

# VOF SERIES

INTERCHANGE > Similar Couplings (Oil & Gas)



## TECHNICAL FEATURES AND OPTIONS

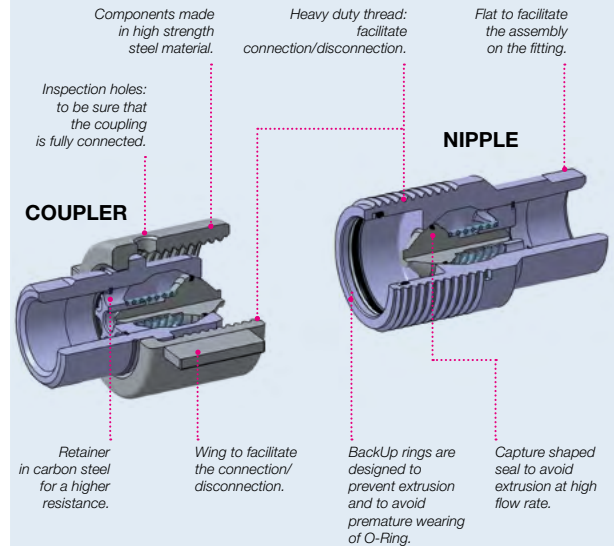
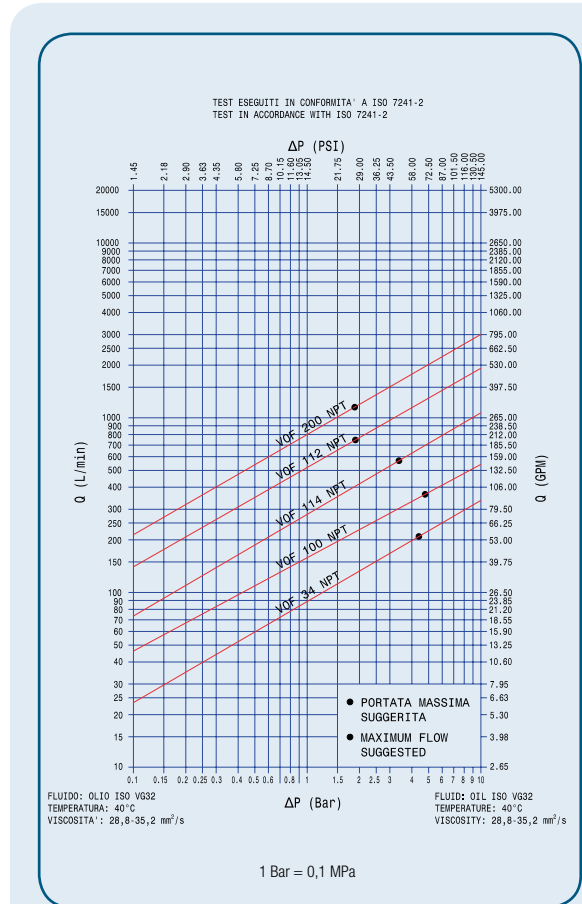
<b>Interchange</b> Similar Couplings (Oil & Gas)	<b>Sealing description</b> Nitrile NBR	<b>Connection system</b> Screw
<b>Available sizes</b> From 3/4" to 2"	<b>Material/treatment</b> Carbon steel /Cr3	<b>Available threads</b> BSP - NPT
<b>Operating pressure</b> Up to 345 bar	<b>Locking mechanism</b> Screw to connect	<b>Flow rate</b> Up to 1100 L/Min
<b>Temperature (°C)</b> -20° / +100°	<b>Valving style</b> Poppet	<b>Connection under pressure</b> Connection: one side Disconnection: not allowed

## BENEFITS

- Connection under residual pressure is allowed in one side.
- Inspection hole to control if the coupling is completely connected.
- Specific dimensions of Stucchi VOF series are fire tested and Lloyd certified in accordance with API 16D and the EUB Directive #36.
- Wrench flat on the bodies to facilitate the fitting assembly.
- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Retainer in high resistance carbon steel.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- High resistance to pressure impulses (500.000 connected).
- 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 nipple in the coupler, screw the sleeve until positive stop (surface contact of two moving parts), 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.
- Check inspection holes to ensure that the coupling is fully connected (no free space allowed).
- To disconnect unscrew totally the sleeve from the nipple.



