

Brushless Screwdriver General catalog

You can get another HIOS brushless screwdriver catalogue which has eco-friendly and advanced design.

HIOS

Electric Screwdriver

General catalog

09A

The English version

HIOS
www.hios.com

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⚠ Cautions for safety

Cautions for safety. Read the instruction manual carefully before use and operate the screwdriver for its intended purpose. Always use the specified current and Voltage.

- Please note that the specifications and appearance may change as improvements are made.
- Using copies or reproductions of this general catalog without permission is prohibited.
- The information presented in this catalog are current as of February 2009.
- Catalog number :EK-A001



Classic Design CL-6500
Since 1977

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Standard specifications
(See the icon on each page for standard driver specifications)

- RoHS** The screwdriver is RoHS compliant.
- CE** Products meet European safety standards.
- UL** Meet UL standard.

External dimensions can be viewed in DXF file format from the HIOS home page. *Special software is required to view DXF files.

DXF File www.hios.com

Electric Screwdrivers List

Model	Output Torque Range																				Unloaded Rotation Speed (r.p.m.) (HI / LOW)	Screw Size (mm)		Used in assembling					
	(kgf • cm)																					Small Size Screw	Tapping screw						
	0	0.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18					19	20	30	40	50
AC Type	VZ-1510 (100V)																									1000	2.0 - 4.0	2.0 - 3.0	Home lighting equipment, pressurization equipment, washing machines
	VZ-1820 (120V)																									2000	2.6 - 4.0	2.6 - 3.0	Automobile parts, car audios, car navigation monitors, air conditioners, office lighting equipment, car door mirrors, taillights, headlights, gas fixtures, vacuum cleaners, TV games, video recorders, communications equipment, copiers, laser printers, microwave ovens, TVs, power tools
	VZ-3012 (120V)																									1200	3.0 - 5.0	3.0 - 4.0	
	VZ-4506 (120V)																									600	3.0 - 5.0	2.6 - 4.0	
	VZ-1812 (220V-240V)																									1200	2.6 - 4.0	2.6 - 3.0	
	VZ-3007 (220V-240V)																									700	3.0 - 5.0	3.0 - 4.0	
	VZ-4504 (220V-240V)																									400	3.0 - 5.0	2.6 - 4.0	
DC Type	CL-2000																									680 / 490	1.0 - 2.3	1.0 - 2.0	Cameras, watches, eyeglasses, cell phones, digital cameras, hard disks, CD drives, optical pickups, car audios, car navigation monitors, mini video recorders, small calculators
	CL-3000																									1000 / 670	1.0 - 2.0	1.0 - 1.7	
	CL-4000																									1000 / 690	1.4 - 2.6	1.4 - 2.3	
	CL-6000																									800 / 500	2.0 - 3.0	2.0 - 2.6	Automobile parts, computers, printers, TVs, air conditioners, fan heaters, TV games, fax machines, communications equipment, copiers, scanners, laptop computers, jet printers, laser printers, satellite TV antennas, video recorder, car door mirrors, toys, electronic clinical thermometers
	CL-6500																									900 / 600	2.0 - 4.0	2.0 - 3.0	
	CL-7000																									750 (H only)	2.0 - 5.0	2.0 - 4.0	
	CL-9000																									530 (H only)	4.0 - 6.0	4.0 - 6.0	Electrical components, computer parts, automobile compressors, pressurization equipment
	SS-2000																									680 / 490	1.0-2.3	1.0-2.0	High density boards, hard disks, car navigation monitor, CD, MD and DVD players, digital cameras, cell phones, watches
	SS-3000																									1000 / 670	1.0 - 2.0	1.0 - 1.7	
	SS-4000																									1000 / 690	1.4 - 2.6	1.4 - 2.3	
	SS-6500																									900 / 600	2.0 - 3.0	2.0 - 3.0	
	SS-7000																									750 (H only)	2.0 - 4.0	2.0 - 4.0	
	α -4500																									1700/1200	2.0 - 3.0	2.0 - 2.6	TVs, communications equipment, copiers, fax machines, computers, POS systems, automobile parts, car door mirrors, taillights, headlights, electronic pianos, TV games, toys
α -5000																									1000 / 700	2.0 - 3.0	2.0 - 3.0		
α -6500																									1700 (H only)	3.0 - 4.0	2.6 - 3.0		

Variations

HIOS screwdriver provides several assembly solutions with variations of its functions.


Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL	E	OPC
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools		Screwdriver for screw counter	

* The suction attachment sold separately.

Q Suction Type Variation **A**

A suction attachment has been installed as standard on the screwdriver. The vacuum assists in picking screws up. Screws that cannot be picked up magnetically, as well as minus screws, can also be picked up with the suction device, while dust generated during screw tightening is also eliminated.

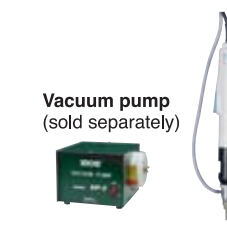


AC Type Combination of VZ suction screwdriver

Vacuum pump (sold separately)

Suction parts (each sold separately)

- Mouthpiece
- Bit
- Suction attachment



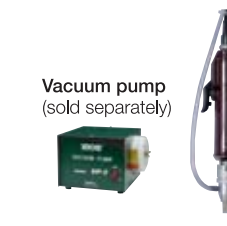
DC Type Combination of CL, SS, α suction screwdriver

Vacuum pump (sold separately)

Power supply

Suction parts (each sold separately)


- Mouthpiece
- Bit
- Suction attachment



ESD Anti-static electricity features Variation **B**


Anti-electrostatic material used in manufacture of the body case, switches, lever and power cord to protect against electrostatic charge accumulations.

- Surface resistance: $10^4 \Omega$



NL Noiseless Specifications Variation **D** **CE**

These reduce electrical noise generated by the screwdriver. Note that all models in the Q and SS series include these as standard specifications.



Suction parts

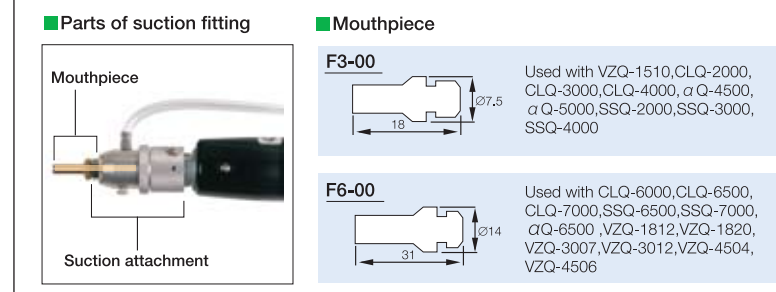
Standard screwdrivers can be equipped for suction head operation by fitting them with the suction attachment.

Parts of suction fitting

Mouthpiece

F3-00 Used with VZQ-1510, CLQ-2000, CLQ-3000, CLQ-4000, α Q-4500, α Q-5000, SSQ-2000, SSQ-3000, SSQ-4000

F6-00 Used with CLQ-6000, CLQ-6500, CLQ-7000, SSQ-6500, SSQ-7000, α Q-6500, VZQ-1812, VZQ-1820, VZQ-3007, VZQ-3012, VZQ-4504, VZQ-4506



- ① Suction screwdriver needs (A) and (B) separately.
- ② To put suction function to standard screwdriver, (A),(B),(C) are needed.

