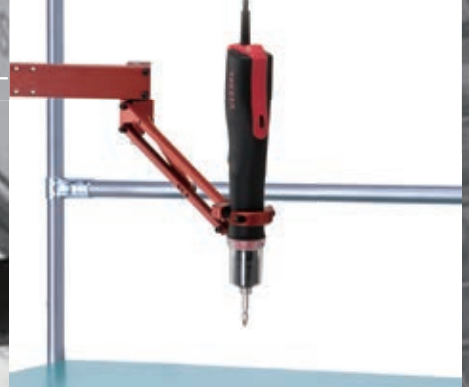


No. HFAC-3-1DR Hand Free Arm



Tool arm series, usable like your hand and arm. Absorbs impact during screw tightening and alleviates waist fatigue. More accurate screw tightening as the tool arm guides your hand and arm vertically or horizontally. Working environment improvement in the production line or at a working bench.

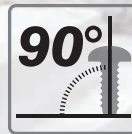
VESSEL Tool Arms are chosen for



- 1) **Reduction of rotational load**
It reduces the reaction of the electric screwdriver to the hand holding it.



- 2) **Reduction of weight load**
It reduces the feeling of fatigue in your hand and arm, caused by the weight of the electric screwdriver.



- 3) **Improvement of vertical stability**
It allows screws to go in straight, which reduces failures in screw tightening.



- 4) **Improvement of tightening accuracy**
It ensures consistent fastening quality with less irregularity.

No. HFAC-3-1DR Hand Free Arm

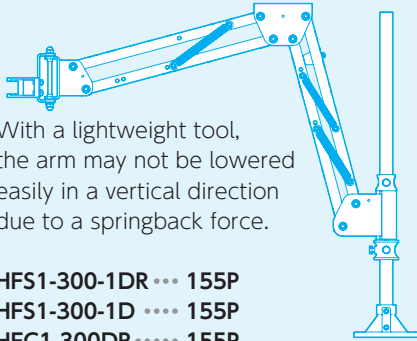
Improved tightening accuracy as this machine assures vertical movement. Optimal for the work in a limited space or with small assembly parts. The swiveling tool holder enables to operate the power tool smoothly even if it is required to move around.

Arm Types

1) Double-link arm

(with two arms connected by a linked structure)

- Advantages :**
- Highly flexible with a wide range of arm movement.
 - Stable tightening accuracy with horizontal movement of the electric screwdriver.
 - Balancing effect for weight load reduction.



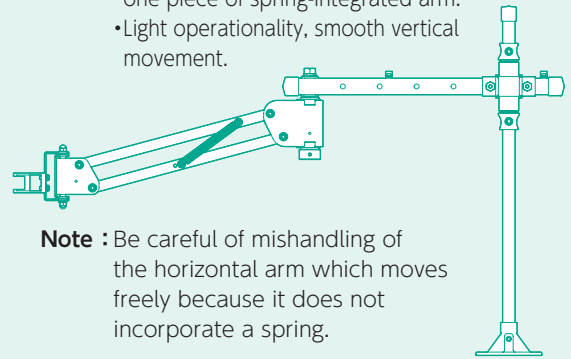
Note : With a lightweight tool, the arm may not be lowered easily in a vertical direction due to a springback force.

Model : HFS1-300-1DR ... 155P
 HFS1-300-1D ... 155P
 HFC1-300DR ... 155P
 HFKCC-3-1DR ... 156P

3) Single-link arm

(combination of horizontal arm and spring-integrated arm)

- Advantages :**
- Suitable for use in a narrow space or on a small worktable than the double-link arm type.
 - Simple movement as this type consists of only one piece of spring-integrated arm.
 - Light operability, smooth vertical movement.



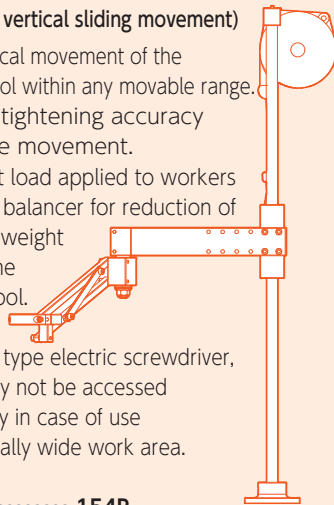
Note : Be careful of mishandling of the horizontal arm which moves freely because it does not incorporate a spring.

