



# Hevi-Rail® Linear Bearing Systems

## 0.6 US Ton-Force

### Linear Motion Systems

#### TECHNICAL SPECIFICATIONS (cont.)

##### PROFILE RAILS

Materials: High quality steel, UNI FE 510.C. Standard length (1024/1524 steel) of 6 m (19.7 ft.). Optional sand blasted and/or lightly oiled.  
 Rails are not hardened but have a Brinell hardness of 145-185.  
 The guide ways in the rails should be lightly greased and not painted.

##### CLAMP FLANGE

Material: Low carbon steel, Adjustable clamp

##### FLANGE PLATE

Materials: Low carbon steel  
 Special designs available, call factory.  
 Optional: Bearings pre-welded to flange plates.  
 Ordering example: HVB-054/HVPO-1

##### BEARING LIFE CALCULATION

$$\text{Life (hrs)} = 0.7 \cdot (c/p)^{3.33}$$

c = dynamic load factor (N)

p = actual radial load (N)

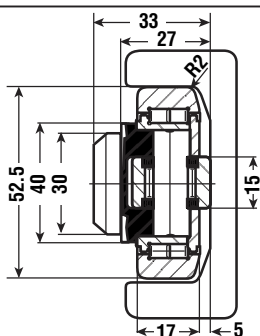
#### LINEAR BEARING SYSTEM SELECTION (when used with Profile Rails HVR-S to HVR-6)

Use the following chart to select the bearings (fixed or adjustable), rails, flange plates and clamp flanges according to your system's maximum static radial and axial loading. A system is defined as a bearing in the corresponding rail. For dimensional and detailed specifications for the system selected, simply refer to the corresponding page.

F (KN) MAX STAT RADIAL	F (KN) MAX STAT AXIAL	COMBINED BEARING AXIAL BEARING FIXED	COMBINED BEARING AXIAL BEARING ADJUSTABLE	PROFILE RAILS	CLAMP FLANGE	FLANGE PLATE	PAGE NO.
5.2	1.7	HVB-053		HVR-S		HVPS-1	244
7.2	2.4	HVB-054	HVBEA-454	HVR-0	HVC-0	HVPO-1	245
8.6	2.8	HVB-055	HVBEA-455	HVR-1, HVRI-07	HVC-1	HVP1-1	246
8.9	3.0	HVB-056	HVBEA-456	HVR-2	HVC-2	HVP2-1	247
8.9	3.0	HVB-057	HVBEA-457	HVRI-08		HVP2-1	248
15.6	5.2	HVB-058	HVBEA-458	HVR-3, HVRI-09	HVC-3	HVP3-1	249
15.5	5.1	HVB-059	HVBEA-459	HVRI-10			250
16.5	5.5	HVB-060	HVBEA-460	HVRI-11			250
16.5	5.5	HVB-061	HVBEA-461	HVR-4	HVC-4	HVP4-1	251
23.5	7.8	HVB-062	-	HVR-5		HVP4-1	252
41.1	13.7	HVB-063	HVBEA-463	HVR-6		HVP6-1	253

NOTE: For cantilevered loads, static verification calculations can be found on page 254.

##### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-053



WEIGHT = 0.36 Kg

##### BEARING RADIAL LOAD

Max. dynamic load = 24 KN

Max. static load = 33 KN

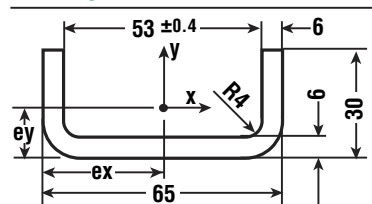
##### BEARING AXIAL LOAD

Max. dynamic load = 10 KN

Max. static load = 14 KN

NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

##### PROFILE RAIL U-CHANNEL HVR-S



WEIGHT = 5.3 Kg/m

##### MOMENT OF INERTIA

$I_x = 5.2 \text{ cm}^4$ ,  $I_y = 38.8 \text{ cm}^4$

##### MOMENT OF RESISTANCE

$W_x = 2.50 \text{ cm}^3$ ,  $W_y = 11.90 \text{ cm}^3$

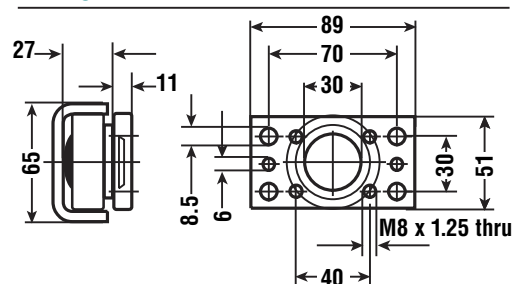
##### RADIUS OF INERTIA

$i_x = 0.80 \text{ cm}$ ,  $i_y = 2.40 \text{ cm}$

##### DIST. TO CENTER OF GRAVITY

$e_y = 0.94 \text{ cm}$ ,  $e_x = 32.50 \text{ cm}$

##### FLANGE PLATE HVPS-1



WHEN USED WITH SHOWN PROFILE RAILS, System Max. Static Radial Load = 5.2 KN / 0.6 US Ton-Force  
 System Max. Static Axial Load = 1.7 KN / 0.2 US Ton-Force

\*All dimensions in mm, unless otherwise specified.