	Model	Mouthpiece model (A)	Bit length (B) ^{*)}	Suction attachment model (C)
AC Type	(100V) VZQ-1510	F3- standard 18 mm	H4 60 mm	VZQ10-SET
	(120V) VZQ-1820, 3012, 4506	F6- standard 31 mm	6.35 mm hex bit	VZQ18-SET
	(230V) VZQ-1812, 3007, 4504	F6- standard 31 mm	H5 80 mm	VZQ18-SET
	CLQ-2000	F3- standard 18 mm	H4 60 mm	CLQ2-SET
DC Type	CLQ-3000,4000	F3- standard 18 mm	H4 60 mm	CLQ4-SET
	CLQ-6000,6500,7000	F6- standard 31 mm	H5 80 mm	CLQ65-SET
	SSQ-2000	F3- standard 18 mm	H4 60 mm	CLQ2-SET
	SSQ-3000,4000	F3- standard 18 mm	H4 60 mm	CLQ4-SET
	SSQ-6500, 7000	F6- standard 31 mm	H5 80 mm	CLQ65-SET
	α Q-4500,5000	F3- standard 18 mm	H4 60 mm	CLQ4-SET
	α Q-6500	F6- standard 31 mm	H5 80 mm	CLQ65-SET

*A longer bit than the standard type is required. Please refer order code table for ordering suction attachment.

Q-CR-ESD Clean room, anti-static electricity features Variation **C**

The screwdrivers is equipped with a Vacuum pipes as well as a suction head to insure complete remover of fine particles generated by the screw tightening process in clean rooms.

- Surface resistance: $10^4 \Omega$
- Cleanliness class 100



OPC (100V Only) Screwdriver for screw counter Variation **E**

Operates with the screw counter VZOP-STC to ensure that all screws are tightened. The screwdriver can be operated in ordinary and reverse directions as well as providing torque increase signals (after screw tightening is complete).



* Refer to p10 for screw counters



No-transformer driver, for hard duty

- Has built-in controller, transformer is required.
- Can be plugged into an ordinary AC outlet.
- Its light, slim body is balanced to minimize fatigue of the operator's hand.
- Both Hios H5 bit and 5 mm hexagonal bit can be used with the standard type.
(excluding VZ-1510, VZ-1510PS, VZ-4506, VZ-4506PS, VZ-4504, VZ-4504PS model)

Variation chart

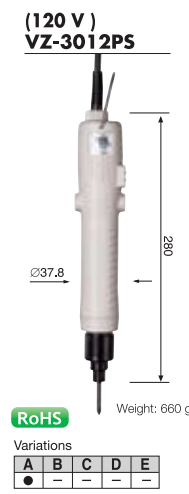
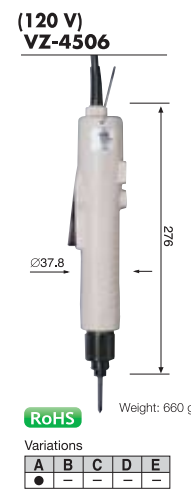
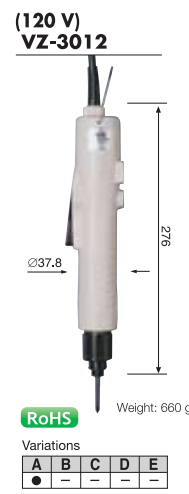
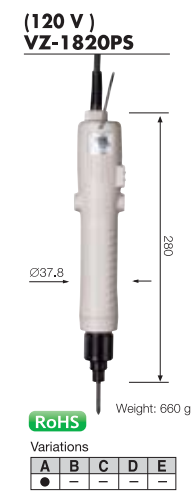
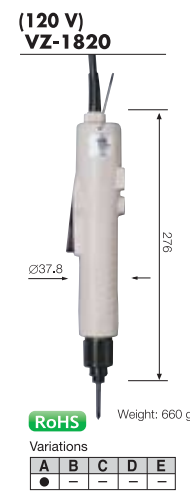
A	Q	B	ESD	C	Q-CR-ESD	D	NL	E	OPC
	Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools		Screwdriver for screw counter



Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL	E	OPC
	Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools		Screwdriver for screw counter

Lever Start Type

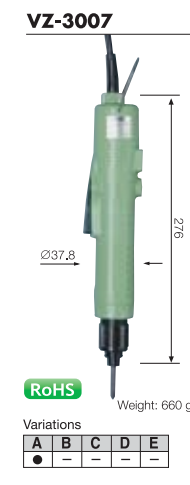
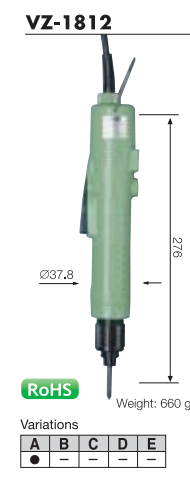


Specifications

Input	100 V	120 V	120 V	120 V
Lever Start type Model	VZ-1510*	VZ-1820	VZ-3012	VZ-4506
Push-to-Start type Model	VZ-1510PS*	VZ-1820PS	VZ-3012PS	VZ-4506PS
Output Torque	N·m 0.15 - 1.5	0.4 - 1.8	0.9 - 3	1 - 4.5
Range	lbf·in 1.3 - 13 (kgf·cm) (1.5 - 15)	3.5 - 16 (4 - 18)	7.8 - 26 (9 - 30)	8.8 - 39 (10 - 45)
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment
Unloaded Rotation Speed (r.p.m) ±10%	1000	2000	1200	600
Screw Size	2.0 - 4.0	2.6 - 4.0	3.0 - 5.0	3.0 - 5.0
Small Size Screw	2.0 - 3.0	2.6 - 3.0	3.0 - 4.0	2.6 - 4.0
Tapping Screw				
Bit Type	Hios H4	Hios H5 & 5 HEX or 1/4HEX	Hios H5 & 5 HEX or 1/4HEX	1/4HEX
Power cable (m)	3m	3m	3m	3m
Accessories	Bit	(H4)	+#1(24 x 40 mm) 1 piece +#2(24 x 40 mm) 1 piece	
		(H5)	+#1(25 x 60 mm) 1 piece +#2(25 x 60 mm) 1 piece	
		(1/4 HEX)	+#1(25 x 50 mm) 1 piece +#2(25 x 50 mm) 1 piece -(25 x 50 mm) 1 piece	
	Carbon brush	1 pair	1 pair	1 pair

*3PIN to 2 PIN power cable adaptor is attached for VZ-1510, VZ-1510PS

Lever Start Type



Push-to-Start Type



Accessories for better operation

Pistol attachment

PA-18 · PA-18PS

This attachment converts a standard driver to a pistol-style driver.



RoHS

Compatible model:

PA-18: Lever Start type only
PA-18PS: Push-to-Start type only
(excluding VZ-1510, VZ-1510PS model)

Angle attachment

ANGLV-Z-CH (For Hios shanks)

ANGLV-Z-XX (For hex shanks)

Attach to the end of the driver when there isn't enough space for a standard driver to tighten the target screw.