Model : HFAC-3-1DR ... 156P

2) Linear arm with tool balancer

(with bearing bushing for vertical sliding movement)

- Advantages :**
- Allows vertical movement of the mounted tool within any movable range.
 - Improved tightening accuracy with stable movement.
 - Less weight load applied to workers with a tool balancer for reduction of the overall weight including the mounted tool.



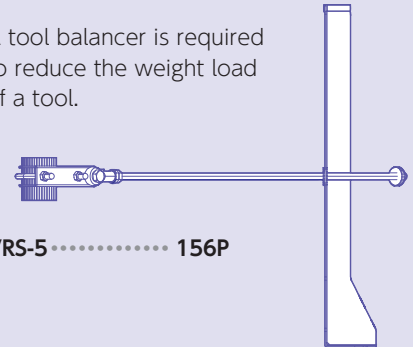
Note : With a lever type electric screwdriver, the lever may not be accessed appropriately in case of use in a horizontally wide work area.

Model : VAB-5 ... 154P

4) Simplified stand arm

- Advantages :**
- Effective to reduce the rotational load of the electric screwdriver.
 - Low cost due to simple structure design.
 - Can be moved freely in all directions.

Note : A tool balancer is required to reduce the weight load of a tool.



Model : VRS-5 ... 156P

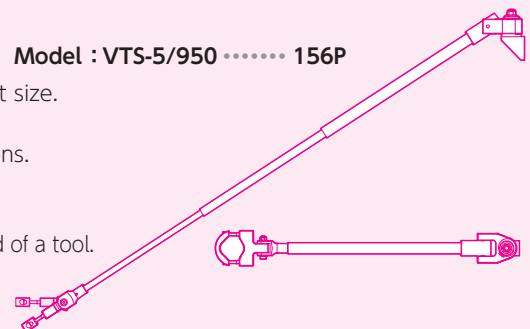
5) Telescopic arm

(with carbon pipes that extend and contract)

- Advantages :**
- Usable on a narrow workbench due to compact size.
 - Made of a strong lightweight carbon fiber.
 - Can be moved freely without load in all directions.
 - Installable in ceilings and walls.

Note :

- A tool balancer is required to reduce the weight load of a tool.
- With a lever type electric screwdriver, the lever may not be accessed appropriately in case of use in a horizontally wide work area.



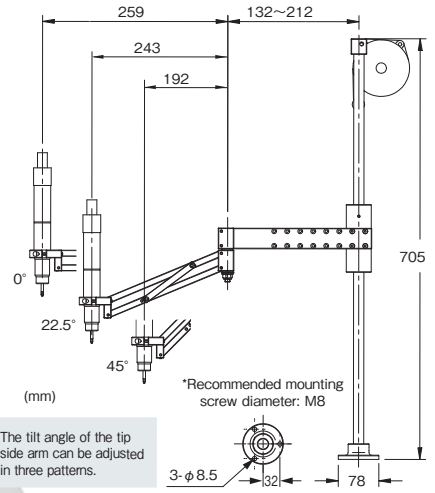
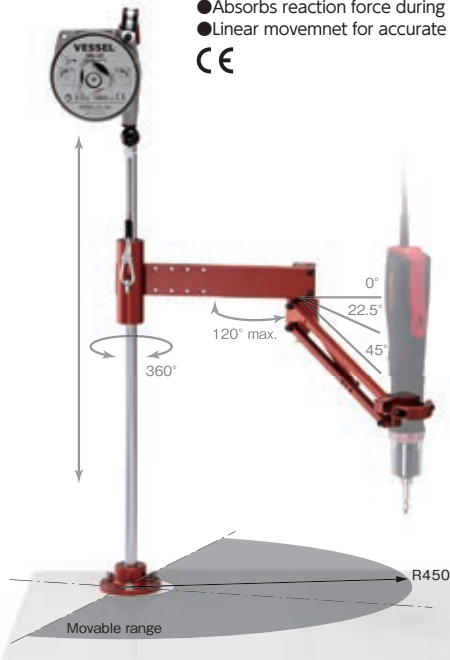
Model : VTS-5/950 ... 156P

No. VAB-5 Vertical Arm NEW

- Absorbs reaction force during screw tightening and alleviates the wrist tiredness.
- Linear movement for accurate screw tightening.



