Hydraulic Cartridge Valve Stock Information

European Distribution Centre

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Parker

ENGINEERING YOUR SUCCESS.

Welcome to the New Hydraulic Cartridge Systems EDC Stocklist Catalogue

All the items contained within are classed as ‘stocked product’ and are available from the European Distribution Centre (EDC) These products are produced in Crewkerne, UK.
The catalogue outlines technical information.

With the addition of valves produced in Lincolnshire that are already held in the EDC, we can now provide a comprehensive product range that is available in very short lead times.

These items are identified as the most popular from each range and have a variety of application usage in hydraulic systems, they are versatile and have proven experience in the field.

Parker Hydraulic Cartridge Systems Division produce innovative, quality products coupled with Premier Customer Service and provide a wide variety of solutions in a diverse range of markets.

Should your requirement not be listed please consult your local sales office for assistance.

WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorised distributors provide product or system options for further investigation by users having technical expertise.

- The user, through its own analysis and testing, is solely responsible for making final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyse all aspects of the application, follow applicable industry standards and follow the information concerning the product in the current product catalogue and in any other materials provided from Parker or its subsidiaries or authorised distributors.

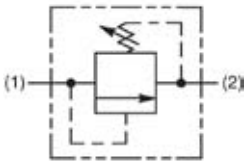
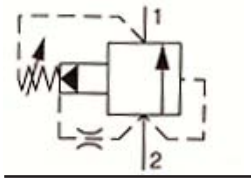
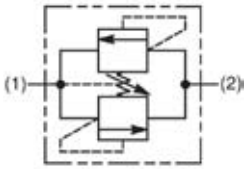
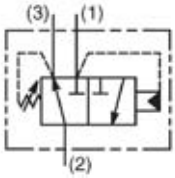
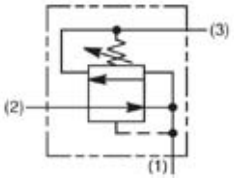
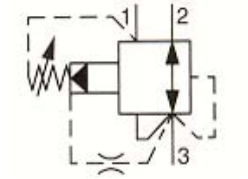
- To the extent that Parker or its subsidiaries or authorised distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable users of the components or systems.

OFFER OF SALE

The items described in this document are hereby offered for sale by Parker-Hannifin Corporation, its subsidiaries or its authorised distributor. This offer and its acceptance are governed by the provisions stated in the detailed ‘Offer of Sale’ available upon request.

Contents

Hydraulic Cartridge Valve Stocklist

	Series	Cavity	Description	Flow l/min (USgal/min)	Pressure bar (psi)
Pressure Controls	**Direct Acting Relief**				
	A02B2FZN Full details pages 8-9	CAV02-2	Direct Acting Relief, Poppet Type	30 (8)	2-100 (29-1450)
	A02B2HZN Full details pages 8-9	CAV02-2	Direct Acting Relief, Poppet Type	30 (8)	5-210 (72-3000)
	A02B2PZN Full details pages 8-9	CAV02-2	Direct Acting Relief, Poppet Type	30 (8)	5-420 (72-6000)
	A04B2HZN Full details pages 10-11	CAV04-2	Direct Acting Relief, Poppet Type	100 (26)	5-210 (72-3000)
	A04B2PZN Full details pages 10-11	CAV04-2	Direct Acting Relief, Poppet Type	100 (26)	5-420 (72-6000)
Pressure Controls	**Pilot Operated Relief**				
	A04G2HZN Full details pages 12-13	CAV04-2	Pilot Operated, Spool Type	200 (53)	10-210 (145-3000)
	A04G2PZN Full details pages 12-13	CAV04-2	Pilot Operated, Spool Type	200 (53)	10-420 (145-6000)
Pressure Controls	**Cross-Over Relief**				
	A04J2MZN Full details pages 14-15	CAV04-2	Direct Acting, Cross-over Relief	120 (32)	10-350 (145-5000)
Pressure Controls	**Direct Acting Sequence**				
	B02E3FZN Full details pages 16-17	CAV02-3	Direct Acting, with Internal Pilot, Internal Drain	30 (8)	2-148 (30-2150)
Pressure Controls	**Direct Acting Pressure Reducing / Relieving**				
	C02A3CZN Full details pages 18-19	CAV02-3	Direct Acting, Pressure Reducing / Relieving	20 (5)	5-40 (73-580)
	C02A3GZN Full details pages 18-19	CAV02-3	Direct Acting, Pressure Reducing / Relieving	20 (5)	50-150 (725-2175)
Pressure Controls	**Direct Acting Pressure Reducing / Relieving**				
	C04B3HZN Full details pages 20-21	CAV04-3	Pilot Operated, Spool type with Relieving Feature	120 (32)	10-210 (145-3000)

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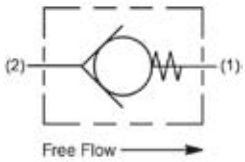
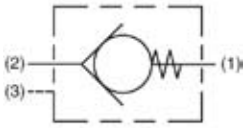
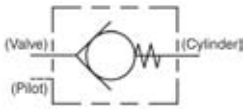
Crewkerne, UK

	Series	Cavity	Description	Flow l/min (USgal/min)	Pressure bar (psi)
Check Valves	**Standard**				
	D02B2-0.2N Full details page 22	CAV02-2	Check , Ball Type	45 (Nom @7bar) (12)	420 (6000)
			Cracking Pressure.....		0.2 (3)
	D02B2-2.1N Full details page 22	CAV02-2	Check, Ball Type	45 (Nom @7bar) (12)	420 (6000)
			Cracking Pressure.....		2.1 (30)
	D02B2-6.0N Full details page 22	CAV02-2	Check, Ball Type	45 (Nom @7bar) (12)	420 (6000)
			Cracking Pressure.....		6.0 (87)
	D04B2-0.2N Full details page 23	CAV04-2	Check, Ball Type	90 (Nom @7bar) (24)	420 (6000)
			Cracking Pressure.....		0.2 (3)
	D04B2-1.0N Full details page 23	CAV04-2	Check, Ball Type	90 (Nom @7bar) (24)	420 (6000)
			Cracking Pressure.....		1.0 (15)
	D04B2-2.1N Full details page 23	CAV04-2	Check, Ball Type	90 (Nom @7bar) (24)	420 (6000)
			Cracking Pressure.....		2.1 (30)
	D06B2H-0.1N Full details page 24	CAV06-2	Check, Poppet Type	330(Nom @7bar) (87)	250 (3625)
			Cracking Pressure.....		0.1 (1.5)
	D1B125-0.1N Full details page 25	2C	Check, Insert, Poppet Type	300(Nom @7bar) (79)	420 (6000)
			Cracking Pressure.....		0.1 (1.5)
	D1B125-0.2N Full details page 25	2C	Check, Insert, Poppet Type	300(Nom @7bar) (79)	420 (6000)
			Cracking Pressure.....		0.2 (3)
	D1B125-1.0N Full details page 25	2C	Check, Insert, Poppet Type	300(Nom @7bar) (79)	420 (6000)
			Cracking Pressure.....		1.0 (15)
Check Valves	**Pilot Operated**				
	D4A020N Full details page 26	53-1	Check, Miniature Pilot to Open, Poppet Type	16 (Nom @7bar) (4.2)	420 (6000)
			Cracking Pressure.....		5 (72)
	D4A040N Full details page 27	68-1	Check, Miniature Pilot to Open, Poppet Type	32 (Nom @7bar) (8.5)	**420** **(6000)**
			Cracking Pressure.....		**3** (43.5)
	PP02SP Full details pages 28-29	CAV02-SP	Single Pilot Piston, Check Package Pilot Ratio 4:1, *use with* D02B2-2.1 (1 off)	40 (10.6)	420 (6000)
	PP04SP Full details pages 32-33	CAV04-SP	Single Pilot Piston, Check Package Pilot Ratio 3:1, *use with* D04B2-2.1 (1 off)	135 (35.7)	420 (6000)

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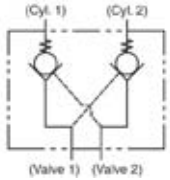
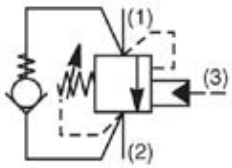
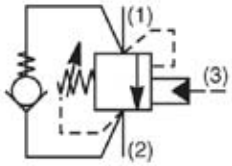
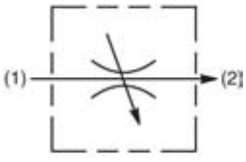
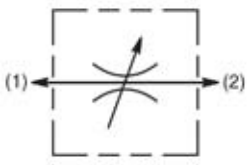
	Series	Cavity	Description	Flow l/min (USgal/min)	Pressure bar (psi)
Check Valves	**Dual Pilot Operated**				
	PP02DP Full details pages **30-31**	CAV02-DP	Dual Pilot Piston, Check Package Pilot Ratio 4:1, *use with* D02B2-2.1 (2 off)	40 (10.6)	420 (6000)
	PP04DP Full details pages **34-35**	CAV04-DP	Dual Pilot Piston, Check Package Pilot Ratio 3:1, *use with* D04B2-2.1 (2 off)	135 (35.7)	420 (6000)
Load and Motor Control Valves	**Standard Pilot Assisted**				
	E2A020ZN Full details pages **36-37**	53-1	Load Control Valve Pilot Ratio 8:1	14 (3.7)	50-420 (725-6000)
	E2A040ZNMK3 Full details pages **38-39**	68-1	Load Control Valve Pilot Ratio 8:1	60 (15.9)	50-350 (725-5000)
	E2A060ZNMK2 Full details pages **40-41**	3C	Load Control Valve Pilot Ratio 8:1	120 (32)	50-350 (725-5000)
	E2A300ZNMK2 Full details pages **42-43**	3K	Load Control Valve Pilot Ratio 8:1	350 (92)	150-350 (2143-5000)
	E2B020ZN Full details pages 36-37	53-1	Load Control Valve Pilot Ratio 4.5:1	20 (5.3)	50-420 (725-6000)
	E2B040ZNMK3 Full details pages **38-39**	68-1	Load Control Valve Pilot Ratio 3:1	60 (15.9)	50-350 (725-5000)
	E2B060ZNMK3 Full details pages **40-41**	3C	Load Control Valve Pilot Ratio 3:1	120 (32)	50-350 (725-5000)
	E2C300ZNMK2 Full details pages **42-43**	3K	Load Control Valve Pilot Ratio 3:1	350 (92)	50-350 (725-5000)
	E2E125ZNMK2 Full details pages **44-45**	3M	Load Control Valve Pilot Ratio 3:1	200 (53)	50-350 (725-5000)
Load and Motor Control Valves	**Independent Of Back-pressure, Vented To Atmosphere**				
	E6B060ZN409 Full details pages **46-47**	3C	Load Control Valve Pilot Ratio 3:1	180 (48)	50-350 (725-5000)
Flow Control Valves	**Pressure Compensated Flow Controls**				
	J02E2ZN Full details pages **58-59**	CAV02-2	Restrictive Flow Control Valve, Pressure Compensated	1-20 (0.3-5.3) (Nom @7bar)	420 (6000)
Flow Control Valves	**Needle**				
	J02A2ZN Full details pages **48-49**	CAV02-2	Flow Control Valve, Needle Type	45 (Nom @7bar) (12)	420 (6000)

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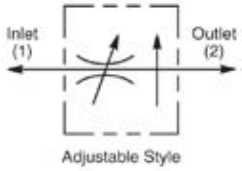
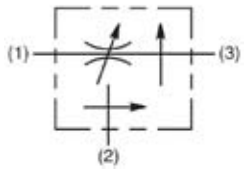
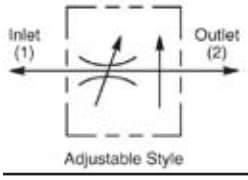
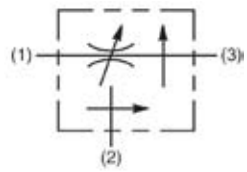
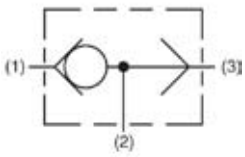
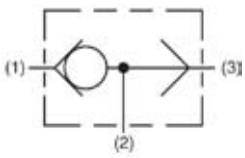
Hydraulic Cartridge Valve Stocklist

	Series	Cavity	Description	Flow l/min (USgal/min)	Pressure bar (psi)
Flow Control Valves	**Needle**				
	J04A2ZN Full details pages **50-51**	CAV04-2	Flow Control Valve, Needle Type	110 (Nom @7bar) (29)	420 (6000)
Flow Control Valves	**Priority Pressure Compensators**				
	J02D3ZN Full details pages **54-55**	CAV02-3	Flow Control Valve, Needle, Priority Style, with Bypass	1-15 (0.3-4)	420 (6000)
	J04D3ZN Full details pages **56-57**	CAV04-3	Flow Control Valve, Priority Style, Pressure Compensated with Bypass	2-45 (0.5-11.9)	420 (6000)
Flow Control Valves	**Pressure Compensated, Restrictive Style**				
	J04E2ZN Full details pages **58-59**	CAV04-2	Flow Control Valve, Restrictive Style, Pressure Compensated	1-40 (0.3-10.6)	420 (6000)
Flow Control Valves	**Pressure Compensated Priority Flow Controls**				
	J1A060ZN Full details pages **60-61**	3G	Pressure Compensated, Priority Type with Bypass	10-90 (2.6-24)	25-350 (362-5000)
	J2A060ZN Full details pages **62-63**	2J	Pressure Compensated, 2 Port Type	2-40 (0.5-11)	20-350 (290-5000)
	J1A125ZN Full details pages **64-65**	3A	Priority Style, Pressure Compensated with Bypass	10-90 (2.6-24)	350 (5000)
Shuttle Valves	**Ball**				
	K02A3N Full details page **66**	CAV02-3	Ball Type, 2 Position, 3 Way	27 (Nom @7bar) (7)	420 (6000)
Shuttle Valves	**Poppet**				
	K2A005N Full details page **67**	3Z	Poppet Type, 2 Position, 3 Way	28 (Nom @7bar) (7.4)	350 (5000)

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Hydraulic Cartridge Valve Stocklist

Parker Hannifin Corporation
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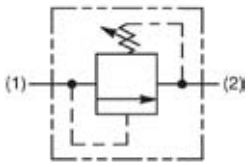
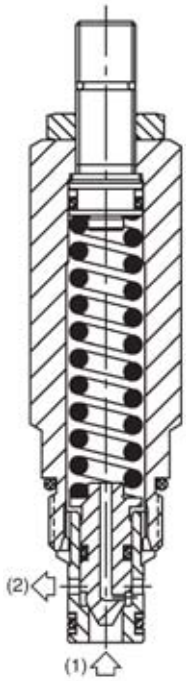
General Description

Direct Acting Poppet-Type Relief Valve.

Features

- Fast response
- Excellent stability throughout flow range
- Virtually leak free
- Hardened working parts for maximum durability
- Preset version is tamper resistant and compact
- All external parts are zinc plated





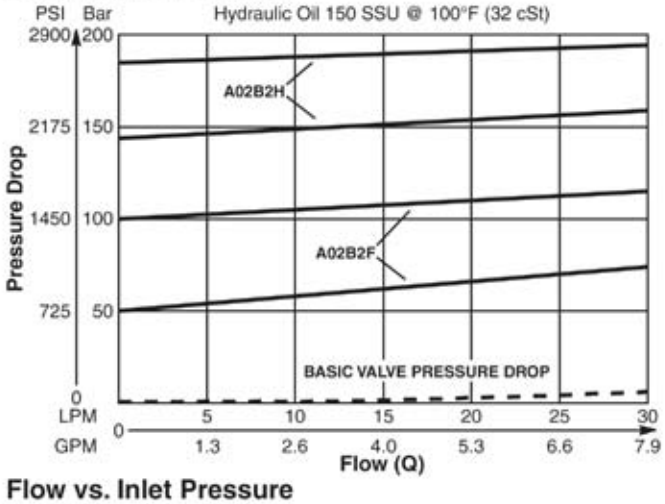
Specifications

Rated Flow	30 l/min (8 USgal/min)
Maximum Pressure Setting	420 bar (6000 psi)
Maximum Inlet Pressure	**F-** 2 - 100 bar (29 - 1450 psi) **H-** 5 - 210 bar (72 - 3000 psi) **P-** 5 - 420 bar (72 - 6000 psi)
Maximum Tank Pressure	420 bar (6000 psi)
Leakage at 32 cSt (150 SSU)	5 drops/min. @100 bar (1450 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.20 kg (0.44 lbs)
Cavity	CAV02-2

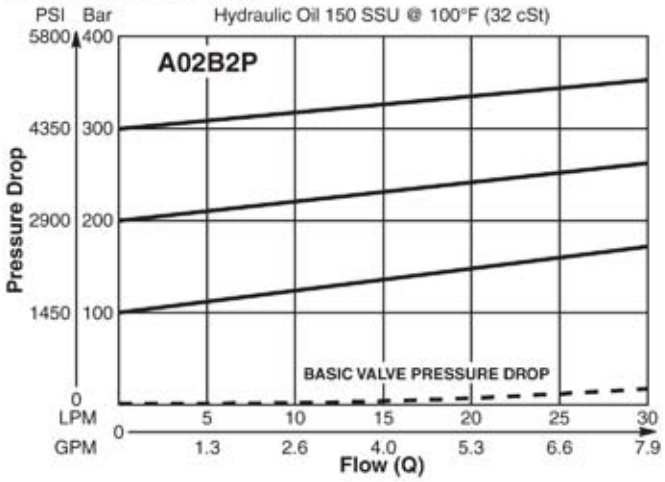
Performance Curves

(Pressure rise through cartridge only)

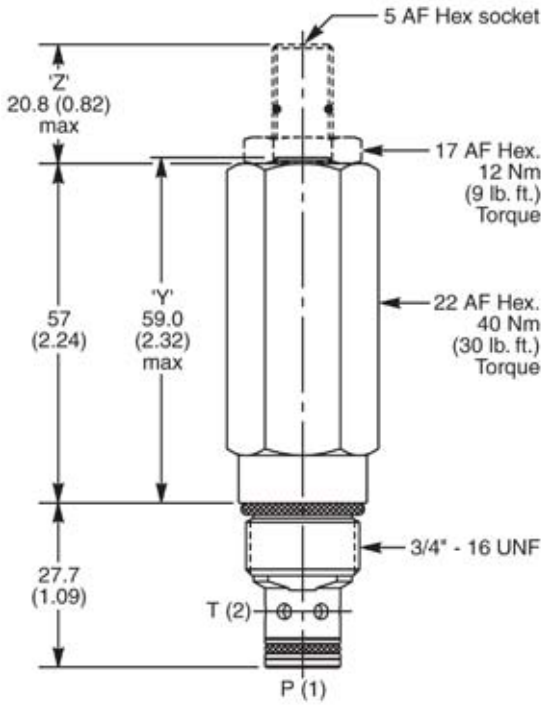
Flow vs. Inlet Pressure



Flow vs. Inlet Pressure



Dimensions Millimeters (Inches)



Ordering Code

A02B2		Z	—	N
Series	Pressure Adjustment Range	Adjustment Style		Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30500N-1)

Code	Adjustment Style
Z	Screw Adjustment (Standard)

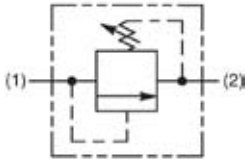
Code	Pressure Adjustment Range
F	2 - 100 bar (29 - 1450 psi)
H	5 - 210 bar (72 - 3000 psi)
P	5 - 420 bar (72 - 6000 psi)

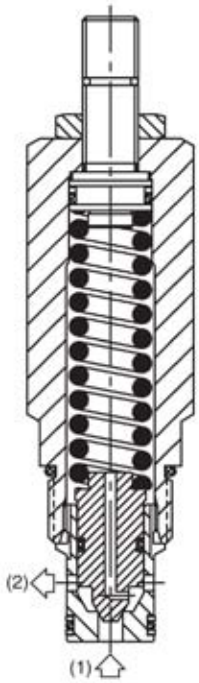
General Description

Direct Acting Poppet-Type Relief Valve.

