

# **JN1/JN2 Series Waterproof Circular Connectors**

Training Module

Technology to Inspire Innovation

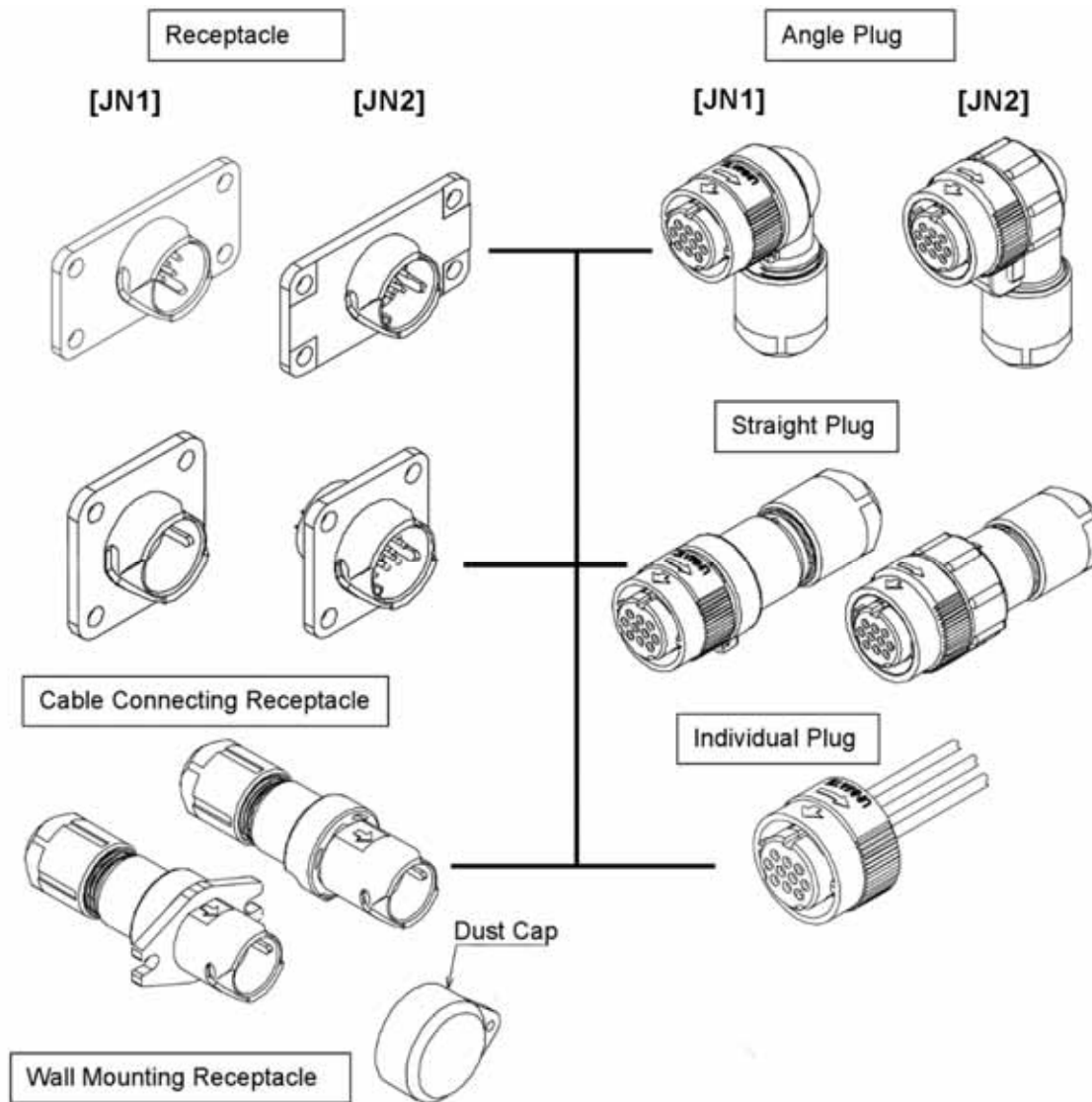
**JAE**

# OVERVIEW



The JN1/JN2 is a waterproof circular connector series with a one-touch lock mechanism developed as an interface for industrial devices. Available in an all-plastic type (JN1) and a partially metal robust type (JN2). Both are compact in design and are suitable for all kinds of electronic devices. JN1 and JN2 are UL certified. The 4- contact JN2 is TUV certified.

