



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

High strength carbon steel



Available threads

BSP - METRIC



Operating pressure

Up to 420 bar



Locking mechanism

Screw to connect



Flow rate

Up to 576 L/Min



Temperature (°C)

-20° / +100°



Valving style

Flat face



Connection under pressure

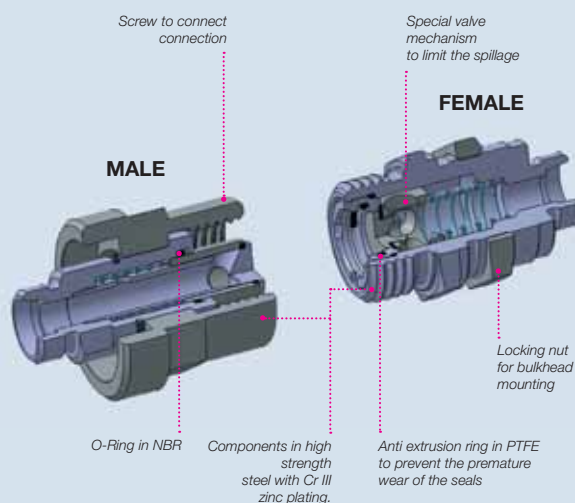
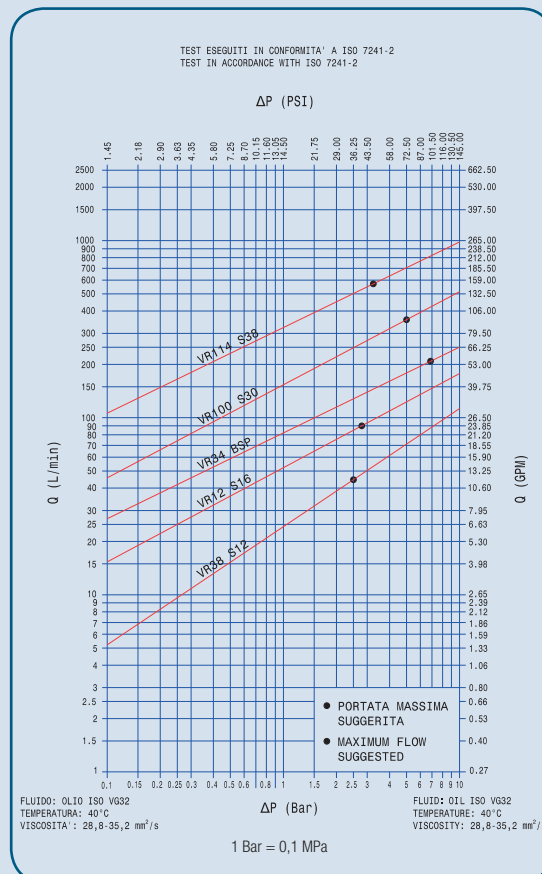
Connection: one side*
Disconnection: not allowed

BENEFITS

- *Connection is allowed in one half of the coupling up to 10 MPa (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.
- 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



Agriculture



Oil/Gas



Industry



High Pressure



Cooling



Refrigeration



Earth Moving



Vehicles



Hydraulic Equipment



Chemical & Food Industry

PERFORMANCES

Size		Series/Size	Max. flow suggested		Torque to connect*		Torque to disconnect*		Spillage**
Inch	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	
Inch		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi
3/8	VR38	40	5800	20	2900	40	5800	200	29000	70	10150	100	14500
1/2	VR12	30	4350	17	2465	30	4350	200	29000	70	10150	100	14500
3/4	VR34	35	5075	20	2900	35	5075	150	21750	80	11600	100	14500
1	VR100	30	4350	20	2900	30	4350	120	17400	80	11600	120	17400
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 7241-2 test method)

Temperature range:

Standard seals NBR (Nitrile): 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 couplings coupled have been tested at maximum operating pressure for 200.000 impulses according to ISO 7241-2 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.

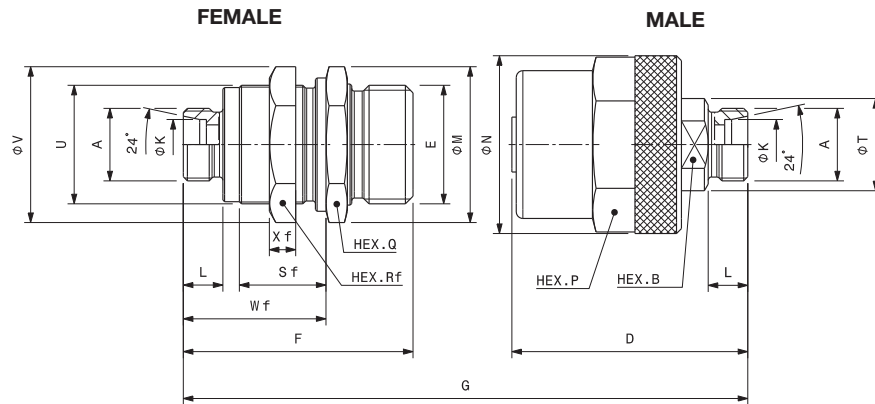
Make sure that the medium used is compatible with seal and material as indicated for each series.