CE



Model No.	Max. Reaction Force (N·m)	Maximum load (kg)	Installed Tool O/D (Φmm)	Height (mm)	Movable Radius (mm)	Weight (kg)	EDP No.
VAB-5	5	1.2	25~42	705	to R450 (When the arm angle is 22.5 degrees)	3.1 (Accessories included)	551082

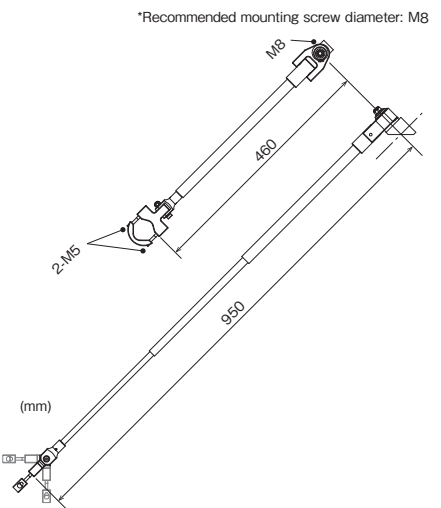
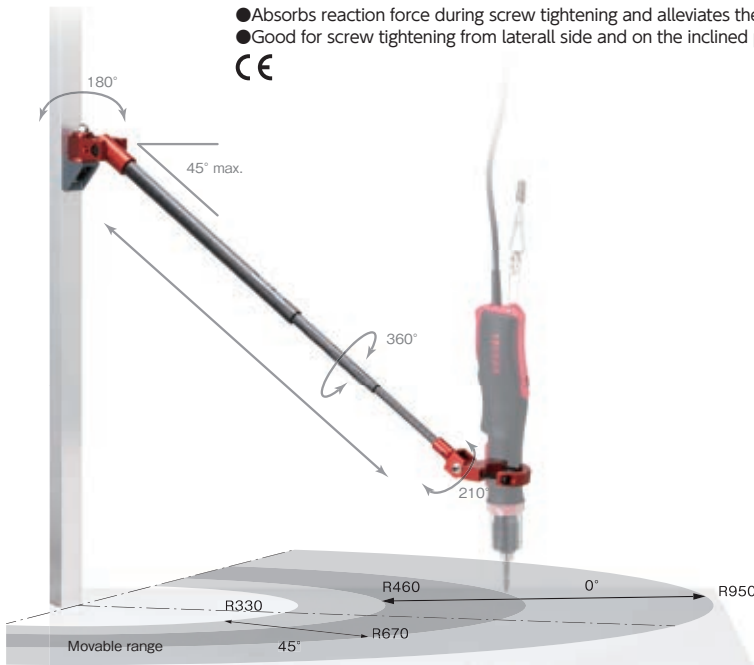
Applicable: VE series (Electric Screwdriver) All models Contents: Tool balancer (VBL-30)

No. VTS-5/950 Sliding Arm NEW

- Absorbs reaction force during screw tightening and alleviates the wrist tiredness.
- Good for screw tightening from lateral side and on the inclined product.



CE



Model No.	Max. Reaction Force (N·m)	Maximum load (kg)	Installed Tool O/D (Φmm)	Arm Length (mm)	Movable Radius (mm)	Weight (kg)	EDP No.
VTS-5/950	5	1.2	25~42	460~950	R330 to 670 (When the arm angle is 45 degrees)	0.53 (Accessories included)	551083

Applicable: VE series (Electric Screwdriver) All models Contents: Universal adapter (already installed)

HAND TOOLS

BITS & SOCKETS

ELECTRIC TOOLS

AIR TOOLS

STATIC SOLUTIONS

GASOLINE ENGINE TOOLS

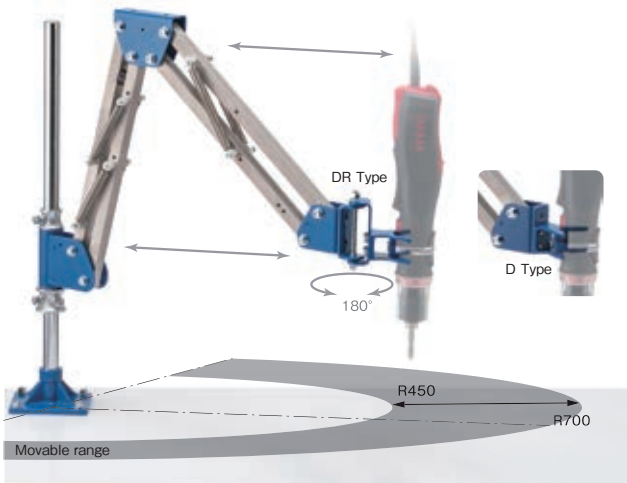
No. HFS1-300-1D/R Hand Free Arm **NEW**

- Accurate screw tightening by stable vertical and/or horizontal movement.
- Tool attachment section which rotates facilitates tool operation in the application where the tool needs to be moved back and forth, up and down.

