

## Karşı Dengeleme Kartriç Valf

### LCBEA

## Counterbalance Cartridge Valve

### OPERATION

The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②. Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

### ÖZELLİKLER

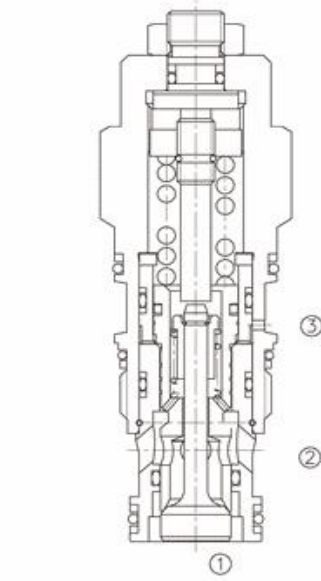
Karşı dengeleme valfinin  
En az maksimum yük  
basıncının 1.3 katına set  
edilmesi gerekmektedir  
Yükün bırakılması ve  
ayarların düşürülmesi için  
saat yönünde  
döndürülmesi gerekir  
2 nolu kısımdaki geri  
basınçta % 1 lik azalma  
olduğu zaman yerleştirilen  
bu basınçla ilave etki yapar

### FEATURES

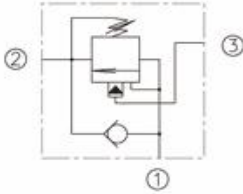
- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Turn adjustment clockwise to decrease setting and release load.
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.

### SPECIFICATIONS

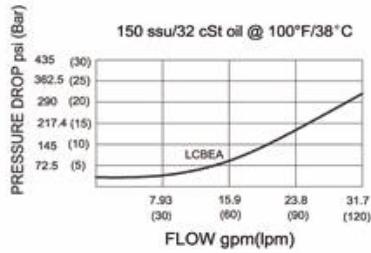
**Load Holding Pressure** : 215 Bar  
**Flow** : See PERFORMANCE CHARACTERISTIC graph.  
**Internal Leakage** : 5 drops/min.  
**Temperature** : -30 ° F to +250 ° F (-35°C to +120°C)  
**Fluids** : Mineral-based fluids.  
For other fluid compatibility, consult factory.  
**Cavity** : CBT-2, see page 225  
**Pilot Ratio** : 3: 1  
**Body Material** : steel rated at 350 Bar.



### SYMBOL



### PRESSURE DROP VS. FLOW

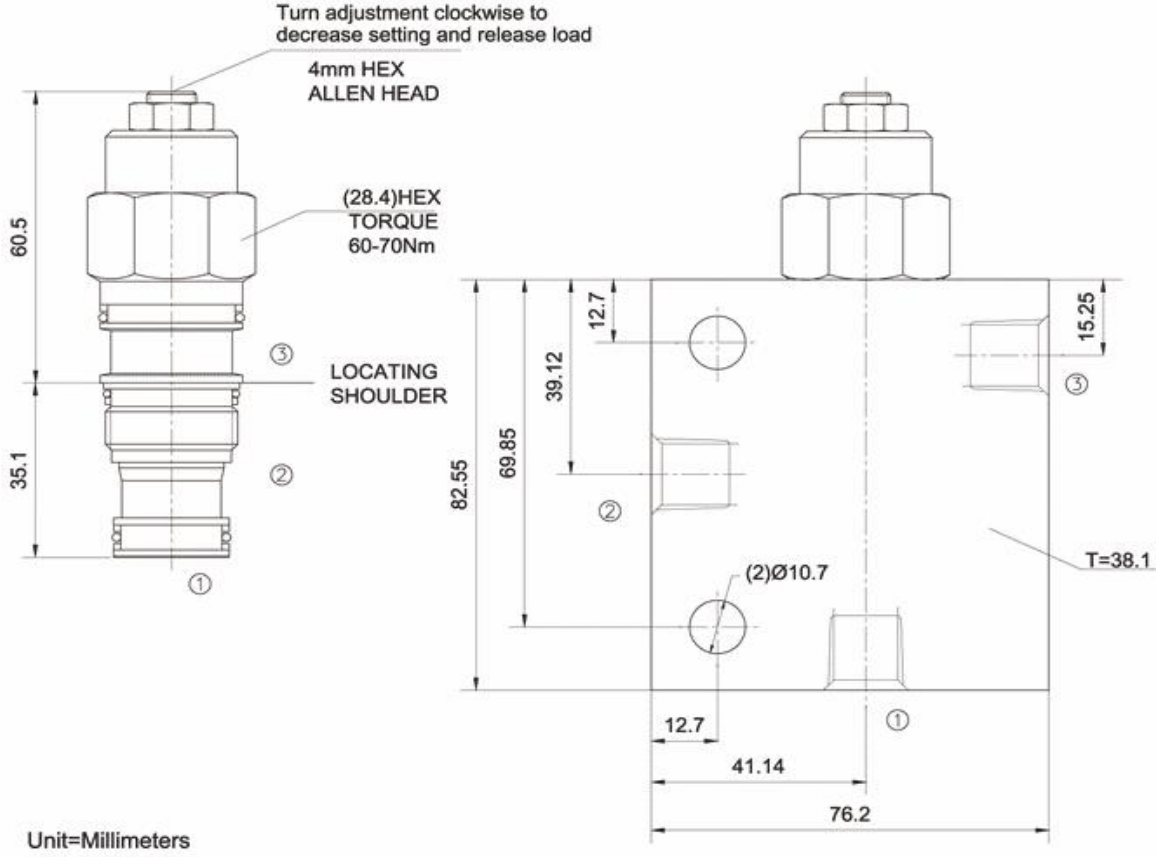


DEBİ

BASINÇDÜŞÜMÜ (bar)

