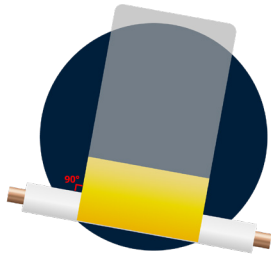


LSW Wrap-around Horizontal Labels

Durable self-laminating marker

TECHNICAL DATA SHEET

Revision Number. 1.5
Last Edited 5. jan. 2024



UL recognised wrap-around horizontal labels. Extremely quick and easy to print and apply and gives the printed label protection with self-laminating function.

The labels are printed using thermal transfer printing technology and designed for many applications where ID of parts are required especially in data centres.

Cost-effective way to label wires and cable when installations don't have to survive the very toughest environmental conditions.

Typical usage.

LSW labels can be applied indoors as self-laminating wrap-around labels that sit flat around cables for a tidy finish or as flagging labels that stand out from cables so that maintenance technicians can sort them with ease. Their ability to withstand exposure to oil, solvents and water makes them ideal for, industrial, commercial, telecom, electrical, electronics and automotive applications. The pressure sensitive adhesive bonds well to a variety of surfaces. Special formulated pressure sensitive adhesive meet the demanding requirement for wire harness labelling.

The labels have detection holes for printers with fixed sensor or movable sensor.

Industries



Industry



Marine



Wind power



Commercial



Aerospace



Construction



Railway



Military



Electrical installations



Petrochemical



Telecom

STANDARD COLORS



MATERIAL

Frosty 3.5 mil "80 micron" clear vinyl film.
Backed with a 50lb. kraft release liner.

ADHESIVE

Solvent based permanent pressure sensitive acrylic adhesive.

APPLICATION MIN TEMPERATURE

Application Temperature Min. 10°C (50°F)

SERVICE TEMPERATURE RANGE

-20°F to 176°F (-29°C to 80°C)

RECOMMENDED RIBBON

FTI-M

ALTERNATIVE RIBBON

FTI-Y - FTI-HX - FTI-X

SMUGDE & SCRATCH RESISTANCE

Good Smear / scratch Resistance

Good Smear / scratch Resistance

RESISTANCE TO SOLVENTS

Excellent. Not recommended in use with acetic acid 25-50% at 140°F (60°C)

REACH - ROHS COMPLIANT

Yes

RECOMMENDED PRINTERS

CAB - EOS - SQUIX Series

HALOGEN FREE

No

UL/ CSA CERTIFICATION

This product "vinyl film" meets the requirements as stated in UL 969

UL file number PGGU2.MH10170

STORAGE STABILITY

12 months from date of manufacture. Cool and dry in original packaging. Recommended temperature: 70-75°F - 21-25°C - 40-50% RH - Relative Humidity defined by FINAT. Prolonged storage at higher temperatures and / or higher humidity will shorten the shelf life.

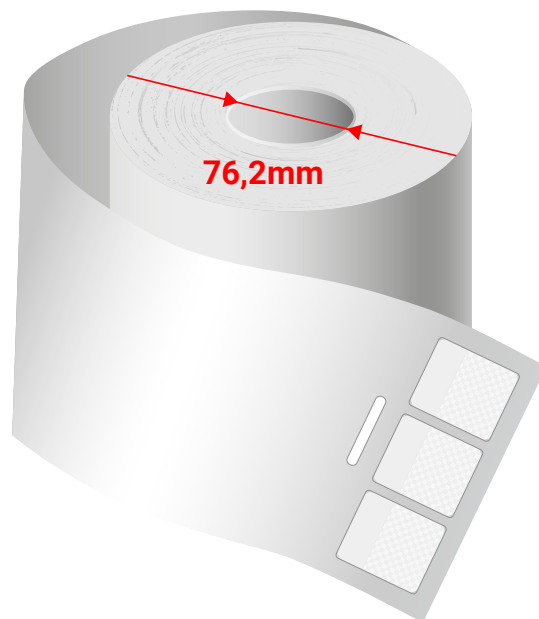
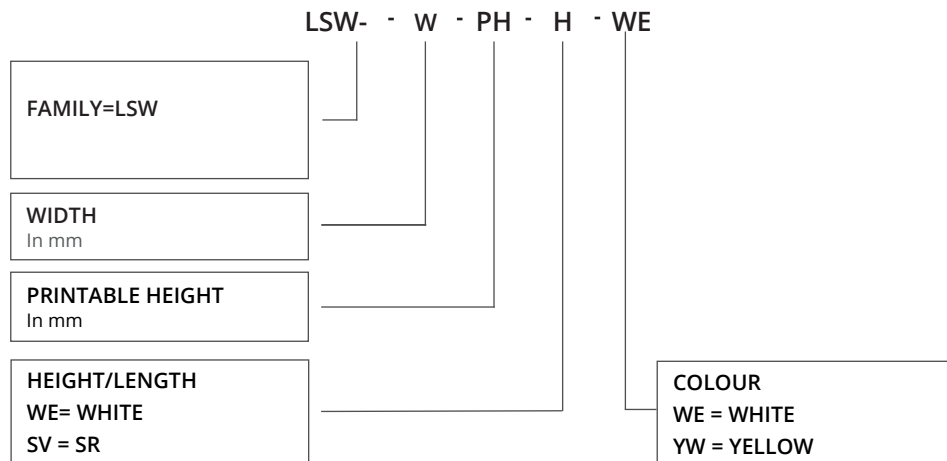
APPLICATIONS