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0.6 US Ton-Force

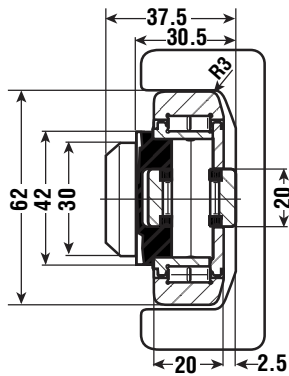


# Hevi-Rail® Linear Bearing Systems

## 0.8 US Ton-Force

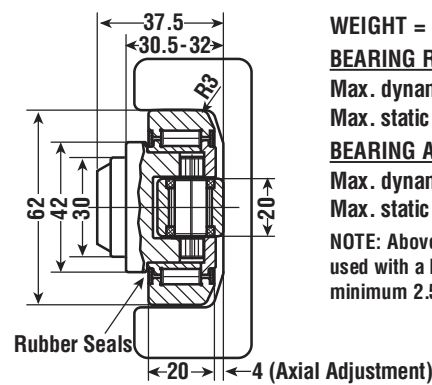
### Linear Motion Systems

#### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-054



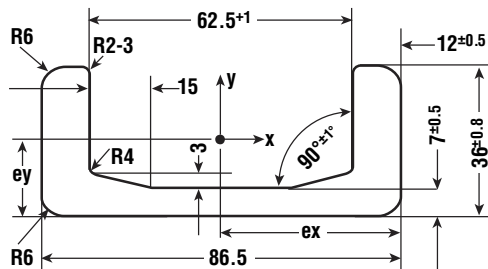
**WEIGHT = 0.53 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 39 KN  
 Max. static load = 65 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 15 KN  
 Max. static load = 22 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

#### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-454



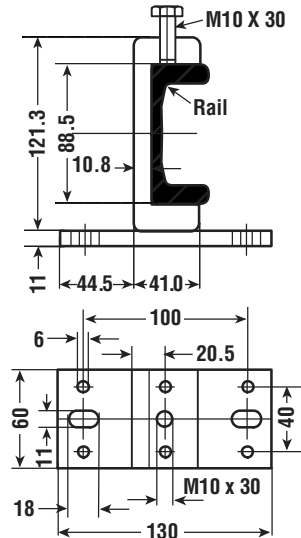
**WEIGHT = 0.53 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 39 KN  
 Max. static load = 65 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 16 KN  
 Max. static load = 25 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

#### PROFILE RAIL U-CHANNEL HVR-0

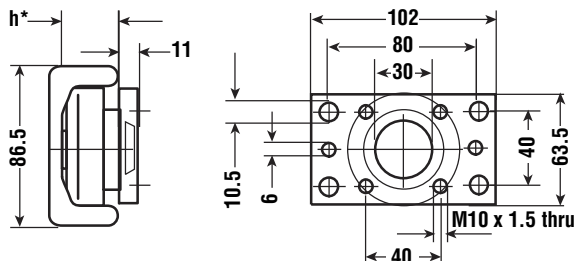


**WEIGHT = 10.5 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 15.35 \text{ cm}^4$ ,  $I_y = 137.05 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 1.29 \text{ cm}$ ,  $e_x = 4.33 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 1.07 \text{ cm}$ ,  $i_y = 3.20 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_{x_{min}} = 6.64 \text{ cm}^3$   
 $W_{x_{max}} = 11.93 \text{ cm}^3$   
 $W_y = 31.69 \text{ cm}^3$

#### CLAMP FLANGE HVC-0



#### FLANGE PLATE HVP0-1



\* h refers to the depth of the axial bearing, so h depends on choice of HVB-054 or HVBEA-454.

WHEN USED WITH SHOWN PROFILE RAILS, System Max. Static Radial Load = 7.2 KN / 0.8 US Ton-Force  
 System Max. Static Axial Load = 2.4 KN / 0.3 US Ton-Force

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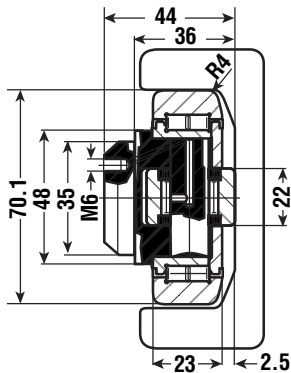


