

# **HYDRAULICS**

6

# **CEJN Multi-X**

- Flexible multi connections for quick and easy handling



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### **CEJN Multi-X allows you to**

- Minimize downtime during tool changes
- Connect the hydraulic lines with residual pressure
- Install multi-plates in confined spaces
- Use working pressure up to 5076 PSI (350 bar)
- Eliminate cross connection



# Multiple connections in one step with CEJN's Multi-X range

- Advanced technology made easy

CEJN Multi-X is a range of innovative, easy to handle, multi-plates designed to meet and exceed the demands of even the most challenging mobile hydraulic application. Its innovative design rivals and surpasses other existing multi-plates on the market. The unique design made with the user in mind offers you a plate system that provides great flexibility, high performance, easy installation and trouble-free operation.



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# Arguments for Multi-X

Single ISO 16028 Flat-Face couplings can be used with fixed installed male plates.

The WEO hose connection is self-aligning and makes connection easy and prolongs hose life.

### Flexibility

**The range** consists of six standard configurations, matching the most frequent application needs. The sizes range for DN 10 to DN 19 combined with two or four ports in each plate (for details on the range see pages 6-7). Each plate can also be equipped with an optional electric connector (available as accessory).

The innovative design allows you to use either part of the plate system mounted as the fixed plate without compromising the performance. The mounting bracket is enclosed with the female plate but you can just as easily use it to install the male plate in the application instead.

As an extra advantage when you use the male plate as the fixed installation you can connect standard ISO 16028 flat-face couplings to the Multi-X plate, giving you maximum flexibility to use tools and attachments both with and without a Multi-X plate.

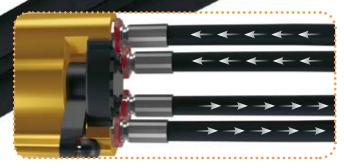
### Performance

The Multi-X design allows you to use a working pressure up to 5076 PSI (350 bar) on half the ports simultaneously and the rest of the ports as return lines with a maximum of 725 PSI (50 bar), regardless if you use two or four ports.

The design also offers the possibility to connect the units with residual pressure.

#### **Residual pressure**

- 1. Up to 5076 PSI (350 bar) residual pressure on the male side and free to drain on the female side.
- 2. Up to 3625 PSI (250 bar) residual pressure on the female side and free to drain on the male side.
- 3. Up to 3625 PSI (250 bar) residual pressure on the male side and 145 PSI (10 bar) return resistance on the female side.



Working pressure of up to 5076 PSI (350 bar) can be used on half the ports simultaneously with the other half of the ports used as return lines with a maximum pressure of 725 PSI (50 bar).



Both the female and male plate can be used as the fixed part.



Electric connectors can easily be attached to each plate.



The pressure is punctured without spillage making it simple to connect with residual pressure in the system.

### Connections

**The Multi-X range** is outfitted with WEO Plug-In hose connections, making them both easy to assemble and to connect. Using Plug-In connections provides the Multi-X range with the same outstanding features as the CEJN WEO Range products – self-aligning hose connections that prolongs hose life, minimized downtimes when the need to replace or remove the hose occurs and its minimal space requirements that allows for more compact designs.

Each Multi-X plate comes with **integrated WEO cartridges** for easy installation. Use the WEO Hose connection nipples and ferrules to crimp the nipples directly onto the hose or convert your existing hose to WEO Plug-In with the threaded WEO Nipples (see part numbers page 10).

### Operation

The Multi-X is **easily operated** with one hand on the lever and one hand guiding the moving plate during both connection and disconnection. The ergonomical lever placed perpendicular to the hydraulic lines keeps the **operators hands safe**. The locking button secures the lever when connected and prevents unintentional disconnection.

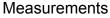
All Multi-X male plates are equipped with **pressure** eliminator nipples that make it possible to connect the plates also with residual pressure in the system. By puncturing the pressure, without spillage, it allows for a smooth connection even at a high residual pressure (up to 5076 PSI (350 bar).

