

# 2020 MTB Components

XX1 X01 GX NX

XX1 XX X01 X0 EX1 X1

GX NX SX X9 X7 X5

LEVEL GUIDE GR



FRAME FIT SPECIFICATIONS

**General Notes**

All dimensions are in millimeters unless otherwise noted.

Images in this document are not to scale.

Your product's appearance may vary slightly from the images in this document.

Information in this document is subject to change without prior notice.

If you have any questions please contact your SRAM representative.

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# Rear Derailleurs

All SRAM rear derailleurs are compatible with all existing axle standards and hub widths, if the following specifications are respected.

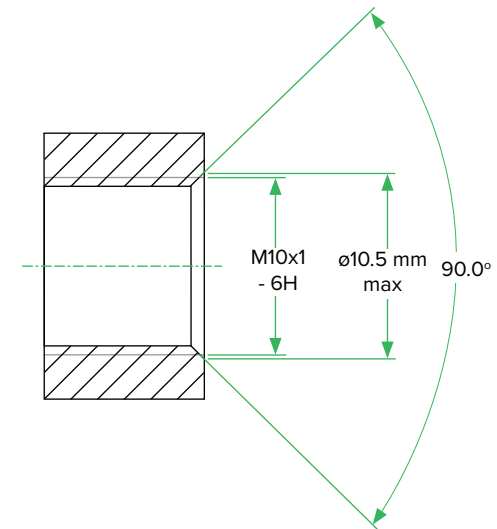
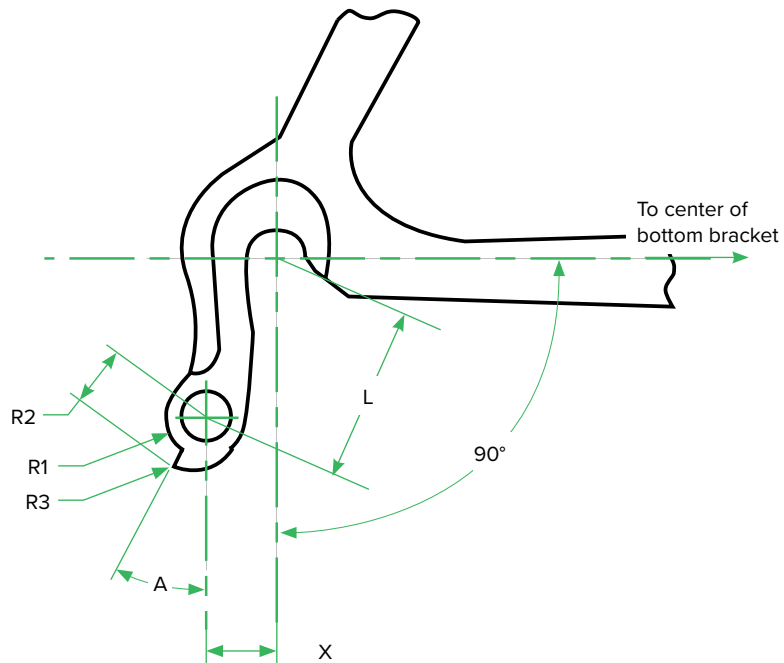
# Universal Derailleur Hanger Specifications

Please visit [www.UniversalDerailleurHanger.com](http://www.UniversalDerailleurHanger.com) for complete specifications.

# Hanger Specifications

Rear Derailleur Hanger Specifications

L	X	A	R1	R2	R3
Hanger material hardness: HRB > 86					
30-34	7.5-10	25°-30°	8-8.5	12.5-14.5	max. 0.5