## YERLEŞTİRME ÖLÇÜLERİ

### INSTALLATION DIMENSIONS



### TO ORDER

|                                                                                                                                                                                                                                                                                                          |   |   |   |   |   |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|
| LCB                                                                                                                                                                                                                                                                                                      | * | * | - | * | * | * | - | * | * | * |
| COUNTER BALANCE<br>CARTRIDGE VALVE                                                                                                                                                                                                                                                                       |   |   |   |   |   |   |   |   |   |   |
| FLOW<br>E = 120 L/min.                                                                                                                                                                                                                                                                                   |   |   |   |   |   |   |   |   |   |   |
| PILOT RATIO<br>A = 3:1                                                                                                                                                                                                                                                                                   |   |   |   |   |   |   |   |   |   |   |
| CONTROL<br>L=Standard Screw Adjustment                                                                                                                                                                                                                                                                   |   |   |   |   |   |   |   |   |   |   |
| BODY PORTING<br>3N = 3/8 PTF<br>6T = SAE 6<br>8T = SAE 8<br>Other porting is available.                                                                                                                                                                                                                  |   |   |   |   |   |   |   |   |   |   |
| (Omit for Cartridge only)                                                                                                                                                                                                                                                                                |   |   |   |   |   |   |   |   |   |   |
| Seal Kits<br>N = Buna N<br>V = Viton                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |   |   |   |
| SPRING RANGE<br>A = 1000-4000psi(70-280bar)<br>preset: 3000psi(210bar)(Check:0.3bar)<br>B = 350-1500psi(25-105bar)<br>preset: 1000psi(70bar)(Check:0.3bar)<br>H = 1000-4000psi(70-280bar)<br>preset: 3000psi(210bar)(Check:1.7bar)<br>I = 350-1500psi(25-105bar)<br>preset: 1000psi(70bar)(Check:1.7bar) |   |   |   |   |   |   |   |   |   |   |

## Karşı Dengeleme Kartriç Valf

### LCBEG/LCBEH

### Counterbalance Cartridge Valve

#### OPERATION

The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②. Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

#### FEATURES

- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Turn adjustment clockwise to decrease setting and release load.
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.

#### ÖZELLİKLER

Karşı dengeleme valfinin En az maksimum yük basıncının 1.3 katına set edilmesi gerekmektedir. Yükün bırakılması ve ayarların düşürülmesi için saat yönünde döndürülmesi gerekir. nolu kısımdaki geri basınçta % 1 lik azalma olduğu zaman yerleştirilen bu basınçla ilave etki yapar

#### SPECIFICATIONS

**Load Holding Pressure** : 270 Bar

**Flow** : See PERFORMANCE CHARACTERISTIC graph.

**Internal Leakage** : 5 drops/min.

**Temperature** : -30°F to +250°F (-35°C to +120°C)

**Fluids** : Mineral-based fluids.

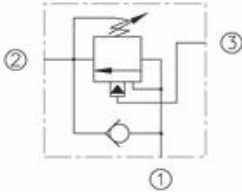
For other fluid compatibility, consult factory.

**Cavity** : CBT-2, see page 225

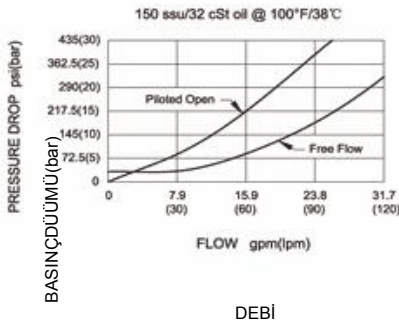
**Pilot Ratio** : (LCBEH)10:1 ; (LCBEG)4.5:1

