



# Technical Specifications

Body Size	Pressure Rating				Burst Pressure						Max. Pressure Connect <sup>3</sup>		Max. Pressure Disconnect <sup>3</sup>		Rated Flow $\Delta P=21.75$ PSI	
	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

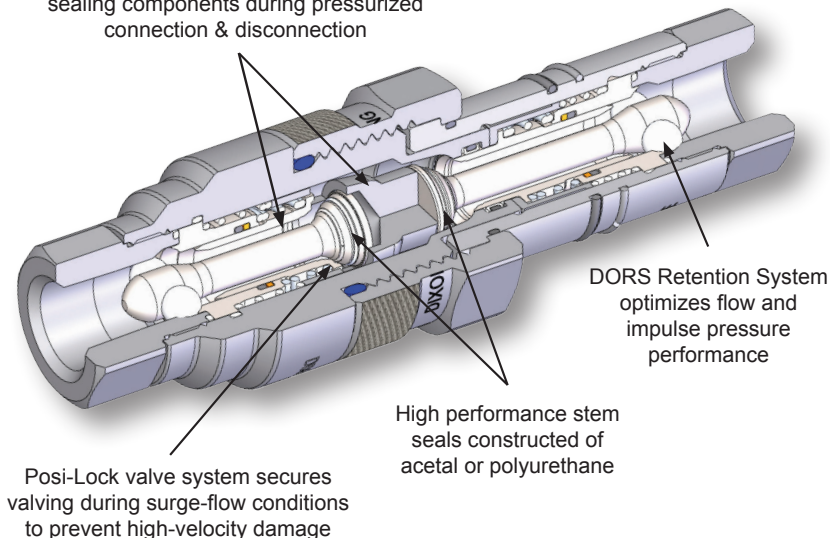
<sup>3</sup> System temperature for Maximum Connect/Disconnect Pressure must not exceed 150°F (65°C)

## 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.
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.

### Attributes:

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



# VEP-Series Coupling

## Applications:

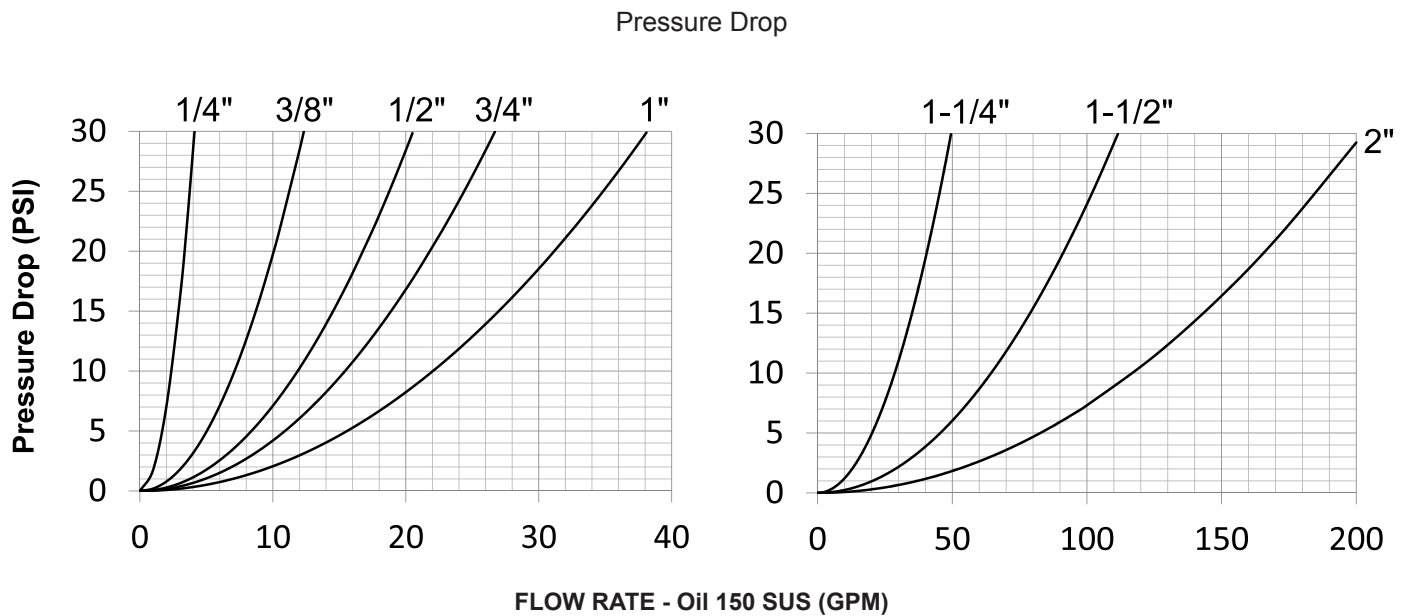
- high impulse hydraulic applications
- oil field equipment
- BOP accumulator systems
- construction equipment
- crane systems
- *anywhere there's a need for a tough, reliable hydraulic connection*

