

Industrial Bits

# BITS & SOCKETS





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## About ISO

### ISO 9001 : 2008

Our screwdriver manufacturing division, VESSEL SHIMANE CO., LTD is certified according to ISO standard, the global standard for quality assurance control.



### ISO 14001 : 2004

We obtained ISO 14001 in August 2010. VESSEL will further strive to offer eco-friendly products, aiming at minimizing the environmental burden as a manufacturing group.



# Industrial bits Technical

## BITS & SOCKETS

## TECHNICAL



### Environmental measures

Pb (lead), Cd (cadmium), Hg (mercury), hexavalent chromium, PBB (polybrominated biphenyl), and PBDE (polybrominated diphenyl ether). This symbol indicates the products that conform to VESSEL's environment measure standards compliant with the restriction of the use of certain hazardous substances (six substances listed above) (RoHS directive).



### For cross recessed screws

Most commonly used in the market  
JIS B4633.  
Devised by PHILLIPS SCREW COMPANY.



### For slotted head screws

Especially used for small screws for watches, glasses and precision equipment.  
Also used for cross recessed slotted screws  
JIS B4609.



### For square screws

Mainly used for quake-resistant hardware.  
Also good for sash doors and log houses.



### For hexagonal socket screws

Used for metal products assembly, mold tools, machines, precision equipment and motorcycles, etc.



### For TORX screws

Used for hard disk, automobiles and cutting tools.  
VESSEL manufactures tools for TORX and TORX PLUS under the licensing agreement with Acument Intellectual Properties, LLC.



### For POZIDRIV screws

Favored in Europe and used for OA devices, computers, housing materials, automobiles and airplanes.  
VESSEL manufactures POZIDRIV tools under the licensing agreement with European Ind. Serv. Ltd. in UK.



### For SUPADRIV screws

Favored in UK, Where this shape was devised, and used for OA devices, computers, housing materials, automobiles and airplanes. VESSEL manufactures SUPADRIV tools under the licensing agreement with European Ind. Serv. Ltd. in UK.



### For hexagonal bolts and nuts

Sockets widely used for metal product assembly, automobiles, machines, houses and construction related fields



### Magnetized bits

These bits can capture screws with a strong magnetic force enhancing work efficiency.



### Torsion part

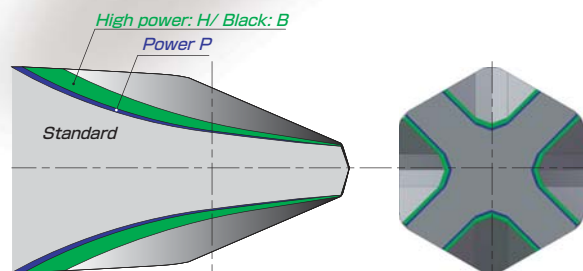
Torsion part absorbs the impact caused when the screw head is fully seated by an impact driver, preventing tip breakage.

φ3.5×20mm

For soft joint such as wood screws fastening.  
Suitable when fastened material is soft.

φ3.7×14mm

For hard joint such as drill fastening.  
Suitable when fastened material is hard.



Name	Mark	Cross-section area of the tip	Purpose	Fitting to screws
Standard	—	Small	Wide range of works	Strongly Recommended
Power	P	Medium	For high impact	Very Good
High Power	H	Large	For widely cross recessed screws (pan head screws.)	Good
Black	B			

## Sockets with a press-fitted shank

The socket and the shank are separately heat-treated at different harnesses, realizing a high torsional strength nearly two times greater than that of integrated type sockets.

## Insertion part



For compact electric screw drivers

   $\phi$  4 mm **76P**

   $\phi$  4 mm **75P  
~77P**



   $\phi$  5 mm **77P**



For electric or air screwdrivers



  H 5 mm **67P  
78P**



  H 5 mm **67P**

For air or electric impact screwdrivers



  H 6.35 mm **61P  
~64P  
80P**



  H 6.35 mm **59P  
~61P**

  H 6.35 mm **69P  
~72P**

  H 6.35 mm **68P  
69P**

For air impact drivers

  H 8 mm **64P**

  H 8 mm **64P**

## Carefully selected materials

With our long experience and research in manufacturing, we developed our own materials with balanced hardness (less wearing) and toughness (hard to chip).

Properties of the elements contained in the materials are improved to an optimal level through a heat treatment process.

**C**...Carbon | The more carbon is contained, the greater hardening penetration becomes. When the carbon content is 0.6 % or more, abrasion resistance increases, although hardening penetration remains the same.

**Ni**...Nickel | The addition of small amount of nickel increases steel's shock resistance and toughness. When added in a large amount, it becomes weak and breaks easily.

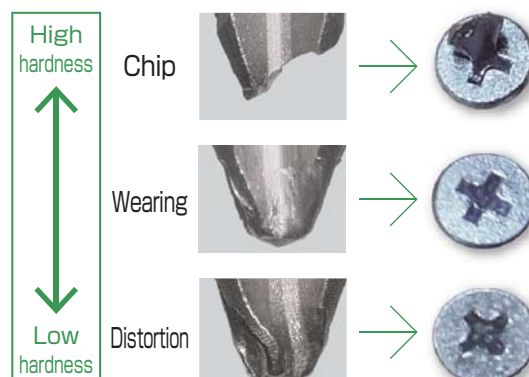
**Cr**...Chrome | Hardenability increases. Oxidation resistance increases. Toughness is improved.

**Mo**...Molybdenum | Hardenability increases. Significant decrease in toughness can be prevented.

## Hardness (Heat processing classifications)

Chip, wearing and deformation, which directly affect the life of bits and sockets, can be controlled by choosing different hardnesses (heat processing classification)

Hardness (Heat processing classifications)	Examples of use for screws	Industrial use
<b>X</b> Possible highest hardness	Precision small screws, automated machine fitting, collated screws	Precision device assembly, light electrical automated screw tightening, collated screws for housing
<b>H</b> High hardness	Wood screws, small screws, tapping screws, self-drilling screws	Light electric assembly, communication acoustic device assembly, civil engineering and construction work
<b>G</b> Standard hardness	Tapping screws, small screws	Automobile and machine assembly, sash frame assembly
<b>E S</b> Low hardness	Self-drilling screws, tapping screws, small screws	Rigid joint, sheet metal assembly, heavy work



If you do not find any bits or sockets suitable for your work in our product lineup, we also offer made-to-order products tailored to your specifications.



- Need a longer bit. Is it OK to connect two bits by welding?
- Bit does not catch screws well. Center run-out of the screw driver is the cause?
- Want to use bits for a long time. Supplies expense is too much?
- Want to stabilize the screw tightening torque as much as possible.
- Want to use bits in narrow spaces. Parts are getting in the way of bits.
- Want to reduce the breakage of the bit tips. Having hard time in removing the broken piece of the bit tip from the screw head.
- Annoyed by stuck screws. Screw fastening machine often stops.
- Rust and oil of bits cause problems.
- Want to prevent screw stripping. It spoils precious workpieces.
- Want to introduce special screws. Tamper-proof screws are under consideration.
- Want to reduce the number of interruptions in production line due to bit changes, etc.

## Best practice

Ideal fitting and improved bit tip life with tailored bits

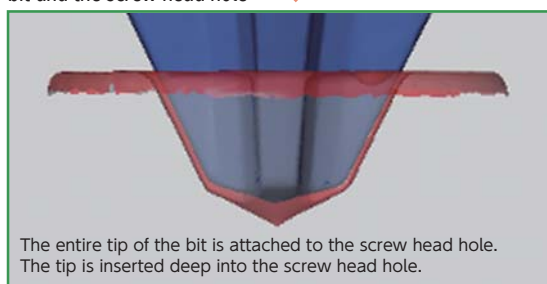
Analyze the fitting between the tip of the bit currently used and the screw head by using a 3D measurement device.

Fitting between the screw head and a user's bit



Analyze the fitting between the tip of the tailored bit and the screw head hole by using a 3D measurement device

Fitting between the tailored bit and the screw head hole

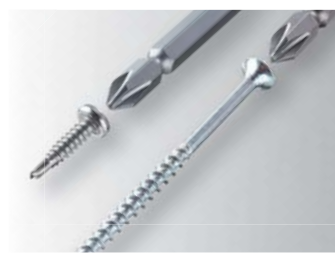


## Result

The life of bits increased three times and the frequency of screw strip decreased.

\*Analyses using 3D measurement devices are conducted as needed.  
They are not conducted every time made-to-order bits and socket are manufactured.

## Flow of arrangement and process of made-to-order bits and sockets production



Points to be checked when arranging made-to-order bits and sockets production

- ☐ Screw samples
- ☐ Screw tightening condition: resin products, Sheet metal (t=mm) tapping, Machine screw M○×○mm, Wood screw ○mm×○mm
- ☐ Whether or not screw locking glue is used
- ☐ Company name, product number, output torque and structure of screw tightening tool you use
- ☐ What you need: tailored bits, promote tip strength (wearing, breakage), better fitting, etc.



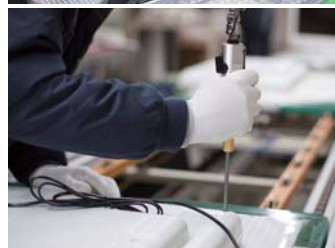
Production of made-to-order bit for testing

- ☐ Delivery deadline: within 25 work days (target)
- ☐ Number of screws: we accept orders for 10 or more pieces.



Completion of test pieces

- ☐ Fitting check with screws used and 3D measurement devices



Production line evaluation

- ☐ Running cost
- ☐ Durability
- ☐ Others (screw strip, cam out, etc.)

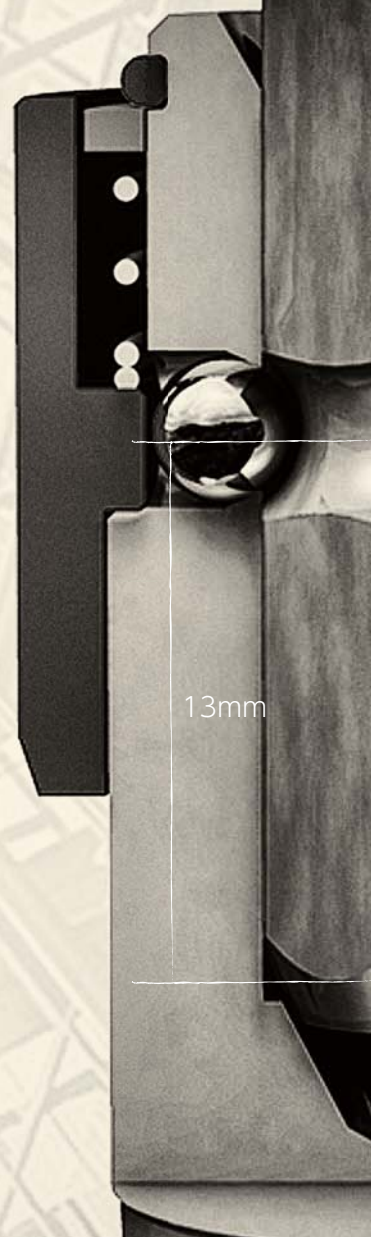
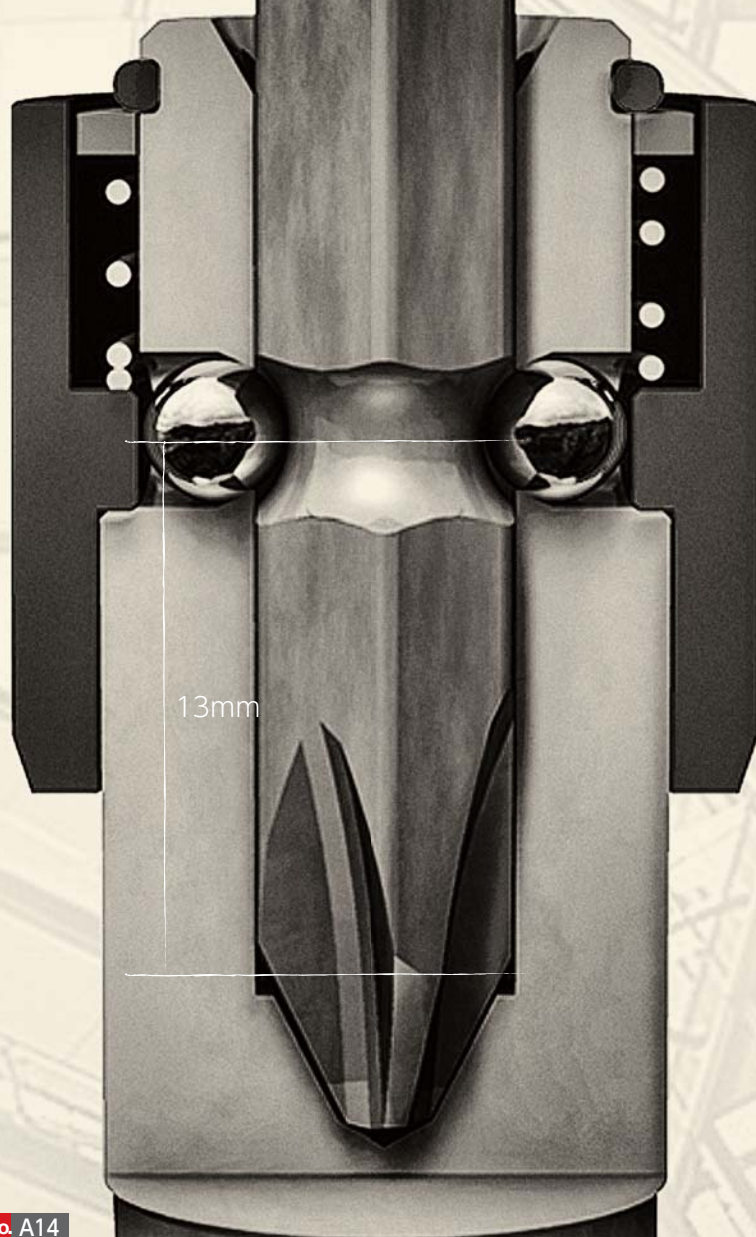
Determination of bit specifications



# Double End Bit Type A



The Type A entry is designed to VESSEL's special insertion dimensions, developed when we first started manufacturing air drivers. The majority of electric drivers on the market can be used with our ubiquitous Type A bits.



No. A14

## Double End Bit

High precision bit tips...







We design and manufacture optimal bits for many kinds of screws. For such purpose, we take proactively into consideration licensing agreements for various screw types.

Also we supply bits that support the continuous changes in screw recess, by technological exchanges with screw punch manufactures.

※This is for illustrative purpose.

## Applicable models

Please check the model No. of your drivers before determining which bit(s) to choose.

