WOER®

WOLABEL®

Cable & Wire Heat Shrinkable Identification Sleeves

SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO.,LTD.

WOLABEL, Identification Sleeves

Marking—It almost lives with the human beings all the time, from the rope–story in remote antiquity to the inscriptions on bones or tortoise shells about 3 thousand years ago, then to various marking methods in modern times, its essence is the development of traceability and reliability, and traceability is one of the most important 3 kernels of ISO quality management system.

In 2003, there were a big power supply failed in New York and Italy, although it was caused by man–made, but there were still many internal reasons, and the source reason was the marking on cable lost.

In the modern times, the reliability of marking must be increased greatly, so WOER started a new concept marking system, now it already become the main products in Europe and American market.

WOER is one of the 3 manufactures who can produce heat shrinkable identification sleeves in the world.

Applications

To enhance the maximum safety, reliability and continuously reduce the total cost for the manufacturing, maintaining, operating and management of a system, the Wolabel serial heat shrinkable identification sleeves are widely used for the permanent marking in the fields below:

- For marking the pipelines located in large chemical manufacturers such as petrifaction, ammonia or urea synthesizing enterprises;
- For marking the cables, wires and signal–nets in general factory, center control chamber and so on;
- For marking the wire, water–pipe, gas–pipe and various cables in house and buildings; For marking the optic–cable and other wires in programmed equipments, built–in terminal connectors and outlet–box, distribution head etc;
- For marking the wires and cables in bank or financial management system, metro, train manufacturers and plane manufacturers etc.

AMS-CB, AMS-H
Military grade wire identification sleeves

DESCRIPTIONS

AMS-CB and AMS-H, two series of marker, the heat shrinkable sleeves are designed to meet the wire and cable marking needs of manufacturers with high performance requirements. Made from permanent, flame retarded, radiation cross-linked heat-shrinkable polyolefin.

AMS-CB and AMS-H marker are the military grade wire identification sleeves; meet the requirements of AMS- DTL-23053/5 classes 1 and 3.

Either AMS-CB or AMS-H has two expansion ratios, both 2:1 and 3:1 shrink ratios are available, see table 1 to table 4.

AMS-CB and AMS-H are permanent immediately after printing and remain legible even when exposed to abrasion, aggressive cleaning solvents, and military fuels and oils.

The sleeves meet the mark permanence requirements of SAE AS 81531 before and after shrinking. The 2:1 products provide a thick, rugged sleeve wall and are particularly easy to handle. The lightweight 3:1 products provide extremely fast shrinking and cover a wider range of wire diameters, thus simplifying inventory. The marker sleeves are designed to be printed by computer-driven heavy duty dot matrix, thermal transfer printers and laser graver printers providing several advantages in terms of reduced errors, cycle time and cost.

Supplied in a thin, flatten "cartridge belt" format, the sleeves are held horizontally between two hole-punched polyester strips. This configuration feeds directly from the storage box into a recommended Wolabel printer,Wolabel ribbons should always be used. The "cartridge belt" format provides automatic kitting of the marker sleeves in the desired sequence. A standard heat gun with reflector is used to shrink the sleeves onto the wire or cable.

CHARACTERISTICS

- ◎Permanent identification sleeves.
- ◎Computer-printable.
- ◎Lightweight for aerospace applications.
- ◎Military grade material and high print performance.
- ◎2:1 and 3:1 shrink ratio.
- ◎Flame retarded, VW-1.
- ◎Temperature rating+135° C/275° F
- ◎Quick recovery for heat sensitive areas.
- ◎RoHS compliant.

☐Temperature rating

Operating temperature range: -55° C to +135° C
-67° F to +275° F
Minimum recovery temperature: +85° C/ +185° F
Maximum storage temperature +50° C /+122° F
Totally shrink temperature: +115° C/239° F

☐Standard

Military AMS-DTL-23053/5 classes 1 and 3
SAE AS 81531, MIL-STD-202F Method 215J

☐Printer information

WOlabel recommended printer:
- WO-III 110-600 (thermal transfer)
- WO-III 110-300 (thermal transfer)
- WO-III 140-203 (thermal transfer)
- WO-III 170-300 (thermal transfer)
- WO-III 220-203 (thermal transfer)
- WO-6310 (dot matrix)
- WO-9200(laser grave)

Wolabel ribbon:
- WO-10345BK (thermal transfer)
- WO- 2427BK(thermal transfer)
- WO-1892BK04 (dot matrix)

☐Equipments for shrinkage

- WO-1K（air heat）
- WO-2K（air heat）
- WO-3K（air heat）
- WO-0K（butane, micro-flame ）

PART NUMBERING SYSTEM

AMS-CB-2X-2.4-L-1K-Y

- Color：Y/4 for yellow,W/9 for white
- Number：2.5k/2k/1k/0.5k/0.25k(Pcs/Coil)
- Nominallength：32.5/50/152,default is 50
- Expanded ID：as supplied
- Expansion ratio：2X, 3X are for 2:1 and 3:1
- Wall thickness：CB for super-thin wall,H for normal thickness
- Product family：AMS for AMS-DTL-23053/5, RSFR for UL 224

WOLABEL®

RSFR–CB, RSFR–H
Halogen free identification sleeves

DESCRIPTIONS

RSFR–CB and RSFR–H, two series of halogen free identification sleeves are designed to meet the wire and cable marking needs of manufacturers with high performance requirements. Made from permanent, flame retarded, radiation cross–linked heat–shrinkable polyolefin.

RSFR–CB and RSFR –H identification sleeves meet the requirements of UL 224.

Either RSFR–CB or RSFR–H has two expansion ratios, both 2:1 and 3:1 shrink ratios are available, see table 1 to table 4.