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 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.

OVERALL DIMENSIONS

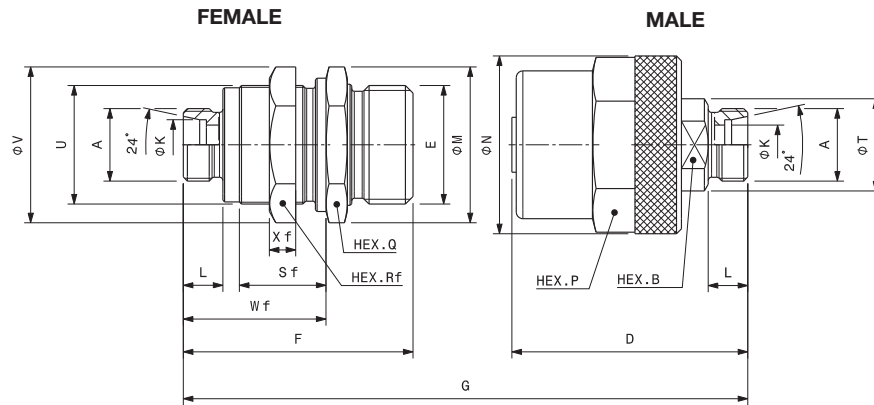


Port description: MALE THREAD METRIC L – 24° CONE (ISO 8434-1 & DIN 2353)

BODY SIZE	Descriptive Code	Item Code	BG	PORT (A)	U	E	Overall Length		Length		Hex		Hex		Diameter			Diameter							
							mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch					
3/8"	F VR38 L10	Female	809608002	2	M16X1.5	M30X1	32X3 SP*	G	121,6	4,79	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	121,6	4,79	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	123,6	4,87	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 VR12 L15	Female	809608000	3	M22X1.5	M36X1	36X3 SP*	G	141,3	5,56	F	69,7	2,74	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	M22X1.6	M45x1.5	48x3 SP*	G	174,2	6,86	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	174,2	6,86	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	203,2	8,00	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	207,2	8,16	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	207,2	8,16	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 VR100 L35	Female	809608014	8	M45x2	M80x2	79x4 SP*	G	253,4	9,98	F	123,0	4,84	Q	85,0	3,35	Rf	90,5*	3,56*	M	90,0	3,54	K	35,3	1,39
	M VR100 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	inch	mm	inch	mm	inch	mm	inch	Kg	Lbs				
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 VR12 L15	Female	809608000	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 VR100 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 VR100 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	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
3/8"	F VR38 S10	Female 809609002	2	M18X1.5	M30X1	32X3 SP*	G	-	-	F	61,0	2,40	Q	36,0	1,42	Rf	36,0	1,42
	M VR38 S10	Male -								D	-	-	P	-	-	B	-	-
3/8"	F VR38 S12	Female 809609004	2	M20X1.5	M30X1	32X3 SP*	G	123,6	4,87	F	61,0	2,40	Q	36,0	1,42	Rf	36,0	1,42
	M VR38 S12	Male 809609005								D	62,6	2,46	P	32,0	1,26	B	22,0	0,87
3/8"	F VR38 S14	Female 809609006	2	M22X1.5	M30X1	32X3 SP*	G	127,6	5,02	F	63,0	2,48	Q	36,0	1,42	Rf	36,0	1,42
	M VR38 S14	Male 809609007								D	64,6	2,54	P	32,0	1,26	B	22,0	0,87
3/8"	F VR38 S16	Female 809609016	2	M24X1.4	M30X1	32X3 SP*	G	127,6	5,02	F	63,0	2,48	Q	36,0	1,42	Rf	36,0	1,42
	M VR38 S16	Male 809609017								D	64,6	2,54	P	32,0	1,26	B	22,0	0,87
1/2"	F VR12 S16	Female 809609000	3	M24X1.5	M36X1	36X3 SP*	G	145,3	5,72	F	71,7	2,82	Q	41,0	1,61	Rf	41,0	1,61
	M VR12 S16	Male 809609001								D	73,6	2,90	P	46,0	1,81	B	24,0	0,94
1/2"	F VR12 S20	Female 809609026	3	M30x2	M36X1	36X3 SP*	G	174,5	6,87	F	73,7	2,88	Q	41,0	1,61	Rf	41,0	1,61
	M VR12 S20	Male 809609027**								D	100,8	3,97	P	46,0	1,81	B	32,0	1,26
3/4"	F VR34 S16	Female -	4	M24X1.5	M45x1.5	48X3 SP*	G	-	-	F	-	-	Q	-	-	Rf	-	-
	M VR34 S16	Male 809609021								D	86,1	3,39	P	60,0	2,36	B	32,0	1,26
3/4"	F VR34 S20	Female 809609018	4	M30X2	M45x1.5	48X3 SP*	G	182,2	7,17	F	94,1	3,70	Q	55,0	2,17	Rf	50,0	1,97
	M VR34 S20	Male 809609019								D	88,1	3,47	P	60,0	2,36	B	32,0	1,26
1"	F VR100 S20	Female 809609008	6	M30X2	M54X1.5	54X4 SP*	G	211,2	8,31	F	100,2	3,94	Q	55,0	2,17	Rf	60,0	2,36
	M VR100 S20	Male 809609009								D	111,0	4,37	P	55,0	2,17	B	41,0	1,61
1"	F VR100 S25	Female 809609010	6	M36X2	M54X1.5	54X4 SP*	G	215,2	8,47	F	102,2	4,02	Q	55,0	2,17	Rf	60,0	2,36
	M VR100 S25	Male 809609011								D	113,0	4,45	P	55,0	2,17	B	41,0	1,61
1"	F VR100 S30	Female 809609012	6	M42X2	M54X1.5	54X4 SP*	G	219,2	8,63	F	104,2	4,10	Q	55,0	2,17	Rf	60,0	2,36
	M VR100 S30	Male 809609013								D	115,0	4,53	P	55,0	2,17	B	41,0	1,61
1-1/4"	F VR114 S38	Female 809609014	8	M52X2	M80X2	79X4 SP*	G	265,4	10,45	F	129,0	5,08	Q	85,0	3,35	Rf	90,5	3,56
	M VR114 S38	Male 809609015								D	136,4	5,37	P	Δ	Δ	B	55,0	2,17

