SINOPS LIMITED

1 Mill Pool, Nash Lane, Belbroughton, Stourbridge, West Midlands DY9 9AF

TECHNICAL DATA SHEET

CABLE TIES
VJT Codes: 24400010 to 24400120

We confirm our range of Cable Ties are manufactured from Nylon Resin, PA66.

Dimension details, tensile strength and flame ratings are attached along with material factory certification for the material used. (Attachment: Pages 1 to 17)

The cable ties are UKCA certified, conforming to BS EN IEC 62275:2009 as per the attached test results and verification of compliance.

The cable ties are UVA and UVB resistant, 0.5% antioxidant H10 is added to achieve this.

Product Code	Size	Colour	weight	Bundle Range	Tensile Strength		Flame Rating
			g/pc	mm	lbs	kgs	
24400010	100x2.5mm (4")	Black	0.26	2 - 22	18	8	94V-2
24400070	100x2.5mm (4")	Clear	0.26	2 - 22	18	8	94V-2
24400020	150x3.6mm (6")	Black	0.64	3 - 35	40	18	94V-2
24400080	150x3.6mm (6")	Clear	0.64	3 - 35	40	18	94V-2
24400030	200x4.8mm (8")	Black	1.14	3 - 50	50	22	94V-2
24400090	200x4.8mm (8")	Clear	1.14	3 - 50	50	22	94V-2
24400040	300x4.8mm (12")	Black	1.78	3 - 80	50	22	94V-2
24400100	300x4.8mm (12")	Clear	1.78	3 - 80	50	22	94V-2
24400050	450x7.6mm	Black	5.37	4-110	120	55	94V-2
24400110	450x7.6mm	Clear	5.37	4-110	120	55	94V-2
24400060	540x12.6mm	Black	15	14-155	250	114	94V-2
24400120	540x12.6mm	Clear	15	14-155	250	114	94V-2

This data sheet is valid until there is a significant change in the product and its characteristics.

Signed by: 

Position: Commercial Manager **Name: Andy Bridge** **Date: 10 July 2023**

Technical Construction File

BS EN IEC 62275:2019

Cable management systems. Cable ties for electrical installationss

Report reference No.	TLZJ21122435588
Compiled by (+ signature)	Stephen Zhang / Test Engineer
Approved by (+ signature)	Kosco Vent / Project Manager
Date of issue	December 28, 2021
Reviewing laboratory	Shanghai Global Testing Services Co., Ltd.
Reviewing location	Floor 2nd, Building D-1, No. 128, Shenfu Road, Minhang District, Shanghai, China.
Applicant	[redacted]
Address	
Manufacturer	[redacted]
Address	
Factory	The same as manufacturer
Address	The same as manufacturer
Standard	☒ BS EN IEC 62275:2019
Review Report Form No.	62275
TRF originator	GTS
Master TRF	Reference No. BS EN IEC 62275:2019
Review procedure	GTS
Type of Review object	NYLON CABLE TIE
Trademark	[redacted]
Model/type reference	2.5X(100-200MM), 3.6X(100-400MM), 4.8X(100-920MM), 7.6X(150-1000MM), 8.8X(280-1220MM), 12.4X(540-1000MM)
Main Model	4.8X200
Rating	-20℃ to 85℃; UV; TENSILE STRENGTH :2.5X(100-200) 80N; 3.6X(100-400) 180N; 4.8X(100-920) 220N; 7.6X(150-1000) 550N; 8.8X(280-1220) 800N; 12.4X(540-1000) 1140N

Possible review case verdicts: - review case does not apply to the test object.....: N(.A.) - review object does meet the requirement.....: P(ass) - review object does not meet the requirement.....: F(ail)
General remarks:
"(see remark #)" refers to a remark appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report a comma is used as the decimal separator. The review results presented in this report relate only to the object reviewed. This report shall not be reproduced except in full without the written approval of the third party.

Testing:	
Date of receipt of review item:	December 16, 2021
Date(s) of performance of review:	December 16, 2021 to December 28, 2021

General product information:

Nylon cable tie

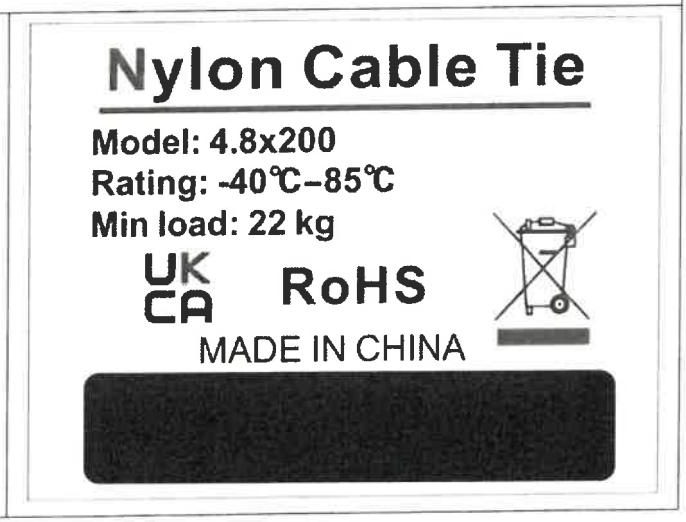
Summary of reviewing:

This review report includes:

Annex I: **2** page(s) of photo documentation.