## 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
3/4"	20	VOF34	212	56,18	1,2	0,89	0,6	0,44	11,5
1"	25	VOF100***	378	100,17	1,6	1,18	1,1	0,81	21,2
1-1/4"	31,5	VOF114	576	152,64	2,8	2,07	1,9	1,40	42,3
1-1/2"	40	VOF112	758	200,87	4	2,95	3,6	2,66	82,6
2"	50	VOF200	1100	291,50	7,5	5,53	5,1	3,76	192,0

Size	Series/Size	Max. operating pressure						Burst pressure					
		Coupled		Nipple		Coupler		Coupled		Nipple		Coupler	
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
3/4"	VOF34	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	100,0	14500
1"	VOF100***	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	100,0	14500
1-1/4"	VOF114	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	100,0	14500
1-1/2"	VOF112	34,5	5000	34,5	5000	34,5	5000	137,9	20000	137,9	20000	82,8	12000
2"	VOF200	34,5	5000	34,5	5000	34,5	5000	100,0	14500	90,0	13050	75,9	11000

\* 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)

\*\*\* Specific dimensions of Stucchi VOF series are fire tested and Lloyd certified in accordance with API 16D and the EUB Directive #36.

For complete technical information please contact technical Stucchi support.

### Temperature range:

Temperature range: Standard seals NBR 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 connected couplings have been tested at maximum operating pressure for 500.000 impulses in according to ISO 7241-2.

The couplings disconnected have been tested for 100.000 impulses.

## ! 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.

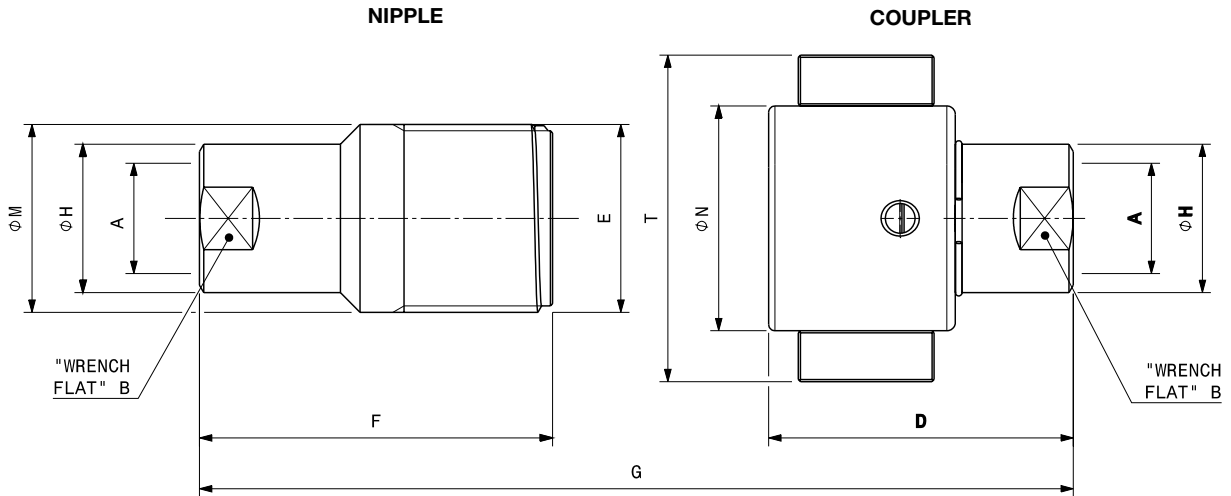
Make sure that the medium used is compatible with seal and material as indicated for each series.

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](http://www.stucchi.it)) before selecting or using Stucchi products.**