# JN1/JN2 Options



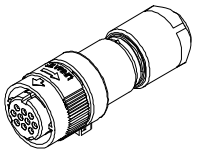
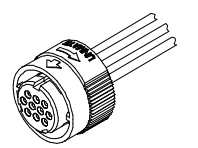
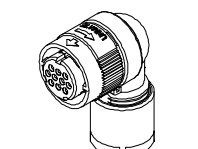
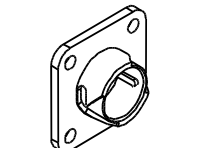
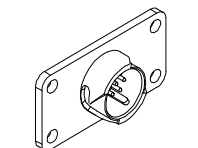
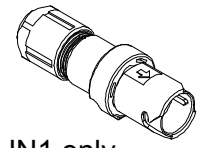
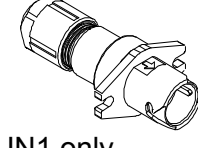
# JN1 GENERAL SPECIFICATIONS

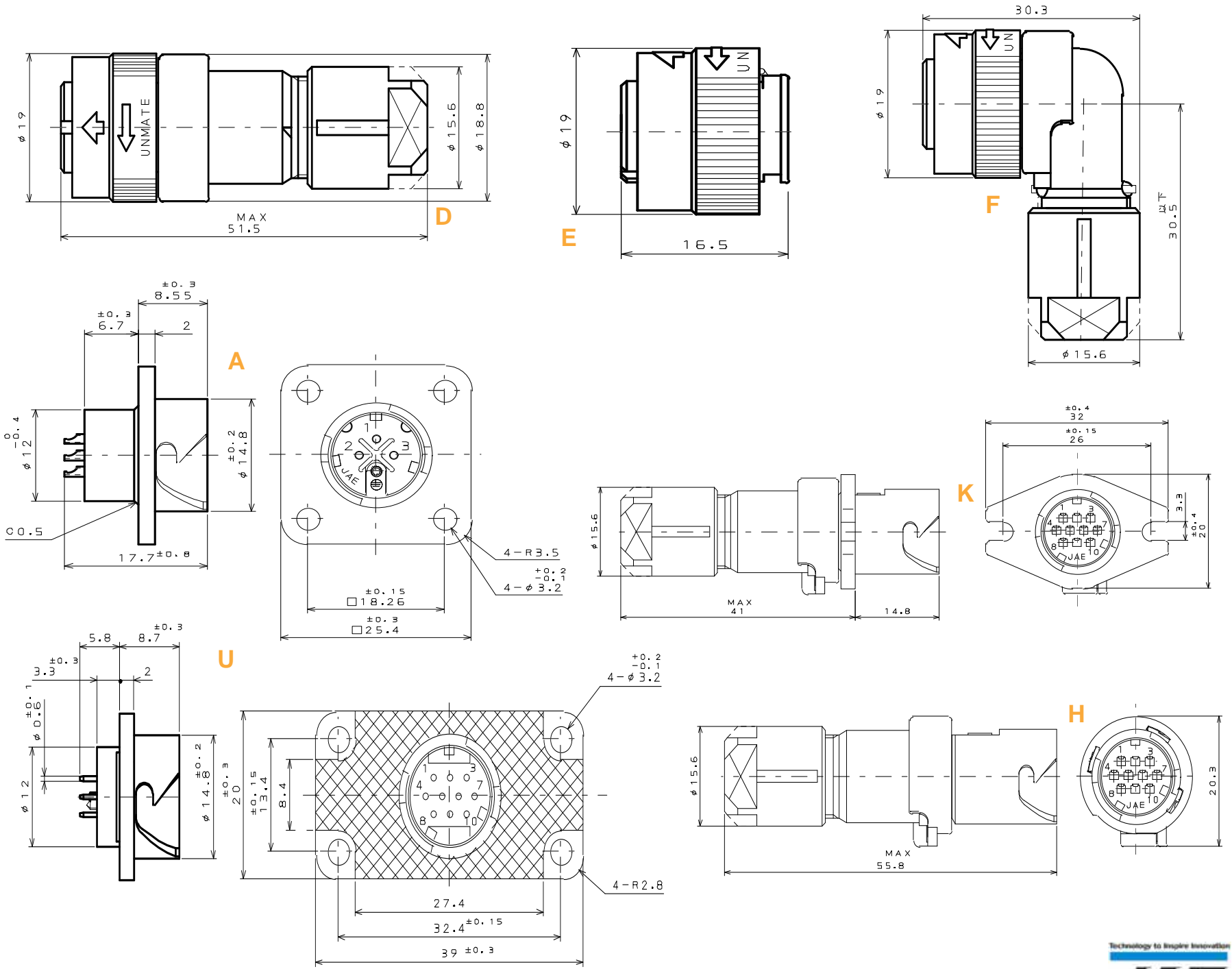
| Item                  | Specifications and Performance  |  |
|-----------------------|---|--|
| No. of Contacts       | 10  | 4  |
| Rated Current         | 3A / pin  | 5A / pin   |
| Rated Voltage         | 200 VAC   | 200 VAC  |
| Withstanding Voltage  | 900 VAC (per minute)  | 2000 VAC (per minute)  |
| Insulation Resistance | 1000M $\Omega$ min. (DC500V energized)  | 1000M $\Omega$ min. (DC500V energized)   |
| Waterproof            | IP67  | IP67   |
| Airtightness          | 2.9 x 10 <sup>4</sup> PA per minute without leakage   | 2.9 x 10 <sup>4</sup> PA per minute without leakage  |
| Operating Temperature | -20 ° c to +125 ° c   | -20 ° c to +125 ° c  |
| Wire Specification    | Receptacle: Through-hole, Soldering (0.3mm <sup>2</sup> max.)<br>Plug: Crimp (AWG 20 to 28) | Receptacle: Soldering (0.75mm <sup>2</sup> max.)<br>Plug: Soldering (1.25mm <sup>2</sup> max.) |
| Life Cycle            | 500 times   | 500 times  |