Copy of marking plate

Nylon cable tie,
Model 4.8X200



EN IEC 62275			
Clause	Requirement - Test	Result - Remark	Verdict
4	General requirements		-
	A Nylon cable tie and a fixing device shall withstand the stresses likely to occur during recommended installation practice and perform under the conditions of classifications in Clause 6 as declared by the manufacturer.		P
	Compliance is checked by carrying out all the appropriate tests specified.		P
5	General notes on tests		-
5.1	Tests according to this standard are type tests. Unless otherwise specified, tests are carried out with the Nylon cable ties and their associated fixing devices, where available, installed as in normal use according to the manufacturer's instructions.		P
5.2	Unless otherwise specified, tests on non-metallic and composite components shall commence when the samples have been removed from their packaging and then stabilised at a temperature of (23 ± 5)° C and at a relative humidity of (50 ± 5) %, for a period as indicatedin Table 1.		P
	The reference thickness of a Nylon cable tie is measured at the midpoint of the strap. The reference thickness of a fixing device shall be the smallest cross section in the area that interfaces with the Nylon cable tie or as declared by the manufacturer		P
	When the equilibrium moisture content for a material at (23 ±5) °C and (50 ± 5) % relative humidity is determined through a method agreed to by the manufacturer and the testing laboratory, the stabilisation time in Table 1 may be reduced when all of the following conditions are met:		---
	a) the product's moisture content in the as-received condition and after each appropriate conditioning is measured using a calibrated moisture analyzer device		P
	b) the samples are subjected to exposure to a constant temperature not exceeding 50 °C and a relative humidity not exceeding 80 %;		P
	c) the product's equilibrium moisture content at (23 ± 5) °C and (50 ± 5) % relative humidity is verified using a calibrated moisture analyzer device. This verification process is repeated until equilibrium is determined		P
5.3	Unless otherwise specified, the tests shall be carried out at an ambient temperature of (23 ± 5) °C and with a relative humidity of between 40 % and 60 %.		P

5.4	Unless otherwise specified, three new samples are submitted to the tests and the requirements are satisfied if all the tests are met. If only one of the samples does not satisfy a test due to an assembly or manufacturing fault, that test and any preceding one which may have influenced the results of the test shall be repeated and also the tests which follow shall be made in the required sequence on another full set of samples, all of which shall comply with the requirements.		P
5.5	When toxic or hazardous processes are used, due regard shall be taken of the safety of persons within the test area.		N/A
5.6	Unless otherwise specified, the cross-head speed of a tensile machine used during the tests shall be (25 ± 2,5) mm/min.		P
5.7	Where required for heat ageing, a full draft circulating-air oven as specified in IEC 60216-4-1 shall be used.		P
	A portion of the air shall be allowed to re-circulate and a substantial amount of air shall be admitted continuously to maintain the normal air content surrounding the samples. The oven shall be adjusted to achieve more than 5 complete fresh air change per hour		P
5.8	A fixing device that is integral to a Nylon cable tie shall comply with the requirements for both the fixing device and the Nylon cable tie. The integral assembly shall be classified according to 6.2.2 or 6.2.3 and subjected to the conditionings for the Nylon cable tie prior to conducting the mechanical strength test for the fixing device according to 9.7		P
	A fixing device, the performance of which is dependent on the mounting hole size, the thickness of the material sheet to which it is to be mounted, or the mounting orientation declared by the manufacturer according to 7.3 f), shall comply with all applicable tests when the device is assembled to the minimum and maximum thickness of each mounting surface, in the largest hole size, and in each intended mounting orientation declared by the manufacturer		P
	When it can be determined that a particular mounting orientation represents the most onerous condition, the results of the tests in that orientation may represent all mounting orientations.		P
5.9	Unless otherwise specified, when conducting the tests on Nylon cable ties in Clause 9, the samples shall be installed according to the manufacturer's instructions on a steel or aluminium mandrel which has a diameter A according to Table 2:		P
	If the minimum declared diameter of the Nylon cable tie is greater than the diameter of the test		N/A

	mandrel specified in Table 2, then a test mandrel that has the minimum diameter as declared by the manufacturer shall be used.		
	For the loop tensile strength tests, the mandrel shall be split in two equal parts and the Nylon cable ties positioned as shown in Figure 2a).		P
	The excess end (tail) of the Nylon cable tie is permitted to be cut off after assembly, except in the tests where marking is required for the purpose of measurement (see 9.6).		P
	The use of separate steel or aluminum conditioning mandrels is permitted. The conditioning mandrels need not be split but shall have a diameter approximately equivalent to the appropriate test mandrel to allow transfer of the sample to the test mandrel. Conditioned samples shall be carefully transferred to the appropriate test mandrel for carrying out the loop tensile test. Where it has been determined that the transfer of the samples from the conditioning mandrel to a test mandrel has influenced the test results, an additional sample set shall be conditioned and tested		P