Shape	Model No.	Page	Applicable models	
			 Air Screwdriver	 Electric Screwdriver
 H 6.35 mm	A14	59P 60P	<b>VESSEL</b> GT-H4R·H4PR·H4.5·H5R·H5P·PH4·PH5·S4.5DR·PLR·PLZ·PLP·PLHⅡ·S6MLR·S6HS·S6.5D·P4.5D·P4.5DR·P5LS·P6EXD·P6LSⅢ·P6HS·P6.5D·S4TR·S4TS·S4TG·S5TR·S5TB·S5TG·S5TS·S4.5XD·P4.5XD·PLXD·P60XD·P6LXD·S6LXD·S60XD·PLIXD·P5XD  <b>Hitachi Koki</b> WH 12AB2·12H2  <b>NPK</b> ND-○○○Y NPW-○○○Y SD-4  <b>Fuji Kuki</b> FLT series D-10·D-20 FPT series D-10 FL series D-10 FPW series D-10 FW series D-10·D-20·D-60·D-70·D-80  <b>Makita</b> AD604·AD605H  <b>Yokota</b> YLa60B·70B·80B YLT50B·60B·70B·60BL·70BL Y-40SB·41B·46B YX-80B·180B·180SB·280B·380B·500B·180SB·280SB·380SB·500SB YBX-50B YD-400SCB·4.5LBZ·6WBZK·600SBZ·40PBZ·4.5PBZK·600PBZ·650PBZ·65PTBZ·65PBZ·670B·670B-F·670B-R·670B-RF  <b>Yutani</b> D-6SPAL·5WPEA·6WSPEA·6WSHPEA·600SHEA·604A·8WPE·6SSAEL·6WSHSA DH-6PL·4.5PEA·6PLE·4.5SA·6SELA HPW-4D·6D·6αD·8αD·4SD·6SD·6αSD ETC-10HD·15HD·5HSD·10HSD  <b>MAX</b> AT-ID6P1·HF-ID7P1	<b>VESSEL</b> VE-5000·5000P·6000·6000P  <b>Toshiba</b> CI-144VBKS  <b>Hitachi Koki</b> WH 7DL·9DM2·10DL·10DAL·14DSL2·14DBAL2·14DDL·14DDL2·18DBAL2·18DDL·18DDL2·14DBEL·18DBEL·14DKL·18DKL·10DCL·14DCL·12H2·12AB2·12VE WM 10DBL·14DBL·18DBL WP 14DSL·12VA DB 3DL2 FWH 7DL·10DAL·10DFL·14DGL·14DSAL·12DC2·12VD·10DCL FDB 3DL2·10DFL <b>W 4SA2·5SA·8V</b>  (Old model) WH 6DC·9DM·12DM·12DAF2·12DM2·12DMR·12DK·12DMR2·14DMRL·14DBL·14DBAL·18DBDL·8DYA (No.2 only available)·14DH·14DM·14DML·14DMR·14DSL·18DL·12VA·12VB·12VC3·12VC2·12VC·12VD WP 10A·12DM <b>W 4SA·5VC·5VD·5VE·6VC·6VH·6VJ·6M·6MV·6MV2</b>  ●The models in blue letters are the screwdrivers for light steel substrates and boards. It is recommended to use a 45mm long bit.  <b>Makita</b> TD 0220·021D·061D·090D·110D·135D·134D·146D·134DX2·146DX2·134DSHX·160D·170D·138D·149D·136D·137D·146D·147D·148D TL 060D·061D TP 140D·131D·141D TS 131D·141D 6955·6963SPK DF 010D·030D·031D  <b>Panasonic</b> EZ 75A7·75A1·7544·7207·6506·7545·7521·7520·7548·6507·7410·7411·7420·6220  <b>Ryobi</b> BD-361 BID-1100·180·1810·1228·1229·1250·1260·1415·1416·1417·1418·143·1440·145·1805·1806 CID-1100 ID-140  <b>Tonichi</b> AUR5N  <b>MAX</b> PJ-ID144·SD101  <b>Yokota</b> YBX-50B
	A14P	59P		
	M-A14			
	A14H			
	A14B			
	AZ14			
	AS14	60P		
	A14R			
	AL14			
	AT14	61P		
	AT14P			
ST14	<b>61P 62P</b>  <b>62P</b>  <b>62P 63P</b>  <b>63P</b>  <b>64P</b>    <b>80P</b>			
A16				
M-A16				
D81				
V				
A20				
A20-5				
MA20S				
MA20				
SB				
HA				
HAM				
HD-71 × 45	<b>D830082 D831045 D831075 D832075 D832100 D832150</b>			
 H 6.35 mm				
		 H 8 mm		
			 H 8 mm	

**No. A14 Double End Bit**

- If one end breaks, the other end can be used.
- A wide variety of bits according to different heat treatment.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1× 45	H	10	100	413029
65	H	10	100	413031
65	G	10	100	413032
110	H	10	100	413231
110	G	10	100	413232
⊕ 2× 45	X	10	100	413039
45	H	10	100	413041
45	G	10	100	413040
65	X	10	100	413047
65	H	10	100	413042
65	G	10	100	413043
65	E	10	100	413045
110	X	10	100	413262
110	H	10	100	413241
110	G	10	100	413242
110	E	10	100	413243
150	X	10	100	413263
150	H	10	100	413245
150	G	10	100	413246
150	E	10	100	413247
200	X	10	150	413264
200	H	10	150	413249
200	G	10	150	413248
200	E	10	150	413250
300	G	10	100	413255
⊕ 3× 45	H	10	100	413051
45	E	10	100	413050
65	X	10	100	413054
65	H	10	100	413052
65	E	10	100	413053
110	H	10	100	413252
110	E	10	100	413251

**No. A14P Double End Bit (Power tip)**

- If one end breaks, the other end can be used.
- Well balanced combination between tip precision and strength.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 65	H	10	100	415331
110	H	10	100	415333
150	H	10	100	415334

**No. A14H TAPPING Bit (High power tip)**

- If one end breaks, the other end can be used.
- Reinforced tip for tapping work.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 65	H	10	100	413351
110	H	10	100	413355
150	H	10	100	413359

**No. M-A14 Double End Bit (Magnetized)**

- If one end breaks, the other end can be used.
- Strongly magnetized.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1× 45	H	10	100	413401
65	H	10	100	413402
110	H	10	100	413407
⊕ 2× 45	H	10	100	413403
45	G	10	100	413404
65	H	10	100	413405
65	G	10	100	413406
110	H	10	100	413408
110	G	10	100	413411
150	H	10	100	413409

**No. A14B TAPPING Bit (Black tip)**

- If one end breaks, the other end can be used.
- Reinforced tip for tapping work.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 50	S	10	100	413141
75	S	10	100	413142
100	S	10	100	413341
150	S	10	100	413342

**No. AZ14 GIZA Bit**

PAT.

- If one end breaks, the other end can be used.
- Jagged tip prevents cam-out.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 65	H	10	100	413360
110	H	10	100	413361
150	H	10	100	413362

**No. AS14 SLENDER Bit**

- If one end breaks, the other end can be used.
- Tapered tip allows for easy view.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1× 65	H	10	100	413367
⊕ 2× 45	H	10	100	413366
65	H	10	100	413364
110	H	10	100	413365



 H 6.35 mm

## No. A14 Square Double End Bit

- If one end breaks, the other end can be used.
- Specially-shaped tip prevents the bit from getting stuck.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
SQ 1× 65	H	10	100	413380
SQ 2× 65	H	10	100	413381
110	H	10	100	413383
150	H	10	100	413385
SQ 3× 65	H	10	100	413382
110	H	10	100	413384
150	H	10	100	413386

## No. A14R Square Double End Bit

- If one end breaks, the other end can be used.
- With a ring attached preventing the bit from getting stuck.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
SQ 1× 65	H	10	100	413387
SQ 2× 65	H	10	100	413388
110	H	10	100	413389
150	H	10	100	413390
SQ 3× 65	H	10	100	413391
110	H	10	100	413392
150	H	10	100	413393

 H 6.35 mm

## No. AL14 ALFA Bit

- If one end breaks, the other end can be used.
- Modest torsion effect created by tempering treatment on the ball grooves.

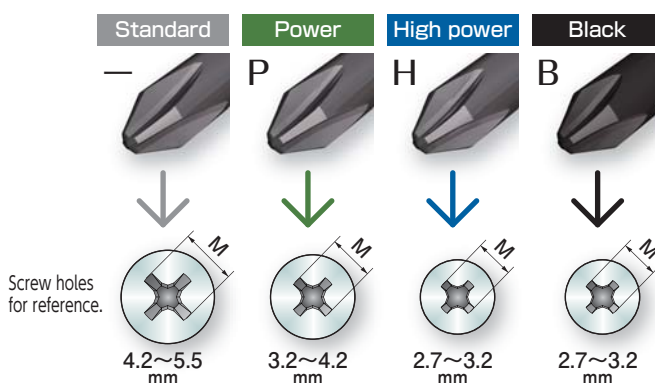
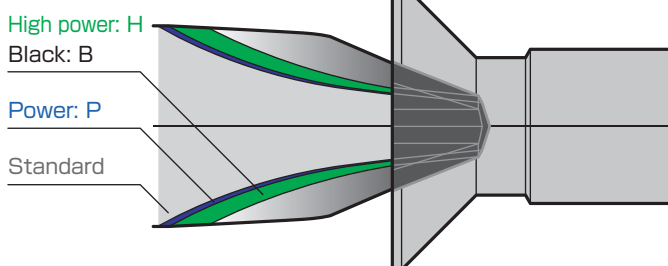


Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 65	H	10	100	413369
110	H	10	100	413370

## One point

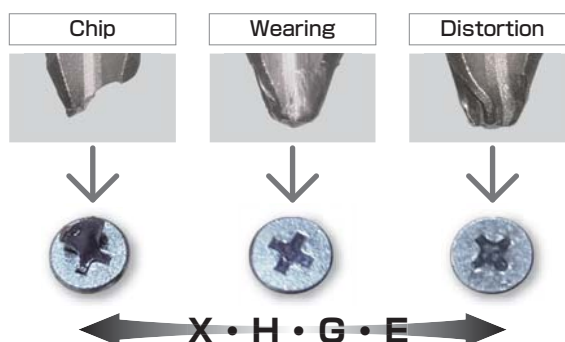
### Bit selection I

- Selecting Phillips tip suitable for screw head hole



\* M dimension : the size of a cross recess on a screw head viewed from directly above

- Selecting Phillips tip according to hardness classification

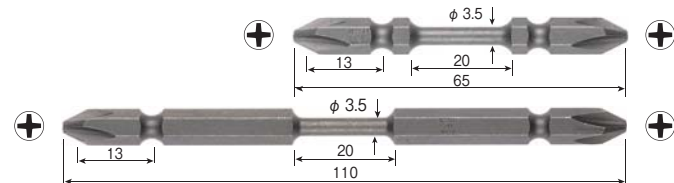


X · H · G · E



## No. AT14 TORSION Bit

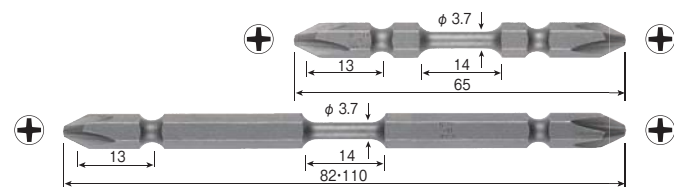
- If one end breaks, the other end can be used.
- For soft joint such as wood screws.



Size Tip×φ×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2×3.5× 65	H	10	100	413143
110	H	10	100	413144

## No. AT14P TORSION Bit (Power tip)

- If one end breaks, the other end can be used.
- For hard joint such as drill screws.

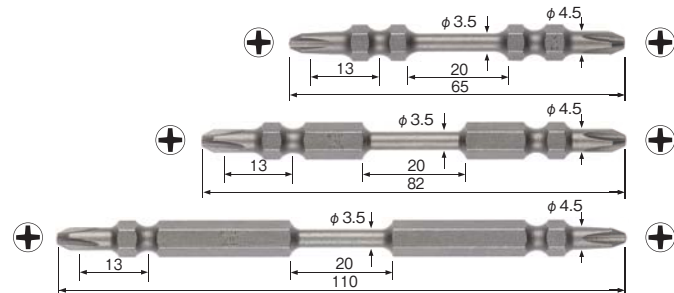


Size Tip×φ×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2×3.7× 65	X	10	100	415361
82	X	10	100	415362
110	X	10	100	415363

## No. ST14 SLENDER TORSION Bit

PAT.

- If one end breaks, the other end can be used.
- Thin tip allows for easy view. For soft joint such as wood screws.

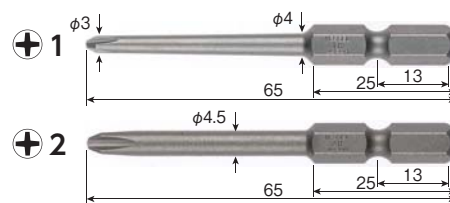


Size Tip×φ×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1×3.5× 65	H	10	100	413374
⊕ 2×3.5× 65	H	10	100	413375
82	H	10	100	413377
110	H	10	100	413376



## No. A16 Recessed Bit

- Recessed type. Thin shank allows for use in narrow spaces.

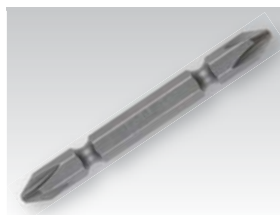


Size Tip×φ×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1×3 × 65	H	10	100	415061
⊕ 2×4.5× 65	H	10	100	415066

# One point

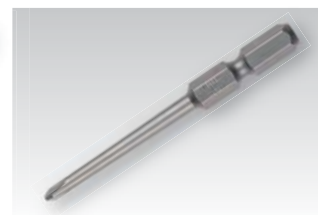
## Bit selection II

- Selection according to bit shapes



### Double End Bit

If one end breaks, the other end can be used.



### Recessed Bit / Bit

Thin shank improves workability in narrow spaces.

- Selection according to torsion effect



Impact is absorbed by the torsion effect at the slot part which receives tempering treatment.



### Hard Joint



### Soft Joint



Impact is absorbed by the torsion part (φ3.5 × 20mm).

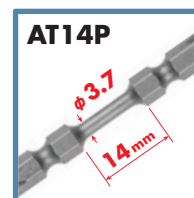


### Soft Joint



### Hard Joint

When an instantaneous impact is given when the head of drill screw and tapping screw is fully seated



Impact is absorbed by the torsion part (φ3.7 × 14mm).



