

# Direct Acting and Differential Area Relief Valves

**Direct Acting Relief Valves** 

	GPM	PSI	LPM	BAR	MODEL	PAGE
	12	3500	45	241	DE-RCA	334
r <del>-</del> ¬	5	3000	19	207	MA-RVA	336
	6	3500	23	241	PB-RVA	338
1 + 2	8	4000	30	276	DE-RVA	340
	6	3500	23	241	PB-RWA	342
	8	4000	30	276	DE-RWA	344

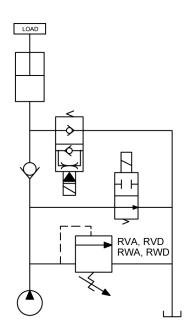
## **Differential Area Relief Valves**

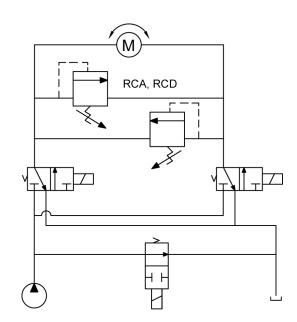
	GPM	PSI	LPM	BAR	MODEL	PAGE
r=-1	15	3500	57	241	DE-RCD	346
	8	3500	30	241	PB-RVD	348
2 + 1	15	4000	57	276	DE-RVD	350
	40	5000	151	345	HE-RVD	352
	8	3500	30	241	PB-RWD	354
	15	4000	57	276	DE-RWD	356

# **Typical Schematic**

Typical application for the RVA, RVD, RWA, RWD is to protect pump and system.

Typical application for the RCA and RCD is cross over relief to protect motor in both directions, where lowest possible price is desired.

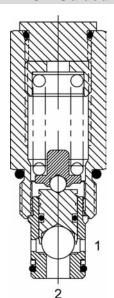




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# DE-RCA Guided Ball, Direct Acting Relief Valve



## DESCRIPTION

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

#### **OPERATION**

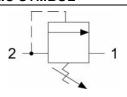
The DE-RCA blocks flow from (2) to (1) until sufficient pressure is present at (2) to force the poppet to open and allow metered flow from (2) to (1).

The cartridge offers smooth transition in response to load changes in common hydraulic circuits.

## **FEATURES**

- Hardened parts for long life.
- Industry common cavity.

### **HYDRAULIC SYMBOL**

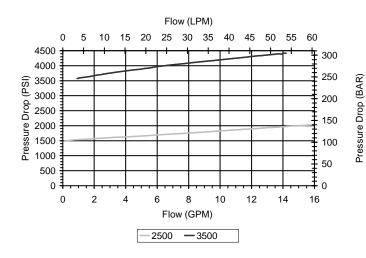




Installation Space Saving Product.
Cannot be field adjusted.
Not recommended for crossover relief valve applications, use DE-RWA

## **PERFORMANCE**

Actual Test Data (Cartridge Only)

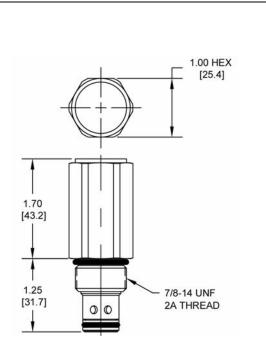


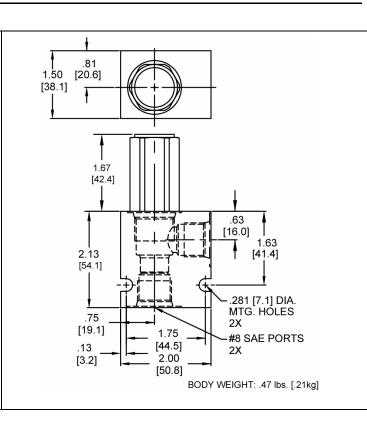
## **VALVE SPECIFICATIONS**

Nominal Flow	12 GPM (45 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating	40° to 250° E ( 40° to 120° C)
Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.38 lbs. (.17 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque	30 ft-lbs (40.6 Nm)
Requirements	30 11-103 (40.0 1411)
Cavity	DELTA 2W
Cavity Form Tool (Finishing)	40500000
Seal Kit	21191200

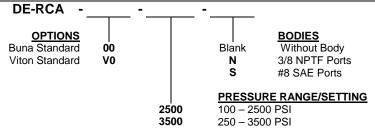
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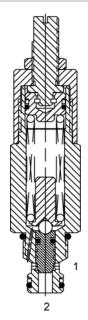


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## MA-RVA Direct Acting Relief Valve



## DESCRIPTION

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

#### **OPERATION**

The MA-RVA blocks flow from (2) to (1) until sufficient pressure is present at (2) to force the poppet to open and allow metered flow from (2) to (1)

The cartridge offers smooth transition in response to load changes in common hydraulic circuits.

