

# **Delta Power Company**

4484 Boeing Drive Rockford, IL 61109

815-397-6628





# **New Releases**

New		
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# HJ-S2A Pilot Operated Poppet, 2 Way Normally Closed DESCRIPTION



## "High Pressure" 16 size, 1 5/16-12 thread, "Super" series, solenoid operated, 2 way normally closed, pilot operated poppet valve with reverse flow de-energized.

#### OPERATION

When de-energized the HJ-S2A blocks flow from (1) to (2) and allows reverse flow from (2) to (1). When energized the valve allows flow from (1) to (2) and restricted flow from (2) to (1).



- Hardened parts for long life.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Industry common cavity.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.

#### HYDRAULIC SYMBOL



## PERFORMANCE

#### Actual Test Data (Cartridge Only)



#### VALVE SPECIFICATIONS

Nominal Flow	40 GPM (151 LPM)
Rated Operating Pressure	4350 PSI (300 bar)
Typical Internal Leakage (150 SSU)	0-10 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	.72 lbs. (.32 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	115 ft-lbs (156 Nm)
Coil Nut Torque Requirements	4-6 ft-lbs (5.4-8.1 Nm)
Cavity	SUPER 2W
Cavity Form Tool (Finishing)	40500017
Seal Kit	21191400

**WARNING:** The specifications/application data shown in our catalogs and data sheets are 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.

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Fax: (815) 397-2526







Note: Aluminum, NOT durability rated for 4350 PSI. Consult factory for options.

Approximate Coil Weight: .74 lbs (.33 kg.)

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## HJ-S2C Pilot Operated Poppet, 2 Way, Normally Open

#### DESCRIPTION

"High Pressure" 16 size, 1 5/16-12 thread, "Super" series, solenoid operated, 2 way normally open, pilot operated poppet valve with free reverse flow energized.

#### OPERATION

When de-energized the HJ-S2C allows flow to pass from (1) to (2), but restricts flow from (2) to (1). When energized the valve blocks flow from (1) to (2) but allows free reverse flow from (2) to (1).



#### FEATURES

- Hardened parts for long life.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Industry common cavity.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.

#### HYDRAULIC SYMBOL



## PERFORMANCE



#### VALVE SPECIFICATIONS

Nominal Flow	40 GPM (151 LPM)
Rated Operating Pressure	4350 PSI (300 bar)
Typical Internal Leakage (150 SSU)	0-10 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	.74 lbs. (.33 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	115 ft-lbs (156 Nm)
Coil Nut Torque Requirements	4-6 ft-lbs (5.4-8.1 Nm)
Cavity	SUPER 2W
Cavity Form Tool (Finishing)	40500017
Seal Kit	21191400

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#### DIMENSIONS





Approximate Coil Weight: .74 lbs/.33 kg.

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## MD-CDP Double Pilot Operated Check Valve



## DESCRIPTION

7 size, 5/8 -18 thread, "Mini" series, double pilot operated check valve.

#### OPERATION

The MD-CDP allows flow to pass from (3) to (4) and (2) to (1). The valve blocks flow from (4) to (3) and from (1) to (2). Blocked flow is released when pilot pressure is applied to the port opposite of (3) and /or (2) respectively.

The valve has a 3:1 pilot ratio, so at least 1/3 of the load pressure at port (4) or (1) is required at the pilot line ports (ports (4) or (1) respectively) to open the flow passage to allow flow from port (4) or (1) respectively.

The check spring biased at 20 PSI (1.4 bar) to assure holding in the static or no-load conditions.

#### FEATURES

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







#### ORDERING INFORMATION





#### DESCRIPTION

8 size, 3/4 -16 thread, "Power" series, double pilot operated check valve.

#### OPERATION

The PQ-CDP allows flow to pass from (3) to (4) and (2) to (1). The valve blocks flow from (4) to (3) and from (1) to (2). Blocked flow is released when pilot pressure is applied to the port opposite of (3) and /or (2) respectively.

