.

Combine with the OM-26R/M to detect when the screw stock is low and send a signal. Please contact us regarding quantity sensors for other products.

Manual Type



OM-26R



OM-26RB

With Brushless Motor

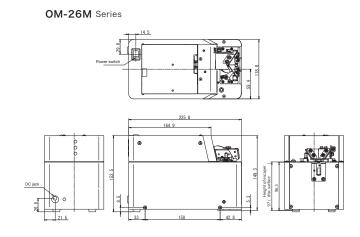
Compatibility Table

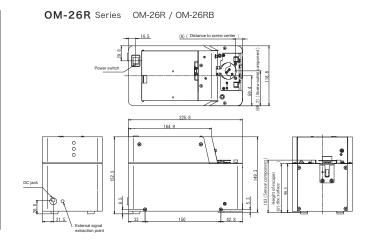
OM-26M

Supported	Mai	n component t	type	S	wap rail set typ	ре
diameter (mm)	OM-26M Series	OM-26R Series	OM-26RB Series	OM-26M Series	OM-26R Series	OM-26RB Series
2.0	OM-26M20	OM-26R20	OM-26RB20	OMM20SET	OMR20SET	OMR20SET2
2.3	OM-26M23	OM-26R23	OM-26RB23	OMM23SET	OMR23SET	OMR23SET2
2.6	OM-26M26	OM-26R26	OM-26RB26	OMM26SET	OMR26SET	OMR26SET2
3.0	OM-26M30	OM-26R30	OM-26RB30	OMM30SET	OMR30SET	OMR30SET2
3.5	OM-26M35	OM-26R35	OM-26RB35	OMM35SET	OMR35SET	OMR35SET2
4.0	OM-26M40	OM-26R40	OM-26RB40	OMM40SET	OMR40SET	OMR40SET2
5.0	OM-26M50	OM-26R50	OM-26RB50	OMM50SET	OMR50SET	OMR50SET2
6.0	OM-26M60	OM-26R60	OM-26RB60	OMM60SET	OMR60SET	OMR60SET2

Model Diagrams

Full diagrams of each model can be downloaded from our website.





Specifications

OM-26M	OM-26R	OM-26RB					
	119(W)×226(D)×152(H)						
	Approx. 3.1kgf						
	AC100V - 240V DC15V 1A AC adapter						
DC brush motor	DC brush motor, stepper motor DC brushless motor, stepper motor						
0	0 0 0						
0	0						
Optional							
0	0	0					
-	-	0					
	Approx. 0.8sec						
	Iron-only						
	M2.0 - M6.0						
Up to 25 mm in length							
Approx. 300cc							
Instruction manual, AC adapter, hex wrench, adjusting screwdriver, earth wire							
	DC brush motor	119(W)×226(D)×152(H) Approx. 3.1kgf AC100V - 240V DC15V 1A AC adapter DC brush motor, stepper motor Optional Optional Approx. 0.8sec Iron-only M2.0 - M6.0 Up to 25 mm in length Approx. 300cc					

MSF Series

Micro-Screw Presenter

Supports screws as small as \$0.5



Robotic MSF



Slim Screw Presenter

Super-thin 55mm width is ideal for cell work

M1.0-M3.0

Non-ferrous

supported

Manual S-12 SS-23



Specifications

71(W)×194(D)×132(H)
Approx. 2kgf
AC100V - 240V DC15V 1A AC adapter
DC brush motor, stepper motor
0
S0.5 - S1.0
1 — 5mm
Approx. 15cc
Instruction manual, AC adapter, hex wrench, adjusting screwdriver, earth wire

Accurately and reliably isolates tiny screws

Rotating escaper isolates even tiny screws one by one.

Slim, space-saving design

Compact, 70mm-wide design saves space.

Simple installation

No need for complex and time-consuming installation just set it in place

Example of installation for a robotic device

- -Easy installation makes maintenance and replacement easy.
- -Features a signal to notify whether a screw is at
- -Rotating escaper ensures accurate screw feed.



Specifications

Model name	SS-12 SS-23				
Exterior dimensions	55(W)×20	5(D)×143(H)			
Volume (including the rail)	Approx. 2.4kgf				
Power	AC100V - 240V DC15V 1A AC adapter				
Drive motor	DC brush motor				
Overload protection/recovery circuit	0 0				
Supported screw diameter	M1.0 - M2.0	M2.3 - M3.0			
Supported screw under-head length	Up to 16 r	nm in length			
Screw capacity	Approx. 40cc				
Accessories and bundled items	Instruction manual, AC adapter, hex wrei adjusting screwdriver, earth wire				

SS-23

55mm

• Slim design that allows them to be installed next to each other

In less than half the width of the NJ/NS series, for the space of a single NSB series model, for example, you can fit two units.

