

# VP-P SERIES

INTERCHANGE > Stucchi profile



Easy CUP

BOP



## TECHNICAL FEATURES AND OPTIONS

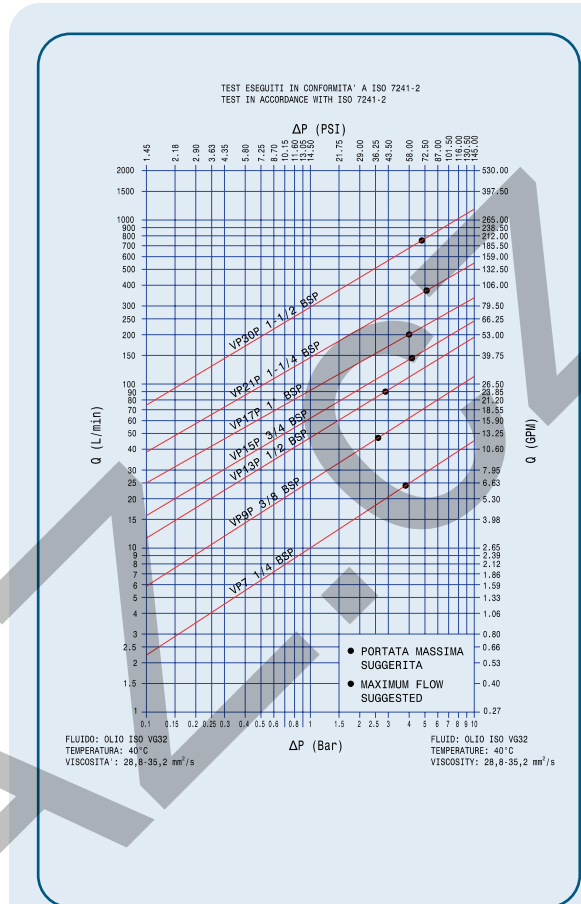
<b>Interchange</b> Stucchi profile	<b>Sealing description</b> Nitrile NBR	<b>Connection system</b> Screw
<b>Available sizes</b> from 1/4" to 1-1/2"	<b>Material /treatment</b> Carbon steel /Cr3+QPQ	<b>Available threads</b> BSP - NPT - SAE
<b>Operating pressure</b> Up to 600 bar	<b>Locking mechanism</b> Screw to connect + Safety sleeve	<b>Flow rate</b> Up to 750 l/min
<b>Temperature (°C)</b> -20°C / +100°C	<b>Valving style</b> Flat face	<b>Connection under pressure</b> Connection: Both sides (see Benefits). Disconnection: Allowed (see Benefits).

## BENEFITS

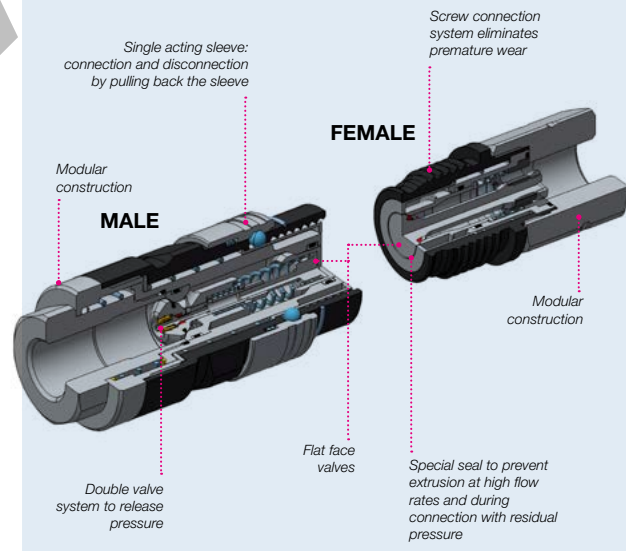
- Easy connection/disconnection with both side under residual pressure thanks to the Stucchi design.
- Flat face is easy to clean, reducing the inclusion of contamination inside the hydraulic circuit.
- Specific dimensions of Stucchi VP-P series are certified with Lloyd Type Approval in accordance with API 16D at specific rating pressure of 345 bar/5000 PSI.
- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Internal valve design creates minimal pressure drop, maintaining circuit efficiency in the system
- Internal pressure release valve system allows an easy connection with high internal residual pressure.
- The safety sleeve integrated in the connection system prevents the accidental disconnection.
- The modular design allows flexibility with a wide range of configurations.
- High resistance to pressure impulses.
- Safe and simple to use.

