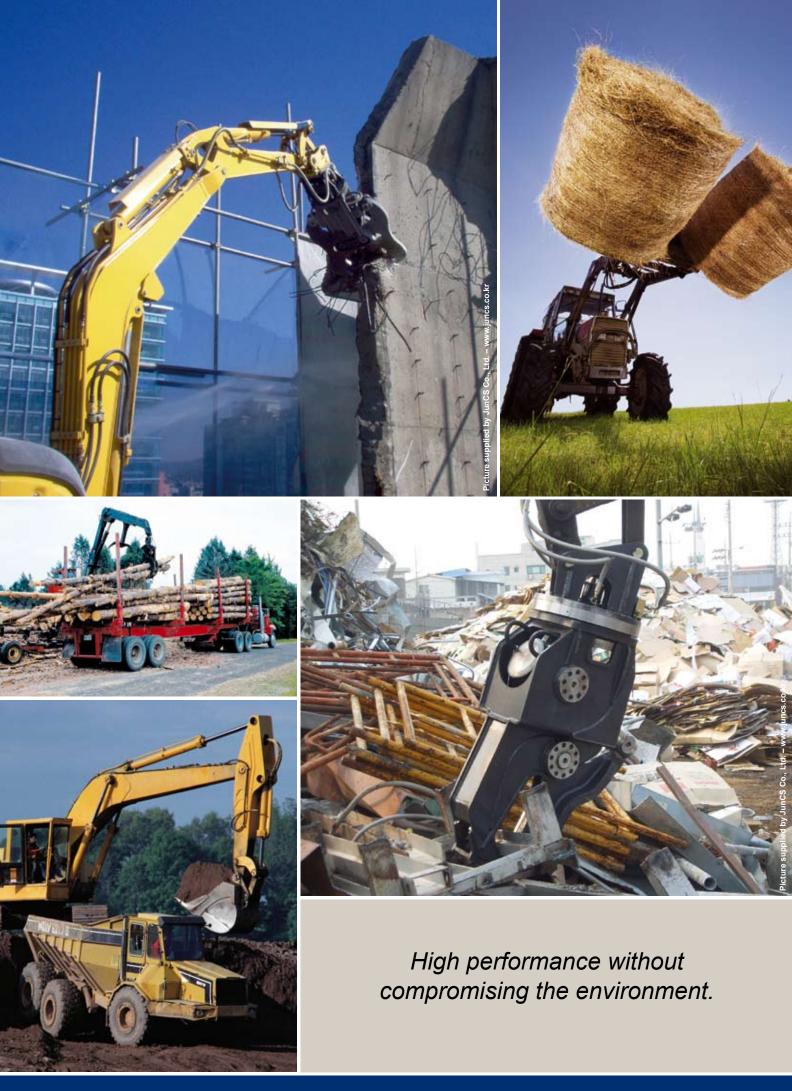


# **CEJN's Hydraulic Range** Synonymous with quality, high performance and safety



www.cejn.com



## **CEJN - Your Global Partner in Hydraulics**

- reliable products with smart solutions for all applications

CEJN is the global quick connect specialist that offers quick couplings and accessories for all types of media as well as custom-made solutions for all types of applications. With more than 50 years' experience of connecting components quickly and safely – our products are, and always have been, synonymous with quality, high performance and safety.

Our product range has, since CEJN was established in 1955, expanded and covers today all types of pressure and media. The range offers products capable of handling hydraulic pressures up to 400 MPa, which makes CEJN the world leader of quick connect couplings for extreme high pressures. Our extensive range of products for low/medium pressure hydraulics covers a wide array of sought-after features such as extra locking rings, pressure eliminators, heavy duty materials and durable designs.

Inspiration from all corners of the world has made CEJN the global partner we are today. Our customers benefit from our unbeatable combination of a local presence and global resources. CEJN's engineers are on the frontier of quick connect technology and are constantly working on new products and innovative solutions. We thrive on taking solutions to the next level in close cooperation with our customers and their specific requirements and needs. Together, we constantly renew and redefine the boundaries of what is possible.



## **Quality, Safety & Testing**

- important cornerstones in CEJN's quality-process



To develop safe products of highest quality has been, and still is, of the utmost importance for CEJN. Through the years, we have pushed the boundaries and faced different challenges in our mission to design products featuring the perfect combination of high performance and functionality with operator safety and easy handling. Important steps in achieving our mission are well thought through designs, carefully selected materials and thorough testing.

