

Self tapping fastener for soft, thermo plastic  
(No metal insert required)

# nonsert®

4th Generation self tapping fastener  
for soft, thermo plastic!



SY non-sert® for SANYO DENKI FAN "SAN ACE"



Page 10

Sharp Thread  
Angle 30°

Repeatable

Low driving &  
High Failure Torque

No idling!  
No cracking!

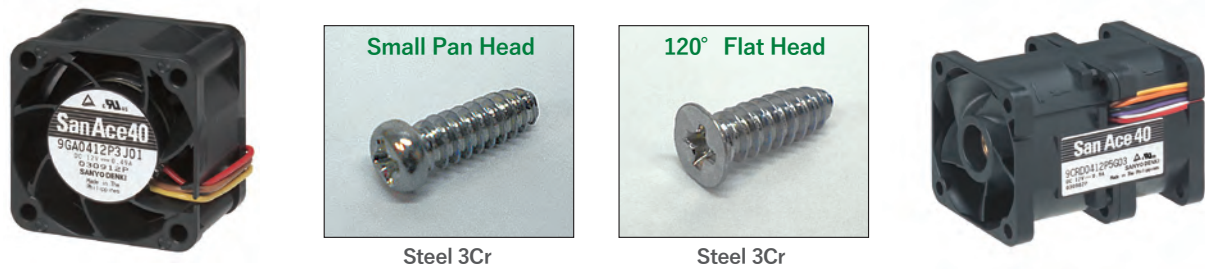


— HIGH SPEED & HIGH QUALITY —  
**SAIMA CORPORATION**

### 4th Generation tapping screw for soft, thermo plastic!



#### SY non-sert® for SANYO DENKI fan "SAN ACE"



See page 10 for more detail.

#### Contact us



HIGH SPEED & HIGH QUALITY  
**SAIMA CORPORATION**

2-9-17 Tsujido, Fujisawa, Kanagawa, 251-0047, Japan  
TEL:+81-466-36-3656 FAX:+81-466-36-0009

 [www.saima.co.jp](http://www.saima.co.jp)

 [info@saima.co.jp](mailto:info@saima.co.jp)



ISO9001:2015  
ISO14001:2015

Applicable:  
SAJ Head Quarter



Non-sert is all ROHS compliance

#### Feature

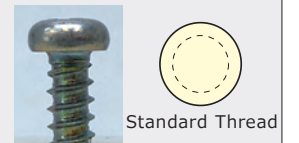
- ★No metal insert required. Cost reduction.
- ★Easy to recycle without metal insert.
- ★Cracking is not expected.
- ★Repeatable on the same pilot hole.
- ★Low torque driving, low stress for plastic.

#### Fastening about Resin, Plastic and Engineering Plastic

Plastics are much weaker than steel screw. Therefore, to prevent the plastic from breaking or cracking, SAIMA strongly recommend to use "specialized screw for plastic."

##### 1st Generation:JIS B 1122 class 2

Suitable for thin plate and plastic fastening as per JIS B 1122 appendix. Widely distributed as a standard tapping screw. Average performance.

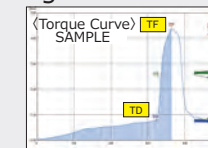


##### 2nd Generation:B-type

Advanced form of JIS B 1122 Class 2, with trilobular thread, same thread angle (60 degree) and pitch.

Tightening Torque is lower than 1st generation according to torque analysis result.

Suitable for thin plate and plastic fastening.



##### 3rd Generation:P-type

Double threaded with 45° thread angle, wider thread compared with B-type and trilobular thread.

Double started thread makes the fastening speed twice as high, but loosens faster once the screw starts loosening.

TF\* point and TD\* point higher, so we have to pay attention to F/D ratio. Using repeatedly on the same pilot hole is not recommended.



TD:Torque of Driving

Min. Torque for fastening

TF:Torque of Failure

Torque for breaking counter material. It includes idling and cracking.

TS:Torque of Setting

Best Torque of Setting

##### 4th Generation:non-sert®

Single threaded same as 1st and 2nd Generation with 30 degree thread angle, trilobular thread shape and large pitch. Lowest TD in all generations.