## HOW TO USE

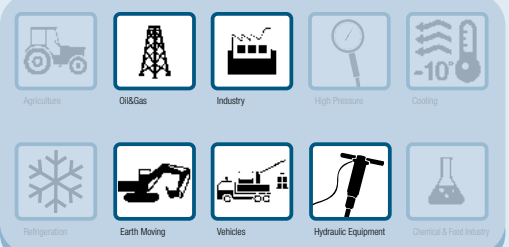
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect align the female coupling to the male coupling, push the male and twist in one motion to catch the first thread on the female half and continue to thread together (do not push together couplers, screw only).
- The screwing of the threads should be done by hand without the use of the tools for the first part of the connection.
- Always connect male and female with the male adaptor fixed on the hose (male adaptor should not rotate during connection)
- The use of tools for the second part of connection can be necessary if there is high residual pressure in the circuit.
- Thread the mating halves until the sleeve lock clicks into position. This activates the safety lock and eliminates accidental disconnection of the coupling.
- To disconnect push the safety locking sleeve towards the male coupling and unthread the connection.
- The lock is disengaged after one complete rotation of the coupler, continue to unthread until both halves disconnect.
- If safety lock sleeve will not push back rotate the male coupling to couple direction until the sleeve will pull back.



FLAT FACE SCREW



## MAIN APPLICATIONS



## PERFORMANCES

Size	Series/Size	Max. flow suggested		Manual connect torque		Manual disconnect torque		Spillage*
		l/min	gpm	Nm	lbf ft	Nm	lbf ft	
1/4	VP7	24	6,36	0,6	0,44	0,4	0,29	0,01
3/8	VP9P	46	12,19	0,8	0,59	0,5	0,37	0,04
1/2	VP13P	90	23,85	1,1	0,81	1,0	0,74	0,02
5/8	VP15P	148	39,22	1,1	0,81	1,0	0,74	0,03
3/4	VP17P	200	53,00	2,0	1,47	1,4	1,03	0,01
1	VP21P	378	100,17	2,2	1,62	1,8	1,33	0,06
1-1/2	VP30P	750	198,75	6,5	4,79	3,2	2,36	0,20

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
1/4	VP7	60	8700	60	8700	42	6090	150	21750	150	21750	126	18270
3/8	VP9P	55	7975	55	7975	33	4785	140	20300	140	20300	100	14500
1/2	VP13P	55	7975	55	7975	33	4785	140	20300	140	20300	100	14500
5/8	VP15P	55	7975	55	7975	33	4785	140	20300	140	20300	100	14500
3/4	VP17P	50	7250	50	7250	33	4785	125	18125	125	18125	100	14500
1	VP21P	47	6815	47	6815	30	4350	120	17400	120	17400	80	11600
1-1/2	VP30P	40	5800	40	5800	27	3915	110	15950	110	15950	80	11600

Size	Series/Size	Max. residual pressure during connection						Max. residual pressure during disconnection	
		Male, female to drain		Female, male to drain		Male and female		MPa	psi
in		MPa	psi	MPa	psi	MPa	psi	MPa	psi
1/4	VP7	30	4350	25	3625	25	3625	25	3625
3/8	VP9P	25	3625	25	3625	25	3625	25	3625
1/2	VP13P	25	3625	25	3625	20	2900	20	2900
5/8	VP15P	25	3625	25	3625	20	2900	20	2900
3/4	VP17P	25	3625	25	3625	15	2175	15	2175
1	VP21P	25	3625	25	3625	15	2175	15	2175
1-1/2	VP30P	25	3625	25	3625	5	725	5	725

\* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method)  
Connect torque and disconnect torque without residual pressure.  
The torque increase to increasing of internal residual pressure.