### Hard Joint



### Soft Joint

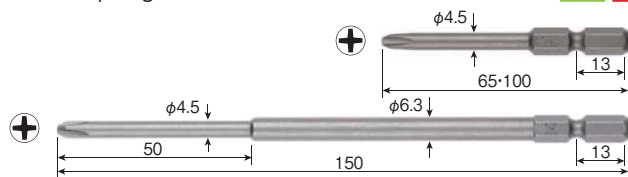
When load is gradually increased such as in fastening wood screws



**H 6.35 mm**

## No. M-A16 Recessed Bit (Magnetized)

- Recessed type. Thin shank allows for use in narrow spaces.
- Powerfully magnetized.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2×4.5× 65	H	10	100	415311
100	H	10	100	415312
150	H	10	100	415313

## No. A16 Hex Bit

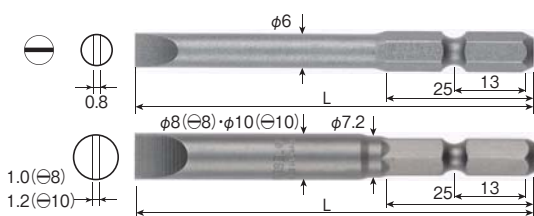
- For assembly work focusing on workability.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
H 2× 65	H	10	100	481090
110	H	10	100	481100
2.5× 65	H	10	100	481091
110	H	10	100	481101
3× 65	H	10	100	481092
110	H	10	100	481102
4× 65	H	10	100	481093
110	H	10	100	481103
5× 65	G	10	100	481094
110	G	10	100	481104
6× 65	G	10	100	481096
110	G	10	100	481105

## No. A16 Recessed Bit

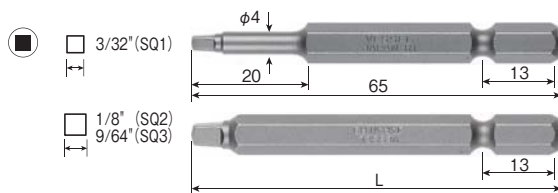
- For assembly work focusing on workability.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊖ 6 × 45	G	10	100	415071
70	G	10	100	415072
⊖ 8 × 45	G	10	300	415171
70	G	10	250	415172
⊖ 10× 52	G	10	200	415271
70	G	10	200	415272

## No. A16 Square Bit

- For assembly work focusing on workability.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
SQ 1×4× 65	H	10	100	481001
SQ 2× 65	H	10	100	481002
110	H	10	100	481005
150	H	10	100	481008
SQ 3× 65	H	10	100	481003
110	H	10	100	481006
150	H	10	100	481009

## No. D81 Recessed Bit

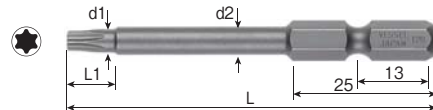
- Recessed type. Thin shank allows for use in narrow spaces.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2 × 82	X	10	100	482040
82	H	10	100	482041
82	E	10	100	482042

## No. V TORX Bit

- For TORX screws used in the automobile industry.



Size Tip×Overall Length (mm)	d1	L1	d2	(mm)	Inner Ctn.	EDP No.
T6 × 65▲	1.65	1.95	6.5	4.0	10	634997
110▲	1.65	1.95	6.5	4.0	10	634998
T8 × 65▲	2.3	2.60	7.0	4.5	10	634999
110▲	2.3	2.60	7.0	4.5	10	635000
T10× 65	2.72	3.02	7.5	4.5	10	635120
110	2.72	3.02	7.5	4.5	10	635121
T15× 65	3.26	3.56	7.5	4.5	10	635125
110	3.26	3.56	7.5	4.5	10	635126
T20× 65	3.84	4.14	7.5	5.0	10	635130
110	3.84	4.14	7.5	5.0	10	635131
T25× 65	4.4	4.70	8.0	5.0	10	635135
110	4.4	4.70	8.0	5.0	10	635136
T27× 65	4.96	5.26	8.0	5.5	10	635140
110	4.96	5.26	8.0	5.5	10	635141
T30× 65	5.49	5.79	8.5	6.0	10	635145
110	5.49	5.79	8.5	6.0	10	635146
T40× 65	6.6	H6.35	—	H6.35	10	635150
110	6.6	H6.35	—	H6.35	10	635151

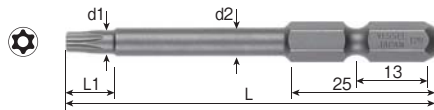
▲For the date of delivery, consult VESSEL

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## No. V TORX Bit (Tamper-Proof)

- For TORX screws used in the automobile industry.
- With a round hole for tamper-proof.

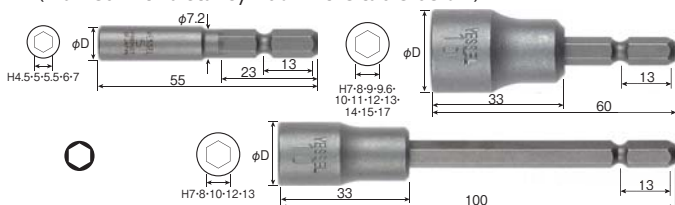


Size Tip×Overall Length (mm)	mm	d1	L1	d2 (mm)	Inner Ctn.	EDP No.
<b>T8H × 65</b>	2.3	2.60	7.0	4.5	10	635032
<b>110</b>	2.3	2.60	7.0	4.5	10	635033
<b>T10H× 65</b>	2.72	3.02	7.5	4.5	10	635001
<b>110</b>	2.72	3.02	7.5	4.5	10	635002
<b>T15H× 65</b>	3.26	3.56	7.5	4.5	10	635005
<b>110</b>	3.26	3.56	7.5	4.5	10	635006
<b>T20H× 65</b>	3.84	4.14	7.5	5.0	10	635010
<b>110</b>	3.84	4.14	7.5	5.0	10	635011
<b>T25H× 65</b>	4.4	4.70	8.0	5.0	10	635015
<b>110</b>	4.4	4.70	8.0	5.0	10	635016
<b>T27H× 65</b>	4.96	5.26	8.0	5.5	10	635020
<b>110</b>	4.96	5.26	8.0	5.5	10	635021
<b>T30H× 65</b>	5.49	5.79	8.5	6.0	10	635025
<b>110</b>	5.49	5.79	8.5	6.0	10	635026
<b>T40H× 65</b>	6.6	H6.35	—	H6.35	10	635030
<b>110</b>	6.6	H6.35	—	H6.35	10	635031

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## No. A20 Socket Bit

- Socket bit for assembly.
- Strong resistance to shank breakage with press-fit method.  
(Marked with a star symbol in the table of each model)



Size Tip×Overall Length (mm)	φD	Drilling holes depth	Inner Ctn. (mm)	Outer Ctn.	EDP No.
<b>A/F 4.5× 55</b>	7.5	20	10	250	416080
<b>5 × 55</b>	8.5	20	10	250	416081
<b>5.5× 55</b>	9	20	10	250	416082
<b>100</b>	9	25	10	250	416281
<b>6 × 55</b>	10	20	10	200	416083
<b>100</b>	10	25	10	200	416282
<b>7 × 11× 55</b>	11	20	10	200	416084
<b>100</b>	11	25	10	150	416280
<b>7 × 60</b> ☆	13.5	22	10	200	416095
<b>100</b> ☆	13.5	25	10	150	416283
<b>8 × 60</b> ☆	13.5	22	10	200	416085
<b>100</b> ☆	13.5	22	10	150	416284
<b>9 × 60</b> ☆	15	22	10	150	416086
<b>9.6× 60</b> ☆	15	22	10	150	416087
<b>10 × 60</b> ☆	16	22	10	150	416088
<b>100</b> ☆	16	22	10	100	416286
<b>11 × 60</b> ☆	17	22	10	150	416089
<b>12 × 60</b> ☆	18	22	10	100	416090
<b>100</b> ☆	18	22	10	100	416287
<b>13 × 60</b> ☆	19	22	10	100	416091
<b>100</b> ☆	19	22	10	50	416288
<b>14 × 60</b> ☆	20	22	10	100	416092
<b>15 × 60</b> ☆	21	22	10	50	416093
<b>17 × 60</b> ☆	23	22	10	50	416094

☆...Press-fit type

## No. A20-5 Socket Bit

- Short type socket bit to use in narrow spaces, such as on the periphery of automobile engines.

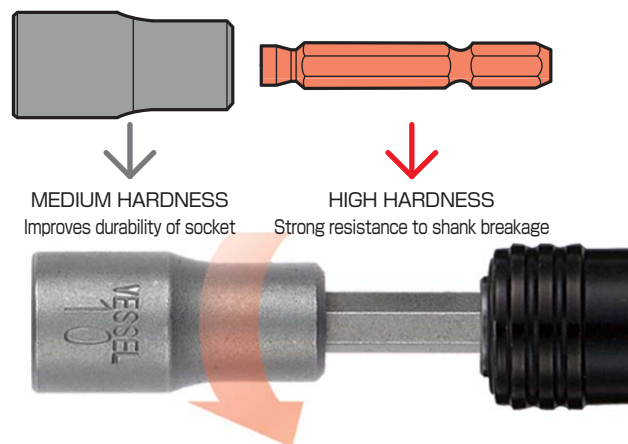


Size Tip×Overall Length (mm)	φD	Drilling holes depth	Inner Ctn. (mm)	Outer Ctn.	EDP No.
<b>A/F 10× 50</b>	16	10	10	150	416396

## One point

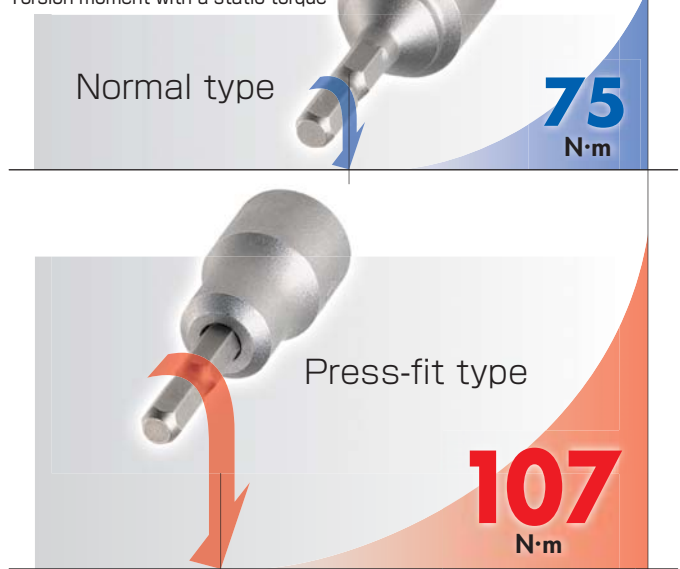
### Features of press-fit type sockets

(Press-fit type: marked with a star symbol in the table of each model)



The shank and socket have been heat-treated to the best hardness and press-fit together.  
The socket part is strong against wear and shank against twisting, resulting in higher durability.

**Prevents shank breakage**  
Torsion moment with a static torque

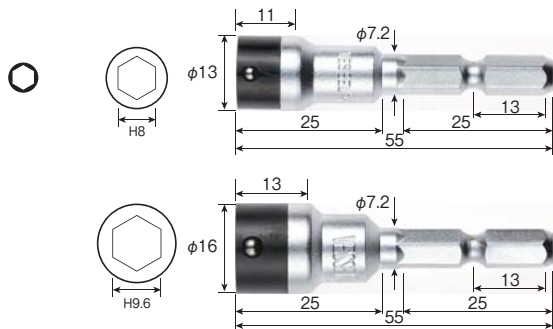






## No. SB Nut Setter (Ball Lock)

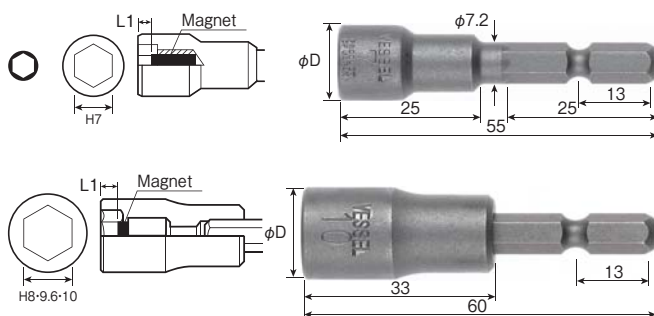
- Socket bit for Hex screws.
- Ball-lock type for minimum cutting particles.



Size Tip×Overall Length	Inner Ctn. (mm)	Outer Ctn. (mm)	EDP No.
A/F 5/16" (8mm) × 55 (For screw dia. 5mm)	5	50	482531
A/F 3/8" (9.6mm) × 55 (For screw dia. 6mm)	5	50	482532

## No. MA20 Socket Bit (Press-Fit Magnet)

- Socket bit for Hex screws.
- Holds the screw with a strong magnet, to prevent the screws from dropping.



Size Tip×Overall Length	(mm)	φD	L1	Inner Ctn. (mm)	Outer Ctn.	EDP No.
A/F 7 × 55(For screw dia. of 4mm)		13	2.5	10	200	482510
A/F 8 × 60(For screw dia. of 5mm)	☆	13.5	3.17	10	150	482511
A/F 9.6× 60(For screw dia. of 6mm)	☆	15	3.96	10	150	482512
A/F 10 × 60(For screw dia. of 6mm)	☆	16	3.96	10	150	482513

☆Press-fit type.

## No. MA20S Socket Bit (Side Magnet)

- Socket bit for Hex screws.
- Holds the screw with side magnet, to prevent the screws from dropping.

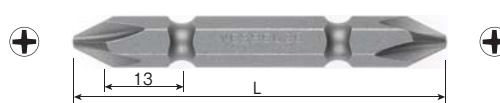


Size Tip×Overall Length	(mm)	φD	Drilling holes depth	Inner Ctn.	Outer Ctn.	EDP No.
A/F 5/16" (8mm) × 55		13	20	10	100	482401
A/F 3/8" (9.6mm) × 55		16	20	10	100	482402
A/F 10mm × 55		16	20	10	100	482403



## No. A15 Double End Bit

- If one end breaks, the other end can be used.
- High strength with 8mm hexagonal shank.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 65	G	10	250	414041
110	G	10	150	414042
⊕ 3× 65	E	10	250	414051
110	E	10	150	414052



## No. A19 Hex Bit

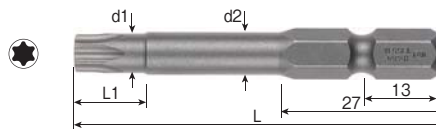
- For assembly work focusing on workability.
- High strength with 8mm hexagonal shank.




Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
H 5× 65	G	10	250	481191
6× 65	G	10	250	481192
130	G	10	100	481196
8× 65	G	10	250	481193
130	G	10	100	481197
10× 65	S	10	200	481194
130	S	10	100	481198

## No. V5 TORX Bit

- For TORX screws used in the automobile industry.
- High strength with 8mm hexagonal shank.



Size Tip×Overall Length (mm)		d1	L1	d2	Inner Ctn.	EDP No.
T25× 65	4.4	4.70	10.0	6.0	10	635215
110	4.4	4.70	10.0	6.0	10	635216
T27× 65	4.96	5.26	11.5	6.5	10	635220
110	4.96	5.26	11.5	6.5	10	635221
T30× 65	5.49	5.79	11.5	6.5	10	635225
110	5.49	5.79	11.5	6.5	10	635226
T40× 65	6.6	6.90	11.5	7.5	10	635230
110	6.6	6.90	11.5	7.5	10	635231
T45× 65	7.77	8.0	—	8.0	10	635235
110	7.77	8.0	—	8.0	10	635236
T50× 65	8.79	H8	—	H8	10	635240
110	8.79	H8	—	H8	10	635241

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No. B35

## Bit Type B



The Type B insertion entry is designed to work with the dimensions most commonly used by air tool manufacturers. There are some models that will not accept insertion of the double-head types, depending on the shape of the insertion chuck. Please make your selections while referring to the specifications table.