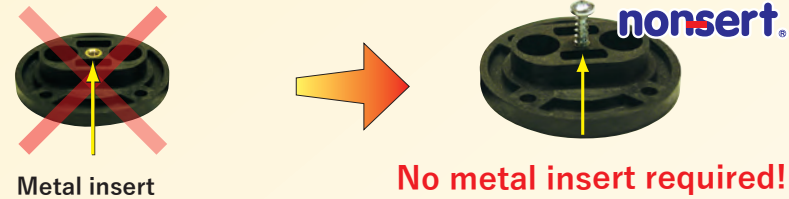
Low stress against the plastic part. TF is lower than 3rd Generation, but mostly F/D ratio indicate higher, these results conclude that using **non-sert® is safe and best for plastic fastening.** Above all, non-sert® is the best screw for repeat use on the same pilot hole.



**1** No metal insert required

Point

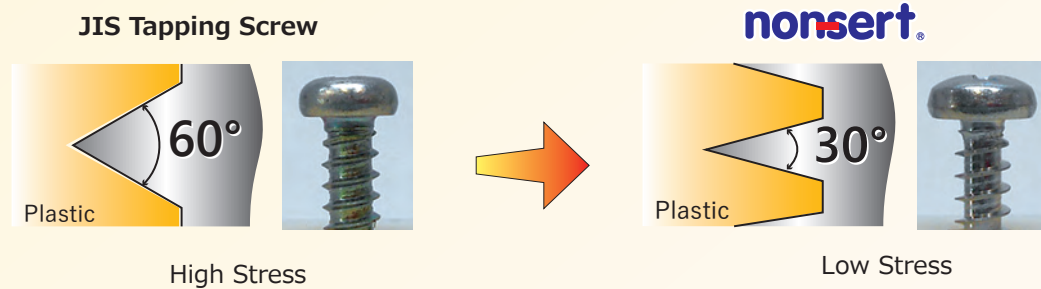
Possible to reduce the cost without metal insert.  
No need countersinking process & expense for the metal insert.  
→ **nonsert** will help you to save total cost and time.



**2** Sharp thread angle "30°"

Point

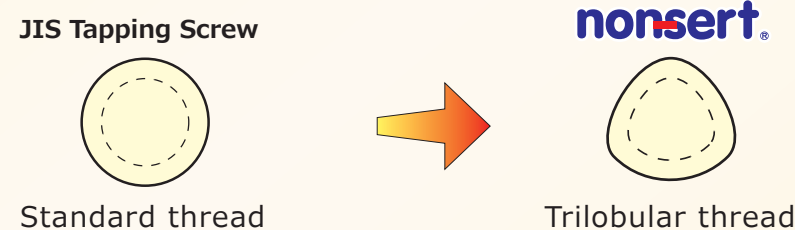
Less stress and cracking on your plastic product.



**3** Best for repeat use

Point

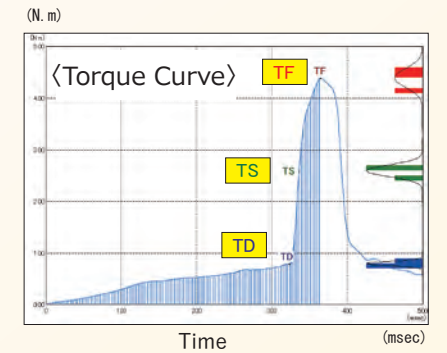
Trilobular thread = Low driving torque = less stress on the plastic.  
→ **nonsert** can be used repeatedly on the same pilot hole.



**4** Low driving torque[TD] & High failure torque[TF]

Point

Trilobular thread & sharp thread angle "30°" achieve low TD & high TF.  
That provide you more safety for designing.



**5** Pilot hole dia. & Torque of setting

Point

Torque Analyzer will...

- ◆ Find the best hole dia.
- ◆ Find the best setting torque

Please feel free to ask us if you're annoyed with cracking & idling.



**6** Special Seminar for Torque Analysis

Point

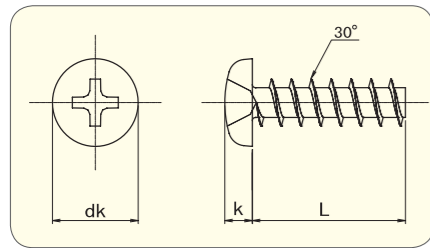
SAIMA is holding a special seminar of torque analyzer about 3 major topics(Hole dia., torque, and tapping screw) to decide which tapping screw is the best on your product. Visit [[www.saima.co.jp/en/top.php](http://www.saima.co.jp/en/top.php)] for more detail.