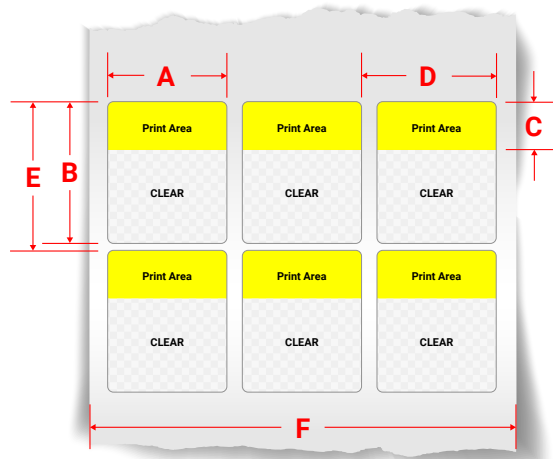
Developed to be used in industry, wind power, commercial, construction, electrical, telecom, industrial signs etc.

Ordering Info - Part Number Example LSW-127-095-190-WE

PART NUMBER EXAMPLE -

Product code





PRODUCT CODE	APPLICATIVE DIAMETER	LINES ACROSS	WIDTH	HEIGHT	PRINT HEIGHT	D	E	LINER WIDTH	PCS / ROLL
			A	B	C			F	
	mm	pcs	mm	mm	mm	mm	mm	mm	pcs
LSW-127-095-190-WE	2-3	4	12,7	19,05	9,53	15,24	24,05	63,50	5,000
LSW-127-095-254-WE	3-5	4	12,7	25,4	9,53	15,24	30,40	63,50	5,000
LSW-127-127-317-WE	3-6	4	12,7	31,75	12,7	15,24	36,75	63,50	5,000
LSW-127-127-365-WE	4-7	5	12,7	36,50	12,7	16,81	41,50	85,09	10,000
LSW-190-095-238-WE	2-4	4	19,05	23,81	9,52	20,32	28,81	85,09	10,000
LSW-190-127-444-WE	5-10	4	19,05	44,45	12,70	20,32	49,45	85,09	5,000
LSW-203-127-365-WE	4-7	4	20,32	36,50	12,70	20,32	41,50	85,09	10,000
LSW-203-127-381-WE	4-8	4	20,30	38,10	12,70	22,90	43,10	94,90	10,000
LSW-250-250-750-WE	8-15	4	25,0	75,0	25,0	28,0	80,00	59,00	2,500
LSW-254-095-190-WE	2-3	2	25,40	19,05	9,53	27,94	24,05	58,42	5,000
LSW-254-095-254-WE	3-5	2	25,40	25,40	9,53	27,94	30,40	58,42	5,000
LSW-254-127-365-WE	4-7	3	25,40	36,50	12,70	27,40	41,50	86,00	5,000
LSW-254-190-571-WE	6-12	2	25,40	57,15	19,05	27,40	62,15	59,00	2,500
LSW-254-254-952-WE	11-22	3	24,40	95,25	25,40	27,30	100,25	85,09	2,500
LSW-254-381-1333-WE	15-30	1	25,40	133,35	38,10		138,35	30,48	500
LSW-254-381-1524-WE	18-36	2	25,40	152,40	38,10	27,94	157,40	55,88	1,000
LSW-254-381-1889-WE	24-48	3	25,40	188,90	38,10	27,90	193,90	87,30	1,000
LSW-381-095-254-WE	3-5	1	38,10	25,40	9,53		30,40	43,18	2,500
LSW-381-127-381-WE	4-8	1	38,10	38,10	12,70		43,10	43,18	2,000
LSW-444-095-254-WE	3-5	1	44,45	25,40	9,53		30,40	49,53	2,500
LSW-444-127-381-WE	4-8	1	44,45	38,10	12,70		43,10	49,53	2,000
LSW-444-190-810-WE	10-19	1	48,30	81,00	19,05	50,80	86,00	54,00	1,000
LSW-483-381-1510-WE	18-35	2	48,30	151,00	38,10	50,80	156,00	105,10	1,000
LSW-508-127-365-WE	4-7	2	50,80	36,50	12,70	50,80	41,50	107,60	2,500
