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.

Applicable models

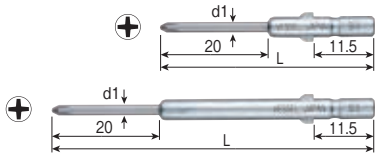
Please check the model No. of your drivers before determining which bit(s) to choose.

Shape	Model NO.	Page	Applicable models Electric S/D (Precision type)
 H 5 mm	B34	84P	VESSEL VE-4000・4000P・4500・4500P Hios 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 Delvo 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 Hitachi Koki WT 3G/3GP・4G/4GP・5G/5GP Kanon 3K-120L・180L・180LF・120P・180P・180PF, 9K-130P・140P・130PF・131L・131LF・131P・131PF, 5KD-200・300 Panasonic FE-A310S・A310MH・A310L・A111L・A111MH・A111M・A710AXN・A710MHN
	N	85P	
	B44	85P	
 ϕ 4 mm	D71	82P	Delvo 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	81P	VESSEL VE-1500・1500EPA・2000・2000EPA・3000 Hios 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 Kanon 3K-110L・110P 2KD-100・200・300
	D73	83P	
 ϕ 5 mm	D76	84P	Hios CL-6000・6500・7000 SS-6500・7000 α-6500 CD-6000・7000

φ 4 mm

No. DS73 Shockless Bit PAT.

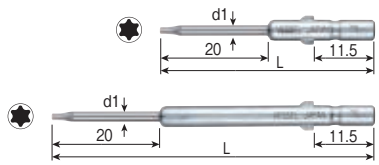
- Combination of special alloy steel and zinc die cast; Stable fastening torque and improved durability.
- Bit tip high-precision-machined to thread standards.



Model No.	(mm) d1	(mm)	Inner Ctn.	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.



Model No.	(mm)	mm	d1	(mm)	Inner Ctn.	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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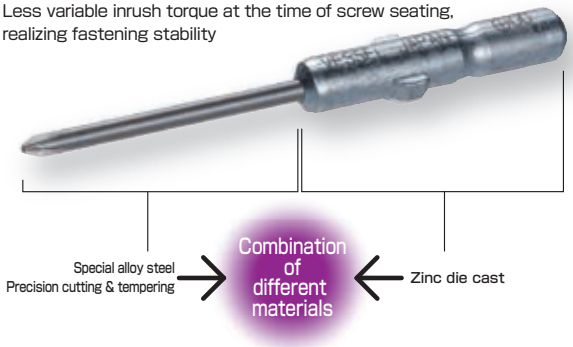
One point

Advantage of Shockless Bit

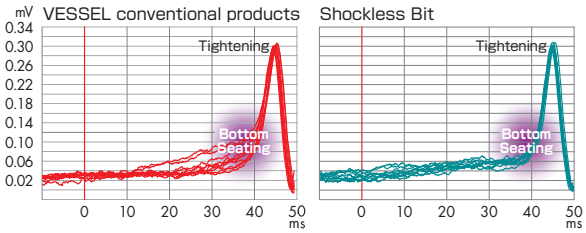
Shockless Bit have cushioning characteristics to absorb the impact occurred when a screw is fully seated.
Less variable inrush torque at the time of screw seating, realizing fastening stability



●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.

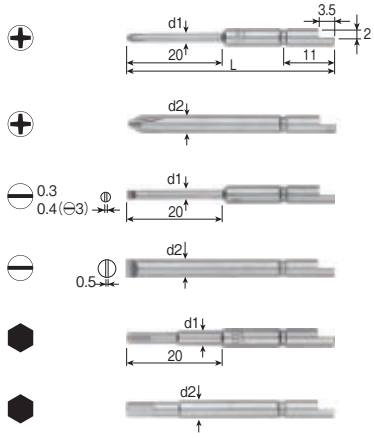
【Driving durability test】
Number of tools which do not break when continuously screwed in by a screw tightening robot.

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.