# Hevi-Rail® Linear Bearing Systems

## 0.9 US Ton-Force

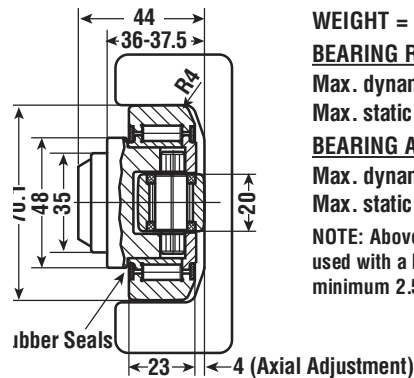
## Linear Motion Systems

### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-055



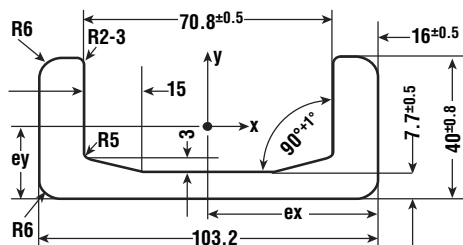
**WEIGHT = 0.80 Kg**  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 18 KN  
 Max. static load = 26 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-455



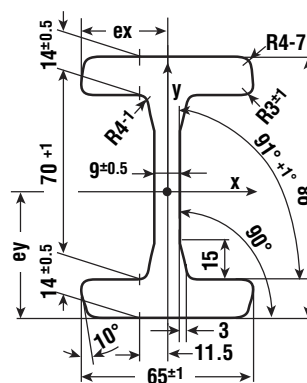
**WEIGHT = 0.80 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 56 KN  
 Max. static load = 93 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 16 KN  
 Max. static load = 25 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### PROFILE RAIL U-CHANNEL HVR-1



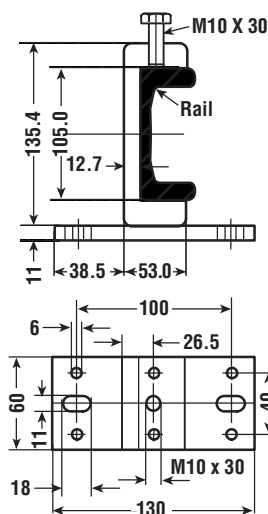
**WEIGHT = 14.8 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 27.29 \text{ cm}^4$ ,  $I_y = 273.50 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 1.50 \text{ cm}$ ,  $e_x = 5.16 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 1.20 \text{ cm}$ ,  $i_y = 3.81 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_{x_{min}} = 10.91 \text{ cm}^3$   
 $W_{x_{max}} = 18.20 \text{ cm}^3$   
 $W_y = 53.00 \text{ cm}^3$

### PROFILE RAIL I-CHANNEL HVR1-07

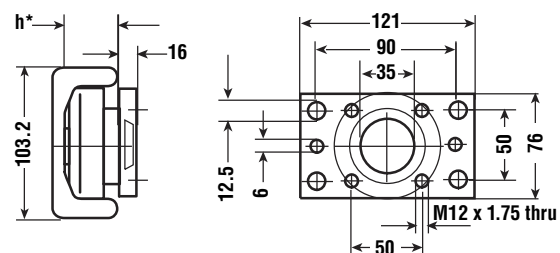


**WEIGHT = 19.4 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 344.29 \text{ cm}^4$ ,  $I_y = 57.63 \text{ cm}^3$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 4.90 \text{ cm}$ ,  $e_x = 3.25 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 3.73 \text{ cm}$ ,  $i_y = 1.52 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_x = 70.26 \text{ cm}^3$ ,  $W_y = 17.73 \text{ cm}^3$

### CLAMP FLANGE HVC-1



### FLANGE PLATE HVP1-1



\* h refers to the depth of the axial bearing, so h depends on choice of HVB-055 or HVBEA-455.

WHEN USED WITH SHOWN PROFILE RAILS, **System Max. Static Radial Load = 8.6 KN / 0.9 US Ton-Force**  
**System Max. Static Axial Load = 2.8 KN / 0.3 US Ton-Force**

\*All dimensions in mm, unless otherwise specified.

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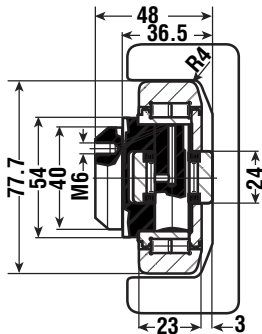


# Hevi-Rail® Linear Bearing Systems

## 1.0 US Ton-Force

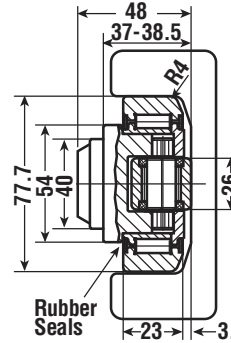
### Linear Motion Systems

#### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-056



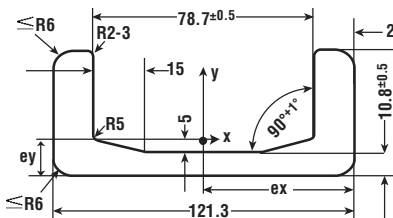
**WEIGHT = 1.00 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 59 KN  
 Max. static load = 102 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 20 KN  
 Max. static load = 32 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

#### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-456



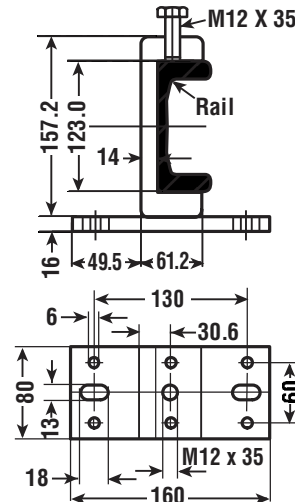
**WEIGHT = 1.00 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 59 KN  
 Max. static load = 102 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 23 KN  
 Max. static load = 36 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

#### PROFILE RAIL U-CHANNEL HVR-2

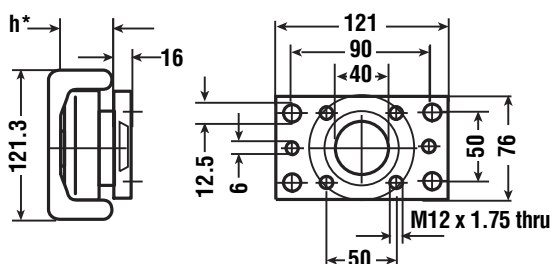


**WEIGHT = 20.9 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 37.92 \text{ cm}^4$ ,  $I_y = 493.58 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 1.54 \text{ cm}$ ,  $e_x = 6.07 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 1.19 \text{ cm}$ ,  $i_y = 4.30 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_{x_{\min}} = 14.83 \text{ cm}^3$ ,  $W_{x_{\max}} = 24.58 \text{ cm}^3$ ,  
 $W_y = 81.38 \text{ cm}^3$

#### CLAMP FLANGE HVC-2



#### FLANGE PLATE HVP2-1



\*  $h$  refers to the depth of the axial bearing,  
 so  $h$  depends on choice of HVB-056 or HVBEA-456.

WHEN USED WITH SHOWN PROFILE RAILS, System Max. Static Radial Load = 8.9 KN / 1.0 US Ton-Force  
 System Max. Static Axial Load = 3.0 KN / 0.3 US Ton-Force

\*All dimensions in mm, unless otherwise specified.

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1.0 US Ton-Force

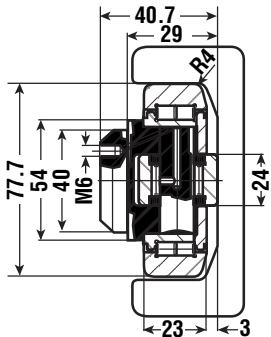


# Hevi-Rail® Linear Bearing Systems

## 1.0 US Ton-Force

## Linear Motion Systems

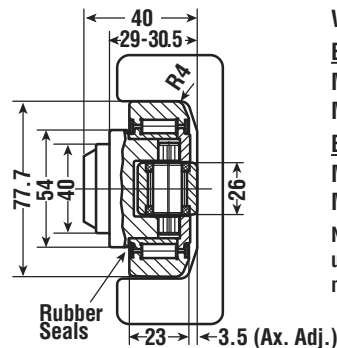
### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-057



**WEIGHT = 0.90 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 59 KN  
 Max. static load = 102 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 20 KN  
 Max. static load = 32 KN

**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

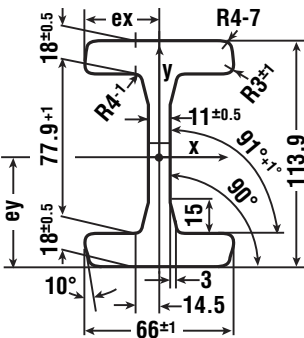
### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-457



**WEIGHT = 0.87 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 59 KN  
 Max. static load = 102 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 23 KN  
 Max. static load = 36 KN

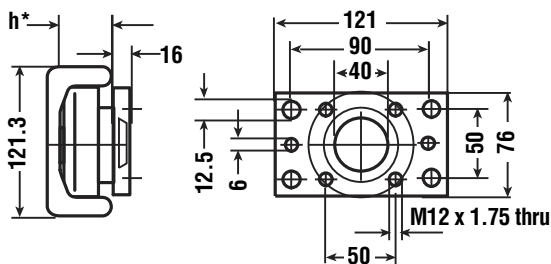
**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### PROFILE RAIL I-CHANNEL HVRI-08



**WEIGHT = 25.3 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 597.54 \text{ cm}^4$ ,  $I_y = 76.79 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 5.70 \text{ cm}$ ,  $e_x = 3.30 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 4.24 \text{ cm}$ ,  $i_y = 1.54 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_x = 104.92 \text{ cm}^3$ ,  
 $W_y = 23.27 \text{ cm}^3$

### FLANGE PLATE HVP2-1



\* h refers to the depth of the axial bearing,  
 so h depends on choice of HVB-057 or HVBEA-457.