6	Classification		P
6.1	According to material		P
6.1.1	Metallic component		N/A
6.1.2	Non-metallic component	Non-metallic	P
6.1.3	Composite component		N/A
6.2	According to loop tensile strength for Nylon cable ties As given in Table 2.		P
6.2.1	Loop tensile strength for Nylon cable ties		P
6.2.2	Type 1 – Retains at least 50 % of declared loop tensile strength for Nylon cable ties and mechanical strength for fixing devices after test conditions		N/A
	Type 2 – Retains 100 % declared loop tensile strength after test conditions		P
6.3	According to temperature		P
6.3.1	According to maximum operating temperature for application given in Table 4		P
	Additional ratings above 150 °C may be declared at the manufacturer's discretion		N/A
6.3.2	According to minimum operating temperature for application given in Table 5		P
6.3.3	According to minimum temperature during installation as declared by the manufacturer		P
6.4	According to contribution to fire for non-metallic and composite Nylon cable ties only		P
6.4.1	Flame propagating		P
6.4.2	Non-flame propagating		P
6.5	According to environmental influences		P
6.5.1	According to resistance to ultraviolet light for non-metallic and composite components		P

6.5.1.1	Not declared		N/A
6.5.1.2	Resistant to ultraviolet light		P
6.5.2	According to resistance to corrosion for metallic and composite components		P
6.5.2.1	Not declared		N/A
6.5.2.2	Resistant to corrosion		P

7	Marking and documentation		--
7.1	Each Nylon cable tie and fixing device shall be marked with the manufacturer's or responsible vendor's name or trademark and identifying symbol		N/A
	Where it is not possible, for example, due to the small size of a Nylon cable tie or fixing device to mark on it the identifying symbol, then this symbol may be marked on the packaging.	See Marking	P
7.2	Marking on the Nylon cable ties or fixing device shall be clearly legible and durable.		N/A
	Marking made by moulding, pressing or engraving is not subjected to this test.		N/A
	After the test, the marking shall be legible to normal or corrected vision.		N/A
7.3	The manufacturer or responsible vendor shall provide in his literature:		P

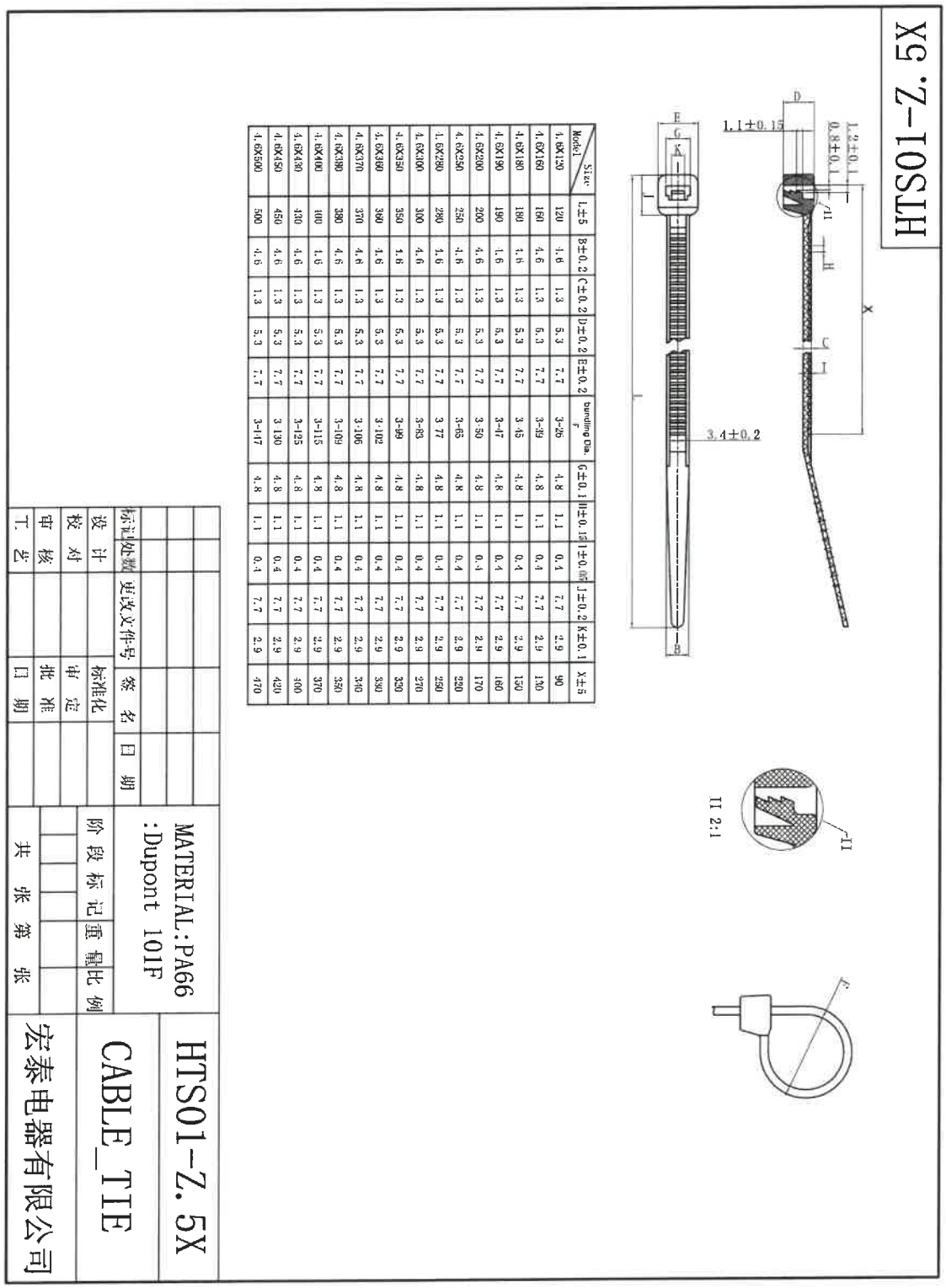
8	Construction		P
	The surface of the Nylon cable tie or fixing device shall be free from burrs and similar inconsistencies, and edges shall be smooth so as not to damage the cables or to inflict injury to the installer or user.	No burrs, edge smooth	P