RoHS

Compatible model:

Lever Start type only
(excluding VZ-1510, VZ-1510PS model)

Specifications

Input	220 V - 240 V	220 V - 240 V	220 V - 240 V	
Lever Start type Model	VZ-1812	VZ-3007	VZ-4504	
Push-to-Start type Model	VZ-1812PS	VZ-3007PS	VZ-4504PS	
Output Torque	N·m 0.4 - 1.8	0.9 - 3	1 - 4.5	
Range	lbf·in 3.5 - 16 (kgf·cm) (4 - 18)	7.8 - 26 (9 - 30)	8.8 - 39 (10 - 45)	
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	
Unloaded Rotation Speed (r.p.m) ±10%	1200	700	400	
Screw Size	2.6 - 4.0	3.0 - 5.0	3.0 - 5.0	
Small Size Screw	2.6 - 3.0	3.0 - 4.0	2.6 - 4.0	
Tapping Screw				
Bit Type	Hios H5 & 5 HEX or 1/4HEX	Hios H5 & 5 HEX or 1/4HEX	1/4HEX	
Power cable (m)	3m	3m	3m	
Accessories	Bit	(H5)	+#1(25 x 60 mm) 1 piece +#2(25 x 60 mm) 1 piece	
		(1/4 HEX)	+#1(25 x 50 mm) 1 piece +#2(25 x 50 mm) 1 piece -(25 x 50 mm) 1 piece	
	Carbon brush	1 pair	1 pair	1 pair

The actual rpm values will vary somewhat from the values in the table according to input voltage variation. Please consider the table values as approximate.



Handle low-torque tightening jobs with confidence!

- This screwdriver is especially designed to deliver low torque for accurate and stable fastening of precision screws.
- Model CL-2000 has a coreless motor with an especially long life.
- These mini type screwdrivers are suitable for those who prefer a light, compact tool.
- Running on low voltage, direct current, this tool is designed for safety.

Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

CE NL Type is CE mark compliant



Well suited for many kinds of operations requiring a wide range of torque values

- This driver has been a long favorite of users who perform precision assembly, for its operability, reliability and stability.
- Has a grip designed for ease of operation over long work periods.
- Running on low voltage, direct current, this tool is designed for safety.

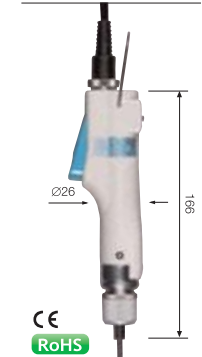
Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

CE NL Type is CE mark compliant

Lever Start Type

CL-2000



Weight: 200 g
RoHS
Variations: A B C D

CL-3000



Weight: 350 g
RoHS
Variations: A B C D

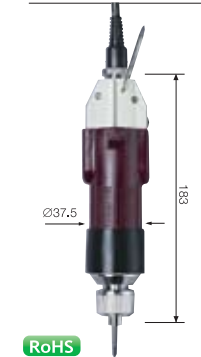
CL-4000



Weight: 380 g
RoHS
Variations: A B C D

Push-to-Start Type

CL-3000PS



Weight: 390 g
RoHS
Variations: A B C D

CL-4000PS



Weight: 430 g
RoHS
Variations: A B C D

Accessories for better operation

Push-start grip attachment PS-1 · PS-2

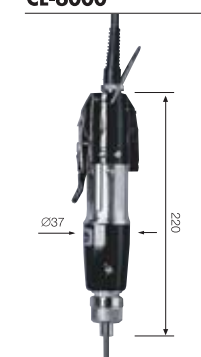
Converts the starting system of a mini size driver from lever-start to push-start.



Compatible model:
PS-1: CL-4000 PS-2: CL-3000

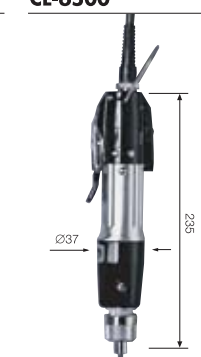
Lever Start Type

CL-6000



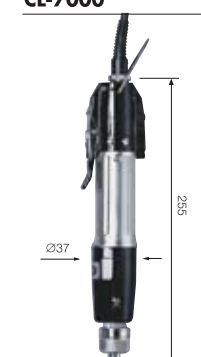
Weight: 600 g
RoHS
Variations: A B C D

CL-6500



Weight: 660 g
RoHS
Variations: A B C D

CL-7000



Weight: 750 g
RoHS
Variations: A B C D

CL-9000 (with shockless stand)



weight: 2,360g
Includes the weight of the screwdriver cord and slide arm
RoHS
Variations: A B C D

Push-to-Start Type

CL-6000PS



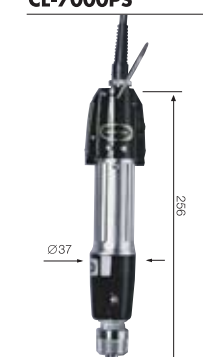
Weight: 600 g
RoHS
Variations: A B C D

CL-6500PS



Weight: 660 g
RoHS
Variations: A B C D

CL-7000PS



Weight: 750 g
RoHS
Variations: A B C D

Accessories for better operation

Pistol attachment PA-65

This attachment converts a standard driver to a pistol-style driver.



Compatible model:
CL-6000, CL-6500, CL-7000

Angle attachment ANGL-Z

(For Hios shanks)
ANGLX-Z (For hex shanks)

Attach to the end of the driver when there isn't enough space for a standard driver to tighten the target screw.



Compatible model:
CL-6000, CL-6500, CL-7000 (Lever Start type only)

Specifications

Lever Start type Model	CL-2000	CL-3000	CL-4000
Push-to-Start type Model		CL-3000PS	CL-4000PS
Output Torque Range	N·m 0.02 - 0.2 lbf·in 0.17 - 1.7 (kgf·cm) (0.2 - 2)	0.03 - 0.2 0.3 - 1.7 (0.3 - 2)	0.1 - 0.55 0.9 - 4.8 (1 - 5.5)
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment
Unloaded Rotation Speed (r.p.m)	HI 680 LOW 490	1000 670	1000 690
Screw Size (mm)	Small Size Screw 1.0 - 2.3 Tapping Screw 1.0 - 2.0	1.0 - 2.0 1.0 - 1.7	1.4 - 2.6 1.4 - 2.3
Bit Type	Hios H4	Hios H4	Hios H4 or 1/4HEX
Power Pack	LHT-30	○	—
	LVT-30	○	—
	CLT-30	○	—
	CLT-60	○	○
	CLT-100	○	○
	MC-70L	○	○
Accessories	Bit (H4)	+ #0(22.0 x 40 mm) 1 piece + #0(22.5 x 40 mm) 1 piece	+ #0(22.0 x 40 mm) 1 piece + #0(22.5 x 40 mm) 1 piece + #1(24.0 x 40 mm) 1 piece
	Bit (1/4 HEX)		+ #1(25 x 50 mm) 1 piece + #2(25 x 50 mm) 1 piece + #3(25 x 50 mm) 1 piece
	Spring	Yellow	Gold
	Carbon brush	1 pair	1 pair
Cord Length (m)	1.5 m (5P)	1.5 m (5P)	1.5 m (5P)

Model CL-2000's carbon brushes are located in a sealed case that cannot be opened for replacement by the user. In our test, they will last for 3-4 years when 6,000 operations are conducted daily (depends on the conditions of use).

