



VEP SERIES

The **VEP Series** is a popular solution for hydraulic circuit applications subject to high pressure impulses and circuits which experience high residual or trapped pressure in a line. Thread-to-connect design eliminates premature wear or brinelling, a patented internal valve allows connection/disconnection with high residual pressures, and the flat face design avoids loss of hydraulic fluid and contamination into the circuit. A yellow o-ring indicator makes the VEP series even easier to work with.

Categories: [Skid Steer Hydraulic Couplers](#), [Threaded Flat Face Couplers](#) Tags: [Industry: Aerospace](#), [Industry: Industrial](#), [Industry: Mobile](#), [Industry: Oil & Gas](#)

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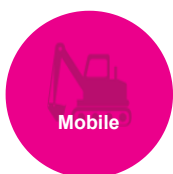
DESCRIPTION

FEATURES

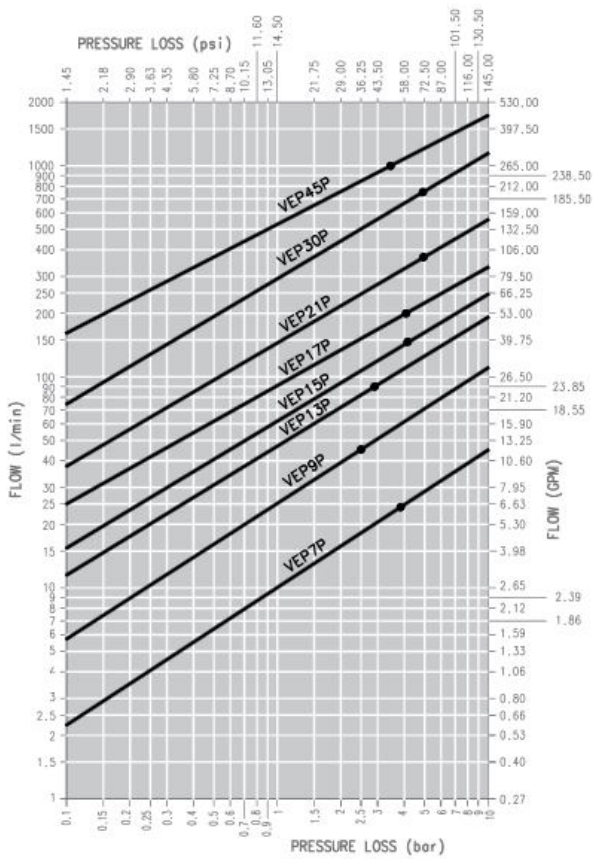
- Size range: 1/4" thru 2"
- Port options: NPT, SAE, BSP, ORFS
- Interchanges with VEPHD, VEPHDL Series
- Connect/disconnect up to 25 MPa/3625 psi residual pressure
- Working pressure: 35-60 MPa/5075-8700 psi range
- Eliminates brinelling, reduces leakage
- Saves time changing tools

APPLICATIONS

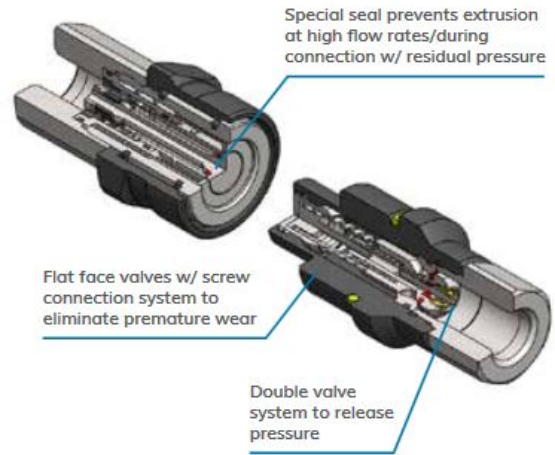
- All construction equipment applications with higher pressure requirements or connection/disconnection issues with tool attachments under residual pressure
- All large equipment needing junction points in circuit: cranes, drilling machines, oil field, well head drives, porta-power
- Excavators w/ auxiliary line for attachments: thumbs, grapples, hammers, compactors/hopaks