# JN2 GENERAL SPECIFICATIONS

| Item                  | Specifications and Performance  |  |
|-----------------------|---|--|
| No. of Contacts       | 10, 15, 19  | 4  |
| Rated Current         | 3A / pin (#22 size contact)   | 5A / pin (#20 size contact)  |
| Rated Voltage         | 200 VAC   | 200 VAC  |
| Withstanding Voltage  | 900 VAC (per minute)  | 2000 VAC (per minute)  |
| Insulation Resistance | 1000M $\Omega$ min. (DC500V energized)  | 1000M $\Omega$ min. (DC500V energized)   |
| Waterproof            | IP67  | IP67   |
| Airtightness          | 2.9 x 10 <sup>4</sup> PA per minute without leakage   | 2.9 x 10 <sup>4</sup> PA per minute without leakage  |
| Operating Temperature | -20 ° c to +125 ° c   | -20 ° c to +125 ° c  |
| Wire Specification    | Receptacle: Through-hole, Soldering (0.3mm <sup>2</sup> max.)<br>Plug: Crimp (AWG 20 to 28) | Receptacle: Soldering (0.75mm <sup>2</sup> max.)<br>Plug: Soldering (1.25mm <sup>2</sup> max.) |
| Life Cycle            | 500 times   | 500 times  |