LSW-508-191-572-WE	6-12	2	50,80	57,20	19,10	50,80	62,20	107,60	2,500
LSW-508-254-952-WE	11-22	1	50,80	95,25	25,40		100,25	55,88	1,000
LSW-508-381-1524-WE	18-36	1	50,80	152,40	38,10		157,40	55,88	500
LSW-508-381-1778-WE	22-44	1	50,80	177,80	38,10		182,80	55,88	500
LSW-508-381-1889-WE	24-48	2	50,80	188,90	38,10	53,30	193,90	110,10	1000
LSW-635-190-571-WE	6-12	1	63,50	57,15	19,05		62,15	68,58	1000

General Values for thermal transfer vinyl Film.

THERMAL TRANSFER PRINTABLE FILM

PHYSICAL PROPERTIES	TEST METHOD	TYPICAL VALUE
Adhesive thickness	ASTM D 3652	0,8,0,8 mil Aprox 20-23 micron ± 0,1 (3)
Facestock thickness Mils / Microns	ASTM D 3652	3.5 mil Aprox 89 micron ± 10%
Dimensional Stability (%)	MD	0,5
Applied Shrinkage: 24 hour dwell time on aluminum panel then 24 hours at 160°F (71°C)	TD	0,5
Dimensional stability	On aluminium panel at 160°F (71°C) for 24 hr.	MD: 0.5
		TD: 0,5

FILM THERMAL PROPERTIES

PROPERTIES	TEST METHOD	TYPICAL VALUE
Service Temperature Range	--20°F to 176°F (-29°C to 80°C)

ADHESIVE PHYSICAL - Special formulated pressure sensitive adhesive meet the demanding requirement for wire harness labeling

PROPERTIES	TEST METHOD	TYPICAL VALUE
High initial tack	ASTM D 2979	250 (gm/sq cm)
Expected Shear	ASTM D 3654 Method A	a. 1 hr. dwell b. 1sq.in. surface c. 4 lb. load
Adhesive Type	Permanent pressure sensitive acrylic adhesive
Ultimate peel from material below	ASTM D 903 (modified for 72 hour dwell time)	Oz/In (N/m)
Acrylic		60 (660)
Ceramic Tile		22 (242)
Glass		54 (594)
Stainless Steel		47 (517)
Painted Metal		59 (649)
Polypropylene		14 (154)
Expected shear (hours)	ASTM D 3654 Method a (1 hour. dwell, 1 sq.in 4 lb. load)	15
Tack (g)	Astm D 2979	500

WATER IMMERSION -

75 hour water immersion + 24 hour recovery versus 72 hour at room temperature on Stainless steel panel (24 hour dwell time on Stainless steel panel before immersion in water).

Result.

No visual change or adhesion loss.