**BOP** Only configurations mentioned in the dedicated BOP section of this catalog are BOP certified.  
For complete technical information please contact Stucchi Technical Support.

**Note:**  
VP7 has metal to metal sealing system in the internal valve of male and in the valve of female coupling.

**Different possible configurations:**  
Different threads available upon request.

### Temperature range:

Standard seals NBR, PUR, POM 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 max. operating pressure for 100.000 impulses according to ISO norm.

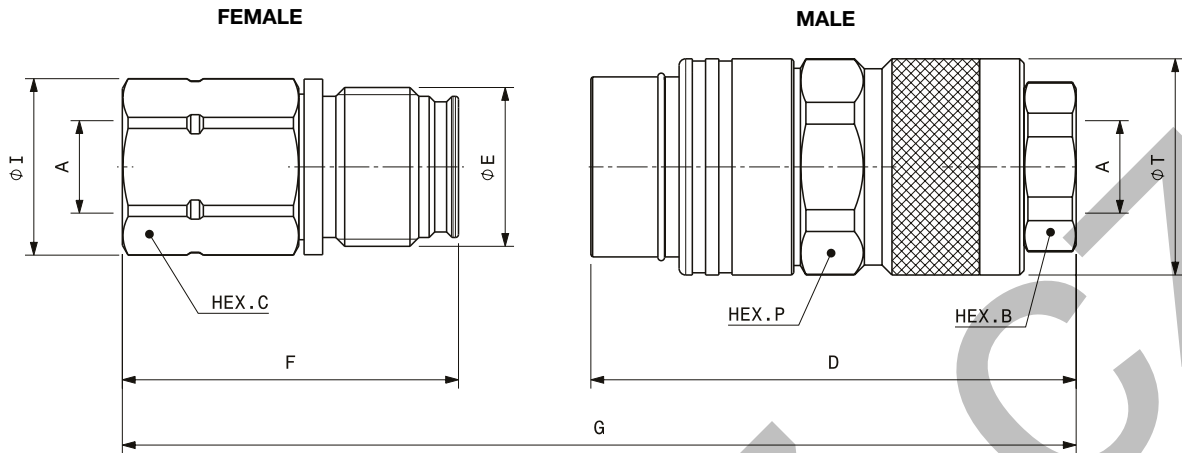
Connection and disconnection with residual pressure in both couplings is recommended for occasional operations only.

For ordinary operations it is suggested to release pressure in one side before to connect and disconnect in way that operator effort and wearing of the couplings are reduced.

## ⚠ WARNING

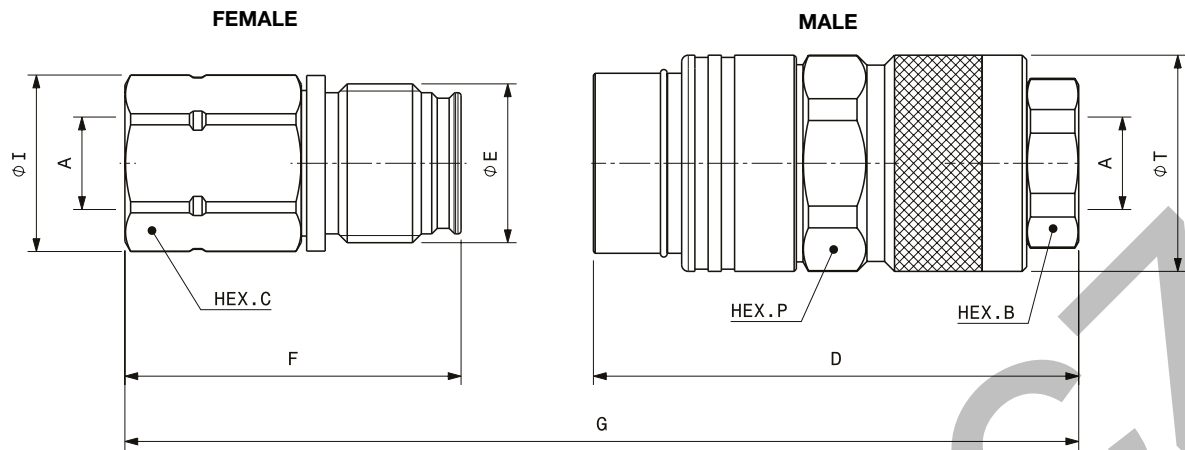
A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.  
Connect under pressure products are suitable to be connected under residual (static) pressure.  
Never connect or disconnect with dynamic pressure (e.g. pump on).  
Do not use the female coupling disconnected with high impulse pressure.  
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).  
Check the maximum allowable working pressure of the port in use.  
It is important to limit contamination in the circuit to avoid compromising the function of the internal valves.  
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 [stuchigroup.com](http://stuchigroup.com) website for the latest release.**  
**For specific, product-related, instructions, please contact Stucchi technical service.**

