

VLSSERIES

INTERCHANGE > Similar Couplings



Stucchi®



TECHNICAL FEATURES AND OPTIONS

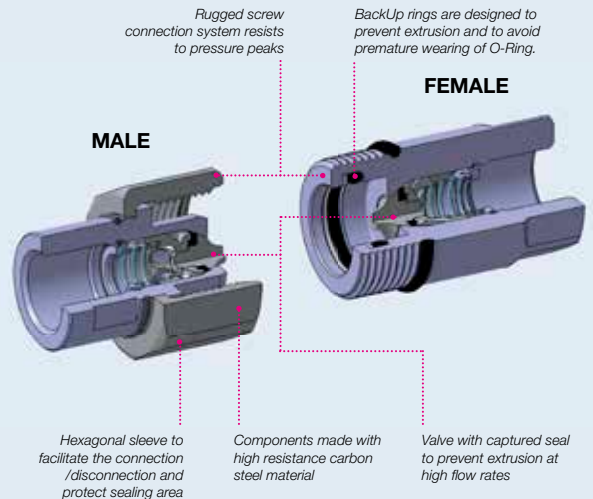
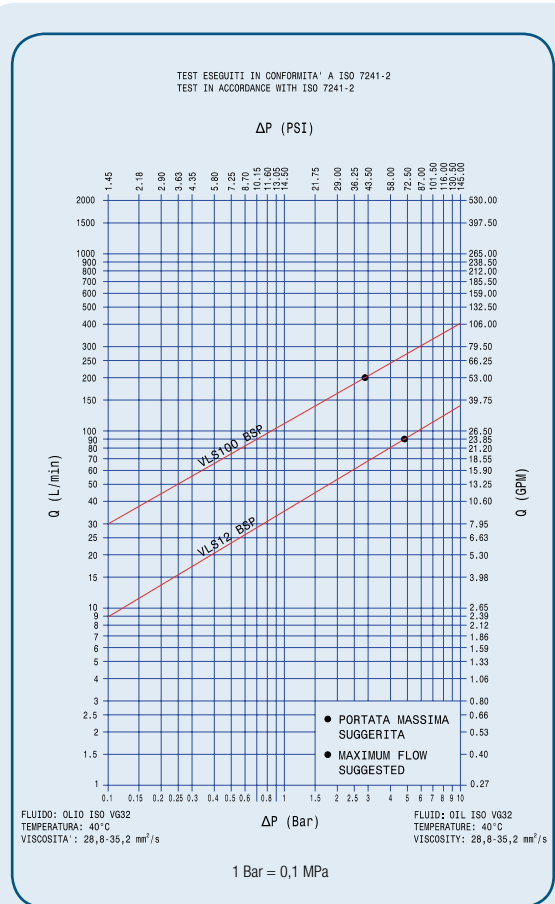
| | | |
|--------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------|
| Interchange Similar Couplings | Sealing description Nitrile NBR | Connection system Screw |
| Available sizes from 1/2" to 1" | Material High strength carbon steel | Available threads BSP - METRIC |
| Operating pressure Up to 465 bar | Locking mechanism Screw to connect | Flow rate Up to 200 L/Min |
| Temperature (°C) -20° / +100° | Valving style Poppet | Connection under pressure Connection: one side Disconnection: not allowed |

BENEFITS

- Connection is allowed in one half of the coupling up to 10 MPa.
- Robustness and ease of construction.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- The robust construction makes them suitable for heavy duty applications.
- Good resistance to pressure impulses.
- Compact design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect insert the male coupling in the female coupling, screw the sleeve till its stop, do not push together the couplings, screw only.
- The use of tools for the second part of the connection can be necessary if there is high residual pressure in the circuit.
- To disconnect unscrew totally the sleeve from the female coupling.



MAIN APPLICATIONS



OTHER INTERCHANGE



PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect torque* | | Disconnect torque* | | Spillage** |
|------|------|-------------|---------------------|-------|-----------------|--------|--------------------|--------|------------|
| Inch | mm | | l/min | GPM | Nm | lbf ft | Nm | lbf ft | ml |
| 1/2 | 12,5 | VLS12 | 90 | 23,85 | 3,2 | 2,36 | 3,2 | 2,36 | 2,5 |
| 1 | 25,0 | VLS100 | 200 | 53,00 | 1,3 | 0,96 | 0,6 | 0,44 | 15 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| Inch | | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/2 | VLS12 | 46,5 | 6743 | 46,5 | 6743 | 46,5 | 6743 | 200 | 29000 | 130 | 18850 | 170 | 24650 |
| 1 | VLS100 | 46,5 | 6743 | 46,5 | 6743 | 46,5 | 6743 | 140 | 20300 | 140 | 20300 | 140 | 20300 |

*Connect torque and disconnect torque without residual pressure.