**Body Material** : steel rated at 350 Bar.

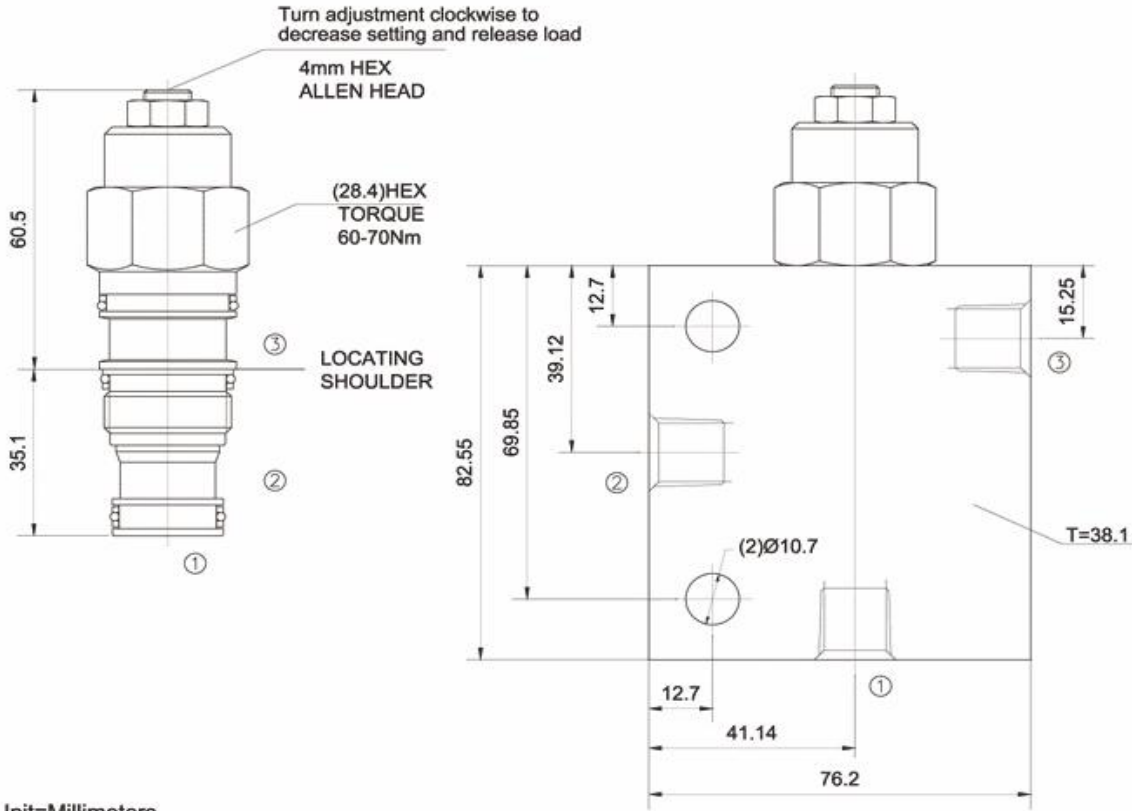
#### SYMBOL



#### PRESSURE DROP VS. FLOW



## YERLEŞTİRME ÖLÇÜLERİ INSTALLATION DIMENSIONS



## TO ORDER

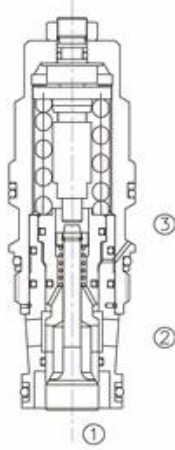
| LCB * * - * * * - * *                  |  |                                                          |
|----------------------------------------|--|----------------------------------------------------------|
| COUNTER BALANCE CARTRIDGE VALVE        |  | BODY PORTING                                             |
| FLOW<br>E = 120 L/min.                 |  | 3N = 3/8 PTF                                             |
| PILOT RATIO<br>G = 4.5:1<br>H = 10:1   |  | 6T = SAE 6                                               |
| CONTROL<br>L=Standard Screw Adjustment |  | 8T = SAE 8                                               |
|                                        |  | Other porting is available.<br>(Omit for Cartridge only) |
|                                        |  | Seal Kits                                                |
|                                        |  | N = Buna N                                               |
|                                        |  | V = Viton                                                |
|                                        |  | SPRING RANGE                                             |
|                                        |  | C = 2000-5000psi(140-350bar)                             |
|                                        |  | preset: 3000psi(210bar)(Check:0.3bar)                    |
|                                        |  | D = 1000-2500psi(70-175bar)                              |
|                                        |  | preset: 2000psi(140bar)(Check:0.3bar)                    |
|                                        |  | J = 2000-5000psi(140-350bar)                             |
|                                        |  | preset: 3000psi(210bar)(Check:1.7bar)                    |
|                                        |  | K = 1000-2500psi(70-175bar)                              |
|                                        |  | preset: 2000psi(140bar)(Check:1.7bar)                    |

## Karşı Dengeleme Kartriç Valf

STANDARD

# LCBGG

## Counterbalance Cartridge Valve



### OPERATION

The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②. Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

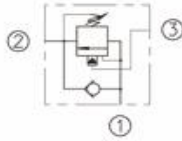
### FEATURES

- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Full clockwise setting is less than 14 bar.
- Turn adjustment clockwise to decrease setting and release load.
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.

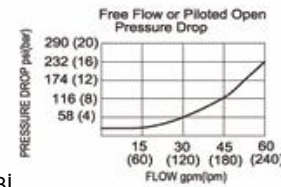
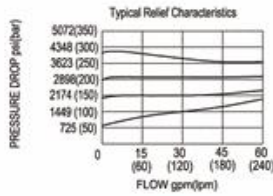
### ÖZELLİKLER

Karşı dengeleme valfinin en az maksimum yük basıncının 1.3 katına set edilmesi gerekmektedir. Tam saat yönünde yerleştirildiğinde 14 Barın altında olmalıdır. Yükün bırakılması ve ayarların düşürülmesi için saat yönünde döndürülmesi gerekir. 2 nolu kısımdaki geri basınçta %1'lik azalma olduğu zaman yerleştirilen bu basınçla ilave etki yapar.

### SYMBOL



### PRESSURE DROP VS. FLOW

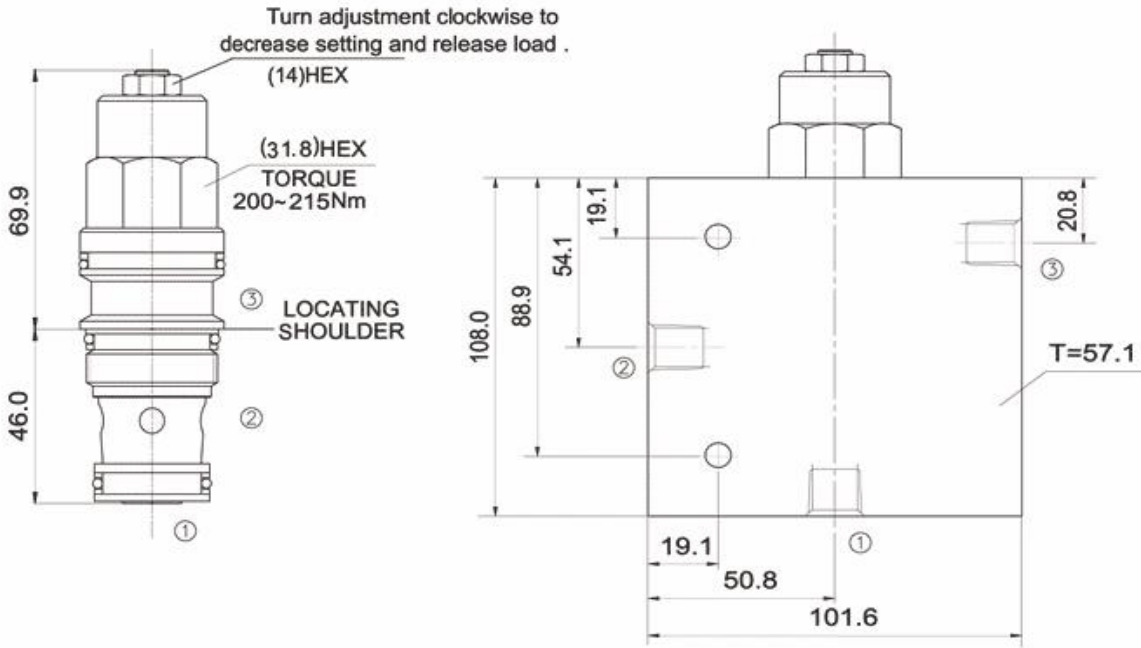


DEBİ

### SPECIFICATIONS

**Load Holding Pressure** : 270 bar  
**Flow** : See PERFORMANCE CHARACTERISTIC graph.  
**Internal Leakage** : 5 drops/min.  
**Temperature** : -30° F to +250° F (-35°C to +120° C)  
**Fluids** : Mineral-based fluids.  
 For other fluid compatibility consult factory.  
**Cavity** : CBT-3, see page 225  
**Pilot Ratio** : 4.5: 1  
**Body Material** : steel rated at 350 Bar.

## YERLEŞTİRME ÖLÇÜLERİ INSTALLATION DIMENSIONS



## TO ORDER

| LCB * * - * * * - * *                  |  |                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COUNTER BALANCE<br>CARTRIDGE VALVE     |  | BODY PORTING<br>6N = 3/4 PTF<br>8N = 1 PTF<br>10N = 1 1/4 PTF<br>12T = SAE 12<br>Other porting is available.                                                                                                                                                                                                   |
| FLOW<br>G = 240 L/min.                 |  | (Omit for Cartridge only )                                                                                                                                                                                                                                                                                     |
| PILOT RATIL<br>G = 4.5:1               |  | Seal Kits<br>N = Buna N<br>V = Viton                                                                                                                                                                                                                                                                           |
| CONTROL<br>L=Standard Screw Adjustment |  | SPRING RANGE<br>C = 2000-5000psi(140-350bar)<br>preset: 3000psi(210bar)(Check:0.3bar)<br>D = 1000-2500psi(70-175bar)<br>preset: 2000psi(140bar)(Check:0.3bar)<br>J = 2000-5000psi(140-350bar)<br>preset: 3000psi(210bar)(Check:1.7bar)<br>K = 1000-2500psi(70-175bar)<br>preset: 2000psi(140bar)(Check:1.7bar) |