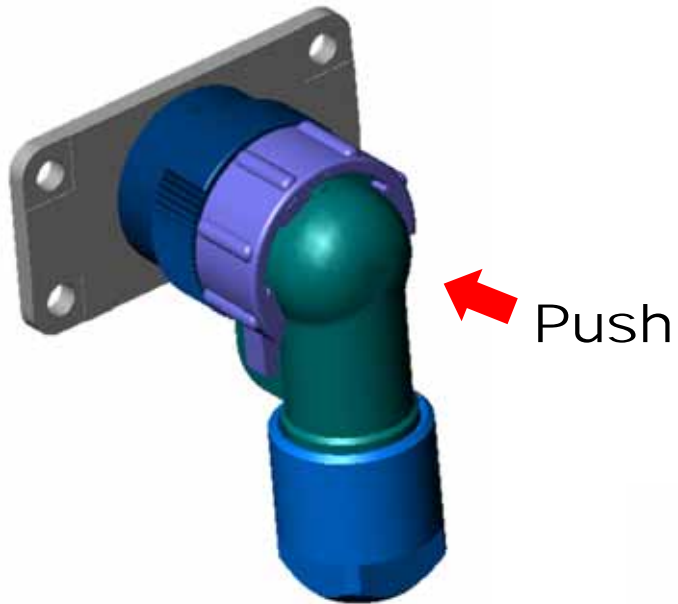
# DIMENSIONS

|  |          |
|--|----------|
| <b>PLUGS</b>   |          |
|     | <b>D</b> |
|    | <b>E</b> |
|    | <b>F</b> |
| <b>RECEPTACLES</b>   |          |
|    | <b>A</b> |
|   | <b>U</b> |
| <b>RELAY RECEP.</b>  |          |
|  | <b>H</b> |
| JN1 only   |          |
|  | <b>K</b> |
| JN1 only   |          |