## OVERALL DIMENSIONS



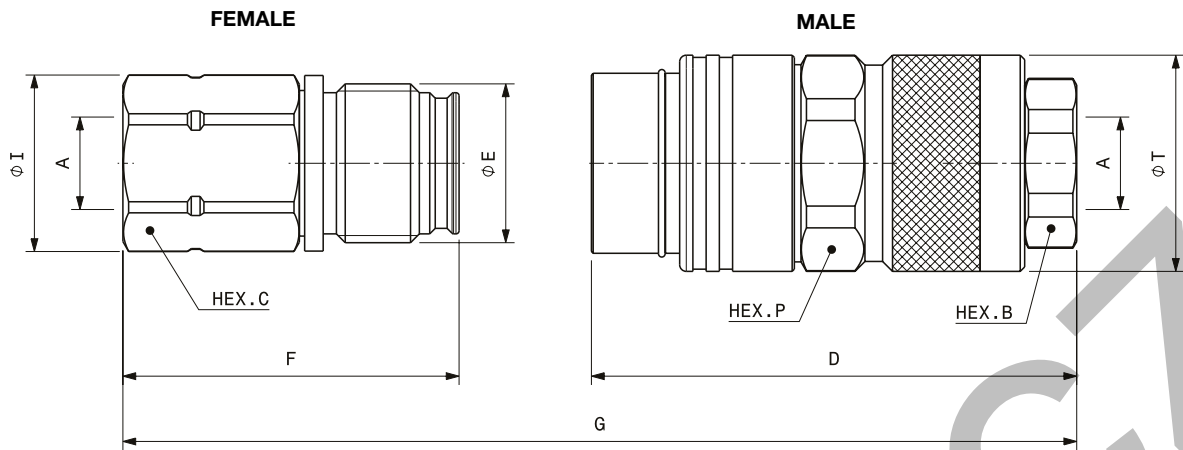
### Port description: FEMALE THREAD BSPP (ISO 1179-1)