The valve has a 3:1 pilot ratio, so at least 1/3 of the load pressure at port (4) or (1) is required at the pilot line ports (ports (4) or (1) respectively) to open the flow passage to allow flow from port (4) or (1) respectively.

The check spring biased at 20 PSI (1.4 bar) to assure holding in the static or no-load conditions.

#### FEATURES

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



P	
Great for "in Cylinder "	use
Application	

#### VALVE SPECIFICATIONS

VALVE SPECIFICATIONS	
Nominal Flow	5 GPM (19 LPM)
Rated Operating Pressure	3000 PSI (207 bar)
Typical Internal Leakage (150 SSU)	0 - 5 drop / 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	.12 lbs. (.05 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	25 ft-lbs (34 Nm)
Cavity	POWER 4W
Cavity Form Tool (Finishing)	40500029
Seal Kit	21191112















## DESCRIPTION

10 size, 7/8 -14 thread, "Delta" series, double pilot operated check valve.

#### OPERATION

The DG-CDP allows flow to pass from (3) to (4) and (2) to (1). The valve blocks flow from (4) to (3) and from (1) to (2). Blocked flow is released when pilot pressure is applied to the port opposite of (3) and /or (2) respectively.

The valve has a 3:1 pilot ratio, so at least 1/3 of the load pressure at port (4) or (1) is required at the pilot line ports (ports (4) or (1) respectively) to open the flow passage to allow flow from port (4) or (1) respectively.

The check spring biased at 20 PSI (1.4 bar) to assure holding in the static or no-load conditions.

#### **FEATURES**

- Hardened parts for long life. ٠
  - Industry common cavity.









## Delta Power Company 4484 Boeing Drive - Rockford, IL 61109

PP-PCC Fixed Pressure Compensating Regulator Valve - Restrictive Type

## DESCRIPTION

8 size, 3/4-16 thread, "Power" series, pressure compensating regulator valve (restrictive type).

#### OPERATION

The PP-PCC-00 with an external orifice beyond port (3) and sensed by port (1) maintains a constant flow rate from (3) regardless of load pressure changes in the system downstream of (3), or in the inlet at (2) as long as pressure at (3) is above (1) by more then spring setting chosen and pump supply is in excess of demand.

The valve's spool maintains a constant differential pressure across an external orifice, thereby regulating the hydraulic flow rate across this external orifice. (see options table for pressure ranges)

When used with an orifice as described above, it functions as a restrictive type regulator, delivering pump flow through the external orifice. All ports may be fully pressurized.

#### FEATURES

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

#### HYDRAULIC SYMBOL

3

00

0

1

2



Can be used as a logic element

Fixed setting pressure reducing valve. For adjustable setting see PP-PCD.

**PP-PCC-00-0100** is recommended for regulated flows up to 4.0 GPM only.

**PP-PCC-00-0220** is recommended for regulated flows up to 8.0 GPM.

For fixed pressure reducing/relieving valve see PP-PCP

#### **PERFORMANCE** Actual Test Data (Cartridge Only)



VALVE SPECIFICATIONS	i de la construcción de la constru
Nominal Flow	8 GPM (30 LPM)
Rated Operating Pressure	3000 PSI (207 bar)
Ratio	Area of Pilot is equal to the area at Port (3)
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	.25 lbs. (.11 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	25 ft-lbs (34 Nm)
Cavity	POWER 3W
Cavity Form Tool (Finishing)	40500024
Seal Kit	21191111







\*Urethane seals are recommended when inlet pressures exceed 1500 PSI



TR-PCC Pressure Compensating Regulator Valve – Restrictive Type

#### DESCRIPTION

12 size, 1 1/16-12 thread, "Tecnord" series, pressure compensating regulator valve (restrictive type)



#### OPERATION

The TR-PCC with an external orifice beyond port (3) and sensed by port (1) maintains a constant flow rate from (3) regardless of load pressure changes in the system downstream of (3), or in the inlet at (2) as long as pressure at (3) is greater than (1) by more than spring setting chosen and pump supply is in excess of demand.