Supports low profile screws

Adjust sensor to support screw heads as low as (factory setting: 0.5mm)

Adjustable screw conveyor speed

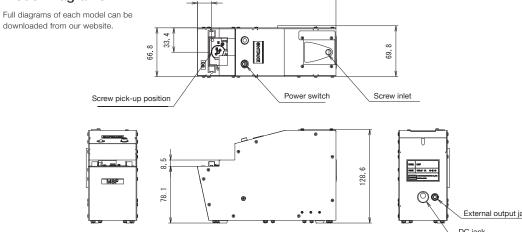
Calibrate amplitude and frequency to achieve the ideal feed speed.



Compatibility Table

Supported screw diameter (mm)	Main component type MSF Series
0.5	MSF-05
0.6	MSF-06
0.7	MSF-07
0.8	MSF-08
1.0	MSF-10

Model Diagrams Full diagrams of each model can be



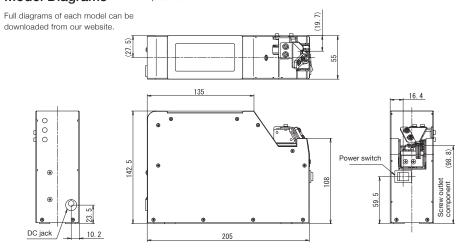
190.7

(19.6)

Compatibility Table

Supported screw	SS S	eries
diameter (mm)	Main component type	Swap rail set type
1.0	SS-1210	WR10
1.2	SS-1212	WR12
1.4	SS-1214	WR14
1.7	SS-1217	WR17
2.0	SS-1220	WR20
2.3	SS-2323	WR23
2.6	SS-2326	WR26
3.0	SS-2330	WR30
3.0	SS-2330	WR30

Model Diagrams SS-12 / SS-23



^{*}Please inquire prior to placing an order.

SSI-M / SSI-R Series

Slim Screw Presenter

Compact size supports a wide range of assembly workflows and fits anywhere

Supported diameter

M1.0-M3.0

Supported under-head length

Longest:
16 mm

Capacity
Approx.

Non-ferrous materials: supported

*For details, please refer to each product's specification

Manual SSI-12M SSI-23M

Robotic SSI-12R SSI-23R

Robotic SSI-12R SSI-23R



• Slim, space-saving design

Compact, 65mm-wide design saves space.

• Stable rail movement without clogging

Horizontal rail system prevents screws from clogging or overlapping, achieving stable presenting.

• Integrated output designed for use with general counters

Send pick-up signal from output jack to connect a general-purpose counter.

Rear part description



Escaper

- \langle High-speed screw supply \rangle

Rotating escaper accurately separates screws and supplies them at a high speed.

- < Supports low-profile screws >

Supports screws with as low a profile as 0.35mm by default (or 0.2mm by special order).

- < Clogging-free mechanism >

Separates screws one at a time, ensuring they do not clog at the pick-up outlet.



Rotating escaper

Manual Type



1 SSI-12R SSI-23R

Robotic Type

SSI-12M SSI-23M

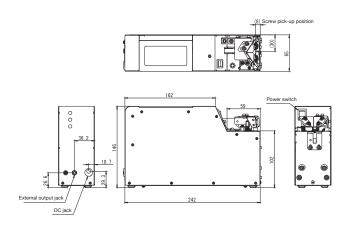
Compatibility Table

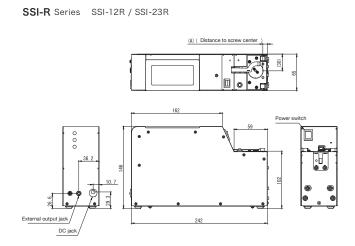
Supported screw	Main comp	onent type	Swap rail	set type
diameter (mm)	SSI-M Series	SSI-R Series	SSI-M Series	SSI-R Series
1.0	SSI-12M10	SSI-12R10	SIM10SET	SIR10SET
1.2	SSI-12M12	SSI-12R12	SIM12SET	SIR12SET
1.4	SSI-12M14	SSI-12R14	SIM14SET	SIR14SET
1.7	SSI-12M17	SSI-12R17	SIM17SET	SIR17SET
2.0	SSI-12M20	SSI-12R20	SIM20SET	SIR20SET
2.3	SSI-23M23	SSI-23R23	SIM23SET	SIR23SET
2.6	SSI-23M26	SSI-23R26	SIM26SET	SIR26SET
3.0	SSI-23M30	SSI-23R30	SIM30SET	SIR30SET

Model Diagrams

Full diagrams of each model can be downloaded from our website.

