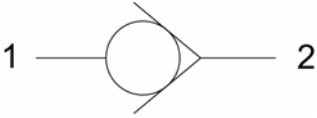
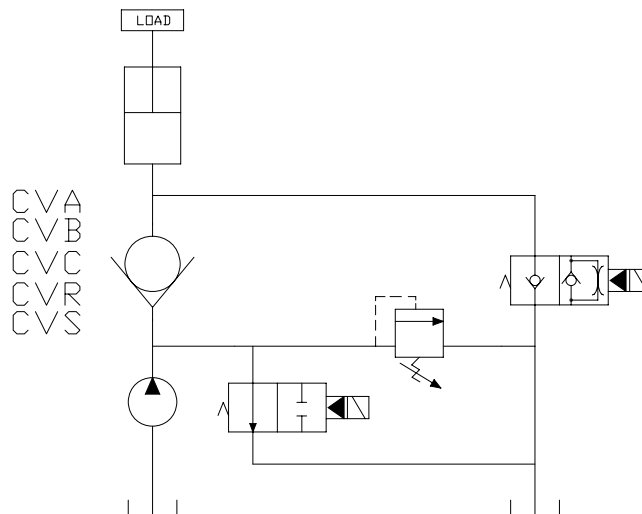


Direct Acting Check Valves

	GPM	PSI	LPM	BAR	MODEL	PAGE
	5	3500	19	241	MA-CVA	
	15	3500	57	241	DE-CVA	
	15	5000	57	345	HE-CVA	
	35	5000	132	345	HT-CVA	
	40	3500	151	241	SJ-CVA	
	10	3500	38	241	DE-CVB	
	10	3500	38	241	PB-CVC	
	15	3500	57	241	DE-CVC	
	15	3500	57	241	DE-CVR	
	35	5000	132	345	HT-CVR	
	2.5	1500	9.5	103	MA-CVS	
	5	3500	19	241	PB-CVS	
	10	1000	38	69	DE-CVS	

Typical Schematic

Typical application for the CVA, CVB, CVC, CVR, and CVS is load holding in a lift, check, or dump circuit.



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**MA-CVA Direct Acting Check Valve, Poppet**

**DESCRIPTION**

7 size, 5/8-18 thread, "Mini" series, direct acting check valve.

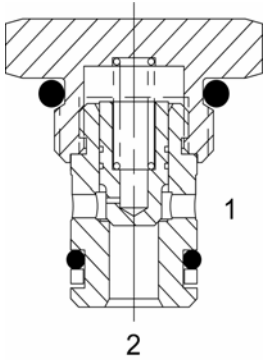
**OPERATION**

The MA-CVA allows flow passage from (2) to (1), while normally blocking oil flow from (1) to (2).

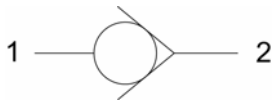
The cartridge has a fully guided poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

- Hardened parts for long life and low leakage.
- Optional bias springs for backpressure application flexibility.
- Fully guided poppet.
- Industry common cavity.

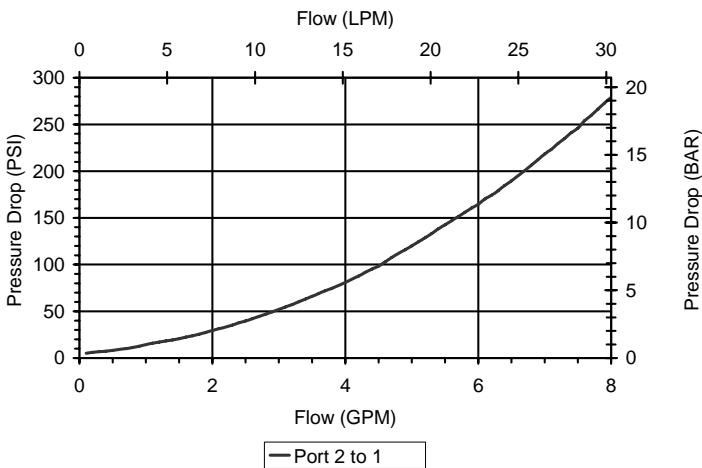


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

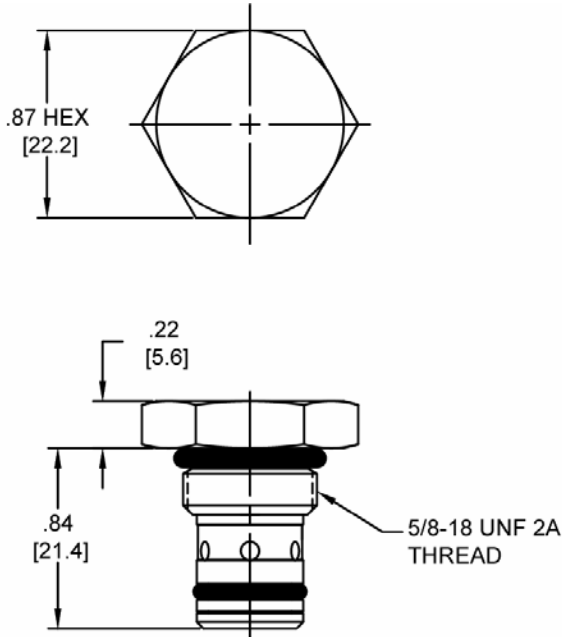


**VALVE SPECIFICATIONS**

Nominal Flow	5 GPM (19 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.08 lbs. (.03 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	15 ft-lbs (20.3 Nm)
Cavity	MINI 2W
Cavity Tools kit (form tool, reamer, tap)	40500003
Seal Kit	21191000

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>MA-CVA</b>		-	-	-	-
<u>OPTIONS</u>					<u>BODIES</u>
Buna Standard	<b>00</b>				Blank
Viton Standard	<b>V0</b>				Without Body
					<b>N</b> 1/4" BSP Ports
					<b>S</b> #6 SAE Ports
					<u>CRACK PRESSURE</u>
				<b>0005</b>	5 PSI
				<b>0020</b>	20 PSI
					±10%

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**DE-CVA Direct Acting Check Valve, Poppet**

**DESCRIPTION**

10 size, 7/8-14 thread, "Delta" series, direct acting check valve.

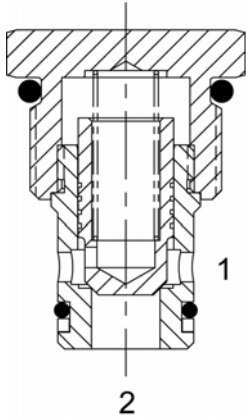
**OPERATION**

The DE-CVA allows free flow passage from (2) to (1), and blocks flow from (1) to (2).

The cartridge has a fully guided check poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

- Hardened parts for long life and low leakage.
- Optional bias springs for backpressure application flexibility.
- Fully guided poppet assembly.
- Industry common cavity.

