

# VEP-Series Hydraulic Couplings

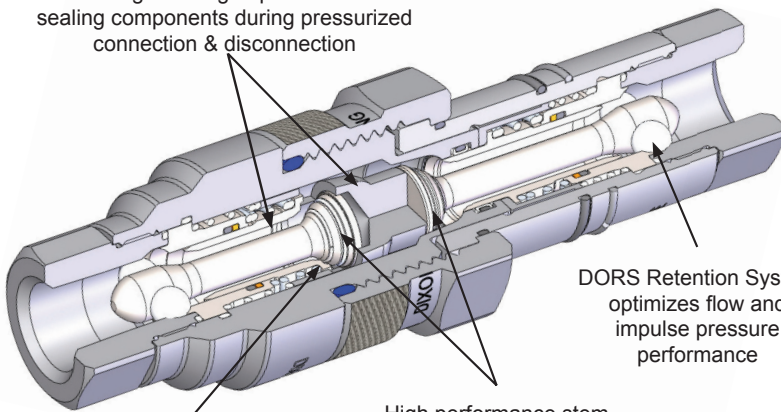
## Interchange Data:

- Interchangeable with Stucchi VEP-P/VEP-HD Series, DNP PST4/FSI Series, Voswinkel FT Series, Parker FET-Series, and Holmbury HFT Series.

## Seal Components:

- Nipples have Nitrile-Energized PTFE valve seals, with a temperature range of **-40°F to 250°F (-40°C to 121°C)**
- 3/8" nipples have molded Polyurethane valve seals, with a temperature range of **-65°F to 212°F (-54°C to 100°C)**
- 3/8" to 3/4" valve stems have molded Acetal seals, with a temperature range of **-65°F to 212°F (-54°C to 100°C)**
- 1" to 2" valve stems have molded Polyurethane seals, with a temperature range of **-65°F to 212°F (-54°C to 100°C)**
- Ancillary coupler and nipple seals are Nitrile (Buna-N), with a temperature range of **-40°F to 250°F (-40°C to 121°C)**
- TPC-ET Anti-Extrusion ring protects main coupling valve seal from dynamic impulse pressure damage

Two-stage valving to protect critical sealing components during pressurized connection & disconnection



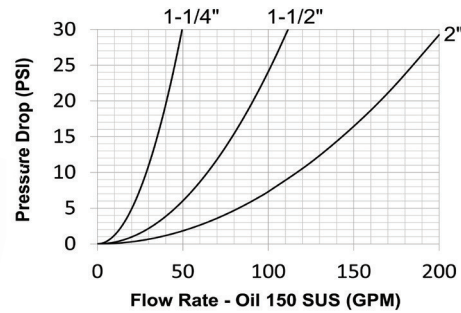
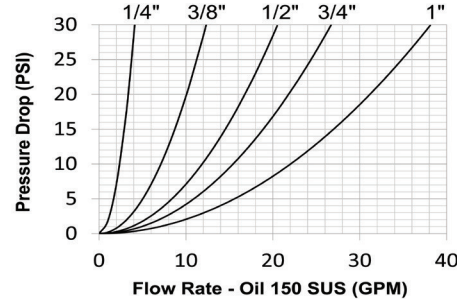
Posi-Lock valve system secures valving during surge-flow conditions to prevent high-velocity damage

High performance stem seals constructed of Acetal or Polyurethane

DORS Retention System optimizes flow and impulse pressure performance

## Materials:

- Machined components are manufactured using solid steel bar stock
- Stainless steel retaining rings and springs maximize corrosion resistance and extend service life
- Steel componentry is plated using ROHS Compliant Zinc Nickel for superior corrosion resistance.