## Karşı Dengeleme Kartriç Valf

### LCBIH

#### Counterbalance Cartridge Valve

#### OPERATION

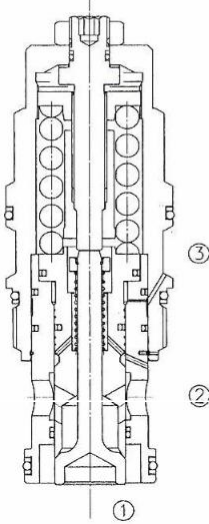
The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②. Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

#### FEATURES

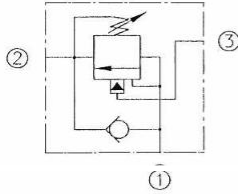
- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.
- Reseat exceeds 85% of set pressure when the valve is standard set. Setting lower than the standard set pressure may result in lower reseal percentages.
- Factory Pressure Setting Established at 30cc/min (2 in<sup>3</sup>/min).

#### ÖZELLİKLER

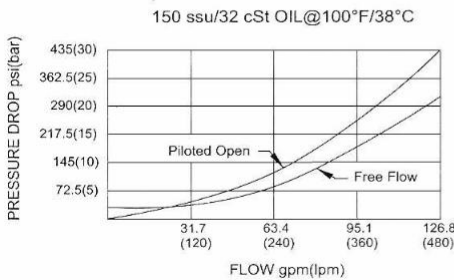
Karşı dengeleme valfinin en az maksimum yük basıncının 1.3 katına set edilmesi gerekmektedir.  
2 nolu kısımdaki geri basınçta % 1lik azalma olduğu zaman yerleştirilen bu basınçla ilave etki yapar.  
Valf standart konumda olduğu zaman Sistem basıncının % 85ini aşan kısım tekrarı eski konuma getirilir. Standart basınç seviyesinden daha az seviyede olan basınç tekrar yerleştirme yüzdesinden düşük sonuç verebilir.  
Belirlenmiş fabrika basınç ayarları 30 cc/dak (2 in<sup>3</sup>/dak)



#### SYMBOL



#### PRESSURE DROP VS. FLOW



#### SPECIFICATIONS

Maximum Setting : 350 bar

Maximum Recommended Load Pressure at Maximum Setting : 270 bar

Load Holding Pressure : 350 Bar

Flow : See PERFORMANCE CHARACTERISTIC graph.

Internal Leakage : 5 drops/min.

Temperature : -30°F to +250°F (-35°C to +120°C)

Fluids : Mineral-based fluids.

For other fluid compatibility, consult factory.

Cavity : CBT-6, see page 270

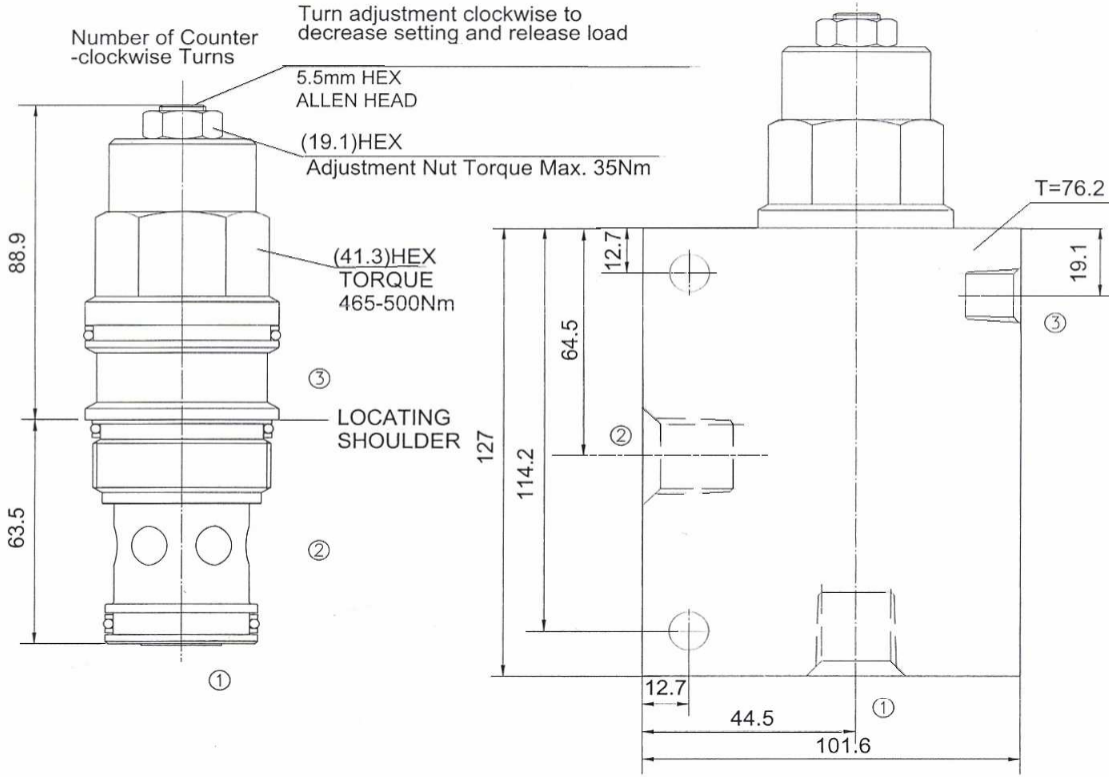
Pilot Ratio : 10: 1

Body Material : steel rated at 350 Bar.

