

**Technical Information**

**Load Control Valve  
Series E2A020, E2B020**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

**LE**

Logic Elements

**DC**

Directional Controls

**MV**

Manual Valves

**SV**

Solenoid Valves

**PV**

Proportional Valves

**CE**

Coils & Electronics

**BC**

Bodies & Cavities

**TD**

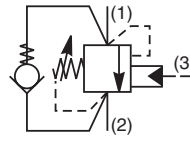
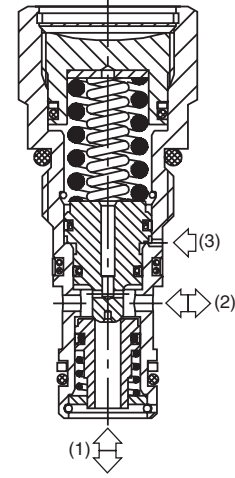
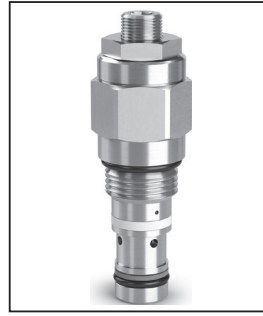
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body, saving space and minimizing 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
- Adjustable and tamper resistant versions available
- Preset version is tamper resistant and compact
- All external parts zinc plated

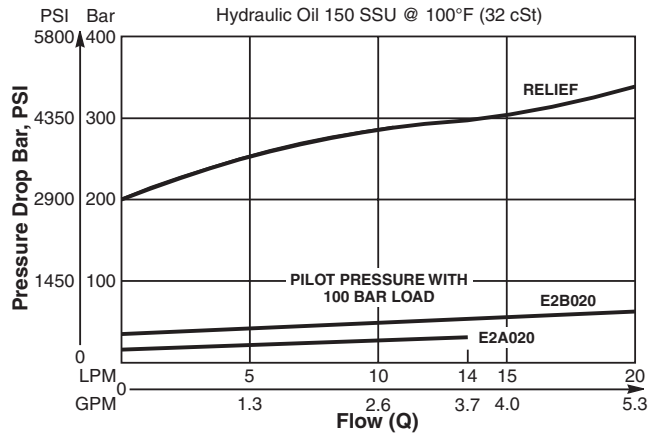


**Specifications**

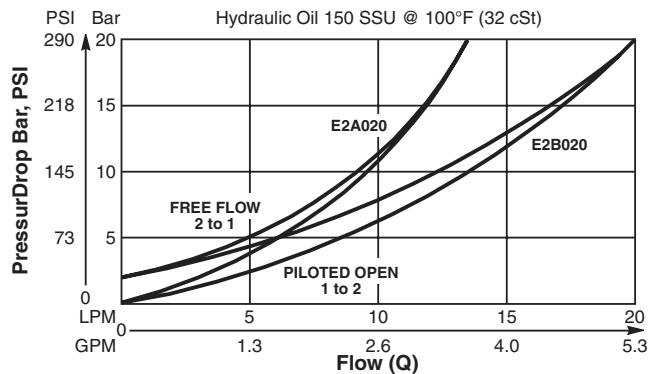
<b>Rated Flow</b>	<b>E2A020</b> 14 LPM (3.7 GPM) <b>E2B020</b> 20 LPM (5.3 GPM)
<b>Pressure</b>	50 - 420 Bar (725 - 6000 PSI)
<b>Sensitivity: Pressure/Turn</b>	<b>E2A020</b> 113 Bar (1640 PSI) <b>E2B020</b> 84 Bar (1220 PSI)
<b>Pilot Ratio</b>	<b>E2A020</b> - 8 : 1 <b>E2B020</b> - 4.5 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.08 kg (0.17 lbs.)
<b>Cavity</b>	53-1 (See BC Section for more details)

**Performance Curves**

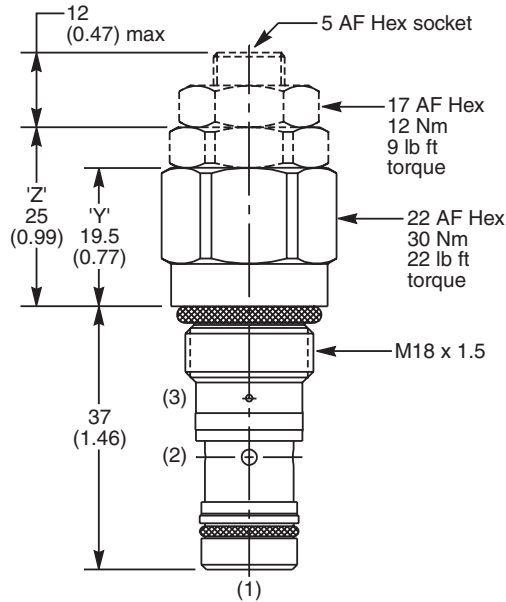
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E2</b>		<b>020</b>			
Load Control Valve	Pilot Ratio	Adjustment Style	Cracking Pressure	Seals	

Code	Pilot Ratio
A	8 : 1
B	4.5 : 1

Code	Cracking Pressure
	Omit for no setting (Standard)* Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Adjustment Style / Kit No.
Z	Screw Adjust
T	Tamper Resistant (TC1125)
Y	Preset (Standard)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30087N-1)
V	Fluorocarbon / (SK30087V-1)

*Order Bodies Separately*

<b>LB10</b>		
Line Body	Porting	Body Material

Code	Porting
318	3/8" SAE (main) 1/4" SAE (aux)
319	3/8" SAE Dual Cavity

Code	Body Material
A	Aluminum
S	Steel

**Technical Information**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

**LE**

Logic Elements

**DC**

Directional Controls

**MV**

Manual Valves

**SV**

Solenoid Valves

**PV**

Proportional Valves

**CE**

Coils & Electronics

**BC**

Bodies & Cavities

**TD**

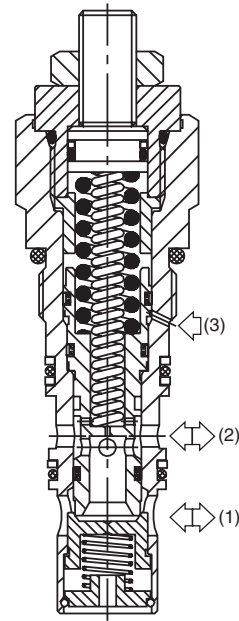
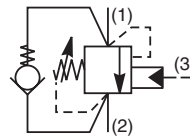
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body, saving space and minimizing installation cost
- Excellent control and very good stability
- Three pilot ratios available, 1.75:1 and 3:1 for cylinders and 8:1 for motor control
- Hardened working parts for maximum durability
- Adjustable, preset and tamper resistant versions available
- Preset version is tamper resistant and compact
- All external parts zinc plated