## Rated Pressure Chart:

Body Size	VEP-Series Interchange															
	Pressure Rating				Burst Pressure						Max. Pressure Connect <sup>3</sup>		Max. Pressure Disconnect <sup>3</sup>		Rated Flow ΔP=21.75psi	
	ISO Working <sup>1</sup>		Max. Impulse <sup>2</sup>		Connected		Coupler		Plug		PSI	MPa	PSI	MPa	GPM	L/min
	PSI	MPa	PSI	MPa	PSI	MPa	PSI	MPa	PSI	MPa	PSI	MPa	PSI	MPa		
1/4"	6,000	40	9,000	62	24,000	165	22,000	152	22,000	152	5,500	38	5,500	38	3.5	13
3/8"	5,500	38	8,000	55	22,000	152	18,000	124	20,000	138	4,500	31	4,500	31	10.5	40
1/2"	5,500	38	8,000	55	22,000	152	18,000	124	20,000	138	4,500	31	4,500	31	17.5	66
3/4"	5,500	38	8,000	55	22,000	152	18,000	124	20,000	138	4,500	31	4,500	31	22.7	85
1"	5,500	38	7,500	52	22,000	152	14,500	100	20,000	138	3,625	25	3,625	25	32.5	123
1-1/4"	5,000	35	7,000	48	20,000	138	14,500	100	16,000	110	3,625	25	3,625	25	46.4	174
1-1/2"	4,500	31	5,800	40	18,000	124	12,000	83	14,500	100	3,000	21	3,000	21	95.0	360
2"	4,000	28	5,000	35	18,000	124	12,000	83	14,500	100	3,000	21	3,000	21	172.5	653

<sup>1</sup> Couplings impulse tested in accordance with ISO7241-2 for 1,000,000 cycles connected and 100,000 cycles disconnected at 133% of ISO working pressure.

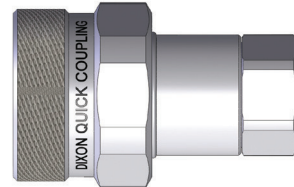
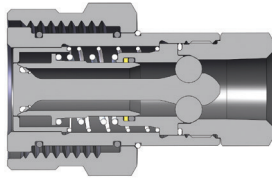
<sup>2</sup> Couplings Impulse tested in accordance with ISO7241-2 for 100,000 cycles connected and disconnected at maximum impulse pressure listed

<sup>3</sup> System temperature for maximum connect/disconnect pressure must not exceed **150°F (65°C)**

# VEP-Series Hydraulic Couplings

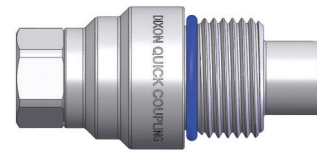
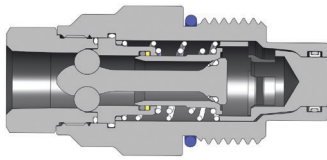
## How to Connect & Disconnect the VEP-Series Coupling

1. Prior to connecting, thoroughly clean all mating surfaces and threads on both halves, then pull the coupler sleeve forward.
2. To initiate the connection, align the coupler and plug, pushing/turning the coupler sleeve towards the plug while engaging the threads. Keep the mating halves aligned during the connection process.
3. Allow the threads to pull the coupler onto the plug, do not push the coupler onto the plug.
4. The first phase of the connection should be threaded by hand, without the use of tools. Please note the connection sleeve may seize when dirt and debris accumulate in the threads - wipe away debris with a cloth, compressed air, or a brush.
5. The second phase of the connection may require a wrench if the pressure is higher than anticipated.
6. Continue to thread the coupler sleeve onto the plug until the end of the sleeve meets the plug body
7. To disconnect, use a wrench to break the coupler sleeve free and keep the mating halves aligned during the disconnection process.