## Features:

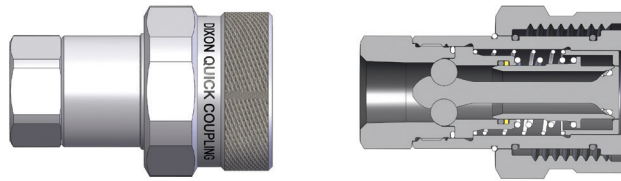
- fully interchangeable with Stucchi VEP/VEP-HD, DNP FSI/PST4, Parker FET, Holmbury HFT, Voswinkel FT
- available with NPTF, BSPP, Code 62 and ORB end connections
- improved connect and disconnect performance up to **5,500 PSI**
- patented valve mechanism optimizes flow and pressure performance
- superior corrosion resistance using ROHS compliant zinc nickel plating

## Specifications:

- temperature range: **-40°F to 212°F (-40°C to 100°C)**

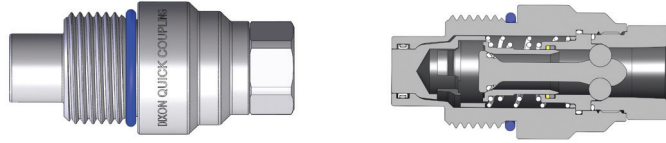


## Female Threaded Couplers



Size	Thread	Length		Maximum OD		Hex Inch	Part #
		in	mm	in	mm		
1/4	1/4" - 18 NPTF	2.14	54.4	1.49	37.8	7/8"	<b>2VEPF2</b>
1/4	1/4" - 19 BSPP	2.14	54.4	1.49	37.8	7/8"	<b>2VEPBF2</b>
1/4	9/16" - 18 ORB	2.14	54.4	1.49	37.8	7/8"	<b>2VEPOF3</b>
3/8"	3/8" - 18 NPTF	2.55	64.8	1.62	41.1	1"	<b>3VEPF3</b>
3/8"	3/8" - 19 BSPP	2.55	64.8	1.62	41.1	1"	<b>3VEPBF3</b>
3/8"	3/4" - 16 ORB	2.77	70.4	1.62	41.1	1"	<b>3VEPOF4</b>
3/8"	1/2" - 14 NPTF	2.77	70.4	1.62	41.1	1 1/8"	<b>3VEPF4</b>
3/8"	1/2" - 14 BSPP	2.77	70.4	1.62	41.1	1 1/8"	<b>3VEPBF4</b>
1/2"	1/2" - 14 NPTF	3.08	78.2	1.98	50.3	1 3/16"	<b>4VEPF4</b>
1/2"	1/2" - 14 BSPP	3.08	78.2	1.98	50.3	1 3/16"	<b>4VEPBF4</b>