No. B35

Bit

Bits manufactured to meet specifications based on ISO.  
Width across flats 6.35 mm, hexagonal.

9.5mm

9mm

※ This is for illustrative purpose.

HAND TOOLS

BITS & SOCKETS

ELECTRIC TOOLS

AIR TOOLS








STATIC SOLUTIONS


GASOLINE ENGINE TOOLS



## Applicable models

Please check the model No. of your drivers before determining which bit(s) to choose.

Shape	Model No.	Page	Applicable models		
			 Air Screwdriver	 Electric Screwdriver	
 H 5 mm	B36	67P	<b>VESSEL</b> GT-S5TFR-S5TFB-S5TFG-S4TFR-S4TFS-S4TFG  <b>Uryu</b> US-40-3.5A-4-4PB/ US-LT○○A/AL series  <b>Yokota</b> YD-3-4-400SC	<b>VESSEL</b> VE-4000-4000P-4500-4500P	
 H 5 mm	B34	67P	<b>VESSEL</b> GT-S4TFR-S4TFS-S4TFG-S5TFR-S5TFB-S5TFG  <b>Uryu</b> US-40-3.5A-4-4PB (Except B44 Socket Bit Overall Length 70mm) US-LT○○A/AL series  <b>Yokota</b> YD-3-4-400SC	<b>VESSEL</b> VE-4000-4000P-4500-4500P  <b>Hios</b> PG-7000, BLG-5000BC1/-15/-20/-HT BLG-5000/-15/-20/HT, BL-5000/-15/-20-5020-7000/-20 CL-4000-6000-6500-7000 SS-4000-6500-7000, α-4500-5000-6500 CD-4000-5000-6000-7000 VB-1510/-18-1820-3012-2008-3020 VZ-1510-1812-1820-3012-3007  <b>Delvo</b> DLV ○○○○-EJN/-DJN/-DJE DLV 7(8)120-SPC-7(8)130-SPC-7(8)140-SPC- 7(8)241-SPC-7(8)231-SPC DLV 30LL(P)-SPC-30SL(P)-SPC-30HL(P)-SPC  <b>Hitachi Koki</b> WT 3G/3GP-4G/4GP-5G/5GP  <b>Kanon</b> 3K-120L-180L-180LF-120P-180P-180PF 9K-130P-140P-130PF-131L-131LF-131P-131PF 5KD-200-300  <b>Panasonic</b> FE-A310S-A310MH-A310L-A111L-A111MH-A111M-A710AXN-A710MHN	
	N				
	B44				
 H 6.35 mm	B43	68P	<b>Uryu</b> UX-U-UW-ALPHA-UL-UEP-UAT-UA-UDP all driver type US-350W-450WB-5-50-5PB-○○W/PW-LT○○B/BL/PB  <b>NPK</b> ND-○○OX, NPW-○○OX  <b>Fuji Kuki</b> FLT series D-1-D-2 FPT series D-1, FL series D-1, FPW series D-1 FW series D-1-D-2-D-6-D-7-D-8, FD series D-4-D-5	<b>Yokota</b> YBX-50A  <b>Tonichi</b> AUR5N-U(Except U1000CN)-UR-DU  ●Following Tool models are applicable only for the single end bits.	
	M-B43				
	B43P				
	B43H				
	B43B	69P	<b>Yutani</b> D-6SPBL-5WPEB-6WSPEB-6WSHPEB-600SHEB- 604B-8WPE-6SSBEL-6WSHSB DH-6PL-4.5PEB-6PLE-4.5SB-6SELB HPW-4D-6D-6αD-8αD-4SD-6SD-6αSD	<b>Hios</b> PG-7000 BLG-4000BC1-5000BC1/-15/-20/-HT BLG-4000-5000/-15/-20/HT BL-3000-5000/-15/-20-5020-7000/-20 CL-4000-6000-6500-7000-9000 SS-4000-6500-7000 α-4500-5000-6500 CD-4000-5000-6000-7000 VB-1510/-18-1820-3012-4504-2008-3020 VBH-1820-3012 VZ-1510-1812-1820-3012-3007-4504-4506 VZH-1820-3012	
	BT43			<b>Delvo</b> DLV ○○○○-EKN/-DKN/-DKE DLV 8150-SPC-7(8)251-SPC DLV 45LL(P)-SPC-45SL(P)-SPC-70LL(P)-SPC	
	BT43P			<b>Uryu</b> UDBP-AF-TA-A  <b>Kanon</b> 9K-150P	
 H 6.35 mm	B35	69P 70P			
	J	70P			
	IP	71P			
	X5000				
	B45	72P			<b>Yutani</b> YLa60A-70A-80A YLT50A-60A-70A-60AL-70AL Y-40SA-41A-46A YX-80A-180A-280A-380A-500A-280A-380A- 500A-180SA-280SA-380SA-500SA-280CA-500CA YBX-50A YD-400SCA-500SCA-5PHCA-3A-4A-4.5SZ-5A- 4.5LAZ-6WAZK-600SZ-40PZ-4.5PZK-600PZ- 650PZ-65PTZ-65PZ-670A-670A-F-670A-R-670A-RF
	MB45				<b>Atlas-Copco</b> LUM-LUF-LUD-TWIST-COMBI series
	MB45S				
	MB45D	80P			
	HB				
	HBM				
	DBHM				
	MMBC	81P			
 H 6.35 mm	B39	71P	<b>VESSEL</b> GT- H4RC-H5RC-S6CD-PLRC  <b>Uryu</b> US-3.5ACB-4CA-5CA- LT30B-○○C-LT40B-○○C  <b>Yutani</b> D-6WHCL  <b>Yokota</b> YD-600L YX-280CA-500CA	<b>Kanon (Old model)</b> CN 60LTDK~N 10LTDK(N6~N100LTDK) CN 60STDK~N 10STDK(N6~N100STDK) CN 100~CN 500DPSK(N10~N50DPSK) CN 100~CN 500DPSK-L(N10~N50DPSK(II)) CN 15/CN 30LTDK-H(N1.5/N3LTDK-H) DTDK-CN 500EXL(DTDK-N5EXL)	

 Manual type Torque Screwdriver

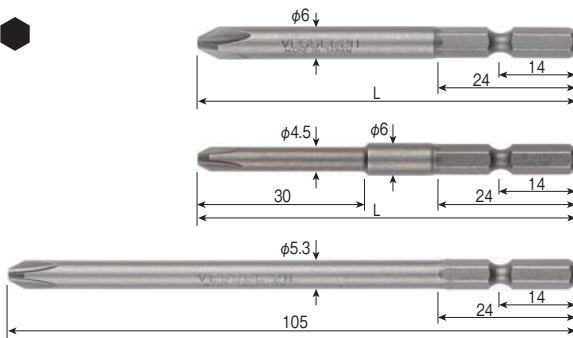


Manual type Torque Screwdriver



### No. B34 Bit

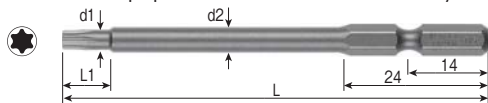
- For assembly work focusing on workability.
- Hexagonal shape with the width across flats of 5mm is also suited for electric drivers.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕1× 70	H	10	100	422031
100	H	10	100	422032
150	H	10	100	422033
⊕1×4 × 70	H	10	100	422048
⊕1×5.3× 105	H	10	100	422034
120	X	10	100	422040
120	H	10	100	422035
⊕2× 70	H	10	100	422041
100	H	10	100	422042
120	H	10	100	422045
150	H	10	100	422043
200	H	10	100	422044
⊕2×3×30×75	H	10	100	446340
⊕2×4.5× 70	H	10	100	422049
⊕2×5.3× 105	H	10	100	422046
120	H	10	100	422047
H 2 × 70	H	10	100	422071
H 2.5× 70	H	10	100	422072
H 3 × 70	H	10	100	422073
H 4 × 70	H	10	100	422074
H 5 × 70	H	10	100	422075

### No. N TORX Bit

- For TORX screws popular in the automobile industry.



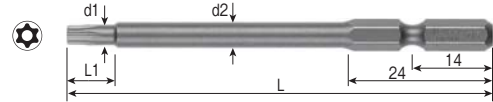
Size Tip×Overall Length (mm)	d1	L1	d2	(mm)	Inner Ctn.	EDP No.
T5 × 75	1.37	1.67	6.5	4.0	10	635498
100▲	1.37	1.67	6.5	4.0	10	635499
T6 × 75	1.65	1.95	6.5	4.0	10	635500
100	1.65	1.95	6.5	4.0	10	635501
T8 × 75	2.3	2.60	7.0	4.5	10	635505
100	2.3	2.60	7.0	4.5	10	635506
T10× 75	2.72	3.02	7.5	4.5	10	635510
100	2.72	3.02	7.5	4.5	10	635511
T15× 75	3.26	3.56	7.5	4.5	10	635515
100	3.26	3.56	7.5	4.5	10	635516
T20× 75	3.84	4.14	7.5	5.0	10	635520
100	3.84	4.14	7.5	5.0	10	635521
T25× 75	4.4	4.70	8.0	5.0	10	635525
100	4.4	4.70	8.0	5.0	10	635526
T27× 75	4.96	5.26	8.0	5.5	10	635530
100	4.96	5.26	8.0	5.5	10	635531

▲For the date of delivery, consult VESSEL

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### No. N TORX Bit (Tamper-Proof)

- For TORX screws popular in the automobile industry.
- With a round hole for tamper-proof.

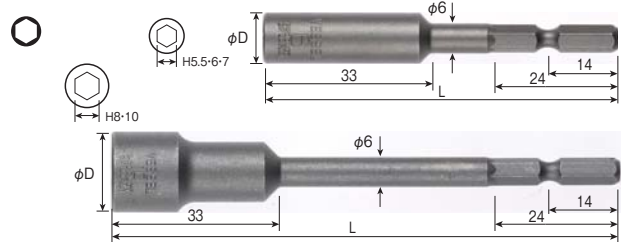


Size Tip×Overall Length (mm)	d1	L1	d2	(mm)	Inner Ctn.	EDP No.
T10H× 75	2.72	3.02	7.5	4.5	10	635551
100	2.72	3.02	7.5	4.5	10	635552
T15H× 75	3.26	3.56	7.5	4.5	10	635553
100	3.26	3.56	7.5	4.5	10	635554
T20H× 75	3.84	4.14	7.5	5.0	10	635555
100	3.84	4.14	7.5	5.0	10	635556
T25H× 75	4.4	4.70	8.0	5.0	10	635557
100	4.4	4.70	8.0	5.0	10	635558

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### No. B44 Socket Bit

- Socket bit for Hex screws.

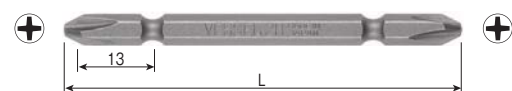


Size Tip×Overall Length (mm)	φD	Drilling holes depth	(mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F 5.5× 70	9	25		10	250	422371
100	9	25		10	250	422381
6× 70	10	25		10	200	422372
100	10	25		10	200	422382
7× 70	11	25		10	200	422373
100	11	25		10	150	422383
8× 70	13	25		10	200	422374
100	13	25		10	150	422384
10×100	16	25		10	100	422385



### No. B36 Double End Bit

- If one end breaks, the other end can be used.
- For assembly work focusing on workability.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕1× 70	H	10	100	423031
100	X	10	100	423036
100	H	10	100	423032
⊕2× 70	H	10	100	423041
100	H	10	100	423042
150	H	10	100	423043
200	H	10	100	423044





## No. B43 Double End Bit

- If one end breaks, the other end can be used.
- For assembly work focusing on workability.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1× 75	H	10	100	425032
⊕ 2× 50	X	10	100	425036
50	H	10	100	425037
50	E	10	100	425038
75	X	10	100	425039
75	H	10	100	425040
75	G	10	100	425041
75	E	10	100	425042
100	X	10	100	425046
100	H	10	100	425047
100	G	10	100	425043
100	E	10	100	425044
150	X	10	100	425048
150	H	10	100	425049
150	G	10	100	425045
200	G	10	100	425050
300	H	10	100	446373
⊕ 3× 75	H	10	100	425054
75	E	10	100	425055
100	H	10	100	425057
100	E	10	100	425058
150	H	10	100	446375

## No. M-B43 Double End Bit (Magnetized)

- If one end breaks, the other end can be used.
- For assembly work focusing on workability.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 75	H	10	100	446669
100	H	10	100	446672
150	H	10	100	446673

## No. B43P Double End Bit (Power tip)

- If one end breaks, the other end can be used.
- Well balanced combination between tip precision and strength.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 75	H	10	100	425171
100	H	10	100	425172

## No. B43H TAPPING Bit (High power tip)

- If one end breaks, the other end can be used.
- Reinforced tip for tapping work.



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 75	H	10	100	425151
100	H	10	100	425153
150	H	10	100	425155

## No. B43B TAPPING Bit (Black tip)

- If one end breaks, the other end can be used.
- Reinforced tip for tapping work.

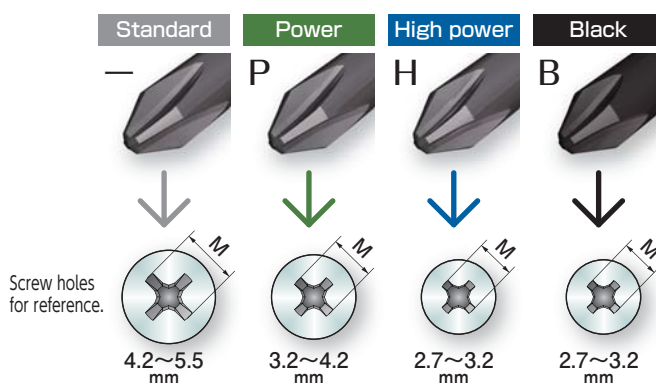
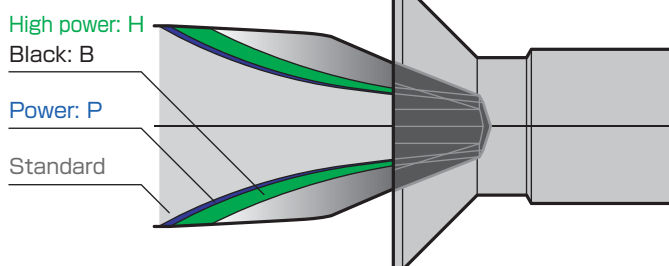


Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2× 50	S	10	100	425141
75	S	10	100	425142
100	S	10	100	425143
150	S	10	100	425144

## One point

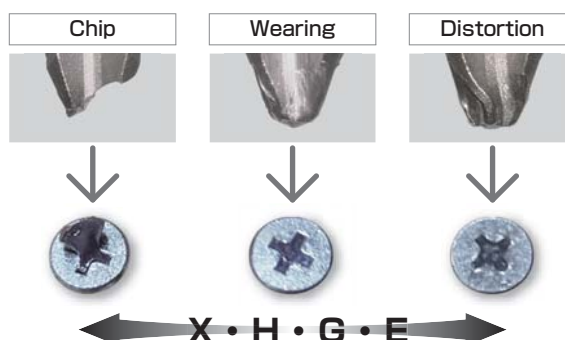
### Bit selection I

- Selecting Phillips tip suitable for screw head hole



\* M dimension : the size of a cross recess on a screw head viewed from directly above

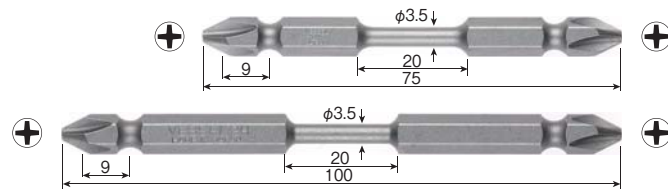
- Selecting Phillips tip according to hardness classification





## No. BT43 TORSION Bit

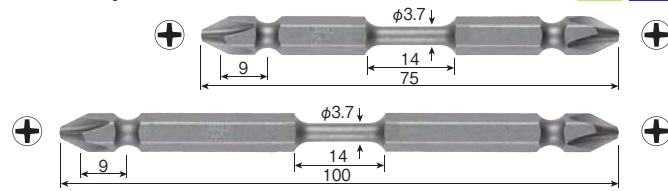
- If one end breaks, the other end can be used.
- For soft joint such as wood screws.