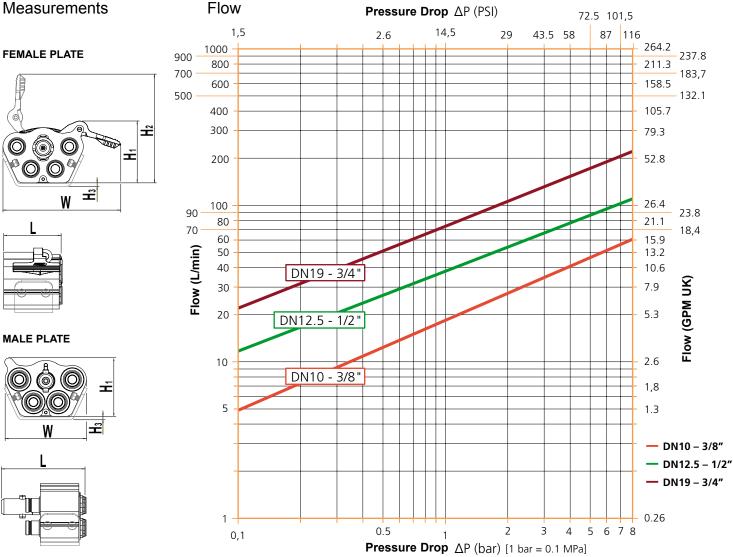
The self-aligning WEO connection **removes the torsion** in the hose, a common issue when using ordinary fittings, making it easy to align and connect the plates.

## Multi-X range Technical data

| Max. working pressure        | . 5076 PSI (35 MPa)  |
|------------------------------|--|
| Min. burst pressure          | . 17 400 PSI (1200 bar)  |
| Temperature range            | 22°F to +212°F(-30°C to +100°C)  |
| Material female plate        | . Zinc plated steel, anodized aluminum, zinc, brass  |
| Material male plate          | . Zinc plated steel, anodized aluminum, brass  |
| Material seal                | . Nitril (NBR)   |
| Disconnection under pressure | . To be avoided. Residual pressure can result in recoil effect during disconnection. Always grip the lever firmly. |
| Comment                      | . Contact CEJN technical support for recommendations for high impulse applications.                                |
| Disconnection under pressure | . To be avoided. Residual pressure can result in recoil effect during disconnection. Always grip the lever firmly. |
| Comment                      | . Contact CEJN technical support for recommendations for high impulse applications.                                |

|    | CONNECTABILITY CASE NO.   | DN10 - 3/8" | DN12.5 - 1/2" | DN19 - 3/4" |
|----|---|-------------|---------------|-------------|
| 1. | Connectable with residual pressure on the male side<br>and free to drain on the female side         | 5076 PSI    | 5076 PSI      | 5076 PSI    |
| 2. | Connectable with residual pressure on the female side and free to drain on the male side            | 3620 PSI    | 2175 PSI      | 870 PSI     |
| 3. | Connectable with residual pressure on the male side<br>and 1 MPa return pressure on the female side | 3620 PSI    | 3190 PSI      | 3190 PSI    |





#### Multi-X Duo 10

#### Nominal flow dia...... 3/8" (10 mm)

|              | Part no     | No Ports | Connection | L   | w   | H1 | H2  | Н3 |
|--------------|-------------|----------|------------|-----|-----|----|-----|----|
| FEMALE PLATE | 10 932 2000 | 2        | WEO 1/2"   | 83  | 168 | 70 | 138 | 5  |
| MALE PLATE   | 10 932 2050 | 2        | WEO 3/8"   | 116 | 116 | 66 | -   | 5  |

#### Multi-X Duo 12.5

Nominal flow dia..... 1/2" (12.5 mm)

|              | Part no     | No Ports | Connection | L   | w   | H1 | H2  | H3 |  |
|--------------|-------------|----------|------------|-----|-----|----|-----|----|--|
| FEMALE PLATE | 10 932 2001 | 2        | WEO 3/4"   | 98  | 176 | 79 | 139 | 5  |  |
| MALE PLATE   | 10 932 2051 | 2        | WEO 1/2"   | 138 | 132 | 73 | -   | 5  |  |

#### Multi-X Duo 19



|              | Part no     | No Ports | Connection | L   | w   | H1  | H2  | НЗ |
|--------------|-------------|----------|------------|-----|-----|-----|-----|----|
| FEMALE PLATE | 10 932 5002 | 2        | WEO 3/4"   | 120 | 214 | 107 | 170 | 5  |
| MALE PLATE   | 10 932 5052 | 2        | WEO 3/4"   | 182 | 179 | 97  | -   | 5  |