BODY SIZE	Descriptive Code	Item Code	PORT (A)	E	Overall Length		Length		Hex		Hex		Diameter		Weight		
					mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb	
1/4"	F VP7 1/4 BSP	Female 801900000	1/4"	M24x2	G	F	52,8	2,08	C	27,0	1,06		I	29,0	1,14	0,16	0,35
	M VP7 1/4 BSP	Male 801900001				D	83,9	3,30	B	22,0	0,87	P	32,0	1,26	T	35,0	1,38
3/8"	F VP9P 3/8 BSP	Female 807300002	3/8"	M28x2	G	F	64,3	2,53	C	30,0	1,18		I	32,0	1,26	0,24	0,53
	M VP9P 3/8 BSP	Male 807300003				D	94,5	3,72	B	27,0	1,06	P	38,0	1,50	T	42,0	1,65
3/8"	F VP9P 1/2 BSP	Female 807300004	1/2"	M28x2	G	F	69,3	2,73	C	30,0	1,18		I	32,0	1,26	0,25	0,54
	M VP9P 1/2 BSP	Male 807300005				D	94,5	3,72	B	27,0	1,06	P	38,0	1,50	T	42,0	1,65
1/2"	F VP13P 1/2 BSP	Female 807300006	1/2"	M36x3	G	F	76,2	3,00	C	36,0	1,42		I	40,0	1,57	0,42	0,93
	M VP13P 1/2 BSP	Male 807300007				D	110,0	4,33	B	36,0	1,42	P	45,0	1,77	T	49,0	1,93
1/2"	F VP13P 3/4 BSP	Female 807300008	3/4"	M36x3	G	F	83,2	3,28	C	36,0	1,42		I	40,0	1,57	0,44	0,97
	M VP13P 3/4 BSP	Male 807300009				D	110,0	4,33	B	36,0	1,42	P	45,0	1,77	T	49,0	1,93
5/8"	F VP15P 3/4 BSP	Female 807300010	3/4"	M39x3	G	F	83,4	3,28	C	41,0	1,61		I	44,8	1,76	0,58	1,28
	M VP15P 3/4 BSP	Male 807300011				D	110,0	4,33	B	36,0	1,42	P	48,0	1,89	T	52,0	2,05
3/4"	F VP17P 3/4 BSP	Female 807300018	3/4"	M45x3	G	F	96,0	3,78	C	46,0	1,81		I	49,8	1,96	0,93	2,05
	M VP17P 3/4 BSP	Male 807300019				D	127,1	5,00	B	46,0	1,81	P	55,0	2,17	T	60,0	2,36
3/4"	F VP17P 1 BSP	Female 807300012	1"	M45x3	G	F	98,0	3,86	C	46,0	1,81		I	49,8	1,96	0,91	2,00
	M VP17P 1 BSP	Male 807300013				D	127,1	5,00	B	46,0	1,81	P	55,0	2,17	T	60,0	2,36
1"	F VP21P 1 BSP	Female 807300022	1"	M55x3	G	F	104,0	4,09	C	55,0	2,17		I	59,8	2,35	1,49	3,28
	M VP21P 1 BSP	Male 807300023				D	137,0	5,39	B	55,0	2,17	P	70,0	2,76	T	76,0	2,99
1"	F VP21P 1-1/4 BSP	Female 807300014	1-1/4"	M55x3	G	F	105,0	4,13	C	55,0	2,17		I	59,8	2,35	1,40	3,08
	M VP21P 1-1/4 BSP	Male 807300015				D	137,0	5,39	B	55,0	2,17	P	70,0	2,76	T	76,0	2,99
1-1/2"	F VP30P 1-1/4 BSP	Female 807300024	1-1/4"	M72x4	G	F	132,2	5,20	C	65,0	2,56		I	85,0	3,35	-	-
	M VP30P 1-1/4 BSP	Male 807300025				D	174,7	6,88	B	65,0	2,56	P	85,0	3,35	T	94,0	3,70
1-1/2"	F VP30P 1-1/2 BSP	Female 807300016	1-1/2"	M72x4	G	F	132,2	5,20	C	65,0	2,56		I	85,0	3,35	2,93	6,46
	M VP30P 1-1/2 BSP	Male 807300017				D	174,7	6,88	B	65,0	2,56	P	85,0	3,35	T	94,0	3,70