Size Tip x Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2x3.5x 75	H	10	100	425161
100	H	10	100	425162

## No. BT43P TORSION Bit (Power tip)

- If one end breaks, the other end can be used.
- For hard joint such as drill screws.

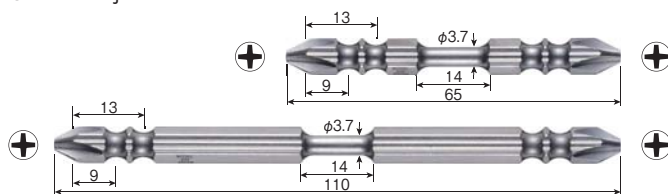


Size Tip x Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2x3.7x 75	X	10	100	425201
100	X	10	100	425202



## No. RS SUPER TORSION bit

- If one end breaks, the other end can be used.
- Compatible with both A and B type chucks.
- For hard joint such as drill screws.



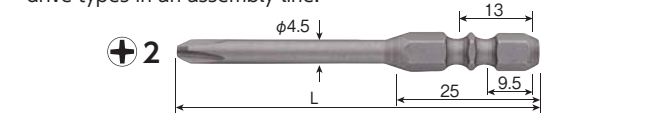
Model No.	Contents	Heat treatment classification	Package size (mm)	EDP No.
RS10P2065F	⊕ 2xφ3.7x 65 10pcs.	H	143x87x7	486948
RS10P2082F	⊕ 2xφ3.7x 82 10pcs.	H	143x87x7	486949
RS10P2110F	⊕ 2xφ3.7x110 10pcs.	H	162x87x7	486950

Inner Ctn.: 10 sets



## No. M-AB16 Recessed Bit (Magnetized)

- Compatible with both A and B type chucks.
- Useful when using multiple fastening tools with different drive types in an assembly line.

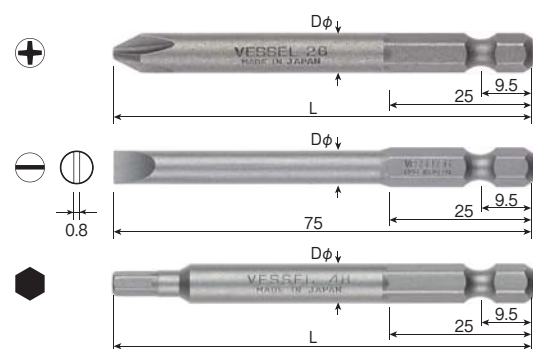


Size Tip x Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 2x4.5x 65	H	10	100	415301
100	H	10	100	415302
150	H	10	100	415303



## No. B35 Bit

- For assembly work focusing on workability.
- International standards compatible A/F 6.35mm(1/4")



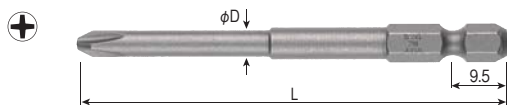
Size Tip x Overall Length (mm)	Heat treatment classification	φD	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1 x 50	H	7.0	10	100	424032
75	X	7.0	10	100	424034
75	H	7.0	10	100	424035
⊕ 1 x 4.5x100	H	4.5	10	100	424036
⊕ 2 x 50	X	7.0	10	100	424061
50	G	7.0	10	100	424040
75	X	7.0	10	100	424062
75	H	7.0	10	100	424047
75	G	7.0	10	100	424041
75	E	7.0	10	100	424042
100	H	7.0	10	100	424048
100	G	7.0	10	100	424043
100	E	7.0	10	100	424044
150	H	7.0	10	100	424049
150	G	7.0	10	100	424045
150	E	7.0	10	100	424046
⊕ 2 x 4.5x100	H	4.5	10	100	424038
⊕ 3 75	H	7.0	10	100	424050
75	E	7.0	10	100	424051
100	H	7.0	10	100	424052
100	E	7.0	10	100	424053
150	G	7.0	10	100	424054
⊖ 6 x 75	E	6.0	10	100	424075
⊖ 6.35 x 0.97t x 49 (1524)	H	6.35	10	100	487245
⊖ 7.9 x 1.17t x 49 (1526)	H	7.9	10	100	487255
H 2 x 75	H	7.0	10	100	424080
100	H	7.0	10	100	424081
H2.5 x 75	H	7.0	10	100	424082
100	H	7.0	10	100	424083
150	H	7.0	10	100	424093
H 3 x 75	H	7.0	10	100	424084
100	H	7.0	10	100	424085
150	H	7.0	10	100	424094
H 4 x 49 (21204)	H	4.6	10	100	487282
75	H	7.0	10	100	424086
100	H	7.0	10	100	424087
150	H	7.0	10	100	424095
H 5 x 49 (21205)	H	5.8	10	100	487283
75	G	7.0	10	100	424088
100	G	7.0	10	100	424089
150	G	7.0	10	100	424096
H 6 x 49 (21206)	H	—	10	100	487284
75	G	7.0	10	100	424090
100	G	7.0	10	100	424091
150	G	7.0	10	100	424097



H 6.35 mm

**No. B35 Bit**

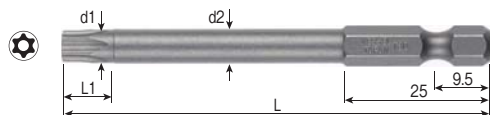
- For assembly work focusing on workability.
- International standards compatible A/F 6.35mm(1/4")




Size Tip×Overall Length	Heat treatment classification	φD	Inner Ctn.	Outer Ctn.	EDP No.
⊕00×1.2×20× 60	H	1.2	10	100	446126
1.58× 49 (10600)	H	1.58	10	100	446423
2×40×100	H	2.0	10	100	446141
⊕0 ×2×20× 60	H	2.0	10	100	446153
3.17× 49 (1060)	H	3.17	10	100	487195
⊕1 ×4.76× 89 (1081)	H	4.76	10	100	487202
⊕2 ×6×100 (4302/100)	H	6.0	10	100	489255
127 (4302/127)	H	6.0	10	100	446435
150 (4302/150)	H	6.0	10	100	489673
200 (4302/200)	H	6.0	10	100	446439
6.35× 49 (1062)	H	6.35	10	100	487205
70 (1072)	H	6.35	10	100	487206
89 (1082)	H	6.35	10	100	487207
152 (1092)	H	6.35	10	100	487208
⊕3 ×7.9× 49 (1063)	H	7.9	10	100	487210
89 (1083)	H	7.9	10	100	487212

**No. J TORX Bit (Tamper-Proof)**

- For TORX screws used in the automobile industry.
- With a round hole for tamper-proof.

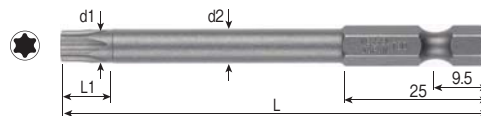



Size Tip×Overall Length	(mm)	mm		d1	L1	d2 (mm)	Inner Ctn.	EDP No.
T6H × 75		1.65	1.95	6.5	4.0	10		635283
100		1.65	1.95	6.5	4.0	10		635284
T8H × 75		2.3	2.60	7.0	4.5	10		635285
100		2.3	2.60	7.0	4.5	10		635286
T10H× 49 (T10610H)		2.72	3.02	7.5	3.96	10		446533
70 (T10710H)		2.72	3.02	7.5	3.96	10		446544
75		2.72	3.02	7.5	4.5	10		635251
100		2.72	3.02	7.5	4.5	10		635252
T15H× 75		3.26	3.56	7.5	4.5	10		635255
100		3.26	3.56	7.5	4.5	10		635256
T20H× 49 (T10620H)		3.84	4.14	7.5	4.37	10		446535
70 (T10720H)		3.84	4.14	7.5	4.37	10		446546
75		3.84	4.14	7.5	5.0	10		635261
100		3.84	4.14	7.5	5.0	10		635262
T25H× 75		4.4	4.70	8.0	5.0	10		635265
100		4.4	4.70	8.0	5.0	10		635266
T27H× 75		4.96	5.26	8.0	5.5	10		635271
100		4.96	5.26	8.0	5.5	10		635272
T30H× 75		5.49	5.79	8.5	6.0	10		635275
100		5.49	5.79	8.5	6.0	10		635276
T40H× 75		6.6	—	—	7.0	10		635281
100		6.6	—	—	7.0	10		635282

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**No. J TORX Bit**

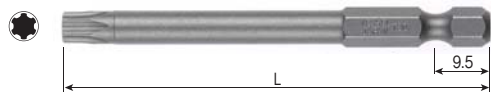

- For TORX screws used in the automobile industry.



Size Tip×Overall Length	(mm)		d1	L1	d2 (mm)	Inner Ctn.	EDP No.
T5 × 49 (T10605)	1.37	1.67	6.5	3.18	10	446486	
89 (T10805)	1.37	1.67	6.5	3.18	10	447356	
T6 × 75	1.65	1.95	6.5	4.0	10	635300	
100	1.65	1.95	6.5	4.0	10	635301	
152 (T10906)	1.65	1.95	6.5	3.18	10	447317	
T7 × 75	1.97	2.27	6.5	4.0	10	635303	
90 (T10807)	1.97	2.27	6.5	3.18	10	446509	
152 (T10907)	1.97	2.27	6.5	3.18	10	446519	
T8 × 70 (T10708)	2.3	2.6	7.0	3.18	10	446500	
75	2.3	2.6	7.0	4.5	10	635305	
100	2.3	2.6	7.0	4.5	10	635306	
T9 × 70 (T10709)	2.5	2.78	7.0	3.18	10	446501	
152 (T10909)	2.5	2.78	7.0	3.18	10	446521	
T10× 49 (T10610)	2.72	3.02	7.5	3.96	10	446491	
70 (T10710)	2.72	3.02	7.5	3.96	10	446502	
75	2.72	3.02	7.5	4.5	10	635310	
100	2.72	3.02	7.5	4.5	10	635311	
152 (T10910)	2.72	3.02	7.5	3.96	10	446522	
T15× 49 (T10615)	3.26	3.56	7.5	3.96	10	446492	
70 (T10715)	3.26	3.56	7.5	3.96	10	446503	
75	3.26	3.56	7.5	4.5	10	635315	
100	3.26	3.56	7.5	4.5	10	635316	
T20× 49 (T10620)	3.84	4.14	7.5	4.37	10	446493	
70 (T10720)	3.84	4.14	7.5	4.37	10	446504	
75	3.84	4.14	7.5	5.0	10	635320	
100	3.84	4.14	7.5	5.0	10	635321	
152 (T10920)	3.84	4.14	7.5	4.37	10	446524	
T25× 70 (T10725)	4.4	4.7	8.0	4.75	10	446505	
75	4.4	4.7	8.0	5.0	10	635325	
100	4.4	4.7	8.0	5.0	10	635326	
T27× 75	4.96	5.26	8.0	5.5	10	635330	
100	4.96	5.26	8.0	5.5	10	635331	
152 (T10927)	4.96	5.26	8.0	6.35	10	446526	
T30× 70 (T10730)	5.49	5.79	8.5	6.35	10	446507	
75	5.49	5.79	8.5	6.0	10	635335	
90 (T10830)	5.49	5.79	8.5	6.35	10	446517	
100	5.49	5.79	8.5	6.0	10	635336	
152 (T10930)	5.49	5.79	8.5	6.35	10	446527	
T40× 49 (T10640)	6.6	—	—	7.0	10	446497	
70 (T10740)	6.6	—	—	7.0	10	446508	
75	6.6	—	—	7.0	10	635340	
90 (T10840)	6.6	—	—	7.0	10	446518	
100	6.6	—	—	7.0	10	635341	
152 (T10940)	6.6	—	—	7.0	10	446528	
T45× 75	7.77	—	—	8.0	10	635345	
100	7.77	—	—	8.0	10	635346	

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**No. IP TORX Plus Bit**●For TORX Plus screws used for various assembly lines. 


Model code	Size Tip	mm	Overall Length (mm)	Inner Ctn.	EDP No.
IP10906	6IP	1.64	152	10	447251
IP10907	7IP	1.99	152	10	447252
IP10908	8IP	2.31	152	10	447253
IP10709	9IP	2.5	70	10	447236
IP10809	9IP	2.5	90	10	447243
IP10909	9IP	2.5	152	10	447226
IP10910	10IP	2.74	152	10	447254
IP10615	15IP	3.27	49	10	447230
IP10715	15IP	3.27	70	10	447237
IP10815	15IP	3.27	90	10	447245
IP10915	15IP	3.27	152	10	447255
IP10620	20IP	3.86	49	10	447231
IP10720	20IP	3.86	70	10	447238
IP10820	20IP	3.86	90	10	447246
IP10920	20IP	3.86	152	10	447256
IP10625	25IP	4.43	49	10	447232
IP10725	25IP	4.43	70	10	447239
IP10825	25IP	4.43	90	10	447247
IP10630	30IP	5.52	49	10	447234
IP10730	30IP	5.52	70	10	447241
IP10830	30IP	5.52	90	10	447249
IP10640	40IP	6.65	49	10	447235
IP10740	40IP	6.65	70	10	447242
IP10840	40IP	6.65	90	10	447250

**No. B35 SUPADRIV Bit**●For SUPADRIV screws. ●Special tip shape prevents cam-out. 


Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
SDV1× 75	H	10	100	636121
SDV2× 75	H	10	100	636122
100	H	10	100	636123
SDV3× 75	H	10	100	636130

**No. B35 POZIDRIV Bit**●For POZIDRIV screws. ●Special tip shape prevents cam-out. 

Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
PZ1×4.8×50	H	10	100	424101
PZ2×6.3×50	H	10	100	424102
PZ3×8.0×50	H	10	100	424103

**No. B39 Bit**●For assembly work focusing on workability. 

Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 1× 23	H	10	100	424131
⊕ 2× 23	H	10	100	424141
40	H	10	100	424143
100	H	10	100	424147

**No. B39 3-Flute Fastening Bit**●For fastening screws used in aircraft, special vehicles, etc. 


Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
TW1×40	H	10	100	424201
TW2×40	H	10	100	424202
TW3×40	H	10	100	424203
TW4×40	H	10	100	424204
TW5×40	H	10	100	424205

**No. X5000 Adapters**

●Hex socket adaptors.