Applications



**Cross recess pan head non-sert®**



◆ ISO spec. Pan Head ◆

- Material Steel
- Surface 3Cr
- Standard ISO spec. Pan Head



	2	2.5	3	4	5	6
dk	4	5	5.6	8	9.5	12
k	1.6	2.1	2.4	3.1	3.7	4.6
drive#	0	1	1	2	2	3

Size		Part#	Pkg Q'ty	Box Q'ty	
d	L				
2	5	NS010205	100	3,500	
	6	NS010206	100	3,000	
	8	NS010208	100	2,500	
	10	NS010210	100	2,000	
2.5	6	NS012506	100	1,700	
	8	NS012508	100	1,400	
	10	NS012510	100	2,400	
	12	NS012512	100	2,000	
3	14	NS012514	100	1,800	
	6	NS010306	100	5,000	
	8	NS010308	100	4,000	
	10	NS010310	100	3,500	
3	12	NS010312	100	3,000	
	14	NS010314	100	2,500	
	16	NS010316	100	2,000	
	20	NS010320	100	1,600	
4	8	NS010408	100	2,000	
	10	NS010410	100	1,500	
	12	NS010412	100	1,500	
	14	NS010414	100	1,300	
4	16	NS010416	100	1,000	
	20	NS010420	100	800	
	25	NS010425	100	800	
	5	10	NS010510	100	1,000
12		NS010512	100	900	
14		NS010514	100	800	
16		NS010516	100	700	
5	20	NS010520	100	600	
	25	NS010525	100	500	
	6	12	NS010612	100	500
		14	NS010614	100	500
16		NS010616	100	400	
20		NS010620	100	400	

◆ #0 Pan Head ◆

- Material Steel
- Surface Black Ni
- Standard #0 Pan Head



	1.4	1.6
dk	2.5	3
k	0.5	0.5
drive#	0	0

Size		Part#	Pkg Q'ty	Box Q'ty
d	L			
1.4	3	NS011403BNi	100	1,000
	4	NS011404BNi	100	1,000
	5	NS011405BNi	100	1,000
	6	NS011406BNi	100	1,000
1.6	4	NS011604BNi	100	1,000
	5	NS011605BNi	100	1,000
	6	NS011606BNi	100	1,000
	8	NS011608BNi	100	1,000

Small tube pump by Welco Co. Ltd.



**Cross recess pan head non-sert®**

◆ JIS spec. Pan Head ◆

- Material Steel
- Surface 3Cr
- Standard JIS spec. pan head



	3
dk	5.5
k	2.0
drive#	2

Size		Part#	Pkg Q'ty	Box Q'ty
d	L			
3	6	NS010306#2	100	5,000
	8	NS010308#2	100	4,000
	10	NS010310#2	100	3,500
	12	NS010312#2	100	3,000
3	14	NS010314#2	100	2,500
	20	NS010320#2	100	1,500
	22	NS010322#2	100	1,500

- Material StainlessA2
- Surface Passivation
- Standard JIS spec. pan head

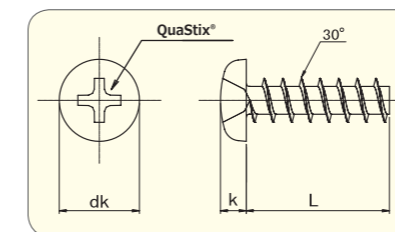


	3	4
dk	5.5	7
k	2.0	2.6
drive#	2	2

Size		Part#	Pkg Q'ty	Box Q'ty	
d	L				
3	6	NS010306JA2	100	6,000	
	8	NS010308JA2	100	5,000	
	10	NS010310JA2	100	4,000	
	12	NS010312JA2	100	3,500	
3	14	NS010314JA2	100	3,000	
	16	NS010316JA2	100	2,500	
	4	8	NS010408JA2	100	2,600
		10	NS010410JA2	100	2,200
12		NS010412JA2	100	2,000	
14		NS010414JA2	100	1,700	
4	16	NS010416JA2	100	1,400	
	20	NS010420JA2	100	1,200	