1/2"	3/4" - 16 ORB	3.08	78.2	1.98	50.3	1 3/16"	<b>4VEPOF4</b>
1/2"	7/8" - 14 ORB	3.18	80.8	1.98	50.3	1 1/4"	<b>4VEPOF5</b>
1/2"	3/4" - 14 NPTF	3.38	85.9	1.98	50.3	1 1/2"	<b>4VEPF6</b>
1/2"	3/4" - 14 BSPP	3.38	85.9	1.98	50.3	1 1/2"	<b>4VEPBF6</b>
1/2"	1 1/16" - 12 ORB	3.58	90.9	1.98	50.3	1 1/2"	<b>4VEPOF6</b>
3/4"	3/4" - 14 NPTF	3.37	85.6	2.19	55.6	1 1/2"	<b>6VEPF6</b>
3/4"	3/4" - 14 BSPP	3.37	85.6	2.19	55.6	1 1/2"	<b>6VEPBF6</b>
3/4"	1 1/16" - 12 ORB	3.37	85.6	2.19	55.6	1 1/2"	<b>6VEPOF6</b>
1"	1" - 11 1/2 NPTF	3.89	98.8	2.46	62.5	1 3/4"	<b>8VEPF8</b>
1"	1" - 11 BSPP	3.89	98.8	2.46	62.5	1 3/4"	<b>8VEPBF8</b>
1"	1 5/16" - 12 ORB	3.89	98.8	2.46	62.5	1 3/4"	<b>8VEPOF8</b>
1 1/4"	1 1/4" - 11 1/2 NPTF	4.40	111.8	2.70	68.6	2 3/16"	<b>10VEPF10</b>
1 1/4"	1 1/4" - 11 BSPP	4.40	111.8	2.70	68.6	2 3/16"	<b>10VEPBF10</b>
1 1/4"	1 5/8" - 12 ORB	4.40	111.8	2.70	68.6	2 3/16"	<b>10VEPOF10</b>
1 1/2"	1 1/2" - 11 1/2 NPTF	5.28	134.1	3.74	95.0	2 1/2"	<b>12VEPF12</b>
1 1/2"	1 1/2" - 11 BSPP	5.28	134.1	3.74	95.0	2 1/2"	<b>12VEPBF12</b>
1 1/2"	1 7/8" - 12 ORB	5.28	134.1	3.74	95.0	2 1/2"	<b>12VEPOF12</b>
2"	2" - 11 1/2 NPTF	9.42	239.3	7.39	187.7	3 1/2"	<b>16VEPF16</b>
2"	2" - 11 BSPP	9.42	239.3	7.39	187.7	3 1/2"	<b>16VEPBF16</b>
2"	2" - 12 ORB	9.42	239.3	7.39	187.7	3 1/2"	<b>16VEPOF16</b>