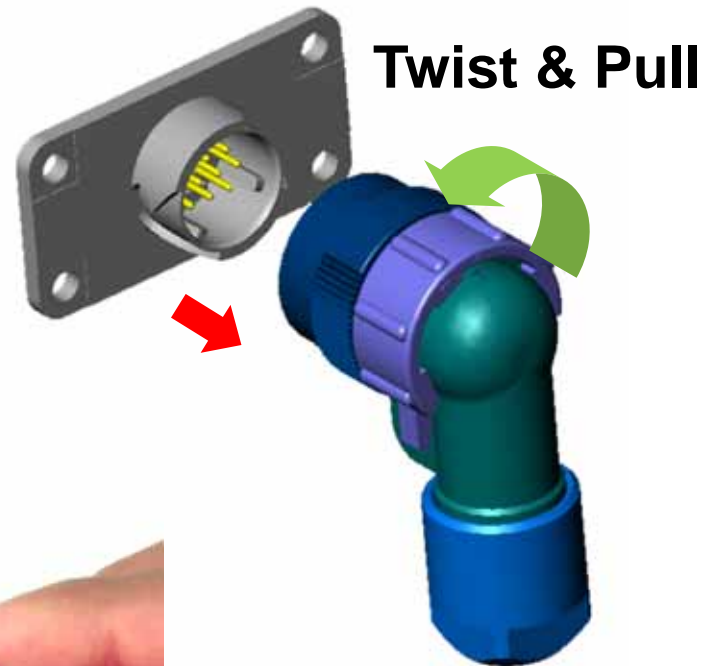


# Feature: One-touch Locking Mechanism

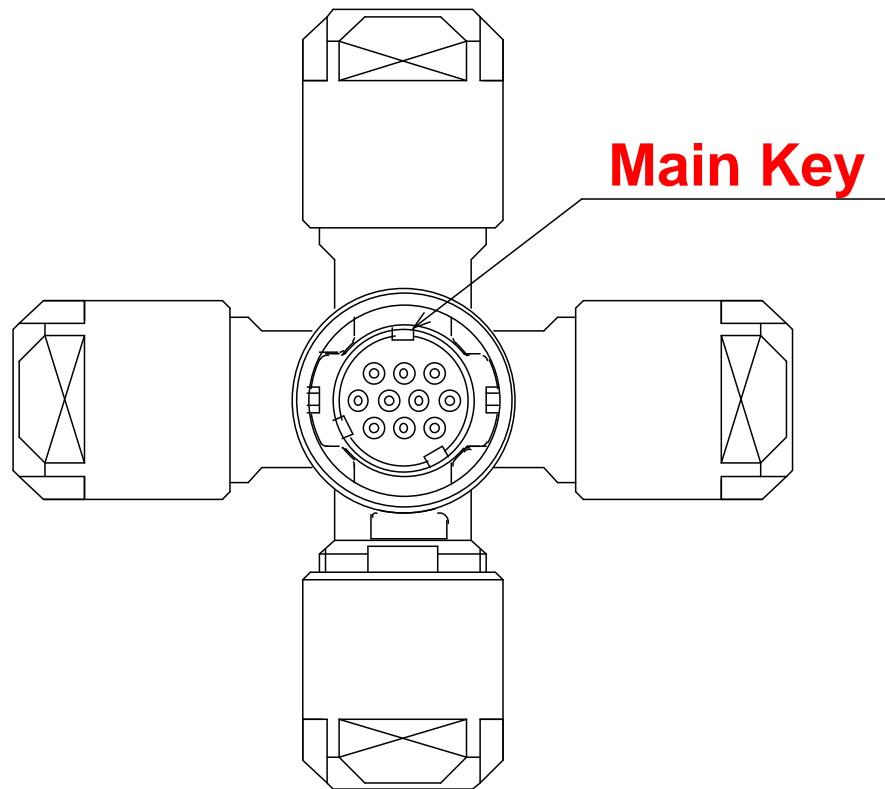
Mating



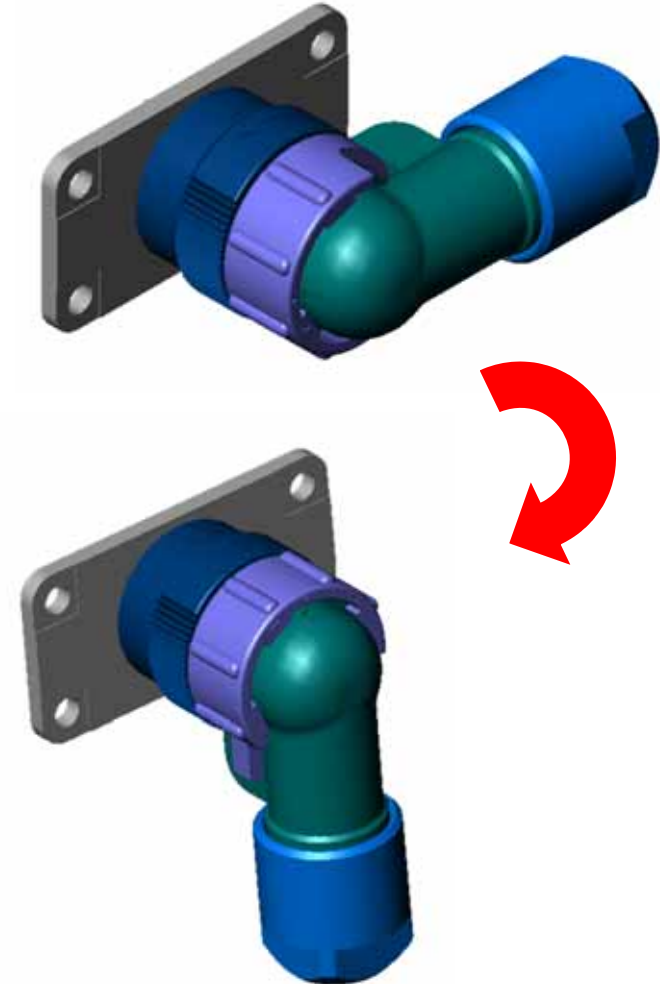
Un-mating