Features

- Fast response with good stability
- Excellent stability throughout flow range
- Virtually leak free
- Hardened working parts for maximum durability
- Preset version is tamper resistant and compact
- All external parts are zinc plated





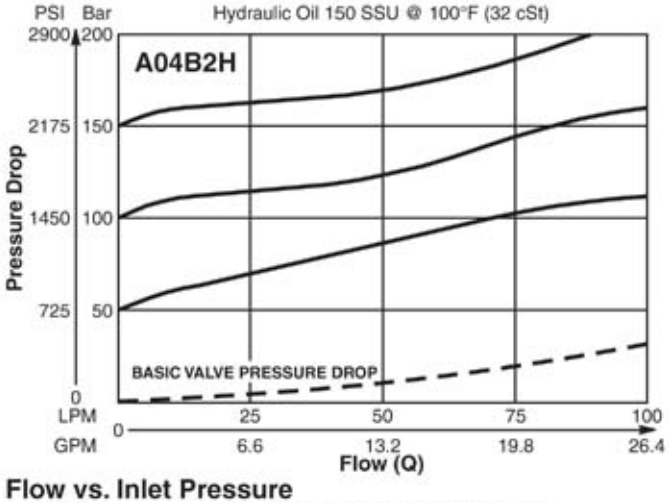
Specifications

Rated Flow	100 l/min (26 USgal/min)
Maximum Pressure Setting	420 bar (6000 psi)
Maximum Inlet Pressure	**H-** 5 - 210 bar (72 - 3000 psi) **P-** 5 - 420 bar (72 - 6000 psi)
Maximum Tank Pressure	420 bar (6000 psi)
Leakage at 32 cSt (150 SSU)	5 drops/min. @100 bar (1450 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.28 kg (0.62 lbs)
Cavity	CAV04-2

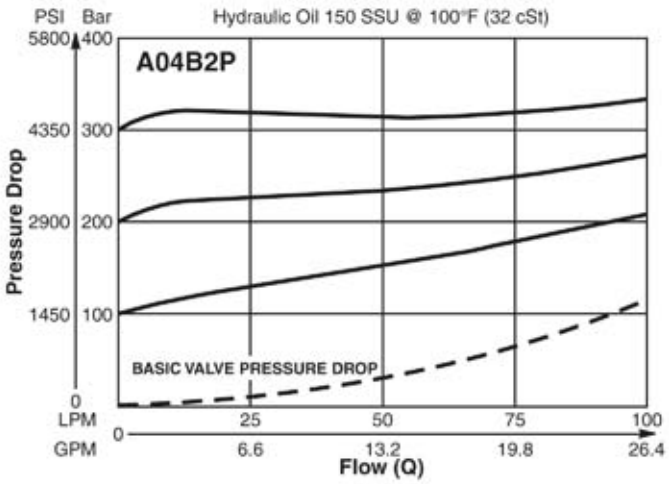
Performance Curves

(Pressure rise through cartridge only)

Flow vs. Inlet Pressure



Flow vs. Inlet Pressure



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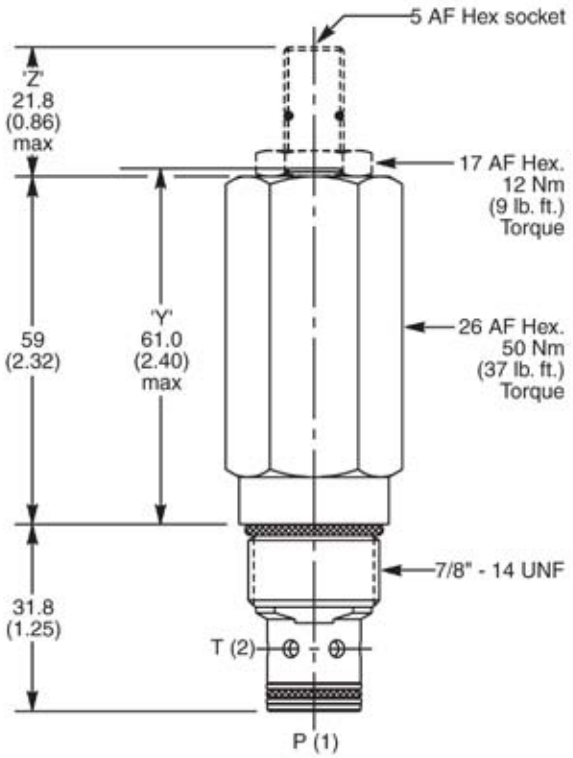
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

A04B2		Z	—	N
Series	Pressure Adjustment Range	Adjustment Style		Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30503N-1)

Code	Adjustment Style
Z	Screw Adjustment (Standard)

Code	Pressure Adjustment Range
H	5 - 210 bar (72 - 3000 psi)
P	5 - 420 bar (72 - 6000 psi)

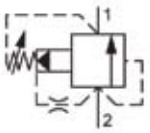
Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

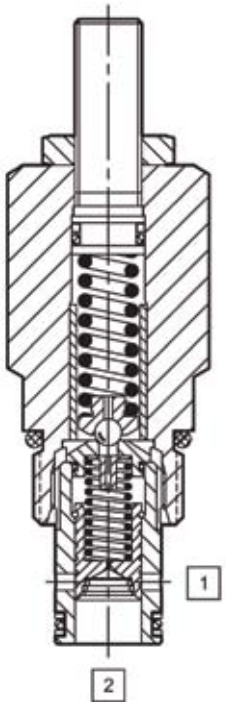
General Description

Pilot Operated, Spool Type Relief Valve.

Features

- High flow capacity
- Minimal pressure variation with flow change
- Full tank line back pressure capability, ideal for cross-line relief applications
- Integral 250 micron pilot flow filter
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts are zinc plated



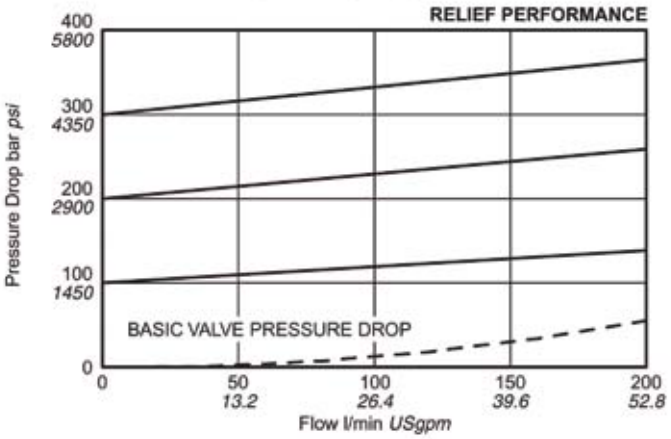


Specifications

Rated Flow	200 l/min (53 USgal/min)
Pressure	**H-** 10 - 210 bar (145 - 3000 psi) **P-** 10 - 420 bar (145 - 6000 psi)
Maximum Reverse Pressure	420 bar (6000 psi)
Sensitivity: Pressure / Turn	**H-** 30 bar (435 psi) **P-** 55 bar (800 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-30°C to +100°C (-20°F to +210°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 15 to 50 cSt (80 to 230 SSU)
Filtration	25 Microns (nom.) or better
Approx. Weight	0.21 kg (0.46 lbs)
Cavity	CAV04-2

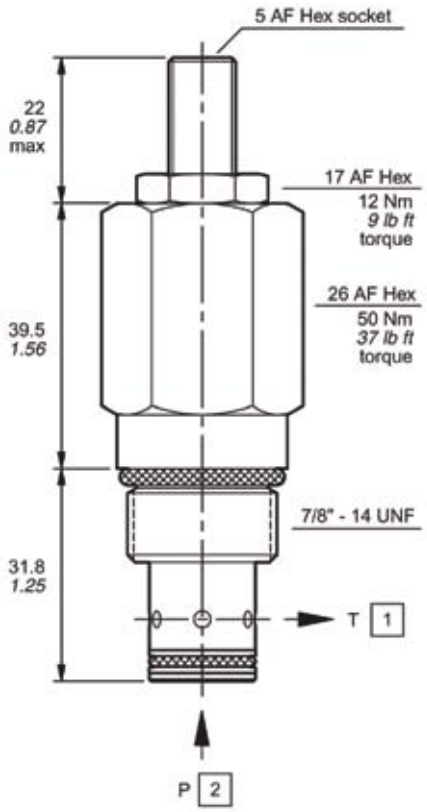
Performance Curve

Measured at 30 cSt *140 SSU* (For cartridge only)



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

A04G2		Z	—	N
Series	Pressure Adjustment Range	Adjustment Style		Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30503N-1)

Code	Adjustment Style
Z	Screw Adjustment (Standard)

Code	Pressure Adjustment Range
H	10 - 210 bar (145 - 3000 psi)
P	10 - 420 bar (145 - 6000 psi)

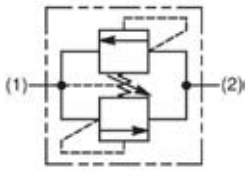
Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

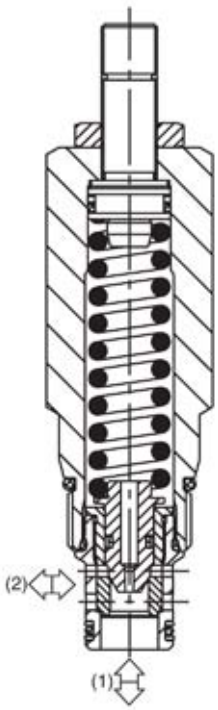
General Description

Direct Acting, Dual Poppet-Type, Cross-over Relief Valve.

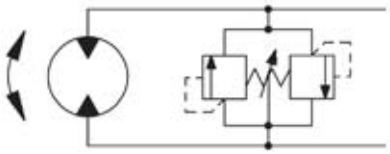
Features

- Compact space saving design
- Cost effective - only requires one cavity
- Poppet-type construction for lower leakage
- Full 350 bar (5000 psi), pressure capability
- High flow capability for the size of valve
- Minimal pressure variation with flow change
- Hardened working parts for maximum durability
- Available as CE marked valve in compliance with pressure Equipment Directive
- All external parts are zinc plated





Typical Application



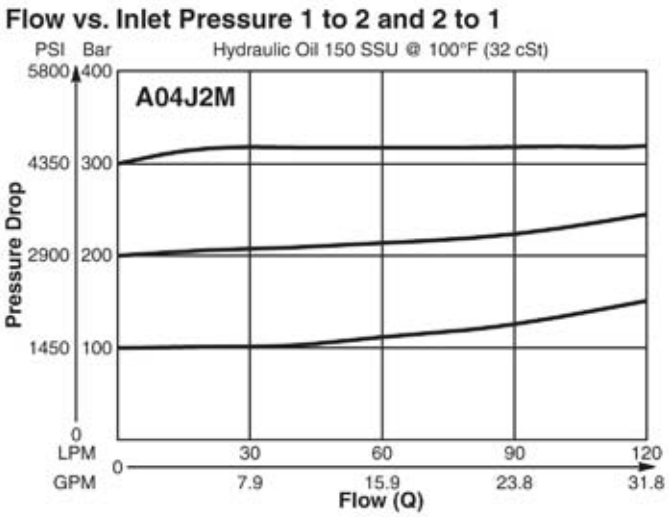
Motor protection in both directions

Specifications

Rated Flow	120 l/min (32 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Maximum Pressure Setting	**M-** 10 - 350 bar (145 - 5000 psi)
Maximum Tank Pressure	420 bar (6000 psi)
Leakage at 32 cSt (150 SSU)	10 drops/min. @100 bar (1450 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.29 kg (0.64 lbs)
Cavity	CAV04-2

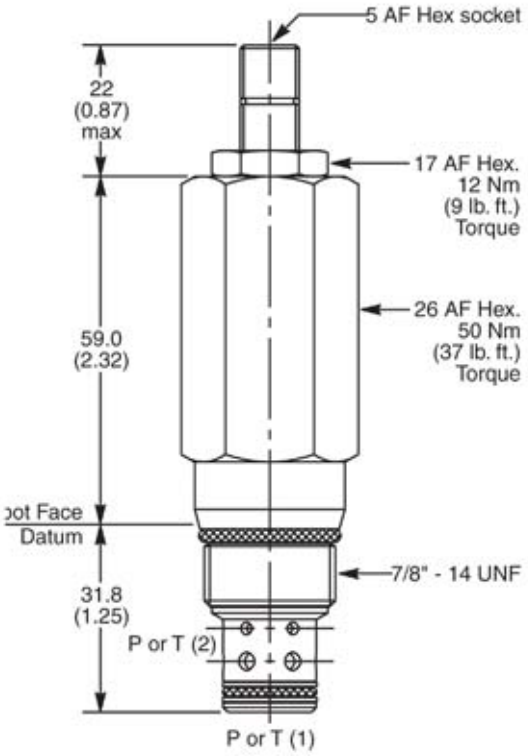
Performance Curves

(Pressure rise through cartridge only)



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

A04J2 — **M** — **Z** — **N**

- **A04J2** — Series
- **M** — Pressure Adjustment Range
- **Z** — Adjustment Style
- **N** — Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30529N-1)

Code	Adjustment Style
Z	Screw Adjustment (Standard)

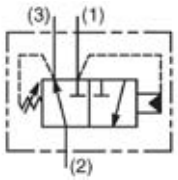
Code	Pressure Adjustment Range
M	10 - 350 bar (145 - 5000 psi)

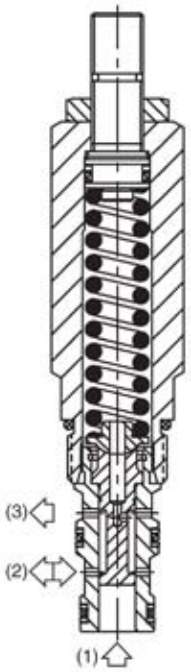
General Description

Direct Acting Sequence Valve with Internal Pilot & Drain.

Features

- Hardened working parts for maximum durability
- All external parts are zinc plated





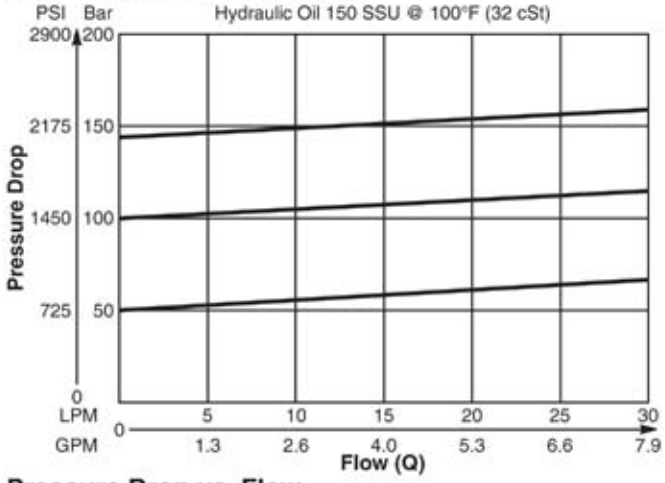
Specifications

Rated Flow	30 l/min (8 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Maximum Pressure Setting	2 - 148 bar (30 - 2150 psi)
Maximum Tank Pressure	420 bar (6000 psi)
Leakage at 32 cSt (150 SSU)	25 ml/min. @35 bar (580 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.21 kg (0.46 lbs)
Cavity	CAV02-3

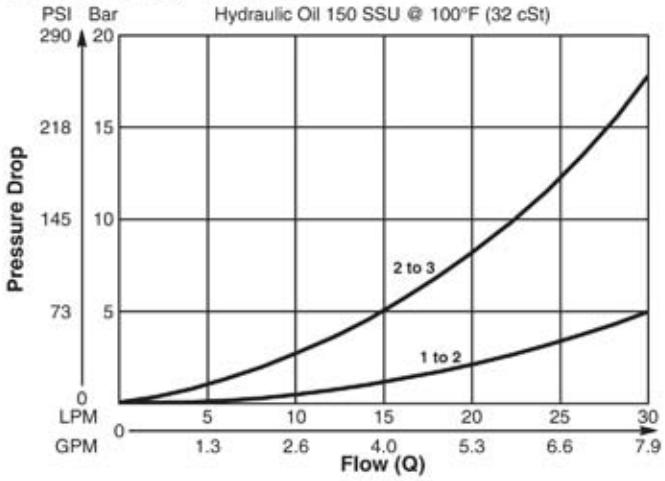
Performance Curves

(Pressure rise through cartridge only)

Flow vs. Inlet Pressure 1 to 2

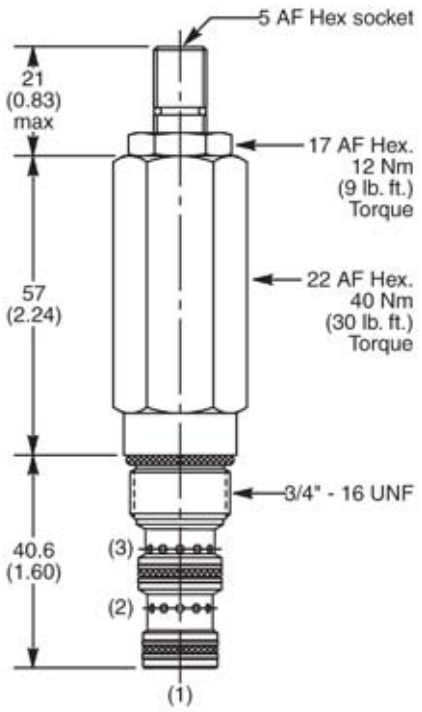


Pressure Drop vs. Flow



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

B02E3F — **Z** — **N**

Series: B02E3F

Adjustment Style: Z

Seals: N

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30501N-1)

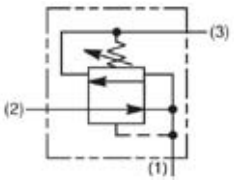
Code	Adjustment Style
Z	Screw Adjustment (Standard)

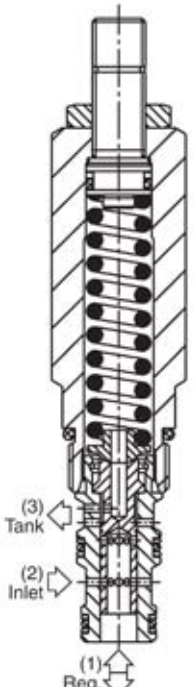
General Description

Direct Acting Pressure Reducing / Relieving Valve.

Features

- Maximum pressure setting up to 150 bar (2175 psi),
- Two pressure ranges available for more accurate pressure control
- Partial reverse flow capability
- Hardened working parts for maximum durability
- All external parts are zinc plated





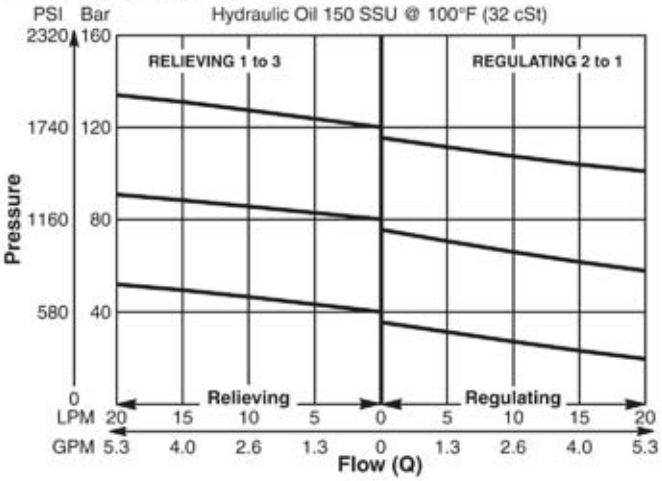
Specifications

Rated Flow	20 l/min (5 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Maximum Pressure Setting	**C-** 5 - 40 bar (73 - 580 psi) **G-** 50 - 150 bar (725 - 2175 psi)
Maximum Tank Pressure	420 bar (6000 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.20 kg (0.44 lbs)
Cavity	CAV02-3

Performance Curve

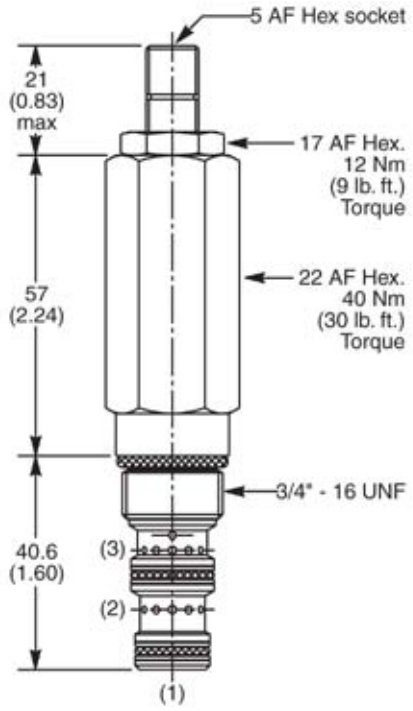
(Pressure rise through cartridge only)

Flow vs. Regulated Pressure



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

C02A3		Z	—	N
Series	Pressure Adjustment Range	Adjustment Style		Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30501N-1)

Code	Adjustment Style
Z	Screw Adjustment (Standard)

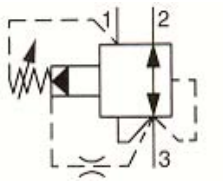
Code	Pressure Adjustment Range
C	5 - 40 bar (73 - 580 psi)
G	50 - 150 bar (725 - 2175 psi)

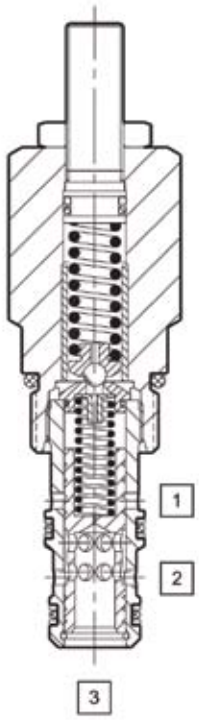
General Description

Pilot Operated, Spool type Relieving Valve.