Model code	SQ	Overall Length (mm)	Inner Ctn.	EDP No.
X5003	1/4"	76	10	487382
X5004	1/4"	102	10	487383
X5005	1/4"	152	10	487384
X5012	3/8"	43	10	487391
X5013	3/8"	76	10	487392
X5014	3/8"	102	10	487393
X5015	3/8"	152	10	487394

**No. A5 TORX Bit**●For TORX screws used in the automobile industry. 

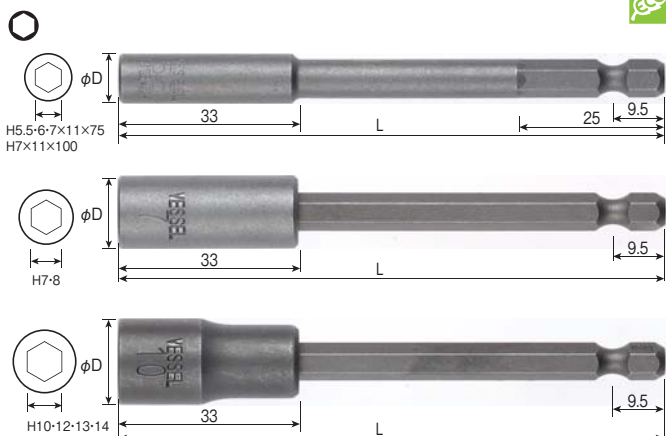
Size Tip	mm	Overall Length (mm)	Inner Ctn.	EDP No.
T30	5.49	32	10	635427
T40	6.6	32	10	635428
T45	7.77	32	10	635429
T50	8.79	32	10	635430

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## No. B45 Socket Bit

- Socket bit for Hex screws.

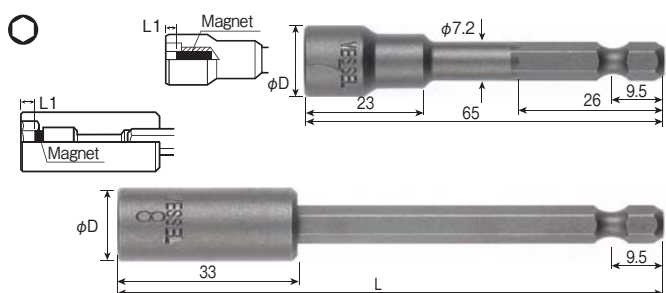


Size Tip×Overall Length (mm)	φD	Drilling holes depth	Inner Ctn. (mm)	Outer Ctn.	EDP No.
A/F 5.5× 75	9	25	10	250	424281
100	9	25	10	250	424380
6×100	10	25	10	200	424381
7×11× 75	11	25	10	200	424279
100	11	25	10	150	424280
7× 75 ☆	13.5	22	10	200	424283
100 ☆	13.5	22	10	150	424382
8× 75 ☆	13.5	22	10	200	424284
100 ☆	13.5	22	10	100	424383
150 ☆	13.5	22	10	100	424483
10× 75 ☆	16	22	10	150	424286
100 ☆	16	22	10	100	424384
150 ☆	16	22	10	100	424484
12×100 ☆	18	22	10	100	424385
13× 75 ☆	19	22	10	100	424288
100 ☆	19	22	10	100	424386
14×100 ☆	20	22	10	100	424387

☆...Adopts a patented axial press-fit shank technique

## No. MB45 Socket Bit (Press-Fit Magnet)

- Socket bit for Hex screws.
- Holds the screw with a strong magnet, to prevent the screws from dropping.

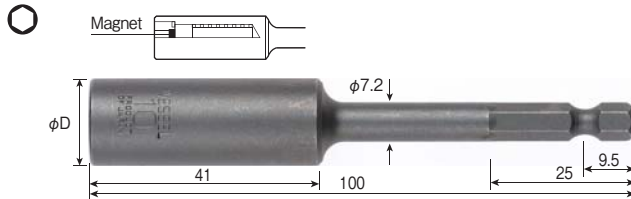


Size Tip×Overall Length (mm)	φD	L1	Inner Ctn. (mm)	Outer Ctn.	EDP No.
A/F 7× 65	13	2.5	10	200	482520
A/F 8× 65 ☆	13.5	3.17	10	150	482521
75 ☆	13.5	3.17	10	100	482523
100 ☆	13.5	3.17	10	100	482524
A/F 9.6× 65 ☆	15	3.96	10	150	482522
A/F 10× 75 ☆	16	3.96	10	100	482525
100 ☆	16	3.96	10	100	482526

☆...Adopts a patented axial press-fit shank technique

## No. MB45D Socket Bit (Sliding Magnet)

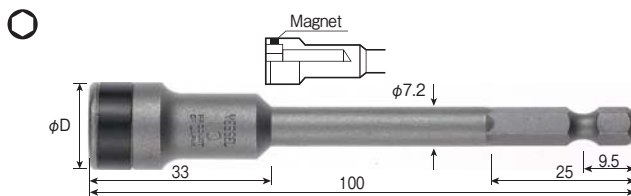
- Socket bit for Hex screw.
- Holds the screw with sliding magnet, to prevent the screws from dropping.



Size Tip×Overall Length (mm)	φD	Drilling holes depth	Inner Ctn. (mm)	Outer Ctn.	EDP No.
A/F 8×100	13	36	10	100	482516
A/F 10×100	16	36	10	100	482517

## No. MB45S Socket Bit (Side Magnet)

- Socket bit for Hex screw.
- Holds the screw with side magnet, to prevent the screws from dropping.

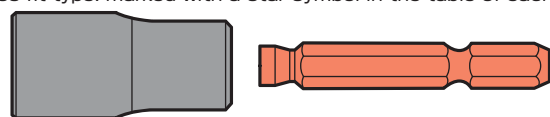


Size Tip×Overall Length (mm)	φD	Drilling holes depth	Inner Ctn. (mm)	Outer Ctn.	EDP No.
A/F 8×100	13	25	10	100	482406
A/F 10×100	16	25	10	100	482407

## One point

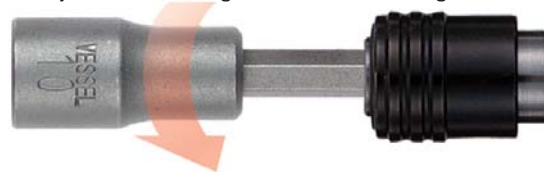
### Features of press-fit type sockets

(Press-fit type: marked with a star symbol in the table of each model)



MEDIUM HARDNESS  
Improves durability of socket

HIGH HARDNESS  
Strong resistance to shank breakage



The shank and socket have been heat-treated to the best hardness and press-fit together. The socket part is strong against wear and shank against twisting, resulting in higher durability.

### Prevents shank breakage

Torsion moment with a static torque

Normal type



75  
N·m

Press-fit type



107  
N·m



No. DS73

## Shockless Bit



### High Precision Bit Tips

Bits with 4mm and 5mm shafts for use with a wide variety of small, electric drivers.

Our strong, durable bits undergo actual work tests, damage tests, and repeated fatigue tests before delivery to the market.

In our quest for ever-greater reliability, we employ torque analysis and screw-engagement checks that result in ultra high precision bit tips.



**No. DS73**

### Shockless Bit

Combination of special alloy steel + zinc die cast.  
Less variation in inrush torque at seating, therefore tightening becomes consistent.  
Moreover, the tip durability is improved significantly.

HAND TOOLS

BITS & SOCKETS

ELECTRIC TOOLS

AIR TOOLS






STATIC SOLUTIONS

GASOLINE ENGINE TOOLS



# Applicable models

Please check the model No. of your drivers before determining which bit(s) to choose.

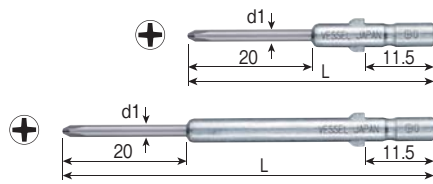
Shape	Model NO.	Page	Applicable models
			 Electric S/D (Precision type)
 H 5 mm	B34	78P	<b>VESSEL</b> VE-4000-4000P-4500-4500P  <b>Hios</b> PG-7000 BLG-5000BC1/-15/-20/-HT BLG-5000/-15/-20/HT BL-5000/-15/-20-5020-7000/-20 CL-4000-6000-6500-7000 SS-4000-6500-7000 α-4500-5000-6500 CD-4000-5000-6000-7000 VB-1510/-18-1820-3012-2008-3020 VZ-1510-1812-1820-3012-3007  <b>Delvo</b> DLV ○○○○-EJN/-DJN/-DJE DLV 7(8)120-SPC-7(8)130-SPC-7(8)140-SPC-7(8)241-SPC-7(8)231-SPC DLV 30LL(P)-SPC-30SL(P)-SPC-30HL(P)-SPC  <b>Hitachi Koki</b> WT 3G/3GP-4G/4GP-5G/5GP  <b>Kanon</b> 3K-120L-180L-180LF-120P-180P-180PF, 9K-130P-140P-130PF-131L-131LF-131P-131PF, 5KD-200-300  <b>Panasonic</b> FE-A310S-A310MH-A310L-A111L-A111MH-A111M-A710AXN-A710MHN
	N		
	B44		
 ϕ 4 mm	D71	76P	<b>Delvo</b> DLV ○○○○-BMN/-CMN/-EMN/-SB DLV 5820-5820H-5840 DLV 7410A-SPC-7410HA-SPC-7420A-SPC-7321-SPC-7331-SPC-7020-SPC-7030-SPC-7031-SPC-8020-SPC-8030-SPC-8031-SPC
	D72		
 ϕ 4 mm	DS73	75P	<b>VESSEL</b> VE-1500-1500EPA-2000-2000EPA-3000  <b>Hios</b> PG-3000-5000 BLG-4000BC1-5000BC1/-15/-20 BLG-4000-5000/-15/-20 BL-2000-3000-5000/-15/-20 CL-2000-3000-4000 SS-2000-3000-4000 α-4500-5000 CD-4000-5000 VB-1510/-18 VZ-1510  <b>Kanon</b> 3K-110L-110P 2KD-100-200-300
	D73	76P 77P	
 ϕ 5 mm	D76	77P	<b>Hios</b> CL-6000-6500-7000 SS-6500-7000 α-6500 CD-6000-7000



## No. DS73 Shockless Bit

PAT.

- Combination of special alloy steel and zinc die cast; Stable fastening torque and improved durability.
- Bit tip high-precision-machined to thread standards.

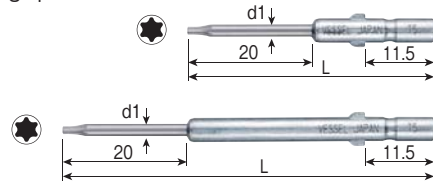


Size Tip×φ×Overall Length(mm)	d1	Inner Ctn. (mm)	Outer Ctn.	EDP No.
⊕ 00×1.5×40	1.5	10	100	483801
60	1.5	10	100	483802
⊕ 0 ×1.5×40	1.5	10	100	483809
60	1.5	10	100	483810
⊕ 0 ×1.7×40	1.7	10	100	483811
60	1.7	10	100	483812
⊕ 0 ×2.0×40	2.0	10	100	483813
60	2.0	10	100	483814

## No. DS73 Shockless Bit

PAT.

- Combination of special alloy steel and zinc die cast; Stable fastening torque and improved durability.
- Bit tip high-precision-machined to thread standards.



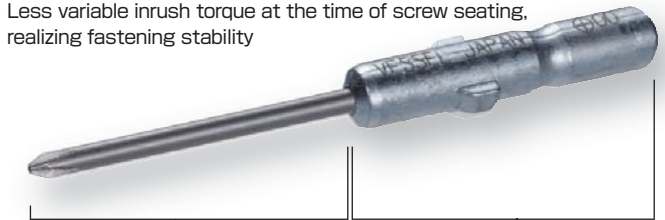
Size Tip×φ×Overall Length(mm)	mm	d1	Inner Ctn. (mm)	Outer Ctn.	EDP No.
T5 ×2.0× 40	1.37	2.0	10	100	483901
60	1.37	2.0	10	100	483902
T6 ×2.0× 40	1.65	2.0	10	100	483903
60	1.65	2.0	10	100	483904

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VESSEL has a manufacturing license in Japan and selling same to the world.

## One point

### Advantage of Shockless Bit

Shockless Bit have cushioning characteristics to absorb the impact occurred when a screw is fully seated.  
Less variable inrush torque at the time of screw seating, realizing fastening stability

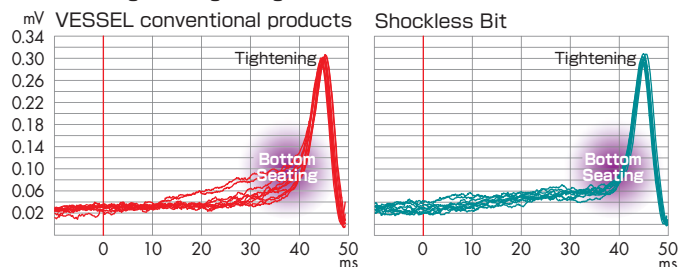


### ●Stable tightening torque

The combination of alloy steel and zinc creates a shockless effect and stabilizes the tightening torque.

#### [Measurement of tightening waveform]

The load during screw tightening is indicated as a waveform



### ●Break-resistant with improved durability

The shockless effect of the alloy steel and zinc combination greatly improves the durability of the tool tip.

#### [Driving durability test]

Number of tools which do not break when continuously screwed in by a screw tightening robot.

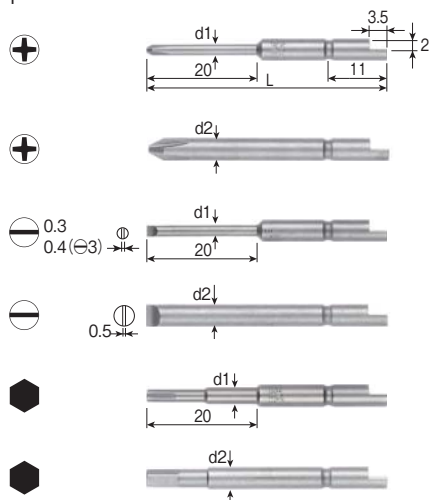


Cushion effect of combination of several materials enables the impact on the tip-end to be absorbed and makes the bit durable. This also leads to less damage on screw or workpieces as Shockless Bit is not merely hard but cushiony.