SSI-M Series SSI-12M / SSI-23M





Specifications

Model name	SSI-12M	SSI-23M	SSI-12R	SSI-23R			
Exterior dimensions	65(W)×242(D)×146(H)						
Volume (including the rail)	Approx	x. 3.3kgf	Approx	k. 3.2kgf			
Power		AC100V - 240V D	C15V 1A AC adapter				
Drive motor	DC brush motor, stepper motor						
Overload protection/recovery circuit	0	0	0	0			
External outlet terminal	0	0	0	0			
Escaper S-shape controlling function	0	0	0 0				
Yield time		Approx	x. 0.9sec				
Supported screw diameter	M1.0 - M2.0	M2.3 - M3.0	M1.0 - M2.0	M2.3 - M3.0			
Supported screw under-head length	Up to 16 mm in length						
Screw capacity	Approx. 40cc						
Accessories and bundled items	Inst	ruction manual, AC adapter, hex w	rench, adjusting screwdriver, earth	wire			

FM Series

Fixed Quantity Count / External Configuration Type Screw Presenter

Accurately presents a set number of screws



Supported under-head length

Longest:
25mm

Capacity
Approx.
150cc

Non-ferrous materials: supported

*For details, please refer to each product's specification

Fixed-quantity pick up

FM-36 FME-36 (External configuration)



Accurately presents the number of screws input to counter

Set between 1 and 99. Accurately counts and expels the number you set.

• Stable rail movement without clogging

Horizontal rail system prevents screws from clogging or overlapping, achieving stable presenting.

• Flexibly supports line changes

Supports screws of varying diameters. Easy installation and the portable size allow you to adapt to line or workpiece changes effortlessly.

Long-running operation when combined with screw hopper

FM unit has capacity of 150cc—add screw hopper for additional 400–1600cc stock.

Counter

- Set number of screws between 0–99
- Set number of times between 0–9999
- External pick-up signal
- Power outage memory protection feature



Fixed-quantity pick up with nut support

By special order, we can consider the fixed-quantity nut pick up model. Please do not hesitate to contact us.



Connect to unit for variable pick-up quantity (FME-36)

Change the setting using a PLC of a variety of manufacturers. *The PLC interface (NEX-PLC) is exclusively for use with the FME-36.



Fixed-quantity pick up

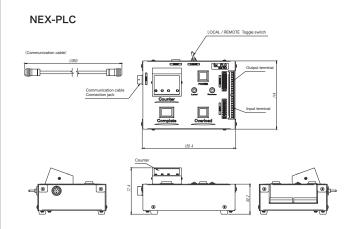


Fixed-quantity pick up with PLC support



Compatibility Table

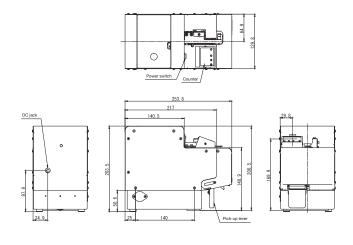
Supported	Main comp	onent type	Swap rail set type
screw diameter (mm)	FM Series	FME Series	FM/FME
3.0	FM-3630	FME-3630	FR30SET
3.5	FM-3635	FME-3635	FR35SET
4.0	FM-3640	FME-3640	FR40SET
5.0	FM-3650	FME-3650	FR50SET
6.0	FM-3660	FME-3660	FR60SET

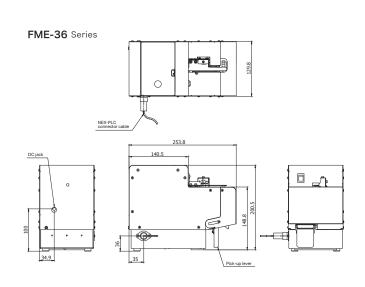


Model Diagrams

Full diagrams of each model can be downloaded from our website.