The valve's spool maintains a constant differential pressure across an external orifice, thereby regulating the hydraulic flow rate across this external orifice. (see table for pressure ranges)

When used with an orifice as described above, it functions as a restrictive type regulator, delivering pump flow through the external orifice. All ports may be fully pressurized.

#### FEATURES

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

#### HYDRAULIC SYMBOL





Can be used as a logic element.

Fixed setting pressure reducing valve. For adjustable setting see TR-PCD.

#### PERFORMANCE

Actual Test Data (Cartridge Only)



#### VALVE SPECIFICATIONS

20 GPM (76 LPM)
3500 PSI (241 bar)
Area of Pilot is equal to the area at Port (3)
36 to 3000 SSU (3 to 647 cSt)
ISO 18/16/13
-40° to 250° F (-40° to 120° C)
.54 lbs. (.24 kg)
General Purpose Hydraulic Fluid
70 ft-lbs (95 Nm)
TECNORD 3WS
40500033
21191306

DIMENSIONS





## Delta Power Company 4484 Boeing Drive - Rockford, IL 61109

## DF-PCE Adjustable Pressure Compensating Valve, Bypass Type

#### DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, spring adjustable pressure compensating valve, bypass type.

#### OPERATION

The DF-PCE with an external orifice in parallel with ports (3) and (1) maintains a constant flow rate across the external orifice, regardless of load pressure changes in the system upstream of (3), or in the bypass leg at (2) as long as pressure at (2) is greater than (1).

The valve's spool maintains a constant differential pressure across an external orifice, thereby regulating the hydraulic flow rate across this external orifice. (see table for pressure ranges)

When used with an orifice as described above, it functions as a bypass type regulator, delivering pump flow through the external orifice.

#### FEATURES

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

#### HYDRAULIC SYMBOL

3

0 0

 $\bigcirc$ 

1

2





Can be used as an adjustable logic element.

Great as an adjustable pressure setting regulation device in brake, transmission & cooling systems, because the spring chamber is separately drained, the outlet can be used for lower pressure functions. For fixed version see DF-PCR-0P.

For higher spring differential pressure ranges consult factory

#### PERFORMANCE

Actual Test Data (Cartridge Only)



300 psi setting /Regulated Flow vs Inlet Pressure

#### VALVE SPECIFICATIONS

Nominal Flow	10 GPM (38 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Seat Ratio	Area of Pilot is equal to the area at Port (3)
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	.52 lbs. (.23 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 3W
Cavity Form Tool (Finishing)	40500001
Seal Kit	21191210





## Delta Power Company 4484 Boeing Drive - Rockford, IL 61109

#### SL-PCE Adjustable Pressure Compensating Regulator Valve

#### DESCRIPTION

16 size, 1 5/16-12 thread, "Super" series, pressure compensating regulator valve.

#### OPERATION

The SL-PCE with an external orifice in parallel with ports (3) and (1) maintains a constant flow rate across the external orifice, regardless of load pressure changes in the system upstream of (3), or in the bypass leg at (2) as long as pressure at (2) is less than (1).

The valve's spool maintains a constant differential pressure across the external orifice, thereby regulating the hydraulic flow rate across the external orifice. (see options table for pressure ranges)

When used with an orifice as described above, it functions as a priority type regulator, delivering pump flow first to the external orifice, then bypassing excess to (2). All ports may be fully pressurized.

#### FEATURES

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

#### HYDRAULIC SYMBOL

3



1

2



Can be used as an adjustable logic element.

Great as an adjustable pressure setting regulation device in brake, transmission & cooling systems. Because the spring chamber is separately drained, the outlet flow can be used for lower pressure functions. For fixed version see SL-PCA-0P.

For higher spring differential pressure ranges consult factory.