Features

- Maximum pressure setting up to 350 bar (5000 psi),
- Low pressure rise / flow characteristic
- Spool valve for good stability
- Partial reverse flow capability
- Hardened working parts for maximum durability
- Preset version is tamperproof and compact
- All external parts are zinc plated



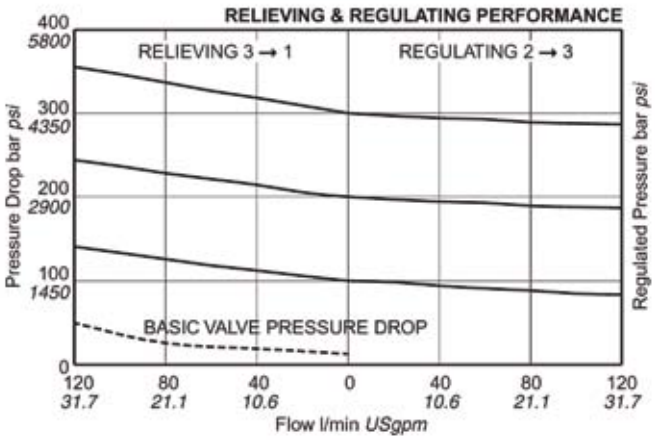


Specifications

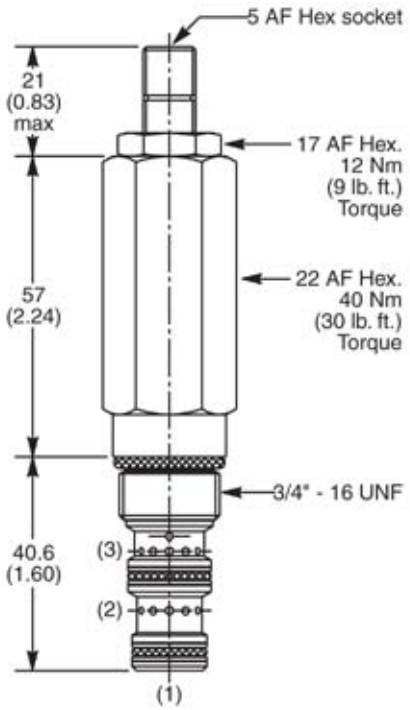
Rated Flow	120 l/min (32 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Pressure	**H-** 10 - 210 bar (145 - 3000 psi)
Sensitivity: Pressure / Turn	**H-** 30 bar (435 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Ideal Viscosity	15 to 50 cSt (80 - 230 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.24 kg (0.53 lbs)
Cavity	CAV04-3

Performance Curve

Measured at 30 cSt *140 SSU* (For cartridge only)



Dimensions Millimeters (Inches)



Ordering Code

C04B3 — **H** — **Z** — **N**

- **C04B3** — Series
- **H** — Pressure Adjustment Range
- **Z** — Adjustment Style
- **N** — Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30505N-1)

Code	Adjustment Style
Z	Screw Adjustment (Standard)

Code	Pressure Adjustment Range
H	10 - 210 bar (145 - 3000 psi)

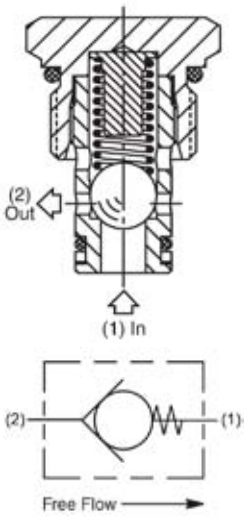
Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

General Description

Check Valve, Ball Type.

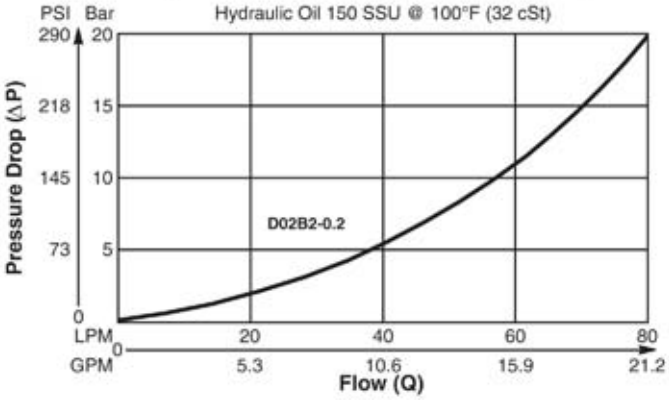
Features

- Low leakage - less than 3 drops/min.
- Ball type construction for cost effective design
- Single and dual pilot pistons available to create pilot to open check
- Range of cracking pressures available
- Good contamination tolerance
- All external parts are zinc plated

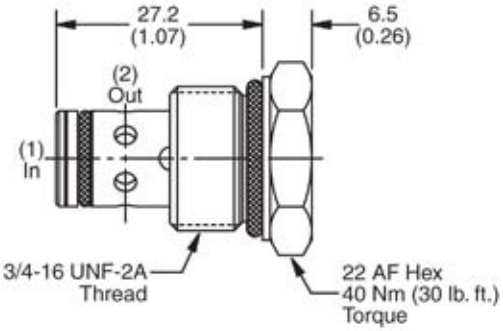


Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



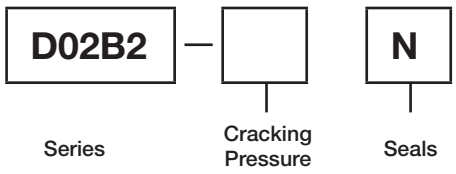
Dimensions Millimeters (Inches)



Specifications

Rated Flow	80 l/min (21 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Nominal Flow @ 7 bar (100 psi)	45 l/min (12 USgal/min)
Leakage @ 32 cSt (150 SSU)	**Less than 3 drops/min.**
Cartridge Material	All parts steel. Hardened steel ball.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.05 kg (0.11 lbs)
Cavity	CAV02-2

Ordering Code



Code	Cracking Pressure
0.2	0.2 bar (3 psi) standard
2.1	2.1 bar (30 psi)
6.0	6.0 bar (87 psi)

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30515N-1)

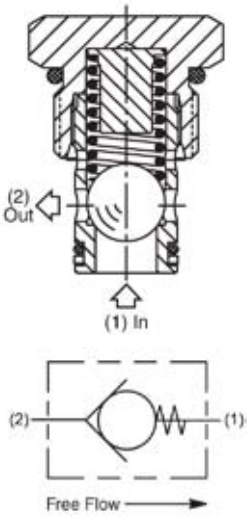
Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

General Description

Check Valve, Ball Type

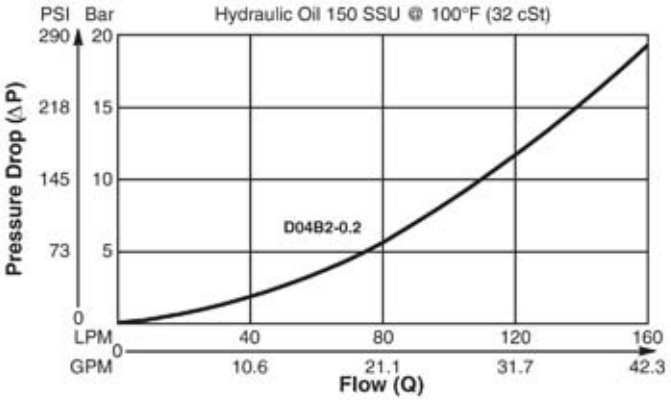
Features

- Low leakage - less than 3 drops/min.
- Ball type construction for cost effective design
- Single and dual pilot pistons available to create pilot to open check
- Range of cracking pressures available
- Good contamination tolerance
- All external parts are zinc plated

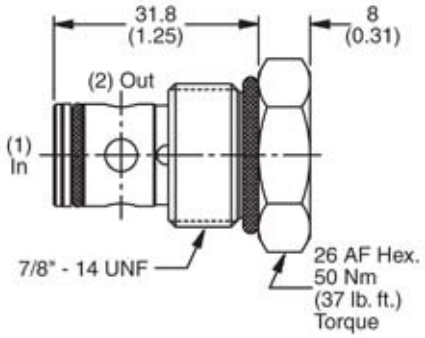


Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



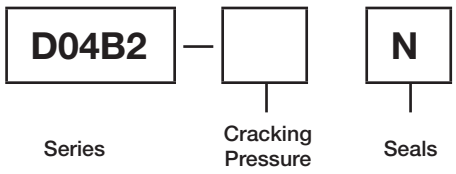
Dimensions Millimeters (Inches)



Specifications

Rated Flow	160 l/min (42 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Nominal Flow @ 7 bar (100 psi)	90 l/min (24 USgal/min)
Leakage @ 32 cSt (150 SSU)	**Less than 3 drops/min.**
Cartridge Material	All parts steel. Hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.08 kg (0.18 lbs)
Cavity	CAV04-2

Ordering Code



Code	Cracking Pressure
0.2	0.2 bar (3 psi) Standard
1.0	1.0 bar (15 psi)
2.1	2.1 bar (30 psi)

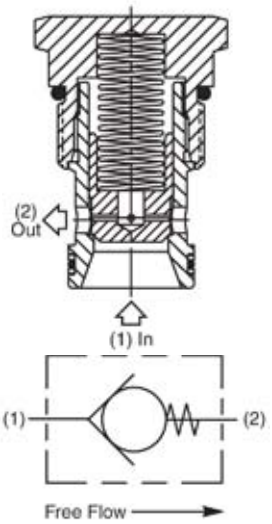
Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30516N-1)

General Description

Check Valve, Poppet Type.

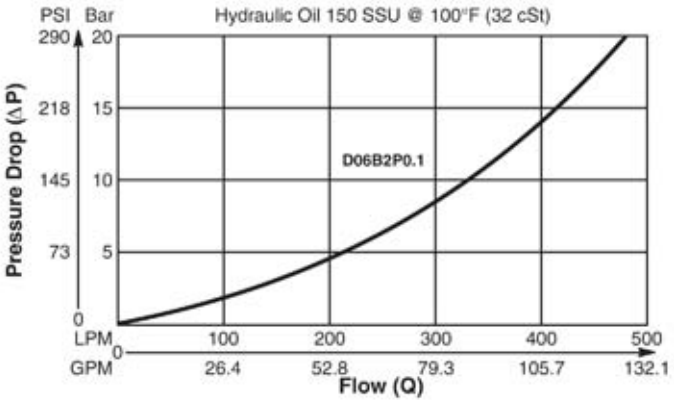
Features

- Extra low pressure drop capability for systems up to 250 bar (3625 psi)
- Poppet type construction for minimal leakage - less than 3 drops/min
- Hardened poppet for maximum durability
- Good contamination tolerance
- All external parts are zinc plated

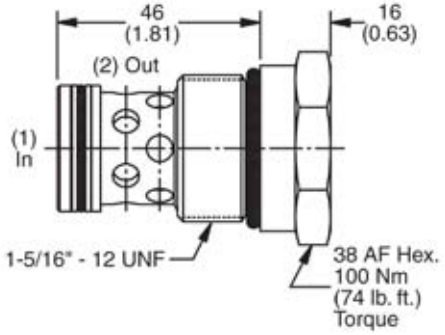


Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Specifications

Rated Flow	500 l/min (132 USgal/min)
Pressure	250 bar (3625 psi)
Nominal Flow @ 7 bar (100 psi)	330 l/min (87 USgal/min)
Leakage @ 32 cSt (150 SSU)	**Less than 3 drops/min.**
Cartridge Material	All parts steel. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 SSU (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.27 kg (0.60 lbs)
Cavity	CAV06-2

Ordering Code

D06B2H – **0.1** **N**

Series | Cracking Pressure | Seals

Code	Cracking Pressure
0.1	0.1 bar (1.5 psi) Standard

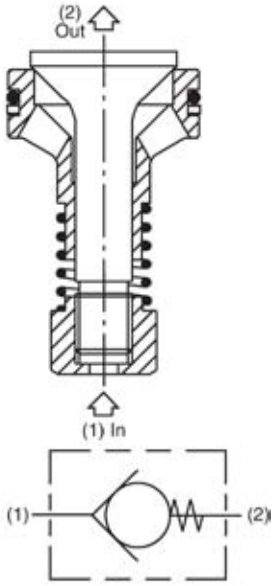
Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30514N-1)

General Description

Check Valve Insert, Poppet Type.

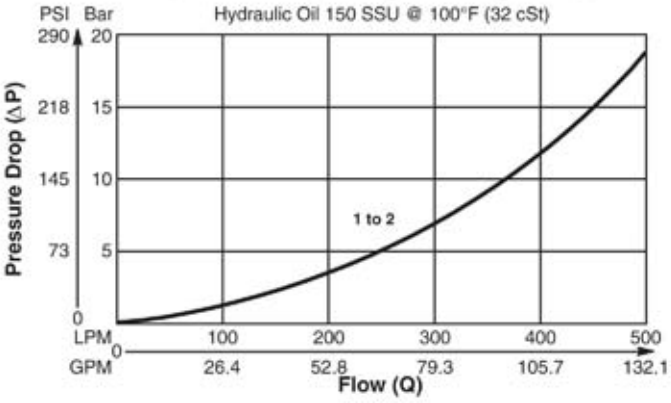
Features

- For insertion inside manifold blocks
- High flow capacity
- Minimal leakage - less than 3 drops / min.
- Simple construction, extremely cost effective
- Range of cracking pressures available
- Good contamination tolerance
- All external parts are zinc plated

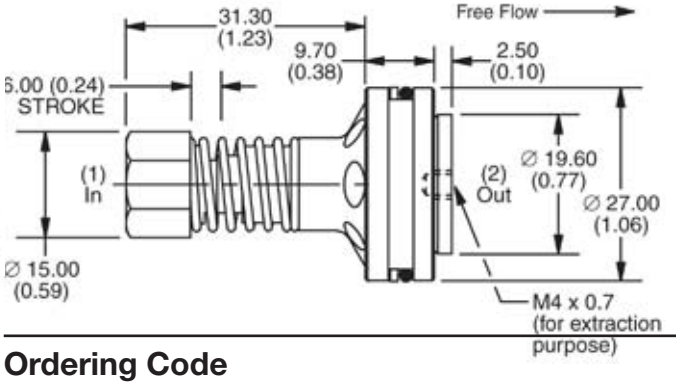


Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Specifications

Rated Flow	500 l/min (132 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Nominal Flow @ 7 bar (100 psi)	300 l/min (79 USgal/min)
Leakage @ 32 CSt (150 SSU)	Less than 3 drops/min.
Cartridge Material	All parts steel. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.06 kg (0.13 lbs)
Cavity	2C

Ordering Code

D1B125		N
Series	Cracking Pressure	Seals

Code	Cracking Pressure
0.1	0.1 bar (1.5 psi)
0.2	0.2 bar (3 psi)
1.0	1.0 bar (15 psi) Standard

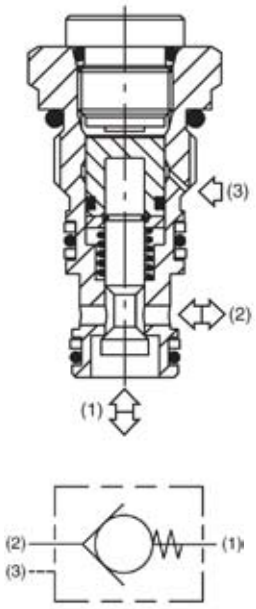
Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30014N-1)

General Description

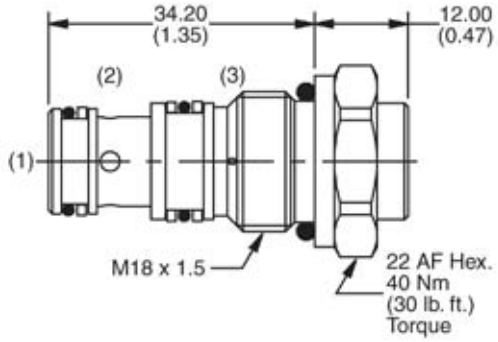
Miniature Pilot to Open, Poppet Type Check Valve.

Features

- Hardened poppet for maximum durability
- Minimal leakage - less than 3 drops / min.
- Sealed pilot
- Extremely compact construction, can be fitted directly into most cylinders
- Cavity commonality with load control valves
- Dual line blocks available
- All external parts are zinc plated



Dimensions Millimeters (Inches)

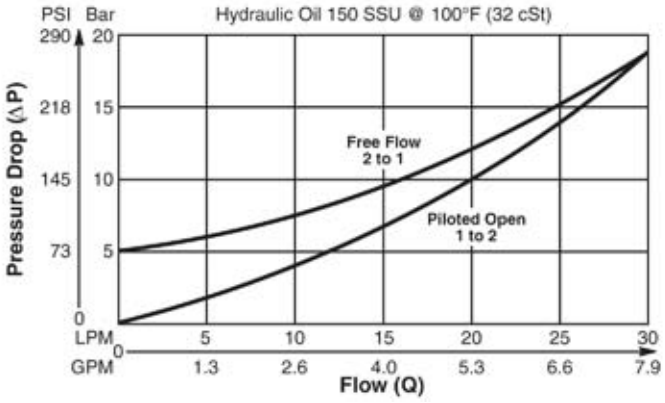


Specifications

Rated Flow	30 l/min (8 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Nominal Flow @ 7 bar (100 psi)	16 l/min (4.2 USgal/min) Piloted Open
Leakage @ 32 cSt (150 SSU)	Less than 3 drops/min.
Cracking Pressure	5 bar (72 psi)
Pilot Ratio	4:1
Cartridge Material	Steel operating parts. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 - 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.066 kg (0.145 lbs)
Cavity	53-1

Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Ordering Code

D4A020	N
Series	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30090N-1)

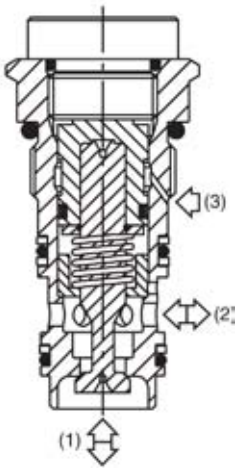
Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

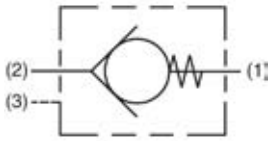
General Description

Pilot to Open, Poppet Type Check Valve.

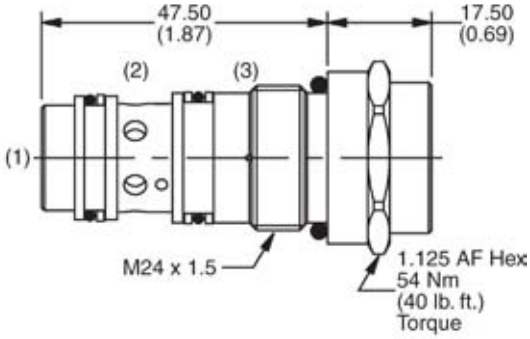
Features

- Hardened poppet for maximum durability
- High flow capacity
- Minimal leakage - less than 3 drops / min.
- Sealed pilot
- Good contamination tolerance
- Cavity commonality with load control valves
- Dual line blocks available
- All external parts are zinc plated





Dimensions Millimeters (Inches)

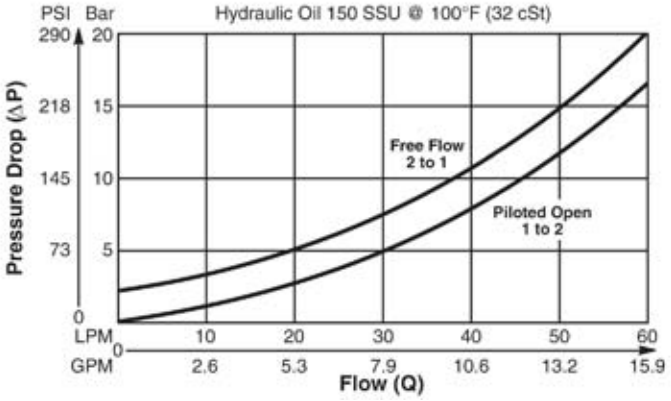


Specifications

Rated Flow	60 l/min (16 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Nominal Flow @ 7 bar (100 psi)	32 l/min (8.5 USgal/min) Piloted Open
Leakage @ 32 cSt (150 SSU)	Less than 3 drops/min.
Cracking Pressure	3 bar (43.5 psi)
Pilot Ratio	4:1
Cartridge Material	Steel operating parts. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.15 kg (0.33 lbs)
Cavity	68-1

Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Ordering Code

D4A040	N
Series	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30059N-1)

Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

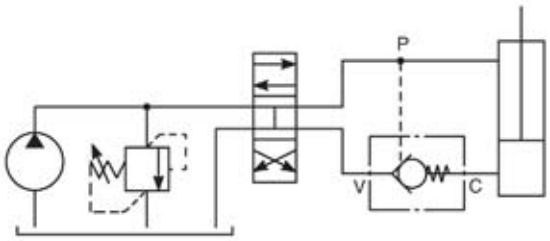
General Description

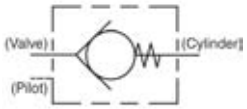
Check Valve Package, Single Pilot Operated.

