

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 /treatment
Carbon steel /Cr3



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°C / +100°C



Valving style
Poppet

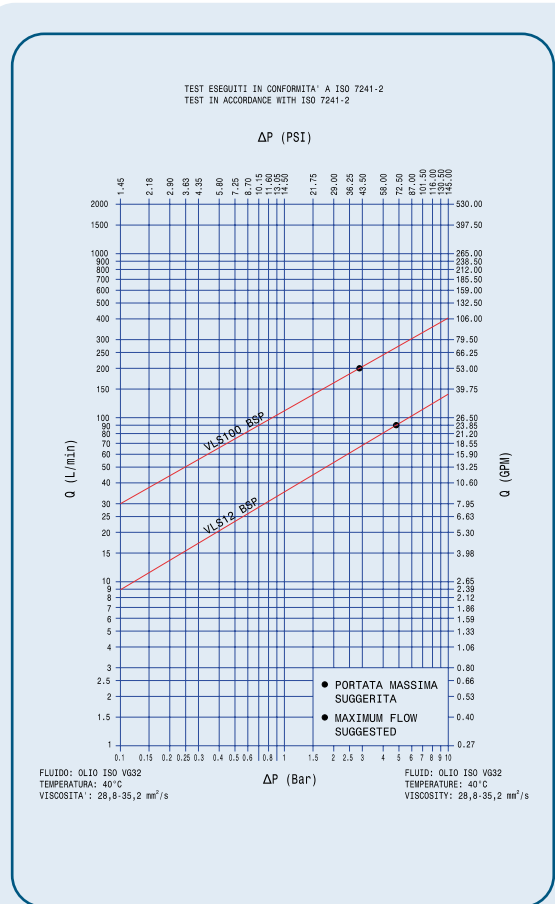


Connection under pressure
Connection: one side
Disconnection: not allowed

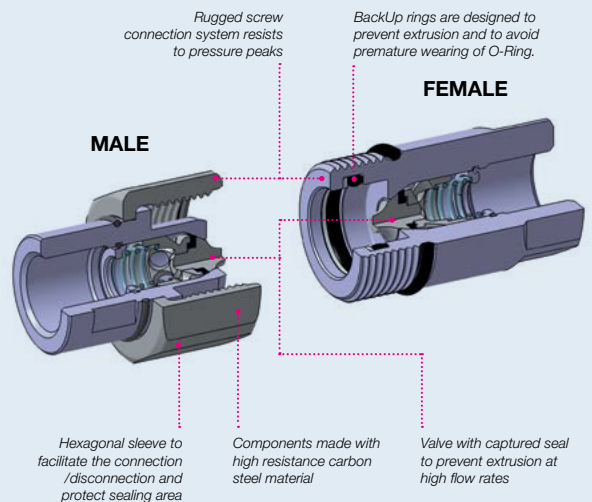
BENEFITS

- Connection is allowed with residual pressure in one side of the coupling (max 10 MPa in one side).
- 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.

- 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.



POPET SCREW



MAIN APPLICATIONS



Agriculture



Oil&Gas



Industry



High Pressure



Cooling



Refrigeration



Earth Moving



Vehicles



Hydraulic Equipment



Chemical & Food Industry



PERFORMANCES

Size		Series/Size	Max. flow suggested		Manual connect torque*		Manual disconnect torque*		Spillage**
in	mm		l/min	gpm	Nm	lbf ft	Nm	lbf ft	
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	
in		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/2	VLS12	46,5	6743	46,5	6743	46,5	6743	186	26970	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 norm test method).

Temperature range:

Standard seals NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Please read carefully Instructions and warnings 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 norm 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.