RSFR–CB and RSFR–H are permanent immediately after printing and remain legible even when exposed to abrasion, aggressive cleaning solvents.
The 2:1 products provide a thick, rugged sleeve wall and are particularly easy to handle. The lightweight 3:1 products provide extremely fast shrinking and cover a wider range of wire diameters, thus simplifying inventory.

The marker sleeves are designed to be printed by computer–driven heavy duty dot matrix, thermal transfer printers and laser graver printers providing several advantages in terms of reduced errors, cycle time and cost.

Supplied in a thin, flatten "cartridge belt" format, the sleeves are held horizontally between two hole–punched polyester strips. This configuration feeds directly from the storage box into a recommended Wolabe Iprinter and the recommended Wolabel ribbons should always be used. The "cartridge belt" format provides automatic kitting of the marker sleeves in the desired sequence. A standard heat gun with reflector is used to shrink the sleeves onto the wire or cable.

RSFR–CB & RSFR–H are the HFEF materials comply with the requirements of RoHS, IEC 61249–2–21, 2002/72/EC, Japan Toy Safety Standard Part–3 and SS00259.

CHARACTERISTICS

◎Permanent identification sleeves.
◎Computer–printable.
◎2:1 and 3:1 shrink ratio.
◎CSA Certified.
◎UL Recognized, VW–1 and all flame tubing test rated.
◎Quick recovery for heat sensitive areas.
◎Not only RoHS compliant, but also halogen free.

☐Temperature rating

Operating temperature range: –55° C to +125° C/67° F to +257° F
Minimum recovery temperature: +85° C/ +185° F
Totally shrink temperature: +115° C/+239° F
Maximum storage temperature +50° C /+122° F

☐Standard / Recognized

UL224 Recognized file E203950
CSA Certified File 220127

☐Printer information

Wolabel printer:
- WO–III 110–600 (thermal transfer)
- WO–III 110–300 (thermal transfer)
- WO–III 140–203 (thermal transfer)
- WO–III 170–300 (thermal transfer)
- WO–III 220–203 (thermal transfer)
- WO–6310 (dot matrix)
- WO–9200(laser grave)

Wolabel ribbon:
- WO–5095BK10245 (thermal transfer)
- WO– AXR7 (thermal transfer)
- WO–1892BK04 (dot matrix)

☐Equipments for shrinkage

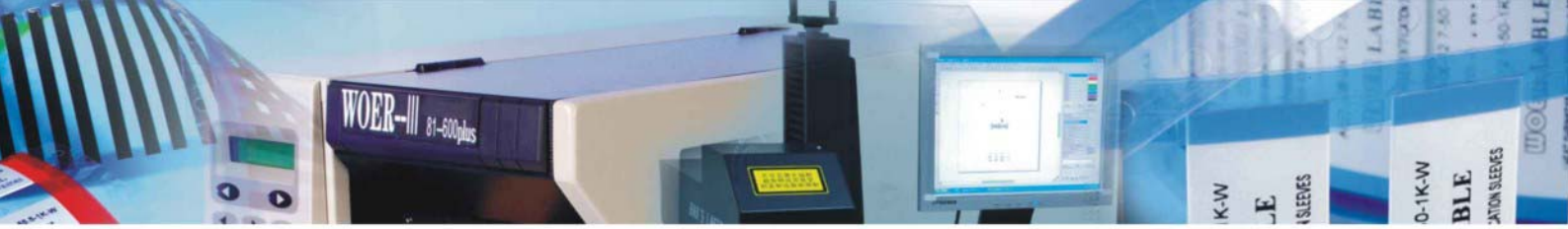
- WO–1K（air heat）
- WO–2K（air heat）
- WO–3K（air heat）
- WO–0K（butane, micro–flame ）

PART NUMBERING SYSTEM

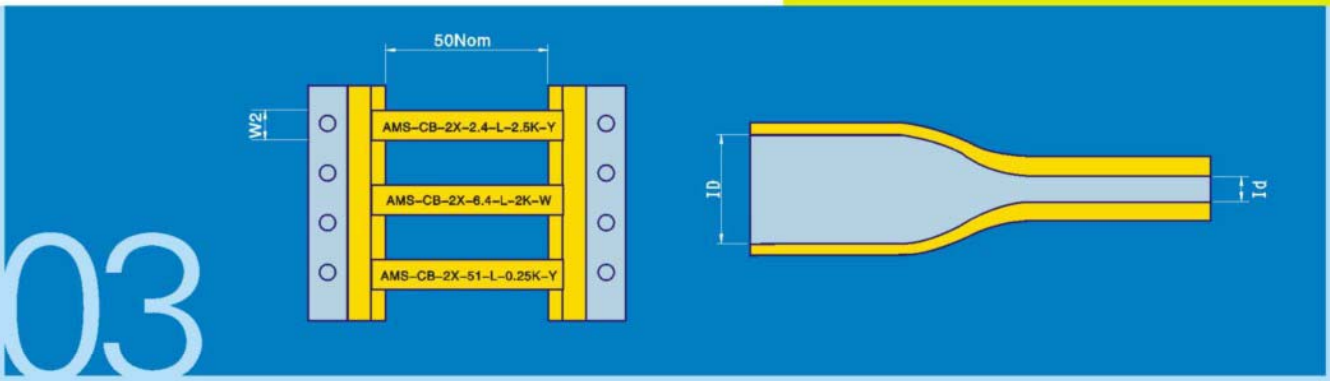
02

RSFR–H–3X–2.4–L–1K–Y

- Color：Y/4 for yellow,W/9 for white
- Number：2.5k/2k/1k/0.5k/0.25k(Pcs/Coil)
- Nominallength：32.5/50/152,default is 50
- Expanded ID：as supplied
- Expansion ratio：2X, 3X are for 2:1 and 3:1
- Wall thickness：CB for super–thin wall,H for normal thickness
- Product family：AMS for AMS–DTL–23053/5, RSFR for UL 224