Body Size	VEP-Series Interchange Coupler (Female Threads)							
	Part Detail		Length		Maximum OD		Hex mm	Box Qty
	Part Number	Threads	Inch	mm	Inch	mm		
1/4"	<b>2VEPF2</b>	1/4" - 18 NPTF	2.14	54.4	1.49	37.8	22	20
1/4"	<b>2VEPBF2</b>	1/4" - 19 BSPP	2.14	54.4	1.49	37.8	22	20
1/4"	<b>2VEPOF3</b>	9/16" - 18 ORB	2.14	54.4	1.49	37.8	22	20
3/8"	<b>3VEPF3</b>	3/8" - 18 NPTF	2.55	64.8	1.62	41.1	25	20
3/8"	<b>3VEPBF3</b>	3/8" - 19 BSPP	2.55	64.8	1.62	41.1	25	20
3/8"	<b>3VEPOF4</b>	3/4" - 16 ORB	2.77	70.4	1.62	41.1	25	20
3/8"	<b>3VEPF4</b>	1/2" - 14 NPTF	2.77	70.4	1.62	41.1	28	20
3/8"	<b>3VEPBF4</b>	1/2" - 14 BSPP	2.77	70.4	1.62	41.1	28	20
1/2"	<b>4VEPF4</b>	1/2" - 14 NPTF	3.08	78.2	1.98	50.3	30	15
1/2"	<b>4VEPBF4</b>	1/2" - 14 BSPP	3.08	78.2	1.98	50.3	30	15
1/2"	<b>4VEPOF4</b>	3/4" - 16 ORB	3.08	78.2	1.98	50.3	30	15
1/2"	<b>4VEPOF5</b>	7/8" - 14 ORB	3.18	80.8	1.98	50.3	32	15
1/2"	<b>4VEPF6</b>	3/4" - 14 NPTF	3.38	85.9	1.98	50.3	38	15
1/2"	<b>4VEPBF6</b>	3/4" - 14 BSPP	3.38	85.9	1.98	50.3	38	15
1/2"	<b>4VEPOF6</b>	1-1/16" - 12 ORB	3.58	90.9	1.98	50.3	38	15
3/4"	<b>6VEPF6</b>	3/4" - 14 NPTF	3.37	85.6	2.19	55.6	38	1
3/4"	<b>6VEPBF6</b>	3/4" - 14 BSPP	3.37	85.6	2.19	55.6	38	1
3/4"	<b>6VEPOF6</b>	1-1/16" - 12 ORB	3.37	85.6	2.19	55.6	38	1
1"	<b>8VEPF8</b>	1" - 11-1/2 NPTF	3.89	98.8	2.46	62.5	44	1
1"	<b>8VEPBF8</b>	1" - 11 BSPP	3.89	98.8	2.46	62.5	44	1
1"	<b>8VEPOF8</b>	1-5/16" - 12 ORB	3.89	98.8	2.46	62.5	44	1
1-1/4"	<b>10VEPF10</b>	1-1/4" - 11-1/2 NPTF	4.40	111.8	2.70	68.6	55	1
1-1/4"	<b>10VEPBF10</b>	1-1/4" - 11 BSPP	4.40	111.8	2.70	68.6	55	1
1-1/4"	<b>10VEPOF10</b>	1-5/8" - 12 ORB	4.40	111.8	2.70	68.6	55	1
1-1/2"	<b>12VEPF12</b>	1-1/2" - 11-1/2 NPTF	5.28	134.1	3.74	95.0	63	1
1-1/2"	<b>12VEPBF12</b>	1-1/2" - 11 BSPP	5.28	134.1	3.74	95.0	63	1
1-1/2"	<b>12VEPOF12</b>	1-7/8" - 12 ORB	5.28	134.1	3.74	95.0	63	1
2"	<b>16VEPF16</b>	2" - 11-1/2 NPTF	9.42	239.3	7.39	187.7	89	1
2"	<b>16VEPBF16</b>	2" - 11 BSPP	9.42	239.3	7.39	187.7	89	1
2"	<b>16VEPOF16</b>	2-1/2" - 12 ORB	9.42	239.3	7.39	187.7	89	1