#### Multi-X Quattro 10

Nominal flow dia..... 3/8" (10 mm)

|              | Part no     | No Ports | Connection | L   | w   | H1 | H2  | Н3 |
|--------------|-------------|----------|------------|-----|-----|----|-----|----|
| FEMALE PLATE | 10 932 3000 | 4        | WEO 1/2"   | 83  | 168 | 88 | 155 | 5  |
| MALE PLATE   | 10 932 3050 | 4        | WEO 3/8"   | 116 | 116 | 83 | -   | 5  |

#### Multi-X Quattro 10/12.5

|              | Part no     | No Ports | Connection     | L   | w   | H1 | H2  | H3 |  |
|--------------|-------------|----------|----------------|-----|-----|----|-----|----|--|
| FEMALE PLATE | 10 932 4000 | 4        | WEO 1/2"+ 3/4" | 98  | 176 | 99 | 159 | 5  |  |
| MALE PLATE   | 10 932 4050 | 4        | WEO 3/8"+ 1/2" | 138 | 132 | 93 | -   | 5  |  |

#### Multi-X Quattro 12.5

Nominal flow dia..... 1/2" (12.5 mm)

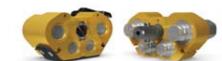
|              | Part no     | No Ports | Connection | L   | w   | H1 | H2  | H3 |  |
|--------------|-------------|----------|------------|-----|-----|----|-----|----|--|
| FEMALE PLATE | 10 932 4001 | 4        | WEO 3/4"   | 98  | 176 | 99 | 159 | 5  |  |
| MALE PLATE   | 10 932 4051 | 4        | WEO 1/2"   | 138 | 132 | 93 | -   | 5  |  |

#### Multi-X Quattro 12.5/19

Nominal flow dia..... 1/2" (12.5 mm)/3/4" (19mm)

|              | Part no     | No Ports | Connection     | L   | w   | H1  | H2  | H3 |
|--------------|-------------|----------|----------------|-----|-----|-----|-----|----|
| FEMALE PLATE | 10 932 5000 | 4        | WEO 3/4"       | 120 | 214 | 107 | 170 | 5  |
| MALE PLATE   | 10 932 5050 | 4        | WEO 1/2"+ 3/4" | 182 | 179 | 97  | -   | 5  |











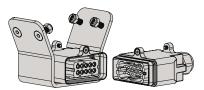


# **Multi-X Accessories**

#### Multi-X Electric Connector kits

Multi-X can be fitted with an electric connector kit on both the male and the female plate. The kits contain all necessary components as well as assembly instructions and dust caps.

| Connections | 10 + ground |
|-------------|-------------|
| Voltage     | 250 V       |
| Current     | 16 Amp.     |
|             |             |



|  | Suitable for   | Part no   | L                                 | w                                      | H1                                     | H2                                     | H3                              |
|--|--|---|-----------------------------------|--|--|--|---------------------------------|
| ELECTRIC CONNECTOR KIT<br>FOR FEMALE PLATE | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 12.5/19 | 10 932 0010<br>10 932 0011<br>10 932 0012<br>10 932 0013<br>10 932 0015 | 83<br>98<br>83<br>98<br>98<br>120 | 168<br>176<br>168<br>176<br>176<br>214 | 101<br>110<br>119<br>130<br>130<br>138 | 169<br>170<br>186<br>190<br>190<br>201 | 5<br>5<br>5<br>5<br>5<br>5<br>5 |
| ELECTRIC CONNECTOR KIT<br>FOR MALE PLATE   | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 12.5/19 | 10 932 0050<br>10 932 0051<br>10 932 0052<br>10 932 0053<br>10 932 0055 | 116<br>138<br>116<br>138<br>182   | 116<br>132<br>116<br>132<br>179        | 97<br>104<br>114<br>124<br>128         |  | 5<br>5<br>5<br>5                |

Measurements refer to outside dimensions of the Multi-X plate with the electrical connector kit installed. All measurements are in mm.