# Setting of Plug Cable

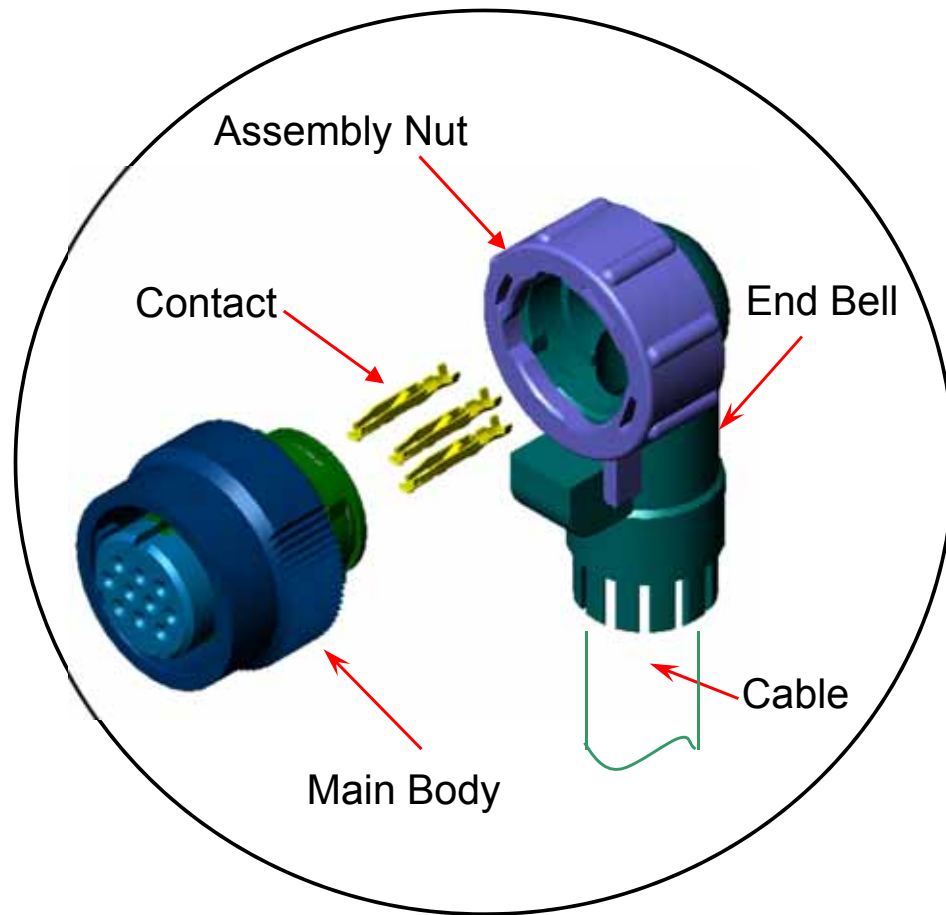


4 direction settings

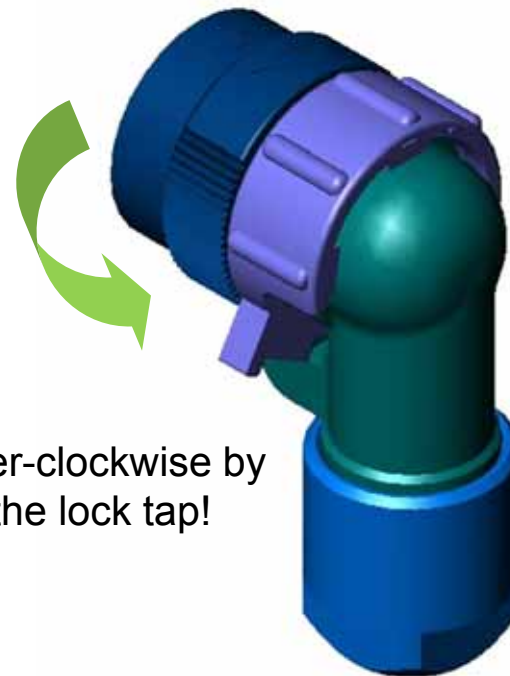
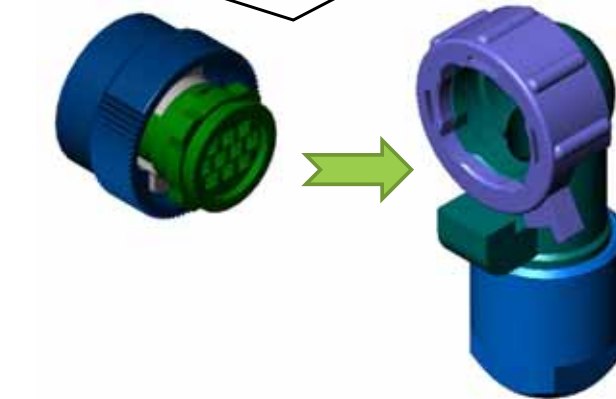