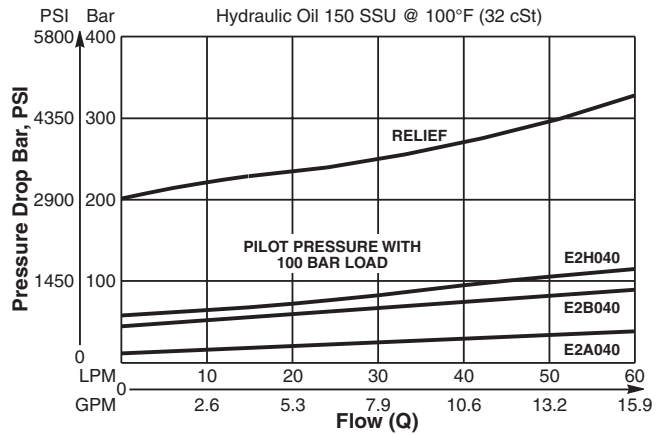


**Specifications**

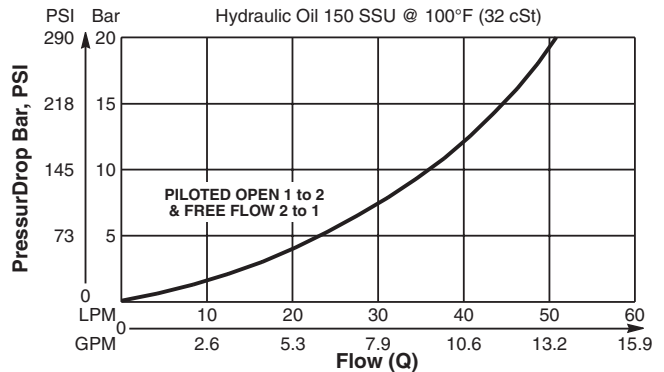
<b>Rated Flow</b>	60 LPM (15.9 GPM)
<b>Pressure</b>	50 - 350 Bar (725 - 5000 PSI)
<b>Sensitivity: Pressure/Turn</b>	99 Bar (1435 PSI)
<b>Pilot Ratio</b>	<b>E2A040</b> - 8 : 1 <b>E2B040</b> - 3 : 1 <b>E2H040</b> - 1.75 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.27 kg (0.60 lbs.)
<b>Cavity</b>	68-1 (See BC Section for more details)

**Performance Curves**

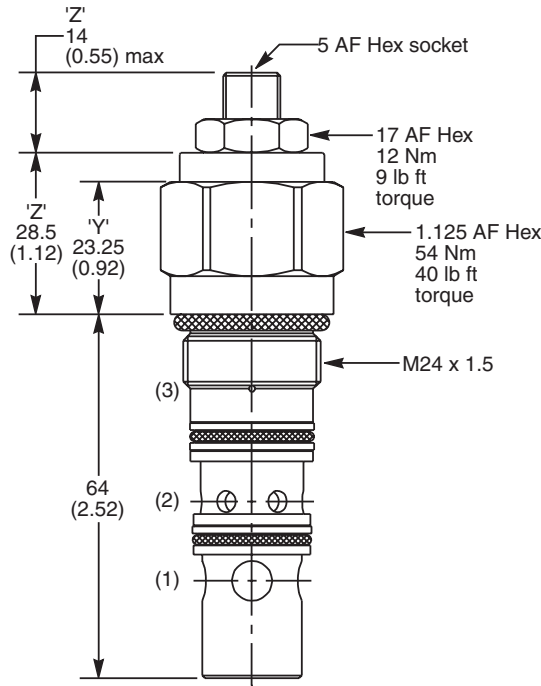
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E2</b>		<b>040</b>				<b>MK3</b>
Load Control Valve	Pilot Ratio	Adjustment Style	Cracking Pressure	Seals		

Code	Pilot Ratio
A	8 : 1
B	3 : 1
H	1.75 : 1

Code	Cracking Pressure
	Omit for no setting (Standard)*
	Specify setting if required
Y:	Setting must be specified

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Standard)
T	Tamper Resistant (TC1125)
Y	Non Adjustable Preset

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30059N-1)
V	Fluorocarbon / (SK30059V-1)

*Order Bodies Separately*

<b>LB10</b>		
Line Body	Porting	Body Material

Code	Porting
253	1/2" SAE (main) 1/4" SAE (aux)
261	1/2" SAE Dual Cavity

Code	Body Material
A	Aluminum
S	Steel

**Technical Information**

**Load Control Valve**

**Series E2A060, E2B060, E2H060, E2J060**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

**LE**

Logic Elements

**DC**

Directional Controls

**MV**

Manual Valves

**SV**

Solenoid Valves

**PV**

Proportional Valves

**CE**

Coils & Electronics

**BC**

Bodies & Cavities

**TD**

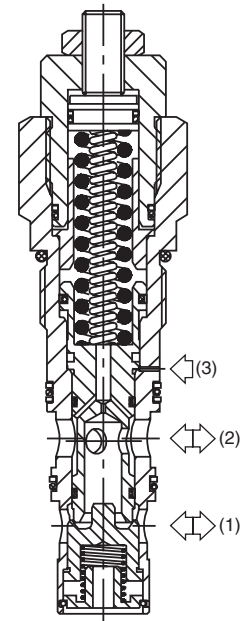
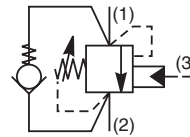
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

- Poppet construction for minimal leakage
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body, saving space and minimizing installation cost
- Excellent control and very good stability
- Four pilot ratios available, 1.75:1, 3:1, and 5:1 for cylinders and 8:1 for motor control
- Hardened working parts for maximum durability
- Adjustable and tamper resistant versions also available
- All external parts zinc plated