ϕ 4 mm

No. D71 Bit

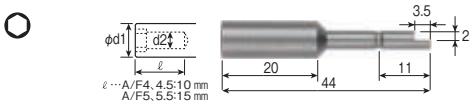
- With crescentic shank shape in cross section; for fastening precision small screws.
- Bit tip high-precision-machined to thread standards.



	Model No. (mm)	d1	d2	Inner Ctn.	Outer Ctn.	EDP No.
	⊕00×1.5× 44	1.5	—	10	100	482901
	64	1.5	—	10	100	482902
★	⊕00×2 × 64 (EPH204)	2.0	2.0	10	—	446293
★	⊕00×2.5× 44 (EPH205)	2.5	2.0	10	—	446294
	⊕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.

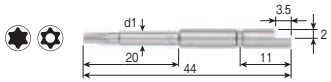


Model No. (mm)	d1	d2	Inner Ctn.	Outer Ctn.	EDP No.
A/F 4 ×44	7	3	10	100	482961
A/F 4.5× 44	7	3	10	100	482962
A/F 5 ×44	8	4	10	100	482963
A/F 5.5× 44	8	4	10	100	482964

ϕ 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.



Model No. (mm)	mm	d1 (mm)	Inner Ctn.	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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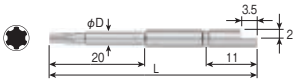
No. D71 TORX Plus Bits

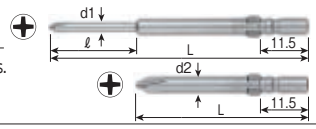
- The earlobe-shaped protrusions on the tip-end provide longer lifetime because they are designed to have the largest fitting area between the bit (which is designed to have large cross-sectional area) and the screw head recess, so as to disperse the stress while tightening.



Model No. (mm)	IP	ϕD	ℓ	L (mm)	Inner Ctn.	EDP No.
2IP × 44	2IP	1.5	20	44	10	447428
2IP × 64	2IP	1.5	20	64	10	447412
3IP × 44	3IP	1.7	20	44	10	447429
3IP × 64	3IP	1.7	20	64	10	447413

ϕ 4 mm

No. D73 Bit



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

Model No.	Tip	ℓ	d1	d2	L (mm)	Inner Ctn.	Outer Ctn.	EDP No.
⊕00×1.2×20×40	00	20	1.2	—	40	10	100	446001
⊕00×1.5×40	00	20	1.5	—	40	10	100	445981*(483001)
⊕00×1.5×60	00	20	1.5	—	60	10	100	445982*(483002)
⊕00×1.5×80	00	20	1.5	—	80	10	100	483003
⊕00×1.7×20×40	00	20	1.7	—	40	10	100	446004
⊕00×2×40	00	20	2	—	40	10	100	445983*(483005)
⊕00×2×60	00	20	2	—	60	10	100	445984*(483006)
⊕0×1.2×20×40	0	20	1.2	—	40	10	100	483007
⊕0×1.4×20×40	0	20	1.4	—	40	10	100	446016
⊕0×1.4×20×60	0	20	1.4	—	60	10	100	446017
⊕0×1.4×20×80	0	20	1.4	—	80	10	100	483008
⊕0×1.5×20×40	0	20	1.5	—	40	10	100	446022
⊕0×1.5×20×60	0	20	1.5	—	60	10	100	446076
⊕0×1.7×40	0	20	1.7	—	40	10	100	483010
⊕0×1.7×60	0	20	1.7	—	60	10	100	445986*(483011)
⊕0×1.7×80	0	20	1.7	—	80	10	100	483012
⊕0×1.8×60	0	20	1.8	—	60	10	100	483013
⊕0×2×20×40	0	20	2	—	40	10	100	446025
⊕0×2×20×60	0	20	2	—	60	10	100	446026
⊕0×2×30×60	0	30	2	—	60	10	100	446029
⊕0×2×20×80	0	20	2	—	80	10	100	446027
⊕0×2×20×100	0	20	2	—	100	10	100	446028
⊕0×2×120	0	20	2	—	120	10	100	483014
⊕0×2.5×40	0	20	2.5	—	40	10	100	483015
⊕0×2.5×60	0	20	2.5	—	60	10	100	483016
⊕0×2.5×20×80	0	20	2.5	—	80	10	100	446033
⊕0×2.5×20×100	0	20	2.5	—	100	10	100	446034
⊕0×2.5×120	0	20	2.5	—	120	10	100	483017
⊕1×2.5×20×40	1	20	2.5	—	40	10	100	446048
⊕1×3×40	1	20	3	—	40	10	100	483021
⊕1×3×20×60	1	20	3	—	60	10	100	446053
⊕1×3×20×80	1	20	3	—	80	10	100	446054
⊕1×3×20×100	1	20	3	—	100	10	100	446055
⊕1×3×20×120	1	20	3	—	120	10	100	483376
⊕1×4×40	1	—	—	4	40	10	100	483025
⊕1×4×60	1	—	—	4	60	10	100	446059
⊕1×4×80	1	—	—	4	80	10	100	483026
⊕1×4×100	1	—	—	4	100	10	100	483027
⊕1×4×120	1	—	—	4	120	10	100	483028
⊕1×4×150	1	—	—	4	150	10	100	483029
⊕1×4×180	1	—	—	4	180	10	100	483030
⊕1×4×200	1	—	—	4	200	10	100	483032
⊕2×4×40	2	—	—	4	40	10	100	483031
⊕2×4×60	2	—	—	4	60	10	100	446070
⊕2×4×80	2	—	—	4	80	10	100	446071
⊕2×4×100	2	—	—	4	100	10	100	446072
⊕2×4×120	2	—	—	4	120	10	100	446073
⊕2×4×150	2	—	—	4	150	10	100	483033