FM-36 Series





Specifications

Model name	FM-36	FME-36				
Main component exterior dimensions	130(W)×254(D)×201(H)					
Main component volume (including the rail)	Appro	x. 6.0kgf				
Main component power supply	AC100V - 240V D	C15V 1A AC adapter				
Drive motor	DC bru	sh motor				
Overload protection/recovery circuit	0					
External signal line	\circ					
Brush-overload protection mechanism	0					
Number configuration	Maximum of 99 Maximum of 127					
Supported screw diameter	M3.0	- M6.0				
Supported screw under-head length	Up to 25 r	mm in length				
Screw capacity	Approx. 150cc					
Accessories and bundled items	Instruction manual, AC adapter, hex wrench, adjusting screwdriver, earth wire					
Extension box exterior dimensions	- 155(W)×113(D)×44(H)					
Extension box power supply	-	AC100V - 240V DC24V 1.9A AC adapter				

^{*}Note that some screw sizes may not support pick up of 99 units.

LS / LV / LF Series

Large, Longneck Screw Presenter

Supports screws and bolts with a diameter of up to M8.0 and an under-head length of 50mm. Ideal for presenting screws and bolts for automotive assembly, construction, and renovation.





Capacity Approx. 1000/

For iron screws

LS25-HM LS-50HM Manual Robotic LS25-HR LS-50HR Fixed-quantity pick up LV25 LV50 LF50



Large capacity

High-capacity stock: between 1000-1300cc

• Capable of supporting a range of needs

Comes with six patterns that you can select based on the type of workpiece and the intended use.

(Please refer to the suggested pick-up patterns described below)

Rivets supported

Fixed-quantity alignment of rivets is supported. Work efficiency is greatly improved because there is no need to reorient rivets by hand.

Supports screws and bolts of 3.0mm-8.0mm diameters

Achieves a stable, horizontal feed even for large workpieces. Configure up to 999 pieces. No need to check the screw quantity each time.





Suggested pick-up patterns



LS25-HM/LS50-HM

Fixed-quantity



LV25-H/LV50-H



LS25-HR/LS-50HR

Present fixed quantity to box



LV25-B/LV50-B



LV25-S/LV50-S

Present fixed quantity to rail



LF50

Robotic Type

With a Counter









LS-HR





LS25-HM LS-50HM

LS25-HR LS-50HR

LV25-S LV50-S

LV25-B LV50-B

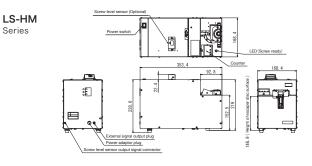
LV25-H LV50-H

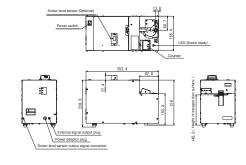
Compatibility Table

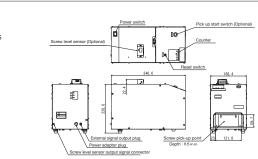
Supported screw	LS-HM	l Series	LS-HR	Series	LV Series		
diameter (mm) Up to under- head length of 25mm		Up to under- head length of 50mm	Up to under- head length of 25mm	Up to under- head length of 50mm	Up to under- head length of 25mm	Up to under- head length of 50mm	
3.0	LS25-HM30	LS50-HM30	LS25-HR30	LS50-HR30	LV25-30	LV50-30	
3.5	LS25-HM35	LS50-HM35	LS25-HR35	LS50-HR35	LV25-35	LV50-35	
4.0	LS25-HM40	LS50-HM40	LS25-HR40	LS50-HR40	LV25-40	LV50-40	
5.0	LS25-HM50	LS50-HM50	LS25-HR50	LS50-HR50	LV25-50	LV50-50	
6.0	LS25-HM60	LS50-HM60	LS25-HR60	LS50-HR60	LV25-60	LV50-60	
8.0	LS25-HM80	LS50-HM80	LS25-HR80	LS50-HR80	LV25-80	LV50-80	

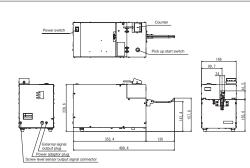
Supported mandrel	Main component type LF Series
diameter (mm)	Up to under-head length of 50mm
2.0	LF50-20
2.3	LF50-23
2.6	LF50-26