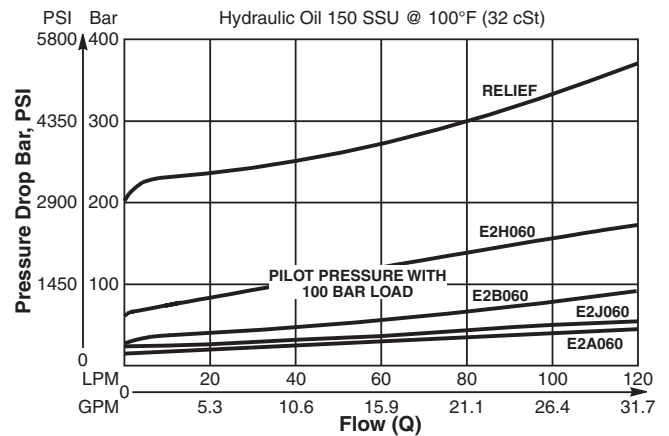


**Specifications**

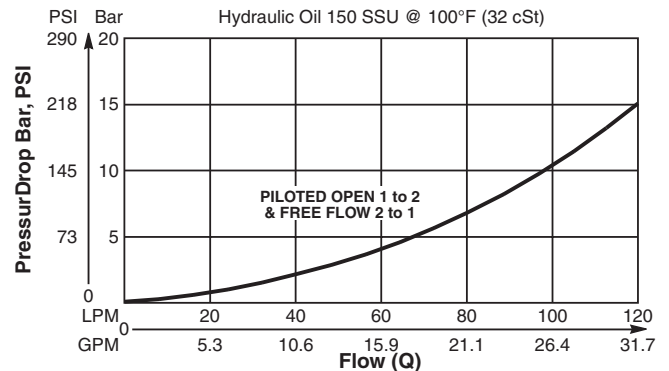
<b>Rated Flow</b>	120 LPM (32 GPM)
<b>Pressure</b>	50 - 350 Bar (725 - 5000 PSI)
<b>Sensitivity: Pressure/Turn</b>	44 Bar (640 PSI)
<b>Pilot Ratio</b>	<b>E2A060</b> - 8 : 1 <b>E2B060</b> - 3 : 1 <b>E2H060</b> - 1.75 : 1 <b>E2J060</b> - 5 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.54 kg (1.19 lbs.)
<b>Cavity</b>	3C (See BC Section for more details)

**Performance Curves**

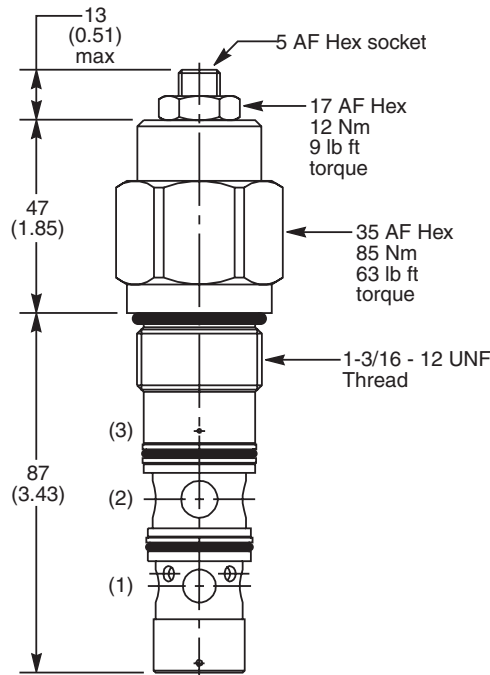
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E2</b>		<b>060</b>				<b>MK2</b>
Load Control Valve	Pilot Ratio		Adjustment Style	Cracking Pressure	Seals	

Code	Pilot Ratio
A	8 : 1
B	3 : 1
H	1.75 : 1
J	5 : 1

Code	Cracking Pressure
	Omit for no setting (Standard)*
	Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Standard)
T	Tamper Resistant (TC1125)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30008N-1)
V	Fluorocarbon / (SK30008V-1)

*Order Bodies Separately*

<b>LB10</b>		
Line Body	Porting	Body Material

Code	Porting
069	1" SAE (main) 1/4" SAE (aux)
234	3/4" SAE Dual Cavity

Code	Body Material
A	Aluminum
S	Steel

**Technical Information**

**Load Control Valve  
Series E2A125, E2E125**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

**LE**

Logic Elements

**DC**

Directional Controls

**MV**

Manual Valves

**SV**

Solenoid Valves

**PV**

Proportional Valves

**CE**

Coils & Electronics

**BC**

Bodies & Cavities

**TD**

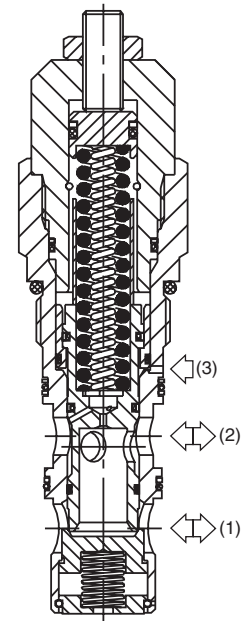
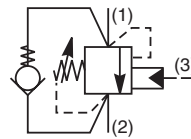
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

