





SmartConnect

Solutions

An irrigation system is only as good as its connecting parts. So why not build the best system you can by relying on tried and tested joining and fixing solutions?

Nowadays, every drop of water counts. Joining and fastening elements are usually the weakest link in an irrigation system and we make sure your water flows smoothly to where it is ultimately needed, your plants.

Don't let your connections be your weakest link.

Discover our leading joining and fixing technology that connects your irrigation system just perfectly. We can provide you with the ideal solution that helps you put an end to inefficient water loss and meets all your irrigation needs.

Uncompromising quality and reliability have made NORMA® the preferred brand for agricultural applications, structural and civil engineering, and sanitary solutions.

Benefit from an unrivaled portfolio, "Fit and Forget" installation and let your water flow without having to worry about it any longer.

SmartFit Compression Fittings	SmartFlow Ball Valves
SmartLoc	SmartProtect
Dripline Fittings	Valve Boxes

 Reliable drip irrigation components and landscape solutions that complement our system solutions just perfectly



Unique expertise, decades of experience and outstanding product engineering

Two strong brands are the key to your success

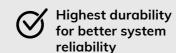
Advanced joining solutions from NORMA® meet even the most rigorous requirements in industries that face far greater challenges than irrigation. We ensure reliable connections in the automotive, construction and marine industries, despite constant temperature shifts, severe vibrations and contact with lubricants and chemicals.

Your irrigation needs are also in the right hands when you turn to our highly reliable and durable products.

With 45 years of experience delivering the highest quality products and support, NDS as a member of NORMA Group has profound experience specifically in the field of water management, especially for irrigation and drainage.

Our Professional Irrigation and Professional Drainage brands have been the products of choice for the professional sector for many decades. NDS products are now also available in Europe.







Excellent performance even under harsh conditions



SmartFit

Compression Fittings

Securely connecting polyethylene tubing fast and efficiently to prevent leakage and pressure loss requires years of unique know-how and joining expertise.

We at NORMA Group insist on minimum tolerances

and the highest quality joints that stand the test of time. Compression fittings from NORMA Group are ideally suited for even the most challenging applications in landscaping and agriculture.



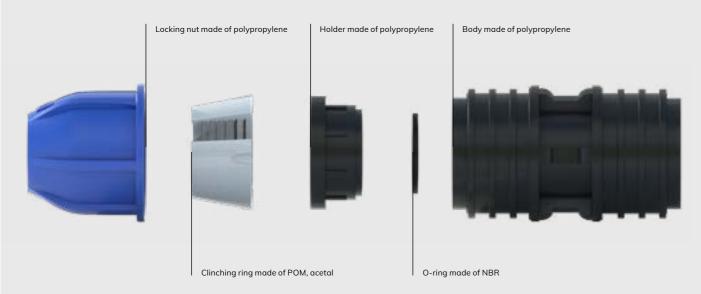


Benefits at a glance

- Safe and durable
- Perfect water tightness
- Easy connection
- High UV and temperature resistance

Compatible with all irrigation systems:

Landscape: residential, municipal, sports fields, golf courses **Agriculture:** horticulture, vineyards



NORMA® compression fittings are available from 16 mm up to 110 mm and are made of polypropylene for high- and low-density polyethylene tubing.

Maximum service pressure: 16 bar

Tubing profile diameters available for PN 10, PN 12.5 & PN 16

Complete product range available

From male/female adaptors to straight couplers, flange adaptors and equal bends

NORMA® PN 10 & PN 16 Compression Fittings

NORMA®'s complete range allows for fast and secure connection of polyethylene tubing for all types of irrigation systems, whether for industrial, commercial or residential needs.

Did you know that...

Our compression fittings for polyethylene tubing have been the products of choice for even the most challenging irrigation applications for over 25 years?

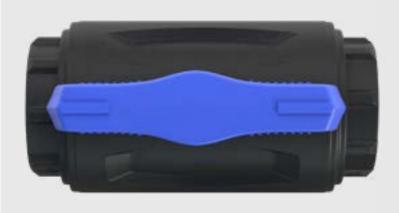




SmartFlow

Ball Valves

Our Ball Valves, "full flow" design ensures that there is minimum pressure loss and the option of a male or female version to eliminate the need for additional fittings.