Model Diagrams Full diagrams of each model can be









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Specifications

Model name	LS25-HM	LS50-HM	LS25-HR	LS50-HR	LV-25	LV-50	LF-50	
Exterior dimensions		169(W)×354(D)×229(H)				169(W)×347(D)×229(H) 169(W)×354(D)×229(Front rail protruding part : 1		
Volume (including the rail)				Appro	x. 15kgf			
Power			A	AC100V - 240V D	C15V 1A AC adap	oter		
Drive motor		DC brushless motor, DC brush motor						
Overload protection/recovery circuit	0	0	0	0	0	0	0	
External outlet terminal	0	0	0	0	0	0		
Safety function			Stop opera	tion when the cove	er of the stock cha	amber is open		
Supported screw diameter	M3.0 -	- M8.0	M3.0 -	- M8.0	M3.0 -	- M8.0	ϕ 2 - ϕ 2.6 (with record)	
Supported screw under-head length	Up to 25 mm in length	Up to 50 mm in length	Up to 25 mm in length	Up to 50 mm in length	Up to 25 mm in length	Up to 50 mm in length	Up to 50 mm in length	
Screw capacity	Approx. 1300cc	Approx. 1000cc	Approx. 1300cc	Approx. 1000cc	Approx. 1300cc	Approx. 1000cc	Approx. 1000cc	
Accessories and bundled items		lr	nstruction manual,	AC adapter, hex w	rench, adjusting s	crewdriver, earth v	wire	
		<u> </u>						

^{*}Please inquire prior to placing an order. You are required to check the work bit you are using.

BS Series

Pneumatic Screw Feeder

Pneumatically feeds screws to their destination in an instant.



BS-D Manual

Robotic BS(S) BS(L) BS-P BS-R

Fixed-quantity pick up BS-C

*BS-P irrespective of material / Other models only for iron screws

• Uses air pressure to convey screws to distant locations

Brings screws right to you using air pressure, dramatically improving work efficiency.

*The default hose is 2.5 meters long and requires air tubing to be installed.

Space-saving, high-capacity model

Separating the screw feed from pick-up points allows for a space-saving design.

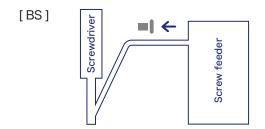
• Four types based on different needs

BS (manual and robotic): Pneumatically feeds screws in response to an external signal.

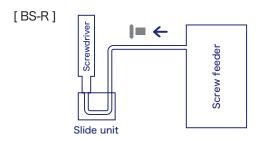
BS-R (robotic pick up): Sliding unit conveys screws to screwdriver pneumatically, greatly cutting down on yield time.

BS-C (fixed-quantity bulk pick up): Pick up the set quantity with the counter and it allows for pick up by simply pulling

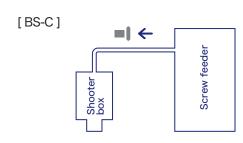
BS-D (fixed-quantity single pick up): Pick up the set number of screws and bolts one at a time next to your hand.



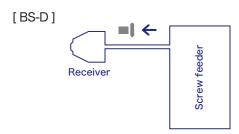
- Screws are pneumatically fed by request through an external signal.
- Screws are fed to the screwdriver's Y pipe with the screw side at the front.
- It is compatible with the robotic and manual screwdrivers.



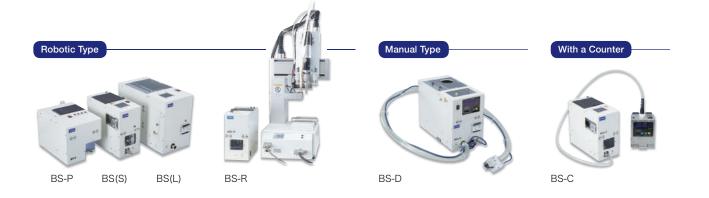
- Screws are pneumatically fed by request through an
- Placing the screw-feeding part of the slide unit near the screwdriver can shorten the time it takes to feed screws to
- Screws are fed with the head at the front.
- It is compatible with screw-tightening robots.



- Fixed quantities of screws are picked up in bulk.
- The screw feeder can be placed outside the workspace, saving more space for work.
- Fixed quantity pick up can prevent screw-tightening being forgotten.