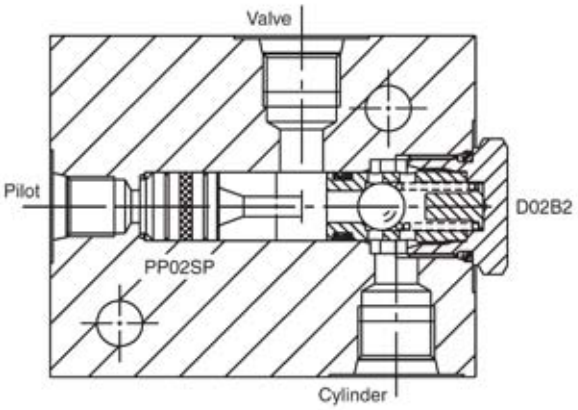
Features

- Uses standard check valve cartridge with separate piston to form a single pilot operated check
- Cost effective
- Low leakage
- Leak free pilot pistons available - consult factory
- All external parts are zinc plated

Typical Application





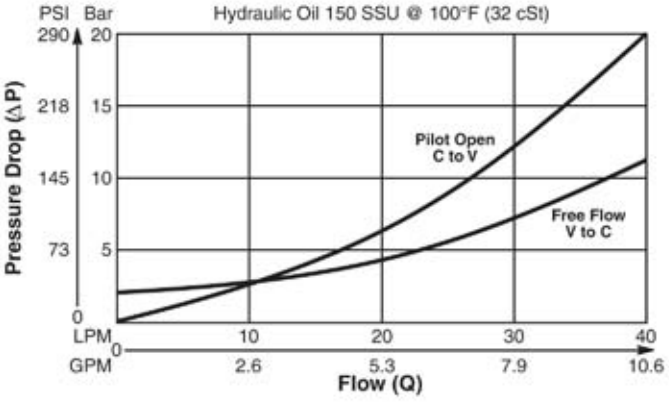


Specifications

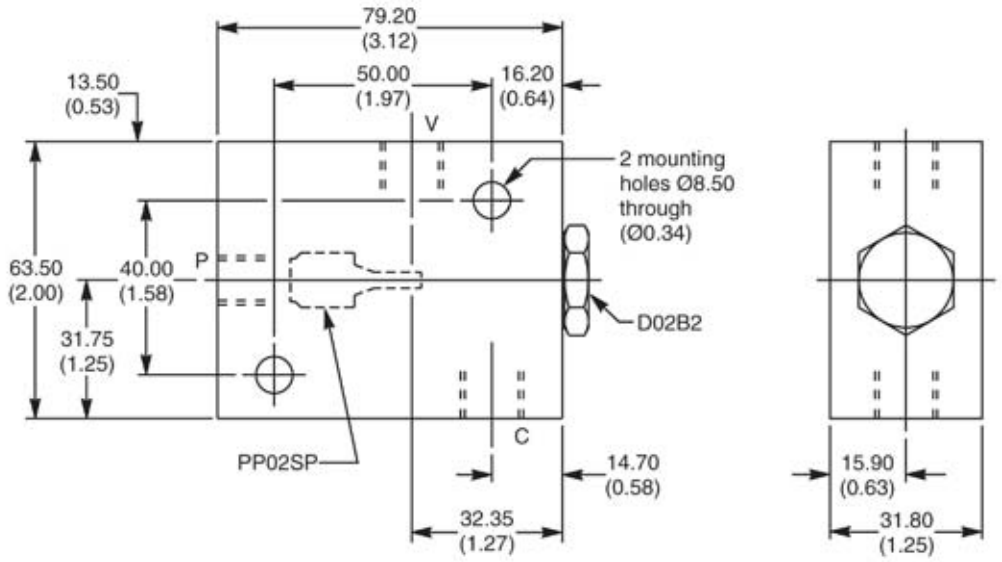
Description	**D02B2-2.1** - Check Valve (1 off) **PP02SP** - Pilot Piston
Rated Flow	40 l/min (11 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Pilot Ratio	4:1
Seal Material	Glass filled PTFE
Seal Temp. Range	-250°C to +260°C -418°F to +500°F
Cavity	CAV02-SP
Approx. Weight	Aluminium Block Assembly 0.43 kg (0.95 lbs) Steel Block Assembly 1.13 kg (2.49 lbs)

Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Code

PP02SP

Use in conjunction with Check Valve D02B2-2.1 - 1off

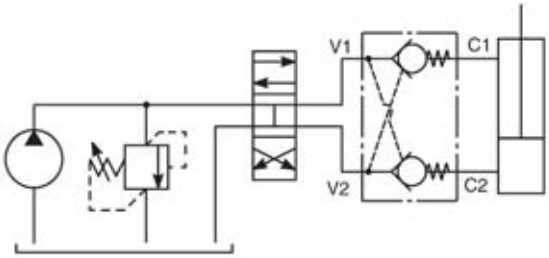
General Description

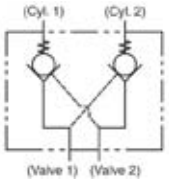
Check Valve Package, Dual Pilot Operated.

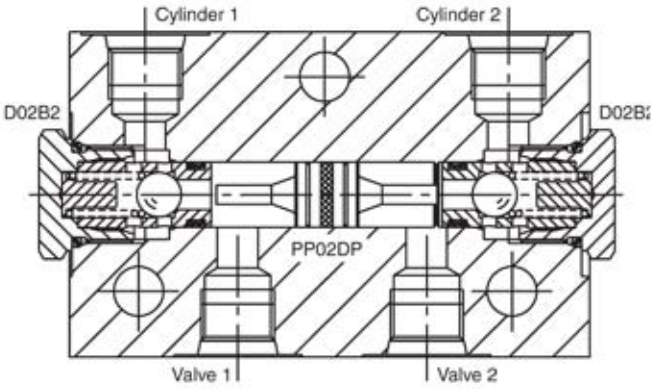
Features

- Uses standard check valve cartridge with separate piston to form a dual pilot operated check
- Cost effective
- Low leakage
- Leak free pilot pistons available - consult factory
- All external parts are zinc plated

Typical Application





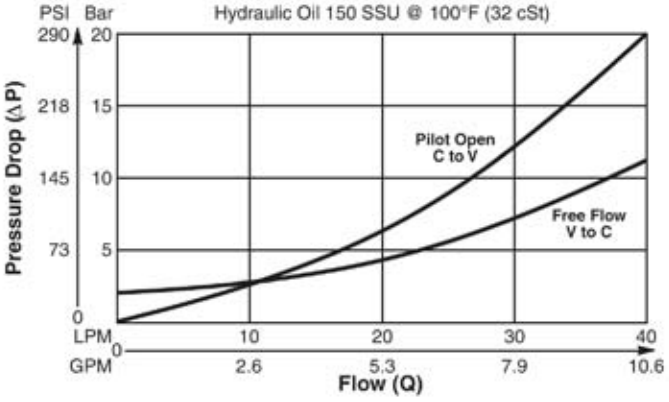


Specifications

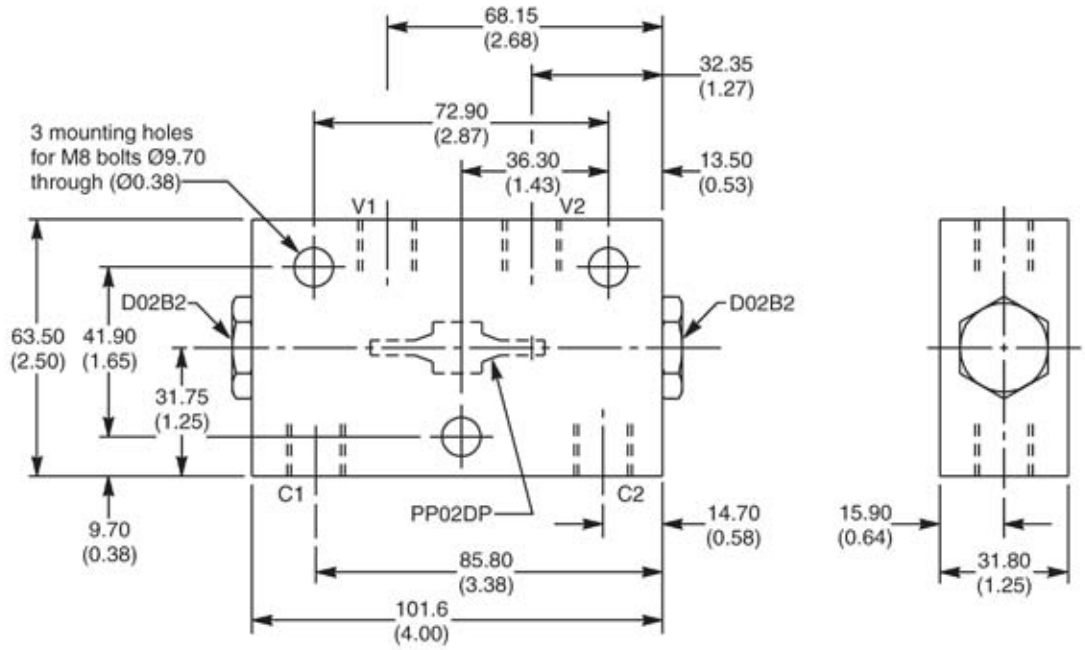
Description	**D02B2-2.1** - Check Valve (2 off) **PP02DP** - Pilot Piston
Rated Flow	40 l/min (11 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Pilot Ratio	4:1
Seal Material	Glass Filled PTFE
Seal Temp. Range	-250°C to +260°C -418°F to +500°F
Cavity	CAV02-DP
Approx. Weight	Aluminium Block Assembly 0.55 kg (1.21 lbs) Steel Block Assembly 1.38 kg (3.04 lbs)

Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Code

PP02DP

Use in conjunction with Check Valve D02B2-2.1 - 2off

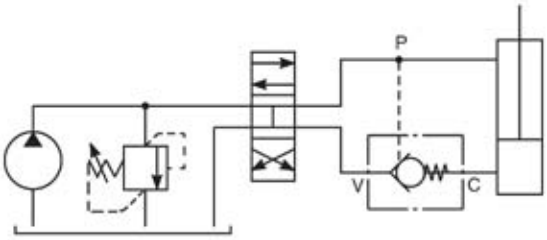
General Description

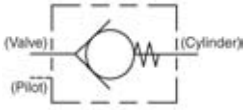
Check Valve Package, Single Pilot Operated.

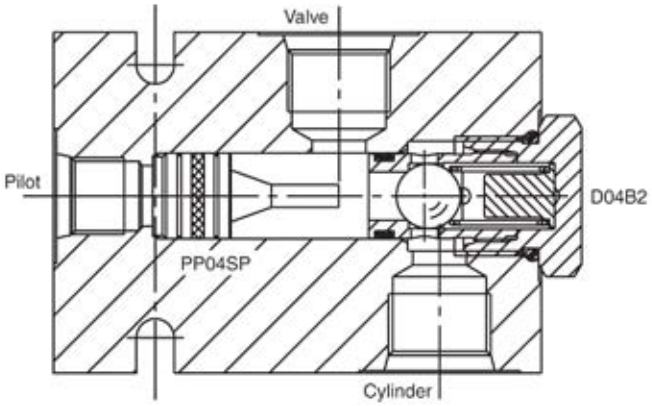
Features

- Uses standard check valve cartridge with separate piston to form a single pilot operated check
- Cost effective
- Low leakage
- Leak free pilot pistons available - consult factory
- All external parts are zinc plated

Typical Application





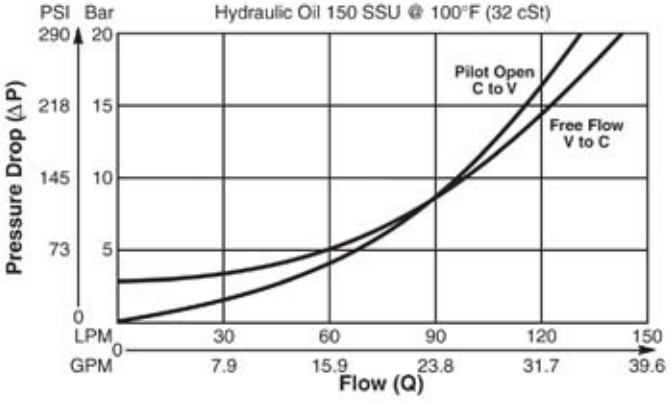


Specifications

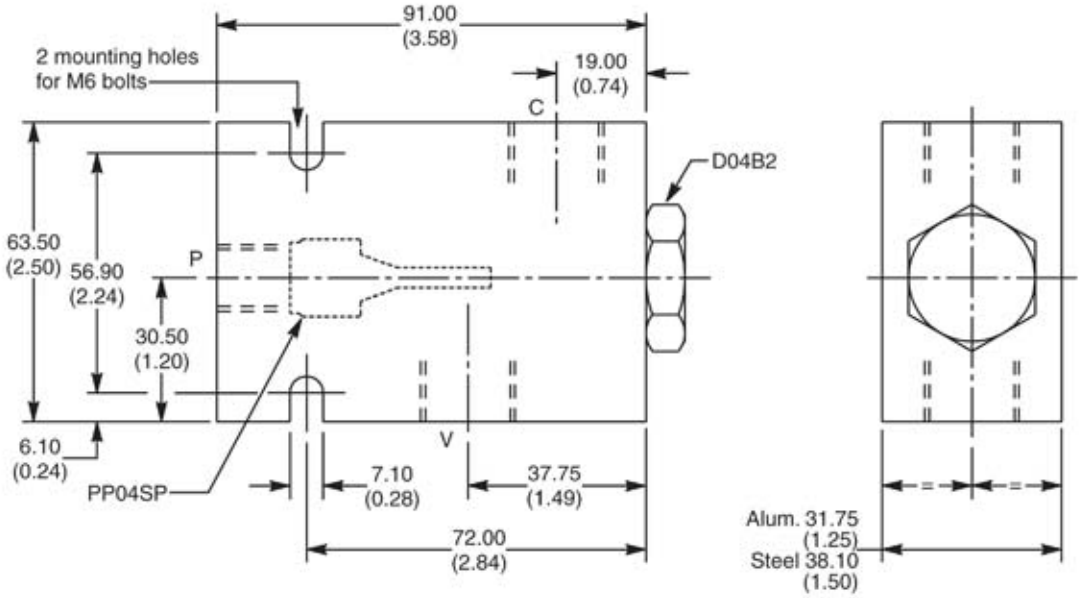
Description	**D04B2-2.1** - Check Valve (1 off) **PP04SP** - Pilot Piston
Rated Flow	135 l/min (36 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Pilot Ratio	3:1
Seal Material	Glass Filled PTFE
Seal Temp. Range	-250°C to +260°C -418°F to +500°F
Cavity	CAV04-SP
Approx. Weight	Aluminium Block Assembly 0.50 kg (1.1 lbs) Steel Block Assembly 1.53 kg (3.37 lbs)

Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Code

PP04SP

Use in conjunction with Check Valve D04B2-2.1 - 1off

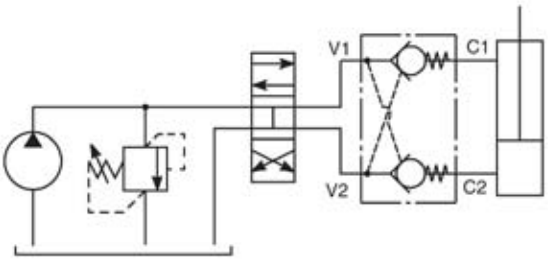
General Description

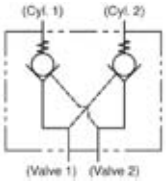
Check Valve Package, Dual Pilot Operated.

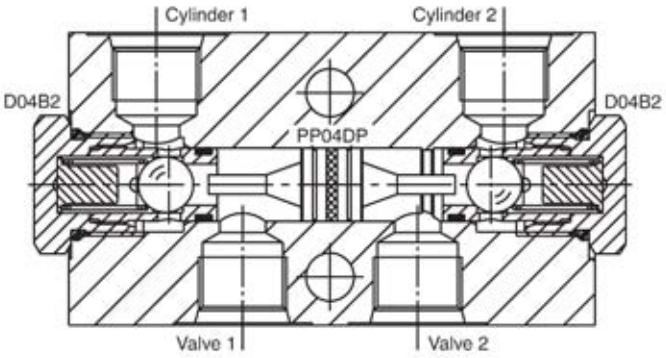
Features

- Uses standard check valve cartridge with separate piston to form a dual pilot operated check
- Cost effective
- Low leakage
- Leak free pilot pistons available - consult factory
- All external parts are zinc plated

Typical Application





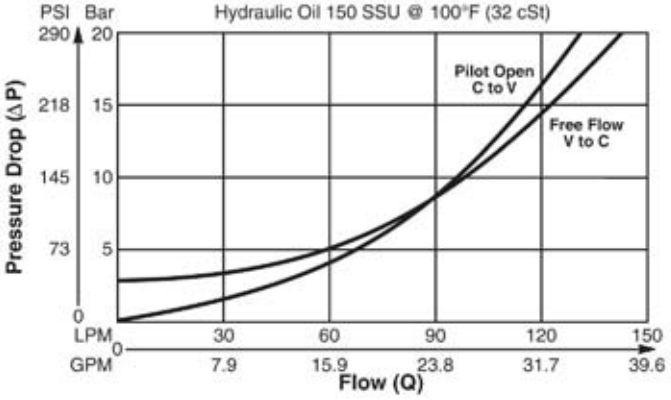


Specifications

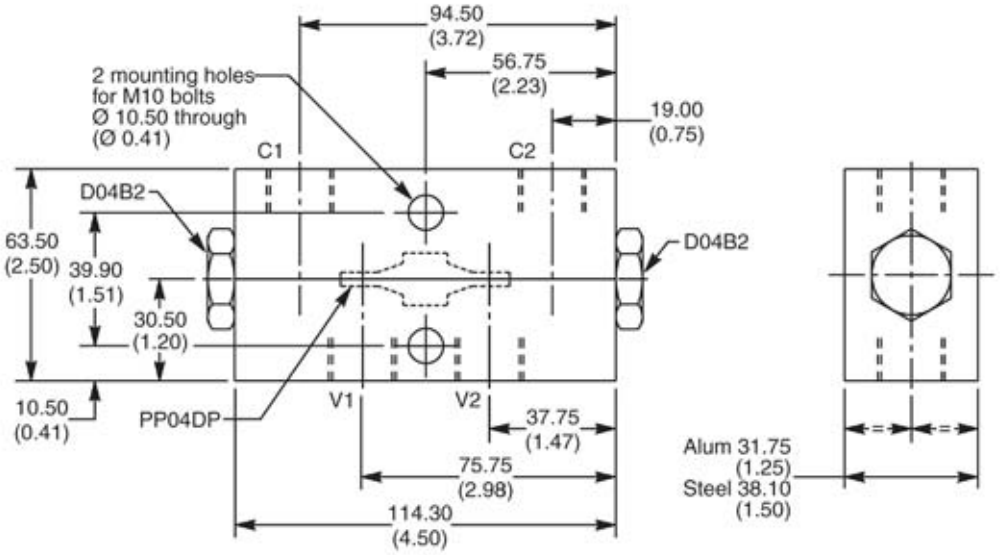
Description	**D04B2-2.1** - Check Valve (2 off) **PP04DP** - Pilot Piston
Rated Flow	135 l/min (36 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Pilot Ratio	3:1
Seal Material	Glass Filled PTFE
Seal Temp. Range	-250°C to +260°C -418°F to +500°F
Cavity	CAV04-DP
Approx. Weight	Aluminium Block Assembly 0.65 kg (1.43 lbs) Steel Block Assembly 1.89 kg (4.17 lbs)

Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Code

PP04DP

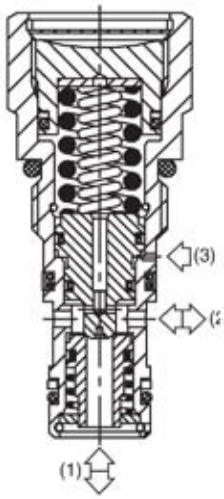
Use in conjunction with Check Valve D04B2-2.1 - 2off

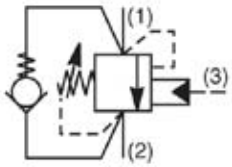
General Description

Threaded Cartridge Style Counterbalance Valve.
Pilot assisted, designed for motion control applications.

