

5100 Series/Low Spill—Connect Under Pressure











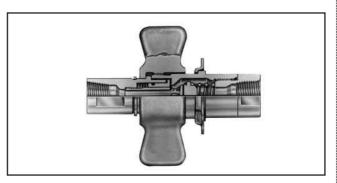










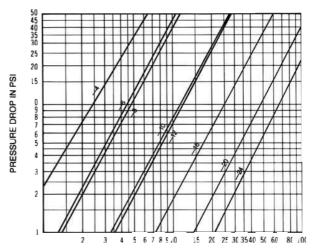


The 5100 Series brass coupling with steel tubular valve offers minimum air inclusion and fluid loss. Thread together latch provides connect under pressure capability and vibration resistance. It is not rated for continuous hydraulic impulse applications. (See FD86 on page 69.)

- Tubular valve construction for virtually no fluid loss during disconnection, reduces environmental and worker safety hazards.
- Low air inclusion during connection maintains system performance.
- Available with wing or hex nut configurations.
- Connect against pressure capability allows connecting of halves even when pressurized up to 500 psi.
- Steel flange available for accessible bulkhead mounting.
- Standard seal material Buna-N.
- Standard body material Brass with steel valving components, hex and wing nuts.

Flow Data

PRESSURE DROP VERSUS FLOW GRAPH



GALLONS PER MINUTE FLOW (TEST FLUID MIL-H-5606 HYDRAULIC OIL AT 100°F.)

Physical Characteristics

Coupling	Coupling	Maximum Operating	Maximum Oper (psi disco	rating Pressure nnected)		Rated	Air	Fluid Loss (cc max.)
Dash Size	Interface Size	Pressure* (psi connected)	Male Half S2 and S4	Female Half S5	Vacuum (in./Hg.)	Flow (gpm)	Inclusion (cc max.)	
-4	-4	3000	3000	3000	28	4	.03	.01
-6	-8	3000	3000	3000	28	7	.05	.06
-8	-8	3000	3000	3000	28	7	.05	.10
-10	-12	3000	3000	3000	28	18	.14	.10
-12	-12	3000	3000	3000	28	18	.34	.26
-16	-16	3000	3000	3000	28	40	.50	.35
-20	-20	2750	2500	2750	28	75	.68	.70
-24	-24	2500	2500	2000	28	100	.60	.94

*Minimum burst pressure is equal to three times the maximum operating pressure. Not recommended for continuous hydraulic impulse applications at maximum operating pressures.



For component part number breakdown and service instructions, request bulletin JB41.

5400 0 :		Thread	Dimensional Data			ata	Part Number			Line
5100 Series		Size (P)	Α	В	(1)	<u>(2)</u>	Buna-N	Viton	EPR	Ref.
Male Half/Less Flange	-4	1 _{/8} -27	1.88	.90	.69		5100-S2-4B			1
Female Pipe	-6	1/ ₄ -18	2.58	1.07	.94		5100-S2-4B			2
	-8	³ / ₈ -18	2.58	1.07	.94		5100-S2-8B			3
<u></u>	-10	1/2-14	3.11	1.38	_		5100-S2-0B			4
	-12	3/ ₄ -14	3.11	1.38			5100–S2–10B			5
I II I I I I I I I I I I I I I I I I I	-16	1-111/2		1.76			5100–S2–12B			6
		1 ¹ / ₄ -11 ¹ / ₂					5100-S2-10B			7
		11/2-111/2					5100-S2-24B			8
Male Half/With Flange	-4	1/ ₈ -27	1.88	.90	.94	-	5100-S4-4B			9
Female Pipe	-6	1/ ₄ -18	2.58	1.07	_		5100-S4-6B			10
	-8	³ / ₈ -18	2.58	1.07			5100-S4-8B			11
A — — — — — — — — — — — — — — — — — — —	-10	1/2-14	3.11	1.38			5100–S4–10B			12
	-12	3/ ₄ -14	3.11	1.38			5100–S4–10B			13
	-16	1-111/2		1.76			5100-S4-16B			14
, <u>1</u>	-20	1 ⁻ 11 ⁻ / ₂ 1 ¹ / ₄ -11 ¹ / ₂					5100–34–16B 5100–S4–20B			15
	-20 -24	1 ¹ / ₄ -11 ¹ / ₂ 1 ¹ / ₂ -11 ¹ / ₂					5100–S4–20B 5100–S4–24B			16
Female Half/Wing Nut	-24 -4	1/ ₂ -11/ ₂ 1/ ₈ -27	1.97		.56		5100–S4–24B 5100–S5–4B			17
Female Pipe	-4	1/ ₄ -18		3.44	.76		5100-S5-6B			18
A	-8	3/ ₈ -18		3.44	.76		5100–S5–8B			19
	-10	¹ / ₂ -14		4.06			5100–35–8B 5100–S5–10B			20
	-12	3/ ₄ -14		4.06			5100–S5–10B			21
	-12	1-111/2		4.38			5100–S5–12B			22
		_		5.19			5100–S5–10B			23
	-20 -24	11/2-111/2					5100–S5–24B			24
Female Half/Hex Nut	-24	1/8-27	2.10			1.19	5110–S5–4B			25
Female Pipe	- 4	1/ ₄ -18	2.40	1.53		1.38	5110–35–4B 5110–S5–6B			26
	_8	³ / ₈ -18	2.40	1.53	.76		5110–S5–8B			27
A	-10	¹ / ₂ -14	3.07		1.16		5110–35–6B 5110–S5–10B			28
	-10	³ / ₄ -14	3.07		1.16		5110–S5–10B			29
В	-12	1-11 ¹ / ₂		2.41			5110–S5–12B 5110–S5–16B			30
		_					5110–S5–16B 5110–S5–20B			31
(1) (2)							5110–S5–20B 5110–S5–24B			
Complete Coupling	-24 -4	1 ¹ / ₂ -11 ¹ / ₂ 1/ ₈ -27	3.20	3.10	2.00	2./5	5110–S5–24B 5101–4B			32
Less Flange/With Wing Nut/	- 4 -6	1/ ₈ -27	4.11				5101–4B 5101–6B			34
Female Pipe	_ 6	¹ / ₄ -18	4.11				5101–6B 5101–8B			35
A	-8 -10	¹ / ₂ -14	5.21				5101–8B 5101–10B			36
	-10	¹ / ₂ -14 ³ / ₄ -14	5.21				5101–10B 5101–12B			37
	-12 -16	1-11 ¹ / ₂	5.21				5101–12B 5101–16B			37
		1-11 ¹ / ₂ 1 ¹ / ₄ -11 ¹ / ₂					5101–16B 5101–20B			39
							5101–20B 5101–24B			40
Repair Kit	-24 -4	11/2-111/2	0.52				FF098-04			40
Each kit will repair male and female							FF098-04 FF098-08			41
halves.	-6, -8			-			FF098-08 FF098-12			_
	-10, -12									43
	-16 20						FF098-16			44
	-20						FF098-20			45
	-24						FF098–24			46