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

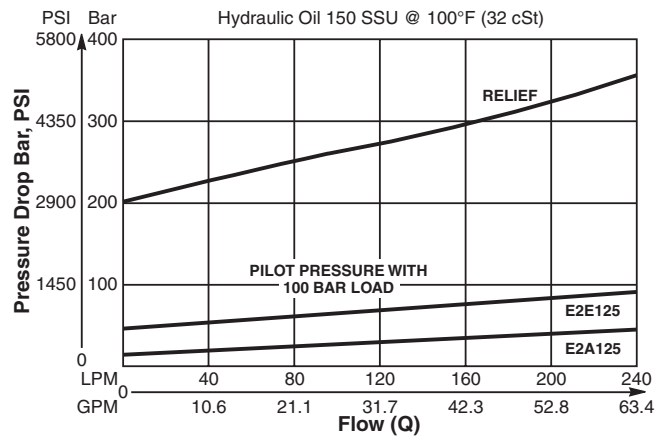


**Specifications**

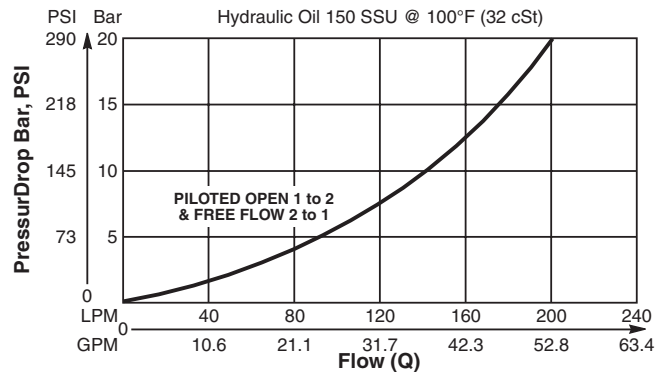
<b>Rated Flow</b>	200 LPM (53 GPM)
<b>Pressure</b>	50 - 350 Bar (725 - 5000 PSI)
<b>Sensitivity: Pressure/Turn</b>	34 Bar (493 PSI)
<b>Pilot Ratio</b>	<b>E2A125</b> - 8 : 1 <b>E2E125</b> - 3 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.75 kg (1.65 lbs.)
<b>Cavity</b>	3M (See BC Section for more details)

**Performance Curves**

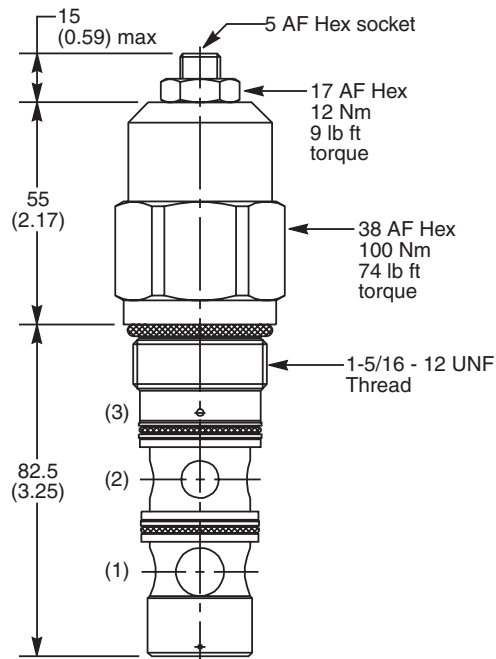
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E2</b>		<b>125</b>				<b>MK2</b>
Load Control Valve	Pilot Ratio		Adjustment Style	Cracking Pressure	Seals	

Code	Pilot Ratio
A	8 : 1
E	3 : 1

Code	Cracking Pressure
	Omit for no setting (Standard)* Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Standard)
T	Tamper Resistant (TC1125)
Y	Non-Adjustable Preset

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30035N-1)
V	Fluorocarbon / (SK30035V-1)

*Order Bodies Separately*

<b>LB10</b>		
Line Body	Porting	Body Material

Code	Porting
078	1" SAE (main) 1/4" SAE (aux)
105	1" SAE Dual Cavity

Code	Body Material
A	Aluminum
S	Steel



**Technical Information**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

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**BC**

Bodies & Cavities

**TD**

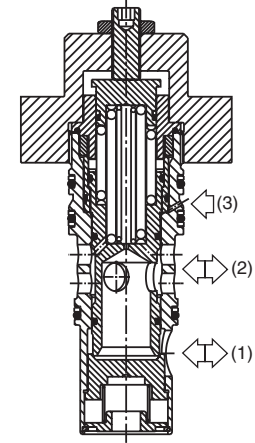
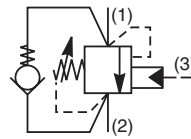
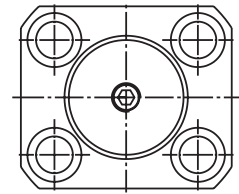
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

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

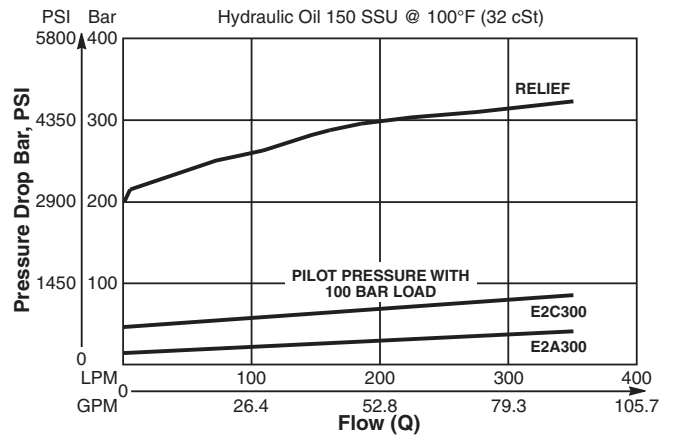


**Specifications**

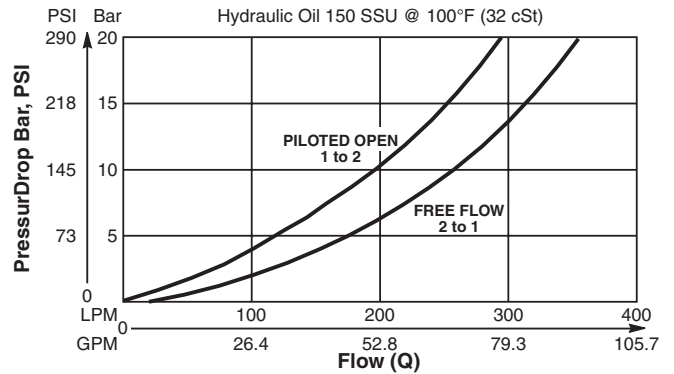
<b>Rated Flow</b>	350 LPM (92 GPM)
<b>Pressure</b>	50 - 350 Bar (725 - 5000 PSI)
<b>Sensitivity: Pressure/Turn</b>	45 Bar (653 PSI)
<b>Pilot Ratio</b>	<b>E2A300</b> - 8 : 1 <b>E2C300</b> - 3 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/ Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	1.44 kg (3.17 lbs.)
<b>Cavity</b>	3K (See BC Section for more details)