#### Multi-X Aluminum Cover/Parking Dock

The aluminum covers can be used as heavy duty protection when the plates are disconnected. The covers can also easily be mounted and used as fixed parking docks. Covers are only available for plates without electric connectors (can be used with the electric connector but will not cover the electric pins).

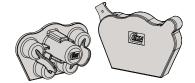
Material ..... Aluminum

|   | Suitable for   | Part no  |
|---|--|--|
| ALUMINUM COVER/PARKING DOCK<br>FOR FEMALE PLATE | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 12.5/19 | 10 932 1020<br>10 932 1021<br>10 932 1022<br>10 932 1023<br>10 932 1023<br>10 932 1023 |
| ALUMINUM COVER/PARKING DOCK<br>FOR MALE PLATE   | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 12.5/19 | 10 932 1070<br>10 932 1071<br>10 932 1072<br>10 932 1073<br>10 932 1073<br>10 932 1073 |

#### Multi-X Dust caps

The plastic dust caps are enclosed with each plate, but can also be purchased separately.

Material ..... Soft PVC



|   | Suitable for   | Part no   |   | Suitable for   | Part no   |
|---|--|---|---|--|---|
| DUST CAPS FOR<br>FEMALE PLATE                               | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 12.5/19 | 09 932 1000<br>09 932 1002<br>09 932 1001<br>09 932 1003<br>09 932 1003<br>09 932 1003<br>09 932 1005 | DUST CAPS FOR<br>MALE PLATE                               | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 12.5/19 | 09 932 1050<br>09 932 1052<br>09 932 1051<br>09 932 1053<br>09 932 1053<br>09 932 1053<br>09 932 1055 |
| DUST CAPS FOR<br>FEMALE PLATE<br>WITH ELECTRIC<br>CONNECTOR | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 12.5/19 | 09 932 1010<br>09 932 1012<br>09 932 1011<br>09 932 1013<br>09 932 1013<br>09 932 1013                | DUST CAPS FOR<br>MALE PLATE<br>WITH ELECTRIC<br>CONNECTOR | Multi-X Duo 10<br>Multi-X Duo 12.5<br>Multi-X Quattro 10<br>Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5/19 | 09 932 1060<br>09 932 1062<br>09 932 1061<br>09 932 1063<br>09 932 1063<br>09 932 1063                |

# **Multi-X Spare Parts**

#### Multi-X Coupling and Nipple kits

The couplings and nipples in the Multi-X plates can be replaced. The nipple kit contains nipple and retaining ring. The coupling kit contains a complete set of parts for replacement of one coupling. The seal kit contains one O-ring and one backup ring to replace the front seal on the nipple.

|           | DN size                   | Suitable for   | Part no                                   | WEO connection |
|-----------|---------------------------|--|---|----------------|
|           | DN 10                     | Multi-X Duo 10<br>Multi-X Quattro 10<br>Multi-X Quattro 10/12.5            | 10 364 6904                               | 3/8"           |
|           | DN 12.5                   | Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5/19 | 10 564 6905                               | 1/2"           |
| (and      | DN 19                     | Multi-X Quattro 12.5/19  | 10 764 6901                               | 3/4"           |
|           | DN 10<br>DN 12.5          | Multi-X Duo 10<br>Multi-X Quattro 10                                       | 10 365 1905                               | 1/2"           |
| ATT       |                           | Multi-X Quattro 10/12.5  | 10 365 1906                               | 1/2"           |
|           |                           | Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5<br>Multi-X Quattro 12.5/19 | 10 565 1907                               | 3/4"           |
|           | DN 19                     | Multi-X Quattro 12.5/19  | 10 765 1901                               | 3/4"           |
| SEAL KITS | DN 10<br>DN 12.5<br>DN 19 | Nipple DN10<br>Nipple DN12.5<br>Nipple DN19                                | 10 365 4900<br>10 565 4900<br>10 765 4900 | :              |

#### Multi-X Mounting Bracket

The mounting bracket is enclosed with all female Multi-X plates, but can be used with both the female or male plate.