BASINÇDÜŞÜMÜ(bar)

DEBİ

## YERLEŞTİRME ÖLÇÜLERİ INSTALLATION DIMENSIONS



## TO ORDER

| LCB * * - * * * - * *                  |                                       |
|----------------------------------------|---------------------------------------|
| COUNTER BALANCE CARTRIDGE VALVE        | BODY PORTING                          |
| FLOW<br>I = 480 L/min.                 | 8N = 1 PTF                            |
| PILOT RATIL<br>H = 10:1                | 10N = 1 1/4 PTF                       |
| CONTROL<br>L=Standard Screw Adjustment | 16T=SAE 16                            |
|                                        | 20T=SAE 20                            |
|                                        | Other porting is available.           |
|                                        | (Omit for Cartridge only)             |
|                                        | Seal Kits                             |
|                                        | N = Buna N                            |
|                                        | V = Viton                             |
|                                        | SPRING RANGE                          |
|                                        | C = 2000-5000psi(140-350bar)          |
|                                        | preset: 3000psi(210bar)(Check:0.3bar) |
|                                        | D = 1000-2500psi(70-175bar)           |
|                                        | preset: 2000psi(140bar)(Check:0.3bar) |
|                                        | J = 2000-5000psi(140-350bar)          |
|                                        | preset: 3000psi(210bar)(Check:1.7bar) |
|                                        | K = 1000-2500psi(70-175bar)           |
|                                        | preset: 2000psi(140bar)(Check:1.7bar) |

## Karşı Dengeleme Kartriç Valf

SEMI-RESTRICTIVE

### LCBBB/LCBBC

### Counterbalance Cartridge Valve

#### OPERATION

The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②. Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

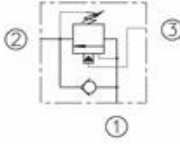
#### FEATURES

- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Full clockwise setting is less than 14 bar.
- Turn adjustment clockwise to decrease setting and release load.
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.

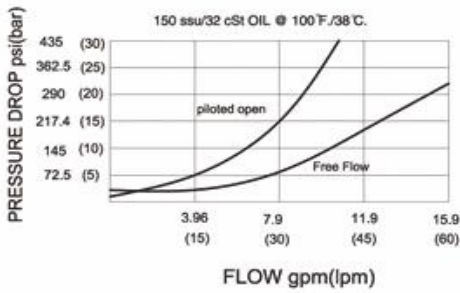
#### ÖZELLİKLER

Karşı dengeleme valfinin en az maksimum yük basıncının 1.3 katına set edilmesi gerekmektedir. Tam saat yönünde yerleştirildiğinde 14 Barın altında olmalıdır. Yükün bırakılması ve ayarların düşürülmesi için saat yönünde döndürülmesi gerekir. 2 nolu kısımdaki geri basınçta %1'lik azalma olduğu zaman yerleştirilen bu basınçla ilave etki yapar.

#### SYMBOL



#### PRESSURE DROP VS. FLOW

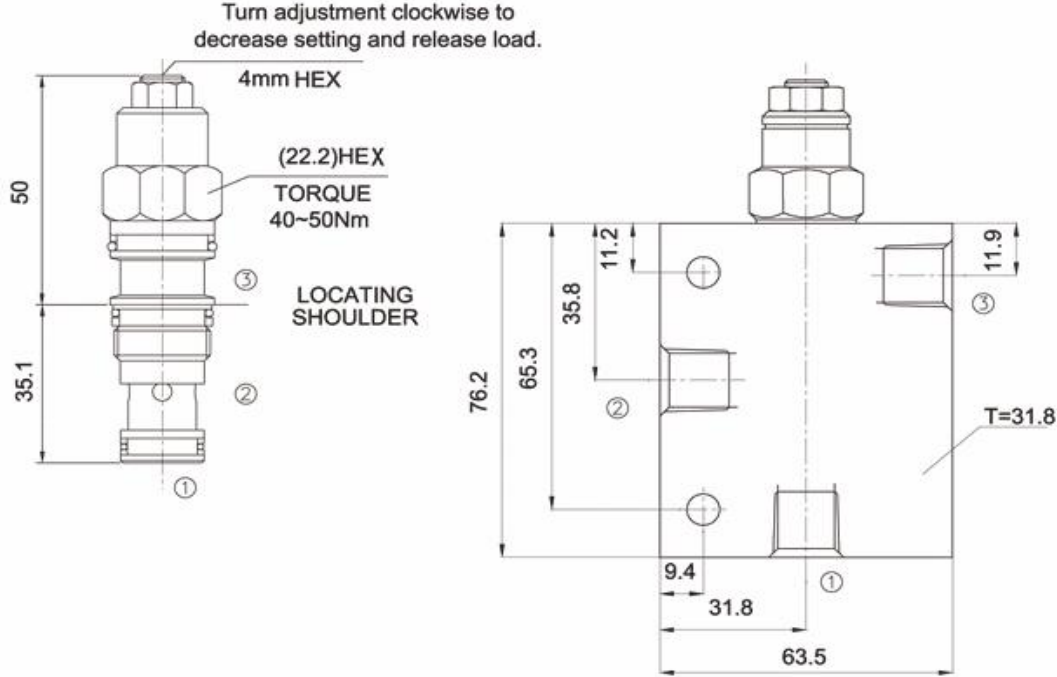


#### SPECIFICATIONS

**Load Holding Pressure** : 215 bar  
**Flow** : See PERFORMANCE CHARACTERISTIC graph.  
**Internal Leakage** : 5 drops/min.  
**Temperature** : -30° F to +250° F (-35°C to +120° C)  
**Fluids** : Mineral-based fluids.  
 For other fluid compatibility consult factory.  
**Cavity** : CBT-1, see page 267  
**Pilot Ratio** : (LCBBC) 3:1 ; (LCBBB) 1.5: 1  
**Body Material** : steel rated at 350 Bar.

DEBI

## YERLEŞTİRME ÖLÇÜLERİ INSTALLATION DIMENSIONS



Unit=Millimeters

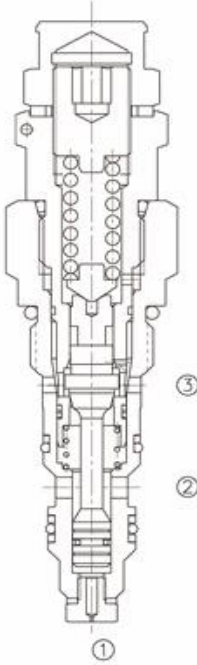
## TO ORDER

|                                                                                                                                                                                                                                                                                                          |   |   |   |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|
| LCB                                                                                                                                                                                                                                                                                                      | * | * | * | * | * | * | * | * |
| COUNTER BALANCE<br>CARTRIDGE VALVE                                                                                                                                                                                                                                                                       |   |   |   |   |   |   |   |   |
| FLOW<br>B = 40 L/min.                                                                                                                                                                                                                                                                                    |   |   |   |   |   |   |   |   |
| PILOT RATIO<br>B = 1.5:1<br>C = 3:1                                                                                                                                                                                                                                                                      |   |   |   |   |   |   |   |   |
| CONTROL<br>L=Standard Screw Adjustment                                                                                                                                                                                                                                                                   |   |   |   |   |   |   |   |   |
| BODY PORTING<br>3N = 3/8 PTF<br>6T = SAE 6<br>8T = SAE 8<br>Other porting is available.<br>(Omit for Cartridge only)                                                                                                                                                                                     |   |   |   |   |   |   |   |   |
| Seal Kits<br>N = Buna N<br>V = Viton                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |   |   |
| SPRING RANGE<br>A = 1000-4000psi(70-280bar)<br>preset: 3000psi(210bar)(Check:0.3bar)<br>B = 400-1500psi(30-105bar)<br>preset: 1000psi(70bar)(Check:0.3bar)<br>H = 1000-4000psi(70-280bar)<br>preset: 3000psi(210bar)(Check:1.7bar)<br>I = 400-1500psi(30-105bar)<br>preset: 1000psi(70bar)(Check:1.7bar) |   |   |   |   |   |   |   |   |