#### PERFORMANCE

Actual Test Data (Cartridge Only)



VALVE SPECIFICATIONS	i
Nominal Flow	40 GPM (151 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Seat Ratio	Area of pilot is equal to the area at Port (3)
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	1.15 Lbs. (.52 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Cavity	SUPER 3WS
Cavity Form Tool (Finishing)	40500021
Seal Kit	21191406

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#### **ORDERING INFORMATION**



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## **VALVE SPECIFICATIONS**

Nominal Flow	10 GPM (38 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Typical Internal Leakage (150 SSU)	5 cu in/min (82 ml/min) per path
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	.60 lbs. (.27 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 3W
Cavity Form Tool (Finishing)	40500001
Seal Kit	21191210



#### **ORDERING INFORMATION**



Fill in 4 Digit Pressure Setting Example: 0200 = 200 PSI

## SL-PWA Sequence Valve, Normally Closed, Internal Pilot

## DESCRIPTION

16 size, 1 5/16-12 thread, "Super" series, internal pilot normally closed, sequence valve

#### OPERATION

The SL-PWA blocks flow from ports (3) to (2). On attainment of a predetermined pressure at (3) the valve shifts to allow flow from (3) to (2). Port (1) should be a tank line.

## FEATURES

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

#### HYDRAULIC SYMBOL

3



1

2

PERFORMANCE Actual Test Data (Cartridge Only)



#### VALVE SPECIFICATIONS

Nominal Flow	40 GPM (151 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 Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	1.15 Lbs. (.52 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Cavity	SUPER 3WS
Cavity Form Tool (Finishing)	40500021
Seal Kit	21191404

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#### **ORDERING INFORMATION**



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SL-PWB Sequence Valve, Normally Closed, Internal Pilot with Reverse Free Flow

#### DESCRIPTION

16 size, 1 5/16-12 thread, "Super" series, internal pilot normally closed, sequence valve w/ reverse free flow

#### OPERATION

The SL-PWB blocks flow from ports (3) to (2). On attainment of a predetermined pressure at (3) the valve shifts to allow flow from (3) to (2). Port (1) should be a tank line.

Reverse flow from (2) to (3) occurs when the pressure at port (2) is at least 45 PSI (3.1 bar) higher than at port (3).

# 

#### FEATURES

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

#### HYDRAULIC SYMBOL

3



## PERFORMANCE

Actual Test Data (Cartridge Only)



#### VALVE SPECIFICATIONS

Nominal Flow	40 GPM (151 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° F (-40° to 120° C)
Veight	1.15   bs (52 kg)
veign	1.10 LDS. (.02 Kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Cavity	SUPER 3WS
Cavity Form Tool (Finishing)	40500021
Seal Kit	21191404

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Fax: (815) 397-2526

E-mail: delta@delta-power.com

## PROPORTIONAL FLOW CONTROLS



#### DIMENSIONS





**ORDERING INFORMATION** EE - P2G -BODIES OPTIONS [ - <sup>1</sup>

	DIALIK	VVILLIOUL DOUV	
to 22 I/min	S	#8 SAE Ports	
to 22 I/min			
o to 22 I/min			
	VOLTAGE		
to 50 I/min 12	12 VDC		
o to 50 l/min 24	24 VDC		
o to 50 l/min			
	"F" COIL TEF	<u>MINATION</u>	
HC	DIN 43650 (Hi	rschman)	
to 50 l/min DI	Deutsch-Integ	ral DT04-2P	
to 50 l/min JT	AMP Jr. Timer		
o to 50 l/min			
	to 50 I/min to 50 I/min	to 22 l/min       S         to 22 l/min       VOLTAGE         to 22 l/min       12         to 50 l/min       12         to 50 l/min       24         to 50 l/min       24         to 50 l/min       DIN 43650 (Hi         to 50 l/min       DI Deutsch-Integr         to 50 l/min       JT         to 50 l/min       DI Deutsch-Integr	blain Vitriout body s #8 SAE Ports s #8 SAE Ports s #8 SAE Ports volument volument s volument s

#### NOTES:

1) Flows refer to a 14 bar Delta P 2) For other seals, consult factory

Approximate Coil Weight: .47lbs. (.21 kg.)

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#### EB - P2A 2 Way, Normally Closed, Proportional Flow Control Valve

## DESCRIPTION

8 size, 3/4-16 thread, solenoid operated, 2 way normally closed poppet style, proportional flow control valve.