Pressure Drop



OIL = ISO VG32, TEMP = 40C, VISCOSITY = 28.8-35.2 MM²/S

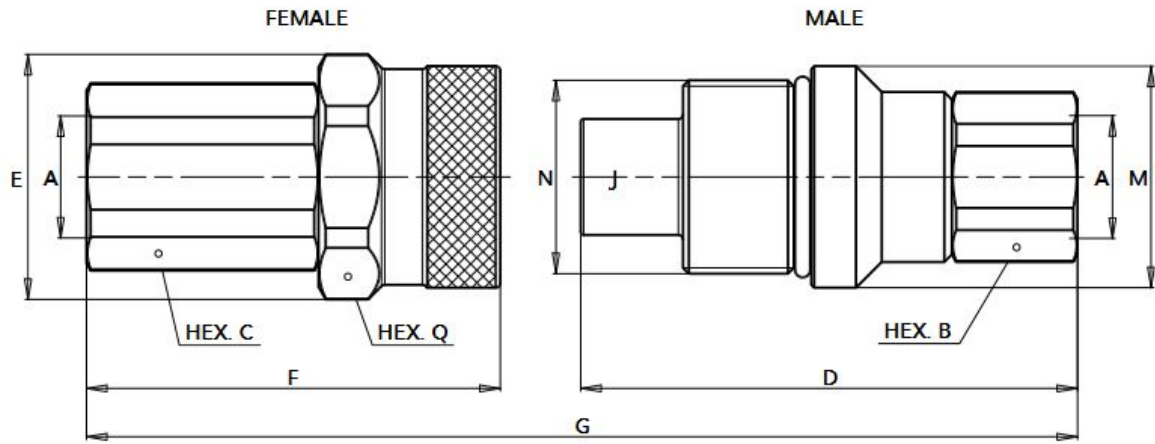


Performance

Burst Pressure												
Description	Size	Max Operating Pressure Coupled		COUPLED		MALE		FEMALE		Max Residual Pressure after Coupling		Spillage *
		MPa	psi	MPa	psi	MPa	psi	MPa	psi	MPa	psi	
VEP7P	1/4	60	8700	150	21750	150	21750	126	18270	30	4350	0.012
VEP9P	3/8	55	7975	140	20300	140	20300	100	14500	25	3625	0.040
VEP13P	1/2	55	7975	140	20300	140	20300	100	14500	25	3625	0.025
VEP15P	3/4	55	7975	140	20300	140	20300	100	14500	25	3625	0.033
VEP17P	1	50	7250	125	18125	125	18125	100	14500	25	3625	0.018
VEP21P	1 1/4	47	6815	120	17400	120	17400	80	11600	25	3625	0.060
VEP30P	1 1/2	40	5800	110	15950	110	15950	80	11600	25	3625	0.200
VEP45P	2	35	5075	110	15950	110	15950	80	11600	25	3625	0.350

3625

Size Diagram



													WEIGHT			
DESC.	BODY SIZE	A	UNIT	B	C	D	E	F	G	M	N	G	UNIT	MALE	FEMALE	
VEP7P	1/4	1/4	mm	22.0	27.0	71.0	38.8	54.1	113.3	34.8		36.0	kg	0.235	0.25	
			inch	0.87	1.06	2.80	1.53	2.13	4.46	1.37	M30X2	1.42	lb	0.52	0.55	
VEP9P	3/8	3/8	mm	27.0	30.0	82.5	41.8	65.8	131.3	37.8		38.0	kg	0.325	0.335	
			inch	1.06	1.18	3.25	1.65	2.59	5.17	1.49	M33X2	1.50	lb	0.72	0.74	
VEP9P	3/8	1/2	mm	27.0	30.0	85.0	41.8	70.8	138.8	37.8		38.0	kg	0.320	0.345	
			inch	1.06	1.18	3.35	1.65	2.79	5.46	1.49	M33X2	1.50	lb	0.71	0.76	
VEP13P	1/2	1/2	mm	36.0	36.0	95.0	49.8	77.8	154.6	45.8		46.0	kg	0.605	0.635	
			inch	1.42	1.42	3.74	1.96	3.06	6.09	1.80	M40X3	1.81	lb	1.33	1.40	
VEP13P	1/2	3/4	mm	36.0	36.0	97.4	49.8	84.8	164.0	45.8		46.0	kg	0.59	0.60	
			inch	1.42	1.42	3.83	1.96	3.34	6.46	1.80	M40X3	1.81	lb	1.30	1.32	
VEP15P	3/4	3/4	mm	36.0	41.0	99.0	53.8	84.9	165.4	49.8		50.0	kg	0.69	0.765	
			inch	1.42	1.61	3.90	2.12	3.34	6.51	1.96	M45X3	1.97	lb	1.52	1.69	
VEP17P	1	3/4	mm	46.0	46.0	113.6	58.8	96.7	187.5	54.8		55.0	kg	1.065	1.168	
			inch	1.81	1.81	4.47	2.31	3.81	7.38	2.16	M50X3	2.17	lb	2.35	2.57	
VEP17P	1	1	mm	46.0	46.0	113.6	58.8	99.7	190.5	54.8		55.0	kg	1.025	1.115	
			inch	1.81	1.81	4.47	2.31	3.93	7.50	2.16	M50X3	2.17	lb	2.26	2.46	
VEP21P	1 1/4	1	mm	55.0	55.0	123.4	69.8	105.8	205.2	64.5		65.0	kg	1.540	1.780	
			inch	2.17	2.17	4.86	2.75	4.17	8.08	2.54	M58X3	2.56	lb	3.40	3.92	
VEP21P	1 1/4	1 1/4	mm	55.0	55.0	123.4	69.8	106.8	206.2	64.5		65.0	kg	1.465	1.700	
			inch	2.17	2.17	4.86	2.75	4.20	8.12	2.54	M58X3	2.56	lb	3.23	3.75	
VEP30P	1 1/2	1 1/4	mm	65.0	65.0	150.0	92.0	133.5	253.9	89.8		85.0	kg	3.245	3.910	
			inch	2.56	2.56	5.91	3.62	5.26	10.00	3.54	M80X4	3.35	lb	7.15	8.62	
VEP30P	1 1/2	1 1/2	mm	65.0	65.0	150.0	92.0	133.5	253.9	89.8		85.0	kg	3.18	3.84	
			inch	2.56	2.56	5.91	3.62	5.26	10.00	3.54	M80X4	3.35	lb	7.01	8.47	
VEP45P	2	2	mm	90.0	90.0	218.4	200.0	224.8	383.5	145.0		0.00	kg	11.67	14.76	