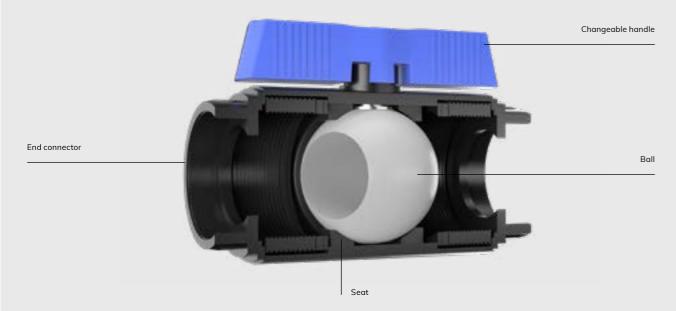


Benefits at a glance

- High-quality glass-reinforced nylon construction
- Interchangeable handles to comply with international color coding for water
- Removable handle prevents unauthorized manipulation of the valve

Compatible with all irrigation systems:

- Private or public commercial
- Golf courses
- Sports fields
- Agriculture



Due to the high-quality reinforced nylon construction, the reduction of the wall thickness provides for significant weight savings without impacting the mechanical resistance.

Maximum service pressure: 16 bar

Maximum operating temperature: 60°

Complete product range available

From 15 mm-1/2" up to 50 mm-2"

NORMA GUYCO Ball Valves

Our Ball Valve can be smoothly opened and closed to allow for water to flow and be stopped without any of it being lost.

Did you know that...

Our Ball Valve's reinforced glass-nylon body can handle pressure up to 16 bar easily?





SmartLoc

Dripline Fittings

SmartLoc[™] technology ensures extra fast and easy installation of the multi-diameter compression fitting that fits all Ø 16-18 mm drip tubing. Ideal for tubing repairs. These products ensure secure leakage-free

connections while maintaining full pressure. In addition, they are reusable because tubing can be inserted and removed without damaging the fitting.



Benefits at a glance

- Reliable under even the most demanding conditions
- Removable and reusable
- UV-resistant
- Secure leak-free connections

Along with NORMA Dripline, this solution is ideal for

- Greenhouses
- Gardens
- Private or public commercial uses
- Residential



Various multi-diameter fittings

Couplings, elbows, tees, end plugs, swivel adapters

Maximum service pressure: 0.5–5.5 bar

Accepts tubing with an outer diameter of 16–18 mm

Various multi-diameter fittings

Couplings, elbows, tees, end plugs, swivel adapter for 16, 17 and 18 mm tubina

NDS Dripline Fitting

Smart-Loc[™] technology ensures extra fast and easy installation of the multi-diameter compression fitting that fits all ½ drip tubing. Ideal for tubing repairs.

Did you know that...

You can install or repair 3 different sizes of polyethylene tubing from 16 mm to 18 mm with our SmartLoc[™] fittings?





SmartProtect

Valve Boxes

SmartProtect NDS Valve Boxes are designed to ensure a long service life. Their reinforced covers can handle heavy loads. An integrated nut even allows for them to be bolted down.



Benefits at a glance

- Corrugated side walls in the Pro-Spec Series for higher strength
- Thicker walls for reinforcement and thus added strength
- Overlapping covers prevent dirt and grass from settling in between the body and the cover



Ideal for residential and commercial applications

- Private gardens
- Condominiums and industrial installations
- Golf courses
- Sports fields



One piece molded from polyolefins (polyethylene and polypropylene). Designations for irrigation control valve and reclaimed water.

Round valve box sizes: Ø 15 and 25 cm

Rectangular valve box sizes from 50–100 cm length and 30–65 cm width

Various sizes and colors available

More than 35 different rectangular and round bo sizes in 5 colors

NDS Valve Boxes

UV inhibitors for sustained durability and performance even in direct sunlight. Thanks to their unique design, all of these boxes lock easily and securely.

Did you know that...

Our Pro-Spec™ Series has superior strength with unique corrugated sidewalls starting at Ø 25 cm round boxes?







Connected to let it flow

Leakage-free and highly durable irrigation system components – Thanks to our decades of experience in joining and connecting solutions for even the most demanding industries, we know what it takes to provide you with secure components for fit & forget irrigation systems that make your life and your customers' lives a lot easier. Contact us to learn more about our fittings, valve boxes and driplines. Because every drop counts, say yes to NORMA and farewell to leakage!

Smart solutions. "Fit & Forget" installation. Excellent performance.

NORMA Group is a global market and technology leader in engineered joining technology, offering more than 40,000 product solutions for diverse applications (automotive, shipbuilding, infrastructure, etc.). As a listed company, NORMA Group has its headquarters in Maintal near Frankfurt/Main, with around 8,800 employees serving customers in over 100 countries.

Visit our website for the latest information on NORMA® products: **norma-irrigation.com**