9	Mechanical properties		P
9.1	Requirements		P
	The Nylon cable tie and/or its associated fixing device shall withstand the stresses likely to occur during installation and application.		P
9.2	Installation test		P
	The sample installed on a mandrel representing the maximum specified diameter or size and the minimum specified diameter or size to determine that it is able to be installed in the intended manner, as specified by the manufacturer.		P
9.3	Minimum installation temperature test for Nylon cable ties		P
9.4	Minimum operating temperature test for Nylon cable ties		P
9.5	Loop tensile strength test for Nylon cable ties classified according to 6.2.2		P
9.6	Loop tensile strength test for Nylon cable ties classified according to 6.2.3		P
9.7	Mechanical strength test for fixing devices		P
10	Contribution to fire		P
	Non-metallic and composite Nylon cable ties		P

	classified according to 6.4.2 shall have adequate resistance to flame propagation.		
	The sample shall be installed on a solid steel or aluminium mandrel with dimensions as specified in 5.9. The Nylon cable tie shall be mounted manually without tension. Then, the remaining end of the tie shall be cut away		P
	Using an arrangement as shown in Figure 6, the sample shall be submitted to the needle flame test as specified in IEC 60695-11-5:2004, with the following additional information		P
	the flame shall be applied to the face of the sample for a maximum of 30 s or until such time as the sample has separated from the mandrel		P
11	Environmental influences		P
11.1	Resistance to ultraviolet light		P
11.2	Resistance to corrosion		P

12	Electromagnetic compatibility		N/A
	Products covered by this standard are, in normal use, passive with respect to electromagnetic influences (emission and immunity).		N/A