BODY SIZE	Descriptive Code	Item Code		Diameter			Length			Length			Length			Weight	
				mm	inch		mm	inch		mm	inch		mm	inch		Kg	Lbs
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 -	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 VR12 S16	Female 809609000	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 809609026	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 -	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	

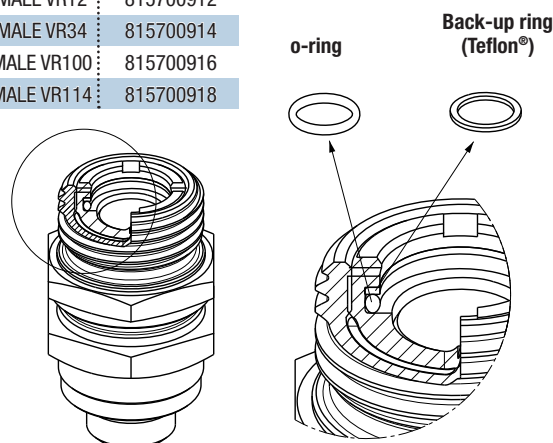
SP* = SPECIAL THREAD
^Δ to mount with a sickle spanner
 ** = longer design with modular thread



SPARE KIT SEAL FOR FEMALE

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

O-Ring in NBR
BackUp in Teflon®



PROTECTIVE CAPS FOR VR SERIES

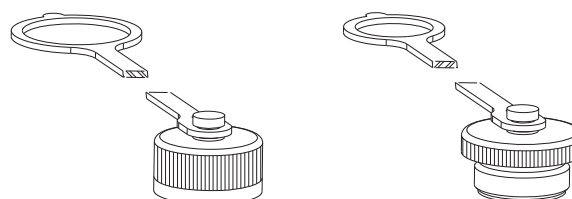
Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

Are available two models of protection caps for VR couplings:

- manufactured in plastic with connection lanyard (standard color red)
- manufactured in aluminum screw caps with lanyard (standard color aluminum)

Cap for FEMALE coupling
Red Plastic

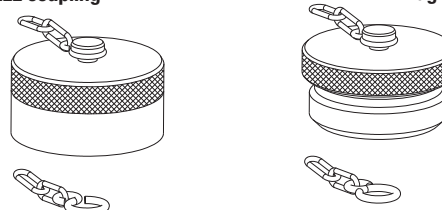
Plug for MALE coupling
Red Plastic



Body Size		Protective Cap		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



Body Size		Protective Cap		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