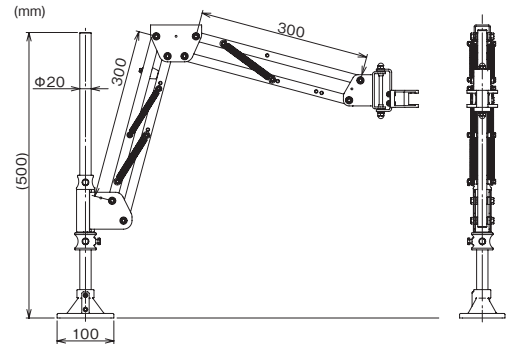
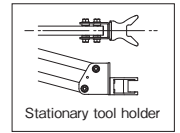


D-type only

No.HFS1-300-1D



No.HFS1-300-1DR

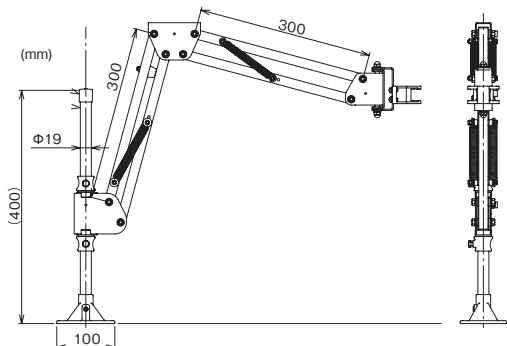
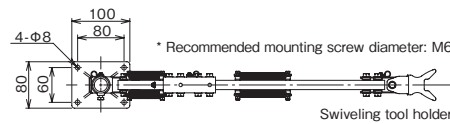
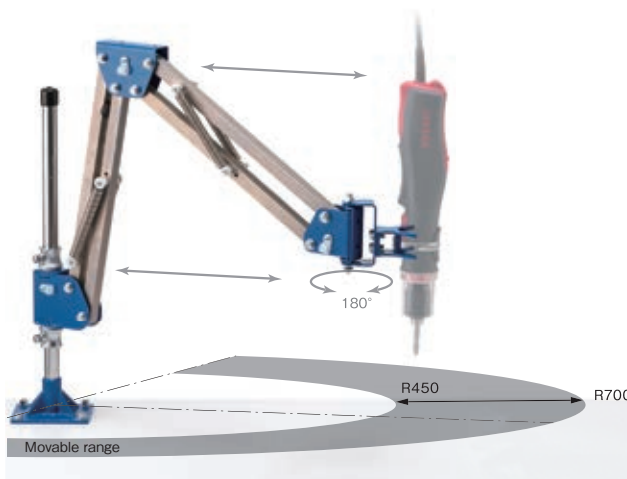


Model No.	Max. Reaction Force (N·m)	Allowable load (kg)	Installed Tool O/D (φmm)	Arm Length (mm)	Movable Radius (mm)	Weight (kg)	EDP No.
HFS1-300-1DR	5.2	0.8~1.2	35~45	300+300	R450~700	4.1 (Accessories not included)	552053
HFS1-300-1D	5.2	0.8~1.2	35~45	300+300	R450~700	4.1 (Accessories not included)	552054

Applicable: VE-3000, VE-4000 (P, AC, PAC), VE-4500 (P, AC, PAC), VE-5000 (P, SOP, PSOP), VE-6000 (P, SOP, PSOP) Contents: Replacement kit, Rubber sheet, Hose band

No. HFC1-300DR Hand Free Arm **NEW**

- Absorbs reaction force during screw tightening and alleviates the wrist tiredness.
- Tool attachment section which rotates facilitates tool operation in the application where the tool needs to be moved back and forth, up and down.
- Light-weight and cost-saving type.

