

SERIES: VLS

Technical Features and Options

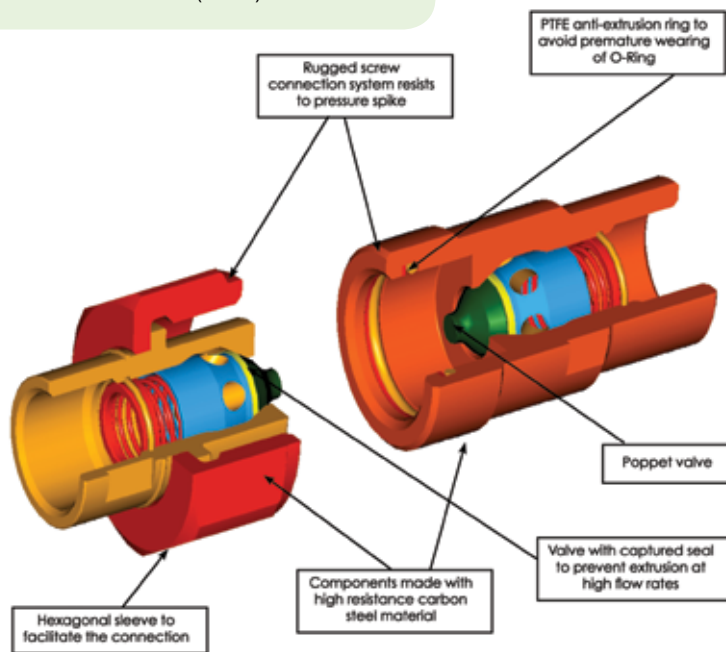
- **Interchangeable: Similar couplings**
- Valve system: Poppet valve
- Available sizes: 1/2" to 1"
- Operating pressure: Up to 465 bar
- Flow rate: Up to 200 L/min
- Mechanical connection: Screw system
- Locking mechanism: Screw to connect
- Disconnection: Unscrew to disconnect
- Connection under pressure: Connection: one side* Disconnection: not allowed
- Thread available: Metric (DIN 3852), BSP (DIN 3852)
- Temperature range: Standard seals NBR from -20 °C to +100 °C (from -4 °F to +212 °F).

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.

Materials

Construction material: high strength carbon steel
Seals: NBR (Nitrile)



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.

Tests performed:

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

Performance

	Size		Rated Flow		Max. flow suggested		Connect Torque*		Disconnect Torque*		Spillage**
	Inch		l/min	GPM	l/min	GPM	Nm	lbf	Nm	lbf	
VLS12	1/2		45	11,93	90	23.85	3.2	2.36	2.36	2.36	2.5
VLS100	1		100	26,50	200	53.00	1.3	0.96	0.6	0,44	15

* Connect torque and disconnect torque without residual pressure. The torque increase to increasing of internal residual pressure.

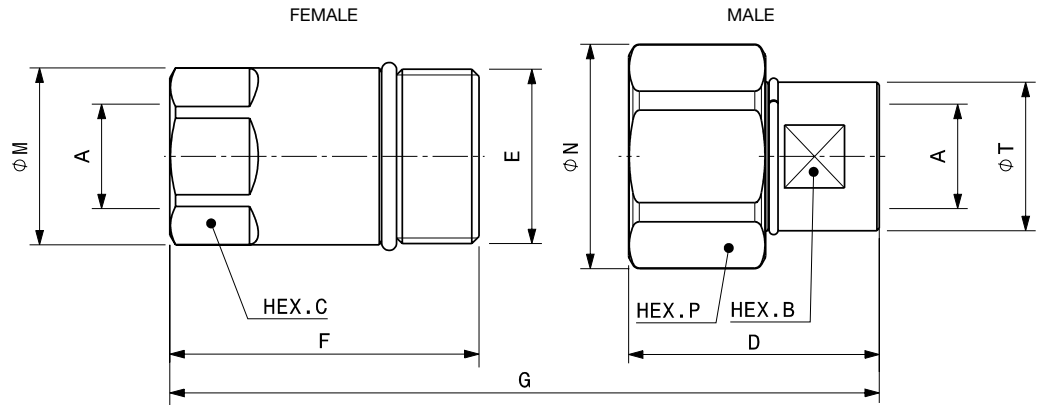
** Spillage is an indicative value of the fluid loss per couple-uncouple cycle without residual pressure.

	Max. operating pressure						Burst pressure					
	Coupled		Male		Female		Coupled		Male		Female	
	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
VLS12	46.5	6743	46.5	6743	46.5	6743	200	29000	130	18850	170	24650
VLS100	46.5	6743	46.5	6743	46.5	6743	140	20300	140	20300	140	20300





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Dimensions (mm) - FEMALE THREAD BSPP (ISO 1179-1)

Description	Size	DN	A	E	G	F	D	HEX B	HEX C	HEX P	M	N	T	Article No.	Weight Kg
VLS12 BSP	1/2" Female	12.5	1/2"	35X2 SP*	92.6	62		35.5	32		35.5		29.8	809900004	0.32
VLS12 BSP	1/2" Male	12.5	1/2"	35X2 SP*	92.6		50.3			41		45		809900005	0.25
VLS100 BSP	1" Female	25	1"	54X3 SP*	143	101.5		44	46		50		54	809900008	0.88
VLS100 BSP	1" Male	25	1"	54X3 SP*	143		66.9			65		72		809900009	0.92

Dimensions (mm) - FEMALE THREAD METRIC

Description	Size	ISO	A	E	G	F	D	HEX B	HEX C	HEX P	M	N	T	Article No.	Weight Kg
VLS12 ISO	1/2" Female	12.5	M22x1.5	35X2 SP*	92.6	62		27	32		35.5		29.8	809912004	0.31
VLS12 ISO	1/2" Male	12.5	M22x1.5	35X2 SP*	92.6		50.3			41		45		809912005	0.24
VLS100 ISO	1" Female	25	M30x1.5	54X3 SP*	143	101.5		41	46		50		54	809912008	0.90
VLS100 ISO	1" Male	25	M30x1.5	54X3 SP*	143		66.9			65		72		809912009	0.94

*SP = SPECIAL THREAD

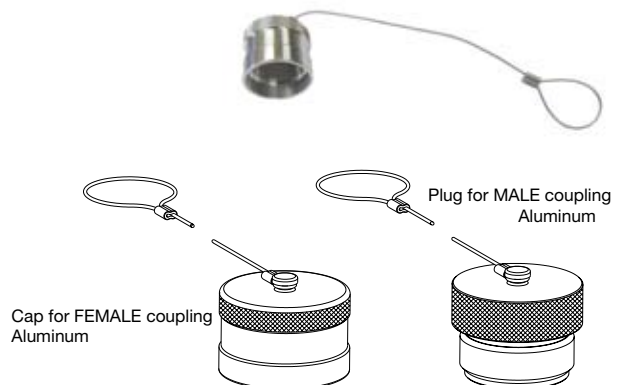
Protection Caps For VLS Series

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).

Are available for the VLS series, aluminum screw caps complete with rope.

	Plug for Female	Cap for male
VLS12	814906022	814906023
VLS100	814906024	814906025



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.