## Dengeli Kartriç Valf

### LCBRC78

#### Counterbalance Cartridge Valve



#### OPERATION

When pressure at ③ rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from ③ to ②. When load pressure at ② rises above the pressure setting, the direct-acting, differential area relief function is activated and flow is relieved from ② to ③. With pilot pressure at ①, the pressure setting is reduced in proportion to the stated ratio of the valve, until fully open with free-flow from ② to ③. The spring chamber is drained to ③, and any back-pressure at ③ is additive to the pressure setting in all functions.

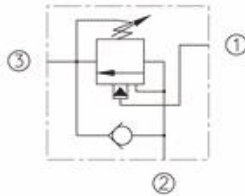
#### ÖZELLİKLER

#### FEATURES

- Hardened poppet and seat for long life.
- Optional spring ranges to 350 bar.
- Industry common cavity.

İsteğe bağlı basınç yay gerilmesi  
Uzun ömür için sertleştirilmiş  
hassas popet ve yuva  
Kompakt boyut  
Endüstriyel standartlarda kavite,

#### SYMBOL



#### SPECIFICATIONS

**Max. Operating Pressure** : 350 Bar

**Flow** : See PRESSURE DROP VS.FLOW graph..

**Temperature** : -30 ° F to +250 ° F(-35°C to +120°C)

**Fluids** : Mineral-based fluids.

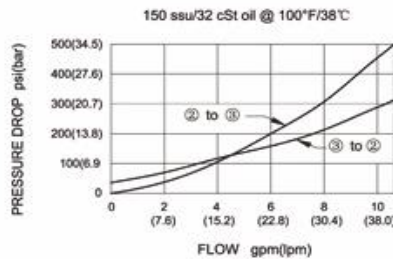
For other fluid compatibility, consult factory.

**Cavity** : 10-3, see page 265

**Pilot Ratio** : 4.1:1

**Body Material** : steel rated at 350 Bar.

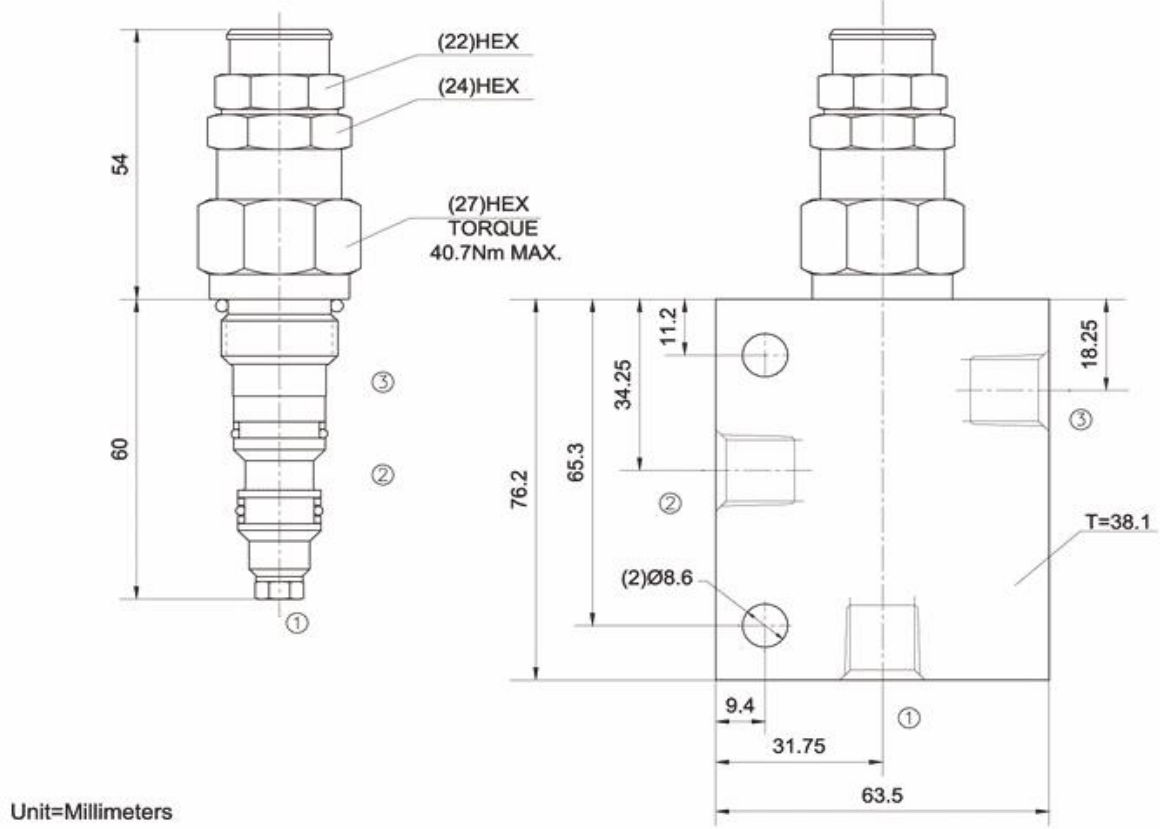
#### PRESSURE DROP VS. FLOW



DEBİ

## YERLEŞTİRME ÖLÇÜLERİ

## INSTALLATION DIMENSIONS



## TO ORDER

LCBRC78 - \* - \* - \*

COUNTERBALANCE CARTRIDGE VALVE

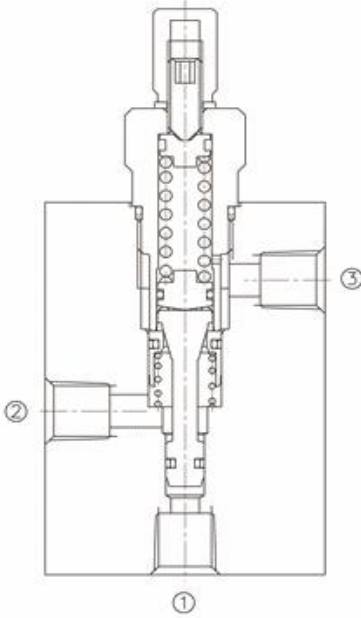
Spring Range  
50 = 1450-5000psi(100-350bar)  
preset:5000psi(350bar)  
(Q=5L/min)