Specifications

Lever Start type Model	CL-6000	CL-6500	CL-7000	CL-9000
Push-to-Start type Model	CL-6000PS	CL-6500PS	CL-7000PS	CL-9000
Output Torque Range	N·m 0.2 - 1 lbf·in 1.7 - 8.8 (kgf·cm) (2 - 10)	0.3 - 1.6 2.6 - 14 (3 - 16)	0.3 - 2.5 2.6 - 22 (3 - 25)	1.2 - 5 10 - 43 (12 - 50)
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment
Unloaded Rotation Speed (r.p.m)	HI 800 LOW 600	900 600	750	530
Screw Size (mm)	Small Size Screw 2.0 - 3.0 Tapping Screw 2.0 - 2.6	2.0 - 4.0 2.0 - 3.0	2.0 - 5.0 2.0 - 4.0	4.0 - 6.0
Bit Type	Hios H5 or 1/4HEX	Hios H5 or 1/4HEX	Hios H5 or 1/4HEX	1/4 HEX
Power Pack	CLT-60	○	○	—
	CLT-100	○	○	—
	MC-70L	○	○	—
	CLT-75	—	—	○
Accessories	Bit (H5)	+ #1(25 x 60 mm) 1 piece + #2(25 x 60 mm) 1 piece	+ #1(25 x 60 mm) 1 piece + #2(25 x 60 mm) 1 piece	+ #1(25 x 60 mm) 1 piece + #2(25 x 60 mm) 1 piece
	Bit (1/4 HEX)	+ #1(25 x 50 mm) 1 piece + #2(25 x 50 mm) 1 piece + #3(25 x 50 mm) 1 piece	+ #1(25 x 50 mm) 1 piece + #2(25 x 50 mm) 1 piece + #3(25 x 50 mm) 1 piece	+ #1(25 x 50 mm) 1 piece + #2(25 x 50 mm) 1 piece + #3(25 x 50 mm) 1 piece
	Spring	White	Yellow	
Carbon brush	1 pair	1 pair	1 pair	
Cord Length (m)	2 m (5P)	2 m (5P)	2 m (5P)	2 m (5P)



Optimal tool for assembly of precision parts! A vibration-absorbing screwdriver

Designed to reduce shock wave energy while the clutch is operating to minimize the effects of vibrations or impacts on the work. The optimal tool for assembly of hard disks, liquid crystal displays, high-density boards or other precision parts.

Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL*
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

*SS series has NL future as standard

Lever Start Type

SS-2000 Weight: 200 g
SS-3000 Weight: 350 g
SS-4000 Weight: 400 g

Push-to-Start Type

SS-3000PS Weight: 390 g
SS-4000PS Weight: 450 g

Lever Start Type

SS-6500 Weight: 660 g
SS-7000 Weight: 750 g

Accessories for better operation

Pistol attachment PA-65

This attachment converts a standard driver to a pistol-style driver.

Compatible model:
SS-6500, SS-7000

Push-start grip attachment PS-1 · PS-2

Converts the starting system of a mini size driver from lever-start to push-start.

Compatible model:
PS-1: SS-4000 PS-2: SS-3000

Specifications

Lever Start type Model	SS-2000	SS-3000	SS-4000	SS-6500	SS-7000
Push-to-Start type Model		SS-3000PS	SS-4000PS		
Output Torque Range	N·m 0.02 - 0.2 lbf·in 0.17 - 1.7 (kgf·cm) (0.2 - 2)	0.03 - 0.2 0.3 - 1.7 (0.3 - 2)	0.1 - 0.45 0.9 - 3.9 (1 - 4.5)	0.25 - 1.3 2.2 - 11 (2.5 - 13)	0.3 - 2 2.6 - 17.4 (3 - 20)
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment
Unloaded Rotation Speed (rpm)	HI 680 LOW 490	1000 670	1000 690	900 600	750
Screw Size (mm)	Small Size Screw 1.0 - 2.3 Tapping Screw 1.0 - 2.0	1.0 - 2.0 1.0 - 1.7	1.4 - 2.6 1.4 - 2.3	2.0 - 3.0 2.0 - 3.0	2.0 - 4.0 2.0 - 4.0
Bit Type	Hios H4	Hios H4	Hios H4 or 1/4HEX	Hios H5 or 1/4HEX	Hios H5 or 1/4HEX
Power Pack	CLT-30 CLT-60 CLT-100 MC-70L	○ ○ ○ ○	○ ○ ○ ○	○ ○ ○ ○	○ ○ ○ ○
Accessories	Bit	+ #0 (2.0 x 40 mm) 1 piece + #0 (2.5 x 40 mm) 1 piece	+ #0 (2.0 x 40 mm) 1 piece + #0 (2.5 x 40 mm) 1 piece	+ #0 (2.5 x 40 mm) 1 piece + #1 (2.0 x 40 mm) 1 piece	+ #1 (2.5 x 60 mm) 1 piece + #2 (2.5 x 60 mm) 1 piece
	Spring	Yellow	Gold	Blue	
	Carbon brush	1 pair	1 pair	1 pair	1 pair
	Cord Length (m)	1.5 m (5P)	1.5 m (5P)	1.5 m (5P)	2 m (5P)

Model SS-2000's carbon brushes are located in a sealed case that cannot be opened for replacement by the user. In our test, they will last for 3-4 years when 6,000 operations are conducted daily (depends on the conditions of use).



Powerful, high speed motor boosts your productivity

- High speed (1,700 rpm) Models α-4500 or α-6500 increase operating efficiency.
- The α-5000 driver is a compact model having a powerful, high speed motor.
- Features a low voltage power safety design that makes it possible for the user to conduct maintenance.

Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL*
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

*α series has NL future as standard

Lever Start Type

α-4500 Weight: 440 g
α-5000 Weight: 440 g
α-6500 Weight: 660 g

Push-to-Start Type

α-4500PS Weight: 490 g
α-5000PS Weight: 490 g
α-6500PS Weight: 660 g

Accessories for better operation

Pistol attachment PA-65

This attachment converts a standard driver to a pistol-style driver.

Compatible model:
α-6500

Angle attachment ANGL-Z

Attach to the end of the driver when there isn't enough space for a standard driver to tighten the target screw.

Compatible model:
α-6500 (Lever Start type only)

Push-start grip attachment PS-1 · PS-2

Converts the starting system of a mini size driver from lever-start to push-start.

Compatible model:
PS-1: α-4500, α-5000

Specifications

Lever Start type Model	α-4500	α-5000	α-6500	
Push-to-Start type Model		α-4500PS	α-5000PS	
Output Torque Range	N·m 0.4 - 0.8 lbf·in 3.5 - 7 (kgf·cm) (4 - 8)	0.4 - 1.2 3.5 - 10 (4 - 12)	0.5 - 1.8 4.3 - 16 (5 - 18)	
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	
Unloaded Rotation Speed (rpm)	HI 1700 LOW 1200	1000 700	1700	
Screw Size (mm)	Small Size Screw 2.0 - 3.0 Tapping Screw 2.0 - 2.6	2.0 - 3.0 2.0 - 3.0	3.0 - 4.0 2.6 - 3.0	
Bit Type	Hios H4 or 1/4HEX	Hios H4 or 1/4HEX	Hios H5 or 1/4HEX	
Power Pack	CLT-60 CLT-100 MC-70L	○ ○ ○	○ ○ ○	
Accessories	Bit	+ #1 (2.0 x 40 mm) 1 piece + #2 (2.0 x 40 mm) 1 piece	+ #1 (2.0 x 40 mm) 1 piece + #2 (2.0 x 40 mm) 1 piece	+ #1 (2.5 x 60 mm) 1 piece + #2 (2.5 x 60 mm) 1 piece
	Carbon brush	1 pair	1 pair	1 pair
	Cord Length (m)	1.5 m (5P)	1.5 m (5P)	2 m (5P)

Power Units & for DC drivers

LHT-30 RoHS

Connects to one CL-2000 and CL-3000 model.