VEP NPT Thread Flat Face Thread Coupling with High Residual Pressure

PART	BODY SIZE	PORT SIZE	THREAD TYPE	ORDER CODE	PART DESCRIPTION
VEP NPT THREAD					
COUPLER	1/4	1/4	NPT	806501008	F. VEP7 1/4 NPT
NIPPLE	1/4	1/4	NPT	806501009	M. VEP7 1/4 NPT
COUPLER	3/8	3/8	NPT	806501002	F. VEP9P 3/8 NPT
NIPPLE	3/8	3/8	NPT	806501003	M. VEP9P 3/8 NPT
COUPLER	3/8	1/2	NPT	806501014	F. VEP9P 1/2 NPT
NIPPLE	3/8	1/2	NPT	806501015	M. VEP9P 1/2 NPT
COUPLER	1/2	1/2	NPT	806501000	F. VEP13P 1/2 NPT
NIPPLE	1/2	1/2	NPT	806501001	M. VEP13P 1/2 NPT
COUPLER	1/2	3/4	NPT	806501016	F. VEP13P 3/4 NPT
NIPPLE	1/2	3/4	NPT	806501017	M. VEP13P 3/4 NPT
COUPLER	3/4	3/4	NPT	806501004	F. VEP15P 3/4 NPT
NIPPLE	3/4	3/4	NPT	806501005	M. VEP15P 3/4 NPT
COUPLER	1	1	NPT	806501006	F. VEP17P 1 NPT
NIPPLE	1	1	NPT	806501007	M. VEP17P 1 NPT
COUPLER	1 1/4	1 1/4	NPT	806501010	F. VEP21P 1 1/4 NPT
NIPPLE	1 1/4	1 1/4	NPT	806501011	M. VEP21P 1 1/4 NPT
COUPLER	1 1/2	1 1/2	NPT	806501012	F. VEP30P 1 1/2 NPT
NIPPLE	1 1/2	1 1/2	NPT	806501013	M. VEP30P 1 1/2 NPT
COUPLER	2	2	NPT	807201018	F. VEP45P 2 NPT
NIPPLE	2	2	NPT	807201019	M. VEP45P 2 NPT
VEP BSP THREAD					
COUPLER	3/8	3/8	BSP	807200002	F. VEP9P 3/8 BSP
NIPPLE	3/8	3/8	BSP	807200003	M. VEP9P 3/8 BSP
COUPLER	1/2	1/2	BSP	807200006	F. VEP13P 1/2 BSP
NIPPLE	1/2	1/2	BSP	807200007	M. VEP13P 1/2 BSP
COUPLER	3/4	3/4	BSP	807200010	F. VEP15P 3/4 BSP
NIPPLE	3/4	3/4	BSP	807200011	M. VEP15P 3/4 BSP
COUPLER	1	1	BSP	807200012	F. VEP17P 1 BSP
NIPPLE	1	1	BSP	807200013	M. VEP17P 1 BSP
COUPLER	1 1/4	1	BSP	807200020	F. VEP21P 1 BSP
NIPPLE	1 1/4	1	BSP	807200021	M. VEP21P 1 BSP
COUPLER	1 1/4	1 1/4	BSP	807200014	F. VEP21P 1 1/4 BSP
NIPPLE	1 1/4	1 1/4	BSP	807200015	M. VEP21P 1 1/4 BSP
COUPLER	1 1/2	1 1/2	BSP	807200016	F. VEP30P 1 1/2 BSP
NIPPLE	1 1/2	1 1/2	BSP	807200017	M. VEP30P 1 1/2 BSP
COUPLER	2	2	BSP	807200018	F. VEP45P 2 BSP