Annex II: Drawing



Size / Model	L±5	B±0.2	C±0.2	D±0.2	E±0.2	F bundling Dia.	G±0.1	H±0.15	I±0.05	J±0.2	K±0.1	X±5
4.6X120	120	4.6	1.3	5.3	7.7	3-26	4.8	1.1	0.4	7.7	2.9	90
4.6X160	160	4.6	1.3	5.3	7.7	3-39	4.8	1.1	0.4	7.7	2.9	130
4.6X180	180	4.6	1.3	5.3	7.7	3-45	4.8	1.1	0.4	7.7	2.9	150
4.6X190	190	4.6	1.3	5.3	7.7	3-47	4.8	1.1	0.4	7.7	2.9	160
4.6X200	200	4.6	1.3	5.3	7.7	3-50	4.8	1.1	0.4	7.7	2.9	170
4.6X250	250	4.6	1.3	5.3	7.7	3-65	4.8	1.1	0.4	7.7	2.9	220
4.6X280	280	4.6	1.3	5.3	7.7	3-77	4.8	1.1	0.4	7.7	2.9	250
4.6X300	300	4.6	1.3	5.3	7.7	3-83	4.8	1.1	0.4	7.7	2.9	270
4.6X350	350	4.6	1.3	5.3	7.7	3-99	4.8	1.1	0.4	7.7	2.9	320
4.6X360	360	4.6	1.3	5.3	7.7	3-102	4.8	1.1	0.4	7.7	2.9	330
4.6X370	370	4.6	1.3	5.3	7.7	3-106	4.8	1.1	0.4	7.7	2.9	340
4.6X380	380	4.6	1.3	5.3	7.7	3-109	4.8	1.1	0.4	7.7	2.9	350
4.6X400	400	4.6	1.3	5.3	7.7	3-115	4.8	1.1	0.4	7.7	2.9	370
4.6X430	430	4.6	1.3	5.3	7.7	3-125	4.8	1.1	0.4	7.7	2.9	400
4.6X450	450	4.6	1.3	5.3	7.7	3-130	4.8	1.1	0.4	7.7	2.9	420
4.6X500	500	4.6	1.3	5.3	7.7	3-147	4.8	1.1	0.4	7.7	2.9	470

标记	处数	更改文件号	签名	日期

设计		标准化	
校对		审定	
审核		批准	
工艺		日期	

MATERIAL:PA66
:Dupont 101F

HTS01-Z.5X

CABLE_TIE

阶段标记	重量	比例

共 张 第 张

宏泰电器有限公司

Annex III: Product specification

MODEL	DIMENSION W*L*T	COLOR	DECLARED BUNDLE DIAMETRE(MM)	DIAMETER OF THE TEST MANDREL(MM)	DECLARED LOOP TENSILE STRENGTH(N)
2.5X100	2.5*100*1.0	BLACK OR WHITE OR COLOR	2--23	20	80
2.5X120	2.5*120*1.0	BLACK OR WHITE OR COLOR	2--30	20	80
2.5X140	2.5*140*1.0	BLACK OR WHITE OR COLOR	2--36	20	80
2.5X150	2.5*150*1.0	BLACK OR WHITE OR COLOR	2--39	20	80
2.5X160	2.5*160*1.0	BLACK OR WHITE OR COLOR	2--42	38	80
2.5X200	2.5*200*1.0	BLACK OR WHITE OR COLOR	2--55	38	80
3.6X100	3.6*100*1.2	BLACK OR WHITE OR COLOR	3--21	20	180
3.6X140	3.6*140*1.2	BLACK OR WHITE OR COLOR	3--35	20	180
3.6X150	3.6*150*1.2	BLACK OR WHITE OR COLOR	3-36	20	180
3.6X180	3.6*180*1.2	BLACK OR WHITE OR COLOR	3-45	38	180
3.6X200	3.6*200*1.2	BLACK OR WHITE OR COLOR	3--55	38	180
3.6X250	3.6*250*1.2	BLACK OR WHITE OR COLOR	3--67	38	180
3.6X280	3.6*280*1.2	BLACK OR WHITE OR COLOR	3--77	38	180
3.6X300	3.6*300*1.2	BLACK OR WHITE OR COLOR	3--83	38	180
3.6X350	3.6*350*1.2	BLACK OR WHITE OR COLOR	3--98	38	180
3.6X370	3.6*370*1.2	BLACK OR WHITE OR COLOR	3--106	38	180
3.6X400	3.6*400*1.25	BLACK OR WHITE OR COLOR	3--110	38	180
4.8X100	4.8*100*1.3	BLACK OR WHITE OR COLOR	3--22	20	220
4.8X120	4.8*120*1.3	BLACK OR WHITE OR COLOR	3--25	20	220
4.8X150	4.8*150*1.3	BLACK OR WHITE OR COLOR	3--39	20	220
4.8X160	4.8*160*1.3	BLACK OR WHITE OR COLOR	3--40	38	220
4.8X180	4.8*180*1.3	BLACK OR WHITE OR COLOR	3--45	38	220
4.8X190	4.8*190*1.3	BLACK OR WHITE OR COLOR	3--47	38	220
4.8X200	4.8*200*1.3	BLACK OR WHITE OR COLOR	3--50	38	220
4.8X250	4.8*250*1.3	BLACK OR WHITE OR COLOR	3--65	38	220
4.8X280	4.8*280*1.3	BLACK OR WHITE OR COLOR	3--77	38	220
4.8X300	4.8*300*1.3	BLACK OR WHITE OR COLOR	3--83	38	220
4.8X350	4.8*350*1.3	BLACK OR WHITE OR COLOR	3--99	38	220
4.8X360	4.8*360*1.3	BLACK OR WHITE OR COLOR	3--102	38	220
4.8X370	4.8*370*1.3	BLACK OR WHITE OR COLOR	3--106	38	220
4.8X380	4.8*380*1.3	BLACK OR WHITE OR COLOR	3--109	38	220
4.8X400	4.8*400*1.35	BLACK OR WHITE OR COLOR	3--115	38	220
4.8X430	4.8*430*1.35	BLACK OR WHITE OR COLOR	3--125	38	220
4.8X450	4.8*450.1.35	BLACK OR WHITE OR COLOR	3--130	38	220
4.8X500	4.8*500*1.4	BLACK OR WHITE OR COLOR	3-147	38	220
4.8X550	4.8*550*1.5	BLACK OR WHITE OR COLOR	3--162	38	220
4.8X600	4.8*600*1.5	BLACK OR WHITE OR COLOR	3--178	38	220
4.8X920	4.8*920*1.6	BLACK OR WHITE OR COLOR	3-260	38	220
7.6X150	7.6*150*1.6	BLACK OR WHITE OR COLOR	4--35	20	550
7.6X200	7.6*200*1.6	BLACK OR WHITE OR COLOR	4--50	38	550
7.6X250	7.6*250*1.6	BLACK OR WHITE OR COLOR	4--68	38	550
7.6X280	7.6*280*1.6	BLACK OR WHITE OR COLOR	4--78	38	550
7.6X300	7.6*300*1.6	BLACK OR WHITE OR COLOR	4-82	38	550
7.6X350	7.6*350*1.6	BLACK OR WHITE OR COLOR	4-98	38	550