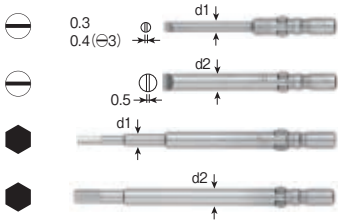
EDP number with mark * will be shifted to the other number in parenthesis.

Socket Bit

Model No. (mm)	Size	ϕD	L (mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F2.3×40	A/F 2.3	6	40	10	100	483921
A/F2.5×40	A/F 2.5	6	40	10	100	483922
A/F3×40	A/F 3	6	40	10	100	483923
A/F4×60	A/F 4	7	60	10	100	483924
A/F4.5×60	A/F 4.5	7	60	10	100	483925
A/F5×60	A/F 5	8	60	10	100	483926
A/F5.5×60	A/F 5.5	8	60	10	100	483927

No. D73 Bit

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

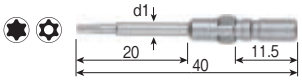


Model No.	(mm)	d1	d2	(mm)	Inner Ctn.	Outer Ctn.	EDP No.
⊖2 ×0.3	×40	2.0	—		10	100	483041
⊖2.5×0.3	×40	2.5	—		10	100	483042
⊖3 ×0.4	×40	3.0	—		10	100	483043
⊖4 ×0.5	×40	—	4.0		10	100	483044
H1.5×2	×60	2.0	—		10	100	483051
H2 ×3	×60	3.0	—		10	100	483052
H2.5×3	×60	3.0	—		10	100	483053
H3 ×4	×60	—	4.0		10	100	483054

ϕ 4 mm

No. D73 TORX Bit

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



Model No.	(mm)	mm	d1	(mm)	Inner Ctn.	Outer Ctn.	EDP No.
T1 ×	40	0.84	1.5		10	100	635621
T2 ×	40	0.94	1.5		10	100	635622
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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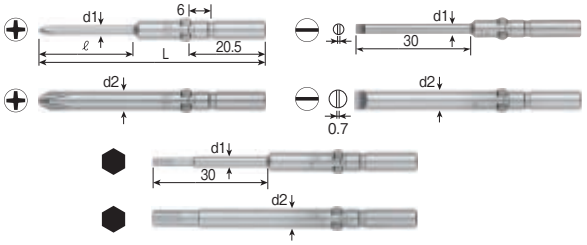
φ 5 mm