Power output ranges from 15V to 30V. Precise output control is possible in sixteen one-volt increments. A low-to-high feature is also included. For a set period of time after start-up (adjustable to 0, 0.2, 0.4, or 0.6 seconds) the screwdriver will rotate at a slow speed, helping to secure a firm fit between bit and screw and screw and pilot hole.



LVT-30 RoHS

Connects to one CL-2000 and CL-3000 model.

The LVT-30 is a switching power pack that connects to HIOS power torque/low-torque drivers. It includes controls for low rpm/low torque screw fixing jobs and 16-stage adjustable rpm.



CLT-30 RoHS CE UL

Connects to one CL-2000, CL-3000, SS-2000 or SS-3000 model.



CLT-60 RoHS CE UL

Connects to one CL, SS or α series driver. (except CL-9000 model).



Specifications

Model	LHT-30	LVT-30	CLT-30	CLT-60	CLT-100	MC-70L*	CLT-75
Input	AC100-240V \pm 5% 47/63 Hz	AC100-240V \pm 5% 47/63 Hz	AC100-240V \pm 5% 47/63 Hz	AC100-240V \pm 5% 47/63 Hz	AC100V, 120V or 220-240V \pm 5% 50/60 Hz		
Output Voltage	5V~21V, Volume adjustment	15V~30V, Volume adjustment	LOW/HI	LOW/HI	LOW/HI		HI
Size (mm)	85x155x42(H)	85x155x42(H)	62x134x40 (H)	88x210x52 (H)	182x145x132 (H)	320x220x153 (H)	182x220x133 (H)
Weight (kg)	0.37		0.3	0.83	4.0	12.0	6.0
Power Cord Length (m)	1.8						

*Accessories : ●Trunk-line wire 20 m 1 line (Black and Red) ●Branch-line wire 0.5 m 10 lines (Black and Red) ●U-Element 20 pcs. #560B

CLT-100 RoHS CE

Connects to two CL, SS or α series driver.
(except the α -6500, CL-9000 model).



MC-70L RoHS CE

Connects to many CL, SS, α series drivers.



Driver models that can be connected

Type	CL-2000, CL-3000 CL-4000, SS-2000 SS-3000, SS-4000	CL-6000, CL-6500, CL-7000 SS-6500, SS-7000 α -4500, α -5000	α -6500
Max. number of drivers	Up to 20	Up to 10	Up to 5

Control box CB-105(SUB) RoHS

Control boxes for cutting off and supplying current in response to clutch action of drivers. Each driver should be connected to one control box.

Specifications

Size (mm)	70 x 42 x 100(H)
Weight (g)	240
Input cord Length (m)	2
Attachment Plates	2 pieces



CLT-75 RoHS CE

Connects to one CL-9000 model.



Power Supply with Screw Counter

The number of screws to be tightened can be set from 1 to 99, with the remaining number counted down after each screw is tightened.

Buzzer to indicate screw tightening complete

A buzzer will sound when the final screw has been tightened to allow a check of complete screw tightening.

Auto reset function

The count down number is automatically reset after all screws have been tightened so that work can start on the next job immediately. The screwdriver will not be operable until the "next work set" confirmation SET signal is input.

Count timer function

Prevents confirmation tightening, supplemental tightening and secondary tightening from being counted.

Normal power mode

In normal power mode the count function is disabled.

VZOP-STC (AC100V Only) RoHS

VZ-OPC screwdriver single power point

Specifications

Model	VZOP-STC
input	AC100V \pm 5% (50/60Hz)
Power consumption (w)	2W / load free
Size (mm)	160x175x84(H)
Weight (kg)	1.5
Power cord length (m)	1.8



CLT-70STC3 RoHS CE

CL, SS, α screwdriver single power point

Specifications

Model	CLT-70STC3
input	AC100V-240V
Power consumption (w)	75W output with DC31V input
Output	HI: DC31V \pm 5% LOW: DC20V \pm 5% (with overload protection)
Size (mm)	127x208x76(H)
Weight (kg)	1.8
Power cord length (m)	1.8



Separate Counter

Compact external screw counter. Connected in-between a screwdriver and a power unit.

CLOP-SC1 RoHS

Connect one CL, SS or α series driver.
(Include CL-9000 driver)



Specifications

Model	CLOP-SC1
Input	DC20V-31V
Out put	Depends on connected
Size (mm)	110x100x55(H)
Weight (kg)	0.6

Suitable power supply to connect with SC1.
CLT-30, CLT-60, CLT-100, MC-70L+CB-105, CLT-75

Separate Counter **CLOP-SC1**

Suitable Screwdriver	
CL Series	CL-2000, CL-3000, CL-4000, CL-6000, CL-6500, CL-7000, CL-9000
SS Series	SS-3000, SS-4000, SS-5000, SS-6500, SS-7000
α Series	α -4500, α -5000, α -6500

Peripheral Unit

Vertical-Operation

Screwdriver Stand RoHS

Keeps driver in vertical position for screw tightening operations.



VMS-40 VMS-50 VMS-50VZ

Specifications

Model	VMS-40	VMS-50	VMS-50VZ
Stand length (mm)	515	615	615
Weight (kg)	2.5	2.65	2.65
Appropriate driver	All models except VZ screwdriver		Only for VZ screwdriver

Vacuum pump VP-3 RoHS (for suction screwdriver)

A vacuum is generated to pick up and hold the screw on the bit end.

Specifications

Model	VP-3
Primary power input	AC100V, 120V or 220-240V \pm 5%
Max. power consumption	39W
Vacuum attained	-350mm Hg
Dimensions (mm)	200x188x142(H)
Weight (kg)	3.8



Flexible screwdriver cord RoHS 2m

Flexible cord that is resistant to kinking or bending for heavy duty.

Compatible models:

<2m> CL Series (5P)



Screwdriver extension cord RoHS 3m/5m

Use this cord as an extension cord when the standard screwdriver cord is not long enough.

Compatible models:

<3m, 5m> CL, SS, α Series (5P)



Carbon brush

Carbon brushes should be changed when they have worn down to the groove on the side of the brush. Both carbon brushes should be replaced at the same time.

Table of carbon brushes and Hios model drivers (each package contains one pair of brushes)

Type of carbon brush	Appropriate driver
A45-0420	CL-3000, SS-3000, α -4500, α -5000 Include PS type
CL4-0420	CL-4000, SS-4000 Include PS type
CL65-0490	CL-6000, CL-6500, CL-7000, SS-6500, SS-7000, α -6500 Include PS type
VZ18-0480	VZ-1820, VZ-3012, VZ-4506 Include PS type
VZ18-0480B	VZ-1812, VZ-3007, VZ-4504 Include PS type
ACL10-0490	VZ-1510 Include PS type

Model CL-2000 and SS-2000 carbon brushes are located in a sealed case that cannot be opened for replacement by the user. In our test, they will last for 3-4 years when 6,000 operations are conducted daily (depends on the conditions of use).

