

VRSERIES

INTERCHANGE > Similar Couplings (type "Rohrleitung")



TECHNICAL FEATURES AND OPTIONS

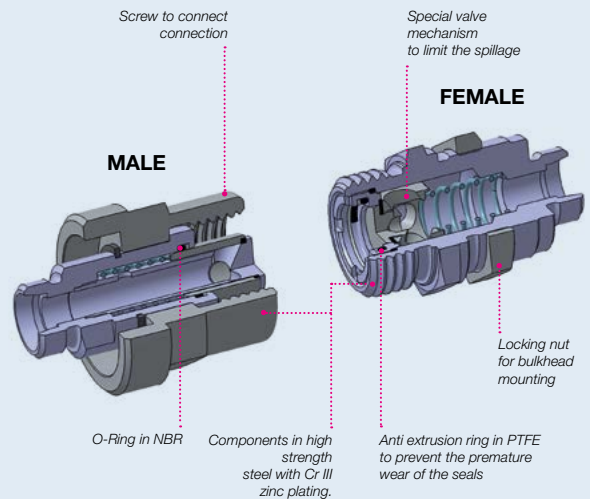
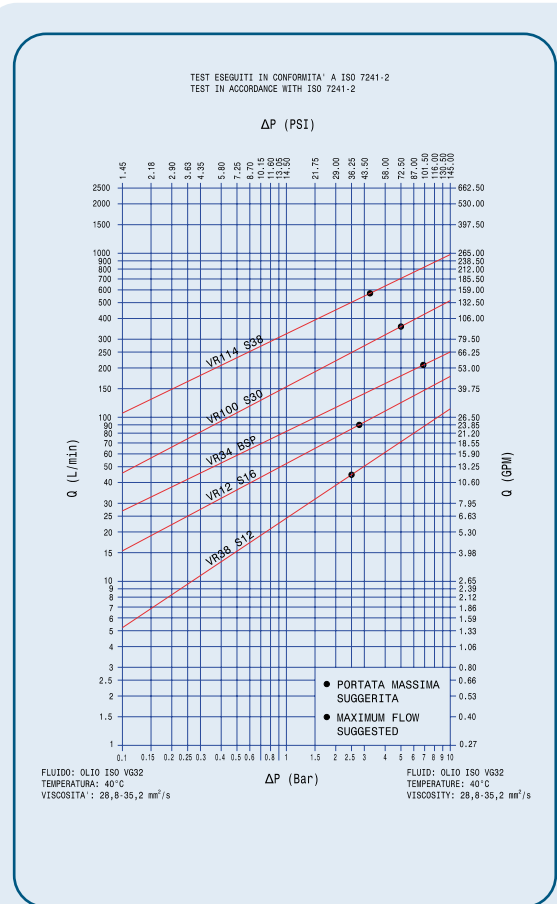
Interchange Similar Couplings (type "Rohrleitung")	Sealing description Nitrile NBR	Connection system Screw
Available sizes From 3/8" to 1-1/4"	Material/treatment Carbon steel /Cr3	Available threads METRIC
Operating pressure Up to 420 bar	Locking mechanism Screw to connect	Flow rate Up to 576 l/min
Temperature (°C) -20°C / +100°C	Valving style Flat face Non spill	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, 4 MPa for size 1-1/4).
- Robustness and ease of construction.
- Special valves ensure a good seal of the coupling disconnected and minimize spillage of fluid.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- External sleeve protects the sealing surface of the male body
- 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 the 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



POPET SCREW

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	ml
3/8	10	VR38	46	12,19	2	1,47	1,8	1,33	0,01
1/2	12,5	VR12	90	23,85	1,3	0,96	0,7	0,52	0,02
3/4	20	VR34	212	56,2	2,2	1,62	1,7	1,25	0,4
1	25	VR100	378	100,21	4,3	3,17	2,5	1,84	1
1-1/4	31,5	VR114	576	152,7	6	4,42	4	2,95	1

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
3/8	VR38	40	5800	20	2900	40	5800	160	23200	70	10150	100	14500
1/2	VR12	30	4350	17	2465	30	4350	120	17400	70	10150	100	14500
3/4	VR34	35	5075	20	2900	35	5075	140	20300	80	11600	100	14500
1	VR100	30	4350	20	2900	30	4350	100	14500	80	11600	100	14500
1-1/4	VR114	42	6090	42	6090	42	6090	120	17400	90	13050	100	14500

* 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).

Different possible configurations:

Different threads available upon request.

