

# Conduit System

## Introduction

Electrical Conduit provides protection to enclosed single or multi-conductors from impact, moisture, and chemical vapors. Varying quantities, sizes, and types of conductors can be pulled into a Conduit, which simplifies design and construction compared to multiple runs of cables or the expense of customized composite cables. Conduit Systems can be made waterproof.

Cable connections between fixed and moving parts are weak spots in machine & system installations. When cables are bent, individual tensioned conductors have no room for flexing. They are subjected to high and variable tension forces, particularly multi-conductor cables. To prevent conductor breakages, the use of Conduit tubing is recommended.

### Advantages:

- Individual conductors are given sufficient flexibility. This prevents tension stress.
- Connections provide security against penetration of fluids.



### Operating Temperatures

Push-In Fittings	- 4°F to 176°F (- 20°C to 80°C)
Turn-to-Seal Fittings	- 40°F to 230°F (- 40°C to 110°C)
Snapclac DUO Nylon	- 40°F to 212°F (- 40°C to 100°C )
Snapclac DUO Brass	- 40°F to 212°F (- 40°C to 100°C )
Double-Seal Fittings	- 40°F to 230°F (- 40°C to 110°C)
Flange/Bulkhead Fittings	- 40°F to 230°F (- 40°C to 110°C)
Standard Conduit	- 40°F to 230°F (- 40°C to 110°C )
Standard Conduit (SM-0811-BK )	- 40°F to 140°F (- 40°C to 60°C)
Super-Flex Conduit	- 58°F to 320°F (- 50°C to 160°C)

## Conduit System - Corrugated Conduit (Standard & Super Flex)



This STANDARD Corrugated Conduit is suitable for static and moderate dynamic installations.

The SUPER-FLEX Conduit is made of a special plastic blend. Due to its higher flexibility, it is an ideal solution for drag chain and robotics applications. The Conduit has a UL HB 22.86 LB<sub>F</sub>/in = Crush Resistance Flammability Rating.



Corrugated Conduit: (Standard & Super-Flex)					
Part Numbers		Nominal Conduit Size	Roll Length (feet)*	Dimensions Inner Dia.(A) x Outer Dia.(B) Inches (mm)	Fits Turn-to-Seal Fittings  ST, ET, SM & EM  See page 42 for thread specs
-40 °F to 230 °F (-40 °C to 110 °C)	-58 °F to 320 °F (-50 °C to 160 °C)				
Standard Modified Polyamide PA	SuperFlex Thermoplastic Elastomer				
**SM-0811-BK	-	8	164	.33 x .45 (8.5 x 11.4)	PG 7, 1/4" NPT
SM-1013-BK	SM-1013-HY	10	164	.39 x .51 (9.9 x 12.9)	PG 7, 3/8" NPT, PG 9, M16
SM-1216-BK	SM-1216-HY	12	164	.48 x .62 (12.2 x 15.7)	PG 11, 3/8" NPT
SM-1419-BK	-	14	164	.55 x .73 (14 x 18.5)	PG 13 / 13.5, M20
SM-1721-BK	SM-1721-HY	17	164	.65 x .83 (16.6 x 21)	PG 16, 1/2" NPT
SM-2328-BK	SM-2328-HY	23	164	.88 x 1.12 (22.4 x 28.4)	PG 21, 3/4" NPT, M25
SM-2934-BK	SM-2934-HY	29	82	1.11 x 1.36 (28.3 x 34.5)	PG 29, 1" NPT, M32
SM-3642-BK	SM-3642-HY	37	82	1.40 x 1.67 (35.5 x 42.3)	PG 36, 1-1/4" NPT
SM-4854-BK	SM-4854-HY	50	82	1.87 x 2.13 (47.5 x 54.2)	PG 48, 2" NPT

\*Note: CE Approval applies to SuperFlex Thermoplastic Elastomer and Standard Nominal Conduit Size 8 (SM-0811-BK)

\*\*Note: UR and CSA approvals apply to Standard Nominal Conduit Size 8 (SM-0811-BK). This Conduit also has UL HB.

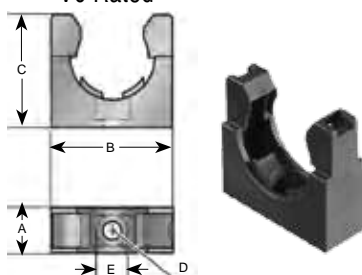
\* Note: 164' = 50 m.



## Conduit System - Mounting Brackets Snap-In Fittings



Mount Holds conduit securely in place. **Material:** Polyamide PA 6 • V0 Rated



Available with the following approvals:



www.sealconex.com

Mounting Brackets: Snap-In - Nylon						
Part Numbers	Fits Nominal Conduit Size	Dimensions				
		A	B	C	D	E
-40 °F to 230 °F (-40 °C to 110 °C)		Width	Length	Height	Mounting Hole ø	Mounting Hole Recess ø
MB-09-BK	10	.49 (12.5)	1.18 (30)	.91 (23)	.16 (4)	.33 (8.5)
MB-11-BK	12	.49 (12.5)	1.18 (30)	.91 (23)	.16 (4)	.33 (8.5)
MB-16-BK	17	.59 (15)	1.38 (35)	1.18 (30)	.20 (5)	.41 (10.5)
MB-21-BK	23	.63 (16)	1.65 (42)	1.50 (38)	.24 (6)	.43 (11)
MB-29-BK	29	.63 (16)	2.01 (51)	1.69 (43)	.24 (6)	.45 (11.5)
MB-36-BK	37	.71 (18)	2.40 (61)	2.01 (51)	.24 (6)	.53 (13.5)
MB-48-BK	50	.75 (19)	2.91 (74)	2.52 (64)	.24 (6)	.53 (13.5)

• Quick assembly thanks to single-hole fixing

• Simply snaps into conduit