FLUID TRANSFER & HYDRAULIC

For component part number breakdown and service instructions, request bulletin JB41.

E100 Carias	Coupling Size	Thread Size (P)	Dimensional Data			ata	Part Number			
5100 Series			Α	В	(1)	(2)	Buna-N	Viton	EPR	Line Ref.
Complete Coupling	-4	1/8-27	3.24				5100–4B			1
With Flange/With Wing Nut/	-6	1 _{/4} -18	4.11				5100–6B			2
Female Pipe	-8	³ / ₈ -18	4.11				5100–8B			3
	-10	1/2-14	5.21				5100-10B			4
	-12	³ / ₄ -14	5.21				5100-12B			5
	-16	1-11 ¹ / ₂	5.99				5100–16B			6
	-20	1 ¹ / ₄ -11 ¹ / ₂	6.33				5100-20B			7
	-24	11/2-111/2	6.54				5100-24B			8
Complete Coupling	-4	¹ / ₈ -27	3.20				5111–4B			9
Less Flange/With Hex Nut/ Female Pipe	-6	¹ / ₄ -18	4.11				5111–6B			10
r cinale r ipo	-8	³ / ₈ -18	4.11				5111–8B			11
A	-10	¹ / ₂ -14	5.21				5111–10B			12
	-12	3/4-14	5.21				5111–12B			13
	-16	1-11 ¹ / ₂	5.98				5111–16B			14
	-20	11/4-111/2	6.31				5111–20B			15
	-24	1 ¹ / ₂ -11 ¹ / ₂	6.52				5111–24B			16
Complete Coupling	-4	1/ ₈ -27	3.20				5110–4B			17
With Flange/With Hex Nut/ Female Pipe	-6	¹ / ₄ -18	4.11				5110–6B			18
i emale ripe	-8	³ / ₈ -18	4.11				5110–8B			19
A	-10	¹ / ₂ -14	5.21				5110–10B			20
	-12	³ / ₄ -14	5.21				5110–12B			21
	-16	1-11 ¹ / ₂	5.98				5110–16B			22
	-20	1 ¹ / ₄ -11 ¹ / ₂	6.31				5110-20B			23
	-24	11/2-111/2	6.52				5110-24B			24
Repair Kit	-4						FF098-04			25
Each kit will repair male and female halves.	-6, -8						FF098-08			26
	-10, -12						FF098-12			27
	-16						FF098–16			28
	-20						FF098-20			29
	-24						FF098-24			30
Accessories							Dust Cap with Chain	Dust Plug with Chain	6 Bolt Flange	31
Dust Cap Dust Plug with Chain** with Chain**	-4						5100-S7-5	5100-S9-5		32
with Grain	-6, -8						5100-S7-8	5100-S9-8		33
	-10, -12						5100-S7-12	5100-S9-12		34
	-16						5100-S7-16	5100-S9-16		35
	-20						5100-S7-20	5100-S9-20		36
C and Come 3	-24						5100-S7-24	5100-S9-24		37
										38
										39
6 Bolt Flange*	-4		.201	1.44					150–22–5	40
A Dia	-6, -8		.201	1.69					150–22–8	41
	-10, -12		.201	2.12					150–22–12	42
	-16		.201	2.38					150–22–16	43
Bott Circle	-20		.201	2.62					150-22-20	44
Dia.	-24		.201	3.25					5100–22–24S	45

^{*6} Bolt Flange-holes equally spaced. (See "A" for bolt hole diameter, and "B" for bolt circle diameter).

**To order caps and plugs without chain, order cap by part number 5100-32-(size) and plug by part number 5100-41-(size).