WHEN USED WITH SHOWN PROFILE RAILS, System Max. Static Radial Load = 8.9 KN / 1.0 US Ton-Force  
 System Max. Static Axial Load = 3.0 KN / 0.3 US Ton-Force

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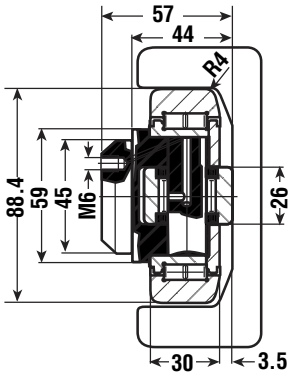


# Hevi-Rail® Linear Bearing Systems

## 1.7 US Ton-Force

## Linear Motion Systems

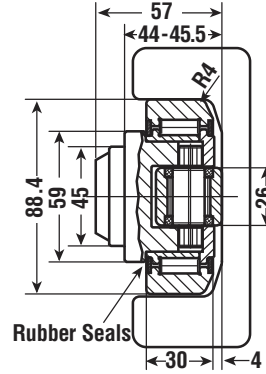
### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-058



**WEIGHT = 1.62 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 85 KN  
 Max. static load = 134 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 27 KN  
 Max. static load = 44 KN

**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

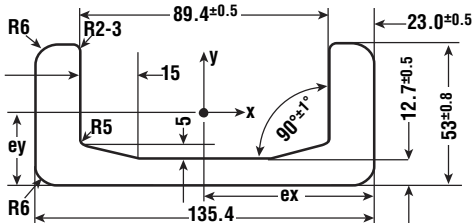
### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-458



**WEIGHT = 1.62 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 85 KN  
 Max. static load = 134 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 23 KN  
 Max. static load = 36 KN

**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

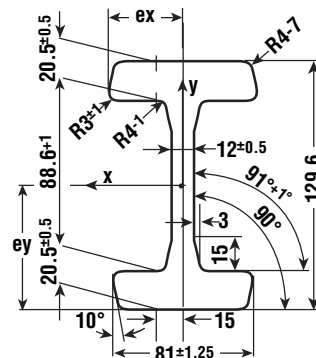
### PROFILE RAIL U-CHANNEL HVR-3



**WEIGHT = 28.6 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 89.47 \text{ cm}^4$ ,  $I_y = 865.23 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 1.99 \text{ cm}$ ,  $e_x = 6.77 \text{ cm}$

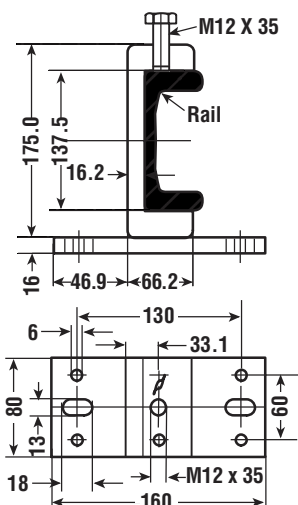
**RADIUS OF INERTIA**  
 $i_x = 1.57 \text{ cm}$ ,  $i_y = 4.87 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_{x_{min}} = 27.03 \text{ cm}^3$   
 $W_{x_{max}} = 44.96 \text{ cm}^3$   
 $W_y = 127.80 \text{ cm}^3$

### PROFILE RAIL I-CHANNEL HVRI-09

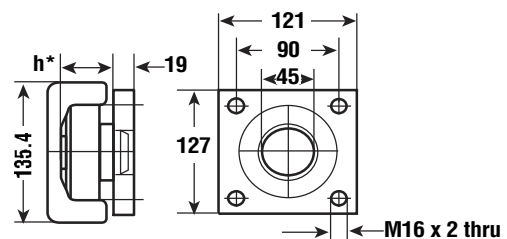


**WEIGHT = 34.1 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 1037.22 \text{ cm}^4$ ,  $I_y = 161.89 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 6.48 \text{ cm}$ ,  $e_x = 4.05 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 4.89 \text{ cm}$ ,  $i_y = 1.93 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_x = 160.07 \text{ cm}^3$ ,  
 $W_y = 39.97 \text{ cm}^3$

### CLAMP FLANGE HVC-3



### FLANGE PLATE HVP3-1



\*  $h$  refers to the depth of the axial bearing, so  $h$  depends on choice of HVB-058 or HVBEA-458.

WHEN USED WITH SHOWN PROFILE RAILS, **System Max. Static Radial Load = 15.6 KN / 1.7 US Ton-Force**  
**System Max. Static Axial Load = 5.2 KN / 0.6 US Ton-Force**

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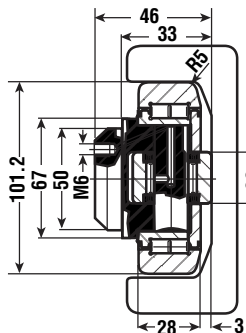


# Hevi-Rail® Linear Bearing Systems

## 1.8 US Ton-Force

# Linear Motion Systems

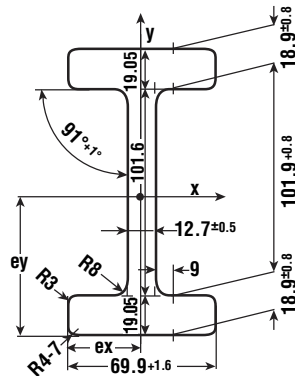
### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-059