## OVERALL DIMENSIONS

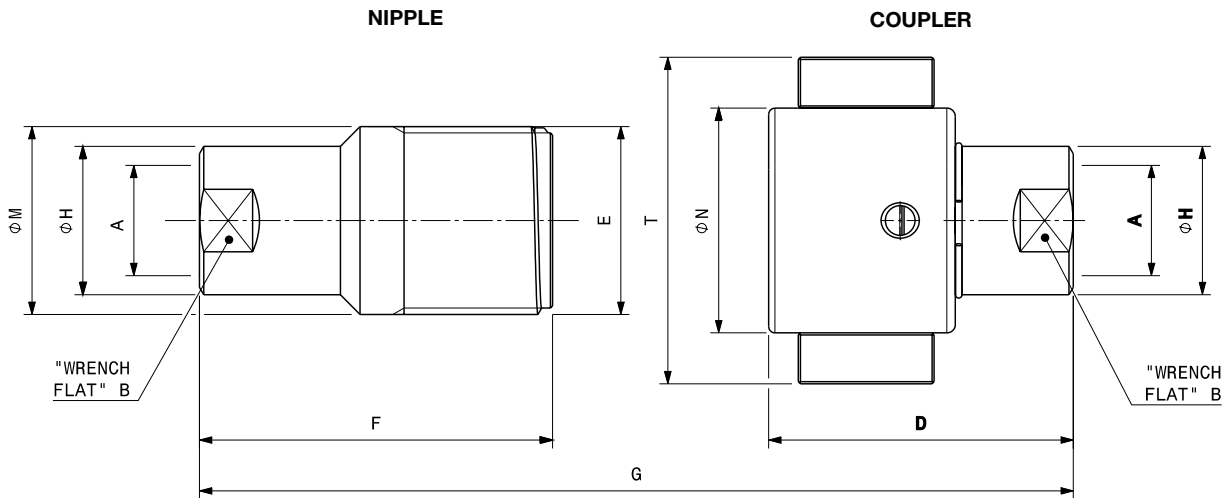


### Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

BODY SIZE	Descriptive Code	Item Code	PORT (A)	Thread	Overall Length		Length		Hex		Diameter						
					mm	inch	mm	inch	mm	inch	mm	inch					
3/4"	VOF34 NPT Nipple	811201002	3/4"	E	1 3/4-8 special	G	123,6	4,87	F	83,2	3,28	B	31,8	1,25	H	35,0	1,38
	VOF34 NPT Coupler	811201003							D	71,8	2,83						
1"	VOF100 NPT Nipple	811201000	1"	E	2 1/4-6 Stub ACME	G	152,9	6,02	F	105,8	4,17	B	41,3	1,63	H	45,0	1,77
	VOF100 NPT Coupler	811201001							D	87,3	3,44						
1-1/4"	VOF114 NPT Nipple	811201004	1-1/4"	E	2 5/8-6 Stub ACME	G	197,9	7,79	F	136,7	5,38	B	50,8	2,00	H	54,5	2,15
	VOF114 NPT Coupler	811201005							D	112,4	4,43						
1-1/2"	VOF112 NPT Nipple	811201006	1-1/2"	E	3 1/4-4 Stub ACME	G	220,3	8,67	F	151,2	5,95	B	57,2	2,25	H	63,5	2,50
	VOF112 NPT Coupler	811201007							D	126,9	5,00						
2"	VOF200 NPT Nipple	811201008	2"	E	4-4 Stub ACME	G	255,2	10,05	F	179,0	7,05	B	76,2	3,00	H	82,6	3,25
	VOF200 NPT Coupler	811201009							D	154,2	6,07						

BODY SIZE	Descriptive Code	Item Code		Diameter		Max overall dimension		Weight	
				mm	inch	mm	inch	Kg	Lbs
3/4"	VOF34 NPT Nipple	811201002	M	44,3	1,74			0,48	1,05
	VOF34 NPT Coupler	811201003	N	53,0	2,09	T	77,0	3,03	0,61
1"	VOF100 NPT Nipple	811201000	M	57,2	2,25			1,19	2,62
	VOF100 NPT Coupler	811201001	N	69,0	2,72	T	109,0	4,29	1,38
1-1/4"	VOF114 NPT Nipple	811201004	M	66,7	2,62			1,95	4,30
	VOF114 NPT Coupler	811201005	N	80,0	3,15	T	120,0	4,72	2,27
1-1/2"	VOF112 NPT Nipple	811201006	M	82,6	3,25			3,22	7,11
	VOF112 NPT Coupler	811201007	N	95,0	3,74	T	145,0	5,71	3,84
2"	VOF200 NPT Nipple	811201008	M	101,6	4,00			6,04	13,32
	VOF200 NPT Coupler	811201009	N	122,5	4,82	T	182,5	7,19	8,10

OTHER INTERCHANGE



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

BODY SIZE	Descriptive Code	Item Code	PORT (A)	Thread	Overall Length	Length		Hex		Diameter							
						mm	inch	mm	inch	mm	inch						
3/4"	VOF34 BSP Nipple	811200002	3/4"	E	1 3/4-8 special	G	123,6	4,87	F	83,2	3,28	B	31,8	1,25	H	35,0	1,38
	VOF34 BSP Coupler	811200003							D	71,8	2,83						
1"	VOF100 BSP Nipple	811200000	1"	E	2 1/4-6 Stub ACME	G	152,9	6,02	F	105,8	4,17	B	41,3	1,63	H	45,0	1,77
	VOF100 BSP Coupler	811200001							D	87,3	3,44						
1-1/4"	VOF114 BSP Nipple	811200004	1-1/4"	E	2 5/8-6 Stub ACME	G	197,9	7,79	F	136,7	5,38	B	50,8	2,00	H	54,5	2,15
	VOF114 BSP Coupler	811200005							D	112,4	4,43						
1-1/2"	VOF112 BSP Nipple	811200006	1-1/2"	E	3 1/4-4 Stub ACME	G	220,3	8,67	F	151,2	5,95	B	57,2	2,25	H	63,5	2,50
	VOF112 BSP Coupler	811200007							D	126,9	5,00						
2"	VOF200 BSP Nipple	811200008	2"	E	4-4 Stub ACME	G	255,2	10,05	F	179,0	7,05	B	76,2	3,00	H	82,6	3,25
	VOF200 BSP Coupler	811200009							D	154,2	6,07						