Features

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body, saving space and minimising installation cost
- Can be directly mounted into cylinder eliminating requirement for manifold block
- Fully sealed pilot for high efficiency and accurate pilot ratio
- Two pilot ratios available, 4.5:1 for cylinders and 8:1 for motor control
- Preset version is tamper resistant and compact
- All external parts are zinc plated



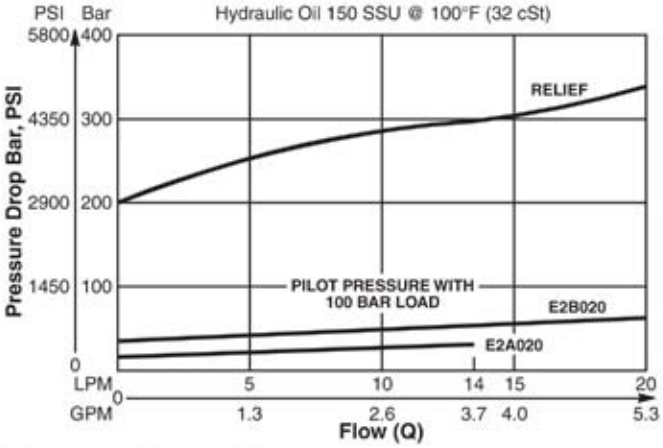


Specifications

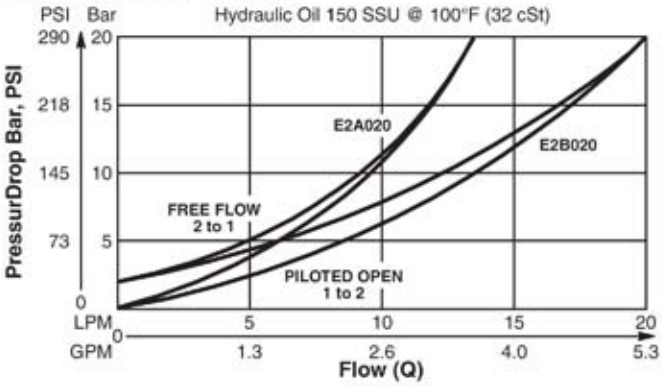
Rated Flow	**E2A020** - 14 l/min (3.7 USgal/min) **E2B020** - 20 l/min (5.3 USgal/min)
Pressure	50 - 420 bar (725 - 6000 psi)
Sensitivity Pressure / Turn	**E2A020** - 113 bar (1640 psi) **E2B020** - 84 bar (1220 psi)
Pilot Ratio	**E2A020** - 8 : 1 **E2B020** - 4.5 : 1
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.08 kg (0.17 lbs)
Cavity	53-1

Performance Curves

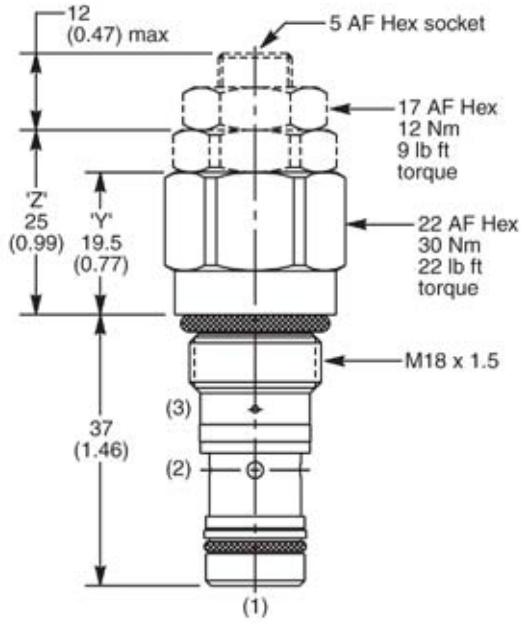
Relief & Pilot Performance 1 to 2



Pressure Drop vs Flow



Dimensions Millimeters (Inches)



Ordering Code

E2		020	Z	N
Series	Pilot Ratio		Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30087N-1)

Code	Adjustment Style
Z	Screw Adjustment (standard)

Code	Pilot Ratio
A	8 : 1
B	4.5 : 1

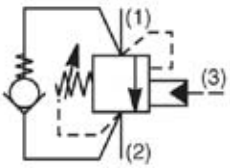
Standard valve is set to crack at 215 bar (3120 psi).
Valve is set to 1.3 times maximum load induced pressure.

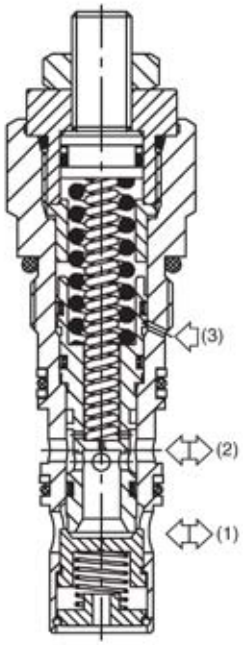
General Description

Threaded Cartridge Style Counterbalance Valve.
Pilot assisted, designed for motion control applications.

Features

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body, saving space and minimising installation cost
- Excellent control and very good stability
- Two pilot ratios available, 3:1 for cylinders and 8:1 for motor control
- Hardened working parts for maximum durability
- Preset version is tamper resistant and compact
- All external parts are zinc plated



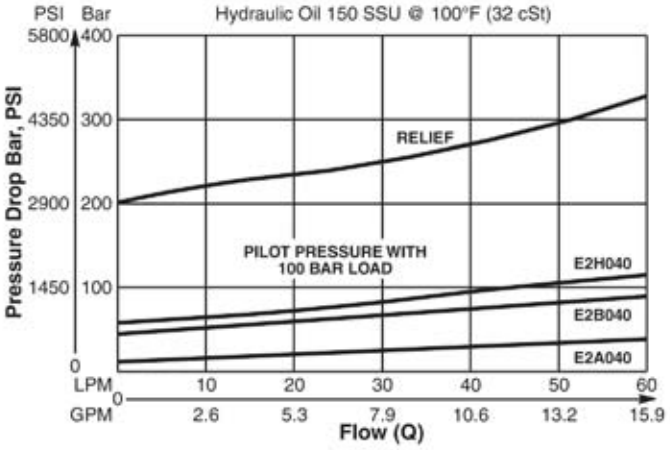


Specifications

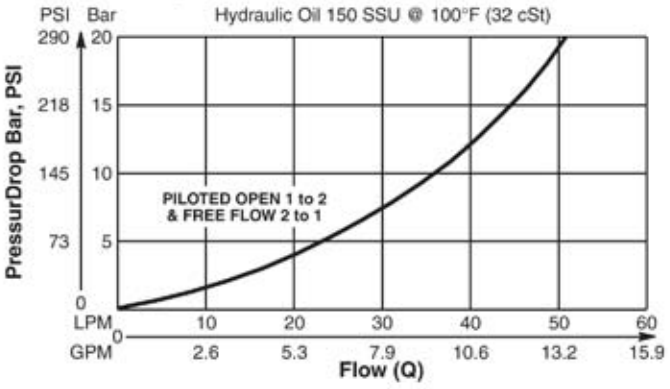
Rated Flow	60 l/min (15.9 USgal/min)
Pressure	50 - 350 bar (725 - 5000 psi)
Sensitivity Pressure / Turn	99 bar (1435 psi)
Pilot Ratio	**E2A040** - 8 : 1 **E2B040** - 3 : 1
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.27 kg (0.60 lbs)
Cavity	68-1

Performance Curves

Relief & Pilot Performance 1 to 2

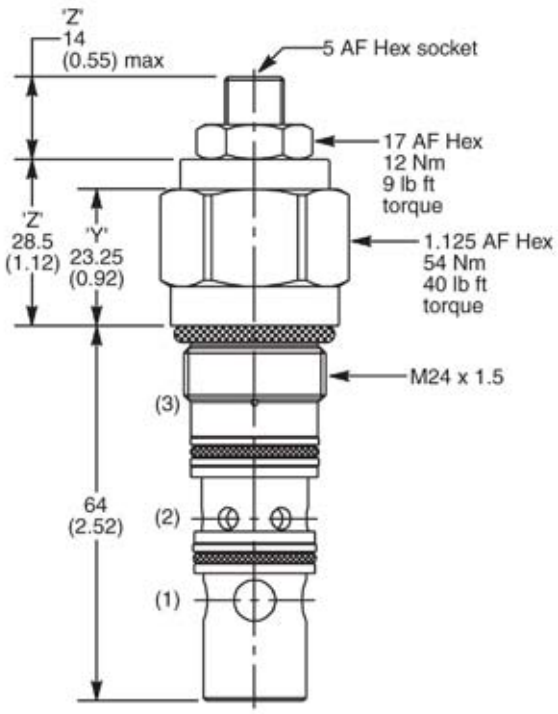


Pressure Drop vs Flow



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

E2		040	Z	N
Series	Pilot Ratio		Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30059N-1)

Code	Adjustment Style
Z	Screw Adjustment (standard)

Code	Pilot Ratio
A	8 : 1
B	3 : 1

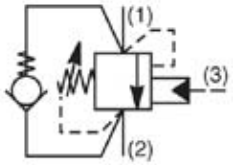
Standard valve is set to crack at 215 bar (3120 psi).
Valve is set to 1.3 times maximum load induced pressure.

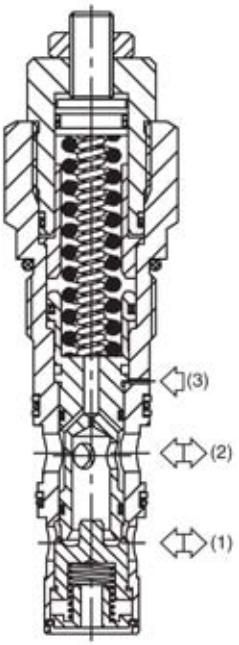
General Description

Threaded Cartridge Style Counterbalance Valve.
Pilot assisted, designed for motion control applications.

Features

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body, saving space and minimising installation cost
- Excellent control and very good stability
- Two pilot ratios available, 3:1 for cylinders and 8:1 for motor control
- Hardened working parts for maximum durability
- All external parts are zinc plated



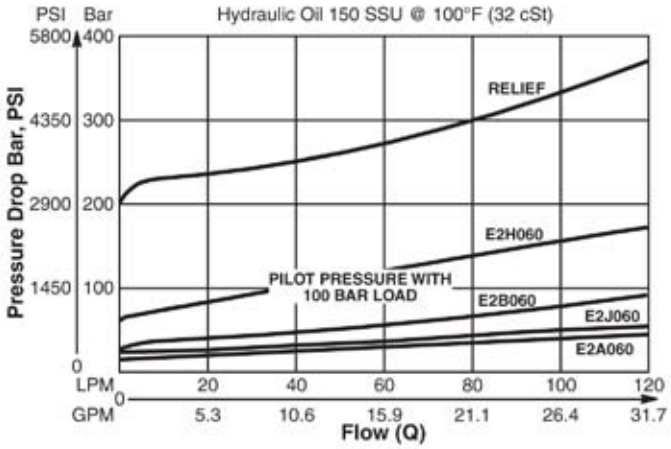


Specifications

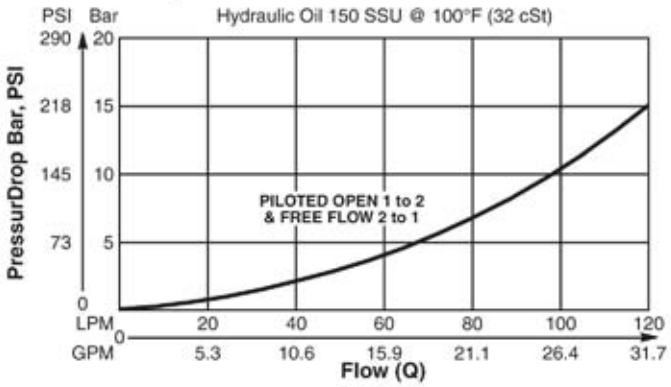
Rated Flow	120 l/min (32 USgal/min)
Pressure	50 - 350 bar (725 - 5000 psi)
Sensitivity Pressure / Turn	44 bar (640 psi)
Pilot Ratio	**E2A060** - 8 : 1 **E2B060** - 3 : 1
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.54 kg (1.19 lbs)
Cavity	3C

Performance Curves

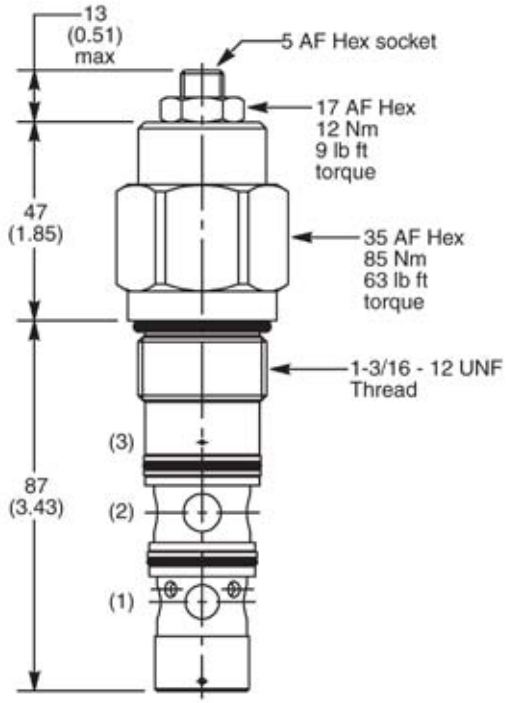
Relief & Pilot Performance 1 to 2



Pressure Drop vs Flow



Dimensions Millimeters (Inches)



Ordering Code

E2		060	Z	N
Series	Pilot Ratio		Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30008N-1)

Code	Adjustment Style
Z	Screw Adjustment (standard)

Code	Pilot Ratio
A	8 : 1
B	3 : 1

Standard valve is set to crack at 215 bar (3120 psi).
Valve is set to 1.3 times maximum load induced pressure.

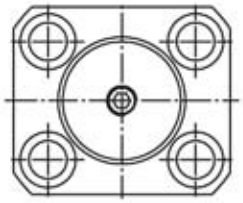
Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

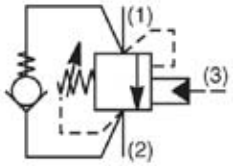
General Description

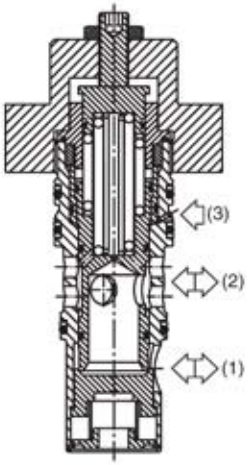
Threaded Cartridge Style Counterbalance Valve.
Pilot assisted, designed for motion control applications.

Features

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection and reverse check valve within body, saving space and minimising installation cost
- Two pilot ratios available, 3:1 for cylinders and 8:1 for motor control
- Hardened working parts for maximum durability
- All external parts are zinc plated





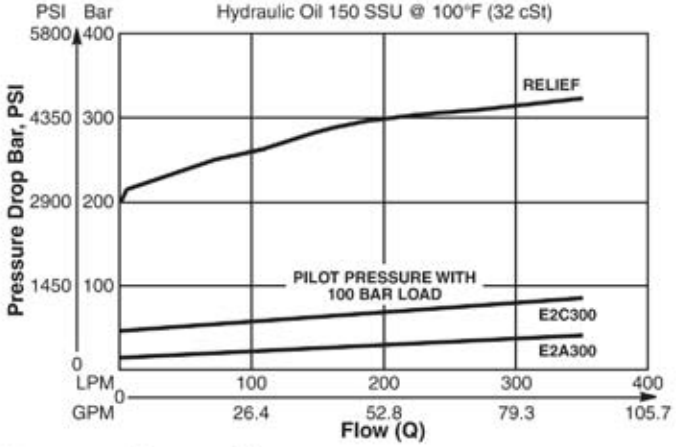


Specifications

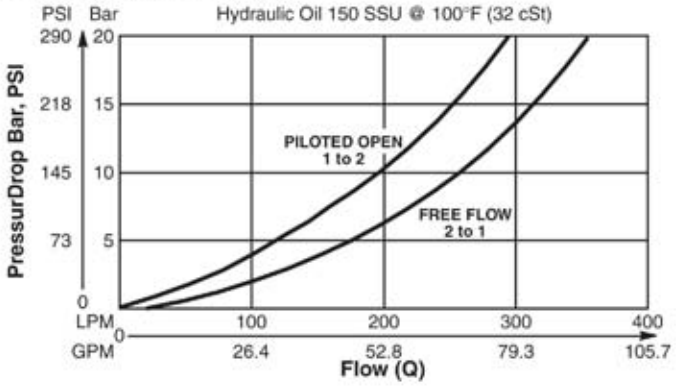
Rated Flow	350 l/min (92 USgal/min)
Pressure	50 - 350 bar (725 - 5000 psi)
Sensitivity Pressure / Turn	45 bar (653 psi)
Pilot Ratio	**E2A300** - 8 : 1 **E2C300** - 3 : 1
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000)
Filtration	25 Microns (Nom.) or better
Approx. Weight	1.44 kg (3.17 lbs)
Cavity	3K

Performance Curves

Relief & Pilot Performance 1 to 2

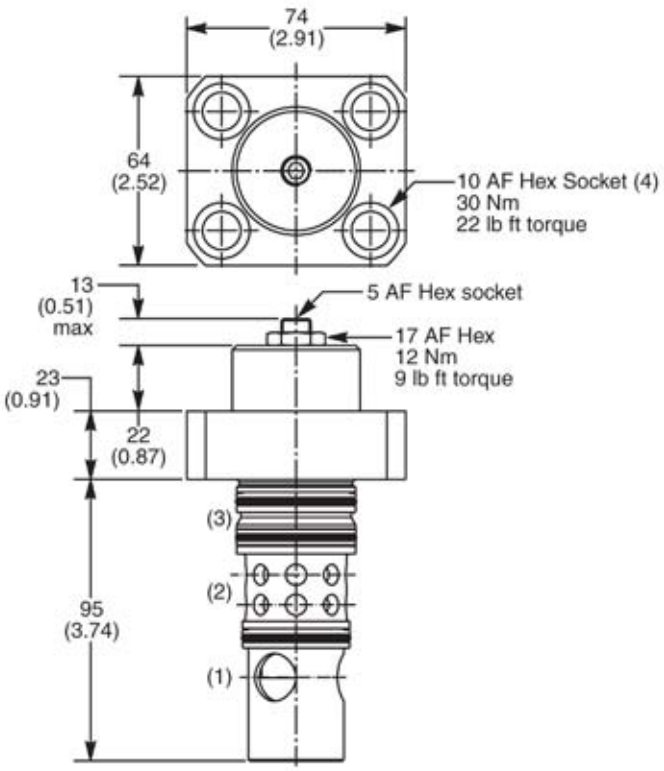


Pressure Drop vs Flow



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

E2		300	Z	N
Series	Pilot Ratio		Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30022N-1)

Code	Adjustment Style
Z	Screw Adjustment (standard)

Code	Pilot Ratio
A	8 : 1
C	3 : 1

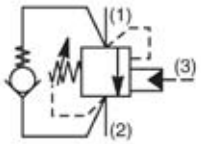
Standard valve is set to crack at 215 bar (3120 psi).
Valve is set to 1.3 times maximum load induced pressure.

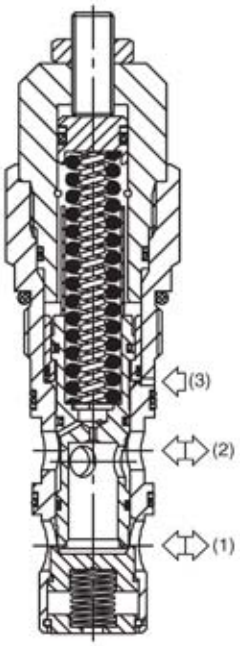
General Description

Threaded Cartridge Style Counterbalance Valve.
Pilot assisted, designed for motion control applications.

Features

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection and reverse check valve, saving space and minimising installation cost
- Pilot ratio available, 3:1 for cylinders
- Hardened working parts for maximum durability
- All external parts are zinc plated



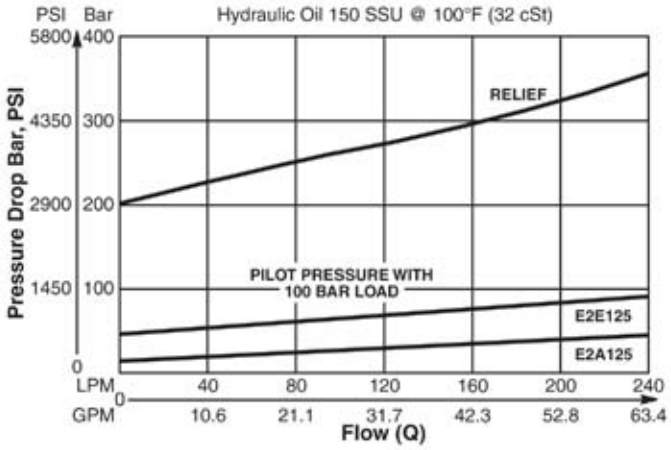


Specifications

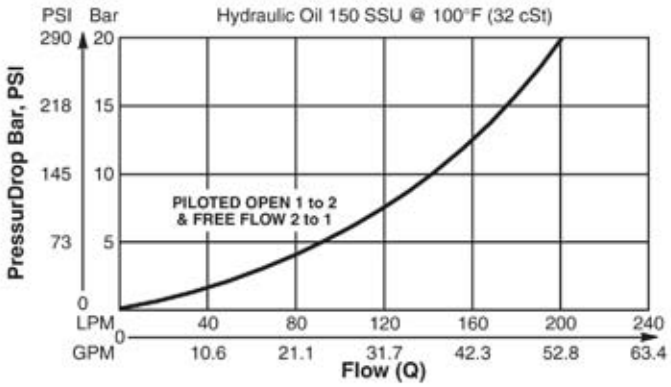
Rated Flow	200 l/min (53 USgal/min)
Pressure	50 - 350 bar (725 - 5000 psi)
Sensitivity Pressure / Turn	34 bar (493 psi)
Pilot Ratio	3 : 1
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.75 kg (1.65 lbs)
Cavity	3M

Performance Curves

Relief & Pilot Performance 1 to 2



Pressure Drop vs Flow



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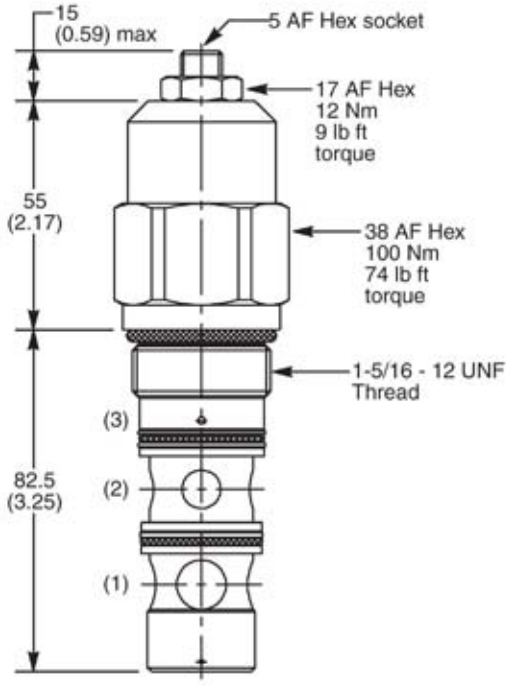
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

E2	E	125	Z	N
Series	Pilot Ratio		Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30035N-1)

Code	Adjustment Style
Z	Screw Adjustment (standard)

Code	Pilot Ratio
E	3 : 1

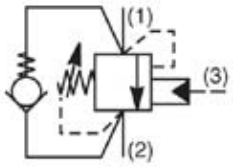
Standard valve is set to crack at 215 bar (3120 psi).
Valve is set to 1.3 times maximum load induced pressure.