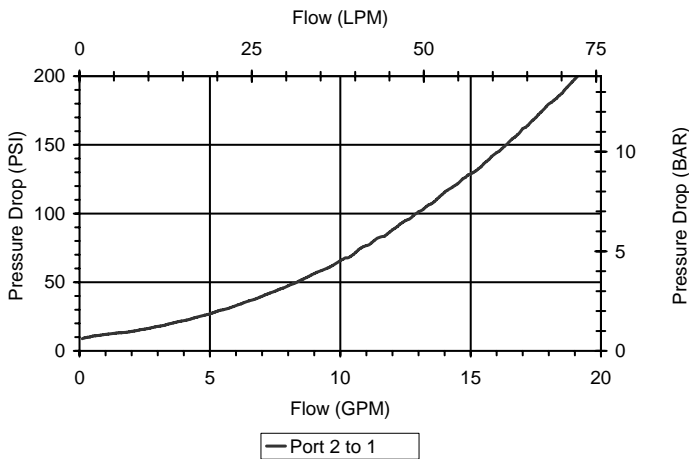


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

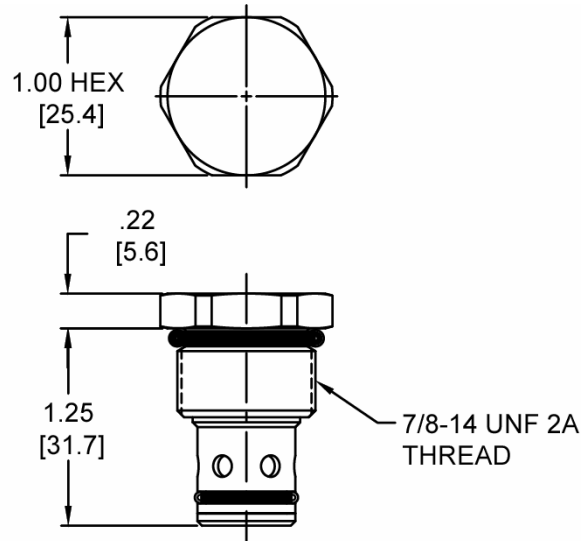


**VALVE SPECIFICATIONS**

Nominal Flow	15 GPM (57 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.15 lbs. (.07 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191000

**WARNING:** The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>DE-CVA</b> -		-	-	-
<b>OPTIONS</b>				<b>BODIES</b>
Buna Standard	<b>00</b>			Blank Without Body
Viton Standard	<b>V0</b>			<b>N</b> 3/8" BSP Ports
				<b>S</b> #8 SAE Ports
			<b>CRACK PRESSURE</b>	
		<b>0010</b>	10 PSI	
		<b>0035</b>	35 PSI	
		<b>0070</b>	70 PSI	
		<b>0100</b>	100 PSI	
			± 10%	

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**HE-CVA Direct Acting Check Valve, Poppet**

**DESCRIPTION**

“High Pressure” 10 size, 7/8-14 thread, “Delta” series, direct acting check valve.

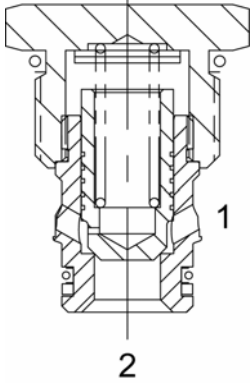
**OPERATION**

The HE-CVA allows free flow passage from (2) to (1), and blocks flow from (1) to (2).

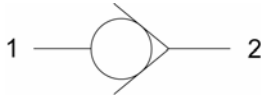
The cartridge has a fully guided check poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

- Hardened parts for long life and low leakage.
- Optional bias springs for backpressure application flexibility.
- Fully guided poppet assembly.
- Industry common cavity.

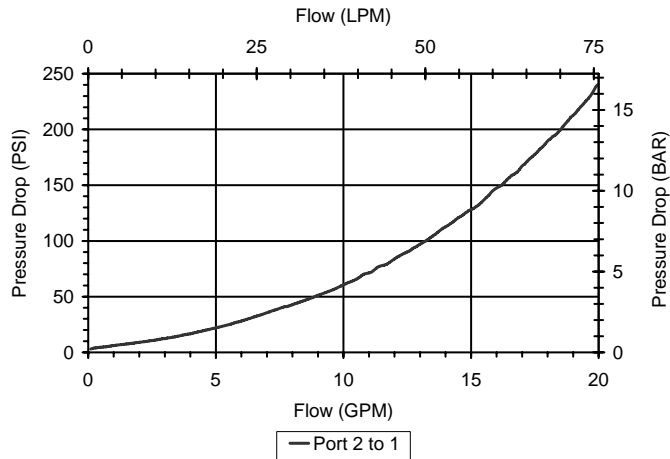


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

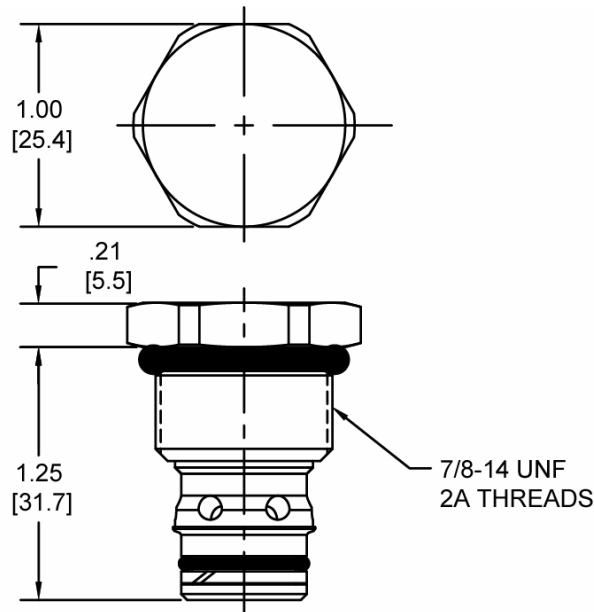


**VALVE SPECIFICATIONS**

Nominal Flow	15 GPM (57 LPM)
Rated Operating Pressure	5000 PSI (345 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	1.23 lbs. (.56 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Form Tool (Finishing)	40500000
Seal Kit	21191000

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

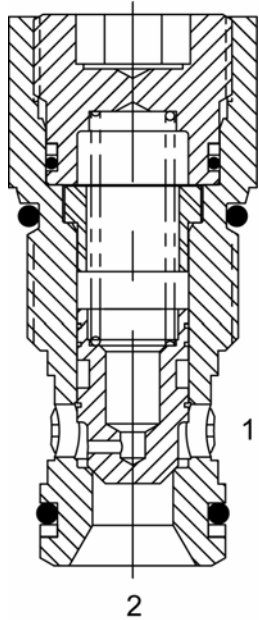
**ORDERING INFORMATION**

<b>HE-CVA</b>		-	-	-	-
<u>OPTIONS</u>					<u>BODIES</u>
Buna Standard	00				Consult Factory
Viton Standard	V0				
					<u>CRACK PRESSURE</u>
			0005		5 PSI
			0010		10 PSI
			0020		20 PSI
			0035		35 PSI
			0070		70 PSI
			0090		90 PSI
			0135		135 PSI
			0150		150 PSI
					± 10%

**WARNING**  
DO NOT USE ALUMINUM BODY  
HIGH PRESSURE (5000 PSI) PRODUCT.

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*HT-CVA Direct Acting Check Valve, Poppet*



**DESCRIPTION**

"High Pressure" 12 size, 1 1/16-12 thread, "Tecnorm" series, direct acting check valve.