### DESIGN AND HIGH QUALITY MATERIALS

All design work is done by our highly trained staff of product designers and engineers in state-of-the-art software. They carefully make each decision regarding design features and material to meet the high internal safety and quality demands of CEJN. Equally important is the fulfillment of the product requirements concerning its future work environment and application field.

### STRINGENT TESTS DONE BY CEJN

Each of our products is subjected to a thorough testing process before the product is approved for production. Firstly, the virtual product is tested through software simulations such as FEM and CFD. Secondly, a prototype is made and put through rigorous laboratory tests and often also field tests. If any kinks or flaws are detected, they are ironed out and the product can be approved for serial production.

Once in production, several tests are made to ensure a high-quality, leak-free product. This to make sure that each product, at a minimum, fulfills the latest customer and market demands as well as our own stringent requirements.

### **ISO CERTIFIED SINCE 1995**

Since 1995, CEJN has been certified in accordance with ISO 9001 and since 2006 we also have been ISO 14001 certified. This means that each product leaving our assembly line has been developed and manufactured in a quality controlled process, ensuring a consistent level of product quality to total customer satisfaction.

## No-Spill, Flat-Face Designed Products

- protect both the environment and hydraulic system from pollution

In CEJN's hydraulic range are Series X62, X64, X65 and X66 available with our Flat-Face designed couplings and nipples that minimize the hydraulic leakage during connection and disconnection. The Flat-Face design prevents environmental pollution and the associated, costly cleanup measures as well as increases the system's performance by ensuring that no dust and debris enter the system.

The design also facilitates maintenance work making it easy to keep the surfaces of the couplings and nipples clean. An additional design benefit that further reduces spillage and the threat of contaminants entering the atmosphere and the hydraulic system.

To further guard against dust and debris from entering the system, we highly recommend to use dust caps. Use them on both coupling and nipple when they are disconnected and keep them joined together when the coupling and nipple are connected.



## **Pressure Eliminator by CEJN**

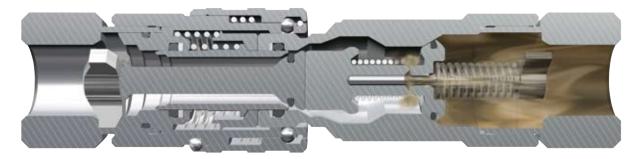
- Series X64, solves problems caused by residual pressure

Residual pressure is mostly caused by expanding oil due to elevated temperatures and results in a coupling that is not connectable or has a substantially increased connection force. These types of problems are usually solved by unscrewing some of the threaded connections to bleed out the residual pressure or punctuating the pressure by force. In doing so, the Flat-Face designed surfaces are damaged and the frequency of costly down times is increased along with the risk of dangerous environmental leakage becoming higher.

Available from CEJN is Series X64, a collection of heavy-duty, compact designed nipples with a built-in pressure eliminator. The Series punctuates and equalizes the residual pressure on the nipple side and makes it possible to connect the hydraulic system without the need for extensive force. Consequently, a fast and easy connection process is ensured and hydraulic spillage is eliminated.

The Series X64 are made of plated steel and available in five sizes ranging from DN 6.3 to DN 19. They are interchangeable with the ISO Standard 16028 and therefore an excellent choice for CEJN Series X62 and X65.