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

BODY SIZE	Descriptive Code	Item Code	PORT (A)	E	Overall Length		Length		Hex		Hex		Diameter		Weight			
					mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb		
1/4"	F VP7 1/4 NPT	Female 801901004	1/4"	M24x2	G	126,6	4,98	F	52,8	2,08	C	27,0	1,06	I	29,0	1,14	0,17	0,36
	M VP7 1/4 NPT	Male 801901005						D	85,3	3,36	B	22,0	0,87	P	32,00	1,26	T	35,0
3/8"	F VP9P 3/8 NPT	Female 807301002	3/8"	M28x2	G	142,3	5,60	F	64,3	2,53	C	30,0	1,18	I	32,0	1,26	0,24	0,53
	M VP9P 3/8 NPT	Male 807301003						D	94,5	3,72	B	27,0	1,06	P	38,00	1,50	T	42,0
3/8"	F VP9P 1/2 NPT	Female 807301004	1/2"	M28x2	G	147,3	5,80	F	69,3	2,73	C	30,0	1,18	I	32,0	1,26	0,24	0,53
	M VP9P 1/2 NPT	Male 807301005						D	94,5	3,72	B	27,0	1,06	P	38,00	1,50	T	42,0
1/2"	F VP13P 1/2 NPT	Female 807301006	1/2"	M36x3	G	167,9	6,61	F	76,2	3,00	C	36,0	1,42	I	40,0	1,57	0,43	0,94
	M VP13P 1/2 NPT	Male 807301007						D	110,0	4,33	B	36,0	1,42	P	45,00	1,77	T	49,0
1/2"	F VP13P 3/4 NPT	Female 807301008	3/4"	M36x3	G	174,9	6,89	F	83,2	3,28	C	36,0	1,42	I	40,0	1,57	0,44	0,97
	M VP13P 3/4 NPT	Male 807301009						D	110,0	4,33	B	36,0	1,42	P	45,00	1,77	T	49,0
5/8"	F VP15P 3/4 NPT	Female 807301010	3/4"	M39x3	G	174,9	6,89	F	83,4	3,28	C	41,0	1,61	I	44,8	1,76	0,60	1,31
	M VP15P 3/4 NPT	Male 807301011						D	110,0	4,33	B	36,0	1,42	P	48,00	1,89	T	52,0
3/4"	F VP17P 1 NPT	Female 807301012	1	M45x3	G	202,5	7,97	F	98,0	3,86	C	46,0	1,81	I	49,8	1,96	0,92	2,02
	M VP17P 1 NPT	Male 807301013						D	127,1	5,00	B	46,0	1,81	P	55,00	2,17	T	60,0
1"	F VP21P 1-1/4 NPT	Female 807301014	1-1/4"	M55x3	G	218,1	8,59	F	108,3	4,26	C	55,0	2,17	I	59,8	2,35	1,43	3,15
	M VP21P 1-1/4 NPT	Male 807301015						D	137,0	5,39	B	55,0	2,17	P	70,00	2,76	T	76,0
1-1/2"	F VP30P 1-1/2 NPT	Female 807301016	1-1/2"	M72x4	G	271,3	10,68	F	132,2	5,20	C	65,0	2,56	I	85,0	3,35	2,93	6,46
	M VP30P 1-1/2 NPT	Male 807301017						D	174,7	6,88	B	65,0	2,56	P	85,00	3,35	T	94,0



FLAT FACE SCREW

**Port description: FEMALE THREAD SAE (ISO 11926-1 & SAE J1926-1)**

BODY SIZE	Descriptive Code	Item Code	PORT (A)	E	Overall Length	Length		Hex		Hex		Diameter		Weight					
						mm	in	mm	in	mm	in	mm	in	kg	lb				
3/8"	FVP9P 3/8 SAE	Female	807304020	9/16-18UNF	M28x2	G	142,3	5,60	F	64,3	2,53	C	30,0	1,18	I	32,0	1,26	0,25	0,54
	MVP9P 3/8 SAE	Male	807304021				D	94,5	3,72	B	27,0	1,06	P	38,00	1,50	T	42,0	1,65	0,60
1/2"	FVP13P 1/2 SAE	Female	807304022	3/4-16UNF	M36x3	G	169,9	6,69	F	76,2	3,00	C	36,00	1,42	I	40,0	1,57	0,43	0,95
	MVP13P 1/2 SAE	Male	807304023				D	110,0	4,33	B	36,00	1,42	P	45,00	1,77	T	49,0	1,93	0,93
1/2"	FVP13P 3/4 SAE	Female	807304008	1-1/16-12UN	M36x3	G	174,9	6,89	F	83,2	3,28	C	36,0	1,42	I	40,0	1,57	0,43	0,95
	MVP13P 3/4 SAE	Male	807304009				D	110,0	4,33	B	36,0	1,42	P	45,00	1,77	T	49,0	1,93	0,93
5/8"	FVP15P 3/4 SAE	Female	807304010	1-1/16-12UN	M39x3	G	174,9	6,89	F	83,4	3,28	C	41,0	1,61	I	44,8	1,76	0,58	1,27
	MVP15P 3/4 SAE	Male	807304011				D	110,0	4,33	B	36,0	1,42	P	48,00	1,89	T	52,0	2,05	1,05
3/4"	FVP17P 1 SAE	Female	807304012	1-5/16-12UN	M45x3	G	202,5	7,97	F	98,0	3,86	C	46,0	1,81	I	49,8	1,96	0,90	1,97
	MVP17P 1 SAE	Male	807304013				D	127,1	5,00	B	46,0	1,81	P	55,00	2,17	T	60,0	2,36	1,58
1"	FVP21P 1-1/4 SAE	Female	807304014	1-5/8-12UN	M55x3	G	214,8	8,46	F	105,0	4,13	C	55,0	2,17	I	59,8	2,35	1,40	3,09
	MVP21P 1-1/4 SAE	Male	807304015				D	137,0	5,39	B	55,0	2,17	P	70,00	2,76	T	76,0	2,99	2,50
1-1/2"	FVP30P 1-1/2 SAE	Female	807304016	1-7/8-12UN	M72x4	G	271,3	10,68	F	132,2	5,20	C	65,0	2,56	I	85,0	3,35	2,92	6,44
	MVP30P 1-1/2 SAE	Male	807304017				D	174,7	6,88	B	65,0	2,56	P	85,00	3,35	T	94,0	3,70	5,10