VEP SAE and Flange Thread Flat Face Thread Coupling with High Residual Pressure

COUPLER	1/4	3/8	SAE	806504008	F. VEP7 3/8 SAE
NIPPLE	1/4	3/8	SAE	806504009	M. VEP7 3/8 SAE
COUPLER	3/8	3/8	SAE	806504014	F. VEP9P 3/8 SAE
NIPPLE	3/8	3/8	SAE	806504015	M. VEP9P 3/8 SAE
COUPLER	3/8	1/2	SAE	806504000	F. VEP9P 1/2 SAE
NIPPLE	3/8	1/2	SAE	806504001	M. VEP9P 1/2 SAE
COUPLER	1/2	1/2	SAE	807204006	F. VEP13P 1/2 SAE*
NIPPLE	1/2	1/2	SAE	807204007	M. VEP13P 1/2 SAE*
COUPLER	1/2	3/4	SAE	806504004	F. VEP13P 3/4 SAE
NIPPLE	1/2	3/4	SAE	806504005	M. VEP13P 3/4 SAE
COUPLER	3/4	3/4	SAE	806504006	F. VEP15P 3/4 SAE
NIPPLE	3/4	3/4	SAE	806504007	M. VEP15P 3/4 SAE
COUPLER	1	1	SAE	806504002	F. VEP17P 1 SAE
NIPPLE	1	1	SAE	806504003	M. VEP17P 1 SAE
COUPLER	1 1/4	1 1/4	SAE	806504010	F. VEP21P 1 1/4 SAE
NIPPLE	1 1/4	1 1/4	SAE	806504011	M. VEP21P 1 1/4 SAE
COUPLER	1 1/2	1 1/2	SAE	806504012	F. VEP30P 1 1/2 SAE
NIPPLE	1 1/2	1 1/2	SAE	806504013	M. VEP30P 1 1/2 SAE
COUPLER	2	2	SAE	807204018	F. VEP45P 2 SAE
NIPPLE	2	2	SAE	807204019	M. VEP45P 2 SAE
COUPLER	2	2	FLANGE HEAD	807224018	F. VEP45P 2 CODE 62 FH
NIPPLE	2	2	FLANGE HEAD	807224019	M. VEP45P 2 CODE 62 FH
COUPLER	2	2	FLANGE PAD	807224020	F. VEP45P 2 CODE 62 FP
NIPPLE	2	2	FLANGE PAD	807224021	M. VEP45P 2 CODE 62 FP
COUPLER	2	2	NPT	807201026	F. VEP45P GG 2 NPT*

ADDITIONAL INFORMATION

Body Size	<u>1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"</u>
Port Options	<u>BSP, NPT, ORFS, SAE</u>
Port Size	<u>1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"</u>
Valve Style	<u>Flat Face</u>
Working Pressure	<u>5000-9000</u>

Related products

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**WING STYLE SERIES**

The **Wing Style Series Rugged Wing Nut** provides reliable service wherever a coupling is required to connect under pressure with minimum spillage and air inclusion.

[Read more](#)

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**SV2 PLATE SERIES**

The **SV2 Series of Multi-Coupling Plates** allows the simultaneous couple and uncouple of two large diameter hydraulic lines with a single, simple movement requiring very little force. The system eliminates crossing of lines, reducing downtime and insuring couplers are fully connected. The auto-locking system insures that lines are connected safely and provides secondary retention of the connection.

[Read more](#)

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VEPHD SERIES

The **VEPHD (Heavy Duty) Series** offers the same features of the VEP series, with upgraded material, a yellow o-ring visual ID, and larger mating areas. Like the VEP, the VEPHD is a popular solution for hydraulic circuit applications subject to high pressure impulses and circuits which experience high residual or trapped pressure in a line, offered in a more durable, higher grade of steel and all QPQ plating for increased longevity.

[Read more](#)

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BIR SERIES

The **BIR Series ISO A Interchange Couplers** are one of the most popular designs worldwide, due to their durability and use of a poppet style valve for the sealing mechanism. The BIR series features a zinc plated steel coupler and zinc plated hardened steel nipple, with nitrile seals. They are available from size 1/4 to 2 inches in size, to cover the various fields of hydraulic applications.

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