The torque will increase as internal residual pressure increases.

** Spillage is an indicative value of the fluid loss during disconnection (according to ISO 7241-2 test method)

Temperature range:

Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F). Please read carefully "instruction and warning" for proper selection of the products.

Tests performed:

The couplings have been tested at maximum operating pressure for 1,000,000 impulses according to ISO 7241-2 test method.



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not couple-uncouple with flow in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Do not use the coupling disconnected with high impulse pressure.

Connect under pressure products are suitable to be connected under residual (static) pressure.

Connection with residual pressure (pressure trapped in the circuit) allowed with other side coupling to drain.

Check the maximum allowable working pressure of the port in use.

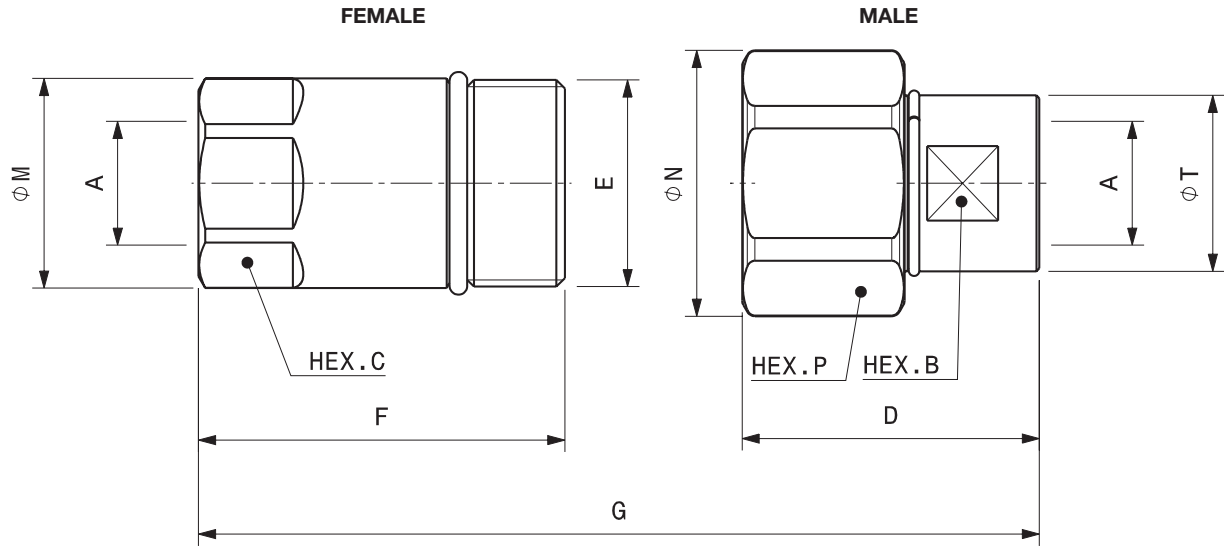
Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (www.stucchi.it) before selecting or using Stucchi products.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | DN | PORT (A) | E | Overall Length | | Length | | Hex | | Diameter | | Hex | | Diameter | | Weight | | | | | | | |
|-----------|---------------------|------------------|------|----------|----------|----------------|------|--------|------|-------|------|----------|------|------|------|----------|------|--------|------|------|---|------|------|------|------|
| | | | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | Kg | Lbs | | | | | | |
| 1/2" | F VLS12 BSP | Female 809900004 | 12,5 | 1/2" | 35X2 SP* | G | 92,6 | 3,65 | F | 62,0 | 2,44 | B | 35,5 | 1,40 | M | 35,5 | 1,40 | C | 32,0 | 1,26 | T | 29,8 | 1,17 | 0,32 | 0,69 |
| | M VLS12 BSP | Male 809900005 | | | | | | | D | 50,3 | 1,98 | N | 45,0 | 1,77 | P | 41,0 | 1,61 | | | | | | | | |
| 1" | F VLS100 BSP | Female 809900008 | 25 | 1" | 54X3 SP* | G | 143 | 5,63 | F | 101,5 | 4,00 | B | 44,0 | 1,73 | M | 50,0 | 1,97 | C | 46,0 | 1,81 | T | 54,0 | 2,13 | 0,88 | 1,94 |
| | M VLS100 BSP | Male 809900009 | | | | | | | D | 66,9 | 2,63 | N | 72,0 | 2,83 | P | 65,0 | 2,56 | | | | | | | | |