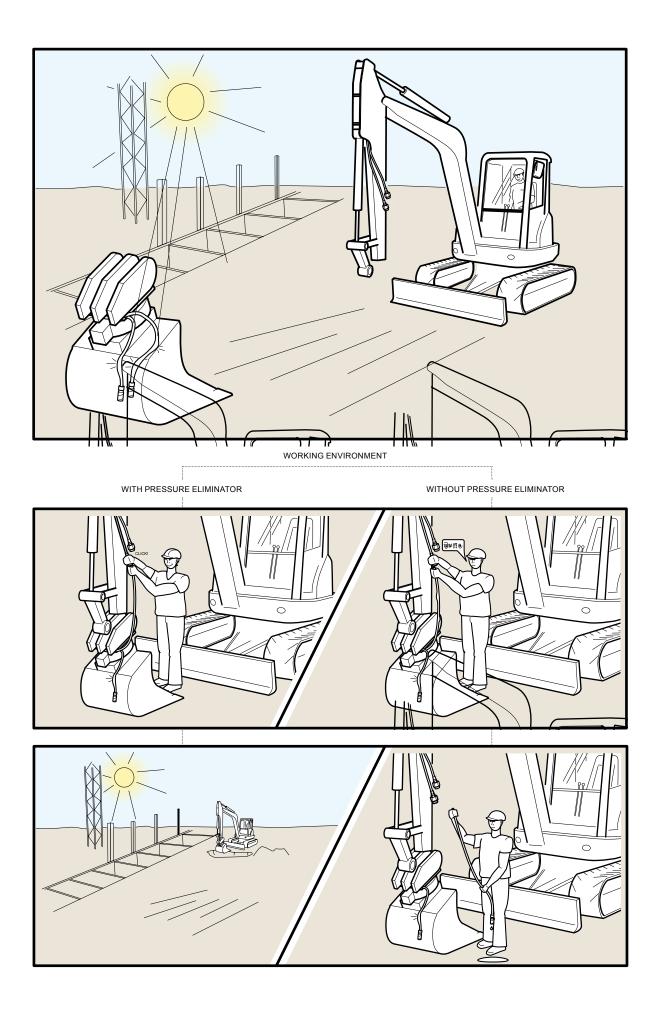
A pressure eliminator is also available in our Nordic Standard range.



PRESSURE IS PUNCTUATED AND EQUALIZED



FULLY CONNECTED



## **CEJN X-Series**

### no-spill Flat-Face couplings

CEJN's X-Series are a collection of Flat-Face couplings and nipples. They are specially designed to minimize spillage in mobile and industrial hydraulic applications such as construction equipment and injection molding. The Series offer added protection against involuntary disconnection and consist of the Series X62, X64, X65 and X66.

### Series X65

- Series 165, 265, 365, 565, 665 and 765

CEJN Series X65 quick connect couplings and nipples are compliant with the ISO Standard 16028 and have many sought-after features that protect both the environment and hydraulic system from pollution. An extra security locking offers added protection against involuntary disconnection. Their Flat-Face design minimizes spillage during connection and disconnection and dust caps are available to further protect against environmental and system contamination. A Push-Pull version for panel mounting is available in DN 6.3 to DN 19.

The Series are made of plated steel and are available in six sizes ranging from DN 5 to DN 19. They are one-hand operated and due to their combination of functionality, safety and sturdy design they are suitable for tough hydraulic applications.

### **Technical Data**

Nominal flow diameter	. DN 5, DN 6.3, DN 10, DN 12.5, DN 16, DN 19
Flow capacity	up to 100 l/min (22.0 GPM UK)*
Max. working pressure	. up to 72 MPa
Temperature range	30°C to +100°C (-22°F to +212°F)

Material, coupling ... Material, nipple ...... Material, seal ..... . Steel (zinc passivation) . Hardened steel (zinc passivation) . Nitrile (NBR), other sealing materials on request

### Series X66

– Series 266, 366, 566 and 766

CEJN Series X66 consist of quick connect couplings and nipples dimensionally designed in accordance with the ISO Standard 16028. The one-hand operated Series offer features that both guard against environmental pollution as well as keep dust and debris from entering the hydraulic system. An extra security locking prevents involuntary disconnection and the Flat-Face design keeps spillage during connection and disconnection to a minimum. In addition, dust caps are available as an additional safety measure to further protect the environment and hydraulic systems from contaminants.

The Series are made of stainless steel AISI 316 and are available in four sizes ranging from DN 6.3 to DN 19. Due to their many sought-after features in combination with functionality, safety and sturdy design the Series X66 are especially suitable for hydraulic/ fluid applications with corrosive media or in corrosive environments such as the offshore, chemical, paper/pulp and food industries.

#### **Technical Data**

Nominal flow diameter	. DN 6.3, DN 10, DN 12.5, DN 19
Flow capacity	. up to 100 l/min (22.0 GPM UK)*
Max. working pressure	. 25 MPa
Temperature range	-20°C to +205°C (-4°F to +401°F)



Material, coupling...... Material, nipple..... Material, seal..... Stainless steel, AISI 316 Stainless steel, AISI 316 Viton (FPM), other sealing material on request

\* Flow capacity is measured at 0.1 MPa pressure drop





### Series X64

- Series 264, 364, 564, 664 and 764

CEJN Series X64 offer quick-connect nipples with a built-in pressure eliminator that does not make their design unnecessarily large and bulky. The pressure eliminator solves problems with high connection force due to residual pressure on the nipple side. It punctuates the residual pressure and ensures a low connection force without any hydraulic leakage. The Series are interchangeable with the ISO Standard 16028 and therefore a suitable complement to Series X62 and X65.