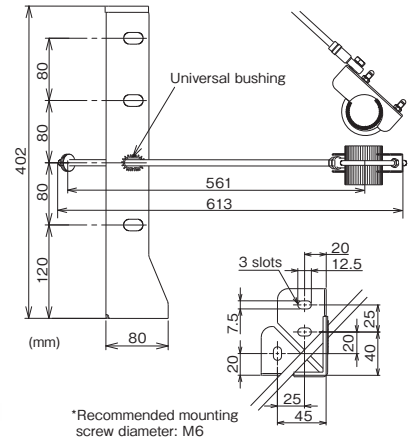
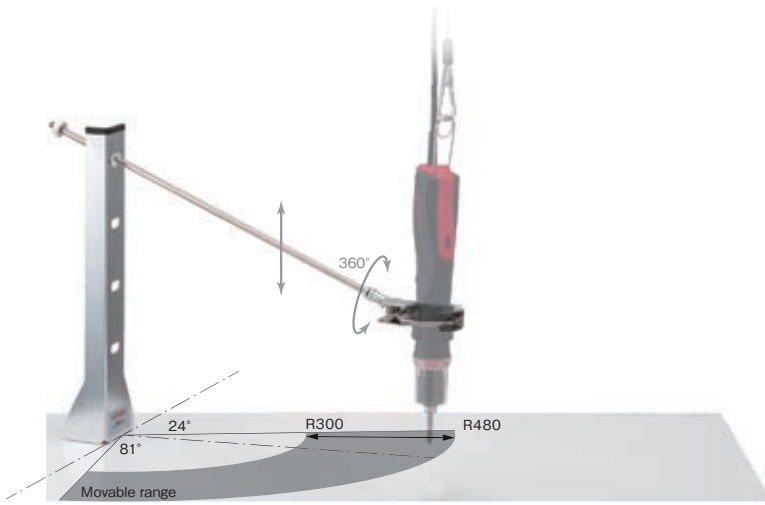


Model No.	Max. Reaction Force (N·m)	Allowable load (kg)	Installed Tool O/D (φmm)	Arm Length (mm)	Movable Radius (mm)	Weight (kg)	EDP No.
HFC1-300DR	4.5	0.8~1.2	35~45	300+300	R450~700	2.7 (Accessories not included)	552051

Applicable: VE-3000, VE-4000 (P, AC, PAC), VE-4500 (P, AC, PAC), VE-5000 (P, SOP, PSOP), VE-6000 (P, SOP, PSOP) Contents: Replacement kit, Rubber sheet, Hose band

No. VRS-5 Reaction Control Arm NEW

- This stand absorbs impact caused during screw tightening and reduces the operation load. Enables to tighten screws assuredly.
- Also enables to tighten screws horizontally located.

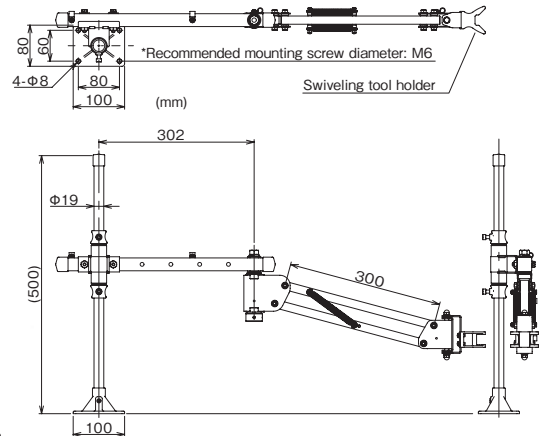
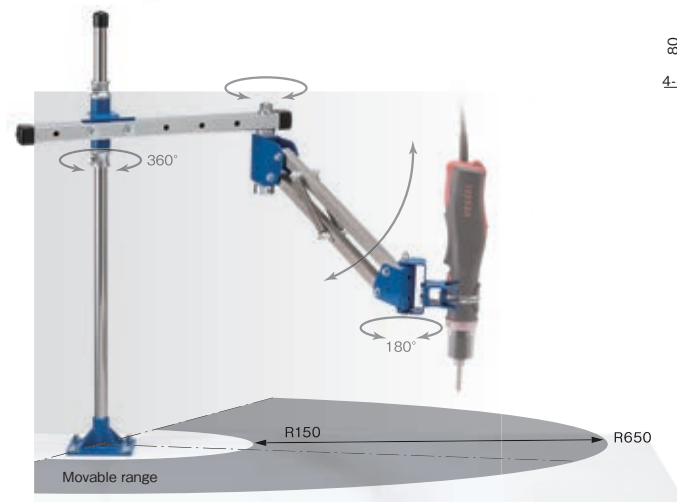


Model No.	Max. Reaction Force (N·m)	Maximum load (kg)	Installed Tool O/D (Φmm)	Shaft Length (mm)	Movable Radius (mm)	Weight (kg)	EDP No.
VRS-5	4.5	1.1	40	561	R300~480	0.85	551081

Applicable: VE-6000 (P, SOP, PSOP), VE-5000 (P, SOP, PSOP) Contents: Free Bush (1 spare), Rubber cover bush

No. HFAC-3-1DR Hand Free Arm NEW

- Accurate screw tightening with the arm tool keeping the vertical positioning of the screwdriver.
- Good for a work in a cramped space or with a small product.
- Tool attachment part which rotates, enables to handle the electric screwdriver freely in an application which requires to move it here and there.