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 coupled have been tested at maximum operating pressure for 200.000 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.

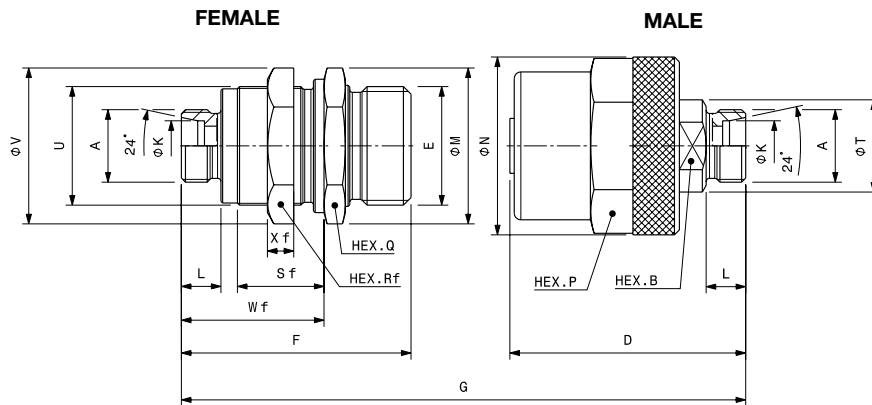
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

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



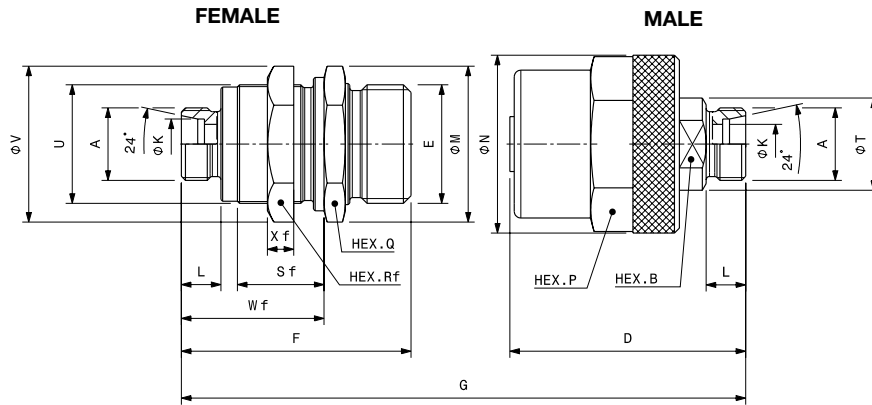
Port description: MALE THREAD METRIC L – 24° CONE (ISO 8434-1 & DIN 2353)