**OPERATION**

The HT-CVA allows flow passage from (2) to (1), while normally blocking oil flow from (1) to (2).

The cartridge has a fully guided poppet, which is spring biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

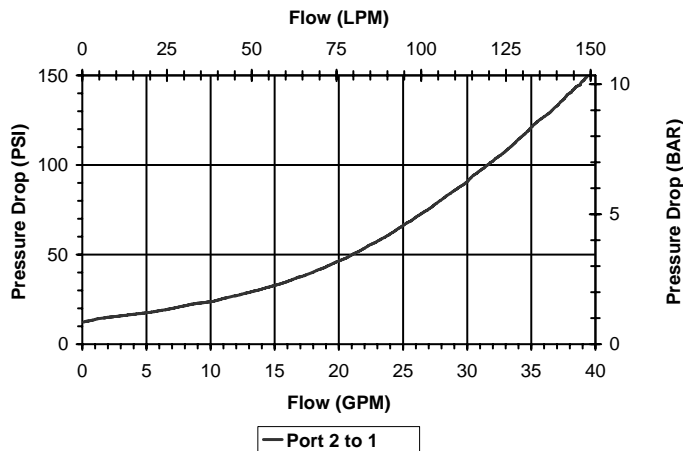
- Hardened parts for long life and low leakage.
- Industry common cavity.
- Optional bias springs for backpressure application flexibility.

**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)



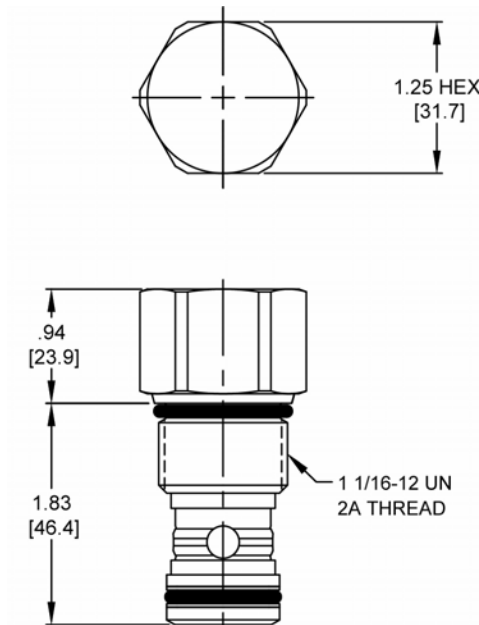
**VALVE SPECIFICATIONS**

Nominal Flow	35 GPM (132 LPM)
Rated Operating Pressure	5000 PSI (345 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.55 lbs. (.25 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	70 ft-lbs (95 Nm)
Cavity	TECNORD 2W
Cavity Tools kit (form tool, reamer, tap)	40500032
Seal Kit	21191300

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**DIMENSIONS**



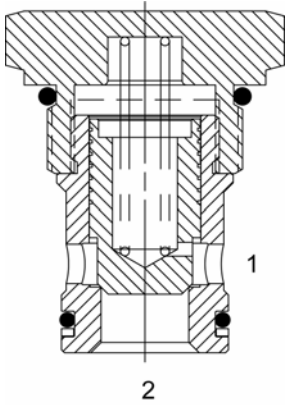
(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>HT-CVA</b>		-	-	-	-
<b>OPTIONS</b>					<b>BODIES</b>
Buna Standard	<b>00</b>			Blank	Without Body
Viton Standard	<b>V0</b>			<b>N</b>	3/4" BSP Ports
				<b>S</b>	#12 SAE Ports
				<b>CRACK PRESSURE</b>	
			<b>0010</b>	10 PSI	
			<b>0030</b>	30 PSI	
			<b>0050</b>	50 PSI	
				+/- 10%	

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**SJ-CVA Direct Acting Check Valve, Poppet**



**DESCRIPTION**

16 size, 1 5/16-12 thread, "Super" series, direct acting check valve.

**OPERATION**

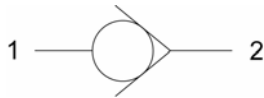
The SJ-CVA allows free flow from (2) to (1) and blocks flow from (1) to (2).

The cartridge has a fully guided poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

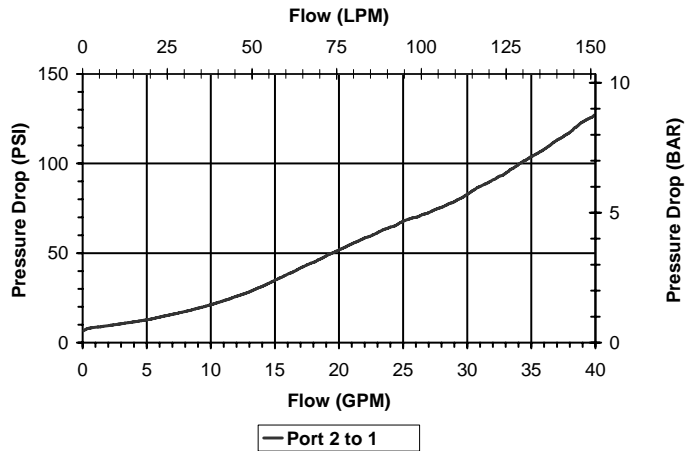
- Hardened parts for long life and low leakage.
- Industry common cavity.
- Optional bias springs for backpressure application flexibility.

**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

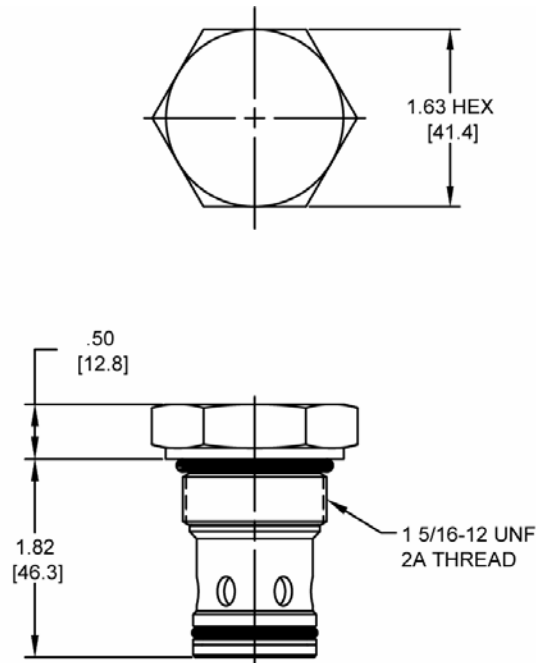


**VALVE SPECIFICATIONS**

Nominal Flow	40 GPM (151 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.67 lbs. (.30 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Cavity	SUPER 2W
Cavity Tools kit (form tool, reamer, tap)	40500017
Seal Kit	21191400

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>SJ-CVA</b> - - -		
<b>OPTIONS</b>		<b>BODIES</b>
Buna Standard	<b>00</b>	Blank
Viton Standard	<b>V0</b>	<b>N</b> Without Body
		<b>S</b> 3/4" BSP Ports
		#12 SAE Ports
		<b>CRACK PRESSURE</b>
	<b>0005</b>	5 PSI
	<b>0010</b>	10 PSI
	<b>0030</b>	30 PSI
	<b>0050</b>	50 PSI
		±10%

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DE-CVB Direct Acting Check Valve, Ball

**DESCRIPTION**

10 size, 7/8-14 thread, "Delta" series, direct acting, check valve.