Material ..... Powder coated steel

#### Multi-X Spare Parts

|                 | Suitable for  | Part no     |
|-----------------|---|-------------|
|                 | Multi-X Duo 10<br>Multi-X Quattro 10                                | 10 932 4960 |
|                 | Multi-X Duo 12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5 | 10 932 4970 |
| COM             | Multi-X Quattro 12.5/19   | 10 932 4980 |
| BACK LID KIT    | Multi-X Duo 10<br>Multi-X Quattro 10                                | 10 932 4961 |
| -               | Multi-X Duo 12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5 | 10 932 4971 |
|                 | Multi-X Quattro 12.5/19   | 10 932 4981 |
| CENTER BOLT KIT | Multi-X Duo 10<br>Multi-X Quattro 10                                | 10 932 4962 |
|                 | Multi-X Duo 12.5<br>Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5 | 10 932 4972 |
|                 | Multi-X Quattro 12.5/19   | 10 932 4982 |

|  | Suitable for   | Part no                                   |  |  |  |  |
|--|--|---|--|--|--|--|
| MOUNTING<br>BRACKET FOR<br>FEMALE/MALE | Multi-X Duo 10<br>Multi-X Quattro 10<br>Multi-X Duo 12.5 | 10 932 4963<br>10 932 4965<br>10 932 4973 |  |  |  |  |
| PLATES                                 | Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5          | 10 932 4975                               |  |  |  |  |
|  | Multi-X Quattro 12.5/19                                  | 10 932 4985                               |  |  |  |  |
| MOUNTING<br>BRACKET FOR<br>FEMALE/MALE | Multi-X Duo 10<br>Multi-X Quattro 10<br>Multi-X Duo 12.5 | 10 932 4964<br>10 932 4966<br>10 932 4974 |  |  |  |  |
| PLATES WITH<br>ELECTRICAL<br>CONNECTOR | Multi-X Quattro 12.5<br>Multi-X Quattro 10/12.5          | 10 932 4976                               |  |  |  |  |
|  | Multi-X Quattro 12.5/19                                  | 10 932 4986                               |  |  |  |  |
|  |  |   |  |  |  |  |