Port description: FEMALE THREAD METRIC

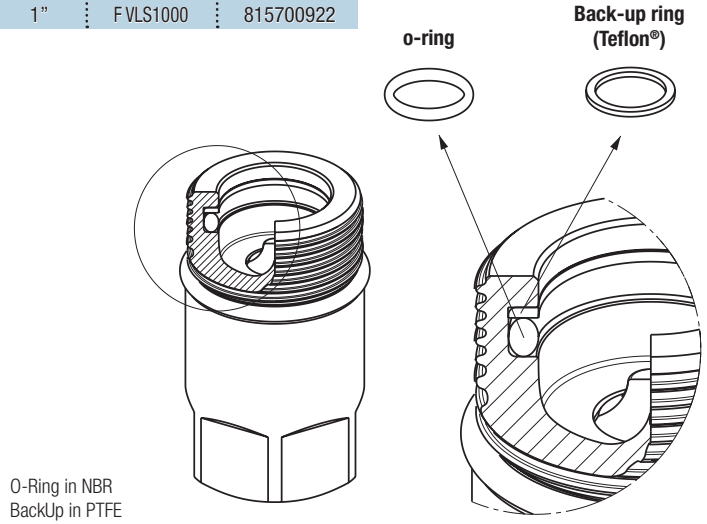
| BODY SIZE | Descriptive Code | Item Code | ISO | PORT (A) | E | Overall Length | | Length | | Hex | | Diameter | | Hex | | Diameter | | Weight | | | | | | | |
|-----------|-----------------------------|------------------|------|----------|----------|----------------|-------|--------|------|-------|------|----------|------|------|------|----------|------|--------|------|------|---|------|------|------|------|
| | | | | | | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | Kg | Lbs | | | | | | |
| 1/2" | F VLS12 M22x1,5 ISO | Female 809912004 | 12,5 | M22X1,5 | 35X2 SP* | G | 92,6 | 3,65 | F | 62,0 | 2,44 | B | 27,0 | 1,06 | M | 35,5 | 1,40 | C | 32,0 | 1,26 | T | 29,8 | 1,17 | 0,31 | 0,67 |
| | M VLS12 M22x1,5 ISO | Male 809912005 | | | | | | | D | 50,3 | 1,98 | N | 45,0 | 1,77 | P | 41,0 | 1,61 | | | | | | | | |
| 1" | F VLS100 M30x1,5 ISO | Female 809912008 | 25 | M30X1,5 | 54X3 SP* | G | 143,0 | 5,63 | F | 101,5 | 4,00 | B | 41,0 | 1,61 | M | 50,0 | 1,97 | C | 46,0 | 1,81 | T | 54,0 | 2,13 | 0,90 | 1,98 |
| | M VLS100 M30x1,5 ISO | Male 809912009 | | | | | | | D | 66,9 | 2,63 | N | 72,0 | 2,83 | P | 65,0 | 2,56 | | | | | | | | |

*SP = SPECIAL THREAD



SPARE KIT SEAL FOR FEMALE

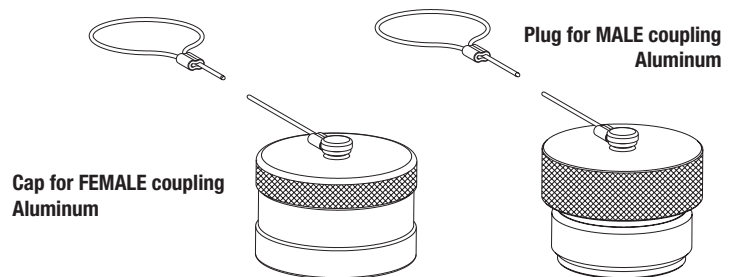
| Repair kit / OR+BK | | |
|--------------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/2" | FVLS12 | 815700920 |
| 1" | FVLS1000 | 815700922 |



PROTECTIVE CAPS FOR VLS SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

For the VLS series, aluminum screw caps complete with lanyard are available (colors: natural aluminum).



| Protective Cap | | | |
|-----------------------|----------------|---------------|------------------|
| Body Size/Description | Part Number | | Material/Color |
| | Cap for Female | Plug for Male | |
| 1/2" VLS12 | 814906022 | 814906023 | Aluminum/Natural |
| 1" VLS100 | 814906024 | 814906025 | Aluminum/Natural |