7.6X370	7.6*370*1.6	BLACK OR WHITE OR COLOR	4--105	38	550
7.6X380	7.6*380*1.6	BLACK OR WHITE OR COLOR	4--109	38	550
7.6X400	7.6*400*1.6	BLACK OR WHITE OR COLOR	4--114	38	550
7.6X450	7.6*450*1.6	BLACK OR WHITE OR COLOR	4--130	38	550
7.6X500	7.6*500*1.6	BLACK OR WHITE OR COLOR	4--146	38	550
7.6X530	7.6*530*1.6	BLACK OR WHITE OR COLOR	4--156	38	550
7.6X550	7.6*550*1.6	BLACK OR WHITE OR COLOR	4--162	38	550
7.6X600	7.6*600*1.6	BLACK OR WHITE OR COLOR	4--178	38	550
7.6X750	7.6*750*1.6	BLACK OR WHITE OR COLOR	4--225	38	550
7.6X1000	7.6*1000*1.7	BLACK OR WHITE OR COLOR	4--300	38	550
8.8X280	8.8*280*1.8	BLACK OR WHITE OR COLOR	8--78	38	800
8.8X400	8.8*400*1.8	BLACK OR WHITE OR COLOR	8--108	38	800
8.8X450	8.8*450*1.8	BLACK OR WHITE OR COLOR	8--124	38	800
8.8X500	8.8*500*1.8	BLACK OR WHITE OR COLOR	8--140	38	800
8.8X550	8.8*550*1.8	BLACK OR WHITE OR COLOR	8--153	38	800
8.8X610	8.8*610*1.8	BLACK OR WHITE OR COLOR	8--170	38	800
8.8X650	8.8*650*1.8	BLACK OR WHITE OR COLOR	8--187	38	800
8.8X720	8.8*720*1.8	BLACK OR WHITE OR COLOR	8--209	38	800
8.8X750	8.8*750*1.8	BLACK OR WHITE OR COLOR	8--219	38	800
8.8X800	8.8*800*1.8	BLACK OR WHITE OR COLOR	8--235	38	800
8.8X910	8.8*910*1.8	BLACK OR WHITE OR COLOR	8--265	38	800
8.8X1000	8.8*1000*1.8	BLACK OR WHITE OR COLOR	8--298	38	800
8.8X1100	8.8*1100*1.8	BLACK OR WHITE OR COLOR	8--330	38	800
8.8X1220	8.8*1220*1.8	BLACK OR WHITE OR COLOR	8--362	38	800
12.4X540	12.4*540*2.0	BLACK OR WHITE OR COLOR	18--159	38	1200
12.4X650	12.4*650*2.0	BLACK OR WHITE OR COLOR	18--185	38	1200
12.4X900	12.4*900*2.0	BLACK OR WHITE OR COLOR	18--260	38	1200
12.4X1000	12.4*1000*2.0	BLACK OR WHITE OR COLOR	18--300	38	1200

Model Difference Statement

We [redacted] CO.,LTD. states that NYLON CABLE TIE and 4.8X200, are identical in interior structure, electrical circuits and components, only difference being the model no., plug portion and exported countries.