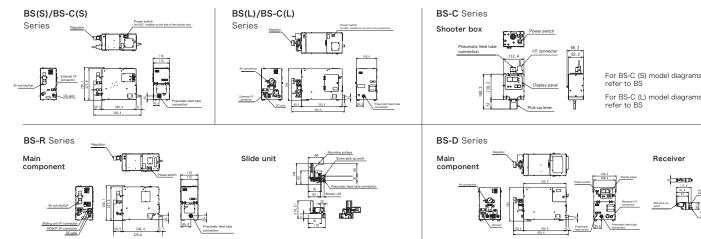
- Fixed quantities of screws are picked up one at a time.
- The screw feeder can be placed outside the workspace, saving space for work.
- It feeds the screw next to the hand doing the screwtightening work.
- Fixed quantity pick up can prevent screw-tightening being



Compatibility Table

			Main comp	onent type			
Supported screw	BS S	BS Series BS-R Se		BS-D Series	BS-C Series		
diameter (mm)	Scooping chamber capacity: approx. 280cc	Scooping chamber capacity: approx. 1300cc	-	-	Scooping chamber capacity: approx. 280cc		
2.0	BS-S20	BS-L20	BS-R20	-	BS-CS20	BS-CL20	
2.3	BS-S23	BS-L23	BS-R23	-	BS-CS23	BS-CL23	
2.6	BS-S26	BS-L26	BS-R26	-	BS-CS26	BS-CL26	
3.0	BS-S30	BS-L30	BS-R30	BS-D30	BS-CS30	BS-CL30	
3.5	BS-S35	BS-L35	BS-R35	BS-D35	BS-CS35	BS-CL35	
4.0	BS-S40	BS-L40	BS-R40	BS-D40	BS-CS40	BS-CL40	
5.0	BS-S50	BS-L50	BS-R50	BS-D50	BS-CS50	BS-CL50	
6.0	BS-S60	BS-L60	-	BS-D60	BS-CS60	BS-CL60	

Model Diagrams Full diagrams of each model can be downloaded from our website.



Specifications

Model name	BS-S	BS-L	BS-CS	BS-CL	BS-D	BS-P	BS-R	
Exterior dimensions	118(W)×310(D)× 237(H)	169(W)×436(D)× 270(H)	118(W)×310(D)× 237(H)	169(W)×436(D)× 270(H)	169(W)×436(D)× 270(H)	175(W)×304(D)× 186(H)	118(W)×310(D)× 237(H)	
Volume (including the rail)	Approx. 4kgf	Approx. 10kgf	Approx. 5kgf	Approx. 12kgf	Approx. 12kgf	Approx. 4kgf	Approx. 4.6kgf	
Power	AC100V - 240V DC15V 1A AC adapter							
Air				0.5MPa MAX 400L/mir	1			
Drive motor				DC brushless motor				
Pneumatic screw-feeding direction							■ ←	
Overload protection/recovery circuit	0	0	0	0	0	0	0	
External interface	O (D-SUB 9pin)	O (D-SUB 9pin)	-	-	-	O (D-SUB 9pin)	O (D-SUB 9pin	
Yield time		M6X25/	3M Approx. 2 seconds	by tube		Approx. 1.2sec	Approx. 1.5sec	
Supported screw diameter		M2.0 -	- M6.0		M3.0 - M6.0	M1.0 - M3.0	M2.0 - M5.0	
Supported screw under-head length		Up to 25 m	m in length		15~25mm in length	Up to 12 mm in length	Up to 14 mm in length	
Supported total length of screw			Lengtl	n/head diameter = 1.3 o	r more			
Screw capacity	Approx. 280cc	Approx. 1300cc	Approx. 280cc	Approx. 1300cc	Approx. 1300cc	Approx. 80cc	Approx. 280cc	
Accessories and bundled items		Instruction manual, AC adapter, hex wrench, adjusting screwdriver, earth wire, pneumatic feed tube (2.5 meters)						
Accompanying unit	-	-	Shooter box Receiver Form: 113(W)×82(D)×140(H) Form: 30(W)×52(D)			-	Slide unit Form : 116(W)×	

Capacity: Approx. 20 for M6X25

144(D)×(120H)

22

*Please inquire prior to placing an order.

Enables Long-Running Screw Presenting

Screw Hopper

A sensor detects the screw stock to automatically feed the optimal amount of screws. Use this to make operation easier.









*For details, please refer to each product's specifications.





SR-80/NJ-80 Rear-attaching Impeller Type

- Easy installation—simply line it up next to the screw presenter. It will not take up space on the upper surface.
- Super compact model fits anywhere, yet has room for a screw stock of 800cc.
- Use the timer to set the impeller's operation time.

Compatibility Table

SR-80 Model number	Supported screw presenter		
SR-80	NSB / NSR / NSBI / NSRI / NSRI-B		

NJ-80 model	Supported		
Model number	screw presenter		
NJ-80	NJ /NJR		
NII OUE	EM 26 / EME 26		

Stock capacity based on the diameter and length of the screw for 800cc: M2.3 x 5, approx. 20,000; M3.0 x 6, approx. 5,600





RHP-160 Side-and Rear-Attaching High-Capacity Impeller Type

- Easy installation—simply line it up next to the screw presenter.
- Supports a screw stock of approximately 1600cc.
- Use the timer to set the impeller's operation time.