**Zinc Nickel version**

VP-P Series is available upon request also in Zinc Nickel version.

The Zinc Nickel plating ensures high resistance to corrosion and it is ideal for hydraulic equipment applications where an improved corrosion resistance is necessary.

For specific codes, configuration or any other information, please contact Stucchi Technical Support.



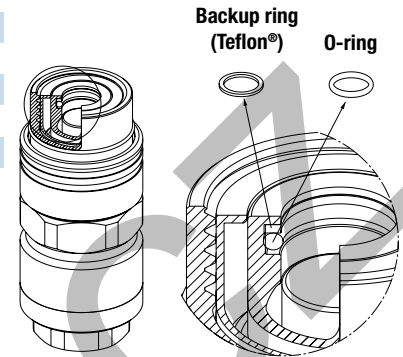


## SPARE KIT SEAL FOR MALE

Repair kit / OR+BK		
Body Size	Description	Part Number
1/4"	M VP7	815700519
3/8"	M VP9P	815701096
1/2"	M VP13P	815700339
5/8"	M VP15P	815700341
3/4"	M VP17P	815700655
1"	M VP21P	815700345
1-1/2"	M VP30P*	815700697

\* Kit replacement O-Ring Holder + O-Ring

O-Ring in NBR  
BackUp in Teflon®

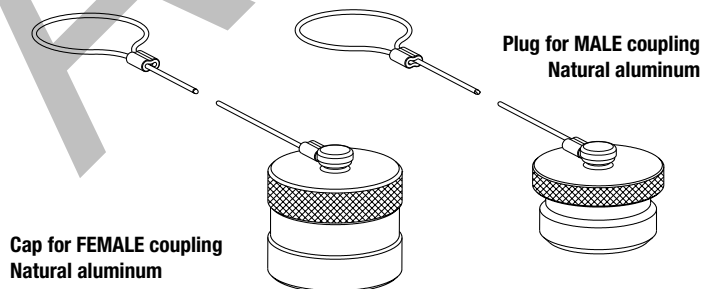


## PROTECTIVE CAPS FOR VP-P SERIES

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 VP-P series aluminum screw caps complete with lanyard are available (standard colors: natural aluminum, other colors available upon request).

Caps and plugs are also available without lanyard, upon request.



Body Size/Description	Protective Cap		Material/Color
	Cap for Female	Plug for Male	
1/4" VP7	815305050	815305051	Aluminum/Natural
3/8" VP9P	815305052	815305053	Aluminum/Natural
1/2" VP13P	815305054	815305055	Aluminum/Natural
5/8" VP15P	815305056	815305057	Aluminum/Natural
3/4" VP17P	815305058	815305059	Aluminum/Natural
1" VP21P	815305060	815305061	Aluminum/Natural
1-1/2" VP30P	815305062	815305063	Aluminum/Natural