●  $\phi 4$  mm

## No. D71 Bit

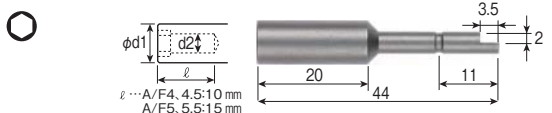
- With crescentic shank shape in cross section; for fastening precision small screws.
- Bit tip high-precision-machined to thread standards.



Size Tip×Overall Length (mm)	d1	d2	(mm)	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 00×1.5×44	1.5	—		10	100	482901
64	1.5	—		10	100	482902
⊕ 0 ×2 ×44	2.0	—		10	100	482911
64	2.0	—		10	100	482912
⊕ 0 ×2.5×44	2.5	—		10	100	482913
64	2.5	—		10	100	482914
⊕ 1 ×3 ×44	3.0	—		10	100	482921
64	3.0	—		10	100	482922
⊕ 1 ×4 ×44	—	4.0		10	100	482923
64	—	4.0		10	100	482924
⊕ 2 ×4 ×44	—	4.0		10	100	482931
64	—	4.0		10	100	482932
⊖ 2 ×0.3×44	2.0	—		10	200	482941
⊖ 2.5×0.3×44	2.5	—		10	200	482942
⊖ 3 ×0.4×44	3.0	—		10	200	482943
⊖ 4 ×0.5×44	—	4.0		10	200	482944
H 1.5×2 ×44	2.0	—		10	200	482951
H 2 ×3 ×44	3.0	—		10	200	482952
H 2.5×3 ×44	3.0	—		10	200	482953
H 3 ×4 ×44	—	4.0		10	200	482954

## No. D72 Socket Bit

- With crescentic shank shape in cross section; for fastening precision small screws.
- Bit tip high-precision-machined to thread standards.

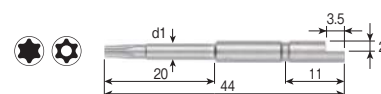



Size Tip×Overall Length (mm)	d1	d2	Inner Ctn. (mm)	Outer Ctn.	EDP No.
A/F 4 × 44	7	3	10	100	482961
A/F 4.5× 44	7	3	10	100	482962
A/F 5 × 44	8	4	10	100	482963
A/F 5.5× 44	8	4	10	100	482964

●  $\phi 4$  mm

## No. D71 TORX Bit

- With crescentic shank shape in cross section; for fastening small screws for such as computers, HDDs.
- Bit tip high-precision-machined to thread standards.



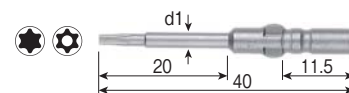
Size Tip×Overall Length (mm)	mm 	d1	Inner Ctn. (mm)	Outer Ctn.	EDP No.
T1 × 44	0.84	1.5	10	100	635601
T2 × 44	0.94	1.5	10	100	635602
T3 × 44	1.12	1.7	10	100	635603
T4 × 44	1.3	1.8	10	100	635604
T5 × 44	1.37	2.0	10	100	635605
T6 × 44	1.65	2.5	10	100	635606
T7 × 44	1.97	2.5	10	100	635607
T8 × 44	2.3	3.0	10	100	635608
T8H × 44 (ETX254)	2.3	4	10	200	446323
T9 × 44	2.48	3.0	10	100	635609
T10 × 44	2.72	3.0	10	100	635610
T15H × 44 (ETX259)	3.26	4	10	200	446328


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●  $\phi 4$  mm

## No. D73 TORX Bit

- For fastening small screws for HDDs, etc.
- Bit tip high-precision-machined to thread standards.



Size Tip×Overall Length (mm)	mm 	d1	Inner Ctn. (mm)	Outer Ctn.	EDP No.
T1 × 40	0.84	1.5	10	100	635621
T2 × 40	0.94	1.5	10	100	635621
T3 × 40	1.12	1.7	10	100	635623
T4 × 40	1.3	1.8	10	100	635624
T5 × 40 ※	1.37	2.0	10	100	635625
T5 ×2×20×40	1.37	2.0	10	100	446107
60	1.37	2.0	10	100	446108
60 ※	1.37	2.0	10	100	635695
T6 × 40 ※	1.65	2.5	10	100	635626
T6 ×2×20×40	1.65	2.0	10	100	446109
60	1.65	2.0	10	100	446110
60 ※	1.65	2.0	10	100	635696
T7 × 40	1.97	2.5	10	100	635627
T7 ×2×20×60	1.97	2.0	10	100	446113
T8 × 40	2.3	3.0	10	100	635628
T9 × 40	2.48	3.0	10	100	635629
T10× 40	2.72	3.0	10	100	635630
T10H ×4× 60	2.72	4.0	10	100	446119

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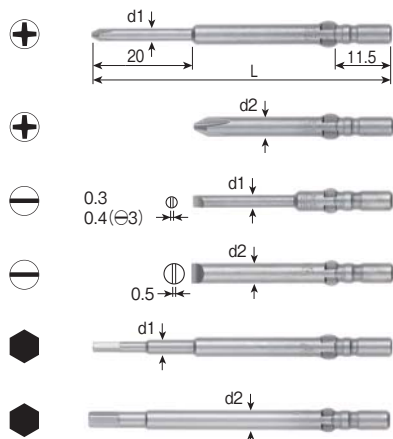
※Japanese specifications.





## No. D73 Bit

- For fastening precision small screws.
- Bit tip high-precision-machined to thread standards.



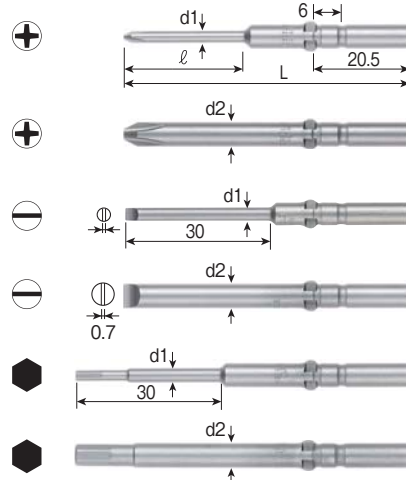
Size Tip×Overall Length (mm)	d1	d2 (mm)	Inner Ctn.	Outer Ctn.	EDP No.
⊕ 00 ×1.2×20×40	1.2	—	10	100	446001
⊕ 00 ×1.5 ×40	1.5	—	10	100	445981
40 ※	1.5	—	10	100	483001
60	1.5	—	10	100	445982
60 ※	1.5	—	10	100	483002
⊕ 00 ×1.7×20×40	1.7	—	10	100	446004
⊕ 00 ×2 ×40	2.0	—	10	100	445983
40 ※	2.0	—	10	100	483005
60	—	—	10	100	445984
60 ※	2.0	—	10	100	483006
⊕ 0 ×1.4×20×40	1.4	—	10	100	446016
60	1.4	—	10	100	446017
⊕ 0 ×1.5×20×40	1.5	—	10	100	446022
⊕ 0 ×1.7 ×40	1.7	—	10	100	483010
60	1.7	—	10	100	483011
⊕ 0 ×2.0×20×40	2.0	—	10	100	446025
60	2.0	—	10	100	446026
80	2.0	—	10	100	446027
100	2.0	—	10	100	446028
⊕ 0 ×2.0×30×60	2.0	—	10	100	446029
⊕ 0 ×2.5 ×40	2.5	—	10	100	483015
60	2.5	—	10	100	483016
⊕ 0 ×2.5×20×80	2.5	—	10	100	446033
100	2.5	—	10	100	446034
⊕ 1 ×2.5×20×40	2.5	—	10	100	446048
⊕ 1 ×3 ×40	3.0	—	10	100	483021
⊕ 1 ×3 ×20×60	3.0	—	10	100	446053
80	3.0	—	10	100	446054
100	3.0	—	10	100	446055
120	3.0	—	10	100	483376
⊕ 1 ×4 ×40	—	4.0	10	100	483025
60	—	4.0	10	100	446059
⊕ 2 ×4 ×40	—	4.0	10	100	483031
60	—	4.0	10	100	446070
80	—	4.0	10	100	446071
100	—	4.0	10	100	446072
120	—	4.0	10	100	446073
⊖ 2 ×0.3 ×40	2.0	—	10	100	483041
⊖ 2.5×0.3 ×40	2.5	—	10	100	483042
⊖ 3 ×0.4 ×40	3.0	—	10	100	483043
⊖ 4 ×0.5 ×40	—	4.0	10	100	483044
H 1.5×2 ×60	2.0	—	10	100	483051
H 2 ×3 ×60	3.0	—	10	100	483052
H 2.5×3 ×60	3.0	—	10	100	483053
H 3 ×4 ×60	—	4.0	10	100	483054

※Japanese specifications.



## No. D76 Bit

- For fastening various small screws and tapping screws for sheet metals.
- Bit tip high-precision-machined to thread standards.

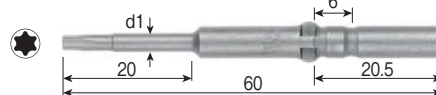




Size Tip×Overall Length (mm)	ℓ	d1	d2	Inner Ctn. (mm)	Outer Ctn.	EDP No.
⊕ 00×2 ×60	20	2.0	—	10	100	446241
60※	20	2.0	—	10	100	483105
⊕ 0 ×2.5 ×60	25	2.5	—	10	100	483115
⊕ 1 ×3 ×60	30	3.0	—	10	100	483121
⊕ 1×3×30×80	30	3.0	—	10	100	446267
⊕ 1 ×5 ×60	—	—	5.0	10	100	483125
⊕ 2 ×5 ×60	—	—	5.0	10	100	483131
80	—	—	5.0	10	100	446279
100	—	—	5.0	10	100	446280
120	—	—	5.0	10	100	446281
150	—	—	5.0	10	100	446282
⊖ 3 ×0.4 ×60	—	3.0	—	10	100	483141
⊖ 4 ×0.6 ×60	—	4.0	—	10	100	483142
⊖ 5 ×0.7 ×60	—	—	5.0	10	100	483143
H 2 ×3 ×70	—	3.0	—	10	100	483151
H 2.5×3 ×70	—	3.0	—	10	100	483152
H 3 ×4 ×70	—	4.0	—	10	100	483153
H 4 ×5 ×70	—	—	5.0	10	100	483154

\*Japanese specifications.

**No. D76 TORX Bit**

- For fastening small screws for HDDs, etc.
- Bit tip high-precision-machined to thread standards.



Size Tip×Overall Length (mm)	mm 	d1	Inner Ctn.	Outer Ctn.	EDP No.
<b>T5 × 60</b>	1.37	2.0	10	100	635651
<b>T6 × 60</b>	1.65	2.5	10	100	635652
<b>T7 × 60</b>	 1.97	2.5	10	100	635653
<b>T8 × 60</b>	2.3	3.0	10	100	635654
<b>T9 × 60</b>	2.48	3.0	10	100	635655
<b>T10× 60</b>	2.72	3.0	10	100	635656
<b>T15× 60</b>	3.26	4.0	10	100	635657
<b>T20× 60</b>	3.84	—	10	100	635658
<b>T25× 60</b>	4.4	—	10	100	635659

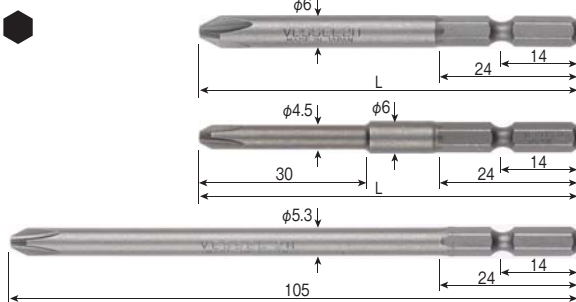
▲For the date of delivery, consult Vessel.

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## No. B34 Bit

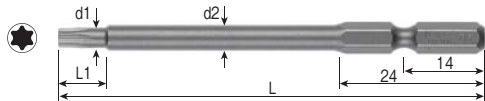
- For fastening various small screws and tapping screws for sheet metals.
- Bit tip high-precision-machined to thread standards.




Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕1×70	H	10	100	422031
100	H	10	100	422032
150	H	10	100	422033
⊕1×4×70	H	10	100	422048
⊕1×5.3×105	H	10	100	422034
120	X	10	100	422040
120	H	10	100	422035
⊕2×70	H	10	100	422041
100	H	10	100	422042
120	H	10	100	422045
150	H	10	100	422043
200	H	10	100	422044
⊕2×3×30×75	H	10	100	446340
⊕2×4.5×70	H	10	100	422049
⊕2×5.3×105	H	10	100	422046
120	H	10	100	422047
H 2×70	H	10	100	422071
H 2.5×70	H	10	100	422072
H 3×70	H	10	100	422073
H 4×70	H	10	100	422074
H 5×70	H	10	100	422075

## No. N TORX Bit

- For fastening small screws for HDDs, etc.
- Bit tip high-precision-machined to thread standards.



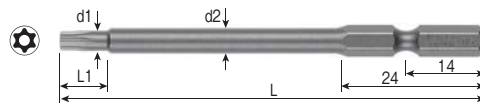
Size Tip×Overall Length (mm)		d1	L1	d2	Inner Ctn.	EDP No.
<b>T5 × 75</b>	1.37	1.67	6.5	4.0	10	635498
<b>100 ▲</b>	1.37	1.67	6.5	4.0	10	635499
<b>T6 × 75</b>	1.65	1.95	6.5	4.0	10	635500
<b>100</b>	1.65	1.95	6.5	4.0	10	635501
<b>T8 × 75</b>	2.3	2.60	7.0	4.5	10	635505
<b>100</b>	2.3	2.60	7.0	4.5	10	635506
<b>T10× 75</b>	2.72	3.02	7.5	4.5	10	635510
<b>100</b>	2.72	3.02	7.5	4.5	10	635511
<b>T15× 75</b>	3.26	3.56	7.5	4.5	10	635515
<b>100</b>	3.26	3.56	7.5	4.5	10	635516
<b>T20× 75</b>	3.84	4.14	7.5	5.0	10	635520
<b>100</b>	3.84	4.14	7.5	5.0	10	635521
<b>T25× 75</b>	4.4	4.70	8.0	5.0	10	635525
<b>100</b>	4.4	4.70	8.0	5.0	10	635526
<b>T27× 75</b>	4.96	5.26	8.0	5.5	10	635530
<b>100</b>	4.96	5.26	8.0	5.5	10	635531


▲ For the date of delivery, consult Vessel.

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## No. N TORX Bit (Tamper-Proof)

- For fastening small screws for HDDs, etc.
- Bit tip high-precision-machined to thread standards.
- With a round hole for tamper-proof.

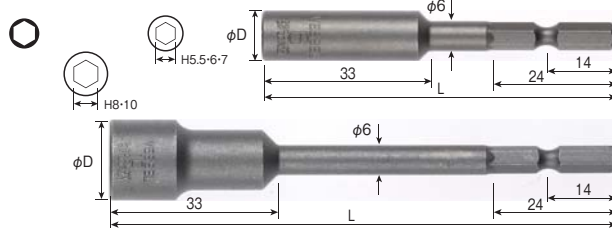


Size Tip×Overall Length (mm)		d1	L1	d2	Inner Ctn.	EDP No.	
T10H× 75		2.72	3.02	7.5	4.5	10	635551
100		2.72	3.02	7.5	4.5	10	635552
T15H× 75		3.26	3.56	7.5	4.5	10	635553
100		3.26	3.56	7.5	4.5	10	635554
T20H× 75		3.84	4.14	7.5	5.0	10	635555
100		3.84	4.14	7.5	5.0	10	635556
T25H× 75		4.4	4.70	8.0	5.0	10	635557
100		4.4	4.70	8.0	5.0	10	635558

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## No. B44 Socket bit

- For fastening screws for electric appliances and hex head tapping screws.