#### OPERATION

When de-energized the EE-P2A blocks flow from (1) to (2) and allows reverse flow from(2) to (1). When energized, the valve allows flow from (1) to (2). Flow is proportional to current applied to the coil. A compensator must be used to create a pressure compensated flow control function.

#### FEATURES

- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Industry common cavity.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.

#### HYDRAULIC SYMBOL

PERFORMANCE



1

Curves are attained without pressure compensator. The valve can work with a pressure drop up to 200 bar.

#### VALVE SPECIFICATIONS

Flow range	See curves
Max System Pressure	3500 PSI (245 bar)
Leakage	0 - 10 drops / min @245 bar
Hysteresis	+/- 3 %
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	.72 lbs. (.32 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	37 ft-lbs (50 Nm)
Coil Nut Torque Requirements	2-3 ft-lbs (3-4 Nm)
Cavity	POWER 2W
Cavity Tools kit (form tool, reamer, tap)	40500005
Seal Kit	21191102
COIL SPECIFICATIONS	
Current Supply Characteristics	PWM
Rated Current Range	500 – 1450 mA
PWM or Super-imposed Dither Frequency	100 Hz
Coil Resistance (12 Vdc)	7,5 Ohm +/- 5% at 68°F (20°C)



Pressure Drop 1 to 2 with valve completely open





Coil 12 VDC - hyd. oil 26cSt(121SSU)@40\*C(104\*F)

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## PROPORTIONAL FLOW CONTROLS



VOLTAGE

AMP Jr. Timer

<u>**"F**" COIL TERMINATION</u>

DIN 43650 (Hirschman)

Deutsch-Integral DT04-2P

12 VDC 24 VDC

12

24

НC

DI

JT

#### DIMENSIONS



#### NOTES:

1) Flow refer to a 14 bar Delta P 2) For other seals, consult factory

#### Approximate Coil Weight: .47lbs. (.21 kg.)

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Poppet type A - Coil 12 VDC hyd. oil 26cSt(121SSU)@40\*C(104\*F)

Fax: (815) 397-2526



#### DIMENSIONS



#### NOTES:

Flows refer to a 14 bar Delta P
 For other seals, consult factory

Approximate Coil Weight: .47lbs. (.21 kg.)

WARNING: The specifications/application data shown in our catalogs and data sheets are 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.

E-mail:

Fax: (815) 397-2526





Poppet type A - Coil 12 VDC hyd. oil 26cSt(121SSU)@40°C(104°F)

WARNING: The specifications/application data shown in our catalogs and data sheets are 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.

Phone: (815) 397-6628

Fax: (815) 397-2526



#### DIMENSIONS



#### NOTES:

1) Flows refer to a 14 bar Delta P 2) For other seals, consult factory

Approximate Coil Weight: .47lbs. (.21 kg.)

WARNING: The specifications/application data shown in our catalogs and data sheets are 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. Fax: (815) 397-2526



#### EE-P2H 2 Way, Normally Open, Proportional Flow Control Valve

#### DESCRIPTION

10 size, 7/8-14 thread, solenoid operated, 2 way normally open, proportional flow control valve.

#### **OPERATION**

When de-energized the EE-P2H allows flow from (1) to (2).

When fully energized, the valve blocks flow at port (1) and (2). Flow is proportional to current applied to the coil. A compensator must be used to create a pressure compensated flow control function. **OPERATION OF MANUAL OVERRIDE OPTION:** To override, turn the manual override screw clockwise. To release turn the manual override screw counter-clockwise.

#### FEATURES

- Efficient wet-armature construction.
- Cartridges are voltage interchangeable. •
- Industry common cavity.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.