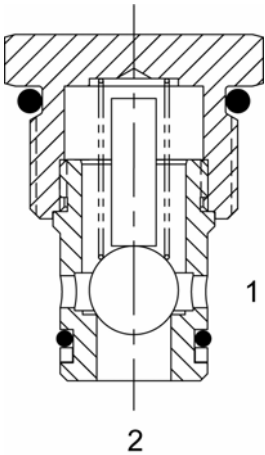
**OPERATION**

The DE-CVB allows free flow passage from (2) to (1), and blocks flow from (1) to (2).

The cartridge has a fully guided check poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

- Hardened seat for long life and low leakage.
- Optional bias springs for backpressure application flexibility.
- Industry common cavity.

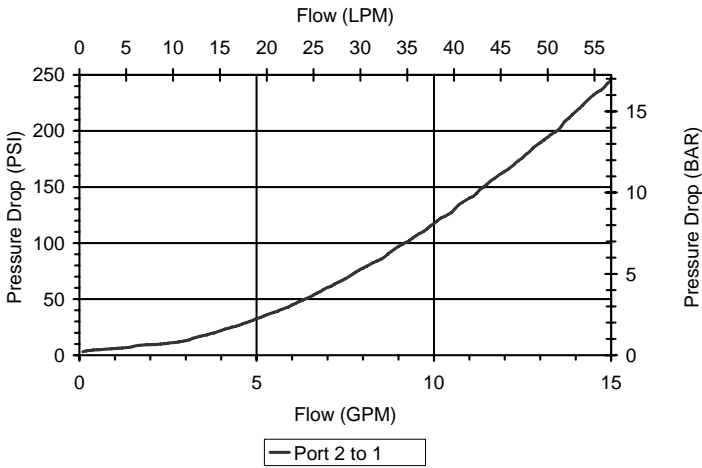


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

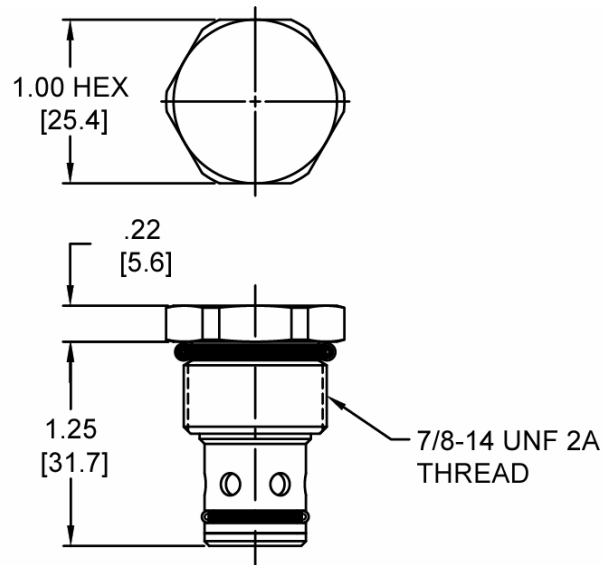


**VALVE SPECIFICATIONS**

Nominal Flow	10 GPM (38 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.14 lbs. (.06 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191000

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>DE-CVB</b>		-	-	-	-
<b>OPTIONS</b>					<b>BODIES</b>
Buna Standard	<b>00</b>			Blank	Without Body
Viton Standard	<b>V0</b>			<b>N</b>	3/8" BSP Ports
				<b>S</b>	#8 SAE Ports
				<b>CRACK PRESSURE</b>	
			<b>0005</b>	05 PSI	
			<b>0015</b>	15 PSI	
				± 10%	

±

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**PB-CVC Direct Acting Check Valve, Guided Ball**

**DESCRIPTION**

8 size, 3/4-16 thread, "Power" series, direct acting check valve.

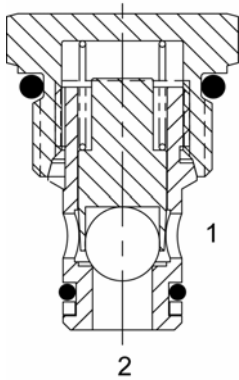
**OPERATION**

The PB-CVC allows free flow passage from (2) to (1), and blocks flow from (1) to (2).

The cartridge has a fully guided check poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

- Hardened parts for long life and low leakage.
- Optional bias springs for back-pressure application flexibility.
- Fully guided ball assembly.
- Industry common cavity.

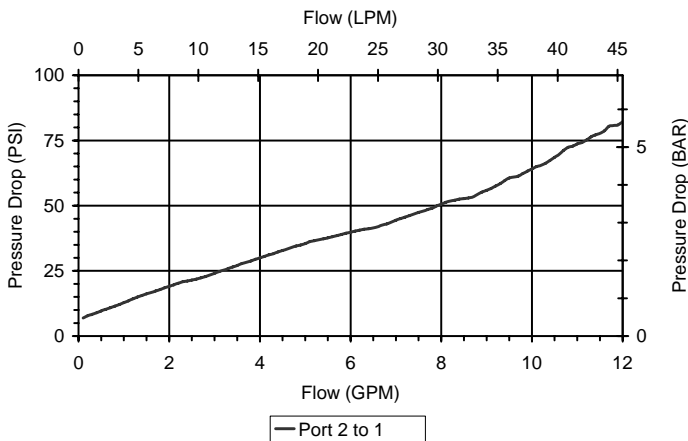


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

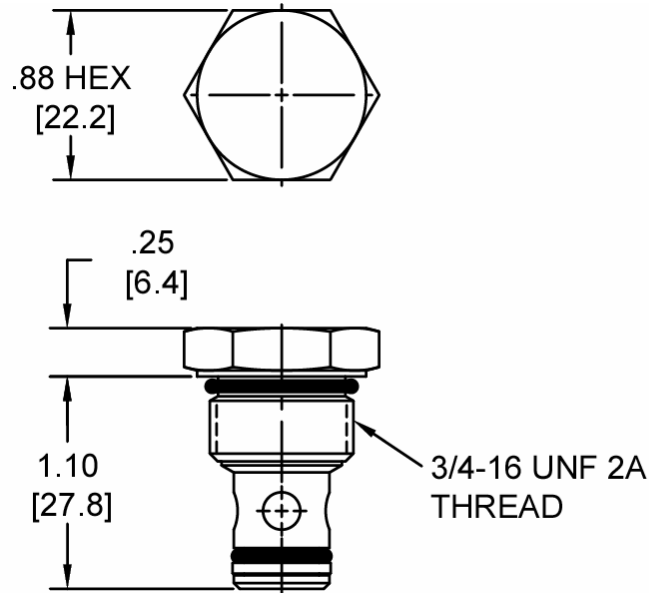


**VALVE SPECIFICATIONS**

Nominal Flow	10 GPM (38 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.10 lbs. (.05 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	25 ft-lbs (34 Nm)
Cavity	POWER 2W
Cavity Tools kit (form tool, reamer, tap)	40500005
Seal Kit	21191100

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**DIMENSIONS**



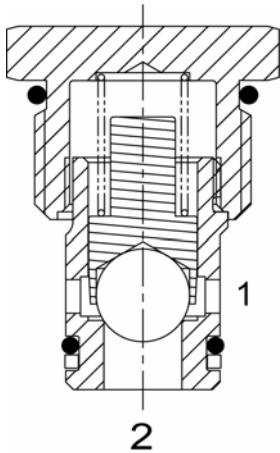
(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>PB-CVC</b>		-	-	-	-
<b>OPTIONS</b>					<b>BODIES</b>
Buna Standard	<b>00</b>			Blank	Without Body
Viton Standard	<b>V0</b>			<b>N</b>	1/4" BSP Ports
				<b>S</b>	#6 SAE Ports
					<b>CRACK PRESSURE</b>
			<b>0005</b>		5 PSI
			<b>0020</b>		20 PSI
			<b>0030</b>		30 PSI
			<b>0050</b>		50 PSI
					±10%

**WARNING:** The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

**DE-CVC Direct Acting Check Valve, Guided Ball**



**DESCRIPTION**

10 size, 7/8-14 thread, "Delta" series, direct acting check valve.