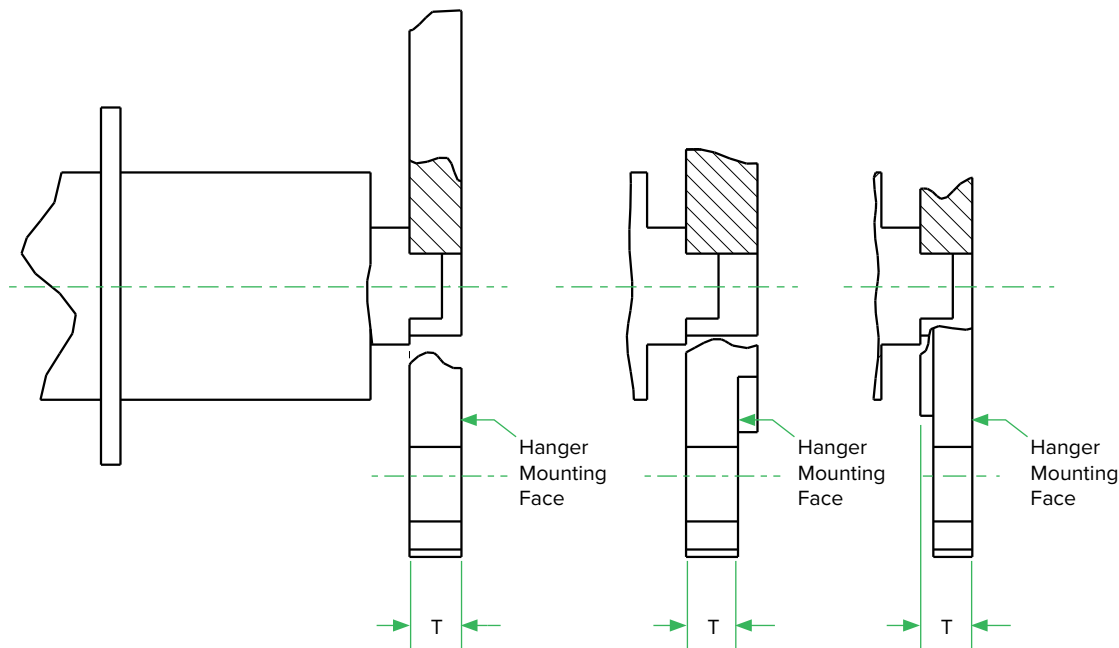
For any dimension outside of these specs, depending on the combination of all the variables, the performance of the drivetrain may be compromised. Please contact your account manager for further technical information.

# Hanger Thickness

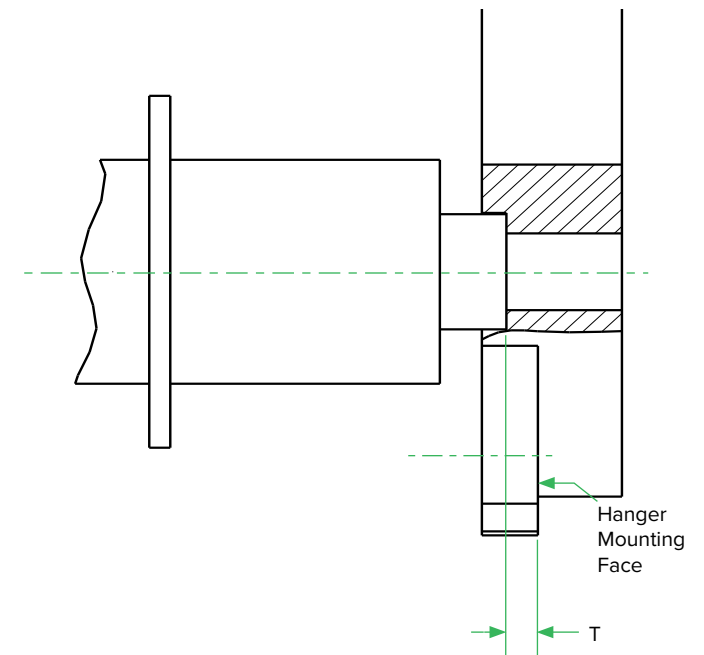
	T (mm)
Quick Release	8-9
Thru Axle	4.5-5.5 (3.5mm frame slot)

For any dimension outside of these specs, depending on the combination of all the variables, the performance of the drivetrain may be compromised. Please contact your account manager for further technical information.