Compatibility Table

RHP-160	Cupported corew presenter
Model number	Supported screw presenter
RHP-160J	NJ / NJR
RHP-160F	FM-36 / FME-36
RHP-160M	OM-26M / OM-26R / OM-26RB





T-510 Conveyor Style, Surface-Mounting Type

- Easy installation—simply align it on top of the screw presenter.

 Does not take up floor space; allows you to add more stock
- Does not take up floor space; allows you to add more stock vertically
- Use the timer to set the conveyor belt's operation time.

Compatibility Table

T-510	Supported screw presenter
Model number	Supported screw presenter
T-510S	NSB / NSR / NSBI / NSRI / NSRI-B
T-510J	NJ / NJR
T-510F	FM-36 / FME-36

Stock capacity based on the diameter and length of the screw for 400cc: M2.3 \times 5, approx. 10,000; M3.0 \times 6, approx. 2,800





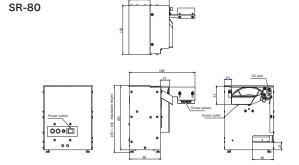
MHP-80 Magnetic Style, Rear-Attaching Type

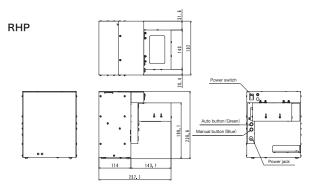
- Easy installation—simply line it up next to the screw presenter. It even supports long screws.
- Magnets are used to feed and convey screws.
- Use the timer to set the magnet operation time.

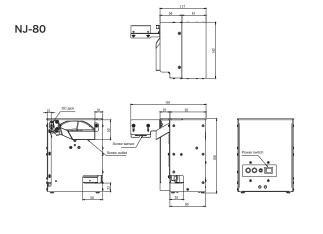
Compatibility Table

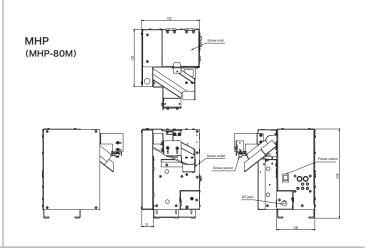
MHP-80	Supported serow presenter				
Model number	Supported screw presenter				
MHP-80S	NSB / NSR / NSBI / NSRI / NSRI-B				
MHP-80J	NJ / NJR				
MHP-80F	FM-36 / FME-36				
MHP-80M	OM-26M / OM-26R / OM-26RB				

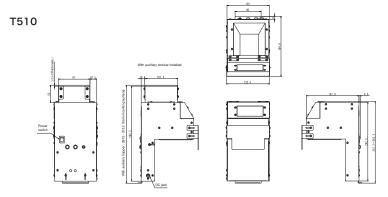
Model Diagrams Full diagrams of each model can be downloaded from our website.











Specifications

Model name	NJ-80	SR-80	T-510	RHP-160	MHP-80
Exterior dimensions	142(W)×191(D)× 188(H)	142(W)×191(D) ×189-198(H)	130(W)×171(D)×245(H) With auxiliary stocker installed 295(H)	192(W)×237(D)×240(H)	156(W)×150(D)×212(H)
Volume (including the rail)	Approx	. 2.9kgf	Approx. 3.1kgf	Approx. 5.5kgf	Approx. 2.9kgf
Power	AC:	100V-240V DC15V 1A A	C adapter	AC100V - 240V DC15V 1A AC adapter	
Drive motor			DC brush motor		
External signal line (remaining quantity sensor)	-	-	0	-	(O) (With remaining quantity sensor is optional)
Safety function	-	-	-	Stop operation when the cover of the stock chamber is open	-
Supported screw materials	-	-	-	-	Iron-only
Supported screw diameter	M2.0 - M6.0		M1.0 - M6.0	M2.0 - M6.0	M2.0 - M6.0
Supported screw under-head length	UP to 15 mm in length(Total length up to 18mm)		Up to 25 mm in length		
Screw capacity	Approx. 800cc		Main component : Approx. 400cc auxiliary stocker : Approx. 400cc	Approx. 1600cc	Approx. 800cc
Accessories and bundled items	Instruction manual, AC adapter, screw splash-proof cover / mounting plate, attaching screws (only for NJ-80F)		Instruction manual, auxiliary stocker, AC adapter, hex wrench, screw (M2.6 x 5), external signal line / mounting plate, attaching screws (only for T-510F)	Instruction manual, AC adapter, hex wrench / mounting plate, attaching screws (only for RHP-160F)	Instruction manual, AC adapter, screw splash-proof cover, adjusting screwdriver / mounting plate, attaching screws (only for MHP-80F)