**WEIGHT = 1.80 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 92 KN  
 Max. static load = 153 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 32 KN  
 Max. static load = 50 KN

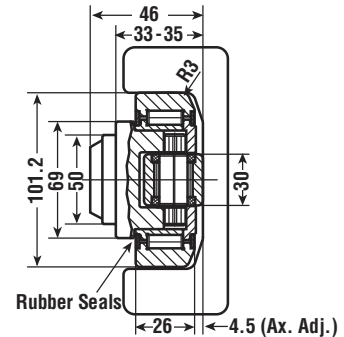
**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### PROFILE RAIL I-CHANNEL HVR1-10



**WEIGHT = 30.9 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 1078.01 \text{ cm}^4$ ,  $I_y = 104.38 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 6.99 \text{ cm}$ ,  $e_x = 3.49 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_x = 154.33 \text{ cm}^3$ ,  $W_y = 29.89 \text{ cm}^3$

### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-459



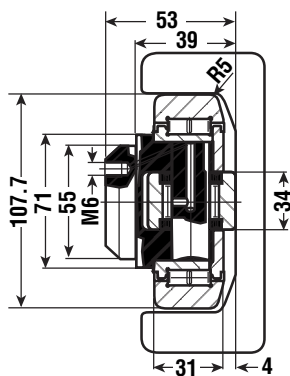
**WEIGHT = 1.74 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 91 KN  
 Max. static load = 140 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 32 KN  
 Max. static load = 50 KN

**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

WHEN USED WITH SHOWN PROFILE RAILS, **System Max. Static Radial Load = 15.5 KN / 1.7 US Ton-Force**  
**System Max. Static Axial Load = 5.1 KN / 0.6 US Ton-Force**

\*All dimensions in mm, unless otherwise speci ed.

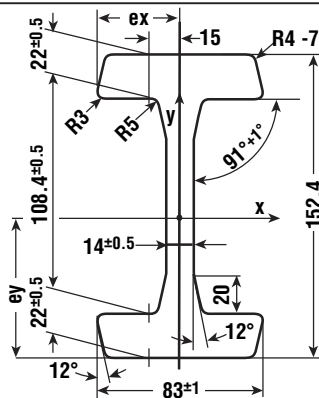
### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-060



**WEIGHT = 2.30 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 100 KN  
 Max. static load = 174 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 39 KN  
 Max. static load = 66 KN

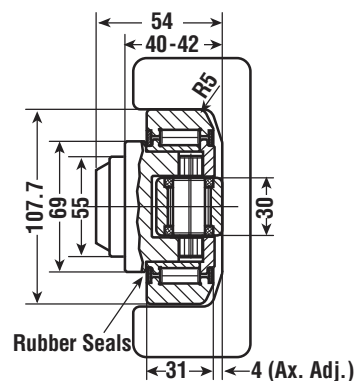
**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### PROFILE RAIL I-CHANNEL HVR1-11



**WEIGHT = 40.5 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 1670.08 \text{ cm}^4$ ,  $I_y = 184.52 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 7.62 \text{ cm}$ ,  $e_x = 4.15 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 5.69 \text{ cm}$ ,  $i_y = 1.91 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_x = 219.17 \text{ cm}^3$ ,  $W_y = 44.46 \text{ cm}^3$

### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-460



**WEIGHT = 2.27 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 100 KN  
 Max. static load = 174 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 32 KN  
 Max. static load = 50 KN

**NOTE:** Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

WHEN USED WITH SHOWN PROFILE RAILS, **System Max. Static Radial Load = 16.5 KN / 1.8 US Ton-Force**  
**System Max. Static Axial Load = 5.5 KN / 0.6 US Ton-Force**

\*All dimensions in mm, unless otherwise speci ed.

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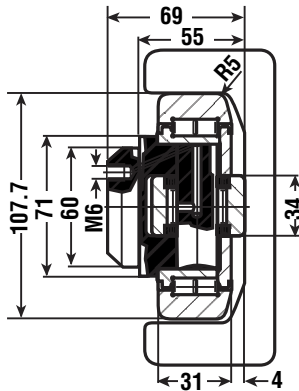


# Hevi-Rail® Linear Bearing Systems

## 1.8 US Ton-Force

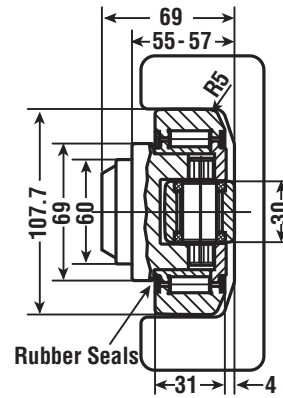
Linear Motion Systems

### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-061



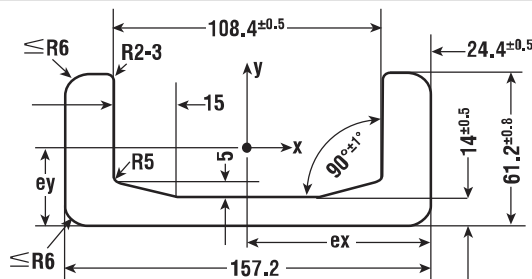
**WEIGHT = 2.82 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 100 KN  
 Max. static load = 174 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 39 KN  
 Max. static load = 66 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-461