AMS-CB/H RSFR-CB/H
wire identification sleeves



03

TABLE 1 SIZES FOR 2X SUPER-THIN WALL

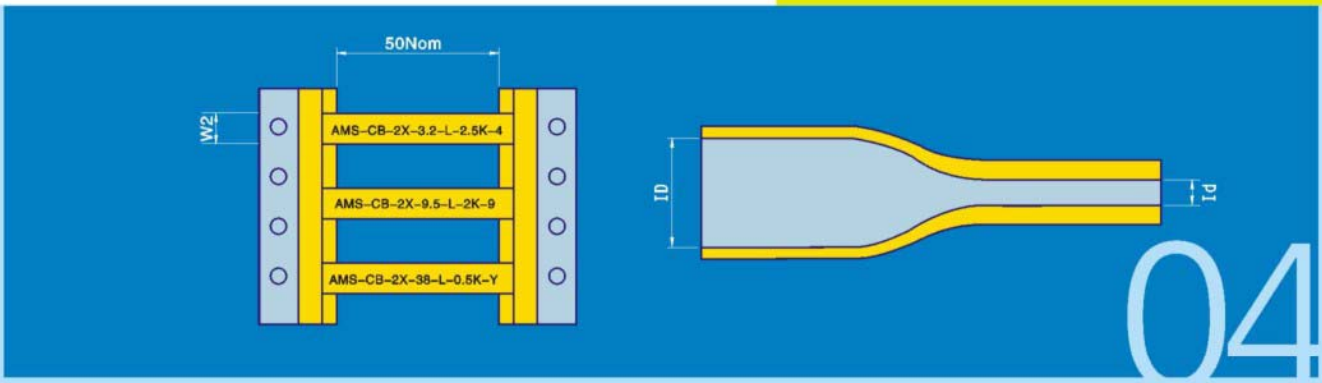
Part Number	Expanded As Supplied (mm)			Recovered After Heating (mm)	
	Inside Diameter, ID	Flat Width, W_2	Double Wall Thickness	Inside Diameter, Id	Single Wall Thickness
AMS-CB-2X-2.4-*-2.5k-*	2.36 ± 0.20	3.7 ± 0.3	0.35 ± 0.10	≤ 1.18	0.36 ± 0.06
AMS-CB-2X-3.2-*-2.5k-*	3.18 ± 0.23	5.0 ± 0.4	0.36 ± 0.10	≤ 1.59	0.37 ± 0.06
AMS-CB-2X-4.8-*-2k-*	4.75 ± 0.25	7.5 ± 0.4	0.36 ± 0.10	≤ 2.36	0.37 ± 0.06
AMS-CB-2X-6.4-*-2k-*	6.35 ± 0.28	10.0 ± 0.4	0.37 ± 0.10	≤ 3.18	0.38 ± 0.06
AMS-CB-2X-9.5-*-2k-*	9.53 ± 0.32	15.0 ± 0.5	0.38 ± 0.11	≤ 4.75	0.39 ± 0.06
AMS-CB-2X-12.7-*-1k-*	12.7 ± 0.36	19.9 ± 0.6	0.38 ± 0.11	≤ 6.35	0.39 ± 0.07
AMS-CB-2X-19-*-1k-*	19.1 ± 0.40	30.0 ± 0.6	0.40 ± 0.11	≤ 9.53	0.40 ± 0.07
AMS-CB-2X-25-*-0.5k-*	25.4 ± 0.45	39.9 ± 0.7	0.40 ± 0.12	≤ 12.7	0.41 ± 0.07
AMS-CB-2X-38-*-0.5k-*	38.1 ± 0.51	59.8 ± 0.8	0.42 ± 0.12	≤ 19.1	0.42 ± 0.07
AMS-CB-2X-51-*-0.25k-*	50.8 ± 0.56	79.8 ± 0.9	0.43 ± 0.13	≤ 25.4	0.43 ± 0.08
AMS-CB-2X-76-*-0.25k-*	76.2 ± 0.63	119.7 ± 1.0	0.44 ± 0.14	≤ 38.1	0.45 ± 0.08

TABLE 2 SIZES FOR 2X NORMAL WALL

Part Number	Expanded As Supplied (mm)			Recovered After Heating (mm)	
	Inside Diameter, ID	Flat Width, W_2	Double Wall Thickness	Inside Diameter, Id	Single Wall Thickness
AMS-H-2X-2.4-*-2.5k-*	2.36 ± 0.20	3.7 ± 0.3	0.62 ± 0.10	≤ 1.18	0.64 ± 0.06
AMS-H-2X-3.2-*-2.5k-*	3.18 ± 0.23	5.0 ± 0.4	0.63 ± 0.10	≤ 1.59	0.64 ± 0.06
AMS-H-2X-4.8-*-2k-*	4.75 ± 0.25	7.5 ± 0.4	0.64 ± 0.10	≤ 2.36	0.65 ± 0.06
AMS-H-2X-6.4-*-2k-*	6.35 ± 0.28	10.0 ± 0.4	0.65 ± 0.10	≤ 3.18	0.66 ± 0.06
AMS-H-2X-9.5-*-2k-*	9.53 ± 0.32	15.0 ± 0.5	0.67 ± 0.11	≤ 4.75	0.68 ± 0.06
AMS-H-2X-12.7-*-1k-*	12.7 ± 0.36	19.9 ± 0.6	0.68 ± 0.11	≤ 6.35	0.69 ± 0.07
AMS-H-2X-19-*-1k-*	19.1 ± 0.40	30.0 ± 0.6	0.69 ± 0.11	≤ 9.53	0.71 ± 0.07
AMS-H-2X-25-*-0.5k-*	25.4 ± 0.45	39.9 ± 0.7	0.71 ± 0.12	≤ 12.7	0.72 ± 0.07
AMS-H-2X-38-*-0.5k-*	38.1 ± 0.51	59.8 ± 0.8	0.73 ± 0.12	≤ 19.1	0.74 ± 0.07
AMS-H-2X-51-*-0.25k-*	50.8 ± 0.56	79.8 ± 0.9	0.75 ± 0.13	≤ 25.4	0.76 ± 0.08
AMS-H-2X-76-*-0.25k-*	76.2 ± 0.63	119.7 ± 1.0	0.78 ± 0.14	≤ 38.1	0.79 ± 0.08