**Performance Curves**

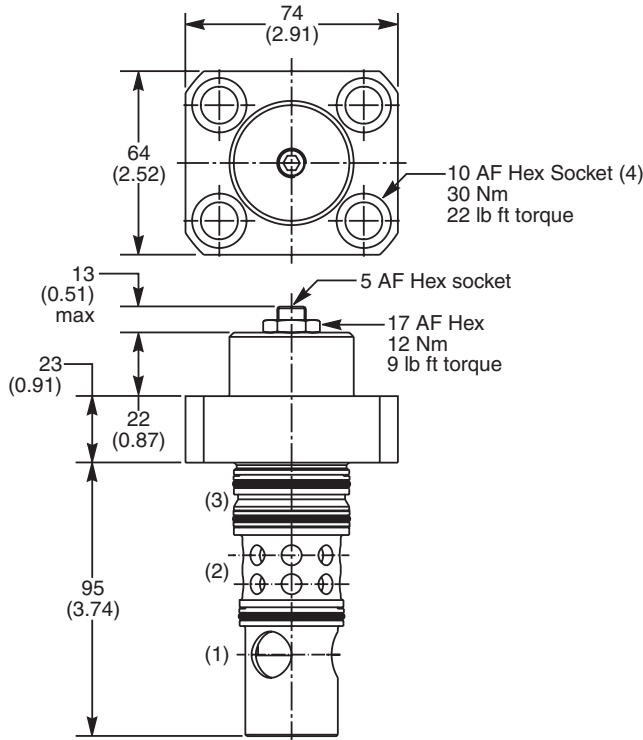
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E2</b>		<b>300</b>				<b>MK2</b>
Load Control Valve	Pilot Ratio		Adjustment Style	Cracking Pressure	Seals	

Code	Pilot Ratio
A	8 : 1
C	3 : 1

Code	Cracking Pressure
	Omit for no setting (Standard)* Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Adjustment Style / Kit No.
Z	Screw Adjust
T	Tamper Resistant (TC1125)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30022N-1)
V	Fluorocarbon / (SK30022V-1)

*Order Bodies Separately*

<b>LB10</b>		
Line Body	Porting	Body Material

Code	Porting
089	1-1/4" BSP (main) 1/4" BSP (aux)

Code	Body Material
A	Aluminum
S	Steel

**Technical Information**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

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Pressure Controls

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Proportional Valves

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Bodies & Cavities

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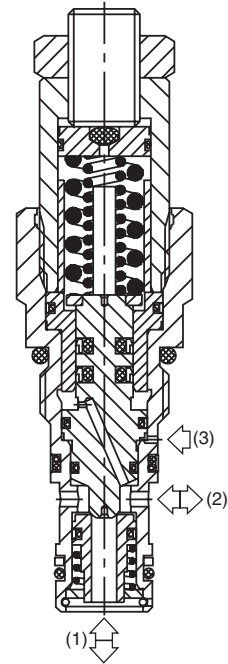
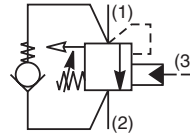
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

- Spring chamber isolated from system backpressure 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
- Small and compact, can be fitted directly into cylinder
- Adjustable and tamper resistant versions available
- All external parts zinc plated

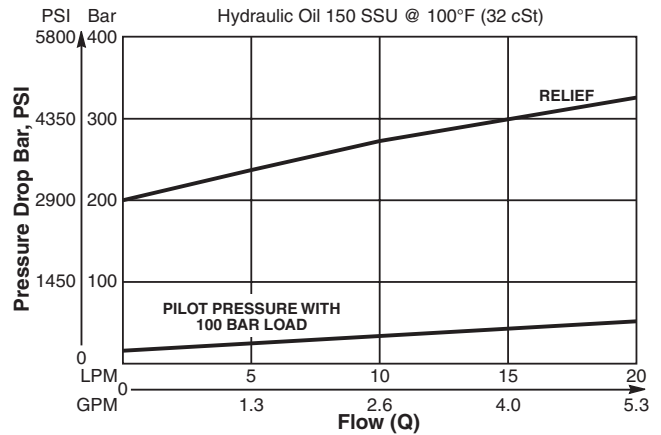


**Specifications**

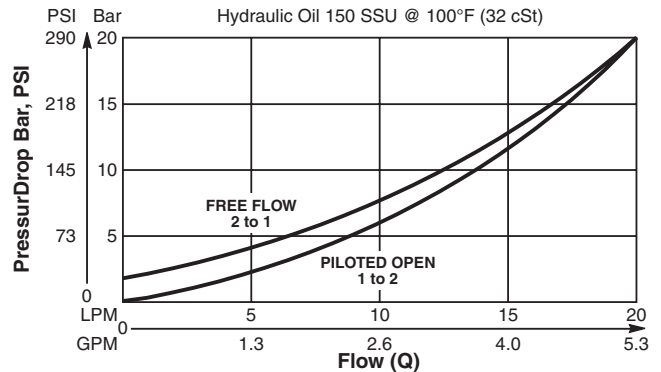
<b>Rated Flow</b>	20 LPM (5.3 GPM)
<b>Pressure</b>	50 - 420 Bar (725 - 6000 PSI)
<b>Sensitivity: Pressure/Turn</b>	84 Bar (1220 PSI)
<b>Pilot Ratio</b>	4.5 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/ Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.08 kg (0.18 lbs.)
<b>Cavity</b>	53-1 (See BC Section for more details)

**Performance Curves**

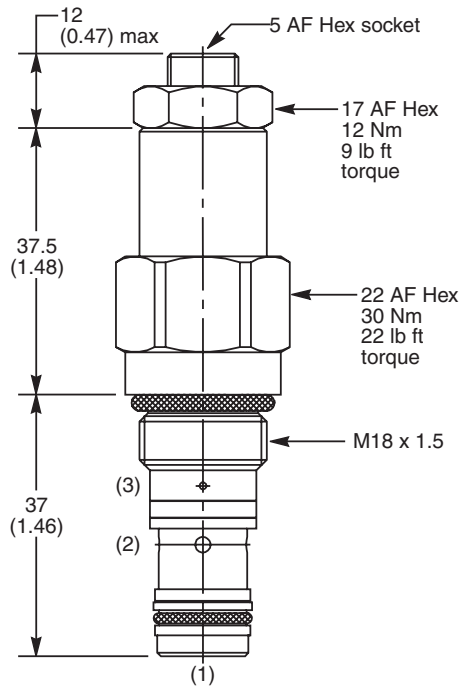
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E6</b>	<b>B</b>	<b>020</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Load Control Valve	Pilot Ratio		Adjustment Style	Cracking Pressure	Seals