The Series are made of plated steel, offered in five sizes ranging from DN 6.3 to DN 19 and are suitable for applications where residual pressure on the nipple side is a problem.



### **Technical Data**

Nominal flow diameter	DN 6.3, D
Flow capacity	up to 87 l/
Max. working pressure	up to 50 N
Temperature range	-30°C to +

. DN 6.3, DN 10, DN 12.5, DN 16, DN 19 . up to 87 l/min (19.1 GPM UK)\* . up to 50 MPa . -30°C to +100°C (-22°F to +212°F)

Material, nipple ..... Material, seal...... Hardened steel (zinc passivation) Nitrile (NBR), other sealing materials on request

### Series X62 - Series 262, 362 and 562

CEJN Series X62 include quick connect couplings and nipples designed to be interchangeable with the ISO Standard 16028. The Series have an additional security locking, a Flat-Face design and available with dust caps for both the coupling and nipple. These features not only guard against environmental pollution but also prevent contaminants entering the hydraulic system. The X62 require only one hand for operation which ensures fast and easy connection and disconnection.

The Series are made of plated steel and are available in three sizes ranging from DN 6.3 to DN 12.5. Their many features and sturdy design were developed to suit the less stringent demands of hydraulic applications with a maximum working pressure of 22 MPa.



#### **Technical Data**

Nominal flow diameter	. DN 6.3, DN 10, DN 12.5
Flow capacity	. up to 41 l/min (9.0 GPM UK)*
Max. working pressure	. up to 22 MPa
Temperature range	30°C to +100°C (-22°F to +212°F)

Material, coupling
Material, nipple
Material, seal

Steel (zinc passivation) Hardened steel (zinc passivation) Nitrile (NBR), other sealing materials on request

## **CEJN Nordic Standard**

- heavy-duty design and high performance

### Nordic Standard

- Series 525 (DN 6.3 to DN 25), made of steel

CEJN Series 525 are a "Nordic standard" where a heavy-duty design ensures maximum durability and high performance even in the roughest environments with the toughest application demands. The Series are equipped with an additional security locking that protects against involuntary disconnection and an extra sealing function to improve the Series' sealing performance. Also available is an optional pressure eliminator facilitating a low-to-connect force even when either half is under residual pressure.

The Series are made of plated steel and those parts exposed to extreme strain and stress are made of hardened steel for extra protection. The Series are offered in five different sizes ranging from DN 6.3 to DN 25. Dust caps are available for both couplings and nipples in all five sizes. Their combined advantages make them suitable for all kinds of mobile and industrial hydraulic applications.



#### **Technical Data**

Nominal flow diameter..... Flow capacity..... Max. working pressure Temperature range ...... DN 6.3, DN 10, DN 12.5, DN 20, DN 25 ...... up to 425 l/min (93.5 GPM UK)\* ...... up to 45 MPa ...... -30°C to +100°C (-22°F to +212°F) Material, coupling..... Material, nipple ...... Material, seal..... Steel (zinc passivation) Hardened steel (zinc passivation) Nitrile (NBR)

### Nordic Standard

- Series 526 (DN 6.3 to DN 25), made of stainless steel

CEJN Series 526 are also a "Nordic standard" with a sturdy design for maximum durability and high performance even in the roughest environments with the toughest application demands. The Series feature an additional security locking to protect the system from unintentional disconnection and an extra sealing function to improve the Series' sealing performance.

The Series are made of stainless steel AISI 316 and are offered in five different sizes ranging from DN 6.3 to DN 25. Dust caps are available for both couplings and nipples in all five sizes. The Series' combined advantages make them suitable for all kinds of mobile and industrial hydraulic applications.



#### **Technical Data**

 Nominal flow diameter
 DN 6.3, DN

 Flow capacity
 up to 425 ¼

 Max. working pressure
 up to 25 MF

 Temperature range
 -20°C to +2

... DN 6.3, DN 10, DN 12.5, DN 20, DN 25 ... up to 425 l/min (93.5 GPM UK)\* ... up to 25 MPa ... -20°C to +205°C (-4°F to +401°F) Material, coupling..... Material, nipple ..... Material, seal.....