BODY SIZE	Descriptive Code	Item Code	BG	PORT (A)	U	E	Overall Length		Length		Hex		Hex		Diameter		Diameter							
							mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in				
3/8"	F VR38 L10	Female 809608002	2	M16X1.5	M30X1	32X3 SP*	G	107,5	4,23	F	60,0	2,36	Q	36,0	1,42	Rf	36,0	1,42	M	41,4	1,63	K	10,2	0,40
	M VR38 L10	Male 809608003								D	61,6	2,43	P	32,0	1,26	B	22,0	0,87	N	38,7	1,52			
3/8"	F VR38 L12	Female 809608004	2	M18X1.5	M30X1	32X3 SP*	G	107,5	4,23	F	60,0	2,36	Q	36,0	1,42	Rf	36,0	1,42	M	41,4	1,63	K	12,2	0,48
	M VR38 L12	Male 809608005								D	61,6	2,43	P	32,0	1,26	B	22,0	0,87	N	38,7	1,52			
3/8"	F VR38 L15	Female 809608006	2	M22X1.5	M30X1	32X3 SP*	G	109,5	4,31	F	61,0	2,40	Q	36,0	1,42	Rf	36,0	1,42	M	41,4	1,63	K	15,2	0,60
	M VR38 L15	Male 809608007								D	62,6	2,46	P	32,0	1,26	B	22,0	0,87	N	38,7	1,52			
1/2"	F VR12P L15	Female 809608026	3	M22X1.5	M36X1	36X3 SP*	G	124,6	4,91	F	70,5	2,78	Q	41,0	1,61	Rf	41,0	1,61	M	47,2	1,86	K	15,2	0,60
	M VR12 L15	Male 809608001								D	71,6	2,82	P	46,0	1,81	B	24,0	0,94	N	54,0	2,13			
3/4"	F VR34 L15	Female 809608016	4	M22X1.5	M45x1.5	48x3 SP*	G	150,1	5,91	F	90,1	3,55	Q	55,0	2,17	Rf	50,0	1,97	M	61,0	2,40	K	15,2	0,60
	M VR34 L15	Male 809608017								D	84,1	3,31	P	60,0	2,36	B	32,0	1,26	N	68,0	2,68			
3/4"	F VR34 L18	Female 809608018	4	M26x1.5	M45x1.5	48x3 SP*	G	150,1	5,91	F	90,1	3,55	Q	55,0	2,17	Rf	50,0	1,97	M	61,0	2,40	K	18,2	0,72
	M VR34 L18	Male 809608019								D	84,1	3,31	P	60,0	2,36	B	32,0	1,26	N	68,0	2,68			
1"	F VR100 L18	Female 809608008	6	M26X1.5	M54X1.5	54X4 SP*	G	174,5	6,87	F	96,2	3,79	Q	55,0	2,17	Rf	60,0	2,36	M	62,2	2,45	K	18,2	0,72
	M VR100 L18	Male 809608009								D	107,0	4,21	P	55,0	2,17	B	41,0	1,61	N	64,0	2,52			
1"	F VR100 L22	Female 809608010	6	M30X2	M54X1.5	54X4 SP*	G	178,5	7,03	F	98,2	3,87	Q	55,0	2,17	Rf	60,0	2,36	M	62,2	2,45	K	22,2	0,87
	M VR100 L22	Male 809608011								D	109,0	4,29	P	55,0	2,17	B	41,0	1,61	N	64,0	2,52			
1"	F VR100 L28	Female 809608012	6	M36X2	M54X1.5	54X4 SP*	G	178,5	7,03	F	98,2	3,87	Q	55,0	2,17	Rf	60,0	2,36	M	62,2	2,45	K	28,2	1,11
	M VR100 L28	Male 809608013								D	109,0	4,29	P	55,0	2,17	B	41,0	1,61	N	64,0	2,52			
1-1/4"	F VR114 L35	Female 809608014	8	M45x2	M80x2	79x4 SP*	G	213,5	8,39	F	123,0	4,84	Q	85,0	3,35	Rf	90,5 ^a	3,56 ^a	M	90,0	3,54	K	35,3	1,39
	M VR114 L35	Male 809608015								D	130,4	5,13	P	Δ	Δ	B	55,0	2,17	N	89,7	3,53			

BODY SIZE	Descriptive Code	Item Code		Diameter		Length		Length		Length		Weight				
				mm	in	mm	in	mm	in	mm	in	kg	lb			
3/8"	F VR38 L10	Female 809608002	V	41,4	1,63	Wf	36,0	1,42	Sf	19,0	0,75	Xf	7,0	0,43	0,23	0,51
	M VR38 L10	Male 809608003	T	25,0	0,98							L	11,0	0,28	0,29	0,63
3/8"	F VR38 L12	Female 809608004	V	41,4	1,63	Wf	36,0	1,42	Sf	19,0	0,75	Xf	7,0	0,43	0,24	0,52
	M VR38 L12	Male 809608005	T	25,0	0,98							L	11,0	0,28	0,28	0,61
3/8"	F VR38 L15	Female 809608006	V	41,4	1,63	Wf	37,0	1,46	Sf	19,0	0,75	Xf	7,0	0,47	0,24	0,53
	M VR38 L15	Male 809608007	T	25,0	0,98							L	12,0	0,28	0,29	0,64
1/2"	F VR12P L15	Female 809608026	V	47,2	1,86	Wf	40,1	1,58	Sf	22,4	0,88	Xf	8,0	0,47	0,36	0,80
	M VR12 L15	Male 809608001	T	28,0	1,10							L	12,0	0,31	0,53	1,16
3/4"	F VR34 L15	Female 809608016	V	57,5	2,26	Wf	55,1	2,17	Sf	28,0	1,10	Xf	9,0	0,47	0,36	0,79
	M VR34 L15	Male 809608017	T	38,0	1,50							L	12,0	0,35	0,53	1,16
3/4"	F VR34 L18	Female 809608018	V	57,5	2,26	Wf	55,1	2,17	Sf	28,0	1,10	Xf	9,0	0,47	0,74	1,63
	M VR34 L18	Male 809608019	T	38,0	1,50							L	12,0	0,35	0,85	1,86
1"	F VR100 L18	Female 809608008	V	69,0	2,72	Wf	53,0	2,09	Sf	22,8	0,90	Xf	10,0	0,47	0,98	2,16
	M VR100 L18	Male 809608009	T	44,9	1,77							L	12,0	0,39	1,32	2,91
1"	F VR100 L22	Female 809608010	V	69,0	2,72	Wf	55,0	2,17	Sf	22,8	0,90	Xf	10,0	0,55	0,99	2,18
	M VR100 L22	Male 809608011	T	44,9	1,77							L	14,0	0,39	1,32	2,91
1"	F VR100 L28	Female 809608012	V	69,0	2,72	Wf	55,0	2,17	Sf	22,8	0,90	Xf	10,0	0,55	0,96	2,12
	M VR100 L28	Male 809608013	T	44,9	1,77							L	14,0	0,39	1,33	2,93
1-1/4"	F VR114 L35	Female 809608014	V	100,0	3,94	Wf	65,0	2,56	Sf	35,0	1,38	Xf	14,0	0,63	2,83	6,24
	M VR114 L35	Male 809608015	T	60,8	2,39							L	16,0	0,55	3,27	7,21