Digital Torque Meter Series

Hios torque meters are world standard instruments.

- Measurement data can be transferred to a computer. (This requires an input tool.)
- Up to 100 data measurements can be stored in memory at a time. (HP series and HDP series)
- Can be checked maximum, minimum and average torque measurement. (HP series and HDP series)
- Measurement can be easily taken in either clockwise or counterclockwise direction.
- Data can be output either numerically or as waveforms.
- Light, compact and operating on a rechargeable battery, it is convenient for carrying around any job site.

HP

**HP-10
HP-100**

RoHS CE



Use for making torque settings on electric drivers, checking torque of torque wrenches or measuring torque of fasteners, etc.

Model	HP-10	HP-100
Peak measuring range	N • m 0.015 - 1.000 lbf • in 0.15 - 90.0 (kgf • cm) (0.15 - 100.0)	0.15 - 10.00 1.5 - 90.0 (1.5 - 100.0)
Accuracy	Up to ± 0.5% (F.S.)	
Measuring modes	track, peak, first peak	
Dimensions (mm)	230 × 124 × 65.2 (H)	
Weight	1.8kg	
Battery pack (charging time)	1.2V NiMH cells 1,000mA (6 hours)	
Continuous running time on a full charge	8 hours	
Battery life	Approx. 300 charges	
Exclusive battery charger	AC 100V-240V input (50 or 60Hz) DC 7.3V-8V output 0.5 A	

HDP

**HDP-5
HDP-50
HDP-100 (option)**

RoHS CE



Use for measuring slack torque of fastened screws or torque increase.

Model	HDP-5	HDP-50
Peak measuring range	N • m 0.015 - 0.500 lbf • in 0.15 - 4.40 (kgf • cm) (0.15 - 5.00)	0.15 - 5.00 1.5 - 44.0 (1.5 - 50.0)
Accuracy	Up to ± 0.5% (F.S.)	
Measuring modes	track, peak	
Dimensions (mm)	125 × 95.6 × 42(H)	
Detector	104(L) × Ø21	160(L) × Ø34.5
Detector bit socket	Hios H4 or 1/4 Hex	Hios H5 or 1/4 Hex
Weight	68g	250g
Detector cord	1.7m (No.: DPC-0506)	
Battery pack (charging time)	1.2V NiMH cells 1,000mA (6 hours)	
Continuous running time on a full charge	8 hours	
Battery life	Approx. 300 charges	
Exclusive battery charger	AC 100V-240V input (50 or 60Hz) DC 7.3V-8V output 0.5A	

HM

**HM-10
HM-100**

RoHS CE



Use for control of torque of automatic drivers.

Model	HM-10	HM-100
Peak measuring range	N • m 0.015 - 1.000 lbf • in 0.15 - 9.0 (kgf • cm) (0.15 - 10.0)	0.15 - 10.00 1.5 - 90.0 (1.5 - 100.0)
Accuracy	Up to ± 0.5% (F.S.)	
Measuring modes	track, peak	
Dimensions (mm)	165 × 95 × 55(H)	
Weight	1.0 kg	
Detector cord	1.7m (No.: DPC-0506)	
Battery pack (charging time)	1.2V NiCd cell (8 hours)	
Continuous running time on a full charge	12 hours	
Battery life	Approx. 300 charges	
Exclusive battery charger	AC 100V, 120V or 220V-240V input DC 7.2V output 120mA	

HIT

**HIT-200
HIT-500
HIT-2000**

RoHS CE



Use for control of torque of impact drivers and torque wrenches.

Model	HIT-200	HIT-500	HIT-2000
Peak measuring range	N • m 0.15 - 18.00 lbf • in 1.5 - 160.0 (kgf • cm) (1.5 - 180.0)	1.5 - 50.0 15 - 440 (15 - 500)	25.0 - 180.0 250 - 1600 (250 - 1800)
Accuracy	Up to ± 1% (F.S.)		
Measuring modes	peak, track, first peak		
Dimensions of display (mm)	165 × 95 × 55(H)		
Weight	1.0 kg	1.65kg	1.65kg
Socket dimensions	9.5sq mm	12.7sq mm	12.7sq mm
Detector cord	1.7m (No.: DPC-0506)		
Battery pack (charging time)	1.2V NiCd cell (8 hours)		
Continuous running time on a full charge	12 hours		
Battery life	Approx. 300 charges		
Exclusive battery charger	AC 100V, 120V or 220V-240V input DC 7.2V output 120mA		

HIOS shank Bit Series

HIOS shank shape
(bit socket)



Please purchase our standard bits.

Classification of Screwdrivers

H4 (Ø4) RoHS

CL-2000, CL-3000, CL-4000, SS-2000, SS-3000, SS-4000
Q-4500, Q-5000, VZ-1510 include PS type

Classification of Screwdrivers

H5 (Ø5) RoHS

CL-6000, CL-6500, CL-7000, SS-6500, SS-7000, Q-6500
VZ-1820, VZ-3012, VZ-1812, VZ-3007 include PS type

* Please address inquiries to your HIOS dealer for hexagonal bit.

Type (Dia. at base mm)	Point size No.	Specifications		Overall Length (mm) (standard type)	Shape	
		Shaft dia. (mm)	Shape of shaft type			
H4 (Ø4)	#00	1.5	B	40, 60, 80	◆	
		1.2	B	40		
		1.5, 1.7	B	40, 60, 80		
	#0	1.8	B	60		
		2.0, 2.5	B	40, 60, 80, 100, 120		
		3.0	B	40, 60, 80, 100, 120		
#1	4.0	A	40, 60, 80, 100, 120, 150, 180, 200	◇		
	4.0	A	40, 60, 80, 100, 120, 150			
	2.0	B	60, 80, 100, 120			
H5 (Ø5)	#0	2.5	B	60, 80, 100, 120	◆	
		3.0	B	40, 60, 80, 100, 120		
		5.0	A	40, 60, 80, 100, 120, 150, 180, 200, 250, 300		
	#1	5.0	A	40, 60, 80, 100, 120, 150, 180, 200, 250, 300, 400		◇
		5.0	A	40, 60, 80, 100, 120, 150, 180, 200, 250, 300, 400		
		7.0	B	60, 80, 100, 120		
#3	7.0	B	60, 80, 100, 120	◇		
	7.0	B	60, 80, 100, 120			
	7.0	B	60, 80, 100, 120			



Dimension of stepped part	H4	H5
(a) Shaft dia.	Refer to the left list.	2.0 2.5 3.0
(b) Length	20	20 25 30

* Only the stepped part of H5 + #1 3.0x4.0 is 15mm in length.