Prevent tools from CAM-OUT

◆ "QUA" non-sert® ◆



- Material Steel
- Surface 3Cr
- Standard JIS spec. pan head



**QuaStix**

- Hardly ever CAM-OUT
- Good torque transmission
- Bit fit stably
- Standard cross recess driver is also applicable

	3	4
dk	5.5	7
k	2.0	2.6
QS Bit No.	2	2



Size		Part#	Pkg Q'ty	Box Q'ty
d	L			
3	6	NS010306JQ	100	5,000
	8	NS010308JQ	100	4,000
	10	NS010310JQ	100	3,500
	12	NS010312JQ	100	3,000
4	8	NS010408JQ	100	2,600
	10	NS010410JQ	100	2,200
	12	NS010412JQ	100	2,000
	14	NS010414JQ	100	1,700
4	16	NS010416JQ	100	1,400

"Qua" Special bit tool

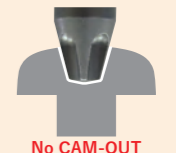
◎ Prevent tools CAM-OUT

Recess is circular-curved with no draft angle.

**[ QuaStix ]**



Almost no draft angle



No CAM-OUT even with no load

**[ Standard cross recess ]**

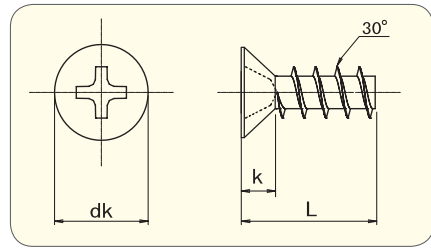


Large draft angle



Easily CAM-OUT with standard tool

**Cross recess flat head non-sert®**



- Material Steel
- Surface 3Cr

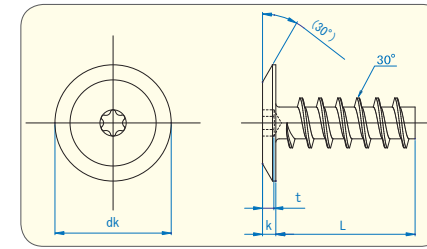


	3	4
dk	6	8
k	1.75	2.3
drive#	2	2



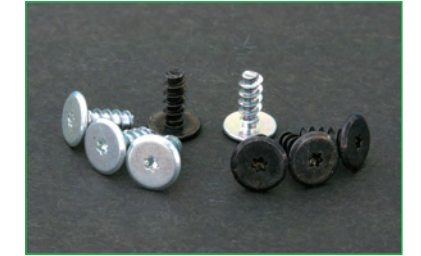
Size		Part#	Pkg Q'ty	Box Q'ty
d	L			
3	8	NS020308	100	5,000
	10	NS020310	100	4,000
	12	NS020312	100	3,500
4	8	NS020408	100	2,500
	10	NS020410	100	2,000
	12	NS020412	100	1,800

**310Slim® non-sert®**

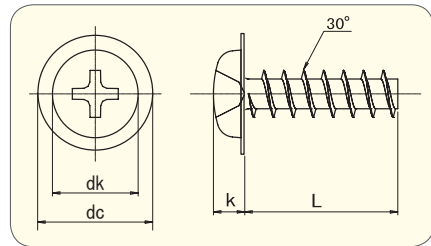


- Help to optimize a compact design by making the head part nearly flat.
- No countersinking required. Save the cost.
- 6-lobe recess(hexalobular JIS B 1015/ISO 10664)

	3	4	5
dk	7	8	9
k	0.8	0.9	1.0
t(min)	0.5	0.5	0.6
drive#	T6	T8	T10



**Cross recess washer head non-sert®**



- Material Steel
- Surface 3Cr

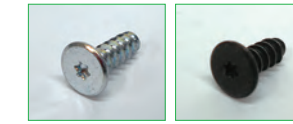


	3
dk	5.5
dc	8
k	2.3
drive#	2

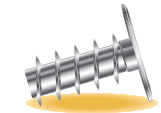


Size		Part#	Pkg Q'ty	Box Q'ty
d	L			
3	6	NS010306WH#2	100	3,000
	8	NS010308WH#2	100	2,500
	10	NS010310WH#2	100	2,000
	12	NS010312WH#2	100	2,000
	14	NS010314WH#2	100	1,500
	20	NS010320WH#2	100	1,000
	22	NS010322WH#2	100	1,000