## Female Threaded Plugs



Size	Thread	Length		Maximum OD		Hex Inch	Part #
		in	mm	in	mm		
1/4"	1/4" - 18 NPTF	2.67	67.8	1.35	34.3	7/8"	<b>VEP2F2</b>
1/4"	1/4" - 19 BSPP	2.67	67.8	1.35	34.3	7/8"	<b>VEP2BF2</b>
1/4"	9/16" - 18 ORB	2.67	67.8	1.35	34.3	7/8"	<b>VEP2OF3</b>
3/8"	3/8" - 18 NPTF	3.28	83.3	1.48	37.6	1"	<b>VEP3F3</b>
3/8"	3/8" - 19 BSPP	3.28	83.3	1.48	37.6	1"	<b>VEP3BF3</b>
3/8"	3/4" - 16 ORB	3.50	88.9	1.48	37.6	1"	<b>VEP3OF4</b>
3/8"	1/2" - 14 NPTF	3.50	88.9	1.48	37.6	1 1/8"	<b>VEP3F4</b>
3/8"	1/2" - 14 BSPP	3.50	88.9	1.48	37.6	1 1/8"	<b>VEP3BF4</b>
1/2"	1/2" - 14 NPTF	3.87	98.3	1.86	47.2	1 3/16"	<b>VEP4F4</b>
1/2"	1/2" - 14 BSPP	3.87	98.3	1.86	47.2	1 3/16"	<b>VEP4BF4</b>
1/2"	3/4" - 16 ORB	3.87	98.3	1.86	47.2	1 3/16"	<b>VEP4OF4</b>
1/2"	7/8" - 14 ORB	3.97	100.8	1.86	47.2	1 1/4"	<b>VEP4OF5</b>
1/2"	3/4" - 14 NPTF	4.07	103.4	1.86	47.2	1 1/2"	<b>VEP4F6</b>
1/2"	3/4" - 14 BSPP	4.07	103.4	1.86	47.2	1 1/2"	<b>VEP4BF6</b>
1/2"	1 1/16" - 12 ORB	4.27	108.5	1.86	47.2	1 1/2"	<b>VEP4OF6</b>
3/4"	3/4" - 14 NPTF	4.12	104.6	1.98	50.3	1 1/2"	<b>VEP6F6</b>
3/4"	3/4" - 14 BSPP	4.12	104.6	1.98	50.3	1 1/2"	<b>VEP6BF6</b>
3/4"	1 1/16" - 12 ORB	4.12	104.6	1.98	50.3	1 1/2"	<b>VEP6OF6</b>
1"	1" - 11 1/2 NPTF	4.95	125.7	2.20	55.9	1 3/4"	<b>VEP8F8</b>
1"	1" - 11 BSPP	4.95	125.7	2.20	55.9	1 3/4"	<b>VEP8BF8</b>
1"	1 5/16" - 12 ORB	4.95	125.7	2.20	55.9	1 3/4"	<b>VEP8OF8</b>
1 1/4"	1 1/4" - 11 1/2 NPTF	5.43	137.9	2.73	69.3	2 3/16"	<b>VEP10F10</b>
1 1/4"	1 1/4" - 11 BSPP	5.43	137.9	2.73	69.3	2 3/16"	<b>VEP10BF10</b>
1 1/4"	1 5/8" - 12 ORB	5.43	137.9	2.73	69.3	2 3/16"	<b>VEP10OF10</b>
1 1/2"	1 1/2" - 11 1/2 NPTF	6.63	168.4	3.74	95.0	2 1/2"	<b>VEP12F12</b>
1 1/2"	1 1/2" - 11 BSPP	6.63	168.4	3.74	95.0	2 1/2"	<b>VEP12BF12</b>
1 1/2"	1 7/8" - 12 ORB	6.63	168.4	3.74	95.0	2 1/2"	<b>VEP12OF12</b>
2"	2" - 11 1/2 NPTF	11.08	281.4	5.70	144.8	3 1/2"	<b>VEP16F16</b>
2"	2" - 11 BSPP	11.08	281.4	5.70	144.8	3 1/2"	<b>VEP16BF16</b>
2"	2" - 12 ORB	11.08	281.4	5.70	144.8	3 1/2"	<b>VEP16OF16</b>



## Code 62

### Flange Head Couplers



flange head coupler

Body Size	Port Size	Steel Part #
3/4"	3/4"	<b>6VEPFH6</b>
1"	1"	<b>8VEPFH8</b>
1 1/4"	1 1/4"	<b>10VEPFH10</b>
1 1/2"	1 1/2"	<b>12VEPFH12</b>
2"	2"	<b>16VEPFH16</b>

### Flange Head Plugs



flange head plug

Body Size	Port Size	Steel Part #
3/4"	3/4"	<b>VEP6FH6</b>
1"	1"	<b>VEP8FH8</b>
1 1/4"	1 1/4"	<b>VEP10FH10</b>
1 1/2"	1 1/2"	<b>VEP12FH12</b>
2"	2"	<b>VEP16FH16</b>

### Flange Pad Couplers



flange pad coupler

Body Size	Port Size	Steel Part #
3/4"	3/4"	<b>6VEFPF6</b>
1"	1"	<b>8VEFPF8</b>
1 1/4"	1 1/4"	<b>10VEFPF10</b>
1 1/2"	1 1/2"	<b>12VEFPF12</b>
2"	2"	<b>16VEFPF16</b>

