How-to

How to Select a Wire Marker for Your Next Job

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An effective wire marking system can make all the difference when on the job. If you're just getting started with the process of marking wires, it can be a bit overwhelming. Read on to determine which wire marker label option is best for your next job.

5 Considerations When Selecting a Wire Marker

To help you identify the ideal wire marker for your unique application, Brady has identified the five most important considerations to assist you in your selection process.

Marker Durability

Who wants to go through the trouble of marking wires, only to have to replace them when they don't stand up to environmental elements? Definitely not you. Save yourself the time and headache by ensuring you've selected the right material for your application. A few factors to consider:

- Will the wire markers be in contact with oil, water, chemicals or solvents?
- Does the application need self-extinguishing properties or requirements?
- Are there any government or special specification requirements?
- Are there any other environmental factors that need to be considered such as dirt or weather?

Brady has a variety of *wire marker material options* that stand up to your biggest environmental challenges. Our top materials for wire markers include:

- **Polyolefin wire markers and sleeves** remain legible in wet environments and have excellent resistance against chemicals and high temperatures.
- **Vinyl wire markers** offer excellent oil and dirt resistance and are ideal for non-flat sub-surfaces.
- **Nylon wire markers** offer excellent resistance against chemicals and hot and cold temperature ranges. Nylon is ideal for curved surfaces and is incredibly strong and flexible.

Marker Types

Next, it's important to consider your wire marker options based on your application. A few questions to ask yourself:

- Do you need a temporary or permanent wire marker?
- Do you prefer adhesive or non-adhesive wire markers?
- How much information do you need to fit on the label?

Once you've determined your wire marker application requirements, it's easy to narrow down which marker type will work best for you.

- **Wraparound Markers** — Self-laminating or repositionable wraparound labels are a permanent or temporary solution that provide fade and abrasion resistance.
- **Flags** — Use a P- or T-shaped flag label when you want to limit contact surface between your wire and identification solution, while also maximizing label space to print on. This is a great solution for labeling wires that are already attached. Tags can be used as a non-adhesive alternative.
- **Tags** — Tags offer a lot of space for identification data and provide tear, solvent and heat resistance for indoor and outdoor use. Tags are usually attached with cable ties.
- **Sleeves** — Sleeves can be moved along a wire until heat shrunk into position. This enables you to adjust sleeve position once cables are terminated. The sleeve needs to be slid over the cable before termination.

Gauge Size

Wire gauge size plays an important role in determining that self-laminating/wraparound markers perform as expected and ensure the sleeve diameter fits the wire you're using. Depending on the thickness of your wires, you'll need to decide which sleeves or wraparound labels to use in order to make sure they'll fit. Use these tips to narrow down your selection:

- **Sleeves** should have at least twice the height of the cable diameter
- **Self-laminating wire markers** should be +/- 6,5 times the cable diameter (2r x 2pi)
- **Wraparound label markers** should have +/- 3,5 times the cable diameter (2r x pi)
- **Very thick wires** can be identified using straps and a wire bundle tag

If you're looking for a more versatile option, Brady's wraparound markers can be used for a range of wire gauge sizes in a pinch.

Still need some help? Check out Brady's *How to Select a Marker Size Guide* or, if you plan to use self-

laminating wire markers, quickly determine the size you need with Brady's *Self-Laminating Label Size Calculator*.

Marker Location

An important consideration when selecting wire markers is whether you'll be marking the wire before or after termination.

- *Before termination* — Because *wire marker sleeves* must be slipped over the open end of a wire, they can only be used before termination. These non-adhesive wire markers provide flexibility as they can be moved prior to being heat-shrunk. Once shrunk, these markers will provide a permanent marker which will stand up to harsh environments.
- *After termination* — *Self-laminating and wraparound wire markers* can be used either before or after termination. When using a wraparound marker, the legend is visible from all sides since the marker completely wraps around the wire. A self-laminating marker includes a clear portion of the label that, when applied, will wrap around and laminate the legend, protecting it from spills and scratches.

Pre-Printed vs. Print-Your-Own Wire Markers

Depending on what your specific project requires, pre-printed and print-your-own wire markers both have their benefits.

- **Pre-printed wire markers** — Pre-printed labels give you the opportunity to shop around for the particular label you need, input your information and place an order. This solution is ideal when a low quantity of labels is needed.

- **Print-your-own wire markers** — If you're seeking more flexibility on the job site, print-your-own wire markers are the perfect solution. Not only does it give you the flexibility to print the labels you need, it also can save you a trip back to the office when there's an unexpected change to your label wiring when on the job.

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