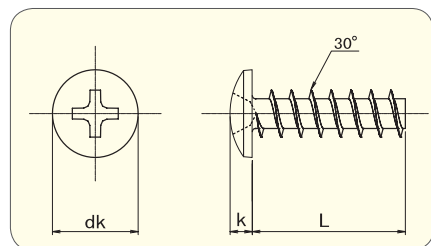
- Material Steel
- Surface 3Cr  
3Cr Black



Size		Part#		Pkg Q'ty	Box Q'ty
d	L	3Cr	3Cr Black		
3	6	NS010306SH	NS010306SHBK	100	5,000
	8	NS010308SH	NS010308SHBK	100	4,000
	10	NS010310SH	NS010310SHBK	100	3,000
4	8	NS010408SH	NS010408SHBK	100	2,500
	10	NS010410SH	NS010410SHBK	100	2,000
	12	NS010412SH	NS010412SHBK	100	1,900
5	10	NS010510SH	NS010510SHBK	100	1,700
	12	NS010512SH	NS010512SHBK	100	1,400



**Cross recess binding head non-sert®**



- Material Steel
- Surface 3Cr



	3
dk	6.3
k	1.9
drive#	2



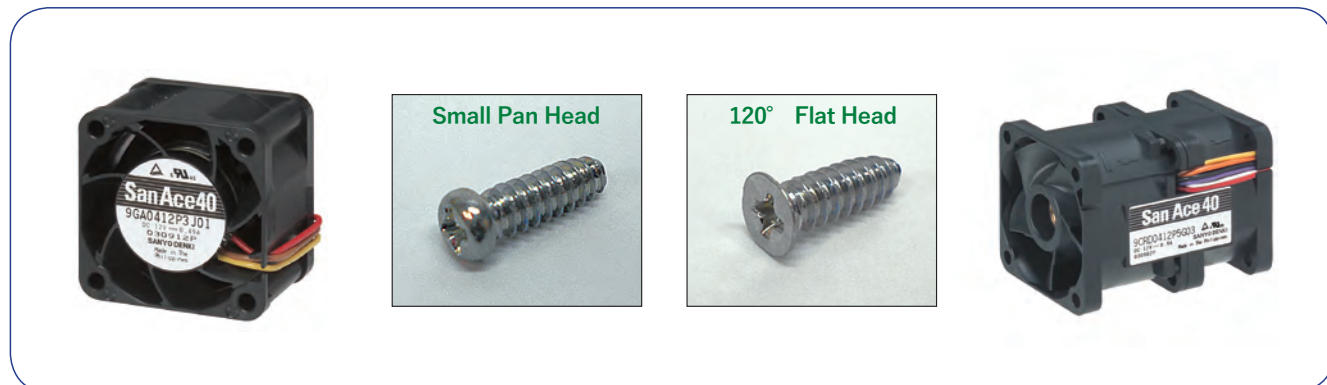
Size		Part#	Pkg Q'ty	Box Q'ty
d	L			
3	6	NS030306	100	4,500
	8	NS030308	100	3,500
	10	NS030310	100	3,000
	12	NS030312	100	2,500
	14	NS030314	100	2,000
	20	NS030320	100	1,500
	22	NS030322	100	1,300

Alcohol Detection System  
by Tokai Denshi Inc.

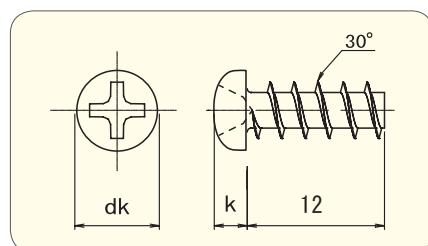


**SY non-sert® for SANYO DENKI FAN "SAN ACE"**

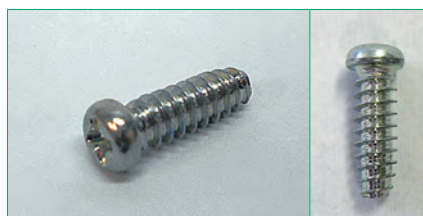
This is a special non-sert® developed together with SANYO DENKI for SANYO DENKI FAN "SAN ACE."  
 Small Pan Head type and 120° Flat Head type.  
 These SY non-sert® are recommended by SANYO DENKI Co., Ltd for assembling SAN ACE.  
 Please refer to SANYO DENKI's technical data for fastening torque & hole dia information.