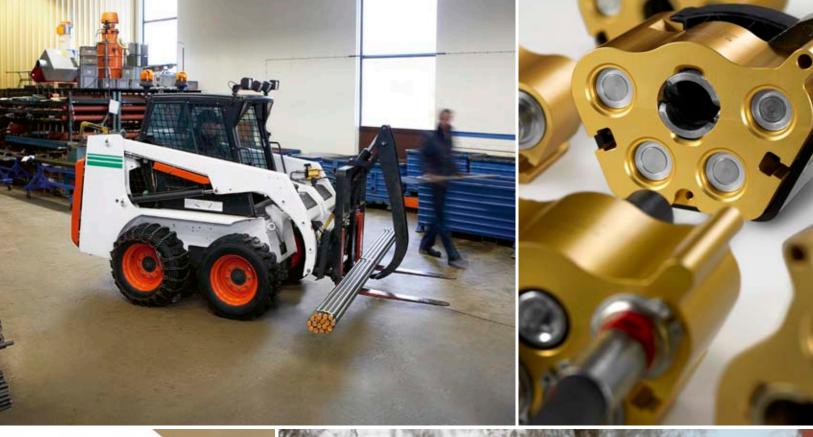
# **Choose connection**

### WEO-nipples with thread connections

| Multi-X art nr  | and title   | Multi-X<br>connection | Choose your conncetion | WEO<br>art nr. |
|---|---|-----------------------|------------------------|----------------|
| 10 932 2050 Duo 10, male plate   10 932 3050 Quattro 10, male plate | •   | WEO 3/8"              | BSP 3/8" fem           | 14 721 0606    |
|   | Quattro 10, male plate                                      |                       | BSP 1/2" fem           | 14 721 0608    |
|   |   | JIC 9/16-18           | 14 727 0609            |                |
|   |   |                       | JIC 3/4"-16            | 14 727 0612    |
| 932 2000  | Duo 10, female plate  | WEO 1/2"              | BSP 3/8" fem           | 14 721 0806    |
| 932 2051<br>932 3000  | Duo 12,5, male plate<br>Quatto 10, female plate             |                       | BSP 1/2" fem           | 14 721 0848    |
| )32 4051  | Quattro 12,5, male plate                                    |                       | JIC 9/16-18            | 14 727 0809    |
|   |   |                       | JIC 3/4"-16            | 14 727 0812    |
| 932 2001  | Duo 12,5, female plate                                      | WEO 3/4"              | BSP 1/2" fem           | 14 721 1208    |
| 932 4001<br>932 5000  | Quattro 12,5, female plate<br>Quattro 12,5/19, female plate |                       | BSP 3/4" fem           | 14 721 1212    |
| 932 5002<br>932 5052  | Duo 19, female plate<br>Duo 19, male plate                  |                       | JIC 1 1/16"-12         | 14 727 1217    |
| 932 4050  | Quattro 10/12,5, male plate                                 | WEO 3/8"              | BSP 3/8" fem           | 14 721 0606    |
|   |   |                       | BSP 1/2" fem           | 14 721 0608    |
|   |   |                       | JIC 9/16-18            | 14 727 0609    |
|   |   |                       | JIC 3/4"-16            | 14 727 0612    |
|   |   | WEO 1/2"              | BSP 3/8" fem           | 14 721 0806    |
|   |   |                       | BSP 1/2" fem           | 14 721 0848    |
|   |   |                       | JIC 9/16-18            | 14 727 0809    |
|   |   |                       | JIC 3/4"-16            | 14 727 0812    |
| 932 4000  | Quattro 10/12,5, female plate                               | WEO 1/2"              | BSP 3/8" fem           | 14 721 0806    |
| 10 932 5050 Quattro 12,5/19, male                                   | Quattro 12,5/19, male plate                                 | 9, male plate         | BSP 1/2" fem           | 14 721 0848    |
|   |   |                       | JIC 9/16-18            | 14 727 0809    |
|   |   |                       | JIC 3/4"-16            | 14 727 0812    |
|   |   | WEO 3/4"              | BSP 1/2" fem           | 14 721 1208    |
|   |   |                       | BSP 3/4" fem           | 14 721 1212    |
|   |   |                       | JIC 1 1/16"-12         | 14 727 1217    |
|   |   |                       |                        |                |

#### WEO-nipples with hydraulic hose connection

| Multi-X art nr   | and title  | Multi-X con. | Hose con.   | Straight nipple | WEO-nipple 45° | WEO-nipple 90° |
|--|--|--------------|-------------|-----------------|----------------|----------------|
|  | Duo 10, male plate   | WEO 3/8"     | DN06 (1/4") | 14 710 0604     |                |                |
|  | Quattro 10, male plate                                       |              | DN10 (3/8") | 14 710 0606     | 14 712 0606    | 14 714 0606    |
| 10 932 2000 Duo 10, female plate   10 932 2051 Duo 12,5, male plate   10 932 3000 Quatto 10, female plate   10 932 4051 Quattro 12,5, male plate | Duo 12,5, male plate   | WEO 1/2"     | DN10 (3/8") | 14 710 0806     |                | 14 714 0806    |
|  |  |              | DN12 (1/2") | 14 710 0808     | 14 712 0808    | 14 714 0808    |
|  |  |              |             |                 |                |                |
| 10 932 2001<br>10 932 4001   |  | WEO 3/4"     | DN12 (1/2") | 14 710 1208     |                |                |
|  |  |              | DN20 (3/4") | 14 710 1212     |                |                |
| 10 932 5002  |  |              |             |                 |                |                |
| 10 932 4050  | Quattro 10/12,5, male plate                                  | WEO 3/8"     | DN06 (1/4") | 14 710 0604     |                |                |
|  |  |              | DN10 (3/8") | 14 710 0606     | 14 712 0606    | 14 714 0606    |
|  |  | WEO 1/2"     | DN10 (3/8") | 14 710 0806     |                | 14 714 0806    |
|  |  |              | DN12 (1/2") | 14 710 0808     | 14 712 0808    | 14 714 0808    |
| 10 932 4000<br>10 932 5050   | Quattro 10/12,5, female plate<br>Quattro 12,5/19, male plate | WEO 1/2"     | DN10 (3/8") | 14 710 0806     |                | 14 714 0806    |
|  |  |              | DN12 (1/2") | 14 710 0808     | 14 712 0808    | 14 714 0808    |
|  |  | WEO 3/4"     | DN12 (1/2") | 14 710 1208     |                |                |
|  |  |              | DN20 (3/4") | 14 710 1212     |                |                |











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The Global Quick Connect Specialist

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