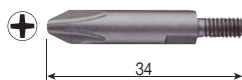


Size Tip×Overall Length (mm)	φD	Drilling holes depth	Inner Ctn.	Outer Ctn.	EDP No.
A/F 5.5× 70	9	25	10	250	422371
100	9	25	10	250	422381
6× 70	10	25	10	200	422372
100	10	25	10	200	422382
7× 70	11	25	10	200	422373
100	11	25	10	150	422383
8× 70	13	25	10	200	422374
100	13	25	10	150	422384
10×100	16	25	10	100	422385

## M4/M5/M6

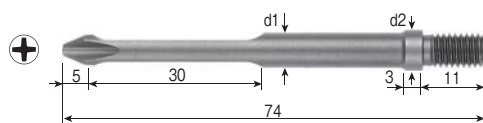
Other bits for screw fastening robots than the following can be custom-made. Please contact VESSEL with detailed information, listed in the right "One point" column.

### No. 3491/34,3492/34 Screw Shank Driver Bit



Model No.	Size Tip×Overall Length (mm)	M	Inner Ctn.	Outer Ctn.	EDP No.
3491/34	⌀1×34-M4	M4	10	100	489656
3492/34	⌀2×34-M4	M4	10	100	489657

### No. D61 Bits for screw fastening robots (Semi-standardized items)



Size Tip×Overall Length (mm)	d1	d2	Inner Ctn. (mm)	Outer Ctn.	EDP No.
⌀2×74-M5 P0.8	5.0	6.0	10	100	483301
⌀2×74-M6 P1.0	6.0	7.0	10	100	483302

### No. D62 Bits for screw fastening robots (Semi-standardized items)



Size Tip×Overall Length (mm)	d1	d2	Inner Ctn. (mm)	Outer Ctn.	EDP No.
⌀2×100-M6 P1.0	6.0	—	10	100	483303

## One point

### Custom-Made Bits

If you cannot find an appropriate bit among our standard line-up, VESSEL can also produce specially designed bits for your application.



**Bits for automated assembly lines**  
High-precision processing is required for bits to be installed in automatic assembly machines, which operate in micro-level accuracy. VESSEL has technology and know-how for such precision bits as one of the biggest bit manufacturers in the world.



**Order-made bit database**  
All the previous orders are recorded and organized by computer system.



**Laser marking**  
Necessary information can be directly laser-marked on bits, which brings further efficiency to your inventory management.



**Innovative material and surface treatment**  
We choose most suitable materials and surface treatment methods for each different application, for example, high-endurance bits made of corrosion-resistant stainless steel and high-speed steel, etc.

### ●How to request for customized bits for automated machinery

<b>Type of screw drive</b> 		
<b>Type and size of screw drive</b> 	<b>Hardness</b> To be specified/ To be based on VESSEL standards	<b>Sample screw</b> Available/ Not available
<b>Surface treatment</b> Black oxide finish Shot blasting	<b>Official drawing</b> Available/ Not available	<b>Quantity</b> Available/ Not available

### ●Outline for made-to-order bit

<b>Arrangement</b>	We receive a minimum order of 10 pieces including test samples. Since the more the number of bits ordered, the less the unit cost becomes, we recommend you to make a bulk purchase for production.
<b>Delivery deadline</b>	Normally, we ship products within 21 work days after receiving your order. Regarding bits for Torx and automatic machine (screw thread cutting), we try to ship products within 25 work days after receiving your order.

\*For some types of bits, more time may be needed to machine specific dies and jigs.  
\*For delivery deadline, we will inform you each time.





## No. HA Bit Holder

- Holds a bit with C-pin. ● Cutting chips do not attach to the bit.

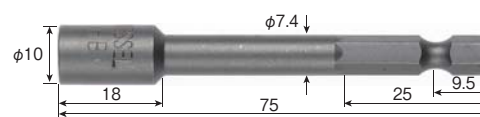


Size Tip×Overall Length (mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F 6.3× 75	—	10 100	482410



## No. HB Bit Holder

- Holds a bit with C-pin. ● Cutting chips do not attach to the bit.



Size Tip×Overall Length (mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F 6.3× 75	—	10 100	482420

## No. HAM Bit Holder

- Holds the bit with a strong magnetic force.



Size Tip×Overall Length (mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F 6.3× 75	—	10 100	482415

## No. HBM Bit Holder

- Holds the bit with a strong magnetic force.



Size Tip×Overall Length (mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F 6.3× 75	—	10 100	482425

## No. HD-71×45 Bit Holder

- By attaching a crescentic shank shape precision bit, it can be used with compact electric screwdrivers.



Size Overall Length (mm)	Inner Ctn.	Outer Ctn.	EDP No.
45	—	10 100	482429

※Bit is not included.

# One point

Precision bits can be installed to electric screwdrivers.

D71 / D72 (4mm) bits can be inserted.

## No. HD-71×45

(6.35mm)

## No. DBHM Double Bit Holder

- Popular bit holders.



Model No.	D	L (mm)	Inner Ctn.	Outer Ctn.	EDP No.
DBHM-01	11.1	60	10	100	482433

## No. DBHM Double Bit Holder

- Popular bit holders.



Model No.	D	L (mm)	Inner Ctn.	Outer Ctn.	EDP No.
DBHM-02	14.4	62	10	100	482434

**No. MMBC-J Magnet Screw Catcher**

●Micro magnet vis catchers.



Size Tip×Overall Length (mm)	Tip size	L	Inner Ctn.	Outer Ctn.	EDP No.
<b>T10× 49</b>	T10	49	10	10	447111
<b>70</b>	T10	70	10	10	447112
<b>T15× 49</b>	T15	49	10	10	447115
<b>70</b>	T15	70	10	10	447116
<b>T20× 49</b>	T20	49	10	10	447113
<b>75</b>	T20	75	10	10	447101
<b>150</b>	T20	150	10	10	447109
<b>T25× 49</b>	T25	49	10	10	447117
<b>70</b>	T25	70	10	10	447118

H 6.35 mm

**No. MMBC Magnet Screw Catcher**

●Micro magnet vis catchers.



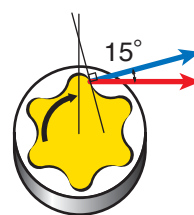
Size Tip×Overall Length (mm)	Tip size	L	Inner Ctn.	Outer Ctn.	EDP No.
<b>T10× 33</b>	T10	33	10	10	447104
<b>T15× 33</b>	T15	33	10	10	447102
<b>T20× 33</b>	T20	33	10	10	447103
<b>T25× 33</b>	T25	33	10	10	447110
<b>PH1× 33</b>	PH1	33	10	10	447105
<b>PH2× 33</b>	PH2	33	10	10	447106
<b>PZ1× 33</b>	PZ1	33	10	10	447107
<b>PZ2× 33</b>	PZ2	33	10	10	447108

**Replacement Bits For MMBC Series**

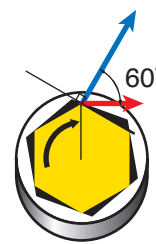
Size Tip×Overall Length (mm)		Inner Ctn.	Outer Ctn.	EDP No.
<b>T10× 33</b>	bit only, for MMBC	10	10	447329
<b>T15× 33</b>	bit only, for MMBC	10	10	447330
<b>T20× 33</b>	bit only, for MMBC	10	10	447331
<b>T25× 33</b>	bit only, for MMBC	10	10	447332
<b>PH1× 33</b>	bit only, for MMBC	10	10	447333
<b>PH2× 33</b>	bit only, for MMBC	10	10	447334
<b>PZ1× 33</b>	bit only, for MMBC	10	10	447335
<b>PZ2× 33</b>	bit only, for MMBC	10	10	447336
<b>T10× 49</b>	bit only, for MMBC	10	10	447337
<b>T10× 70</b>	bit only, for MMBC	10	10	447338
<b>T20× 49</b>	bit only, for MMBC	10	10	447339
<b>T20× 75</b>	bit only, for MMBC	10	10	447340
<b>T20×150</b>	bit only, for MMBC	10	10	447341

**One point****Features of TORX Bits**

TORX has 6-lobe shaped curves. Compared to hexagonal shape driver, TORX has higher drive effectiveness and transfers torque smoothly and accurately while eliminating "CAM-OUT".

**TORX**

TORX transfers max torque due to small driving angle.

**Hex**

Meanwhile, Hex square drive need max upload torque to transfer for large driving angle to other directions.

Driving Torque  
Loading Torque

**TAMPER-PROOF TORX SYSTEM**

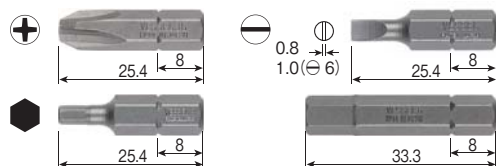
Added function of "Never Touch Screw" a post in the middle of the recess for maximum security eliminates regular TORX drive or any other flat screwdrivers for safety. Tamper proof screws are mostly used at communication equipment and computers so as not to abuse the screwing/unscrewing due to its design and control of function. Keep off unscrewing unless otherwise maintenance serving practiced.

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H 6.35 mm

## No. B33 Short Bit (For Bit Holder)

● Can be used by attaching to a bit holder.

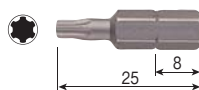


Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕1 × 25.4	H	10	100	421231
⊕2 × 25.4	H	10	100	421241
⊕3 × 25.4	G	10	100	421242
⊖4 × 25.4	G	10	100	421251
⊖6 × 25.4	G	10	100	421252
H 2 × 25.4	H	10	100	421260
H 2.5 × 25.4	H	10	100	421261
H 3 × 25.4	H	10	100	421262
H 4 × 33.3	H	10	100	421263
H 5 × 33.3	H	10	100	421264
H 6 × 33.3	H	10	100	421265

Model No.	Contents	Set content	Inner Ctn.	Outer Ctn.	EDP No.
B33 Driver Bit Set	1 for each	⊕1, ⊕2, ⊕3, ⊖4, ⊖6×25.4 with holder	1	10	421270
B33 Hex. Bit Set	1 for each	H 2, 2.5, 3×25.4 H 4, 5, 6×33.3 with holder	1	10	421271

## No. IP TORX Plus Bit

● Can be used by attaching to a bit holder.

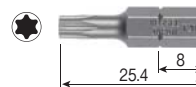


Size Tip No.	mm	Overall Length (mm)	Inner Ctn.	EDP No.
15IP	3.26	25	10	447204
20IP	3.84	25	10	447205
25IP	4.4	25	10	447206
30IP	5.49	25	10	447207
40IP	6.6	25	10	447208

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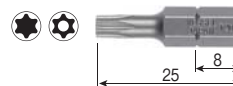
## No. A4 TORX Bit

● Can be used by attaching to a bit holder.



Size Tip No.	mm	Overall Length (mm)	Inner Ctn.	EDP No.
T6	1.65	25.4	10	635400
T8	2.3	25.4	10	635401
T10	2.72	25.4	10	635402
T15	3.26	25.4	10	635403
T20	3.84	25.4	10	635404
T25	4.4	25.4	10	635405
T27	4.96	25.4	10	635406
T30	5.49	25.4	10	635407
T40	6.6	25.4	10	635408

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Model No.	Size	mm	Overall Length (mm)	Inner Ctn.	EDP No.
T3/25	T3	1.12	25	10	489154
T5/25	T5	1.37	25	10	489155
T7/25	T7	1.99	25	10	489157
TF08/25	T8H	2.31	25	10	446392

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# One point

## Bit Holder



Short bits can be used in various power tools.  
Throw-away method in which a bit can be replaced without being removed from the power tool.



**H 6.35 mm**

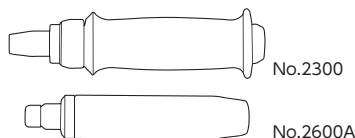
## No. C50 Impact Driver Bit



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	EDP No.
⊕1× 125	G	10	431301
⊕2× 125	G	10	431302
⊕3× 125	G	10	431303
⊖5× 125	G	10	431311
⊖6× 125	G	10	431312
⊖7× 125	G	10	431313

Applicable models

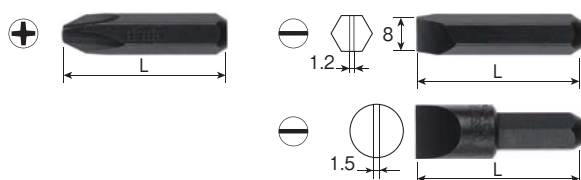
No.2300  
No.2600A  
No.230001  
No.260002



Model No.	Contents	Set content	Inner Ctn.	EDP No.
2300• 2600A Bit Set	1 for each	C50 ⊕1, ⊕2, ⊕3, ⊖5, ⊖6, ⊖7×125mm	1	431701

**H 8 mm**

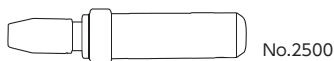
## No. C51 Impact Driver Bit



Size Tip×Overall Length (mm)	Heat treatment classification	Inner Ctn.	Outer Ctn.	EDP No.
⊕2× 36	G	10	250	431041
80	G	10	250	431042
⊕3× 36	E	10	250	431051
80	E	10	250	431052
⊕4× 36	E	10	250	431061
⊖8× 36	E	10	250	431171
80	E	10	250	431172
⊖10× 36	E	10	250	431271
80	E	10	200	431272
⊖12× 36	E	10	200	431273

Applicable models

No.2500  
No.240001  
No.250001



Model No.	Contents	Set content	Inner Ctn.	Outer Ctn.	EDP No.
2500 Bit Set	1 for each	C51 ⊕2, ⊕3, ⊕4, ⊖10×36mm	1	50	431801

**9.5 mm Attachment for Impact Driver**

## No. S6 TORX Socket

●SQ9.5mm TORX sockets for impact wrenches



Size Tip×Overall Length (mm)	mm	d1 (mm)	EDP No.
T30× 75	▲	5.49 5.79	— 635681
T40× 75	▲	6.6 6.9	— 635682
T45× 75	▲	7.77 8.0	— 635683
T50× 75	▲	8.79 10.0	— 635684

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**12.7 mm Attachment for Impact Driver**

## No. S8 TORX Socket

●SQ12.7mm TORX sockets for impact wrenches.



Size Tip×Overall Length (mm)	mm	d1 (mm)	EDP No.
T40× 75	▲	6.6 6.9	— 635691
T45× 75	▲	7.77 8.0	— 635692
T50× 75	▲	8.79 9.09	— 635693

▲For the date of delivery, consult Vessel.  
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