## **FEATURES**

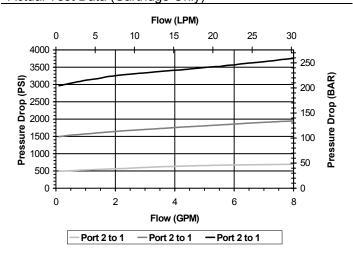
- Hardened parts for long life.
- Industry common cavity.

## **HYDRAULIC SYMBOL**



### **PERFORMANCE**

Actual Test Data (Cartridge Only)

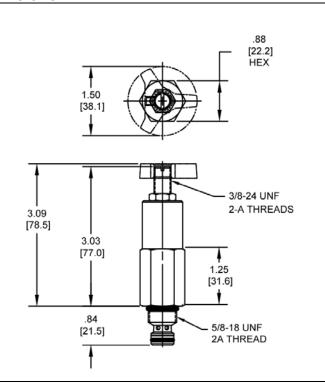


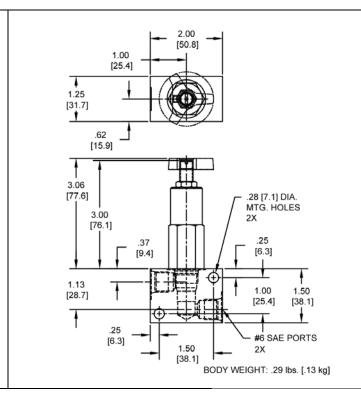
## **VALVE SPECIFICATIONS**

Nominal Flow	5 GPM (19 LPM)
Rated Operating Pressure	3000 PSI (207 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating	-40° to 250° F (-40° to 120° C)
Temperature Range	-40 to 250 F (-40 to 120 C)
Weight	.39 lbs. (.17kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque	15 ft-lbs (20.3 Nm)
Requirements	15 It-lbs (20.5 IVIII)
Cavity	MINI 2W
Cavity Form Tool (Finishing)	40500003
Seal Kit	21191000

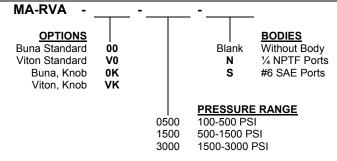
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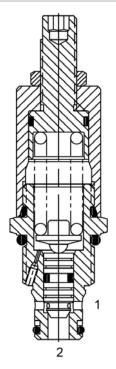


### **ORDERING INFORMATION**





# PB-RVA Direct Acting Relief Valve



## DESCRIPTION

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

#### **OPERATION**

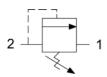
The PB-RVA blocks flow from (2) to (1) until sufficient pressure is present at (2) to force the poppet to open and allow metered flow from (2) to (1)

The cartridge offers smooth transition in response to load changes in common hydraulic circuits.

### **FEATURES**

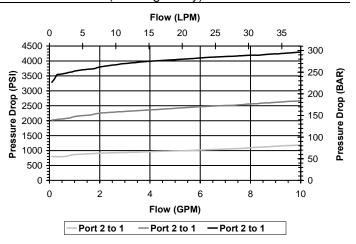
- Hardened parts for long life.
- Industry common cavity.