**OPERATION**

The DE-CVC allows free flow passage from (2) to (1), and blocks flow from (1) to (2).

The cartridge has a fully guided hardened ball, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

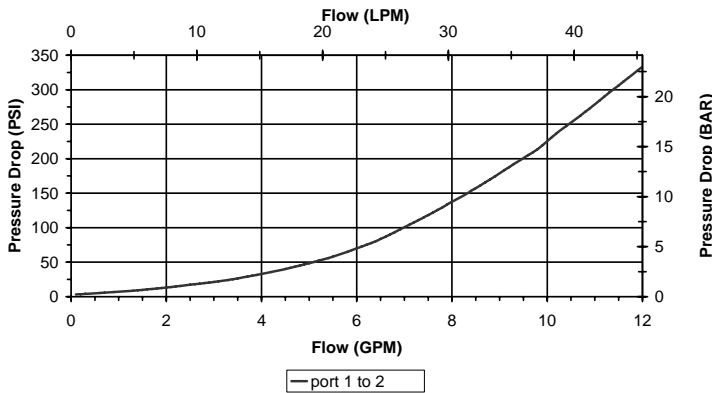
- Hardened parts for long life and low leakage.
- Optional bias springs for back-pressure application flexibility.
- Fully guided ball assembly.
- Industry common cavity.

**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)



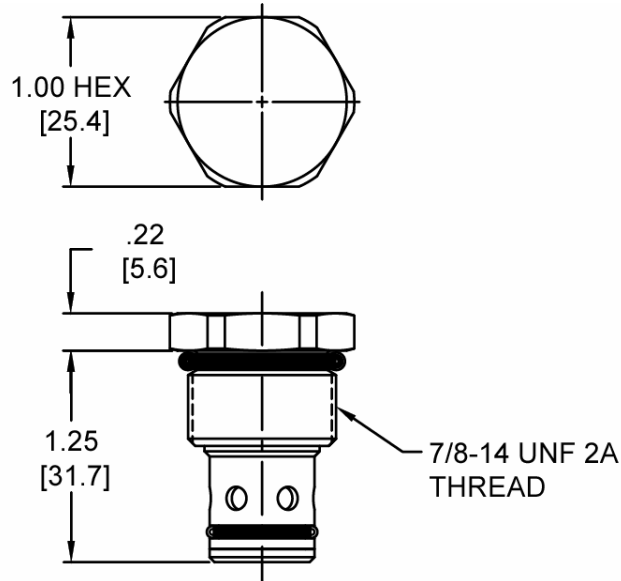
**VALVE SPECIFICATIONS**

Nominal Flow	8 GPM (30 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.15 lbs. (.07 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	25 ft-lbs (34 Nm)
Cavity	DELTA 2W
Cavity Form Tool (Finishing)	40500000
Seal Kit	21191200

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>DE-CVC</b> -		-	-	-
<b>OPTIONS</b>				<b>BODIES</b>
Buna Standard	<b>00</b>			Blank
Viton Standard	<b>V0</b>			<b>N</b> 3/8 NPTF Ports
				<b>S</b> #8 SAE Ports
				<b>CRACK PRESSURE</b>
		<b>0003</b>	3 PSI	
		<b>0005</b>	5 PSI	
		<b>0010</b>	10 PSI	
		<b>0020</b>	20 PSI	
		<b>0035</b>	35 PSI	
		<b>0050</b>	50 PSI	
		<b>0075</b>	75 PSI	
		<b>0095</b>	95 PSI	
			± 10%	

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*DE-CVR Reverse Flow Check Valve, Poppet*

**DESCRIPTION**

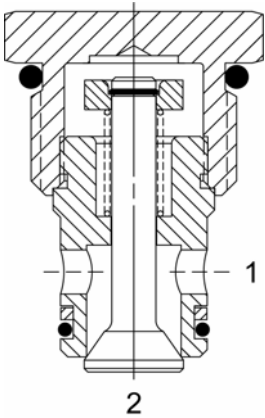
10 size, 7/8-14 thread, "Delta" series, reverse flow check valve.

**OPERATION**

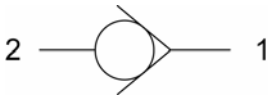
The DE-CVR allows free flow (1) to (2) and blocks flow from (2) to (1).

**FEATURES**

- Hardened parts for long life and low leakage.
- Industry common cavity.
- Optional bias springs for backpressure application flexibility.

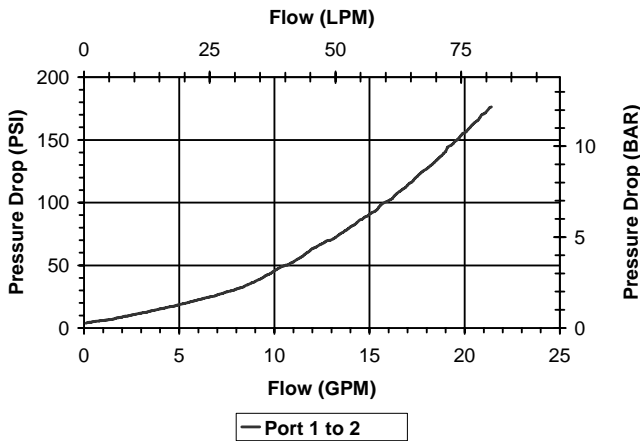


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

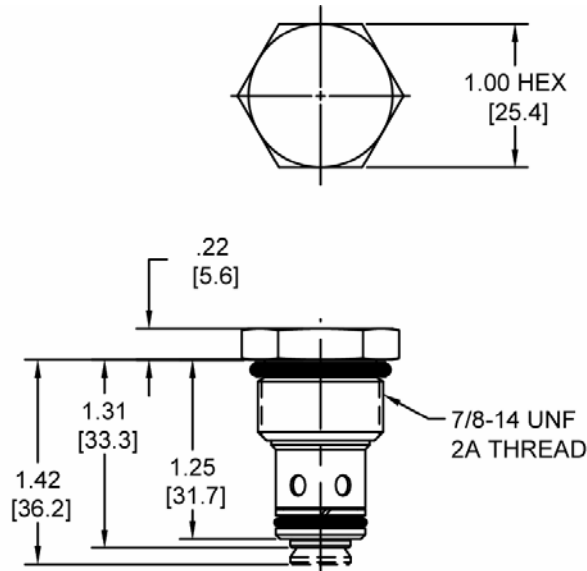


**VALVE SPECIFICATIONS**

Nominal Flow	15 GPM (57 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	0-5 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.15 lbs. (.07 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191204

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>DE-CVR</b> -		-	-	-
<b>OPTIONS</b>				<b>BODIES</b>
Buna Standard	<b>00</b>			Blank
Viton Standard	<b>V0</b>			<b>N</b>
				<b>S</b>
				Without Body
				3/8" BSP Ports
				#8 SAE Ports
			<b>0005</b>	<b>CRACK PRESSURE</b>
			<b>0025</b>	5 PSI
				25 PSI
				±10%

±

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HT-CVR Reverse Flow Check Valve, Poppet

**DESCRIPTION**

"High Pressure" 12 size, 1 1/16-12 thread, "Tecnorm" series, reverse flow check valve.