WOLABEL®

AMS-CB/H RSFR-CB/H
wire identification sleeves



04

TABLE 3 SIZES FOR 3X SUPER-THIN WALL

Part Number	Expanded As Supplied (mm)			Recovered After Heating (mm)	
	Inside Diameter, ID	Flat Width, W_2	Double Wall Thickness	Inside Diameter, Id	Single Wall Thickness
AMS-CB-3X-2.4-*-2.5k-*	2.36±0.20	3.7±0.3	0.36±0.10	≤0.79	0.56±0.06
AMS-CB-3X-3.2-*-2.5k-*	3.18±0.23	5.0±0.4	0.36±0.10	≤1.06	0.56±0.06
AMS-CB-3X-4.8-*-2k-*	4.75±0.25	7.5±0.4	0.37±0.10	≤1.59	0.57±0.06
AMS-CB-3X-6.4-*-2k-*	6.35±0.28	10.0±0.4	0.38±0.10	≤2.36	0.58±0.06
AMS-CB-3X-9.5-*-2k-*	9.53±0.32	15.0±0.5	0.39±0.11	≤3.18	0.60±0.06
AMS-CB-3X-12.7-*-1k-*	12.7±0.35	19.9±0.6	0.39±0.11	≤4.75	0.61±0.07
AMS-CB-3X-19-*-1k-*	19.1±0.40	30.0±0.6	0.40±0.11	≤6.35	0.63±0.07
AMS-CB-3X-25-*-0.5k-*	25.4±0.45	39.9±0.7	0.42±0.12	≤8.47	0.64±0.07
AMS-CB-3X-38-*-0.5k-*	38.1±0.51	59.8±0.8	0.43±0.12	≤12.7	0.66±0.07
AMS-CB-3X-51-*-0.25k-*	50.8±0.57	79.8±0.9	0.44±0.13	≤16.9	0.68±0.08
AMS-CB-3X-76-*-0.25k-*	76.2±0.64	119.7±1.0	0.46±0.14	≤25.4	0.71±0.08

TABLE 4 SIZES FOR 3X NORMAL WALL

Part Number	Expanded As Supplied (mm)			Recovered After Heating (mm)	
	Inside Diameter, ID	Flat Width, W_2	Double Wall Thickness	Inside Diameter, Id	Single Wall Thickness
AMS-H-3X-2.4-*-2.5k-*	2.36±0.20	3.7±0.3	0.44±0.10	≤0.79	0.68±0.06
AMS-H-3X-3.2-*-2.5k-*	3.18±0.22	5.0±0.4	0.44±0.10	≤1.06	0.68±0.06
AMS-H-3X-4.8-*-2k-*	4.75±0.26	7.5±0.4	0.45±0.10	≤1.59	0.69±0.06
AMS-H-3X-6.4-*-2k-*	6.35±0.28	10.0±0.4	0.46±0.10	≤2.36	0.70±0.06
AMS-H-3X-9.5-*-2k-*	9.53±0.32	15.0±0.5	0.46±0.11	≤3.18	0.72±0.06
AMS-H-3X-12.7-*-1k-*	12.7±0.35	19.9±0.6	0.47±0.11	≤4.75	0.73±0.07
AMS-H-3X-19-*-1k-*	19.1±0.41	30.0±0.6	0.48±0.11	≤6.35	0.75±0.07
AMS-H-3X-25-*-0.5k-*	25.4±0.45	39.9±0.7	0.49±0.12	≤8.47	0.76±0.07
AMS-H-3X-38-*-0.5k-*	38.1±0.51	59.8±0.8	0.51±0.12	≤12.7	0.78±0.07
AMS-H-3X-51-*-0.25k-*	50.8±0.56	79.8±0.9	0.52±0.13	≤16.9	0.80±0.08
AMS-H-3X-76-*-0.25k-*	76.2±0.64	119.7±1.0	0.54±0.14	≤25.4	0.83±0.08

GUIDS OF PRINTERS
WO-III Serial Thermal transfer Printers

HIGHER LEVELS OF LABELING

The Wo-III series offer superior performance, mission-critical printers that deliver a labeling solution to fulfill any need—from 600 dpi resolution for small label printing to an 8.5-inch print width for wide labels and forms. Exciting, new features include a 32-bit processor; increased memory for label formats, graphics, fonts and programs; and an early warning notification for print head maintenance support. WO-III Plus printers also offer more connectivity choices than their competitors, including Wo-Link, Wo-Net wireless Card Socket, and USB 2.0, serial, and parallel ports.

WO-III Series (AS/400) network users may select from a wide range of twin ax/coax and IPDS connectivity options. Add up all the bells and whistles, and it's easy to see why Wo-III Plus printers take high performance to an all-new level!

EVERYTHING YOU COUNT ON WITH WO-III SERIES PRINTERS, PLUS MORE!