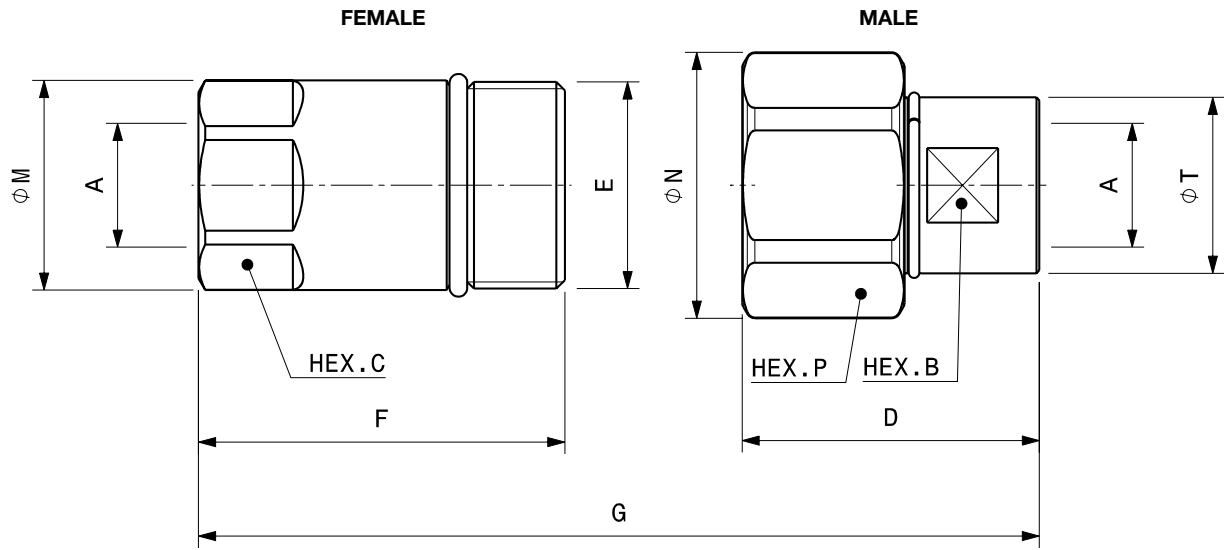
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

For specific, product-related, instructions, please contact Stucchi technical service.

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	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in						
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

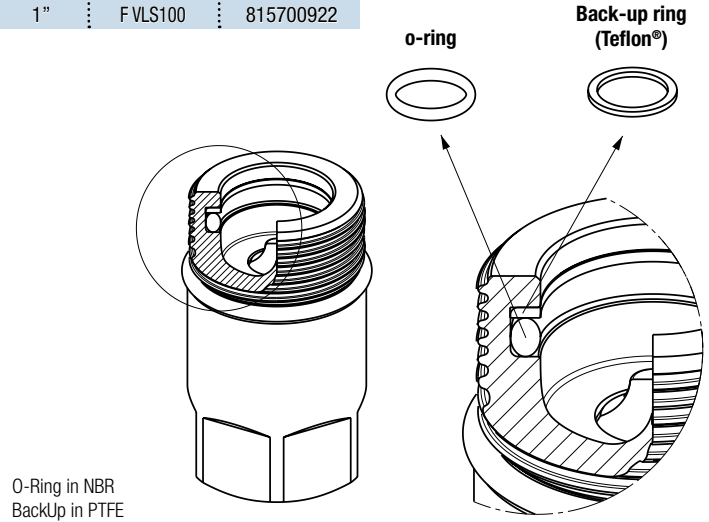
BODY SIZE	Descriptive Code	Item Code	ISO	PORT (A)	E	Overall Length		Length		Hex		Diameter		Hex		Diameter		Weight							
						mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in						
1/2"	F VLS12 M22x1,5 ISO	Female 809912004	12,5	M22x1,5	35X2 SP*	G	92,6	3,65	F	62,0	2,44	B	27,0	1,06	M	35,5	1,40	C	32,0	1,26	T	29,8	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

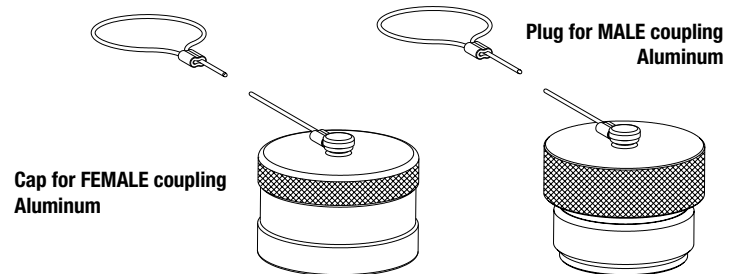
Repair kit / OR+BK		
Body Size	Description	Part Number
1/2"	FVLS12	815700920
1"	FVLS100	815700922



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