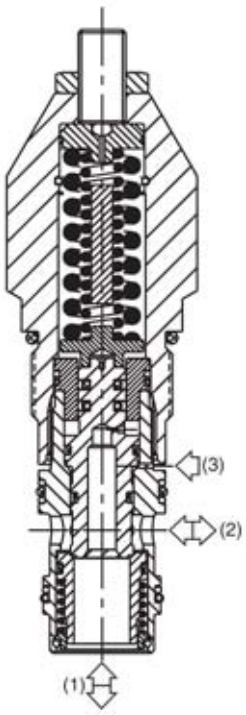
General Description

Threaded Cartridge Style Counterbalance Valve.
Pilot assisted, designed for motion control applications.

Features

- High flow design with extra damping
- Spring chamber isolated from system back pressure by double seal, eliminating vent port leakage and need for separate drain line
- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body, saving space and minimising installation cost
- Hardened working parts for maximum durability
- All external parts are zinc plated



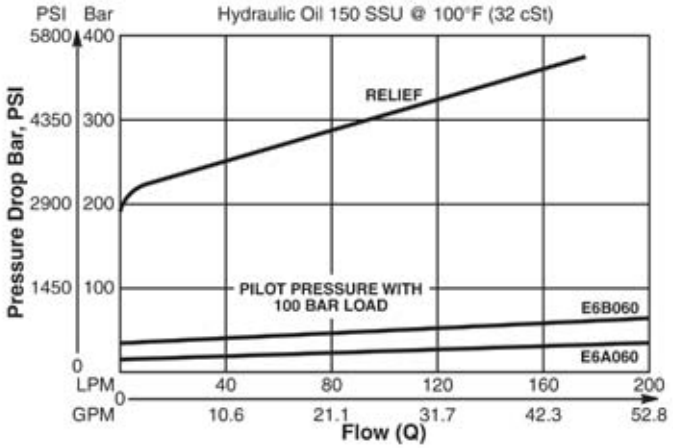


Specifications

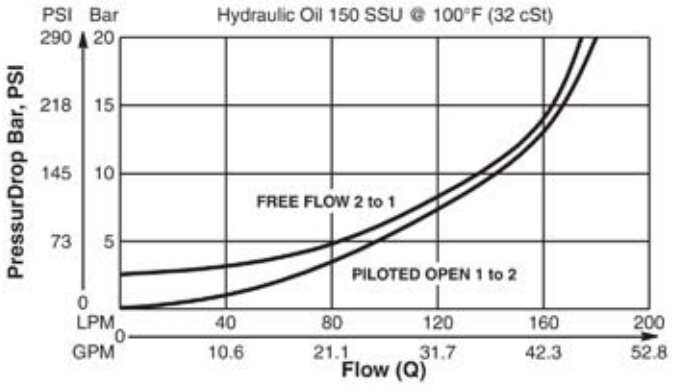
Rated Flow	180 l/min (48 USgal/min)
Pressure	50 - 350 bar (725 - 5000 psi)
Sensitivity Pressure / Turn	50 bar (725 psi)
Pilot Ratio	3 : 1
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.53 kg (1.17 lbs)
Cavity	3C

Performance Curves

Relief & Pilot Performance 1 to 2



Pressure Drop vs Flow



Parker Hannifin Corporation
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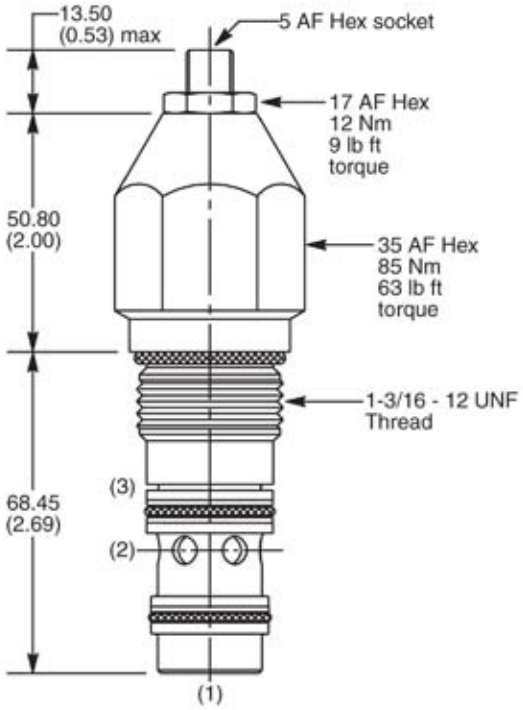
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

E6	B	060	Z	N	409
Series	Pilot Ratio		Adjustment Style	Seals	Suffix Number

Code	Suffix No
409	High Flow Design With Extra Damping

Code	Seal Material / Kit No
N	Nitrile, Buna-N / (SK30008N-1)

Code	Adjustment Style
Z	Screw Adjustment

Code	Pilot Ratio
B	3 : 1

Standard valve is set to crack at 215 bar (3120 psi).
Valve is set to 1.4 times maximum load induced pressure.

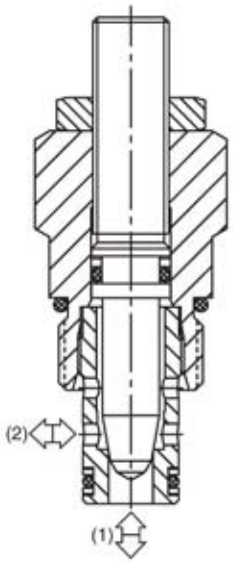
Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

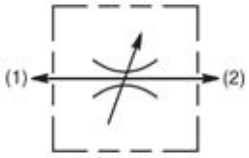
General Description

Cartridge Style Needle Valve.

Features

- Shuts off to a very low leakage level
- High flow capacity from a small cavity
- Good adjustment sensitivity - ideal for fine control
- Good contamination tolerance
- Hardened working parts for maximum durability
- All external parts are zinc plated



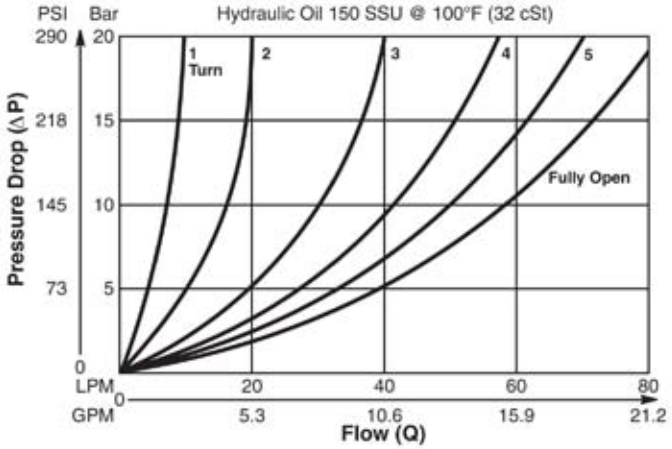


Specifications

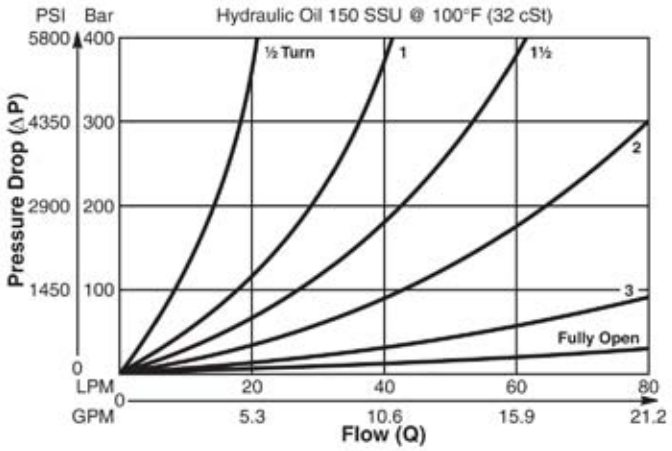
Rated Flow	45 l/min (12 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Min. Operating Pressure	See Regulated Flow vs. Pressure Curve
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 80 to 230 SSU (15 to 50 cSt)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.11 kg (0.24 lbs)
Cavity	CAV02-2

Performance Curves (Through cartridge only)

Low Pressure Drop vs. Flow 1 to 2 & 2 to 1

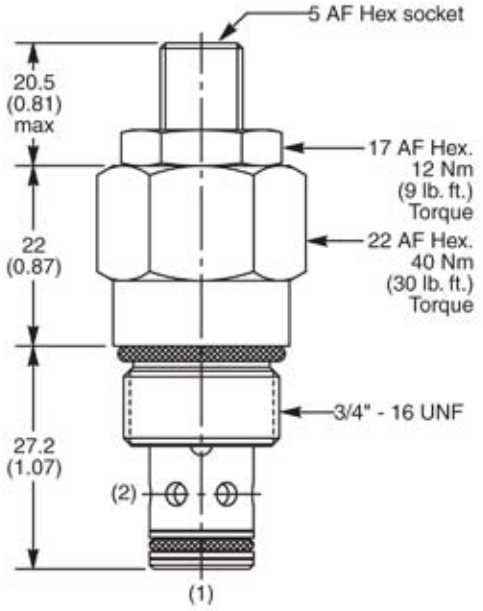


High Pressure Drop vs. Flow 1 to 2 & 2 to 1



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

J02A2 — Series

Z — Adjustment Style

Code	Adjustment Style
Z	Screw Adjustment (standard)

N — Seals

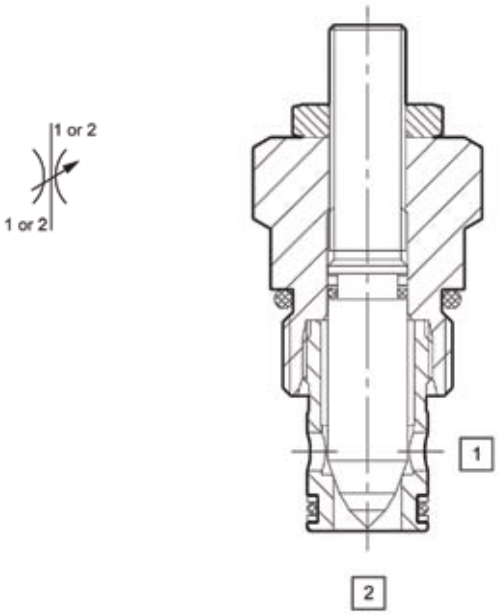
Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30500N-1)

General Description

Flow Restrictor Valve, Needle Type.

Features

- Shuts off to a very low leakage level
- High flow capacity
- Good adjustment sensitivity - ideal for fine control
- Good contamination tolerance
- Hardened working parts for maximum durability
- All external parts are zinc plated

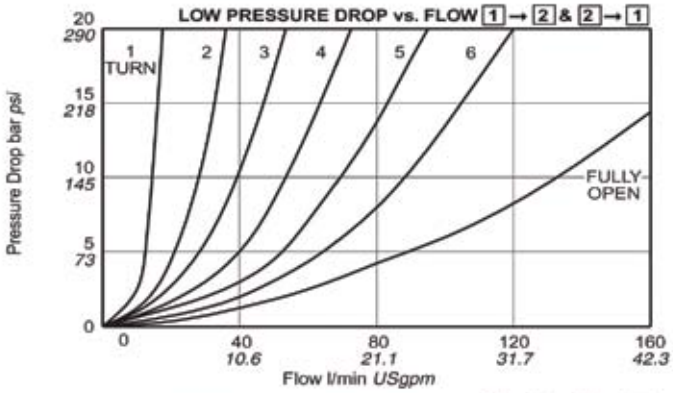


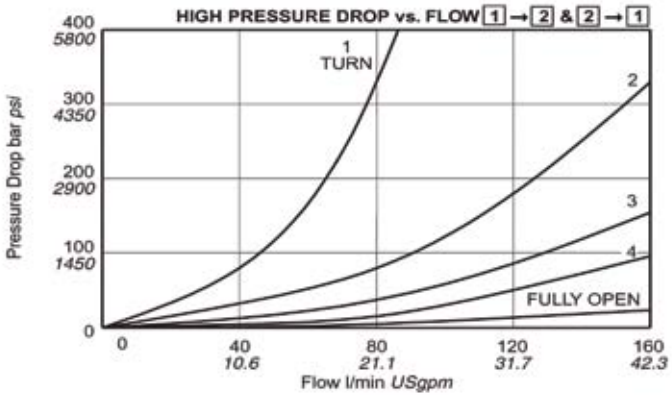
Specifications

Nominal Flow @ 7 bar (100 psi)	110 l/min (29 USgal/min)
Pressure	420 bar (6000 psi)
Min. Operating Pressure	See Regulated Flow vs. Pressure curve
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 15 to 50 cSt (80 to 230 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.20 kg (0.44 lbs)
Cavity	CAV04-2

Performance Curves

Measured at 30 cSt *140 SSU* (For cartridge only)





Parker Hannifin Corporation
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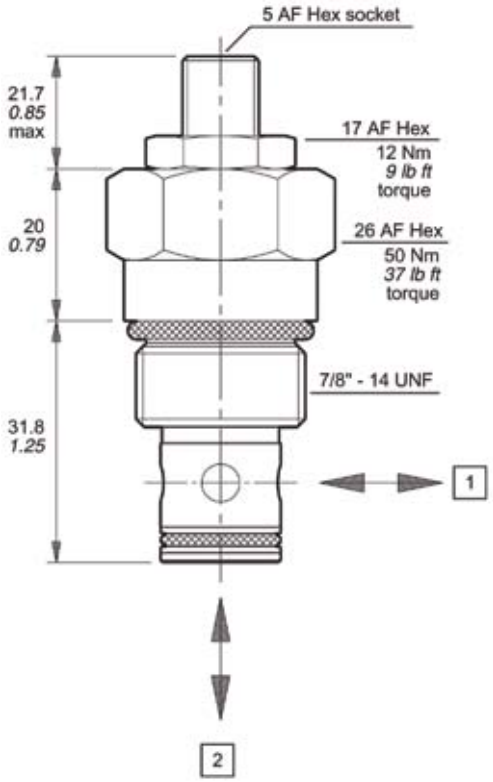
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

J04A2	Z	N
Series	Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30503N-1)

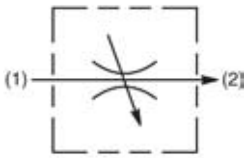
Code	Adjustment Style
Z	Screw Adjustment (standard)

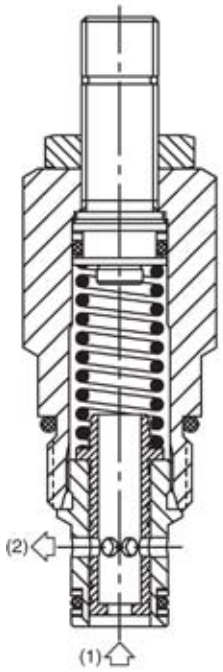
General Description

Restrictive Style, Pressure Compensated Flow Control Valve.

Features

- Minimal flow change with pressure variation
- Reverse flow function
- Full adjustment from 1-20 l/min (0.3-5.3 USgal/min)
- Hardened working parts for maximum durability
- All external parts are zinc plated



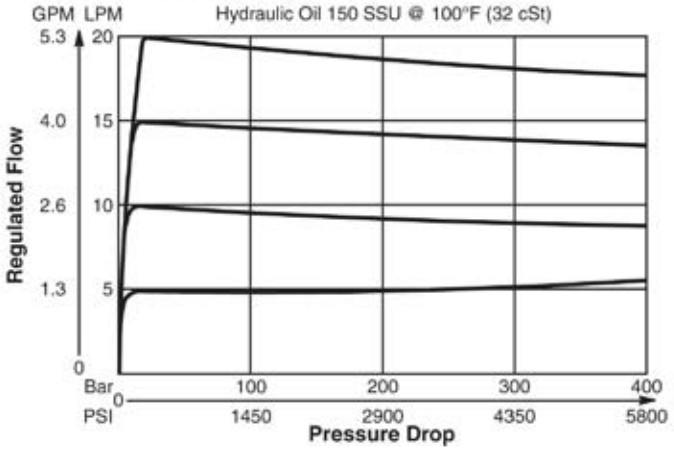


Specifications

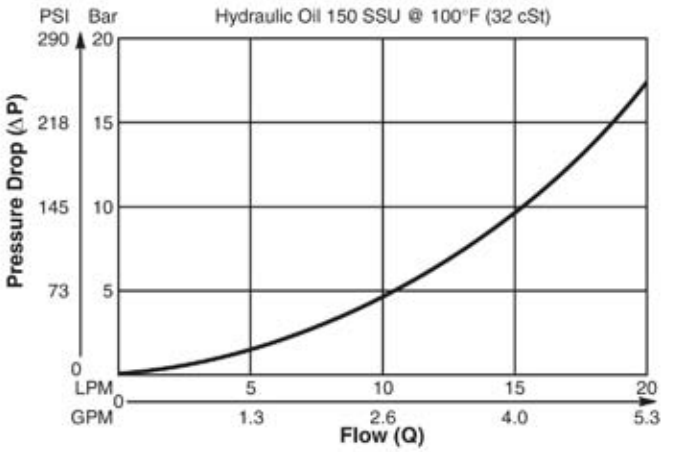
Rated Flow	20 l/min (5.3 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Min. Operating Pressure	See Regulated Flow vs. Pressure curve
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.13 kg (0.29 lbs)
Cavity	CAV02-2

Performance Curves (Through cartridge only)

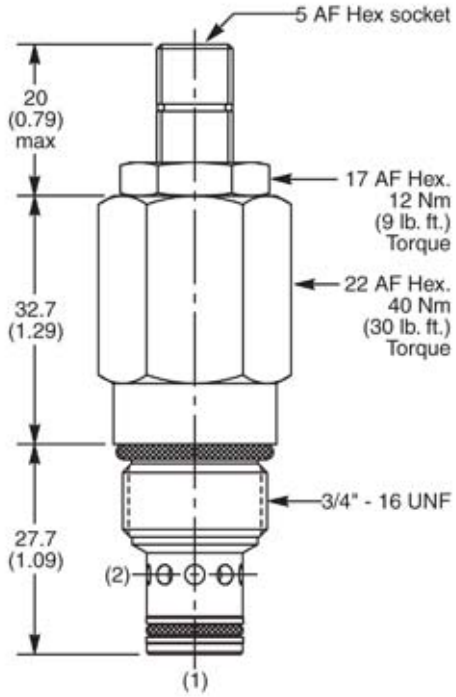
Flow Regulating Performance



Reverse Flow Pressure Drop vs. Flow



Dimensions Millimeters (Inches)



Ordering Code

J02E2 — Series

Z — Adjustment Style

Code	Adjustment Style
Z	Screw Adjustment (standard)

N — Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30500N-1)

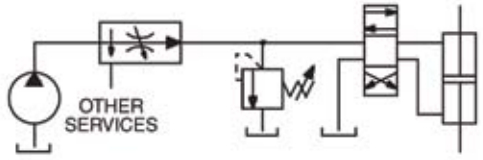
General Description

Needle Type, Pressure Compensated Flow Control Valve.