*SP = SPECIAL THREAD

Δ to mount with a sickle spanner



Port description: MALE THREAD METRIC S – 24° CONE (ISO 8434-1 & DIN 2353)

BODY SIZE	Descriptive Code	Item Code	BG	PORT (A)	U	E	Overall Length		Length		Hex		Hex		Diameter		Diameter							
							mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in				
3/8"	F VR38 S10	Female 809609002*	2	M18X1.5	M30X1	32X3 SP*	G	109,5	4,65	F	61,0	2,40	Q	36,0	1,42	Rf	36,0	1,42	M	41,4	1,63	K	10,2	0,40
	M VR38 S10	Male 809609003								D	62,6	2,46	P	32	1,26	B	22	0,87	N	38,7	1,52			
3/8"	F VR38 S12	Female 809609004	2	M20X1.5	M30X1	32X3 SP*	G	109,5	4,31	F	61,0	2,40	Q	36,0	1,42	Rf	36,0	1,42	M	41,4	1,63	K	12,2	0,48
	M VR38 S12	Male 809609005								D	62,6	2,46	P	32,0	1,26	B	22,0	0,87	N	38,7	1,52			
3/8"	F VR38 S14	Female 809609006	2	M22X1.5	M30X1	32X3 SP*	G	113,5	4,47	F	63,0	2,48	Q	36,0	1,42	Rf	36,0	1,42	M	41,4	1,63	K	14,2	0,56
	M VR38 S14	Male 809609007								D	64,6	2,54	P	32,0	1,26	B	22,0	0,87	N	38,7	1,52			
3/8"	F VR38 S16	Female 809609016	2	M24X1.5	M30X1	32X3 SP*	G	113,5	4,47	F	63,0	2,48	Q	36,0	1,42	Rf	36,0	1,42	M	41,4	1,63	K	16,2	0,64
	M VR38 S16	Male 809609017								D	64,6	2,54	P	32,0	1,26	B	22,0	0,87	N	38,7	1,52			
1/2"	F VR12P S16	Female 809609028	3	M24X1.5	M36X1	36X3 SP*	G	128,6	5,06	F	72,5	2,85	Q	41,0	1,61	Rf	41,0	1,61	M	47,2	1,86	K	16,2	0,64
	M VR12 S16	Male 809609001								D	73,6	2,90	P	46,0	1,81	B	24,0	0,94	N	54,0	2,13			
1/2"	F VR12P S20	Female 809609030	3	M30x2	M36X1	36X3 SP*	G	157,8	6,21	F	74,5	2,93	Q	41,0	1,61	Rf	41,0	1,61	M	47,2	1,86	K	20,2	0,80
	M VR12 S20	Male 809609027**								D	100,8	3,97	P	46,0	1,81	B	32,0	1,26	N	54,0	2,13			
3/4"	F VR34 S16	Female 809609020*	4	M24X1.5	M45x1.5	48X3 SP*	G	154,1	6,09	F	92,1	3,64	Q	55	2,17	Rf	50	1,97	M	38,7	1,52	K	16,2	0,64
	M VR34 S16	Male 809609021*								D	86,1	3,39	P	60,0	2,36	B	32,0	1,26	N	68,0	2,68			
3/4"	F VR34 S20	Female 809609018	4	M30X2	M45x1.5	48X3 SP*	G	158,1	6,22	F	94,1	3,70	Q	55,0	2,17	Rf	50,0	1,97	M	61,0	2,40	K	20,2	0,80
	M VR34 S20	Male 809609019								D	88,1	3,47	P	60,0	2,36	B	32,0	1,26	N	68,0	2,68			
1"	F VR100 S20	Female 809609008	6	M30X2	M54X1.5	54X4 SP*	G	182,5	7,19	F	100,2	3,94	Q	55,0	2,17	Rf	60,0	2,36	M	62,2	2,45	K	20,2	0,80
	M VR100 S20	Male 809609009								D	111,0	4,37	P	55,0	2,17	B	41,0	1,61	N	64,0	2,52			
1"	F VR100 S25	Female 809609010	6	M36X2	M54X1.5	54X4 SP*	G	186,5	7,34	F	102,2	4,02	Q	55,0	2,17	Rf	60,0	2,36	M	62,2	2,45	K	25,2	0,99
	M VR100 S25	Male 809609011								D	113,0	4,45	P	55,0	2,17	B	41,0	1,61	N	64,0	2,52			
1"	F VR100 S30	Female 809609012	6	M42X2	M54X1.5	54X4 SP*	G	190,5	7,50	F	104,2	4,10	Q	55,0	2,17	Rf	60,0	2,36	M	62,2	2,45	K	30,2	1,19
	M VR100 S30	Male 809609013								D	115,0	4,53	P	55,0	2,17	B	41,0	1,61	N	64,0	2,52			
1-1/4"	F VR114 S38	Female 809609014	8	M52X2	M80X2	79X4 SP*	G	225,15	8,86	F	129,0	5,08	Q	85,0	3,35	Rf	90,5*	3,56*	M	90,0	3,54	K	38,3	1,51
	M VR114 S38	Male 809609015								D	136,4	5,37	P	Δ	Δ	B	55,0	2,17	N	89,7	3,53			