WO-III series is known for its high performance and ruggedness. These hardworking printers are the ones to call on24/7in heavy-duty, industrial operations.
Wo-III Plus printers offer revolutionary features including:

- ◎New 32-bit processor for faster throughput and processing
- ◎Increased 16 MB SDRAM memory(over 12 MB user available) for printing longer label formats
- ◎Compact Flash (up to 256 MB memory) for added label format/font storage
- ◎4 MB non-volatile Flash memory (2 MB user available)
- ◎Early service warning for print head maintenance and ribbon/media changes
- ◎300 distinct darkness settings for fine-tuning print quality

WO-III ,110-203/300

The WoIII, 110 Plus with 203- or 300-dpi print head and variable width up to 4 inches, making it ideal for high-quality printing on small product labels.

☐MAXIMUM PRINT AREA
Width:
203 dpi: 4.09"/104 mm;
300 dpi: 4.09"/104 mm
Length: (with standard memory):
39"/991 mm

☐RESOLUTION
203 dpi/8 dots per mm;
300 dpi/12 dots per mm

☐MAXIMUM PRINT SPEED
203 dpi: 10"/254 mm per second;
300 dpi:
8"/203 mm per second

☐PHYSICAL
CHARACTERISTICS
Width: 10.37"/263.5 mm
Depth: 19.5"/495.3 mm
Height: 15.5"/393.7 mm
Weight: 50 lbs./22.7 kg

☐MEDIA SPECIFICATIONS
Label and liner width:
0.79"/20 mm to 4.5"/114 mm
Ribbon width:
0.79"/20 mm to 4.33"/110 mm

WO-III ,110-600

The WO-III, 110 Plus with 600-dpi print head is unmatched at printing precise text and graphics in limited shrinkable label space.
An outstanding value, this printer is ideal when you require extremely high resolution and density.

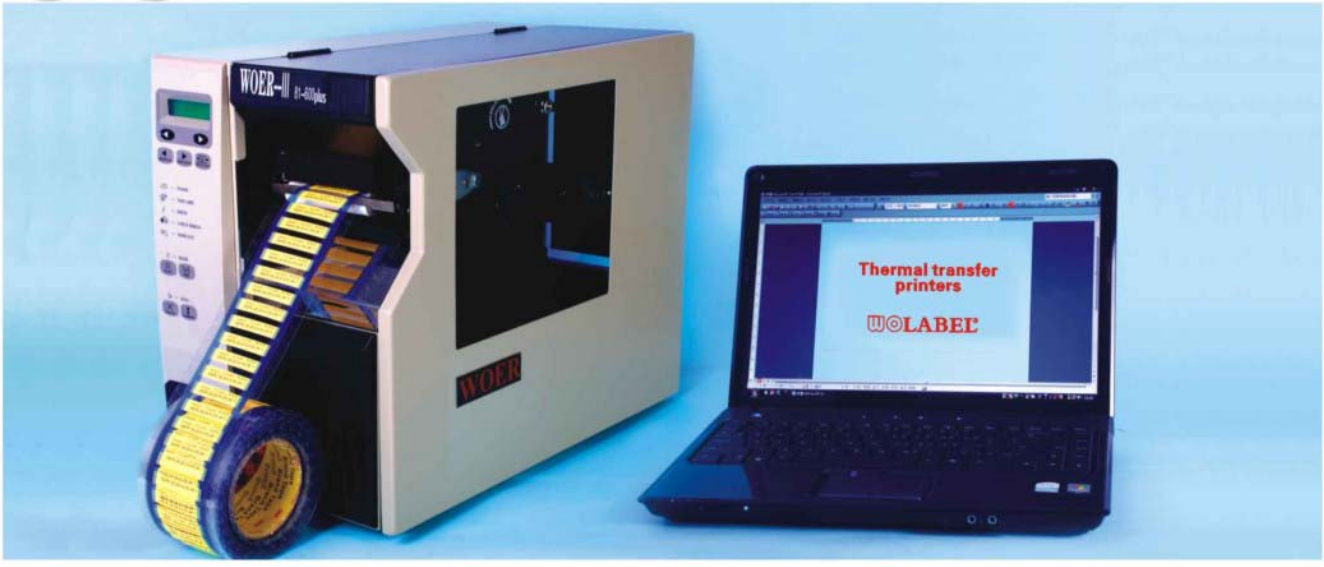
☐MAXIMUM PRINT AREA
Width: 3.2"/81 mm
Length (with standard memory):
39"/991 mm

☐RESOLUTION
23.5 dots per mm

☐MAXIMUM PRINT SPEED
4"/102 mm per second

☐PHYSICAL CHARACTERISTICS
Width: 10.37"/263.5 mm
Depth: 19.5"/495.3 mm
Height: 15.5"/393.7 mm
Weight: 50 lbs./22.7 kg

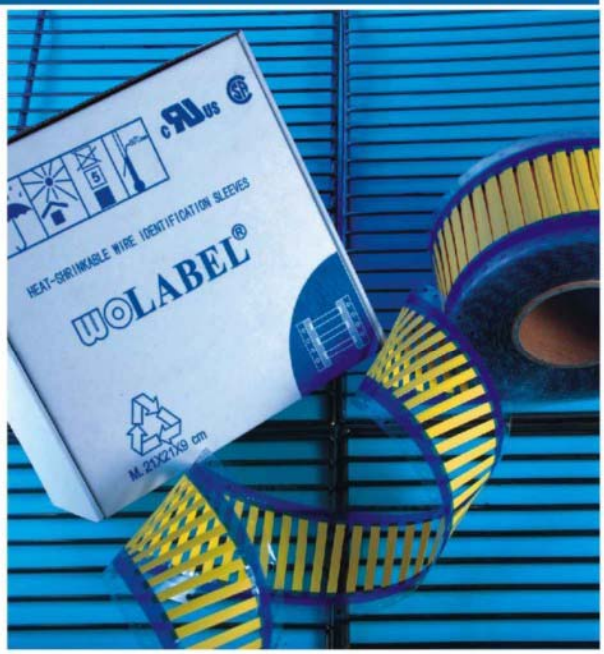
☐MEDIA SPECIFICATIONS
Label and liner width:
0.79"/20 mm to 4.5"/114 mm
Ribbon width:
0.79"/20 mm to 4.33"/110 mm