Stainless steel, AISI 316 Stainless steel, AISI 316 Viton (FPM)

\* Flow capacity is measured at 0.4 MPa pressure drop.

## **CEJN Classic Range**

- small dimensions and high performance

### **CEJN's Classic Hydraulic Range**

– Series 325, 415, 605 and 705

Included in CEJN's Classic Range are quick connect couplings and nipples with extremely small external dimension as well as extremely low connection force. These features enable a quick one-hand operating process. A combination that not only saves time but also minimizes the physical stress of the operators. Dust caps are included in order to prevent dust and debris from entering the system.

The Series are made of high-grade steel and are available in four sizes ranging from DN 6.2 to DN 19. Their high flow, extremely small size and low connection force make them the perfect choice for demanding medium-pressure applications. They are especially suitable in applications where space is limited and, for ergonomic reasons, when they are frequently operated, e.g. in test benches.



#### **Technical Data**

Nominal flow diameter..... Flow capacity..... Max. working pressure ..... Temperature range .. DN 6.2, DN 8.9, DN 14.5, DN 19 .. up to 290 l/min (63.8 GPM UK)\* .. up to 32 MPa .. -30°C to +100°C (-22°F to +212°F) Material, coupling...... Material, nipple...... Material, seal..... Steel (zinc passivation) Steel (zinc passivation) Nitrile (NBR), other sealing materials on request

\* Flow capacity is measured at 0.4 MPa pressure drop.



## **Pressure Monitoring & Accessories**

- Snap-Check, dust caps and seal kits

### Snap-Check

In the Snap-Check range are quick connect couplings and nipples, hoses, pressure gauges and accessories offered to create a custom-made, portable and flexible monitoring system. The large selection of parts ensures a perfect fit no matter the size or complexity of the system.

The couplings and nipples have a maximum working pressure of 60 MPa. This ensures extra long, leak-free service and unsurpassed reliability. The system can also be connected under pressure up to 30 MPa on the nipple side and is available with G, R, NPT, UNF and metric threads. Couplings and nipples are delivered with standard red dust caps to keep them clean and prevent dirt from entering the system. Suitable applications include mobile equipment, injection molding machines, oil and gas equipment, marine vessels and production machinery.

#### **Technical Data**



Material, coupling & nipple ...... Material, seal.... Material, hose ... Zinc-plated steel ... Nitrile (NBR) ... Polyamide with braided Kevlar

### **Dust Caps & Seal Kits**

Available from CEJN are plastic dust caps in order to prevent possibly dangerous environmental pollution and protect the hydraulic system from contaminants. The dust caps are suitable for all couplings and nipples in our hydraulic range. The dust caps are designed so they can, and should, be joined together when the coupling and nipple are connected. This to keep the dust caps free from dust and debris. The pressure monitoring system is available with plastic dust caps as well as metal screw-on dust caps with wire straps.

Additional seal kits are offered as accessories for the X-Series and Nordic Standard range. The kits facilitate quick maintenance work and prolong the products' service life. Seal kits for the X-Series nipples contain one O-ring and one backup ring to replace the front seal on the nipple. Seal kits for the Nordic Standard couplings contain two O-rings and one backup ring for replacing the outer seals in the coupling.



## **WEO Plug-In**

### - transforming and simplifying hydraulic systems

The WEO Plug-In system with an innovative type of coupling has the potential to transform and simplify critical equipment applications within the hydraulic industry. The WEO Plug-In not only saves space, which allows for new pioneering system designs, it also dramatically reduces assembly time and eliminates work injuries associated with connection and disconnection.

### **WEO**

The WEO Plug-In's click-to-connect and self-aligning features facilitate an easy and trouble-free operation. Due to these features, no tools or spanners are needed for installation or maintenance work. Thereby, the need for hand-tool clearance is eliminated and a new generation of more compact and reliable hydraulic systems can be designed.

The innovative features also enable the assembly time to be significantly reduced. By choosing the WEO Plug-In system, manual time-consuming installations are eliminated and follow-up tightening is not required. The WEO system is simple to "plug-in" and the click-to-connect and self-aligning features take care of the rest. A quick and easy installation is ensured and virtually leak-free connections are guaranteed.