* Relationship between point size No. and shape of shaft size
#00 M0.8—M1.0 #0 M1.4—M2.6 #1 M2.0—M2.6 #2 M3.0—M5.0
#3 M6.0—M8.0

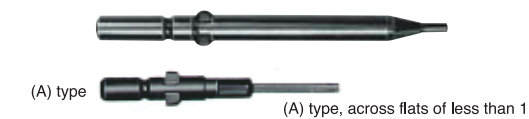
Type (Dia. at base mm)	Blade width (mm)	Blade thickness (mm)	Shape of shaft type	Overall Length (mm) (standard type)	Shape
H4 (Ø4)	1.3 0.28 B 60, 80				
	1.5 0.3 B 40, 60, 80				
	1.7 0.3 B 40, 60, 80				
	1.8 0.4 B 60, 80				
	2.0 0.4 B 40, 60, 80				
	2.3 0.4 B 60, 80				
	2.5 0.4 B 40, 60, 80				
	2.8 0.4 B 60, 80				
	3.0 0.4 B 40, 60, 80				
	4.0 0.6 A 40, 60, 80, 100				
	2.0 0.4 B 60				
2.5 0.4 B 60					
H5 (Ø5)	3.0 0.4 B 60, 80	◆			
	4.0 0.6 B 60				
	4.0 0.6 B 60				
	5.0 0.7 A 60, 80, 100, 120, 150, 180				
	7.0 1.0 B 60				



Dimension of stepped part	H4	H5
(a) Blade Width	Refer to the left list.	2.0 2.5 3.0 4.0
(b) Length	20	20 25 30 30

* Only the stepped part of H5 + #1 3.0x4.0 is 15mm in length.

Type (Dia. at base mm)	Hex. across flat (mm)	Overall Length (mm) (standard type)
H4 (Ø4)	1.27	60, 100
	2.5	60, 100, 120
	1.27	70
	1.5, 3.0, 4.0, 6.0	70, 100
H5 (Ø5)	2.0, 2.5, 5.0	70, 100, 120



*1 Used for tightening hollow set screws, cap screws, etc.

Type (Dia. at base mm)	Nut across flat (mm)	Overall Length (mm) (standard type)
H4 (Ø4)	4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0	60
	10.0	60
	4.0, 4.5, 5.0, 5.5, 6.0, 6.35	60
	7.0, 8.0	80
	9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 17.0	80



*2 Used for bolt nuts.

Type (Dia. at base mm)	Nut across flat (mm)	Overall Length (mm) (standard type)
H4 (Ø4)	8.0	65
	4.0, 4.5, 5.0, 5.5, 6.0, 7.0	60
	8.0	65



*2 Used for bolt nuts.

Bit order codes explained

Bit classification	Bit specs
BP	(H4 or H5) — (Point size No.) — (Shaft dia.) — (Overall length in mm)
BS	(H4 or H5) — (Blade width) — (Overall length in mm)
BH	(H4 or H5) — (Hex. across flat) — (Overall length in mm)
BN	(H4 or H5) — (Nut across flat) — (Overall length in mm)
BC	(H4 or H5) — (Nut across flat) — (Overall length in mm)

Example 1: To order a Phillips head bit for a mini driver with a #1 point size, 3 mm in shaft diameter and 40 mm long, write the following: BP—H4—# 1 —3.0—40mm

Example 2: To order a slotted bit for a standard driver with a 3.0 mm Blade width, and 80 mm long, write the following: BS—H5—3.0—80mm

When placing an order
 • One order for standard bits should not be less than one pack (10 pieces).
 • One order for special bits should be:
 For BT, BP, BS and BH types, not less than one lot (100 pieces).
 For BN type, not less than one lot (50 pieces).
 For BC type, not less than one lot (10 pieces).

Order codes

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VZ-Series

● Lever Start Type/100V

Model	Order Code	Bit
VZ-1510	VZ-1510	H4

● Push-to-Start Type/100V

Model	Order Code	Bit
VZ-1510PS	VZ-1510PS	H4

● Lever Start Type/120V

Model	Order Code	Bit
VZ-1820	VZ-1820-120	H5&5HEX
	VZ-1820X-120	1/4HEX
VZ-3012	VZ-3012-120	H5&5HEX
	VZ-3012X-120	1/4HEX
VZ-4506	VZ-4506X-120	1/4HEX

● Push-to-Start Type/120V

Model	Order Code	Bit
VZ-1820PS	VZ-1820PS-120	H5&5HEX
	VZ-1820PSX-120	1/4HEX
VZ-3012PS	VZ-3012PS-120	H5&5HEX
	VZ-3012PSX-120	1/4HEX
VZ-4506PS	VZ-4506PSX-120	1/4HEX

● Lever Start Type/220 V - 240 V

Model	Order Code	Bit
VZ-1812	VZ-1812-B	H5 & 5HEX
	VZ-1812X-B	1/4HEX
VZ-3007	VZ-3007-B	H5 & 5HEX
	VZ-3007X-B	1/4HEX
VZ-4504	VZ-4504X-B	1/4HEX

● Push-to-Start Type/220 V - 240 V

Model	Order Code	Bit
VZ-1812PS	VZ-1812PS-B	H5 & 5HEX
	VZ-1812PSX-B	1/4HEX
VZ-3007PS	VZ-3007PS-B	H5 & 5HEX
	VZ-3007PSX-B	1/4HEX
VZ-4504PS	VZ-4504PSX-B	1/4HEX

VZQ Type

● Lever Start Type/100V

Model	Order Code	Bit
VZQ-1510	VZQ-1510	H4

● Push-to-Start Type/100V

Model	Order Code	Bit
VZQ-1510PS	VZQ-1510PS	H4

● Lever Start Type/120V

Model	Order Code	Bit
VZQ-1820	VZQ-1820X-120	1/4HEX
VZQ-3012	VZQ-3012X-120	1/4HEX
VZQ-4506	VZQ-4506X-120	1/4HEX

● Push-to-Start Type/120V

Model	Order Code	Bit
VZQ-1820PS	VZQ-1820PSX-120	1/4HEX
VZQ-3012PS	VZQ-3012PSX-120	1/4HEX
VZQ-4506PS	VZQ-4506PSX-120	1/4HEX

● Lever Start Type/220 V - 240 V

Model	Order Code	Bit
VZQ-1812	VZQ-1812X-B	1/4HEX
VZQ-3007	VZQ-3007X-B	1/4HEX
VZQ-4504	VZQ-4504X-B	1/4HEX

● Push-to-Start Type/220 V - 240 V

Model	Order Code	Bit
VZQ-1812PS	VZQ-1812PSX-B	1/4HEX
VZQ-3007PS	VZQ-3007PSX-B	1/4HEX
VZQ-4504PS	VZQ-4504PSX-B	1/4HEX

Suction Attachment

● VZ drivers

Model	Order Code
VZQ-1510(100V)	VZQ10-SET
VZQ-1820,VZQ-3012	
VZQ-4506,VZQ-1812, VZQ-3007,VZQ-4504	VZQ18-SET

VZ-OPC Type

● 100V spec only

Model	Order Code	Bit
VZ-1510-OPC	VZ-1510-OPC	H4
VZ-1510PS-OPC	VZ-1510PS-OPC	H4

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CL-Series

● Lever Start Type

Model	Order Code	Bit
CL-2000	CL-2000	H4
CL-3000	CL-3000E	H4
CL-4000	CL-4000E	H4
	CL-4000X	1/4HEX
CL-6000	CL-6000E	H5
	CL-6000X	1/4HEX
CL-6500	CL-6500E	H5
	CL-6500X	1/4HEX
CL-7000	CL-7000E	H5
	CL-7000X	1/4HEX