## **HYDRAULIC SYMBOL**



### **PERFORMANCE**

Actual Test Data (Cartridge Only)

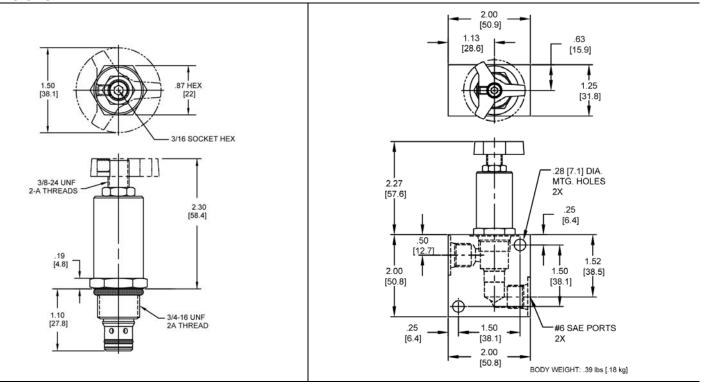


#### **VALVE SPECIFICATIONS**

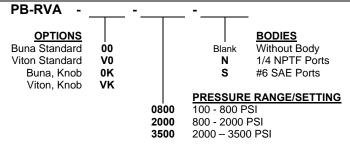
Nominal Flow	6 GPM (23 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating	40° to 250° E / 40° to 120° C)
Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.30 lbs. (.14 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque	25 ft-lbs (34 Nm)
Requirements	25 It-105 (34 IVIII)
Cavity	POWER 2W
Cavity Form Tool (Finishing)	40500005
Seal Kit	21191100

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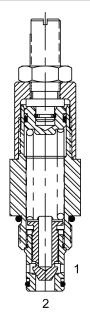


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# DE-RVA Direct Acting Relief Valve



## DESCRIPTION

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

#### **OPERATION**

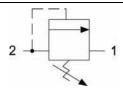
The DE-RVA blocks flow from (2) to (1) until sufficient pressure is present at (2) to force the poppet to open and allow metered flow from (2) to (1)

The cartridge offers smooth transition in response to load changes in common hydraulic circuits.

## **FEATURES**

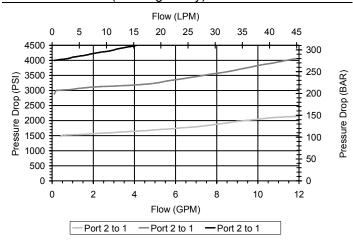
- Hardened parts for long life.
- Industry common cavity.

## **HYDRAULIC SYMBOL**



## **PERFORMANCE**

Actual Test Data (Cartridge Only)

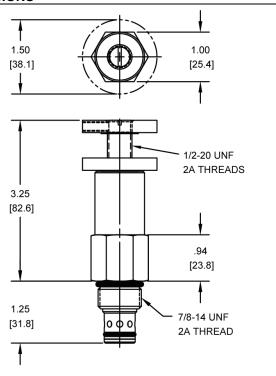


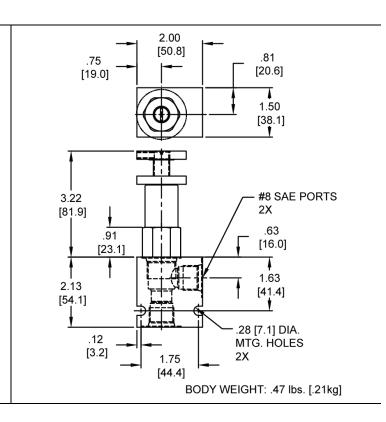
## **VALVE SPECIFICATIONS**

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Nominal Flow	4 GPM (15.6 LPM) 4000 PSI		
INOTHINAL Flow	8 GPM (30 LPM) 3000 PSI		
Rated Operating Pressure	4000 PSI (276 bar)		
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)		
Filtration	ISO 18/16/13		
Media Operating	40° to 250° F ( 40° to 120° C)		
Temperature Range	-40° to 250° F (-40° to 120° C)		
Weight	.56 lbs. (.25 kg)		
Operating Fluid Media	General Purpose Hydraulic Fluid		
Cartridge Torque	20 ft lbs (40 6 Nm)		
Requirements	30 ft-lbs (40.6 Nm)		
Cavity	DELTA 2W		
Cavity Form Tool (Finishing)	40500000		
Cavity Form 1001 (Finishing)	+0000000		
Seal Kit	21191200		

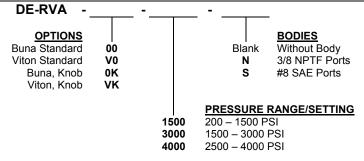
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