Confirmed by:

By: _____XIAOBO HU__ ___XIAOBO HU_
(Signature[1]) (Print name)

Title: _ENGINEER MANAGER_

On behalf of: ___[redacted]

Telephone: __[redacted]_

Product Manual

1. Our cable tie is made of UL-approved PA66, which has good weather resistance.
It can be used normally under the environment of (-40℃) to (+85℃) without breakage,
Trips, etc.;

2. The product meets the requirements of ROHS2.0, REACH, PAHS after SGS chemical test,
Meet the requirements of environmental protection;

3. The products are widely used in electric power, machinery, hardware, electrical appliances, cables and other industries.
For civilian purposes, it can be used to tie up packaging bags, bunching flowers and grass and other items that need to be tied up.
Easy to operate

4. The product has the functions of oil resistance, acid resistance, alkali resistance, and UV resistance, and has good toughness and strength

5. Our products are vacuum packed in nylon bags, it is recommended to open them before use.
In order to avoid the loss of product moisture and affect product performance.

Photo documentation

Type of equipment: NYLON CABLE TIE

Details of:

View:

[X] general

[ ] front

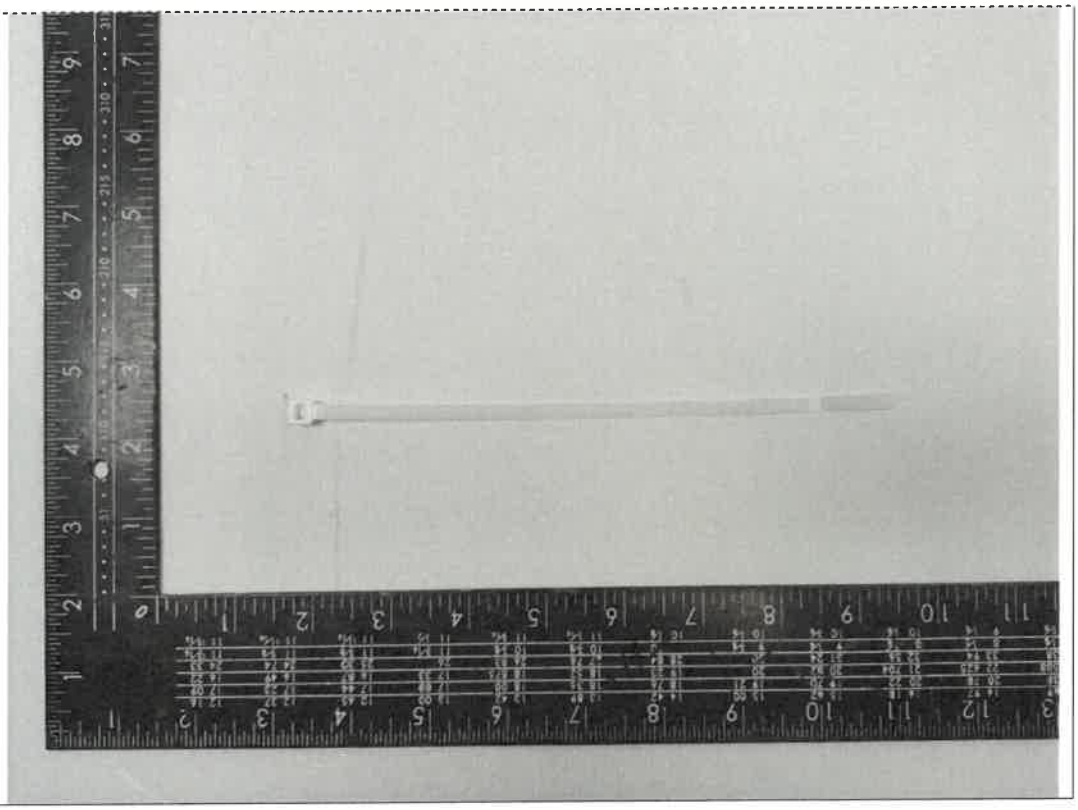
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Details of:

View:

[X] general

[ ] front

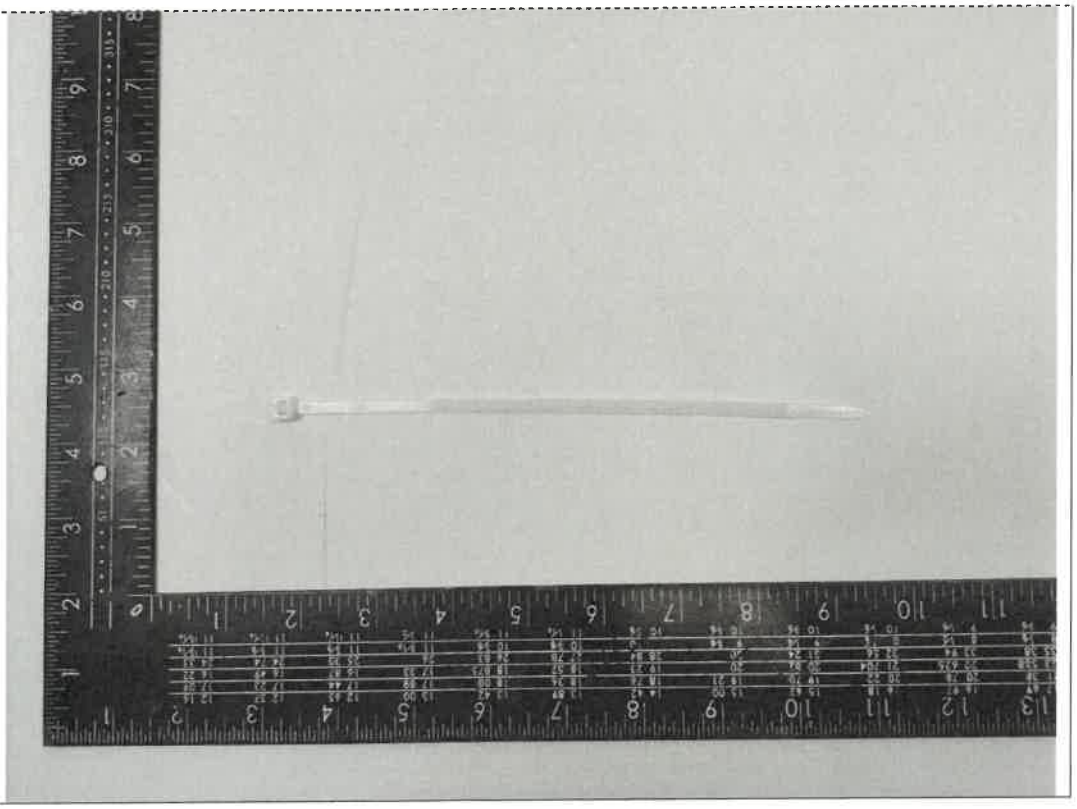
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



Details of:

View:

[X] general

[ ] front

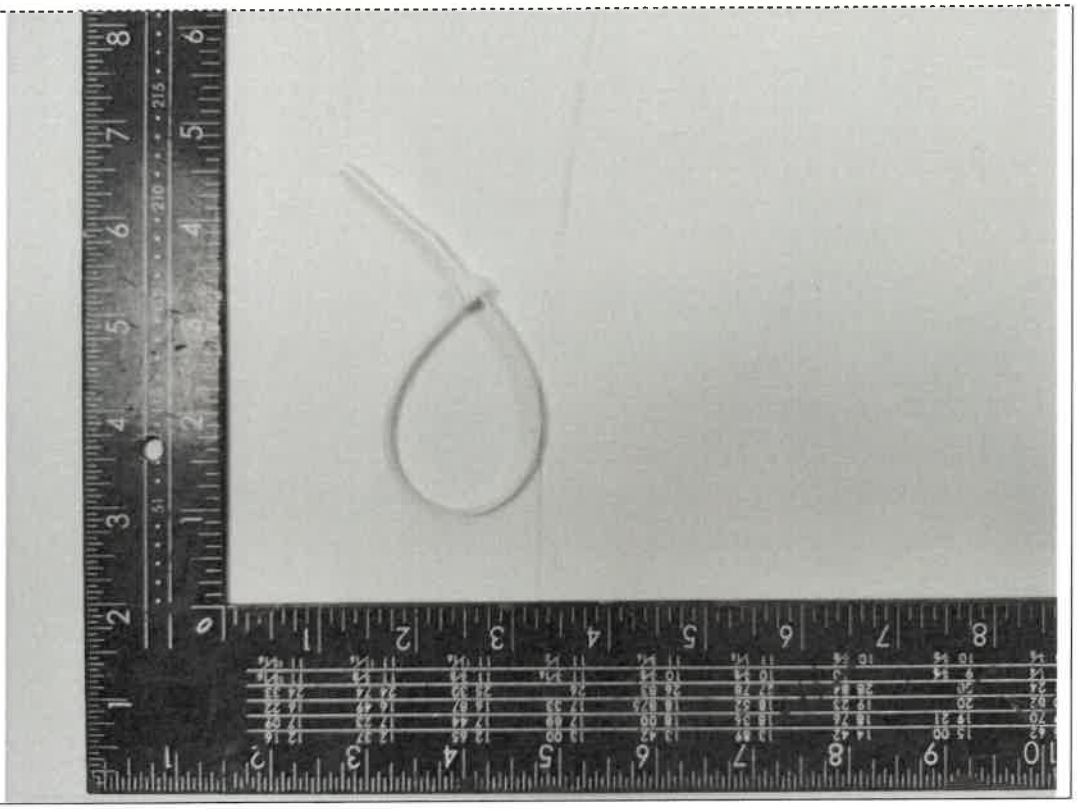
[ ] rear

[ ] right

[ ] left

[ ] top

[ ] bottom



-End of Photo Documentation -