WOLABEL®

GUIDS OF PRINTERS
Wo–III Serial Thermal transfer Printers

06



WO–III,140–203

The WO–III,140 Plus gets the job done fast, printing at up to 12 inches per second. With such powerful performance and steel construction, it is the ideal choice for high volume, mission–critical applications with 24–hour duty cycles. The Wo–III,140 Plus is also well suited for applications in which labels are required quickly, either on demand or in batches.

☐MAXI MUM PRINT AREA
Width: 5.04"/128 mm
Length (with standard memory):
39"/991 mm

☐RESOLUTION
203 dpi/8 dots per mm

☐MAXI MUM PRINT SPEED
12"/305 mm per second

☐PHYSICAL CHARACTERISTICS
Width: 11.15"/283.2 mm
Depth: 19.5"/495 mm
Height: 15.5"/393.7 mm
Weight: 55 lbs./25 kg

☐MEDIA SPECIFICATIONS
Label & liner width:1.57"/40 mm to 5.51"/140 mm
Ribbon width: 1.57"/40 mm to 5.1"/130 mm

WO–III, 170–203

The industrial–strength WO–III, 170 Plus has a12–gauge steel frame,300–dpi print resolution, and the ability to print labels up to 6.6 inches wide at 8 inches per second. Tough compliance labeling applications are no match for the WO–III, 170Plus, since it can easily print large numbers of AIAG,ODETTE, UCC/EAN–128 and other compliance labels on demand or in batches.

☐MAXI MUM PRINT AREA
Width: 6.6"/168 mm
Length (with standard memory):
39"/991 mm

☐RESOLUTION
300 dpi/12 dots per mm

☐MAXI MUM PRINT SPEED
8"/203 mm per second

☐PHYSICAL CHARACTERISTICS
Width: 13.15"/334.4 mm
Depth: 19.5"/495 mm
Height: 15.5"/393.7 mm
Weight: 67 lbs./30.5 kg

☐MEDIA SPECIFICATIONS
Label & liner width: 2"/51 mm to 7.1"/180 mm
Ribbon width:
2"/51 mm to 6.7"/170 mm
5.1"/130 mm

WO–III, 220–203

The WO–III, 220Plus quickly prints labels up to 8.5 inches wide at 10 inches per second. It is ideal for wide label applications such as printing chemical drum labels, primary metal standard labels, automotive industry labels, banner–sized labels and pallet and container shipping labels.

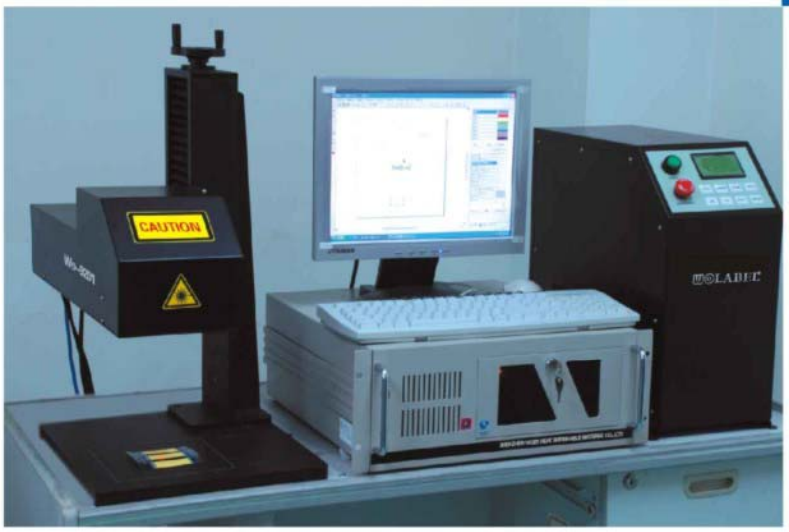
☐MAXI MUM PRINT AREA
Width: 8.5"/216 mm
Length (with standard memory):39"/991 mm

☐RESOLUTION
203 dpi/8 dots per mm

☐MAXI MUM PRINT SPEED
10"/254 mm per second

☐PHYSICAL CHARACTERISTICS
Width: 15.65"/397.5 mm
Depth: 19.5"/495 mm
Height: 15.5"/393.7 mm
Weight: 72 lbs./32.7 kg

☐MEDIA SPECIFICATIONS
Label and liner width: 4.25"/108 mm to 8.8"/224 mm
Ribbon width: 4.25"/108 mm to 8.6"/220 mm



WO-9201 LASER MARKER

The WO-9201 is a CO_2 laser marker, multifunction, reliable, and easily installed. It is equipped with an advanced laser module in the world. Even though under many difficult environments, it also can provide stable output. Such as a partial case, it has operated continuously and stably for 30000 hrs.

The WO-9201 laser marker base on the new concept of labeling, burning or graver by laser to perform marks on the surface of production, overthrew away the conventional inks and thinner which spraying to form characters.
This process makes our environment friendly. There is no ink dropping, no column line limitations. It can change the sizes and the appearances of any character easily.

FEATURES AND BENEFITS

- ◎Fastest CO_2 Laser.
- ◎Permanent identification is not altered.
- ◎Multifunction and versatile.
- ◎Without maintenance.
- ◎Without any ink and thinner.
- ◎Most stable and continuous laser output.
- ◎Very fine precision and distinct.
- ◎High reliability and speed.
- ◎Operating long lively and stably.