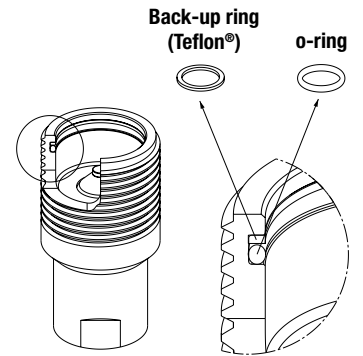
BODY SIZE	Descriptive Code	Item Code	Diameter		Max overall dimension		Weight		
			mm	inch	mm	inch	Kg	Lbs	
3/4"	VOF34 BSP Nipple	811200002	M	44,30	1,74			0,50	1,10
	VOF34 BSP Coupler	811200003	N	53,00	2,09	T	77,0	3,03	0,63
1"	VOF100 BSP Nipple	811200000	M	57,15	2,25			1,17	2,58
	VOF100 BSP Coupler	811200001	N	69,00	2,72	T	109,0	4,29	1,35
1-1/4"	VOF114 BSP Nipple	811200004	M	66,67	2,62			1,92	4,23
	VOF114 BSP Coupler	811200005	N	80,00	3,15	T	120,0	4,72	2,24
1-1/2"	VOF112 BSP Nipple	811200006	M	82,55	3,25			3,16	6,97
	VOF112 BSP Coupler	811200007	N	95,00	3,74	T	145,0	5,71	3,82
2"	VOF200 BSP Nipple	811200008	M	101,60	4,00			6,03	13,29
	VOF200 BSP Coupler	811200009	N	122,50	4,82	T	182,5	7,19	8,09



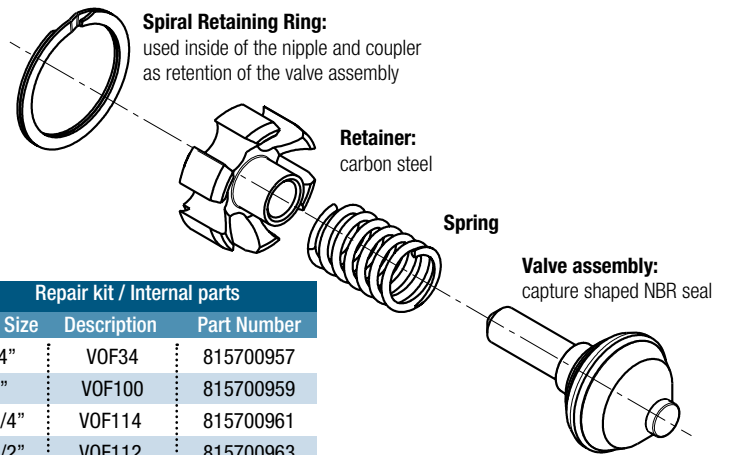
## SPARE KIT SEAL FOR NIPPLE

Repair kit / OR+BK		
Body Size	Description	Part Number
3/4"	VOF34	815700956
1"	VOF100	815700958
1-1/4"	VOF114	815700960
1-1/2"	VOF112	815701122
2"	VOF200	815700964

O-Ring in Nitrile  
BackUp in Teflon®



## SPARE KIT INTERNAL PARTS



Repair kit / Internal parts		
Body Size	Description	Part Number
3/4"	VOF34	815700957
1"	VOF100	815700959
1-1/4"	VOF114	815700961
1-1/2"	VOF112	815700963
2"	VOF200	815700965

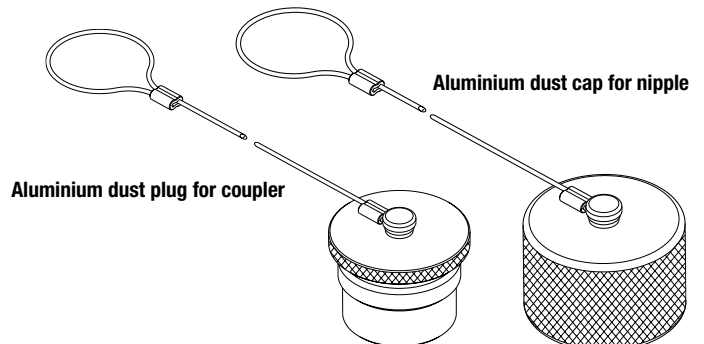
\*same codes for coupler or nipple

## PROTECTIVE CAPS FOR VOF 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 Oil&Gas and mobile applications where exposure to weather and aggregate materials are common.

The protective caps for VOF couplings are manufactured in aluminum (natural color).



Body Size/Description	Protective Cap		Material/Color
	Plug for Coupler	Cap for Nipple	
3/4"	815405013	815405012	Aluminum/Natural
1"	815405011	815405010	Aluminum/Natural
1-1/4"	815405015	815405014	Aluminum/Natural
1-1/2"	815405017	815405016	Aluminum/Natural
2"	815405019	815405018	Aluminum/Natural