Code	Pilot Ratio
<b>B</b>	4.5 : 1

Code	Adjustment Style / Kit No.
<b>Z</b>	Screw Adjust (Standard)
<b>T</b>	Tamper Resistant (TC1125)

Code	Cracking Pressure
	Omit for no setting (Standard)* Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Seals / Kit No.
<b>N</b>	Nitrile, Buna-N (Std.) / (SK30087N-1)
<b>V</b>	Fluorocarbon / (SK30087V-1)

*Order Bodies Separately*

<b>LB10</b>	<input type="checkbox"/>	<input type="checkbox"/>
Line Body	Porting	Body Material

Code	Porting
<b>318</b>	3/8" SAE (main) 1/4" SAE (aux)
<b>319</b>	3/8" SAE Dual Cavity

Code	Body Material
<b>A</b>	Aluminum
<b>S</b>	Steel

**Technical Information**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

**LE**

Logic Elements

**DC**

Directional Controls

**MV**

Manual Valves

**SV**

Solenoid Valves

**PV**

Proportional Valves

**CE**

Coils & Electronics

**BC**

Bodies & Cavities

**TD**

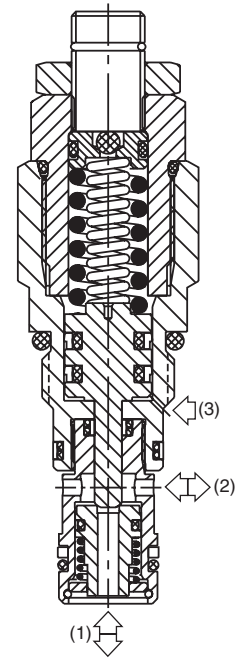
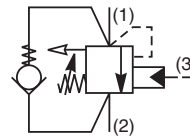
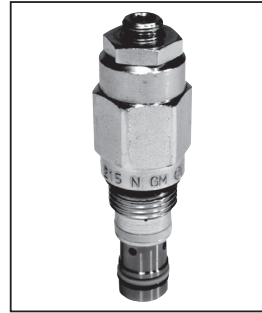
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

- Spring chamber isolated from system backpressure by double seal, eliminating vent port leakage and need for separate drain line
- Poppet construction for minimal leakage
- Suitable for remote pilot controlled boomlock applications as per ISO8463
- Incorporates direct acting relief valve for overload protection
- Includes reverse check valve within body
- Hardened working parts for maximum durability
- Adjustable and tamper resistant versions available
- All external parts zinc plated

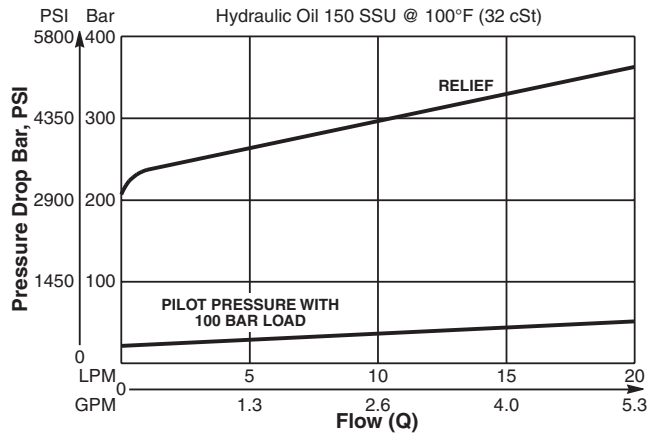


**Specifications**

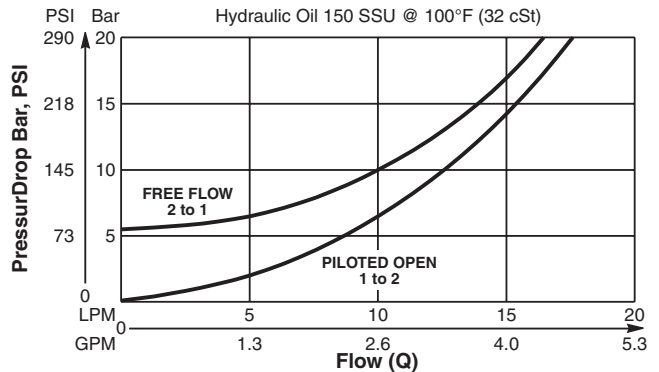
<b>Rated Flow</b>	20 LPM (5.3 GPM)
<b>Pressure</b>	100 - 350 Bar (1450 - 5075 PSI)
<b>Sensitivity: Pressure/Turn</b>	114 Bar (1650 PSI)
<b>Pilot Ratio</b>	15 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/ Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.08 kg (0.18 lbs.)
<b>Cavity</b>	53-1 (See BC Section for more details)

**Performance Curves**

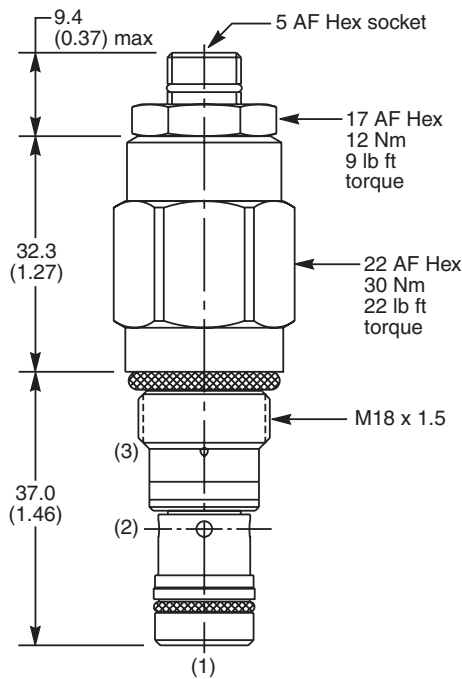
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E6</b>	<b>K</b>	<b>020</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Load Control Valve	Pilot Ratio		Adjustment Style	Cracking Pressure	Seals

Code	Pilot Ratio
K	15 : 1

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Standard)
T	Tamper Resistant (TC1125)

Code	Cracking Pressure
	Omit for no setting (Standard)* Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30087N-1)
V	Fluorocarbon / (SK30087V-1)