□SPECIFICATIONS

Total Power:	220V, 300W
Avg. Power:	10W
Gravening Area:	70 × 70mm²
Gravening Depth:	0.00 ~ 2.0 mm
Production Speed:	200 m/min
Smallest Character:	0.4 mm
Column Line Limitation:	No limit
Types of Characters:	All of the Asian / Western characters
Document Format:	AutoCAD\CorelDraw \Photoshop\PLT\PCX
Scanner Speed:	12000 mm /s
Gravening Speed:	150 characters /s
Laser Actuator Life:	≥30000 hrs
Cooling method:	Air-cooled

□PHYSICAL CHARACTERISTICS

Width: 5.91"/150 mm
Depth: 27.95"/710 mm
Height: 13.78"/ 350 mm
Weight: 77 lbs./35 kg

WO-9202 LASER MARKER

The WO-9202 laser marker is equipped with an advanced laser module as well as the fastest polarizer controlled motor in the world. It can perform the flash speed laser mark, operate continuously and ensure stability without any maintenance for 100,000 hours.

The WO-9202 laser marker based on new concept of labeling, burning or graver by laser to perform marks on the surface of production, overthrew away the conventional inks and thinner which spraying to form characters. This process makes the environment friendly.

There is no ink dropping, no column line limitations. It can change the sizes or the appearances of any character easily

The WO-9202 laser marker has the small sizes as a PC, with the total power only 250W, saving electric power and operating low cost. Between the laser head and the actuator, a flexible fiber connection is used up to 5m.

The WO-9202 laser marker can be easily installed and controlled to manipulate. The density between the focal points can be random controlled to allow the user unlimited creativity and imagination.

FEATURES AND BENEFITS

- ◎Permanent identification is not altered.
- ◎Very fine precision and distinct
- ◎High reliability and speed
- ◎Operating long lively and stably.
- ◎Efficient on energy
- ◎Without any ink and thinner
- ◎Small sizes as a PC
- ◎Can grave on metallic or polymers.

WOLABEL®

GUIDS OF PRINTERS
Laser Serial Graver Printers

☐SPECIFICATIONS

Total Power:	220V, 250W
Avg. Power:	20W
Production Speed:	200 m/min
Smallest Character:	0.5 mm
Column Line Limitation:	No limit
Types of Characters:	All of the Asian / Western characters
Document Format:	AutoCAD\CorelDraw\ Photoshop\PLT\PCX
Scanner Speed:	580 ~ 12000 mm /s
Gravening Speed:	800 characters per second
Laser Actuator Life:	⩾100000 hrs

☐PHYSICAL CHARACTERISTICS

Width: 7.87"/200 mm
Depth: 23.62"/600 mm
Height: 16.54"/420 mm
Weight: 48.4 lbs./22 kg

WO-9203 LASER MARKER

The WO-9203 is remote controllable small laser marker and has the fastest scanner system in the worlds which can ensure the high precision marking. Users can install self the scan head into the line by separating it from other system.

The WO-9203 is very efficient on energy, such as peak plug efficiency 20% and peak photoelectric conversion 70%, high pulse repetition, steady output and single pulse energy < 1%, allows high speed, high accuracy and high definition laser operations.

The WO-9203 is designed air-cooling, compact casing, high quality output, beam divergence.

FEATURES AND BENEFITS

◎Permanent identification
◎High reliability and high speed
◎Long life operated
◎Efficient on energy
◎Can grave on metallic or polymers.

☐SPECIFICATIONS

Total Power:	220V, 200W
Avg. Power:	20W
Power Density:	160 MW /mm2
Focal Point Size:	6 μ m
Gravening Area:	300 X 300 mm2
Gravening Depth:	0.00 ~ 2.0 mm
Scanner Speed:	12000 mm /s
Gravening Speed:	800 characters /s
Laser Actuator Life:	⩾100000 hrs

☐PHYSICAL CHARACTERISTICS

Width: 7.48"/190 mm
Depth: 25.60"/650 mm
Height: 17.13"/435 mm
Weight: 44 lbs./20 kg

GUIDS OF PRINTERS
Wo-6310 Heavy duty dot matrix printer

HIGHER LEVELS OF LABELING

Specifically, the WO-6310 is a heavy duty industrial dot matrix printer with a high impact 24-pin print head. Automatic media thickness detection and a high impact print head make the WO-6310 the best industrial printer available for heavy gauge wire marker and tag materials, and the 24-pin print head produces high quality text printing with fast print speeds.

Standard WO-6310 printer models are designed to print on Wolabel wire marker sleeves and dot matrix pressure sensitive label and tag products. WO-6310D models are equipped with dual tractor mechanism necessary for guiding Wolabel sleeve products. Such dual tractor models can also print on HSI and dot matrix label and tag products.