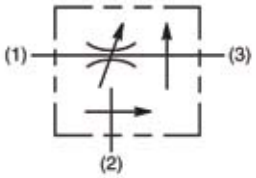
Features

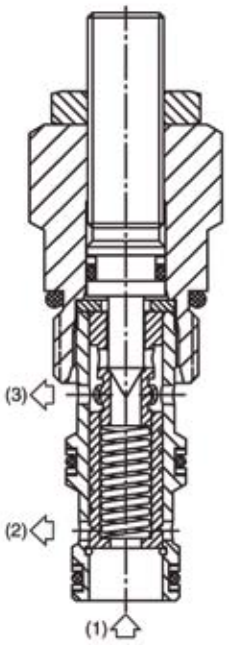
- Good adjustment from 1-15 l/min (0.3-4 USgal/min)
- Used for systems requiring priority flow such as steering systems
- Hardened working parts for maximum durability
- Reverse flow function to 3 to 1
- All external parts are zinc plated

Typical Application



Priority flow on steering circuit



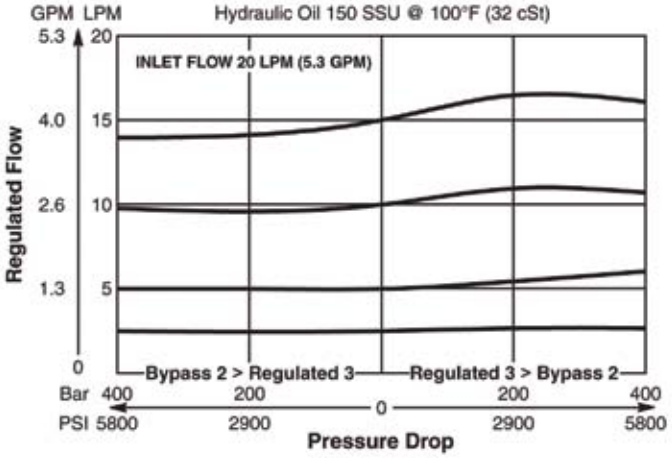


Specifications

Rated Flow	15 l/min (4 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Min. Operating Pressure	See Regulated Flow vs. Pressure curve
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.08 kg (0.18 lbs)
Cavity	CAV02-3

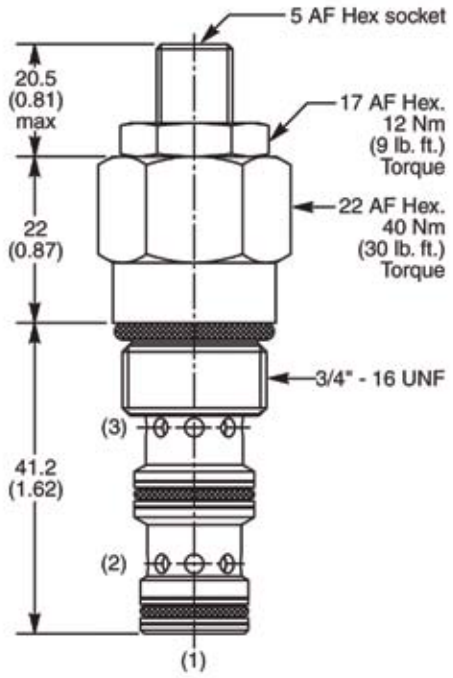
Performance Curves (Through cartridge only)

Flow Regulating Performance



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

J02D3	Z	N
Series	Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30501N-1)

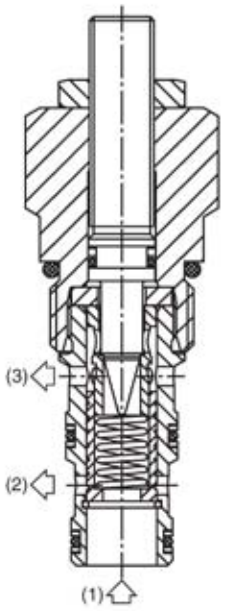
Code	Adjustment Style
Z	Screw Adjustment (standard)

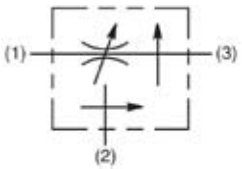
General Description

Needle Type, Pressure Compensated Flow Control Valve.

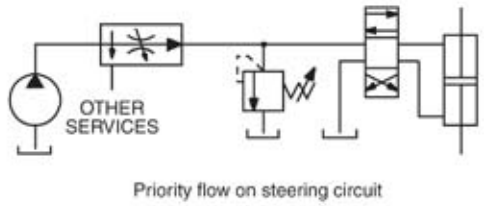
Features

- High flow capacity
- Good adjustment from 2-45 l/min (0.5-12 USgal/min)
- Used for systems requiring priority flow such as steering systems
- Hardened working parts for maximum durability
- Reverse flow function to 3 to 1
- All external parts are zinc plated





Typical Application



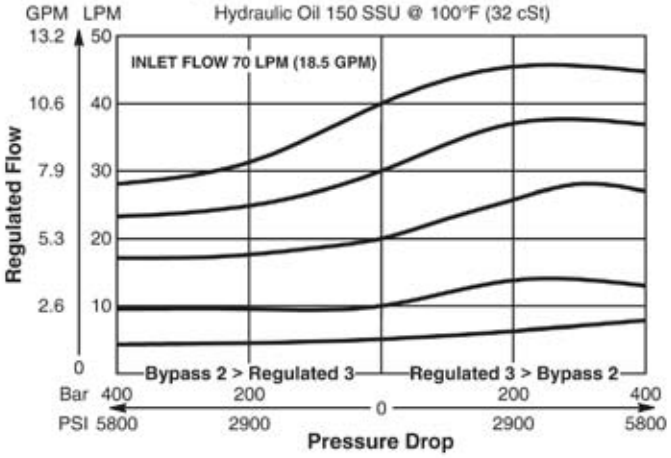
Priority flow on steering circuit

Specifications

Rated Flow	45 l/min (12 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Min. Operating Pressure	See Regulated Flow vs. Pressure curve
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.18 kg (0.40 lbs)
Cavity	CAV04-3

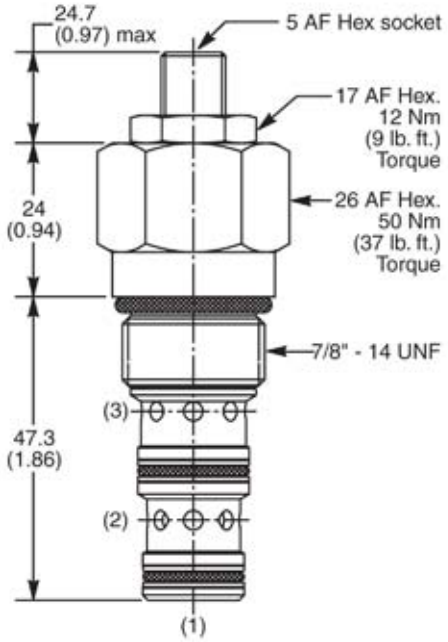
Performance Curves (Through cartridge only)

Flow Regulating Performance



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

J04D3 — Series

Z — Adjustment Style

Code	Adjustment Style
Z	Screw Adjustment (standard)

N — Seals

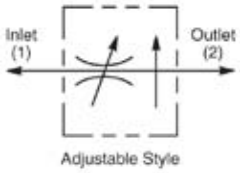
Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30505N-1)

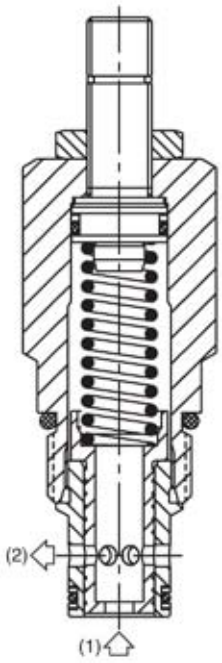
General Description

Restrictive Style, Pressure Compensated Flow Control Valve.

Features

- Minimal flow change with pressure variation
- Full adjustment from 1-40 l/min (0.3-10.6 USgal/min)
- Hardened working parts for maximum durability
- Reverse flow function
- All external parts are zinc plated



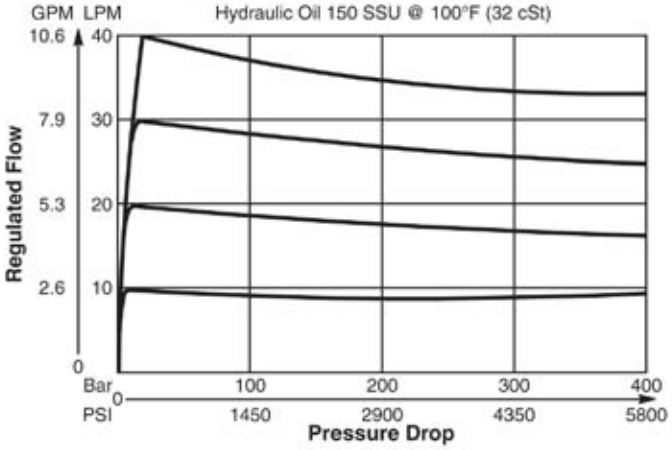


Specifications

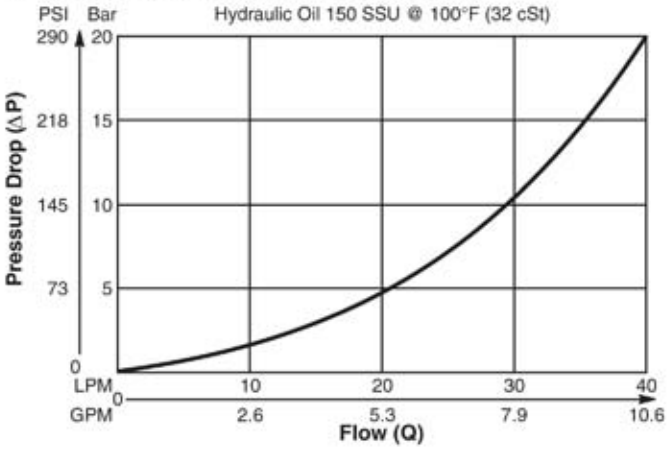
Rated Flow	40 l/min (10.6 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Min. Operating Pressure	See Regulated Flow vs. Pressure curve
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.20 kg (0.44 lbs)
Cavity	CAV04-2

Performance Curves (Through cartridge only)

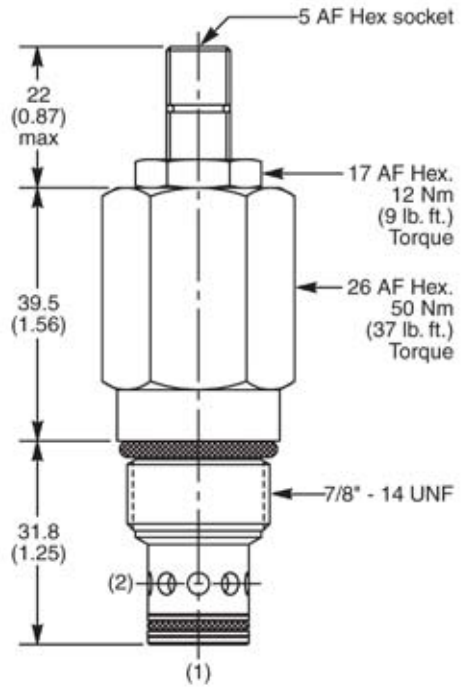
Flow Regulating Performance



Reverse Flow Pressure Drop vs. Flow



Dimensions Millimeters (Inches)



Ordering Code

J04E2	Z	N
Series	Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30500N-1)

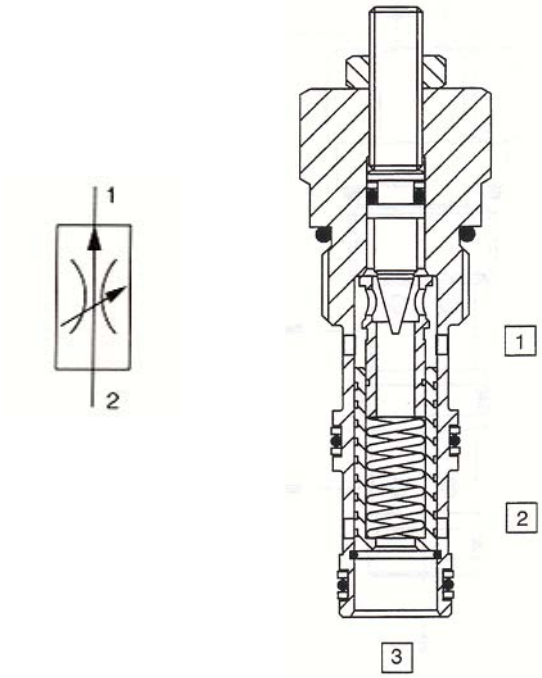
Code	Adjustment Style
Z	Screw Adjustment (standard)

General Description

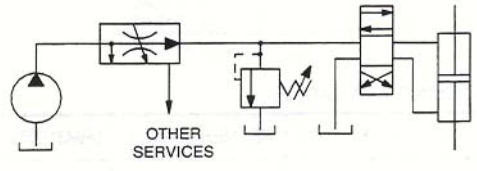
Priority Style, Pressure Compensated Flow Regulator Valve with Bypass.

Features

- Full 350 bar (5000 psi) capacity
- High flow capacity
- Used for systems requiring priority flow such as steering systems
- Hardened working parts for maximum durability
- All external parts are zinc plated



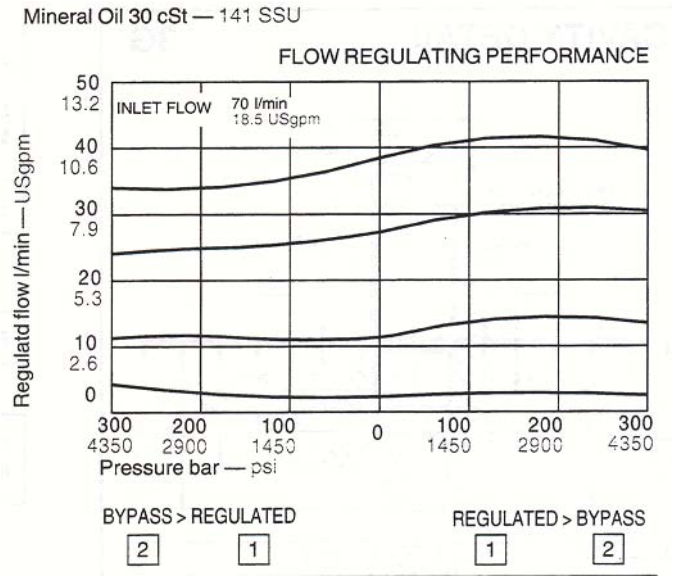
Typical Application



Specifications

Inlet Flow (standard)	45 l/min (12 USgal/min)
Regulated Flow (standard)	25 l/min (6.5 USgal/min)
Pressure Rating	25 - 350 bar (362 - 5000 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-30°C to +90°C (-22°F to +194°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 5 to 50 cSt (42 to 232 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.20 kg (0.44 lbs)
Cavity	3G

Performance Curve



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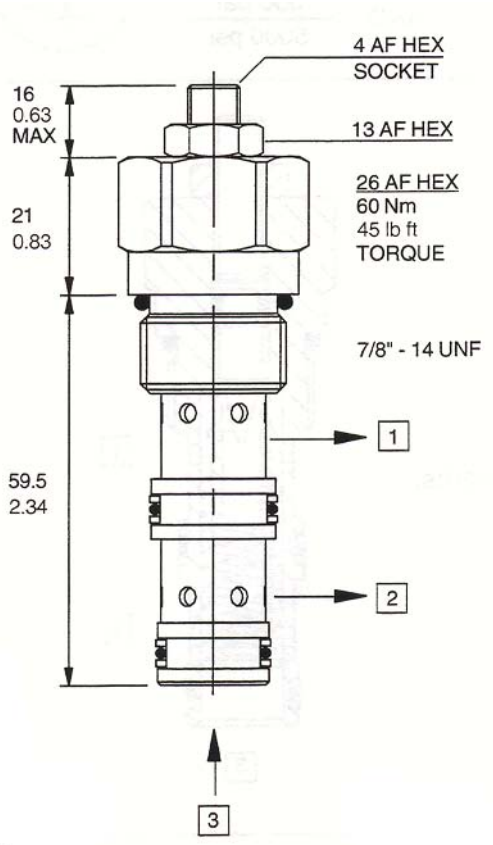
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

J1A060 — Series

Z — Adjustment Style

Code	Adjustment Style
Z	Screw Adjustment (standard)

N — Seals

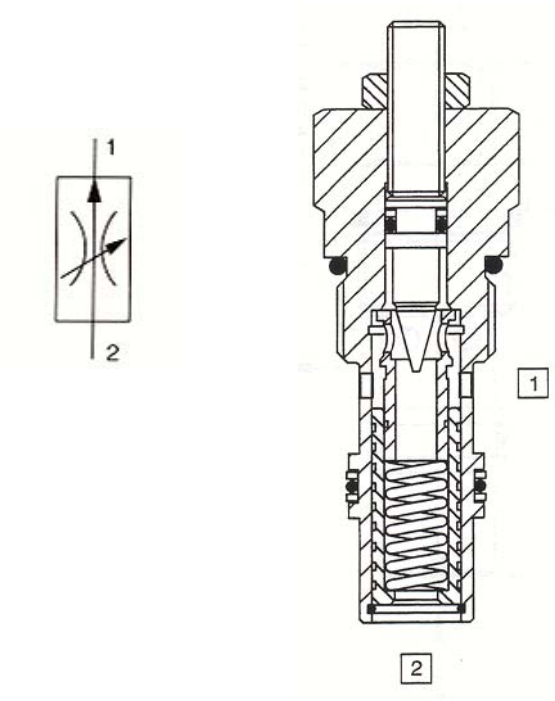
Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30018N-1)

General Description

Pressure Compensated, 2 Port Flow Regulator Valve.

Features

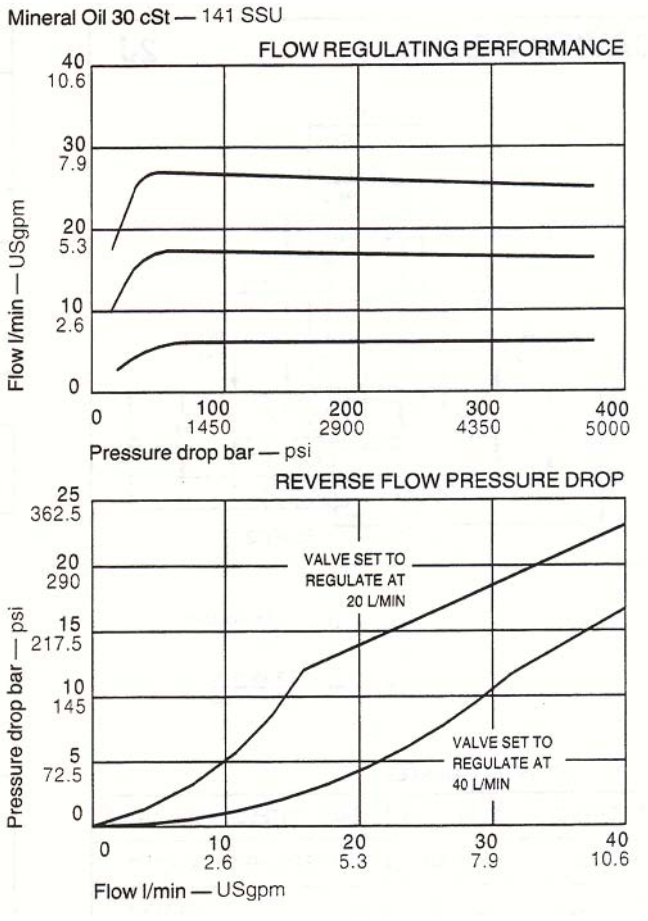
- Full 350 bar (5000 psi) capacity
- Used for systems requiring good flow control regardless of inlet or outlet pressure variations
- Hardened working parts for maximum durability
- All external parts are zinc plated



Specifications

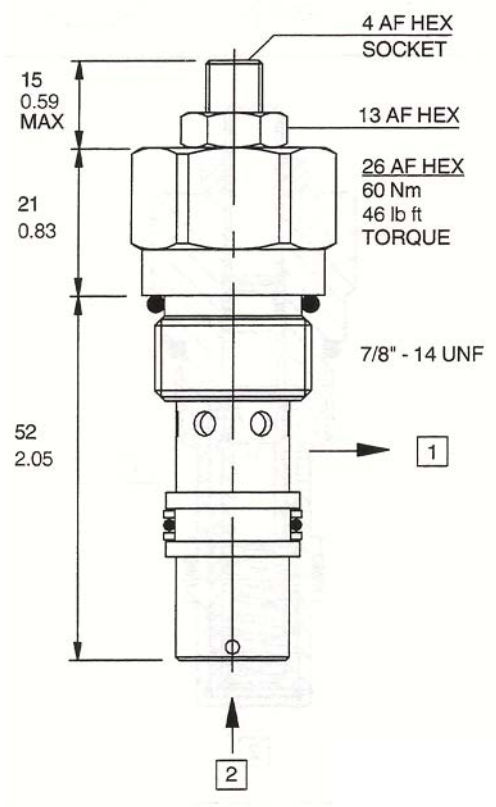
Regulated Flow (Standard)	10 l/min (2.6 USgal/min)
Pressure Range	25 - 350 bar (360 - 5000 psi)
Max. Reverse Pressure	350 bar (5000 psi)
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-30°C to +90°C (-22°F to +194°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 5 to 50 cSt (42 to 232 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.19 kg (0.42 lbs)
Cavity	2L

Performance Curves



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

J2A060	Z	N
Series	Adjustment Style	Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30006N-1)

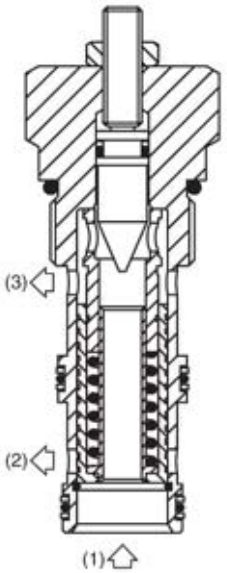
Code	Adjustment Style
Z	Screw Adjustment (standard)

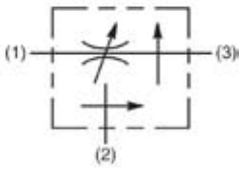
General Description

Priority Style, Pressure Compensated Flow Regulator Valve with Bypass.