# Easy Assembly

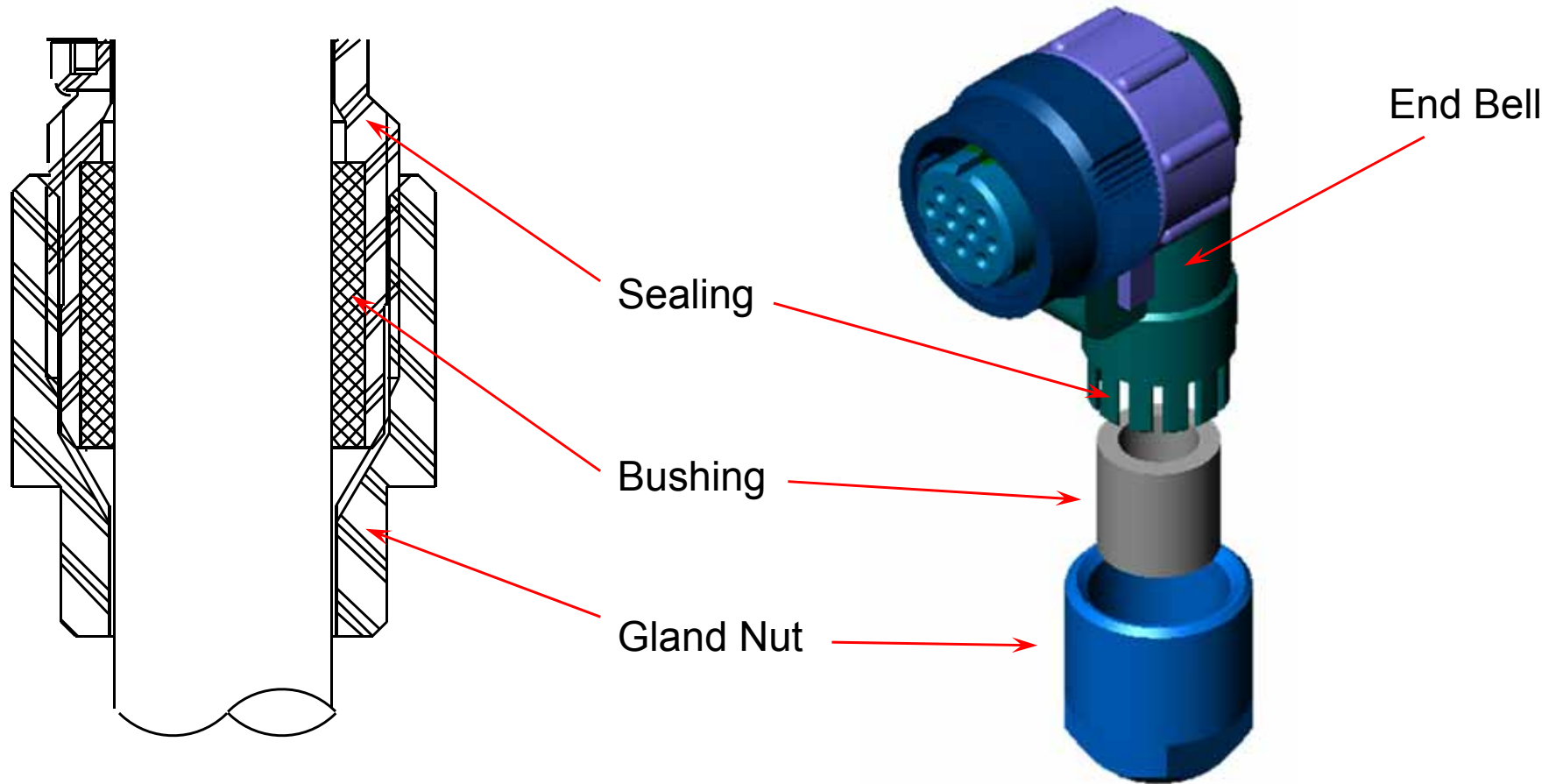


Attach mating key and assemble



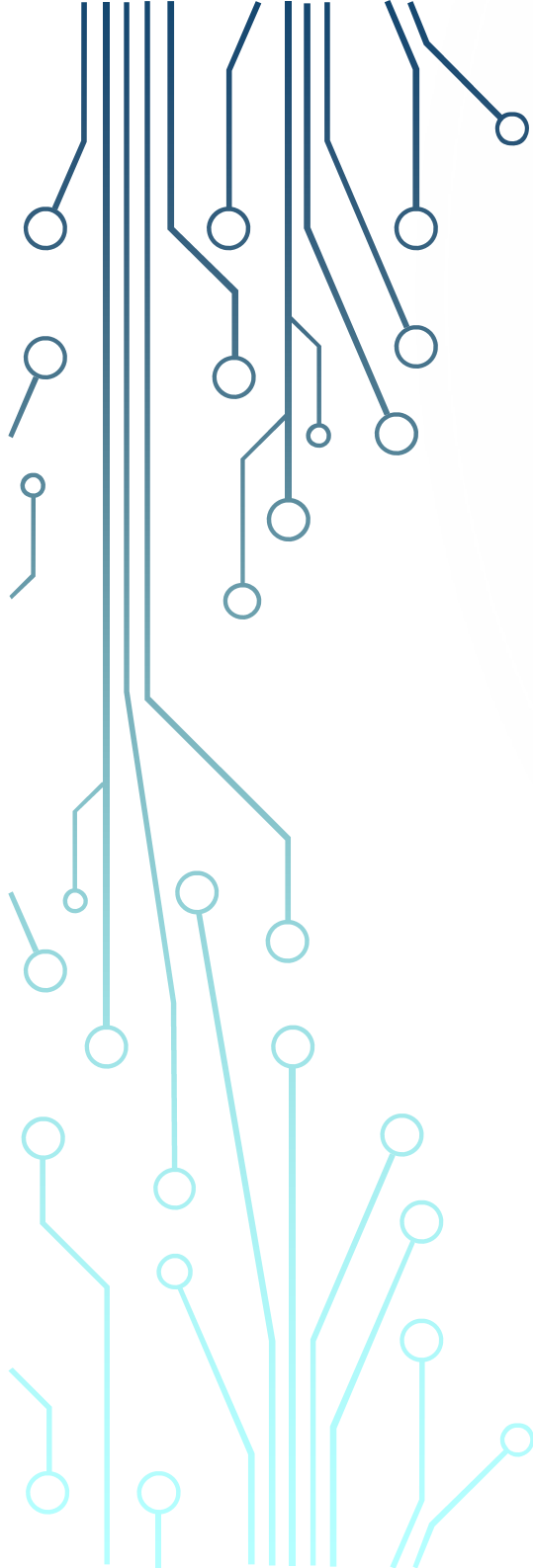
Twist counter-clockwise by pushing the lock tap!

# Water and Dust Resistant (IP67)



# SUMMARY

- IP67 rating ensures that these connectors are waterproof and dust resistant
- One-touch lock mechanism
- All-plastic JN1 and partially metal JN2
- Compact design enables both options be to used in various applications



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