BODY SIZE	Descriptive Code	Item Code		Diameter		Length		Length		Length		Weight				
				mm	in	mm	in	mm	in	mm	in	kg	lb			
3/8"	F VR38 S10	Female 809609002*	V	41,4	1,63	Wf	37,0	1,46	Sf	19,0	0,75	Xf	7,0	0,28	0,24	0,11
	M VR38 S10	Male 809609003*	T	-	-	-	-	-	-	-	-	L	12,0	0,47	-	-
3/8"	F VR38 S12	Female 809609004	V	41,4	1,63	Wf	37,0	1,46	Sf	19,0	0,75	Xf	7,0	0,28	0,25	0,54
	M VR38 S12	Male 809609005	T	25,0	0,98	-	-	-	-	-	-	L	12,0	0,47	0,29	0,64
3/8"	F VR38 S14	Female 809609006	V	41,4	1,63	Wf	39,0	1,54	Sf	19,0	0,75	Xf	7,0	0,28	0,25	0,54
	M VR38 S14	Male 809609007	T	25,0	0,98	-	-	-	-	-	-	L	14,0	0,55	0,29	0,64
3/8"	F VR38 S16	Female 809609016	V	41,4	1,63	Wf	39,0	1,54	Sf	19,0	0,75	Xf	7,0	0,28	0,25	0,55
	M VR38 S16	Male 809609017	T	25,0	0,98	-	-	-	-	-	-	L	14,0	0,55	0,30	0,66
1/2"	F VR12P S16	Female 809609028	V	47,2	1,86	Wf	42,1	1,66	Sf	22,4	0,88	Xf	8,0	0,31	0,37	0,82
	M VR12 S16	Male 809609001	T	28,0	1,10	-	-	-	-	-	-	L	14,0	0,55	0,54	1,18
1/2"	F VR12 S20	Female 809609030	V	47,1	1,86	Wf	44,1	1,74	Sf	22,5	0,89	Xf	8,0	0,31	0,38	0,84
	M VR12 S20	Male 809609027**	T	35,0	1,38	-	-	-	-	-	-	L	16,0	0,63	0,67	1,48
3/4"	F VR34 S16	Female 809609020*	V	-	-	Wf	-	-	Sf	-	-	Xf	-	-	-	-
	M VR34 S16	Male 809609021*	T	38,0	1,50	-	-	-	-	-	-	L	14,0	0,55	0,85	1,87
3/4"	F VR34 S20	Female 809609018	V	57,5	2,26	Wf	59,1	2,33	Sf	28,0	1,10	Xf	9,0	0,35	0,37	0,82
	M VR34 S20	Male 809609019	T	38,0	1,50	-	-	-	-	-	-	L	16,0	0,63	0,87	1,91
1"	F VR100 S20	Female 809609008	V	69,0	2,72	Wf	57,0	2,24	Sf	22,8	0,90	Xf	10,0	0,39	1,01	2,23
	M VR100 S20	Male 809609009	T	44,9	1,77	-	-	-	-	-	-	L	16,0	0,63	1,34	2,95
1"	F VR100 S25	Female 809609010	V	69,0	2,72	Wf	59,0	2,32	Sf	22,8	0,90	Xf	10,0	0,39	1,01	2,23
	M VR100 S25	Male 809609011	T	44,9	1,77	-	-	-	-	-	-	L	18,0	0,71	1,36	3,00
1"	F VR100 S30	Female 809609012	V	69,0	2,72	Wf	61,0	2,40	Sf	22,8	0,90	Xf	10,0	0,39	1,02	2,24
	M VR100 S30	Male 809609013	T	44,9	1,77	-	-	-	-	-	-	L	20,0	0,79	1,38	3,03
1-1/4"	F VR114 S38	Female 809609014	V	100,0	3,94	Wf	71,0	2,80	Sf	35,0	1,38	Xf	14,0	0,55	2,89	6,37
	M VR114 S38	Male 809609015	T	60,8	2,39	-	-	-	-	-	-	L	22,0	0,87	3,31	7,30