*Order Bodies Separately*

<b>LB10</b>	<input type="checkbox"/>	<input type="checkbox"/>
Line Body	Porting	Body Material

Code	Porting
318	3/8" SAE (main) 1/4" SAE (aux)
319	3/8" SAE Dual Cavity

Code	Body Material
A	Aluminum
S	Steel

**Technical Information**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

**LE**

Logic Elements

**DC**

Directional Controls

**MV**

Manual Valves

**SV**

Solenoid Valves

**PV**

Proportional Valves

**CE**

Coils & Electronics

**BC**

Bodies & Cavities

**TD**

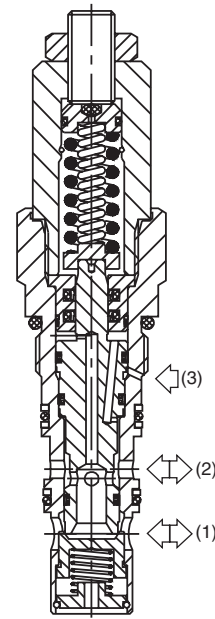
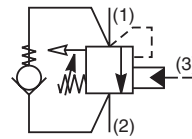
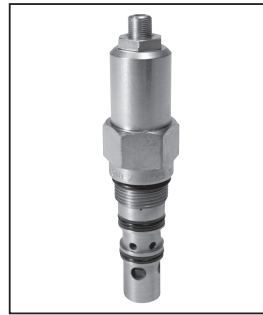
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

- Spring chamber isolated from system backpressure 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 minimizing installation cost
- Hardened working parts for maximum durability
- Adjustable and tamper resistant versions available
- All external parts zinc plated

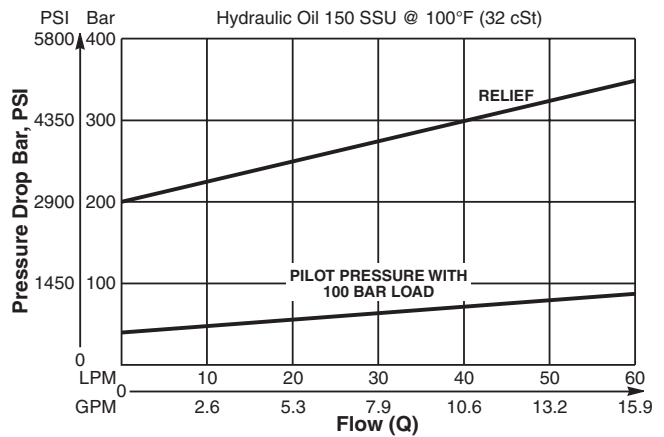


**Specifications**

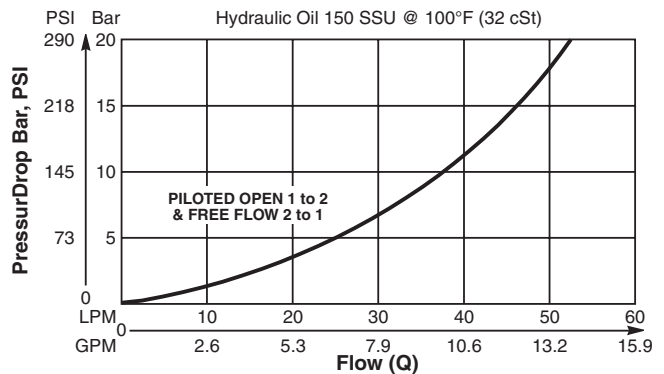
<b>Rated Flow</b>	60 LPM (15.9 GPM)
<b>Pressure</b>	50 - 350 Bar (725 - 5000 PSI)
<b>Sensitivity: Pressure/Turn</b>	92 Bar (1335 PSI)
<b>Pilot Ratio</b>	3 : 1
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.33 kg (0.73 lbs.)
<b>Cavity</b>	68-1 (See BC Section for more details)

**Performance Curves**

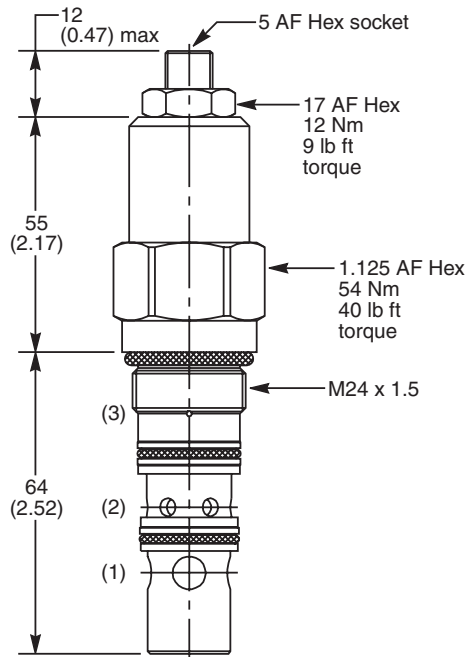
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E6</b>	<b>B</b>	<b>040</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>MK3</b>
Load Control Valve	Pilot Ratio		Adjustment Style	Cracking Pressure	Seals	

Code	Pilot Ratio
<b>B</b>	3 : 1

Code	Cracking Pressure
	Omit for no setting (Standard)* Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.3 times maximum load induced pressure.*

Code	Adjustment Style / Kit No.
<b>Z</b>	Screw Adjust (Standard)
<b>T</b>	Tamper Resistant (TC1125)

Code	Seals / Kit No.
<b>N</b>	Nitrile, Buna-N (Std.) / (SK30059N-1)
<b>V</b>	Fluorocarbon / (SK30059V-1)

*Order Bodies Separately*

<b>LB10</b>	<input type="checkbox"/>	<input type="checkbox"/>
Line Body	Porting	Body Material

Code	Porting
<b>253</b>	1/2" SAE (main) 1/4" SAE (aux)
<b>261</b>	1/2" SAE Dual Cavity