● Push-to-Start Type

Model	Order Code	Bit
CL-3000PS	CL-3000PS	H4
CL-4000PS	CL-4000PS	H4
	CL-4000PSX	HEX
CL-6000PS	CL-6000PS	H5
	CL-6000PSX	1/4HEX
CL-6500PS	CL-6500PS	H5
	CL-6500PSX	1/4HEX
CL-7000PS	CL-7000PS	H5
	CL-7000PSX	1/4HEX
CL-9000	CL-9000	1/4HEX

CLQ Type

● Lever Start Type

Model	Order Code	Bit
CLQ-2000	CLQ-2000	H4
CLQ-3000	CLQ-3000	H4
CLQ-4000	CLQ-4000	H4
CLQ-6000	CLQ-6000	H5
	CLQ-6000X	1/4HEX
CLQ-6500	CLQ-6500	H5
	CLQ-6500X	1/4HEX
CLQ-7000	CLQ-7000	H5
	CLQ-7000X	1/4HEX

● Push-to-Start Type

Model	Order Code	Bit
CLQ-3000PS	CLQ-3000PS	H4
CLQ-4000PS	CLQ-4000PS	H4
CLQ-6000PS	CLQ-6000PS	H5
	CLQ-6000PSX	1/4HEX
CLQ-6500PS	CLQ-6500PS	H5
	CLQ-6500PSX	1/4HEX
CLQ-7000PS	CLQ-7000PS	H5
	CLQ-7000PSX	1/4HEX

Suction Attachment

● CL drivers

Model	Order Code
CLQ-2000	CLQ2-SET
CLQ-3000,CLQ-4000	CLQ4-SET
CLQ-6000,CLQ-6500, CLQ-7000	CLQ65-SET

CL-ESD Type

● Lever Start Type

Model	Order Code	Bit
CL-2000ESD	CL-2000ESD	H4
CL-3000ESD	CL-3000ESD	H4
CL-4000ESD	CL-4000ESD	H4
	CL-4000X-ESD	1/4HEX
CL-6000ESD	CL-6000ESD	H5
	CL-6000X-ESD	1/4HEX
CL-6500ESD	CL-6500ESD	H5
	CL-6500X-ESD	1/4HEX
CL-7000ESD	CL-7000ESD	H5
	CL-7000X-ESD	1/4HEX

● Push-to-Start Type

Model	Order Code	Bit
CL-3000PSESD	CL-3000PSESD	H4
CL-4000PSESD	CL-4000PSESD	H4
	CL-4000PSX-ESD	1/4HEX
CL-6000PSESD	CL-6000PSESD	H5
	CL-6000PSX-ESD	1/4HEX
CL-6500PSESD	CL-6500PSESD	H5
	CL-6500PSX-ESD	1/4HEX
CL-7000PSESD	CL-7000PSESD	H5
	CL-7000PSX-ESD	1/4HEX

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CLQ-CR-ESD Type

● Lever Start Type

Model	Order Code	Bit
CLQ-3000CR-ESD	CLQ-3000CR-ESD	H4
CLQ-4000CR-ESD	CLQ-4000CR-ESD	H4
	CLQ-4000XCR-ESD	1/4HEX
CLQ-6500CR-ESD	CLQ-6500CR-ESD	H5
	CLQ-6500XCR-ESD	1/4HEX

● Push-to-Start Type

Model	Order Code	Bit
CLQ-6500PS CR-ESD	CLQ-6500PSCR-ESD	H5
	CLQ-6500PSXCR-ESD	1/4HEX

CL-NL Type

● Lever Start Type

Model	Order Code	Bit
CL-3000NL	CL-3000NL	H4
CL-4000NL	CL-4000NL	H4
	CL-4000NLX	1/4HEX
CL-6000NL	CL-6000NL	H5
	CL-6000NLX	1/4HEX
CL-6500NL	CL-6500NL	H5
	CL-6500NLX	1/4HEX
CL-7000NL	CL-7000NL	H5
	CL-7000NLX	1/4HEX

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SS-Series

● Lever Start Type

Model	Order Code	Bit
SS-2000	SS-2000E	H4
SS-3000	SS-3000E	H4
SS-4000	SS-4000E	H4
	SS-4000X	1/4HEX
SS-6500	SS-6500E	H5
	SS-6500X	1/4HEX
SS-7000	SS-7000E	H5
	SS-7000X	1/4HEX

● Push-to-Start Type

Model	Order Code	Bit
SS-3000PS	SS-3000PS	H4
SS-4000PS	SS-4000PS	H4
	SS-4000PSX	1/4HEX

SSQ Type

● Lever Start Type

Model	Order Code	Bit
SSQ-2000	SSQ-2000	H4
SSQ-3000	SSQ-3000	H4
SSQ-4000	SSQ-4000	H4
	SSQ-4000X	1/4HEX
SSQ-6500	SSQ-6500	H5
	SSQ-6500X	1/4HEX
SSQ-7000	SSQ-7000	H5
	SSQ-7000X	1/4HEX

● Push-to-Start Type

Model	Order Code	Bit
SSQ-3000PS	SSQ-3000PS	H4
SSQ-4000PS	SSQ-4000PS	H4
	SSQ-4000PSX	1/4HEX

Suction Attachment

● SS drivers

Model	Order Code
SSQ-2000	CLQ2-SET
SSQ-3000,SSQ-4000	CLQ4-SET
SSQ-6500,SSQ-7000	CLQ65-SET

SS-ESD Type

● Lever Start Type

Model	Order Code	Bit
SS-2000ESD	SS-2000ESD	H4
SS-3000ESD	SS-3000ESD	H4
SS-4000ESD	SS-4000ESD	H4
	SS-4000X-ESD	1/4HEX
SS-6500ESD	SS-6500ESD	H5
	SS-6500X-ESD	1/4HEX
SS-7000ESD	SS-7000ESD	H5
	SS-7000X-ESD	1/4HEX

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SS-ESD Type

● Push-to-Start Type

Model	Order Code	Bit
SS-3000PSESD	SS-3000PSESD	H4
SS-4000PSESD	SS-4000PSESD	H4
	SS-4000PSX-ESD	1/4HEX

SSQ-CR-ESD Type

● Lever Start Type

Model	Order Code	Bit
SSQ-2000CR-ESD	SSQ-2000CR-ESD	H4
SSQ-3000CR-ESD	SSQ-3000CR-ESD	H4
SSQ-4000CR-ESD	SSQ-4000CR-ESD	H4
	SSQ-4000XCR-ESD	1/4HEX
SSQ-6500CR-ESD	SSQ-6500CR-ESD	H5
	SSQ-6500XCR-ESD	1/4HEX
SSQ-7000CR-ESD	SSQ-7000CR-ESD	H5
	SSQ-7000XCR-ESD	1/4HEX

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α-Series

● Lever Start Type

Model	Order Code	Bit
α-4500	A-4500E	H4
	A-4500X	1/4HEX
α-5000	A-5000E	H4
	A-5000X	1/4HEX
α-6500	A-6500E	H5
	A-6500X	1/4HEX

● Push-to-Start Type

Model	Order Code	Bit
α-4500PS	A-4500PS	H4
	A-45	