Quick Connectors

MK

Connecting spigot
 MK connectors have been developed with the aim to achieve significantly reduced permeation rates. They provide a perfect link between the tank and the pipe system in cases where existing standard 1K connectors are prone to a high permeation rate while their tendency to “creep” causes additional micro leakage. MK connectors for the first time combine reinforced and unreinforced materials and thus enable the safe connection of the connector with the plastic fuel tank.

Standard materials
 MK combine materials that so far have been incompatible. Welded ring made from HDPE, can be welded onto the plastic fuel tank. Spigot made from Polyamide 12 with 30% glass fiber content.

Insiders’ Tip
 The perfectly matched system is achieved when combining MK connecting spigots and NORMA Group Fluid systems.

TWIST II – QUICK CONNECTORS

The TWIST II was brought to the market to connect plastic air intake or cooling system pipes in order to get leak-proof connections. By using the TWIST connector system, you can combine your design with plastic, aluminum or steel tubes. Flexibility and freedom of design are key words when systems with integrated TWIST connectors are engineered. TWIST connectors are engineered, eliminating leakages and helping reduce weight.

The advantages at a glance

- Can be integrated in end-tanks as well as be mounted on tubes or hoses
- A secure seal to the mating spigot with a low assembly force
- Robust and clear locking features with a click function to ensure a correct lock
- Easy operation for disassembly
- Temperature resistance of up to 180°

Applications
 Air intake, charge air and cooling water systems
**Quick Connectors**

**TWIST II**

**Variants**

Since all our TWIST II are made of thermoplastic materials, we can adopt the connector features and customize our connectors to suit your demands.

![TWIST II images]

**Materials**

The components are combined in a way to match the specific requirements of each application and to provide the best possible physical and chemical properties. TWIST II is manufactured in recyclable materials with low permeation values. PA 66 with a glass fibre content of 30% is usually used for standard products. For coolant applications, we recommend the use of heat and hydrolysis stabilized glass fibre reinforced PA materials. Special applications, e.g. charge air systems with high temperatures require specific material grades. On request, we are ready to advise you on the best-suited material choice. O-rings are made of standard materials EPDM, NBR, FPM and FVMQ.

**Standard materials**

TWIST II quick connectors are made out of recyclable materials. As a standard solution Polyamide 6.6 with 30% to 50% glass fiber reinforcement is used. When an application requires, other engineering thermoplastic material can be used. Different reinforcement fillers and additional heat or hydrolysis resistance can also be added. Application-based design is possible when a minimum required quantity is ordered.

**TWIST III – QUICK CONNECTORS**

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. 3.5 bar excess pressure and engine compartment temperatures of –48°C up to +135°C. Standard design configurations, 90° and adaptors. Special designs are also available.

**The advantages at a glance**

- Compact design – space savings
- Always in “closed” position
- Easy open – no tool needed

**Components**

1. Housing
2. Spider Ring
3. Supporting Ring
4. Sealing component

**Applications**

- Charge air applications – cold side

Optional design – Customer specific with an air port and a sensor base.