

TWIST III

TWIST III is a quick connector series for charged air system applications. Developed to meet extremely tough requirements, especially in low-emission vehicles, it combines a low assembly effort with very good hydrolysis tolerance, temperature resistance and mechanical performance. TWIST III operates at approx. 2.75 bar excess pressure and engine compartment temperatures of -48°C up to +135°C. Standard design configurations are straight. Special designs are also available.



Standard design



Optional design



Optional design

Standard materials

Standard versions are made from recyclable polyamide 66 with 35% to 50% GF. O-rings are available in various materials, including AEM. Note that both plastic and metal spigots can be used.

TWIST III quick connectors have a 360° symmetrical design. As they can be opened from any angle, they are perfect for tight environments as well as spin-weld applications. Additional cut-outs or knobs are not necessary.

Quick and safe assembly/disassembly

Assembling TWIST III is quick and easy. Press the self-locking spider ring onto the mating spigot and check that all the ring-locking tabs have passed the spigot's locking edge. Then pull the connector to verify the connection.

To disassemble the connector, turn the spider ring counterclockwise, hold it in the open position and pull it off the mating spigot. When the connector disengages from the spigot, release the spider ring to automatically return it to its relaxed (locked) position.

QUICK CONNECTORS

TWIST III

Standard sizes and designs

TWIST III connector size designations are determined by the sealing diameter (ØD1) of the TWIST III spigot. Current standard diameters are listed below. Larger diameters will be added in the future.

Five standard sizes are available. TWIST III SP (spin-weld) is for applications where the quick connector will be spin-welded to other injection or blow-molded plastic components. Based on recommendations from a spin-welding equipment supplier, this design includes weld surfaces, flash traps and support surfaces. This connector is tested using the GMW 15803 specification as reference.

Standard sizes:

| TWIST III Quick Connector | Ø D1 (mm) |
|---------------------------|--------------------|
| TWIST III 48.40 | 48.40 |
| TWIST III 56.40 | 56.40 |
| TWIST III 67.40 | 67.40 |
| TWIST III 71.40 | 71.40 |
| TWIST III 80.00 | 80.00 |



Optional designs

A hot-plate weld design (TWIST III HP) is used for housings in PBT material, when the connector has to be welded to a flexible TPE / TPC-ET (HYTREL®) Duct, or with flexible plastic ducts. It is also the standard solution when hot-plate/mirror welding is applied. A further special design TWIST III (AR) has an optional anti-rotation/assembly orientation feature. Other designs are also possible.

Please ask for details

TWIST III VO (straight) and TWIST III V90 (90° bend) are optional designs with a hose barb for applications where a hose will be crimped/clamped onto the barb. Both allow reinforcement with an optional metal sleeve when required.