BODY PORTING  
3N = 3/8 PTF  
6T = SAE 6  
8T = SAE 8  
Other porting is available.  
(Omit for Cartridge only)

## Dengeli Kartriç Valf

### LCBRD30

#### Counterbalance Cartridge Valve



#### OPERATION

When pressure at ③ rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from ③ to ②. When load pressure at ② rises above the pressure setting, the direct-acting, differential area relief function is activated and flow is relieved from ② to ③. With pilot pressure at ①, the pressure setting is reduced in proportion to the stated ratio of the valve, until fully open with free-flow from ② to ③. The spring chamber is drained to ③, and any back-pressure at ③ is additive to the pressure setting in all functions.

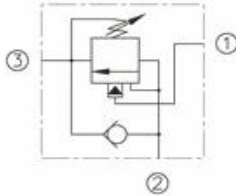
#### FEATURES

- Hardened poppet and seat for long life.
- Optional spring ranges to 350 bar.

#### ÖZELLİKLER

İsteğe bağlı basınç yay gerilmesi –  
Uzun ömür için sertleştirilmiş  
hassas poppet ve yuva  
Kompakt boyut –  
Endüstriyel standartlarda kavite

#### SYMBOL



#### SPECIFICATIONS

**Max. Operating Pressure** : 350 Bar

**Flow** : See PRESSURE DROP VS.FLOW graph..

**Temperature** : -30 ° F to +250 ° F(-35°C to +120°C)

**Fluids** : Mineral-based fluids.

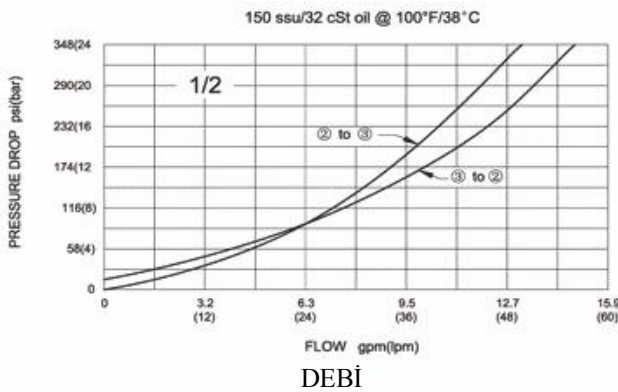
For other fluid compatibility, consult factory.

**Cavity** : CBRD-1, see page 229

**Pilot Ratio** : 4.2 :1

**Body Material** : steel rated at 350 Bar.

#### PRESSURE DROP VS. FLOW



Hidrosam Hidropar Hidrolik Pnömatik Elektrik San.Tic. Ltd

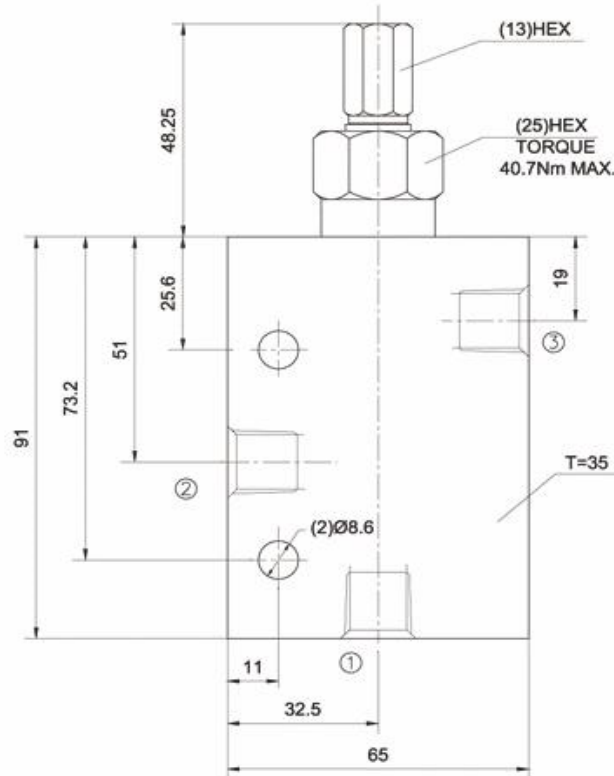
Alaaddinbey mah. 623 sok. Şam 1 plaza B blok No:2/d Nilüfer/BURSA TURKEY

Tel:+90224 441 8877 Fax:+90224 441 0333

[info@hidrosam.com](mailto:info@hidrosam.com) [www.hidrosam.com](http://www.hidrosam.com)

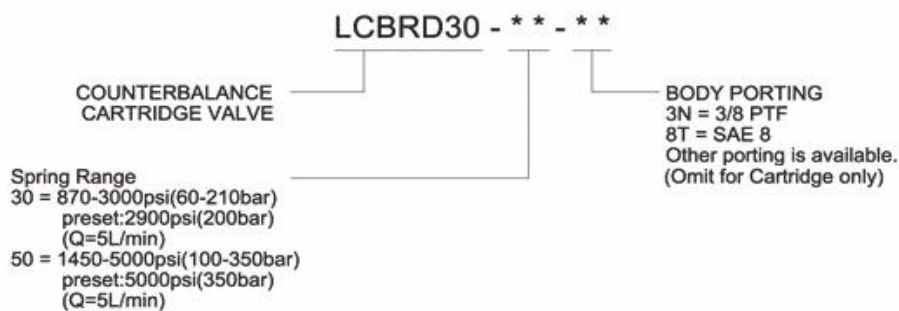
## YERLEŞTİRME ÖLÇÜLERİ

## INSTALLATION DIMENSIONS



Unit=Millimeters

TO ORDER



## Karşı Dengeleme Kartriç Valf

### LCBCA/LCBCG

#### Counterbalance Cartridge Valve

##### OPERATION

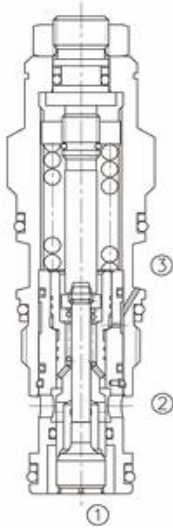
The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②. Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

##### FEATURES

- Counterbalance valves should be set at least 1.3 times the maximum load induced pressure.
- Turn adjustment clockwise to decrease setting and release load.
- Backpressure at port 2 adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure.