#### HYDRAULIC SYMBOL



PERFORMANCE

#### Flow (I/min) vs. Current (mA) (12 V coil; Delta P = 5, 14, 20 bar; Toil = 40°C)



## with various settings.

Curve is attained with compensator at

#### VALVE SPECIFICATIONS

Flow range	See curve
Max System Pressure	3500 PSI (245 bar)
Leakage	max 100 cc/min at 245 bar
Hysteresis	+ / - 4%
	36 to 3000 SSU (3 to 647
Viscosity Range	cSt)
Filtration	ISO 18/16/13
Media Operating	-40° to 250° F (-40° to
Temperature Range	120° C)
Weight	.58 lbs. (.26 kg)
Operating Fluid Media	General Purpose
	Hydraulic Fluid
Cartridge Torque	26 ft-lbs (35 Nm)
Requirements	2010105(001111)
Coil Nut Torque	2-3 ft-lbs (3-4 Nm)
Requirements	
Cavity	DELTA 2W
Cavity Lools kit (form tool,	40500000
reamer, tap)	
	21191200
Current Supply	PWM
Characteristics	
Rated Current Range	0 – 1450 mA
PWM or Super-imposed	100 - 150 Hz
Dither Frequency	
Coil Resistance (12 Vdc)	7,5 Ohm +/- 5% at 68 °F
	(20°C)

WARNING: The specifications/application data shown in our catalogs and data sheets are 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.

Phone: (815) 397-6628

Fax: (815) 397-2526

## PROPORTIONAL FLOW CONTROLS



#### DIMENSIONS





NOTE: for other seals, consult factory

Approximate Coil Weight: .47lbs. (.21 kg.)

WARNING: The specifications/application data shown in our catalogs and data sheets are 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. Fax: (815) 397-2526 E-mail:



## EG-PRZ 3 Way, Proportional Pressure Reducing Control Valve

#### DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, solenoid operated, proportional pressure reducing control valve

#### **OPERATION**

When de-energized the EG-PRZ allows flow from (2) to (1) and blocks flow at (3).

When energized, the cartridge's spool lifts to open (3) to (2) and blocks flow at (1). Outlet pressure is proportional to current applied to the coil.

#### **FEATURES**

- Efficient wet-armature construction. •
- Cartridges are voltage interchangeable. •
- Industry common cavity.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.
- Optional "I" Coil: Weatherproof, Thermal Shock, Immersion Safe.

#### HYDRAULIC SYMBOL

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2

3





Note: Low Wattage coils are available. Consult Factory

#### PERFORMANCE Actual Test Data (Cartridge Only)



## **VALVE SPECIFICATIONS**

Nominal Flow	8 GPM (30 LPM)
Max System Pressure	450 PSI (31 bar)
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	.38 lbs. (.17 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	12 ft-lbs (16.3 Nm)
Coil Nut Torque Requirements	4 - 6 ft-lbs (5.4 - 8.1 Nm)
Cavity	DELTA 4W
Cavity Form Tool (Finishing)	40500002
Seal Kit	21191204







## Delta Power Company 4484 Boeing Drive - Rockford, IL 61109

## ES-PRZ Proportional Pressure Reducing Control Valve

## DESCRIPTION

12 size, 1 1/16-12 thread, "Tecnord" series, solenoid operated, proportional pressure reducing control valve

#### OPERATION

When de-energized the ES-PRZ allows flow from (2) to (1) and blocks flow at (3).

When energized, the cartridge's spool lifts to open (3) to (2) and blocks flow at (1). Outlet pressure is proportional to current applied to the coil.

#### **FEATURES**

- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.
- Optional "I" Coil: Weatherproof, Thermal Shock, Immersion Safe.

#### HYDRAULIC SYMBOL

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1

2

3



Note: Low Wattage coils available. Consult Factory

#### **PERFORMANCE** Actual Test Data (Cartridge Only)

Pressure vs Current Graph for ESPRZ at 300 psi inlet



#### VALVE SPECIFICATIONS

Nominal Flow	30 GPM (114 LPM)
Max System Pressure	450 PSI (31 bar)
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. (.3 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	70 ft-lbs (94.9 Nm)
Coil Nut Torque Requirements	4 – 6 ft-lbs (5.4 – 8.1 Nm)
Cavity	40200043
Seal Kit	







Approximate Coil Weight: .42 lbs. (.19 kg.)