

DOWEL PIN EXTRACTORS

—ROTATION TYPE— (APPLICABLE DOWEL PINS : D5 ~ 12)

MSFM (①②③④⑤⑥⑦ set)

② MSFMT ① MSFMH ③ MSFMS6 ⑤ MSFMM 6-40
⑥ UNUTZ6
CB3-15
③ MSFMS34 ④ MSFMC4 CB4-20 ④ MSFMC3
③ MSFMS5 ⑤ MSFMM5-30 ⑥ UNUTZ5
⑦ MSFMB (201×149×39)

Components

No.	Name	Type	M	H	
①	a: body	MSFMH	SUS	45~50HRC	
	b: plunger		SUS,SUJ2	—	
	c: cover		SUS	—	
	d: bearing		SUJ2	—	
②	Nut	MSFMT	SUS303	—	
③	Shaft	MSFMS	34	SCM435	38~43HRC
			5	—	—
④	Clamp	MSFMC	SUS	—	
⑤	Tensile bolt	MSFMM	5-30	SCM435	38~43HRC
			6-40	—	—
⑥	U-nut	UNUTZ	SS400 or equivalent	—	
⑦	Case	MSFMB	PP	—	

Accessory : CB3-15, CB4-20

Dowel pin extractor set (①②③④⑤⑥⑦)

Catalog No.

MSFM

Accessory : CB3-15, CB4-20

Single tensile bolt (⑤ only)

Type	M	L				
		MSFMM	5	25	30	40
	6		30	40	50	60

MSFM set is provided with MSFMM5-30 and MSFMM6-40.

Ultra-long socket (Separately sold)

Catalog No.

4NV-17L100

Use for impact wrench (insertion angle : 12.7)

Can be stored in ⑦ Case by inserting the shaft in the ultra-long socket.

Order Catalog No. L

MSFM
MSFMM5 — 50
4NV-17L100

Days to Ship **Quotation**

Price **Quotation**

Other single components

Name	Catalog No.
① Holder	MSFMH
② Nut (with solid lubricating material)	MSFMT
③ Shaft	34
	5
	6
④ Clamp	MSFMC
(For shaft MSFMS34)	3
⑦ Case	MSFMB

Order Catalog No. Days to Ship **Quotation**

MSFMH
MSFMS6

Features

- The rotation of the bolt and nut help the dowel pin be extracted smoothly.
- The compact shape make it possible to remove the dowel pin without dementing the die sets from the press machines.
- Because this structure reduces the shock during extraction, it solve those problems as shifting of peripheral components due to damage of bolt or vibration.

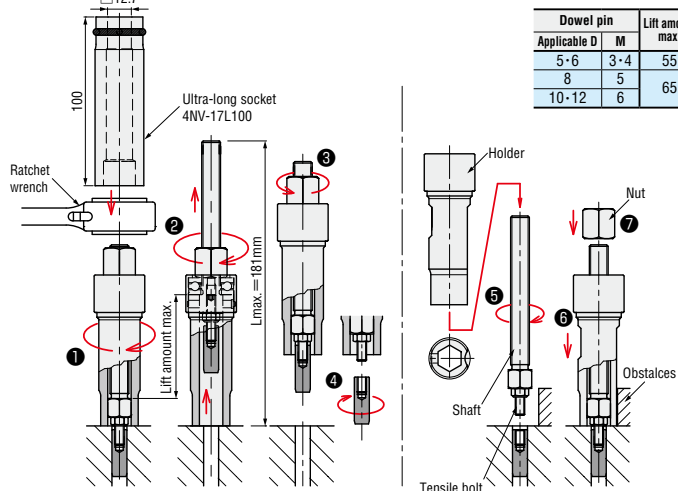


The dowel pin can be either extracted by applying ratchet wrench or spanner to the nut, or removed by using impact wrench after changing the nut to the separately sold ultra-long socket 4NV-17L100.