No. D76 Bit

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



Model No. (mm)	Tip	ℓ	d1	d2	L	Inner Ctn.	Outer Ctn.	EDP No.
⊕00×2×60	00	20	2	—	60	10	100	446241*(483105)
⊕0×2×60	0	25	2	—	60	10	100	483106
⊕0×2.5×60	0	25	2.5	—	60	10	100	483115
⊕0×2.5×80	0	25	2.5	—	80	10	100	483116
⊕0×2.5×100	0	25	2.5	—	100	10	100	483117
⊕0×2.5×150	0	25	2.5	—	150	10	100	483118
⊕1×3×15×40	1	15	3	—	40	10	100	483119
⊕1×3×60	1	30	3	—	60	10	100	483121
⊕1×3×30×80	1	30	3	—	80	10	100	446267
⊕1×3×30×100	1	30	3	—	100	10	100	483122
⊕1×3×30×120	1	30	3	—	120	10	100	483123
⊕1×5×40	1	—	—	5	40	10	100	483124
⊕1×5×60	1	—	—	5	60	10	100	483125
⊕1×5×80	1	—	—	5	80	10	100	483126
⊕1×5×100	1	—	—	5	100	10	100	446271*(483127)
⊕1×5×120	1	—	—	5	120	10	100	483128
⊕1×5×150	1	—	—	5	150	10	100	483129
⊕1×5×180	1	—	—	5	180	10	100	483130
⊕1×5×200	1	—	—	5	200	10	100	483132
⊕1×5×250	1	—	—	5	250	10	100	483133
⊕1×5×300	1	—	—	5	300	10	100	483134
⊕2×5×40	2	—	—	5	40	10	100	483135
⊕2×5×60	2	—	—	5	60	10	100	483131
⊕2×5×80	2	—	—	5	80	10	100	446279
⊕2×5×100	2	—	—	5	100	10	100	446280
⊕2×5×120	2	—	—	5	120	10	100	446281
⊕2×5×150	2	—	—	5	150	10	100	446282
⊕2×5×180	2	—	—	5	180	10	100	483136
⊕2×5×200	2	—	—	5	200	10	100	483137
⊕2×5×250	2	—	—	5	250	10	100	483138
⊕2×5×300	2	—	—	5	300	10	100	483139
⊕2×5×400	2	—	—	5	400	10	100	483140
⊖3×0.4×60	⊖3×0.4t	30	3	—	60	10	100	483141
⊖4×0.6×60	⊖4×0.6t	30	4	—	60	10	100	483142
⊖5×0.7×60	⊖5×0.7t	—	—	5	60	10	100	483143
H2×3×70	H2	30	3	—	70	10	100	483151
H2.5×3×70	H2.5	30	3	—	70	10	100	483152
H3×4×70	H3	30	4	—	70	10	100	483153
H4×5×70	H4	—	—	5	70	10	100	483154

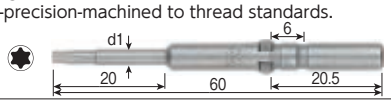
EDP number with mark * will be shifted to the other number in parenthesis.

Socket Bit

Model No. (mm)	Size	φD	L (mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F4×60	A/F 4	7	60	10	100	483941
A/F4.5×60	A/F 4.5	7	60	10	100	483942
A/F5×60	A/F 5	8	60	10	100	483943
A/F5.5×60	A/F 5.5	8	60	10	100	483944

No. D76 TORX Bit

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



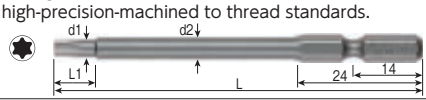
Model No. (mm)	mm	d1	(mm)	Inner Ctn.	Outer Ctn.	EDP No.
T5 × 60	1.37	2.0		10	100	635651
T6 × 60	1.65	2.5		10	100	635652
T7 × 60	1.97	2.5		10	100	635653
T8 × 60	2.3	3.0		10	100	635654
T9 × 60	2.48	3.0		10	100	635655
T10× 60	2.72	3.0		10	100	635656
T15× 60	3.26	4.0		10	100	635657
T20× 60	3.84	—		10	100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

TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA).
VESSEL has a manufacturing license in Japan and selling same to the world.