**WEIGHT = 2.82 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 100 KN  
 Max. static load = 174 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 32 KN  
 Max. static load = 50 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

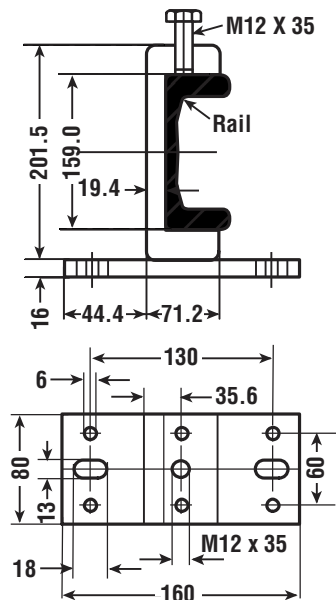
### PROFILE RAIL U-CHANNEL HVR-4



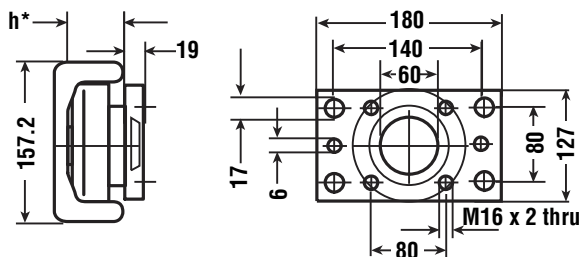
**WEIGHT = 35.9 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 150.98 \text{ cm}^4$   
 $I_y = 1,494.32 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 2.25 \text{ cm}$ ,  $e_x = 7.86 \text{ cm}$

**RADIUS OF INERTIA**  
 $i_x = 1.82 \text{ cm}$ ,  $i_y = 5.72 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_{x_{min}} = 39.00 \text{ cm}^3$   
 $W_{x_{max}} = 67.13 \text{ cm}^3$   
 $W_y = 190.12 \text{ cm}^3$

### CLAMP FLANGE HVC-4



### FLANGE PLATE HVP4-1



\* h refers to the depth of the axial bearing, so h depends on choice of HVB-061 or HVBEA-461.

WHEN USED WITH SHOWN PROFILE RAILS, System Max. Static Radial Load = 16.5 KN / 1.8 US Ton-Force  
 System Max. Static Axial Load = 5.5 KN / 0.6 US Ton-Force

\*All dimensions in mm, unless otherwise speci ed.

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1.8 US Ton-Force



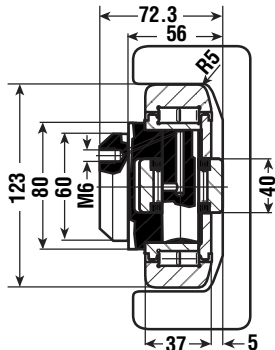


# Hevi-Rail® Linear Bearing Systems

## 2.6 US Ton-Force

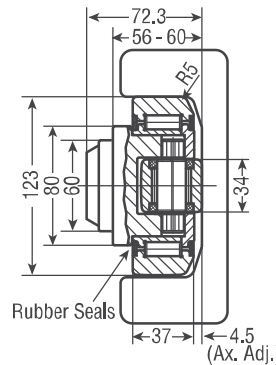
## Linear Motion Systems

### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-062



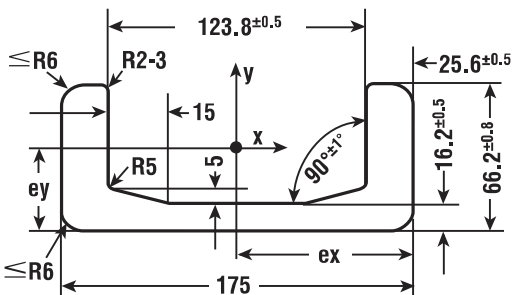
**WEIGHT = 4.50 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 135 KN  
 Max. static load = 242 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 47 KN  
 Max. static load = 90 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-462



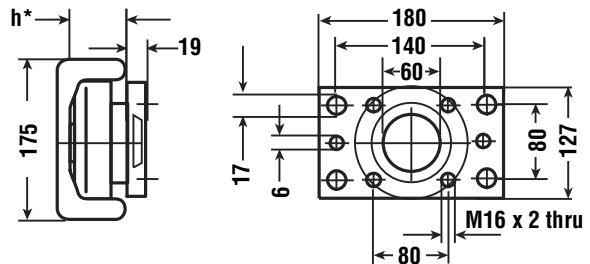
**WEIGHT = 3.90 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 135 KN  
 Max. static load = 242 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 41 KN  
 Max. static load = 72 KN