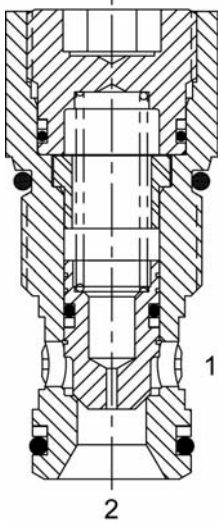
**OPERATION**

The HT-CVR allows free flow from (1) to (2) and blocks flow from (2) to (1).

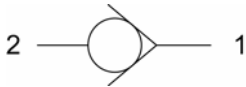
The cartridge has a fully guided poppet, which is spring biased closed, until sufficient pressure is applied at (1) to open to (2).

**FEATURES**

- Hardened parts for long life and low leakage.
- Industry common cavity.
- Optional bias springs for backpressure application flexibility.

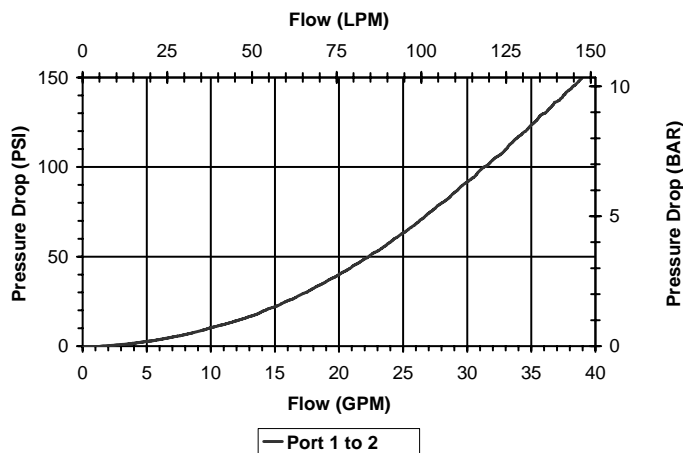


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

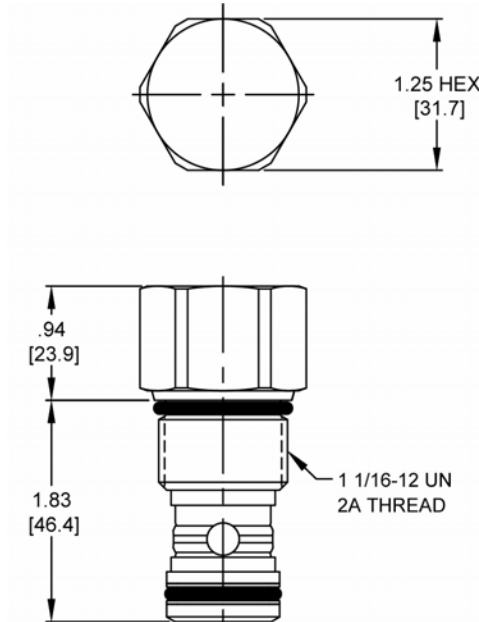


**VALVE SPECIFICATIONS**

Nominal Flow	35 GPM (132 LPM)
Rated Operating Pressure	5000 PSI (345 bar)
Typical Internal Leakage (150 SSU)	0-8 drops/min
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.55 lbs. (.25 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	70 ft-lbs (95 Nm)
Cavity	TECNORD 2W
Cavity Tools kit (form tool, reamer, tap)	40500032
Seal Kit	21191300

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>HT-CVR</b>		-	-	-	-
<u>OPTIONS</u>					<u>BODIES</u>
Buna Standard	<b>00</b>			Blank	Without Body
Viton Standard	<b>V0</b>			<b>N</b>	3/4" BSP Ports
				<b>S</b>	#12 SAE Ports
					<u>CRACK PRESSURE</u>
			<b>0010</b>	10 PSI	
			<b>0030</b>	30 PSI	
			<b>0050</b>	50 PSI	
				+/- 10%	

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**MA-CVS Direct Acting Check Valve, Soft Seat, Poppet**

**DESCRIPTION**

7 size, 5/8-18 Thread, "Mini" series, direct acting check valve, soft seat, poppet.

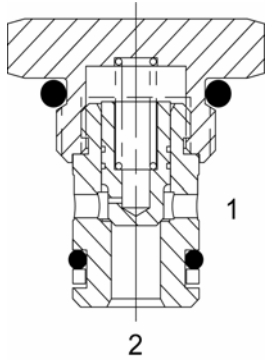
**OPERATION**

The MA-CVS allows free flow (2) to (1) and blocks flow from (1) to (2).

The cartridge has a fully guided poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open (1).

**FEATURES**

- Soft seat for ultra low leakage.
- Industry common cavity.
- Optional bias springs for backpressure application flexibility.
- Fully guided poppet.

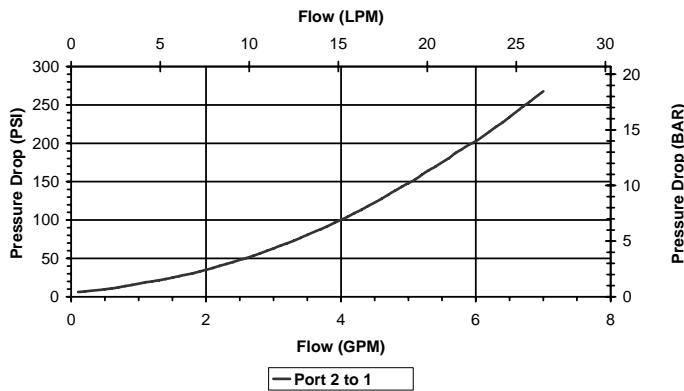


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

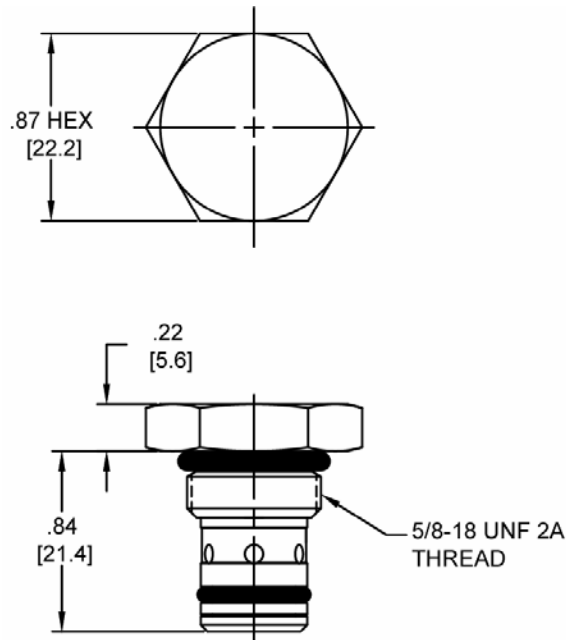


**VALVE SPECIFICATIONS**

Nominal Flow	2.5 GPM (9.5 LPM)
Rated Operating Pressure	1500 PSI (103 bar)
Typical Internal Leakage (150 SSU)	Negligible
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	32° to 160° F (0° to 70° C)
Weight	.08 lbs. (.03 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	15 ft-lbs (20.3 Nm)
Cavity	MINI 2W
Cavity Tools kit (form tool, reamer, tap)	40500003
Seal Kit	21191000