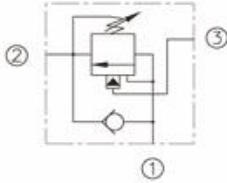
##### ÖZELLİKLER

İsteğe bağlı basınç yay gerilmesi  
Uzun ömür için sertleştirilmiş  
hassas popet ve yuva  
Kompakt boyut



Endüstriyel standartlarda kavite

##### SYMBOL



##### SPECIFICATIONS

**Load Holding Pressure** : 215 Bar(LCBCA); 270 Bar(LCBCG)

**Flow** : See PERFORMANCE CHARACTERISTIC graph.

**Internal Leakage** : 5 drops/min.

**Temperature** : -30°F to +250°F (-35°C to +120°C)

**Fluids** : Mineral-based fluids.

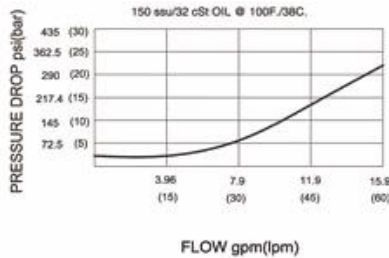
For other fluid compatibility, consult factory.

**Cavity** : CBT-1, see page 267

**Pilot Ratio** : (LCBCA)3:1 ; (LCBCG)4.5:1

**Body Material** : steel rated at 350 Bar.

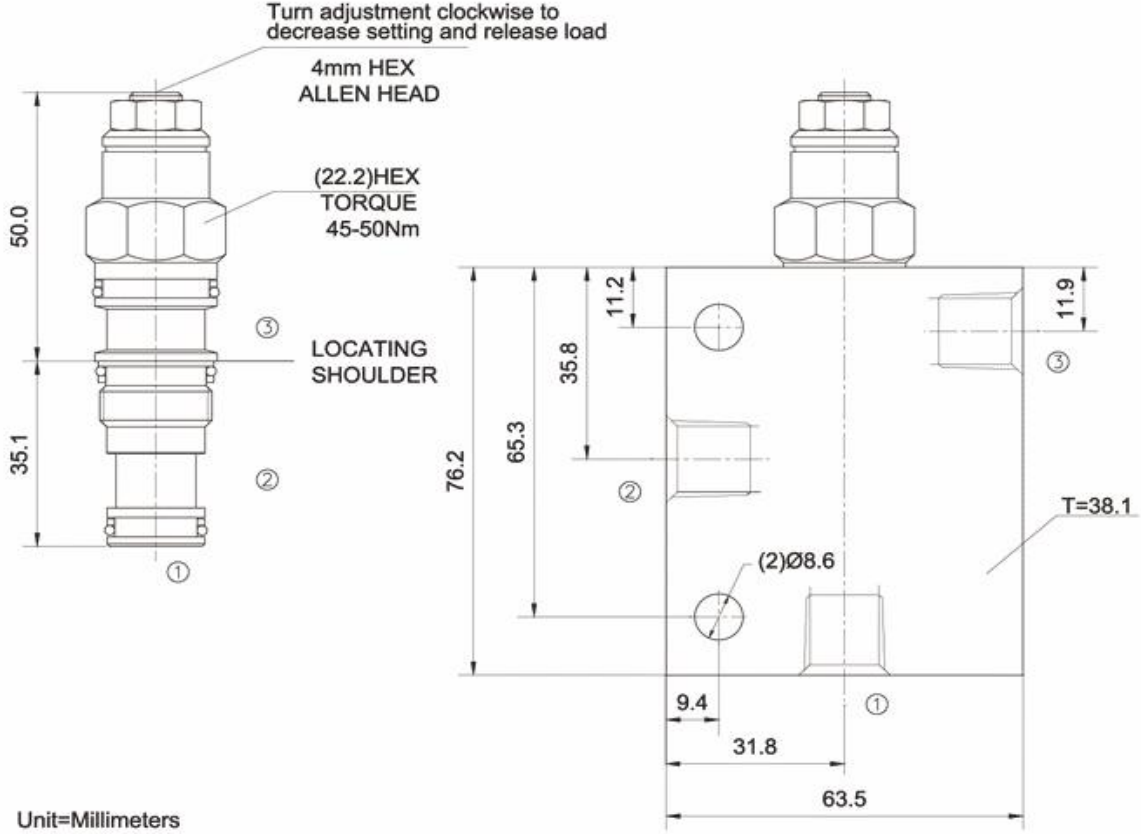
##### PRESSURE DROP VS. FLOW



DEBİ

## YERLEŞTİRME ÖLÇÜLERİ

### INSTALLATION DIMENSIONS



### TO ORDER

| LCB * * - * * * - * *                  |                                                                       |                                                                                         |
|----------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| COUNTER BALANCE CARTRIDGE VALVE        |                                                                       | BODY PORTING<br>3N = 3/8 PTF<br>6T = SAE 6<br>8T = SAE 8<br>Other porting is available. |
| FLOW<br>C = 60 L/min.                  |                                                                       | (Omit for Cartridge only)                                                               |
| PILOT RATIO<br>A = 3:1<br>G = 4.5:1    |                                                                       | Seal Kits<br>N = Buna N<br>V = Viton                                                    |
| CONTROL<br>L=Standard Screw Adjustment |                                                                       | SPRING RANGE                                                                            |
|                                        | LCBCG:                                                                | LCBCA:                                                                                  |
|                                        | C = 2000-5000psi(140-350bar)<br>preset: 3000psi(210bar)(Check:0.3bar) | A = 1000-4000psi(70-280bar)<br>preset: 3000psi(210bar)(Check:0.3bar)                    |
|                                        | D = 1000-2500psi(70-175bar)<br>preset: 2000psi(140bar)(Check:0.3bar)  | B = 360-1500psi(25-105bar)<br>preset: 1000psi(70bar)(Check:0.3bar)                      |
|                                        | J = 2000-5000psi(140-350bar)<br>preset: 3000psi(210bar)(Check:1.7bar) | H = 1000-4000psi(70-280bar)<br>preset: 3000psi(210bar)(Check:1.7bar)                    |
|                                        | K = 1000-2500psi(70-175bar)<br>preset:2000psi(140bar)(Check:1.7bar)   | I = 360-1500psi(25-105bar)<br>preset: 1000psi(70bar)(Check:1.7bar)                      |