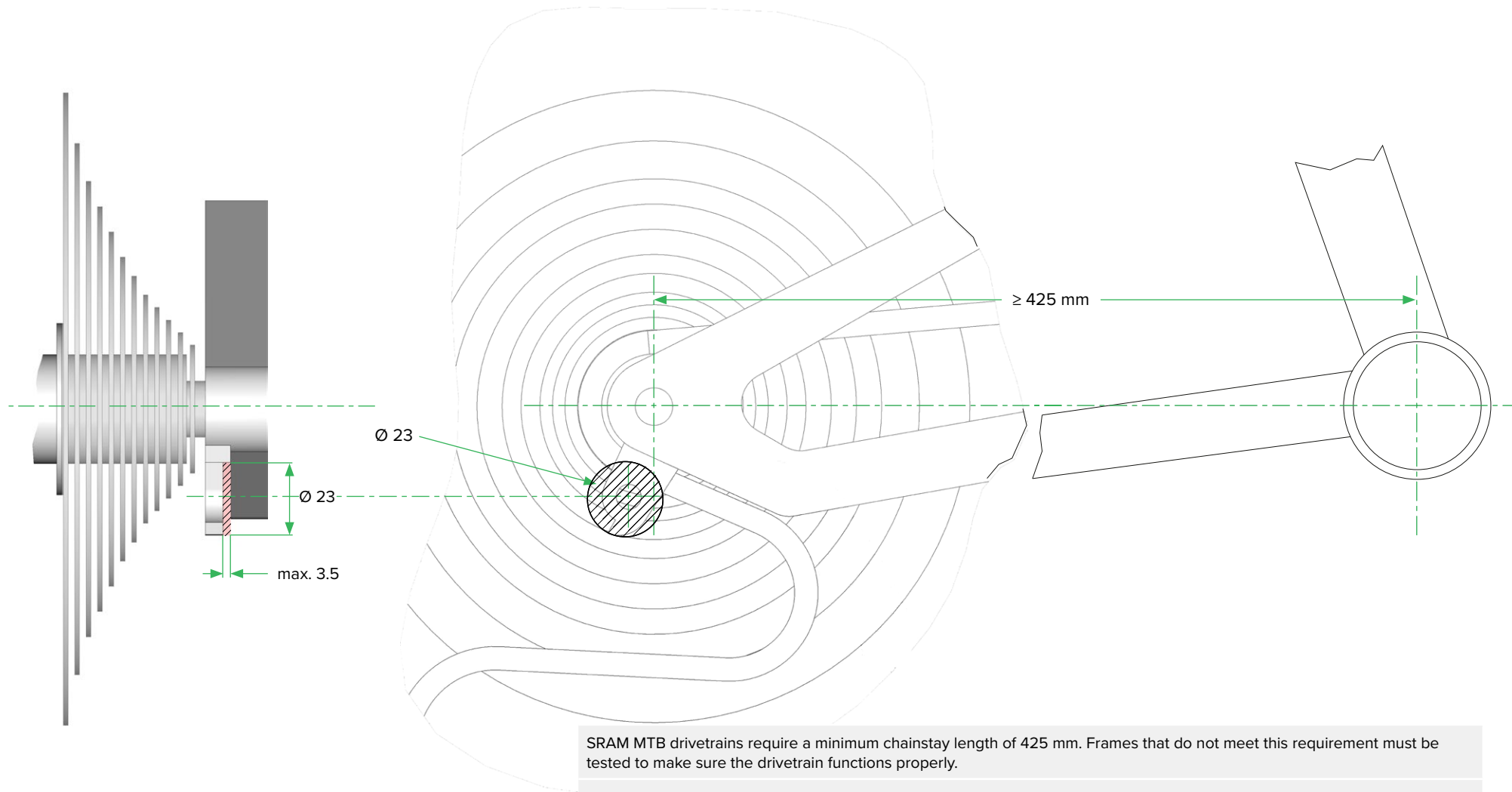
Quick Release



Thru Axle



# Chainstay Length/Rear Derailleur Mounting Clearance



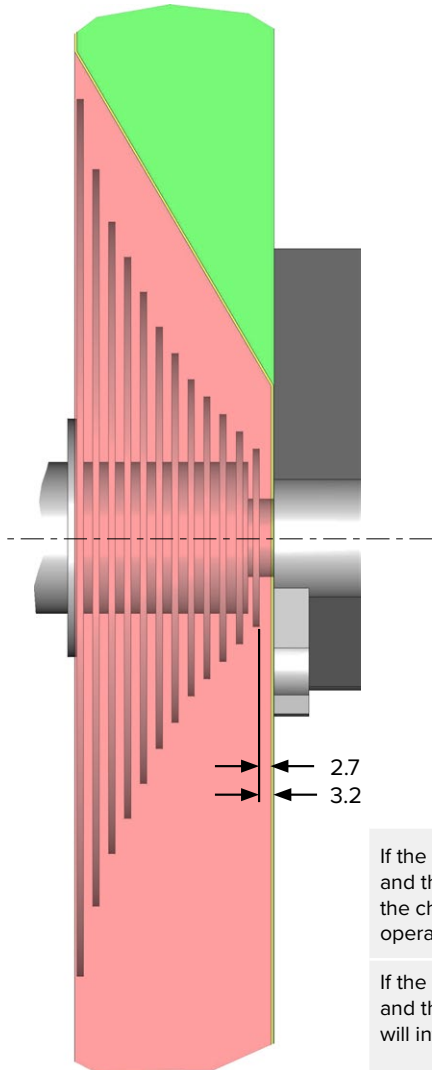
SRAM MTB drivetrains require a minimum chainstay length of 425 mm. Frames that do not meet this requirement must be tested to make sure the drivetrain functions properly.

Chainstay growth must not exceed 27 mm.