09

WO-6310-110/230 V

☐PRINTER SPECIFICATINS

Print head 24-pin high-impact dot matrix
Print speed Max. high-speed draft: 600 cps at 12 cpi
Letter quality: 160 cps at 12 cpi
Print direction Bi-directional, logic seeking
Control panel LCD, 12 keys, select-dial and quick access setup menu
Feed mechanism Tractor (single or dual)
Memory 2 MB flash
Input buffer 80 KB
Communication interface Parallel port (centronics 36-pin) and serial port (RS232/DB25)

☐MAXIMUM PRINT AREA

Width: 11.0"/279 mm

☐PHYSICAL CHARACTERISTICS

Width: 19.0" /483 mm
Depth: 16.0"/427 mm
Height: 8.2"/ 208 mm
Weight: 40 lbs /18.1 kg

☐MEDIA SPECIFICATINS

Label and liner width:
1.0"/25 mm to 12.0"/305 mm Minimum

☐PRODUCT ORDER CODE DESCRIPTION

WO-6310-110 V dot matrix printer, standard 110 V
WO-6310-230V dot matrix printer, standard 230 V
WO-6310D-110Vdot matrix printer, dual tractor 110 V
WO-6310D-230V dot matrix printer, dual tractor 230 V

WOLABEL®

GUIDS OF HEATERS
WO–NK Heaters

Wo–2KB Heater

Wo–2KA Heater

Wo–3K Heater

WO–1K HEATER

In the world, for aiming at the characteristics of heat shrinkable sleeves. Wo– 1 K heater is the advanced for heat shrinkable wire identification sleeves, with our created technology surpassing Japanese over.

WO– 1 K heater blows heated air by electrics, it is suitable for small quantity of the shrinkage tasks, intermittently by manual operation.

Today, only has one of Wo– 1 K can be supplied. It has the small sizes and lightweight, the exact precision of temperature.

WO– 1 K heater can insure the words and logo to maintain legible, long live on the wires identification shrinkable sleeves.

☐**Power of the heater:**
WO– 1 K 0 . 2 : 230 V, 0 . 2 kW

☐**Precision of the temperature:**
±3℃/5.4℉

☐**Minimum current of the hot air:**
1 8 0L / min

☐**Physical Characteristics:**
Width: 11.65"/296 mm
Depth: 3.15"/80 mm
Height: 5.12"/130mm
Weight: 1.1 lbs./0.5 kg

☐**Approval:** CE Certificated

WO–1K Heater

WO–2K HEATERS

In the world, for aiming at the characteristics of heat shrinkable sleeves, WO–2K serial heaters are the advanced for heat shrinkable wire identification sleeves, with our created technology surpassing over the LEISTER.

WO–2K serial heaters blow heated air by electrics, they are suitable for large quantities of the shrinkage tasks, intermittently by manual operation.

There are two styles of WO–2K serial heaters can be supplied. They have the small sizes and lightweight, exact precision of temperature.

WO–2K serial heaters can be operated continuously for 24h, can insure the words and logo to maintain legible as well as long live on the wires identification shrinkable sleeves.

☐**Power of the heater:**
WO–2K3: 230 V, 3 kW
WO–2K4: 380 V, 4 kW

☐**Precision of the temperature:**
±1℃/1.8℉

☐**Minimum current of the hot air:**
WO–2K4: 400L / min
WO–2K5: 500L / min

☐**Physical Characteristics:**
Width: 4.25"/108 mm
Depth: 12.44"/316 mm
Height: 4.41"/112 mm
Weight: 4.1 lbs./1.85 kg

☐**Approval:** CE Certificated

WO–3K HEATERS

In the world, for aiming at the characteristics of heat shrinkable sleeves, Wo–3K serial heaters is the advanced for heat shrinkable wire identification sleeves, with our created technology surpassing over the STEINEL.

WO–3K heaters blow heated air by electrics, they are suitable for large quantities of the tasks to shrinkage, continuously by automatic equipment operation.

There are four styles of WO–3K serial heaters can be supplied. They have the small sizes and lightweight, exact precision of temperature. Wo–3K can be operated continuously for 24h. Wo–3K serial heaters can insure the words and logo to maintain legible, long live on the wires identification shrinkable sleeves.

☐**Power of the heater:**
WO–3K1.5: 230 V, 1.5kW
WO–3K2.0: 230 V, 2.0kW
WO–3K2.5: 230 V, 2.5 kW
WO–3K3.5: 230 V, 2.5 kW

☐**Precision of temperature:**
±1℃/1.8℉

☐**Minimum current of hot air:**
WO–3K1.5: 400 L / min
WO–3K2.0: 500 L / min
WO–3K2.5: 500 L / min
WO–3K3.5: 800 L / min

☐**Physical Characteristics:**
Width: 2.36" /60 mm
Depth: 15.98"/406 mm
Height: 2.36"/60 mm
Weight: 2.3 lbs./1.05 kg

☐**Approval:** CE Certificated

GUIDS OF HEATERS

WO-0K Heaters

WO-0K25

For aiming at the characteristics of heat shrinkable sleeves. WO-0K25 is the high density, color-less flame heater. It is suitable for small quantity of the shrinkage testing tasks by manual operation.

The appearance of WO-0K25 is chic, unconventional arts, very small sizes and lightweight. The temperature of color-less flame is nearly to 700℃/1292℉, powered by butane gas and ignited with piezoelectricity.

WO-0K25 heater can insure the words and logo to maintain legible, long live on the wires identification shrinkable sleeves.

☐**Temperature of the hot air:** ~700℃/1292℉

☐**Physical Characteristics:**

Width: 1.97"/50 mm
Depth: 2.76 "/70 mm
Height: 1.97"/50 mm
Weight: 80g

WO-0K35 H

WO-0K35 is a micro-heater, high density, color-less flame heater. The appearance is designed as a lighter. It is suitable for small quantity of the shrinkage testing tasks by manual operation.

The appearance of WO-0K35 is chic, unconventional arts, very small sizes and lightweight. The temperature of color-less flame is nearly to 700℃/1292℉, powered by butane gas and ignited with flint.

WO-0K35 heater can insure the words and logo to maintain legible, long live on the wires identification shrinkable sleeves.

☐**Temperature of the hot air:** ~700℃/1292℉

☐**Physical Characteristics:**

Width: 2.36"/60 mm
Depth: 2.76 "/70 mm
Height: 1.97"/50 mm
Weight: 90g

WOLABEL®

Engineering Memoire

Engineering Memoire