### Flange Pad Plugs



flange pad plug

Body Size	Port Size	Steel Part #
3/4"	3/4"	<b>VEP6FP6</b>
1"	1"	<b>VEP8FP8</b>
1 1/4"	1 1/4"	<b>VEP10FP10</b>
1 1/2"	1 1/2"	<b>VEP12FP12</b>
2"	2"	<b>VEP16FP16</b>

## Dust Caps and Dust Plugs



Size	Material	Part #
1/4"	aluminum	<b>VEP2DC-A</b>
3/8"	aluminum	<b>VEP3DC-A</b>
1/2"	aluminum	<b>VEP4DC-A</b>
3/4"	aluminum	<b>VEP6DC-A</b>
1"	aluminum	<b>VEP8DC-A</b>
1 1/4"	aluminum	<b>VEP10DC-A</b>
1 1/2"	aluminum	<b>VEP12DC-A</b>
2"	aluminum	<b>VEP16DC-A</b>

Size	Material	Part #
1/4"	aluminum	<b>2VEPDP-A</b>
3/8"	aluminum	<b>3VEPDP-A</b>
1/2"	aluminum	<b>4VEPDP-A</b>
3/4"	aluminum	<b>6VEPDP-A</b>
1"	aluminum	<b>8VEPDP-A</b>
1 1/4"	aluminum	<b>10VEPDP-A</b>
1 1/2"	aluminum	<b>12VEPDP-A</b>
2"	aluminum	<b>16VEPDP-A</b>

## VEP-BOP Series Hydraulic Couplings

**Features:**

- red powder coated components and external O-rings for easy BOP service identification
- steel components are plated using ROHS compliant zinc nickel
- blow-out preventer (BOP) coupling critical seals are severe service FKM
- interchangeable with Stucchi VEP/VEP-HD Series, DNP FSI-BOP Series

**Specification:**

- pressure rating **5000 PSI**

**Approvals:**

- BOP couplings have been fire tested and Lloyd's certified to **1300°F (700°C)** in accordance with API 16D
- certificate available upon request

### Female Threaded Couplers

Body Size	Threads	Steel Part #
3/8"	3/8" - 18 NPTF	<b>3VEPF3-BOP</b>
1/2"	1/2" - 14 NPTF	<b>4VEPF4-BOP</b>
3/4"	3/4" - 14 NPTF	<b>6VEPF6-BOP</b>
1"	1" - 11 1/2 NPTF	<b>8VEPF8-BOP</b>
1 1/4"	1 1/4" - 11 1/2 NPTF	<b>10VEPF10-BOP</b>
1 1/2"	1 1/2" - 11 1/2 NPTF	<b>12VEPF12-BOP</b>



### Female Threaded Plugs

Body Size	Threads	Steel Part #
3/8"	3/8" - 18 NPTF	<b>VEP3F3-BOP</b>
1/2"	1/2" - 14 NPTF	<b>VEP4F4-BOP</b>
3/4"	3/4" - 14 NPTF	<b>VEP6F6-BOP</b>
1"	1" - 11 1/2 NPTF	<b>VEP8F8-BOP</b>
1 1/4"	1 1/4" - 11 1/2 NPTF	<b>VEP10F10-BOP</b>
1 1/2"	1 1/2" - 11 1/2 NPTF	<b>VEP12F12-BOP</b>



Dixon, founded in 1916, is a premier manufacturer and supplier of hose couplings, valves, dry-disconnects, swivels, and other fluid transfer and control products. The company's global reach includes a wide range of products for numerous industries including petroleum exploration, refining, transportation, chemical processing, food & beverage, steel, fire protection, construction, mining and manufacturing. Dixon's strategic objective is to create solutions that make products safer, leak-free, longer lasting, and always available.



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