**Cross recess pan head self tapping screw for SANYO DENKI FAN [SY non-sert®]**



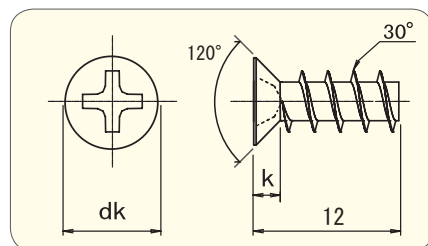
- Material Steel
- Surface 3Cr



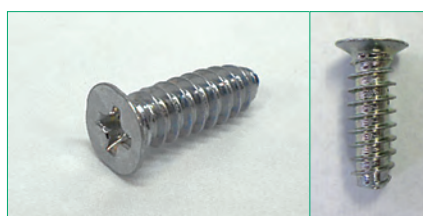
Part#	nominal dia.	L	dk	k	drive#	Box Q'ty
SY-NS010412P11	4	12	5.5	2.0	2	2,000
SY-NS014812P15	4.8	12	7.0	2.6	2	1,400
SY-NS010512P15	5	12	7.0	2.6	2	1,200



**Cross recess 120° flat head self tapping screw for SANYO DENKI FAN [SY non-sert®]**



- Material Steel
- Surface 3Cr



Part#	nominal dia.	L	dk	k	drive#	Box Q'ty
SY-NS020412P11	4	12	6.2	MAX1.1	2	2,000
SY-NS024812P15	4.8	12	6.8	MAX1.2	2	1,800
SY-NS020512P15	5	12	6.8	MAX1.2	2	1,600



**About us**

Company **SAIMA CORPORATION(SAJ)**

Overseas Trading Division **310express Company**

Established January, 1952

Board Members  
 CEO Takashi Saima  
 SMD Hiroshi Saima  
 Chairman Masaru Saima  
 Director GM Toshinori Ooba  
 Director Sales & Marketing Manager Tadao Matsumoto  
 Director Accounting Manager Hitomi Saima  
 Auditor Tomiko Saima



Number of Employee 50(Whole group)

Capital JPY 10,000,000-

Address Head Quarter 2-9-17 Tsujido, Fujisawa, Kanagawa, 251-0047, Japan  
 TEL:+81-466-36-3656 FAX:+81-466-36-0009  
 Email:info@310ex.com http://www.310ex.com

Overseas China (100% Subsidiary) **KOAS Corporation**  
 [Head Quarter]  
 1206 Xindu Bldg. No50 Jugian Street Changzhou City, Jiangsu, China 213000  
 TEL:+86-519-88101398 FAX:+81-519-88108938  
 [Warehouse & Distribution Center]  
 5F, Xi Jia BlockA, Tianoun Industrial Park Xinbei Changzhou Jiangsu 231001  
 TEL:+86-519-86672033 FAX:+86-519-88108938

SPC Members\* Singapore **SYNERGIX SAIMA (S) PTE. LTD.**  
 52 Ubi Ave 3, #05-37FRONTIER Singapore 408867  
 TEL:+65-6316-2630 Email:sales@synergixfast.com

Malaysia **ANT INDUSTRIAL SDN BHD**  
 No 4, Jalan Industri USJ1/4, Taman PerindustrianUSJ, 47610 Subang Jaya, Selangor, Malaysia  
 TEL:+603-8023-2010 Email:inquiry@ant-ind.com

\*SPC Members : Saima Premium Club Members



— HIGH SPEED & HIGH QUALITY —  
**SAIMA CORPORATION**

2-9-17 Tsujido, Fujisawa, Kanagawa, 251-0047, Japan

TEL:+81-466-36-3656 FAX:+81-466-36-0009

info@saima.co.jp www.saima.co.jp

2020.02



Applicable:  
SAJ Head Quarter