FAQ

Q	Can I increase the capacity for the screw presenter?	You can add a screw hopper to add a capacity of 400-1600cc.		
Q	Self-tapping screws are not working as intended. Why?	One possible cause is that M3.5 tolerance screws are intermingled with M3.0 tapping screws. If you are handling workpieces with large differences in screw tolerance, select a product based on the maximum screw and bolt diameter.		
Q	I want to use a hexagon socket head cap bolt.	If you are considering a hexagon socket head cap bolt, please make an inquiry with our dealer before placing an order.		
Q	Can I have model diagrams?	Yes, they can be downloaded from our website.		
Q	Do you support special screw and bolt shapes?	If you are considering a device for a specialized screw or bolt, please print out the Special Order Form from our website, complete it, and submit it to one of our dealers.		
Q	Can I have extra parts for maintenance?	To purchase extra parts, please contact the dealer where you purchased the product.		
Q	How can I fix a presenter for a robotic device?	This is described in the product manual available on our website.		
Q	I want to know more about options.	Please refer to our website.		

Signals obtained from signal line

- Manual models: Signal of the screw pick up can be obtained.
- Robotic models: Signal of whether there is a screw in the screw pick-up point can be obtained.
- Fixed-quantity pick up models: Signal of feed completion for set number of screws can be obtained.

For customers seeking repairs

Print out a repair request form from our website, complete it, and submit it to the dealer where you purchased the product. Include the same document with your item to be repaired. If you do not have a printer, please include the details indicated on the right on a piece of paper.

Website: www.ohtake-root.co.jp

- Product name
- Serial number (on rear)
- Company name, address, contact person's name and department, telephone number, fax number
- Problem (in detail, and please be as specific as possible)
- Context in which it was used (type of screws, etc.)

Automatic screw presenter/Hopper AC adapter plug formats

Model	DC voltage	Adapter model	AC cord types	(Representative) countries supported	Adapter shape	Plug shape
		UNI315-1510	PSE cord	Japan Mexico Brazil other		A type PSE (Japan) certified (~AC125V)
		UI315-15	CCC cord	China Thailand Taiwan Malaysia Vietnam Brazil other	Power adapter: Certified cords for each country supported (100–240V AC)	A type CCC (China) certified (~AC240V)
All models	DC15V		KC cord	Korea		SE type KC (Korea) certified (~AC240V)
		UNI315-1510	CE cord	EU countries Argentina Indonesia India Vietnam other	Power adapter: Certified cords for each country supported (100–240V AC) (50/60 Hz)	C type CE (EU) certified (~AC240V)
		UNI315-1510	UL cord	USA		A type UL (USA) certified (~AC125V)

^{*}Adapter and AC are separate.

The following adapters are compatible with Hopper manufactured before March 2020. Check the voltage on the nameplate of the Hopper main unit.

Model	DC	Adapter model	AC cord	countries		Adapter and plug shape
Hopper SR-80	voltage DC12V	AD- 1200 500DJ	types 100V Adapter	supported Japan		A type PSE (Japan) certified(AC100V 50/60 Hz)
NJ-80 T-510	BOILV	YL41- 12000 500D	As an alter HSC09024.	native, we will sell th	In the EU have been discore adapter UNI315-1510 where you purchased the	for DC15V and the conversion cable

^{*}For 12V DC, adapter and AC cord are one unit. Customers are required to make other preparations themselves.

Caution

- The specifications and performance figures of the products described in this catalog are based on our company's design calculations, in-house testing, individual performance testing, product usage results, and official standards/specifications. These are provided for reference purposes only for model selection under normal circumstances.
- The items listed in this catalog may be amended, have their designs changed, or be revised without notice.
- If you are considering using our products under special circumstances, please make sure to discuss technical issues with us beforehand, or conduct a test and evaluation to check the performance on your own responsibility. If damages or injuries are incurred without following this process, OHTAKE-ROOT KOGYO cannot be held responsible.
- For safe usage of our products, please make sure to read the instruction manual before using them.

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