LINER DATA

PROPERTIES	COLOUR	TYPICAL VALUE
Supercalendered release kraftliner paper	White	50lb

ENVIRONMENTAL UV AND USE

PROPERTIES	TEST METHOD	TYPICAL VALUE
The clear vinyl film is not recommended for life outdoor applications.	The durability is based on European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking	A durability of 1 year (vertical exposure) can be expected. No visual effect. Good contrast and visibility

TYPICAL VALUES

The listed technical data are typical values and give indications about the performance of the material only. They are not intended for specification purpose.

PERFORMANCE OF THE PRODUCT

The performance of the product should always be tested in the actual application conditions. Our recommendations are based on our most current knowledge and experience. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use. Users of our products are solely responsible that the product is suitable for its intended application, and have determined such at their sole discretion. Users must comply with any applicable legislation and/or testing requirements for the finished article, and are responsible for bringing their products to market.

This publication does not constitute any warranty, express or implied, and is intended only for the recipient and cannot therefore be transferred to any third party. We cannot assume any liability for the use of our products in conjunction with other materials.

CHEMICAL RESISTANCE -

Test method ASTM D 896 at relative temperature.

1. Five cycles with 10 minutes immersed in solvent.

2. 30 minutes recovery time on stainless steel panel

3. 24 hr recovery after last cycle versus 75 hour on stainless steel panel at relative temperature with 24 hour dwell time on the stainless steel panel before immersion.

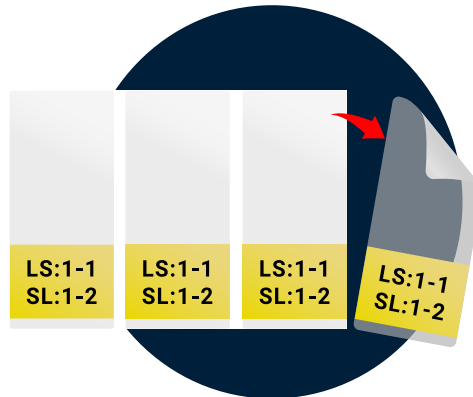
PROPERTIES	TEST METHOD	TYPICAL VALUE
Windex cleaner	ASTM D 896	No visual change or adhesion loss
Isopropyl alcohol	ASTM D 896	No visual change, 15% adhesion loss
Mineral spirit	ASTM D 896	No visual change, 15% adhesion loss
Gasoline	ASTM D 896	Edge penetration, 40% adhesion loss
Toulene	ASTM D 896	No visual change or adhesion loss
Oil (SAE 10W-30)	ASTM D 896	No visual change or adhesion loss
Acetic acid (5%)	ASTM D 896	No visual change or adhesion loss
Deionized water	ASTM D 896	No visual change or adhesion loss
Northwoods TM buzz saw terpene	ASTM D 896	No visual change
Formula 409	ASTM D 896	Minor disruption
Brake fluid	ASTM D 896	Film deterioration and complete adhesion loss

APPENDIX 1 - CHEMICAL PERFORMANCE

Note: is not recommended for use in harsh organic solvents such as methyl ethyl ketone, acetone, or 1,1,1-trichloroethane and ecetic acid above 25%

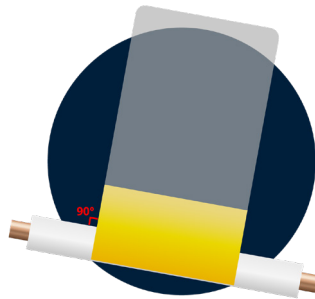
Assembly Instructions after printing

1 - TAKE THE PRINTED MARKER OF THE LINER



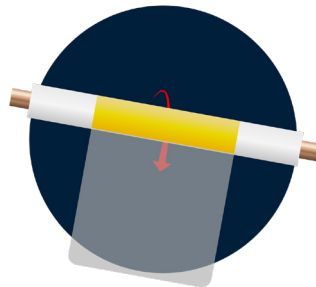
2 - POSITION THE MARKER 90 DEGREES ON THE CABLE

- Use the adhesive area in end of marker to adhere to the cable



2 - WRAP AROUND THE CABLE

- Use the adhesive area in end of marker to adhere to the adhesive area over the print area so it laminate to itself



4 - CONTINUE WRAP-AROUND

- Continue to wrap-around the marker until you reach the end. Be carefully not to touch the adhesive end.