## VEP-Series Hydraulic Couplings



Body Size	VEP-Series Interchange Nipples (Female Threads)							
	Part Detail		Length		Maximum OD		Hex mm	Box Qty
	Part Number	Threads	Inch	mm	Inch	mm		
1/4"	<b>VEP2F2</b>	1/4" - 18 NPTF	2.67	67.8	1.35	34.3	22	20
1/4"	<b>VEP2BF2</b>	1/4" - 19 BSPP	2.67	67.8	1.35	34.3	22	20
1/4"	<b>VEP2OF3</b>	9/16" - 18 ORB	2.67	67.8	1.35	34.3	22	20
3/8"	<b>VEP3F3</b>	3/8" - 18 NPTF	3.28	83.3	1.48	37.6	25	20
3/8"	<b>VEP3BF3</b>	3/8" - 19 BSPP	3.28	83.3	1.48	37.6	25	20
3/8"	<b>VEP3OF4</b>	3/4" - 16 ORB	3.50	88.9	1.48	37.6	25	20
3/8"	<b>VEP3F4</b>	1/2" - 14 NPTF	3.50	88.9	1.48	37.6	28	20
3/8"	<b>VEP3BF4</b>	1/2" - 14 BSPP	3.50	88.9	1.48	37.6	28	20
1/2"	<b>VEP4F4</b>	1/2" - 14 NPTF	3.87	98.3	1.86	47.2	30	10
1/2"	<b>VEP4BF4</b>	1/2" - 14 BSPP	3.87	98.3	1.86	47.2	30	10
1/2"	<b>VEP4OF4</b>	3/4" - 16 ORB	3.87	98.3	1.86	47.2	30	10
1/2"	<b>VEP4OF5</b>	7/8" - 14 ORB	3.97	100.8	1.86	47.2	32	10
1/2"	<b>VEP4F6</b>	3/4" - 14 NPTF	4.07	103.4	1.86	47.2	38	10
1/2"	<b>VEP4BF6</b>	3/4" - 14 BSPP	4.07	103.4	1.86	47.2	38	10
1/2"	<b>VEP4OF6</b>	1-1/16" - 12 ORB	4.27	108.5	1.86	47.2	38	10
3/4"	<b>VEP6F6</b>	3/4" - 14 NPTF	4.12	104.6	1.98	50.3	38	1
3/4"	<b>VEP6BF6</b>	3/4" - 14 BSPP	4.12	104.6	1.98	50.3	38	1
3/4"	<b>VEP6OF6</b>	1-1/16" - 12 ORB	4.12	104.6	1.98	50.3	38	1
1"	<b>VEP8F8</b>	1" - 11-1/2 NPTF	4.95	125.7	2.20	55.9	44	1
1"	<b>VEP8BF8</b>	1" - 11 BSPP	4.95	125.7	2.20	55.9	44	1
1"	<b>VEP8OF8</b>	1-5/16" - 12 ORB	4.95	125.7	2.20	55.9	44	1
1-1/4"	<b>VEP10F10</b>	1-1/4" - 11-1/2 NPTF	5.43	137.9	2.73	69.3	55	1
1-1/4"	<b>VEP10BF10</b>	1-1/4" - 11 BSPP	5.43	137.9	2.73	69.3	55	1
1-1/4"	<b>VEP10OF10</b>	1-5/8" - 12 ORB	5.43	137.9	2.73	69.3	55	1
1-1/2"	<b>VEP12F12</b>	1-1/2" - 11-1/2 NPTF	6.63	168.4	3.74	95.0	63	1
1-1/2"	<b>VEP12BF12</b>	1-1/2" - 11 BSPP	6.63	168.4	3.74	95.0	63	1
1-1/2"	<b>VEP12OF12</b>	1-7/8" - 12 ORB	6.63	168.4	3.74	95.0	63	1
2"	<b>VEP16F16</b>	2" - 11-1/2 NPTF	11.08	281.4	5.70	144.8	89	1
2"	<b>VEP16BF16</b>	2" - 11 BSPP	11.08	281.4	5.70	144.8	89	1
2"	<b>VEP16OF16</b>	2-1/2" - 12 ORB	11.08	281.4	5.70	144.8	89	1

## VEP-Series Hydraulic Couplings



Body Size	VEP-Series Rigid Dust Plug		
	Part Number	Package Qty	
		Bag	Box
1/4"	<b>2VEPDP-A</b>	5	50
3/8"	<b>3VEPDP-A</b>	5	50
1/2"	<b>4VEPDP-A</b>	5	25
3/4"	<b>6VEPDP-A</b>	5	25
1"	<b>8VEPDP-A</b>	-	10
1-1/4"	<b>10VEPDP-A</b>	-	10
1-1/2"	<b>12VEPDP-A</b>	-	5
2"	<b>16VEPDP-A</b>	-	1



Body Size	VEP-Series Rigid Dust Cap		
	Part Number	Package Qty	
		Bag	Box
1/4"	<b>VEP2DC-A</b>	5	50
3/8"	<b>VEP3DC-A</b>	5	50
1/2"	<b>VEP4DC-A</b>	5	50
3/4"	<b>VEP6DC-A</b>	5	25
1"	<b>VEP8DC-A</b>	-	10
1-1/4"	<b>VEP10DC-A</b>	-	10
1-1/2"	<b>VEP12DC-A</b>	-	5
2"	<b>VEP16DC-A</b>	-	1

VEP Series dust caps and plugs are aluminum with a steel cable

## VEP-Series Profile

Body Size	A	B
1/4"	5/8"	1/2"
3/8"	25/32"	11/16"
1/2"	31/32"	3/4"
3/4"	1-1/16"	3/4"
1"	1-3/16"	15/16"
1-1/4"	1-7/16"	1"
1-1/2"	2-1/4"	1-1/4"
2"	3-7/16"	2-7/16"