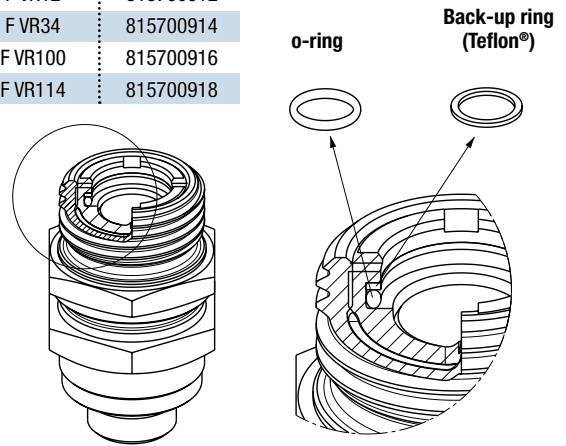
SP* = SPECIAL THREAD
 Δ to mount with a sickle spanner
 ** = longer design with modular thread
 *Available upon request.



SPARE KIT SEAL FOR FEMALE

Repair kit / OR+BK		
Body Size	Description	Part Number
3/8"	F VR38	815700902
1/2"	F VR12	815700912
3/4"	F VR34	815700914
1"	F VR100	815700916
1-1/4"	F VR114	815700918

O-Ring in NBR
BackUp in Teflon®



PROTECTIVE CAPS FOR VR SERIES

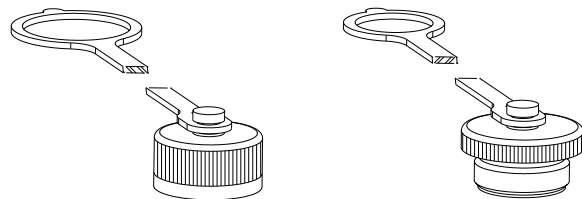
Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

Are available two models of protection caps for VR couplings:

- manufactured in plastic with connection lanyard (standard color: red, other colors available upon request)
- manufactured in aluminum screw caps with lanyard (standard color aluminum)

Cap for FEMALE coupling
Red Plastic

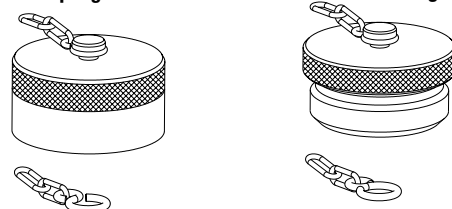
Plug for MALE coupling
Red Plastic



Protective Cap				
Body Size		Part Number		Material/Color
		Cap for Female	Plug for Male	
3/8"	VR38	814900012	814900013	Plastic/Red
1/2"	VR12	814900014	814900015	Plastic/Red

Cap for FEMALE coupling
Aluminum

Plug for MALE coupling
Aluminum



Protective Cap				
Body Size		Part Number		Material/Color
		Cap for Female	Plug for Male	
3/4"	VR34	814906016	814906017	Aluminum/Natural
1"	VR100	814906018	814906019	Aluminum/Natural
1-1/4"	VR114	814906020	814906021	Aluminum/Natural