Further benefits gained with the WEO Plug-In system are the prevention of torsion stress of twisted hoses, which prolongs the hoses' service life, along with the elimination of operator injuries associated with connection and disconnection.

The WEO Plug-in range consists of a wide selection of components to suit most applications and system requirements. Couplings and nipples are made of plated steel and come in various types and shapes. Also included are cartridges that are easily integrated into hydraulic components and small-dimensioned swivels that allow hoses to swivel under full working pressure.



#### **Technical Data**

Nominal flow diameter Max. working pressure ..... up to 35 MPa

from DN 6 to DN 25 Temperature range ...... -30°C to +100°C (-22°F to +212°F)

Material, coupling Material, nipple Material. seal

Steel, zinc chromate plating Hardened steel, zinc chromate plating Nitrile (NBR), other sealing material on request





## Special Solutions for Special Applications

- modified products to suit your demands

Connecting components, tools and machine units have been our business for more than 50 years. We are proud of our long history and our past accomplishments but are nowhere near ready to settle back and relax. Providing our customers with high performing quick-connect solutions is what we live for. Translating customer needs into viable product solutions are exciting challenges that we proudly take on on a daily basis.

Our expertise in quick connect technology, experience in low to extreme high pressures and our wide range of high performing coupling products provides us with a strong foundation to handle any quick connect challenge we face, whether it be connecting machine units under pressure, combining several connections into one or finding ways to connect components in corrosive environments.

The need to connect components quickly, safely and securely exists in all industries. We have provided solutions to minimize production lead times, manifolds to ensure proper multi-line connections every time and product design for easy handling. Every customer has their own individual needs and reasons for adopting quick connect technology and we are there to help no matter the industry segment, application area or geographical location.











In nuclear power plants, some fluid lines need to be connected and disconnected by robots without any human involvement due to the radioactive environment. The customer therefore needed a push-to-connect product for robotic operation and fulfills the demands of radioactive work environments. A solution was created by designing a unique locking sleeve and changing the material from plated steel to stainless steel, AISI 316. The locking sleeve had special flanges that offered a perfect grip for the robot and the new material suits this type of work environment.

#### MULTI-CONSOLE WITH LOW CONNECTION FORCE

The Swedish military has developed a mobile bridge that is divided into sections. These sections can be hydraulically connected and disconnected but high connection force due to residual pressure proved to be an initial problem. This was solved by combining two CEJN couplings with low connection force in a small and compact multi-console. And as an additional benefit, the console can be connected under pressure.

### USER-FRIENDLY COUPLINGS WITH HIGH PERFORMANCE

In hydraulic testing stations, frequent connection and disconnection lead to operator injuries due to physical strain and stress as well as unnecessarily long changeover times. The customer therefore looked for a product that could solve their problems and have a working pressure of 40 MPa. We were able to fulfill all their demands by modifying our Classic Hydraulic range. After a few alterations they were able to work with pressures up to 40 MPa and their extremely low connection force dramatically reduced both the physical stress of operators and changeover times.

### SERIES X65 WITH REDUCED CONNECTION FORCE

Operators that carry out tests of hydraulic components frequently need to connect and disconnect test-components. In doing so, they subject themselves to significant strain and stress that lead to operator injuries. For that reason, this customer wanted a more ergonomically designed product that was compatible with the ISO Standard 16028 and spill-free. By modifying the Series X65, we were able to reduce the connection force and deliver a easy operated product that improved the customer's work environment.



#### MULTI-CONSOLE TO ELIMINATE CROSS-CONNECTION

After maintenance work in a paper-mill, cross-connected hydraulic lines where a problem and resulted in discarded paper as well as costly downtimes. The customer wanted a product that could resolve these problems, ensure a proper connection and be able to handle the tough work environment of paper mills. CEJN created a multi-console in stainless steel with our high performing Series X65. A solution that eliminated the problems with cross-connection without compromising on function or performance and is more than capable of handling the demands of tough work environments.



### SERIES X65 FOR AGGRESSIVE TYPE MEDIA

A special version of Series X65 was made to suit the demands of component testing within the aircraft industry. The special version features EPDM seals, which enable the Series to handle aggressive type media such as Skydrol<sup>®</sup>. The special X65 fully complies with the ISO Standard 16028 and its sturdy design perfectly suits the demands of this industry.



Your Global Quick Connect Partner