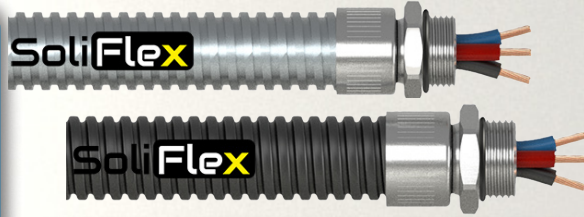




Things to know Metallic Conduit

Technical Breakdown



SoliFlex® Flexible helically formed metallic conduit, either bare galvanised steel or PVC-covered, provides robust protection for electrical cables in industrial, commercial and utility settings such as HVAC, Agriculture, Pharmaceutical and Food & Beverage.

The steel core gives strength and crush resistance, while the PVC coating adds corrosion protection, UV resistance and a clean finish for exposed runs. Because the conduit is flexible, it can follow tight bends and irregular routing without the need for extra fittings, which can speed up installation.

PVC-covered conduit is ideal for damp, chemical-prone, or outdoor environments, while bare galvanised types are better for indoor use where flexibility is key, such as in tight spots or applications requiring repeated flexing. Both types protect cables from abrasion, vibration and impact, helping maintain long-term electrical safety.

Installation is straightforward using the correct fittings and glands. Fixed and swivel fittings make connections easier and faster while keeping everything secure. Choosing the correct diameter, wall thickness, fittings and mechanical supports ensures the system meets electrical standards, stays durable over time, and keeps cables in good condition.

How to Choose - Think about where the conduit will go. For moisture, chemical exposure or outdoor use, PVC-covered is best. For indoor spaces where you need maximum flexibility, bare galvanised works well. Select conduit diameter that fits your cables comfortably, with a fill capacity of no more than 50% to make installation easier. Consider the bend radius, wall thickness and whether the installation might see knocks or impacts. Choose fixed or swivel fittings depending on how the conduit will be terminated. For outdoor or harsh conditions, make sure the PVC or galvanisation is rated for UV or corrosion resistance. Always check datasheets and specifications for temperature limits, strength and support spacing to ensure safe, reliable performance.

Best Practices - Plan your runs before installation to avoid sharp bends or kinks. Stick to the minimum bend radius recommended by the manufacturer. Support the conduit at regular intervals usually 0.5 to 1 m depending on size to prevent sagging or stress. Use cable friendly lubricants when pulling cables through the conduit, especially for longer runs. Label the runs to make future inspection and maintenance easier.

In applications exposed to high vibration or exposed areas, consider extra supports or protective coverings. Keep cable capacity fill levels below recommended limits to allow for future cable additions. Applying best practice steps could extend cable life, maintain mechanical integrity and the longevity of the installation.

Q How do I determine the correct size of flexible conduit for my cables?

A Choose a conduit with an internal diameter that accommodates your cables comfortably, allowing for easy pulling and future additions. The conduit should not be more than 40-50% filled to ensure optimal performance and compliance with electrical codes.

Q How should flexible conduit be supported during installation?

A Flexible conduit should be supported at regular intervals to prevent sagging and mechanical stress. The spacing between supports depends on the conduit size and the installation environment; refer to manufacturer guidelines for specific recommendations.

Q How long do metallic conduits last?

A Metallic flexible conduits are built to last. When matched to the right environment, they can protect cables for decades, resisting moisture, dust, corrosion and general wear. The key is choosing the correct type for the job - indoor, outdoor or corrosive settings all need different grades. Not sure which type you need? Our team can help you find the best fit for your project.