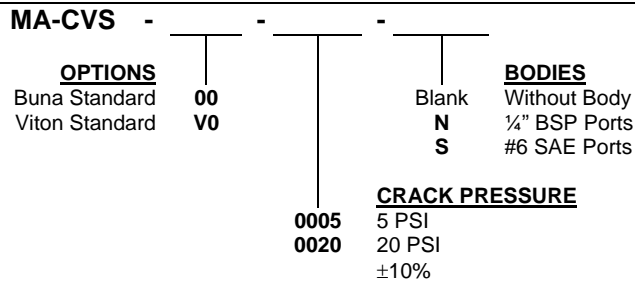
**WARNING:** The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

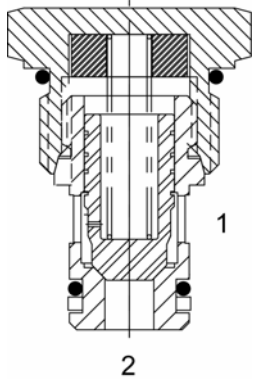


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**PB-CVS Direct Acting Check Valve, Soft Seat, Poppet**

**DESCRIPTION**

8 size, 3/4-16 thread, "Power" series, direct acting check valve, soft seat, poppet.



**OPERATION**

The PB-CVS allows free flow passage from (2) to (1), and blocks flow from (1) to (2).

The cartridge has a fully guided poppet, which is spring-biased closed, until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

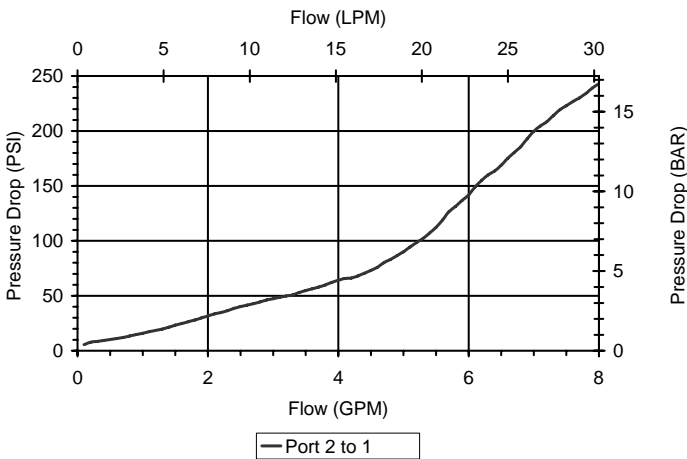
- Soft seat for ultra low leakage.
- Optional bias springs for backpressure application flexibility.
- Fully guided poppet assembly.
- Industry common cavity.

**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)



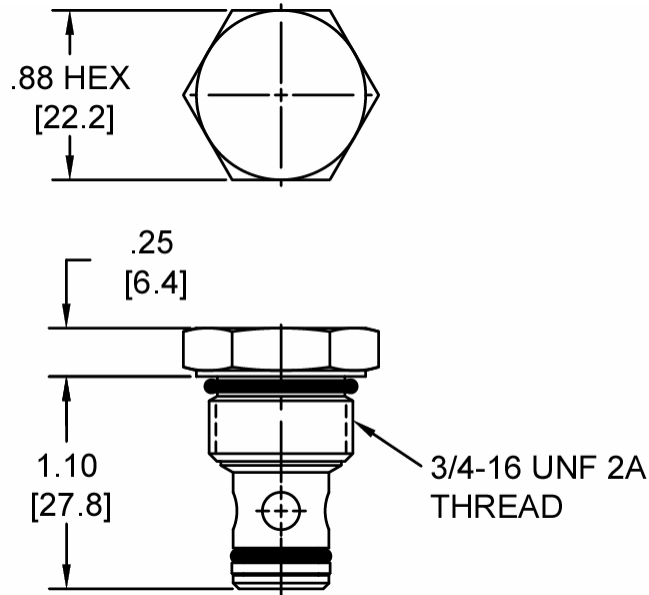
**VALVE SPECIFICATIONS**

Nominal Flow	5 GPM (19 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	Negligible
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-35° to 200° F (-37° to 93° C)
Weight	.09 lbs. (.04 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	POWER 2W
Cavity Tools kit (form tool, reamer, tap)	40500005
Seal Kit	21191100

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>PB-CVS</b>		-	-	-	-
<b>OPTIONS</b>					<b>BODIES</b>
Buna Standard	<b>00</b>				Without Body
Viton Standard	<b>V0</b>				1/4" BSP Ports
					#6 SAE Ports
					<b>CRACK PRESSURE</b>
				<b>0005</b>	5 PSI
				<b>0020</b>	20 PSI
				<b>0030</b>	30 PSI
				<b>0050</b>	50 PSI
					±10%

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**DE-CVS Direct Acting Check Valve, Soft Seat, Poppet**

**DESCRIPTION**

10 size, 7/8-14 thread, "Delta" series, soft seat check valve.

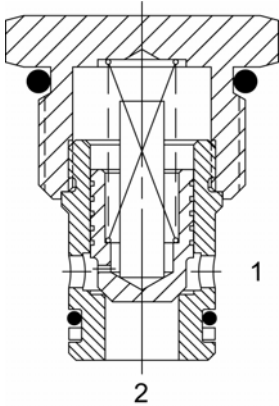
**OPERATION**

The DE-CVS allows flow to pass from (2) to (1) and blocks flow from (1) to (2).

The cartridge has a fully guided check poppet, which is spring-biased closed until sufficient pressure is applied at (2) to open to (1).

**FEATURES**

- Soft seat for ultra low leakage.
- Industry common cavity.
- Optional bias springs for backpressure application flexibility.