### PROFILE RAIL HVR-5



**WEIGHT = 42.9 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 205.84 \text{ cm}^4$   
 $I_y = 2,185.32 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 2.37 \text{ cm}$ ,  $e_x = 8.75 \text{ cm}$   
**RADIUS OF INERTIA**  
 $i_x = 1.94 \text{ cm}$ ,  $i_y = 6.32 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_{x_{min}} = 48.42 \text{ cm}^3$   
 $W_{x_{max}} = 86.89 \text{ cm}^3$   
 $W_y = 249.75 \text{ cm}^3$

### FLANGE PLATE HVP4-1



\* h refers to the depth of the axial bearing, so h depends on choice of HVB-062 or HVBEA-462.

WHEN USED WITH SHOWN PROFILE RAILS, System Max. Static Radial Load = 23.5 KN / 2.6 US Ton-Force  
 System Max. Static Axial Load = 7.8 KN / 0.9 US Ton-Force

\*All dimensions in mm, unless otherwise specified.

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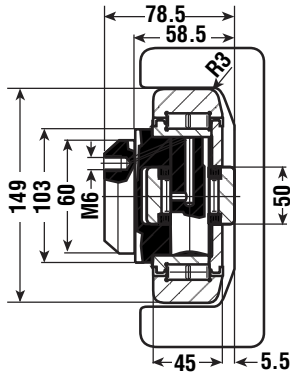


# Hevi-Rail® Linear Bearing Systems

## 4.6 US Ton-Force

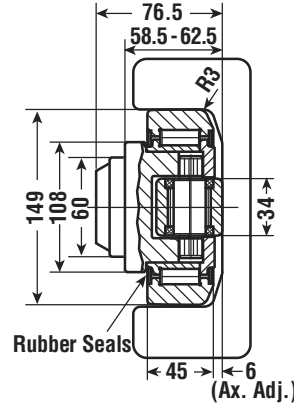
## Linear Motion Systems

### LINEAR BEARING WITH FIXED AXIAL BEARING HVB-063



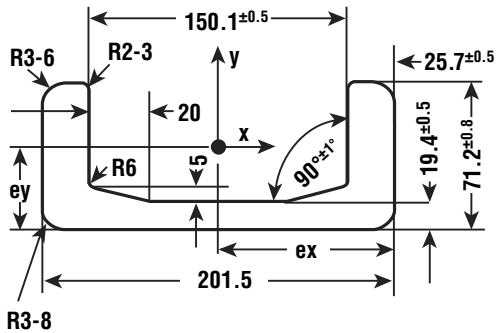
**WEIGHT = 6.52 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 183 KN  
 Max. static load = 353 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 82 KN  
 Max. static load = 131 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

### LINEAR BEARING WITH ECCENTRIC ADJUSTABLE AXIAL BEARING HVBEA-463



**WEIGHT = 6.50 Kg**  
**BEARING RADIAL LOAD**  
 Max. dynamic load = 183 KN  
 Max. static load = 353 KN  
**BEARING AXIAL LOAD**  
 Max. dynamic load = 41 KN  
 Max. static load = 72 KN  
 NOTE: Above loads achievable when used with a hardened rail 55 RC minimum 2.54mm deep.

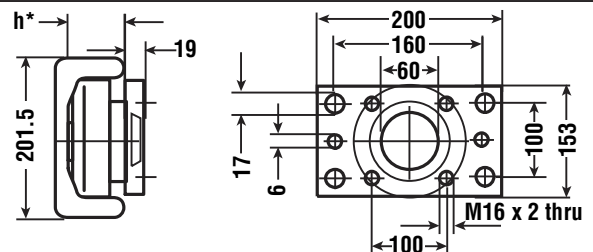
### PROFILE RAIL HVR-6



**WEIGHT = 52.3 Kg/m**  
**MOMENT OF INERTIA**  
 $I_x = 269.52 \text{ cm}^4$   
 $I_y = 3,423.08 \text{ cm}^4$   
**DIST. TO CENTER OF GRAVITY**  
 $e_y = 2.40 \text{ cm}$ ,  $e_x = 10.08 \text{ cm}$

**RADIUS OF INERTIA**  
 $i_x = 2.01 \text{ cm}$ ,  $i_y = 7.17 \text{ cm}$   
**MOMENT OF RESISTANCE**  
 $W_{x_{min}} = 57.15 \text{ cm}^3$   
 $W_{x_{max}} = 112.11 \text{ cm}^3$   
 $W_y = 339.76 \text{ cm}^3$

### FLANGE PLATE HVP6-1



\* h refers to the depth of the axial bearing, so h depends on choice of HVB-063 or HVBEA-463.

WHEN USED WITH SHOWN PROFILE RAILS, **System Max. Static Radial Load = 41.1 KN / 4.6 US Ton-Force**  
**System Max. Static Axial Load = 13.7 KN / 1.5 US Ton-Force**

\*All dimensions in mm, unless otherwise specified.