—Without obstacles— —With obstacles nearby—

- By using the nut adjust the tensile bolts to extends about M×1.2mm from the holder. Turn the holder and screw the tensile bolt into the dowel pin. (Return about 1/2 rotation when the tensile bolt reached the incomplete thread of the dowel pin.)
- Turn the nut and extract the dowel pin.
- Rotate the nut and out the dowel pin from the holder.
- Remove the dowel pin.
- Screw the shaft into the dowel pin by more than 5 threads. (Return about 1/2 rotation when the tensile bolt reached the incomplete thread of the dowel pin.)
- Insert the cut face of the holder into the shaft along the obstruction.
- Install and turn the nut.

Dowel pin Applicable D	M	Lift amount max.
5-6	3-4	55
8	5	65
10-12	6	65



DOWEL PIN EXTRACTORS

—ROTATION TYPE— (APPLICABLE DOWEL PINS : D13 ~ 20)

MSFL (①②③④⑤⑥ set)

② MSFLN ① MSFLH ③ MSFLS8
④ MSFMM8-40 ⑤ UNUTZ8
③ MSFLS10 ④ MSFMM10-50 ⑤ UNUTZ10
⑥ MSFLB (321×158×48)

Components

No.	Name	Type	M	H	
①	a: body	MSFLH	SUS	45~50HRC	
	b: plunger		SUS,SUJ2	—	
	c: cover		SUS	—	
	d: bearing		SUJ2	—	
②	Nut for impact wrench	MSFLN	SUS303	—	
③	Shaft	MSFLS	8	SCM435	38~43HRC
			10	—	—
④	Tensile bolt	MSFMM	8-40	SCM435	38~43HRC
			10-50	—	—
⑤	U-nut	UNUTZ	SS400 or equivalent	—	
⑥	Case	MSFLB	Steel	—	

Accessory : CB3-15, CB4-20

Dowel pin extractor set (①②③④⑤⑥)

Catalog No.

MSFL

Single tensile bolt (④ only)

Type	M	L					
		MSFMM	8	40	50	60	80
	10		40	50	60	80	100

MSFL set is provided with MSFMM8-40 and MSFMM10-50.

Order Catalog No. L Days to Ship **Quotation**

MSFL
MSFMM8 — 100

Price **Quotation**

Other single components

Name	Catalog No.
① Holder	MSFLH
② Nut for impact wrench	MSFLN
③ Shaft	8
	10
⑥ Case	MSFLB
Nut (with solid lubricating material)	MSFLT

M : SUS303

MSFL (dowel pin extractor set) is not provided with MSFLT (nut).

If nuts for ① Holder and ② Impact wrench are newly purchased, they can be dedicated for use with M8 and M10.

Order Catalog No. Days to Ship **Quotation**

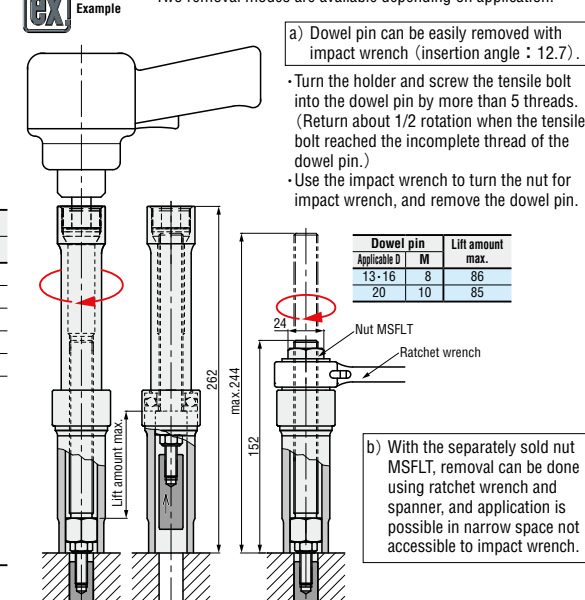
MSFLH
MSFLN

Features

- The rotation of the bolt and nut help the dowel pin be extracted smoothly.
- It solves the problems that could easily occur with the traditional hammer-type dowel pin extractor used in large-diameter dowel pin, such as pinching of fingers and fallover due to damage of bolt and welded part.
- Extraction is easy even for dowel pin of tight engagement like MST (p6 tolerance).
- Because this structure reduces the shock during extraction, it solve those problems as shifting of peripheral components due to damage of bolt or vibration.



Two removal modes are available depending on application.



Order Catalog No. Days to Ship **Quotation**

MSFLH
MSFLN