Code	Body Material
<b>A</b>	Aluminum
<b>S</b>	Steel



**Technical Information**

**CV**

Check Valves

**SH**

Shuttle Valves

**LM**

Load/Motor Controls

**FC**

Flow Controls

**PC**

Pressure Controls

**LE**

Logic Elements

**DC**

Directional Controls

**MV**

Manual Valves

**SV**

Solenoid Valves

**PV**

Proportional Valves

**CE**

Coils & Electronics

**BC**

Bodies & Cavities

**TD**

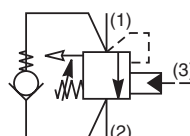
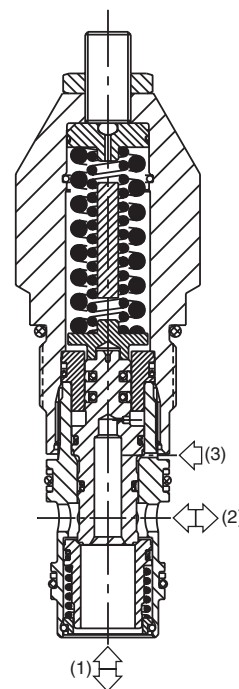
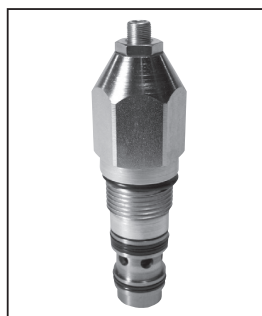
Technical Data

**General Description**

Threaded Cartridge Style Counterbalance Valve. Pilot assisted, designed for motion control applications. For additional information see Technical Tips on pages LM1-LM4.

**Features**

- High flow design with extra dampening
- Spring chamber isolated from system backpressure 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 minimizing installation cost
- Hardened working parts for maximum durability
- Adjustable and tamper resistant versions available
- All external parts zinc plated

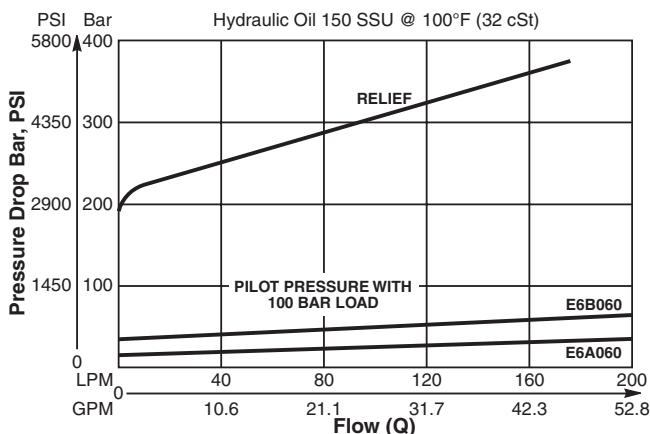


**Specifications**

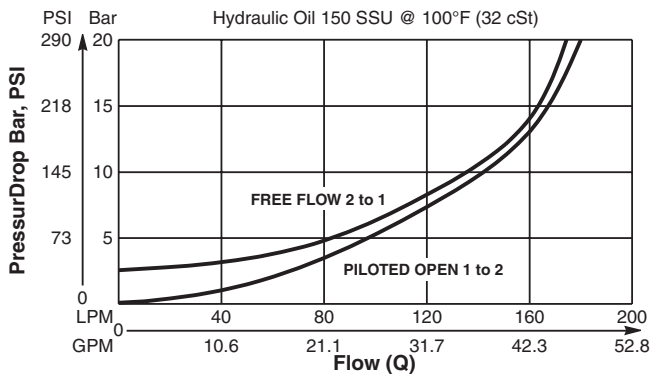
<b>Rated Flow</b>	180 LPM (48 GPM)
<b>Pressure</b>	50 - 350 Bar (725 - 5000 PSI)
<b>Sensitivity: Pressure/Turn</b>	50 Bar (725 PSI)
<b>Pilot Ratio</b>	<b>E6A060*409 - 8 : 1</b> <b>E6B060*409 - 3 : 1</b>
<b>Cartridge Material</b>	All parts steel. All operating parts hardened steel.
<b>Operating Temp. Range/Seals</b>	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°F)
<b>Fluid Compatibility/ Viscosity</b>	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
<b>Filtration</b>	ISO-4406 18/16/13, SAE Class 4
<b>Approx. Weight</b>	0.53 kg (1.17 lbs.)
<b>Cavity</b>	3C (See BC Section for more details)

**Performance Curves**

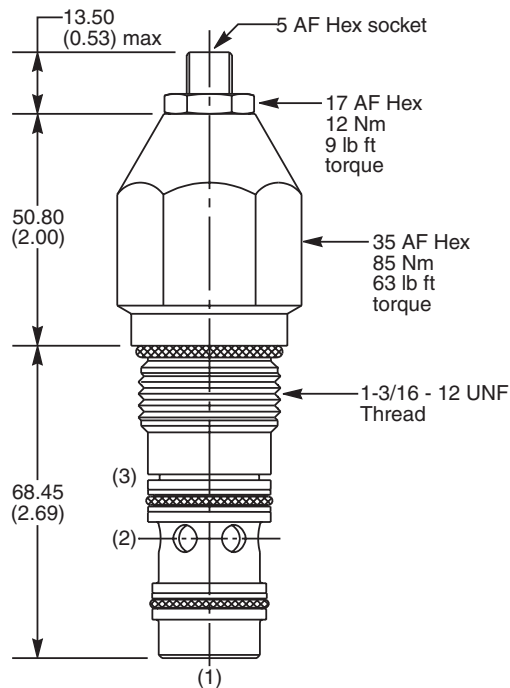
**Relief & Pilot Performance 1 to 2**



**Pressure Drop vs Flow**



**Dimensions** Millimeters (Inches)



**Ordering Information**

<b>E6</b>		<b>060</b>				<b>409</b>
Load Control Valve	Pilot Ratio	Adjustment Style	Cracking Pressure	Seals	Suffix Number	

Code	Pilot Ratio
A	8 : 1
B	3 : 1

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Standard)
T	Tamper Resistant (TC1125)

Code	Cracking Pressure
	Omit for no setting (Standard)* Specify setting if required

*\*Standard valve is set to crack at 215 Bar (3120 PSI). Valve to be set to 1.4 times maximum load induced pressure.*

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30008N-1)
V	Fluorocarbon / (SK30008V-1)

Code	Suffix Number
409	High flow design with extra dampening

*Order Bodies Separately*

<b>LB10</b>		
Line Body	Porting	Body Material

Code	Porting
069	1" SAE (main) 1/4" SAE (aux)
234	3/4" SAE Dual Cavity

Code	Body Material
A	Aluminum
S	Steel