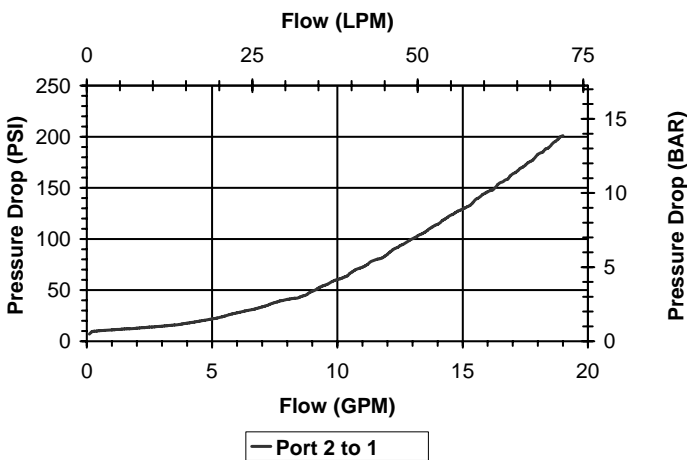


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

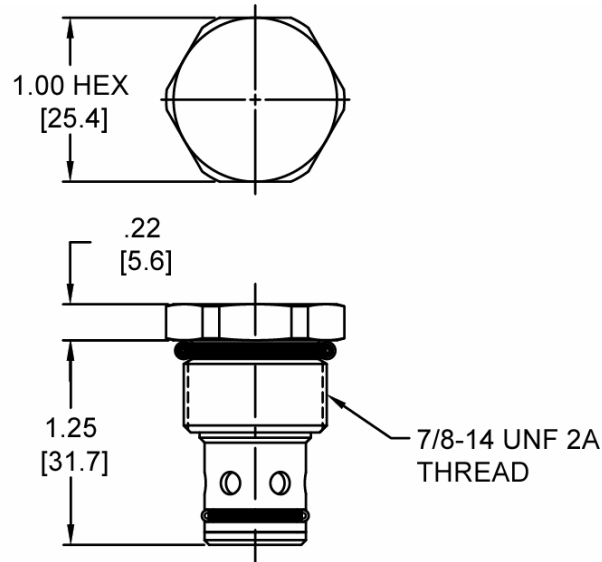


**VALVE SPECIFICATIONS**

Nominal Flow	10 GPM (38 LPM)
Rated Operating Pressure	1000 PSI (69 bar)
Typical Internal Leakage (150 SSU)	Negligible
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	32° to 160° F (0° to 70° C)
Weight	.14 lbs. (.06 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191200

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**DIMENSIONS**



(for bodies style and sizes see section "Accessories")

**ORDERING INFORMATION**

<b>DE-CVS</b>		-	-	-	-
<b>OPTIONS</b>					<b>BODIES</b>
Buna Standard	<b>00</b>			Blank	Without Body
Viton Standard	<b>V0</b>			<b>N</b>	3/8" BSP Ports
				<b>S</b>	#8 SAE Ports
					<b>CRACK PRESSURE</b>
			0010		10 PSI
					±15%

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**QS-CVL Check Valve, Insert Type**

**DESCRIPTION**

Special cavity, insert type, direct acting check valve.

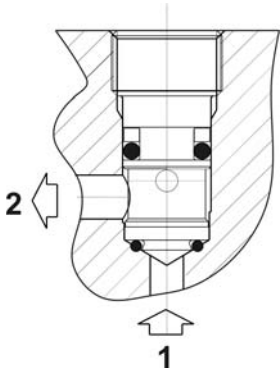
**OPERATION**

The QS-CVL allows free flow passage from (1) to (2).

The valve is commonly used on load sensing lines to sense the working pressure of the functions of the circuit. The check valve is without spring inside.

**FEATURES**

- Hardened parts for long life.

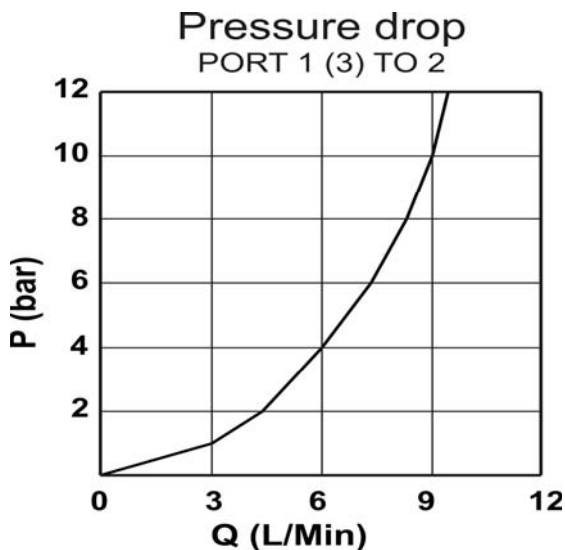


**HYDRAULIC SYMBOL**



**PERFORMANCE**

Actual Test Data (Cartridge Only)

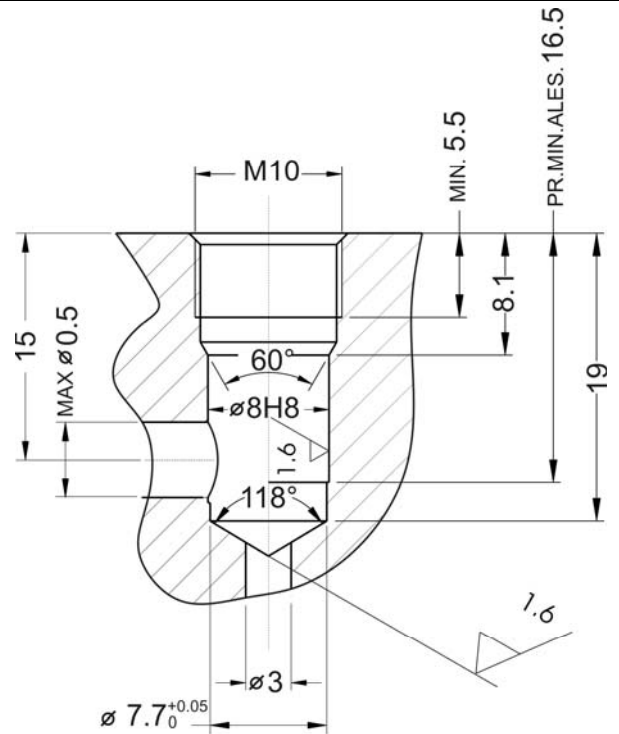
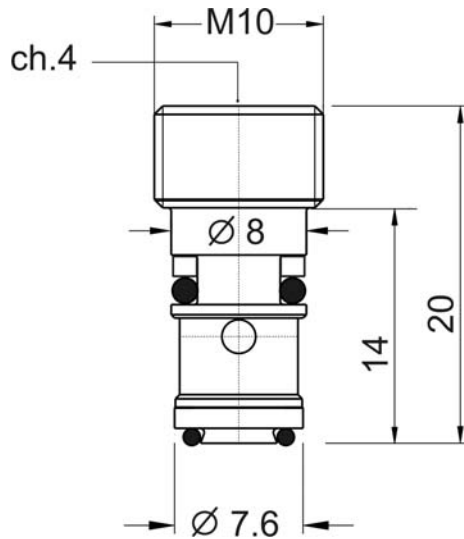


**VALVE SPECIFICATIONS**

Nominal Flow	1 GPM (4 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	1 cu in/min (16 ml/min)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.16 lbs. (.07 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	10 – 12 Nm
Cavity	T151
Cavity Tools kit (form tool, reamer, tap)	K-T151

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**DIMENSIONS**



**Cavity - T 151**

**ORDERING INFORMATION**

QS - CVL - - 00

**OPTIONS**  
 Buna Standard 00  
 Viton Standard V0

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