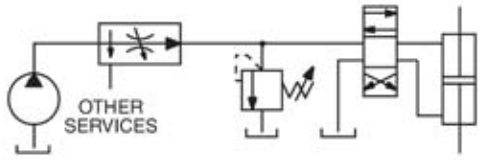
Features

- Free reverse flow function
- High flow capacity
- Used for systems requiring priority flow such as steering systems
- Hardened working parts for maximum durability
- All external parts are zinc plated





Typical Application



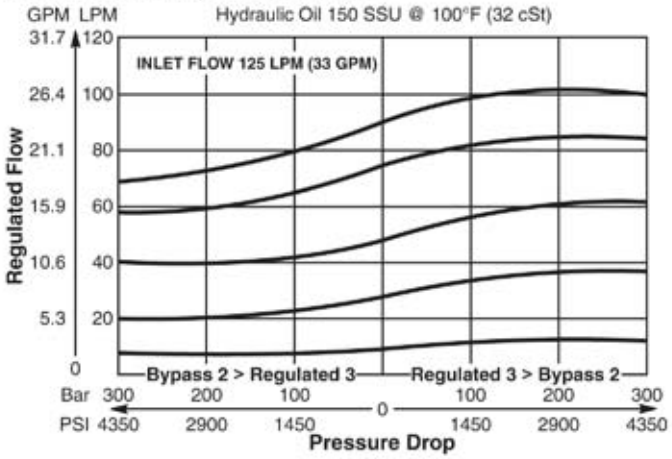
Priority flow on steering circuit

Specifications

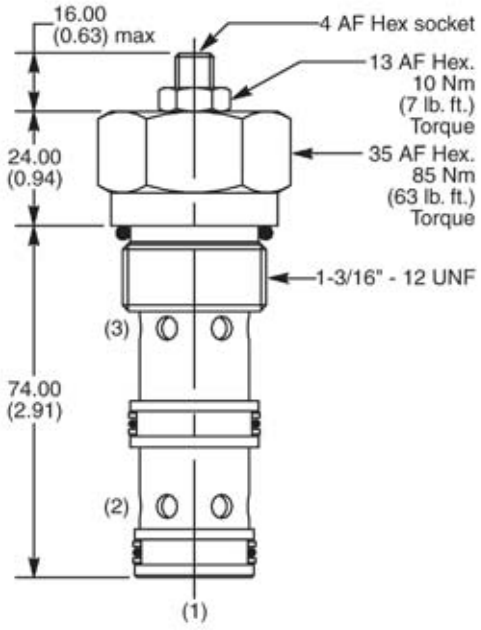
Rated Flow	90 l/min (24 USgal/min)
Maximum Inlet Pressure	350 bar (5000 psi)
Min. Operating Pressure	See Regulated Flow vs. Pressure curve
Cartridge Material	All parts steel. All operating parts hardened steel.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) / Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.45 kg (1.00 lbs)
Cavity	3A

Performance Curve (Through cartridge only)

Flow Regulating Performance



Dimensions Millimeters (Inches)



Ordering Code

J1A125 — Series

Z — Adjustment Style

Code	Adjustment Style
Z	Screw Adjustment (standard)

N — Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30011N-1)

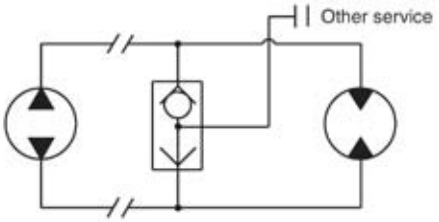
General Description

Ball Type, 2 Position, 3 Way Shuttle Valve.

Features

- High flow capacity
- Ball type construction for maximum wear resistanceand greater durability
- Minimal leakage - less than 3 drops/min.
- Contamination tolerant
- Hardened working parts for maximum durability
- All external parts are zinc plated

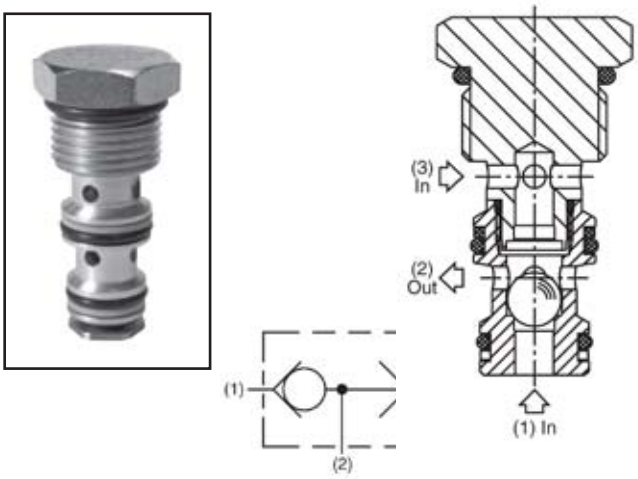
Typical Application



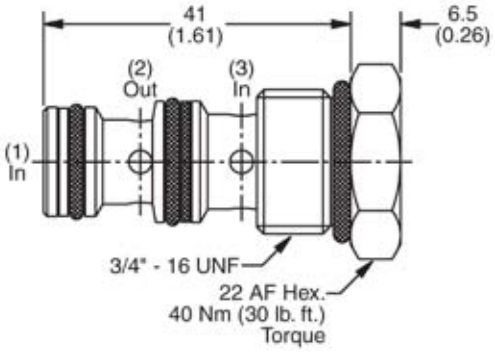
Selects highest pressure from either line.

Specifications

Rated Flow	50 l/min (13 USgal/min)
Nominal Flow @ 7 bar (100 psi)	27 l/min (7 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Cartridge Material	All parts steel. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F)
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.07 kg (0.15 lbs)
Cavity	CAV02-3

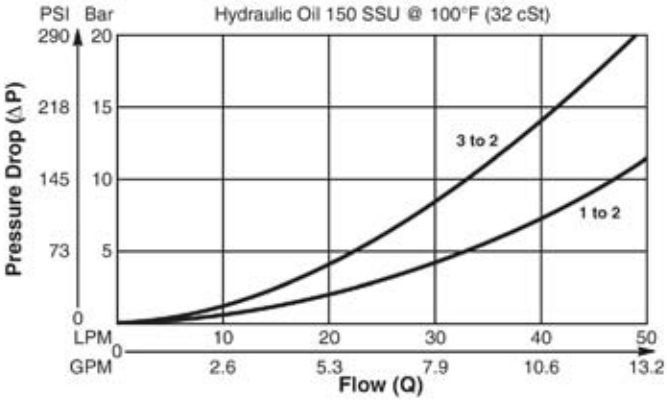


Dimensions Millimeters (Inches)



Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Ordering Code

K02A3 **N**

Series — Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30521N-1)

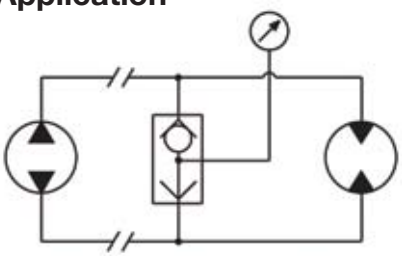
General Description

Poppet Type, 2 Position, 3 Way Shuttle Valve.

Features

- High flow capacity
- Compact effective design
- Poppet type construction for minimal leakage
- Contamination tolerant
- Hardened working parts for maximum durability
- All external parts are zinc plated

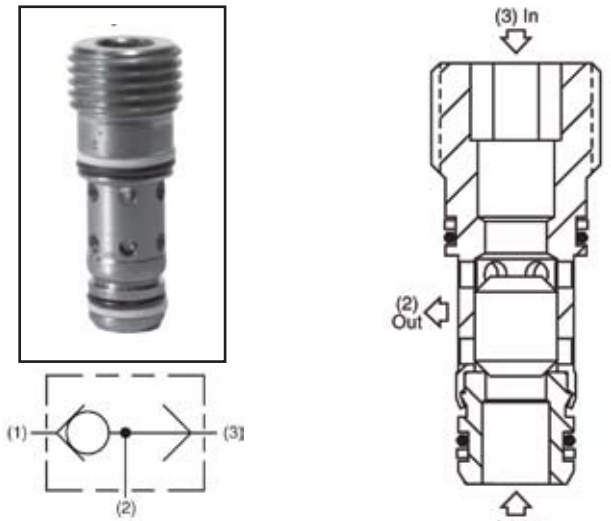
Typical Application



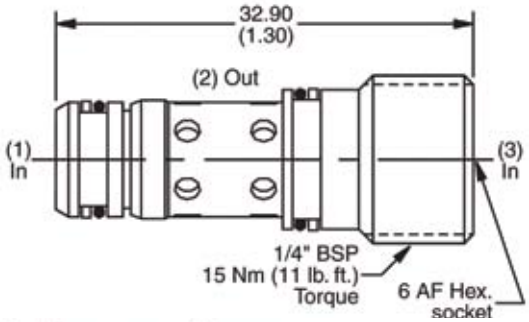
Selects highest pressure from either line.

Specifications

Rated Flow	38 l/min (10 USgal/min)
Nominal Flow @ 7 bar (100 psi)	28 l/min (7.4 USgal/min)
Maximum Inlet Pressure	350 bar (5000 psi)
Cartridge Material	All parts steel. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.02 kg (0.04 lbs)
Cavity	3Z

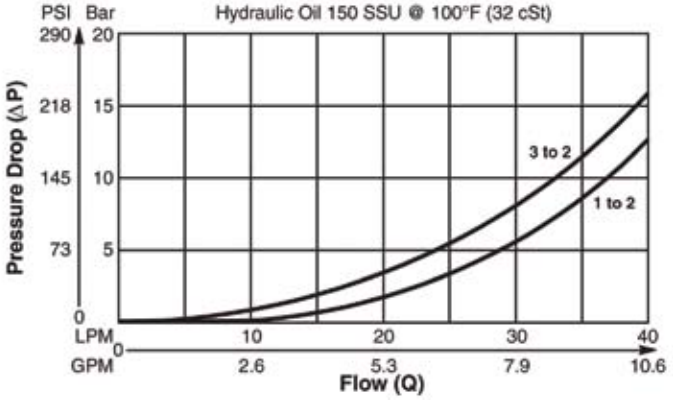


Dimensions Millimeters (Inches)



Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Ordering Code

K2A005 **N**

Series — Seals

Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30091N-1)

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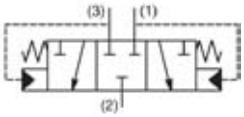
Crewkerne, UK

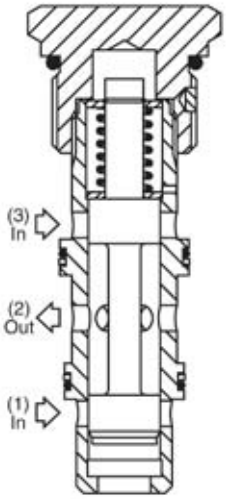
General Description

Spring Centred Type, 2 Position, 3 Way Shuttle Valve.

Features

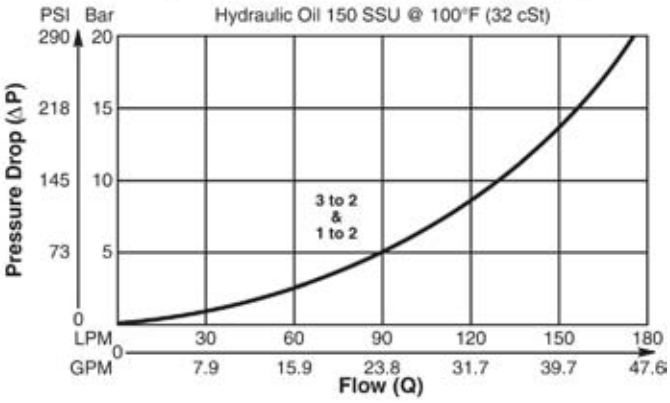
- High flow capacity
- Compact effective design
- Used in transmission systems as purge valve where hydraulic parking brake is necessary
- Hardened working parts for maximum durability
- All external parts are zinc plated



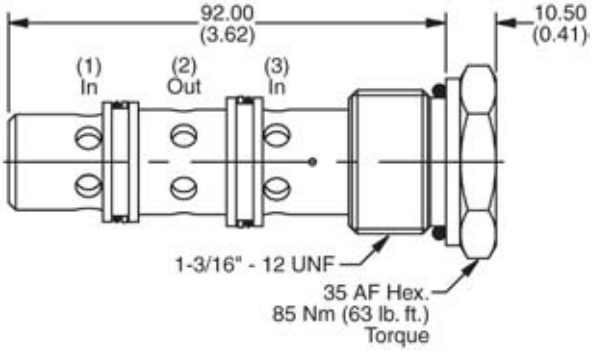


Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



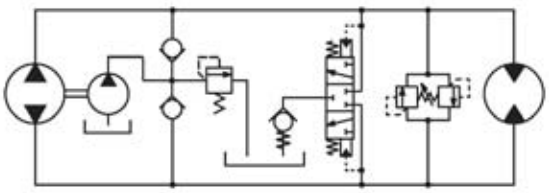
Dimensions Millimeters (Inches)



Specifications

Rated Flow	175 l/min (46 USgal/min)
Nominal Flow @ 7 bar (100 psi)	105 l/min (28 USgal/min)
Maximum Inlet Pressure	350 bar (5000 psi)
Cartridge Material	All parts steel. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.32 kg (0.70 lbs)
Cavity	3U

Typical Application



Purge valve in transmissions with hydraulic parking brake

Ordering Code

K3A125 — **1.0** **N**

Series | Switching Pressure | Seals

Code	Switching Pressure
1.0	1.0 bar (15 psi) Standard

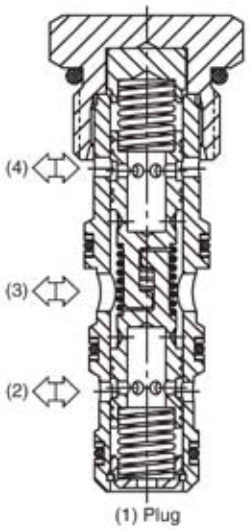
Code	Seal Material / Kit No
N	Nitrile, *Buna-N* / (SK30040N-1)

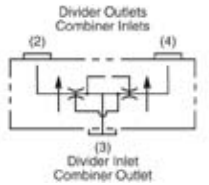
General Description

Spool Type, Flow Divider / Combiner Valve.

Features

- Interlocking spools for equal control dividing or combining
- Pressure compensated control in both directions
- 50 /50 ratio standard other ratios available on request
- Commonly used for differential lock in transmission applications
- Hardened working parts for maximum durability
- All external parts are zinc plated



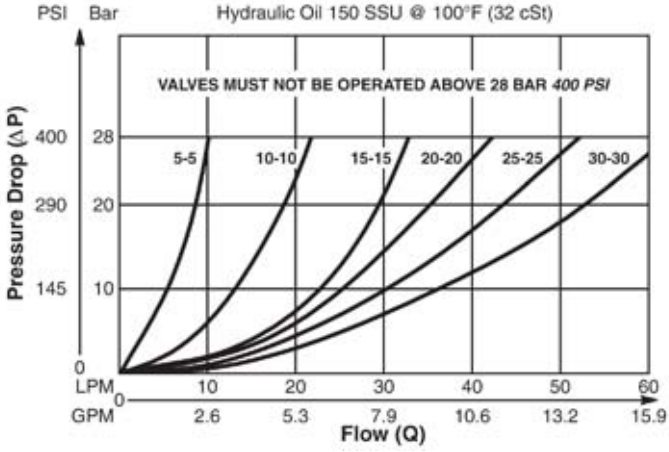


Specifications

Rated Flow	60 l/min (16 USgal/min)
Flow Rating and Ratio	14 - 60 l/min (3.7 - 15.9 USgal/min) 50 / 50 Ratio
Maximum Inlet Pressure	420 bar (6000 psi)
Accuracy Per Leg	+ / - 10%
Cartridge Material	All parts steel. Hardened steel poppet.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.12 kg (0.26 lbs)
Cavity	CAV04-4

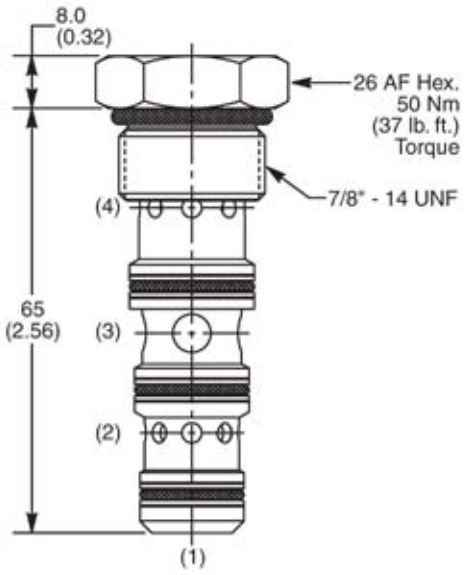
Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Parker Hannifin Corporation
Hydraulic Cartridge Systems Division
Crewkerne, UK

Dimensions Millimeters (Inches)



Ordering Code

L04A3 — [ ] **N**

Series | Flow Rating & Ratio | Seals

Code	Seal Material / Kit No
N	Nitrile, Buna-N / (SK30506N-1)

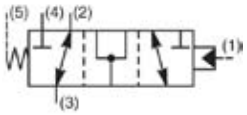
Code	Total Flow Rating - Port 2 (Flow Ratio)
30-30	14 - 60 l/min (3.7 - 15.9 USgal/min) (50 / 50 Ratio)

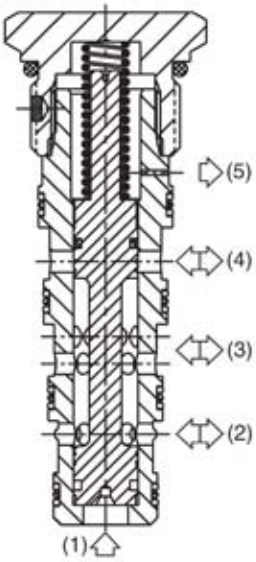
General Description

Pilot Operated Directional Valve, 3 Way, 2 Position, External Drain, Open Transition.

Features

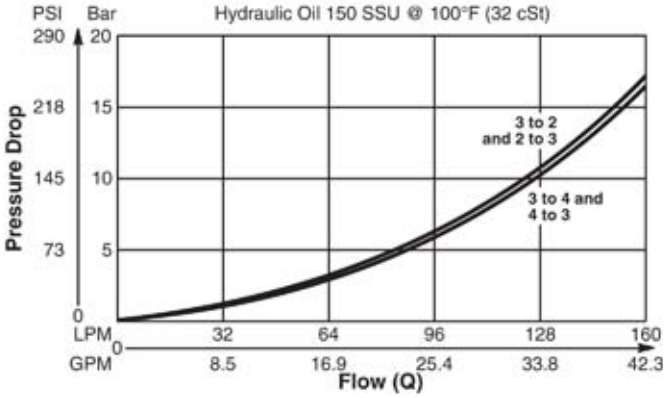
- High flow capacity
- Used as high flow switching or metering element
- Hardened working parts for maximum durability
- All external parts are zinc plated



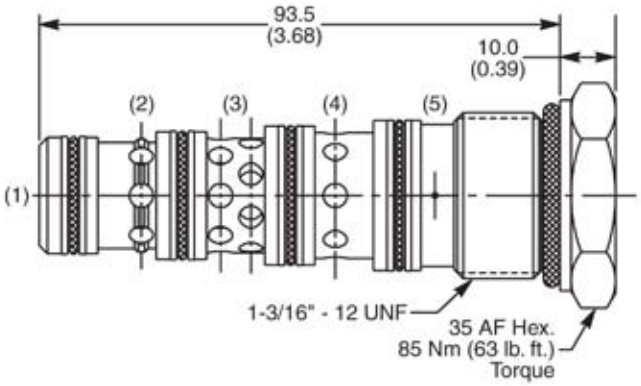


Performance Curve

Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Specifications

Rated Flow	160 l/min (42.3 USgal/min)
Nominal Flow @ 7 bar (100 psi)	90 l/min (24 USgal/min)
Maximum Inlet Pressure	420 bar (6000 psi)
Pilot Switching Pressure	6.9 bar (100 psi) standard
Cartridge Material	All parts steel. Hardened steel spool.
Seal Operating Temp. Range / Material	-40°C to +93.3°C (-40°F to +200°F) Nitrile *BUNA-N*
Fluid Compatibility / Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 6 to 420 cSt (45 to 2000 SSU)
Filtration	25 Microns (Nom.) or better
Approx. Weight	0.33 kg (0.76 lbs)
Cavity	5A

Ordering Code

N5A125 — **6.9** **N**

Series — Pilot Switching Pressure — Seals

Code	Switching Pressure
6.9	6.9 bar (100 psi) Standard

Code	Seal Material / Kit No
N	Nitrile, Buna-N / (SK30103N-1)

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