H 5 mm

No. N TORX Bit

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

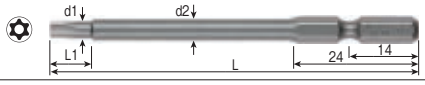


Model No. (mm)	mm	d1	L1	d2	(mm)	Inner Ctn.	EDP No.
T5 × 75	1.37	1.67	6.5	4.0		10	635498
100	1.37	1.67	6.5	4.0		10	635499
T6 × 75	1.65	1.95	6.5	4.0		10	635500
100	1.65	1.95	6.5	4.0		10	635501
T8 × 75	2.3	2.60	7.0	4.5		10	635505
100	2.3	2.60	7.0	4.5		10	635506
T10× 75	2.72	3.02	7.5	4.5		10	635510
100	2.72	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

TORX is a registered trademark of Acument TM Intellectual Properties, LLC (USA).
VESSEL has a manufacturing license in Japan and selling same to the world.

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.



Model No. (mm)	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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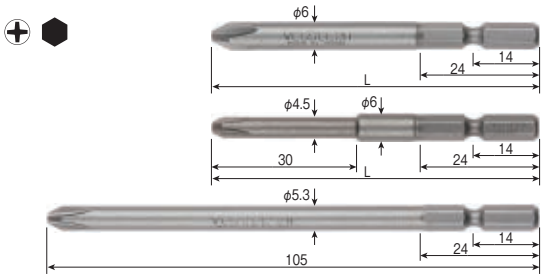
VESSEL has a manufacturing license in Japan and selling same to the world.

H 5 mm

No. B34 Bit

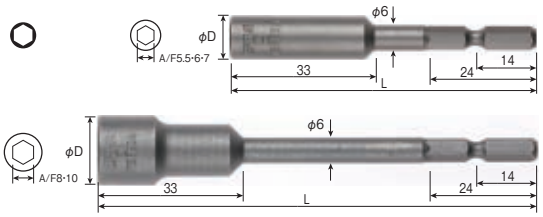
●For fastening various small screws and tapping screws for sheet metals.
●Bit tip high-precision-machined to thread standards.



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
⊕1×4×30×70	H	10	10	446335
⊕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. B44 Socket bit

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

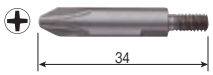


Size Tip×Overall Length (mm)	ϕD	Hole depth	(mm)	Inner Ctn.	Outer Ctn.	EDP No.
A/F 5.5× 70	9	25		10	250	422371
100	9	25		10	250	422381
6× 70	10	25		10	200	422372
100	10	25		10	200	422382
7× 70	11	25		10	200	422373
100	11	25		10	150	422383
8× 70	13	25		10	200	422374
100	13	25		10	150	422384
10×100	16	25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

M4/M5/M6

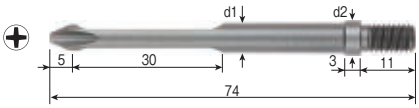
Other bits for screw fastening robots than the following can be custom-made.
Please contact VESSEL with detailed infomation, listed in the right "One point" column.

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



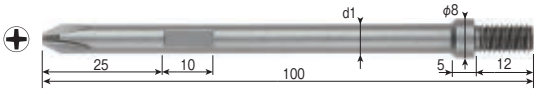
Model No.	Size Tip×Overall Length (mm)	M	Inner Ctn.	Outer Ctn.	EDP No.
3491/34	⊕1× 34 -M4	M4	10	100	489656
3492/34	⊕2× 34 -M4	M4	10	100	489657

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



Model No.	(mm) d1	d2	(mm)	Inner Ctn.	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)



Model No.	(mm) d1	d2	(mm)	Inner Ctn.	Outer Ctn.	EDP No.
⊕2×100-M6 P1.0	6.0	—		10	100	483303