Model No.	Max. Reaction Force (N·m)	Applicable electric screwdrivers Weight (kg)	Tool O/D (Φmm)	Arm Length (mm)	Movable Radius (mm)	Weight (kg)	EDP No.
HFAC-3-1DR	4.5	0.6~1.0	35~45	302+300	R150~650	3.1 (Accessories not included)	552055

Applicable: VE-3000, VE-4000 (P, AC, PAC), VE-4500 (P, AC, PAC), VE-5000 (P, SOP, PSOP), VE-6000 (P, SOP, PSOP) Contents: Replacement kit, Rubber sheet, Hose band

HAND TOOLS

BITS & SOCKETS

ELECTRIC TOOLS

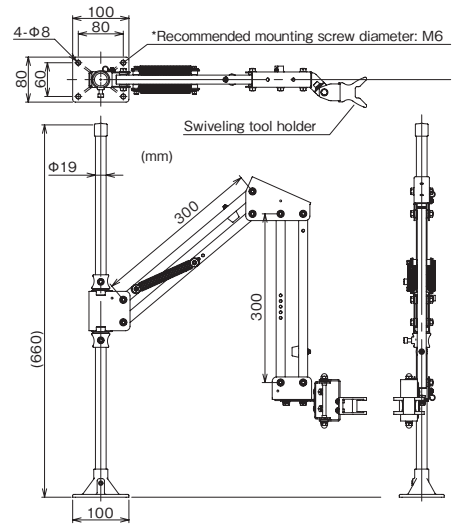
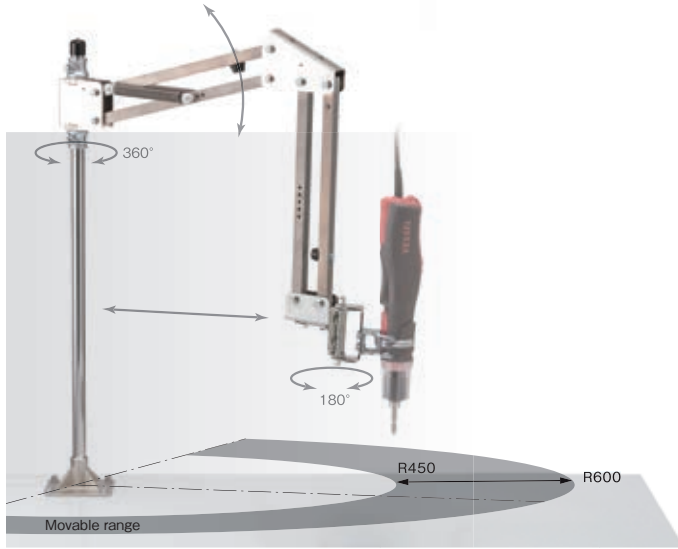
AIR TOOLS

STATIC SOLUTIONS

GASOLINE ENGINE TOOLS

No. HFKCC-3-1DR Hand Free Arm NEW

- Accurate screw tightening with the arm tool keeping the vertical positioning of the screwdriver.
- Plated parts incorporated make optimal for the electric device industry in which the paint separation should not occur.
- Tool attachment part which rotates, enables to handle the screwdriver freely even in a wide moving range application.



Model No.	Max. Reaction Force (N·m)	Applicable electric screwdrivers Weight (kg)	Tool O/D (φmm)	Arm Length (mm)	Movable Radius (mm)	Weight (kg)	EDP No.
HFKCC-3-1DR	4.5	0.6~1.0	35~45	300+300	R450~600	2.9(Accessories not included)	552056

Applicable: VE-3000, VE-4000 (P, AC, PAC), VE-4500 (P, AC, PAC), VE-5000 (P, SOP, PSOP), VE-6000 (P, SOP, PSOP) Contents: Replacement kit, Rubber sheet, Hose band