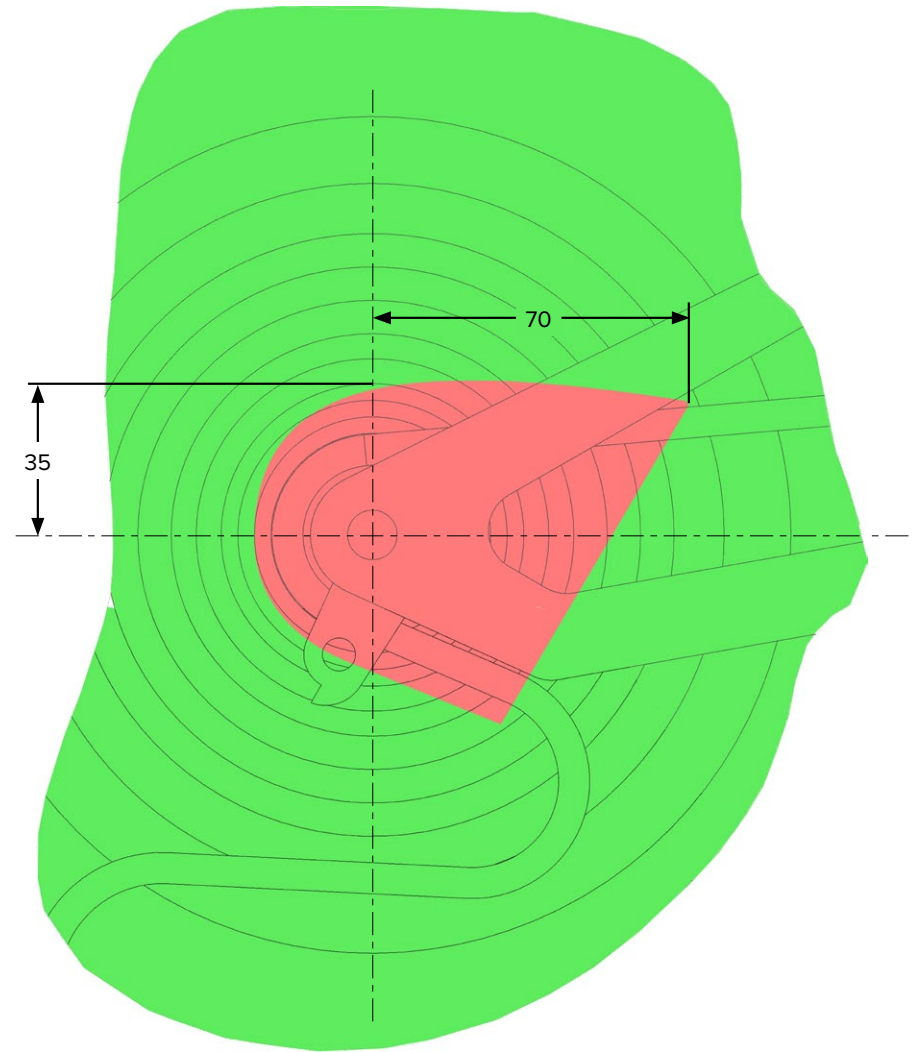


# Chain/Cassette Frame Clearance



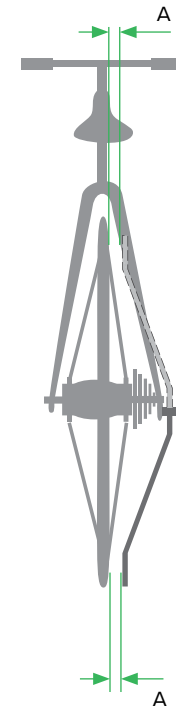
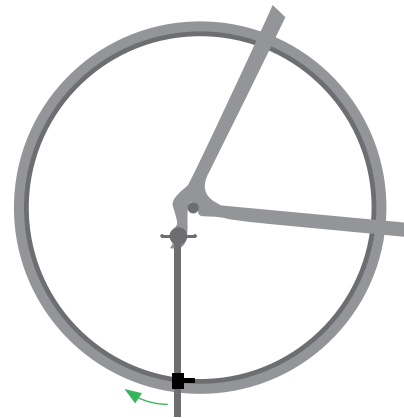
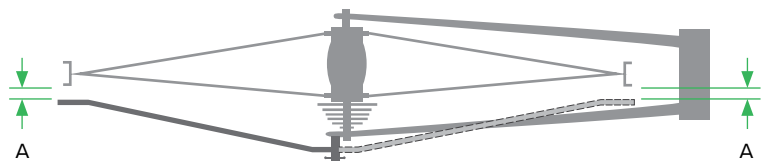
If the gap between the outer edge of the smallest cog and the frame inside plane is between 2.7 and 3.2 mm, the chain may contact the frame slightly during shift operation.

If the gap between the outer edge of the smallest cog and the derailleur hanger is less than 2.7 mm, the chain will interfere with the frame during shift operation.



# Hanger Straightness

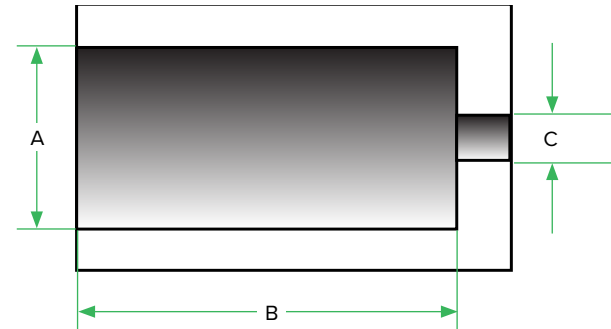
The rear derailleur hanger alignment has to be checked in relation to the rear hub axis. The entire circumference of the rim must be checked with a hanger alignment tool. The difference between "A max" and "A min" should be smaller than 5 mm. The rim must be perfectly true. If the rim is not true it must be turned with the tool for inspection.



# Cable Routing

## Cable Housing Stop Dimensions

A	B	C
Ø 6.05-5.9	12 (min 8)	Ø 2.25-2.6
Opposing cable housing stops need to be exactly aligned		
Total bending angle of all housing sections should be less than 270°		
Cable/housing system must not be affected by suspension movement		
Avoid sharp bends and S-bends just before or after a housing stop		
For best performance use aluminum housing end caps		
Do not use sealed end caps		
Housings must be cut with specific housing cutting pliers and inner liner needs to be checked against pinching		

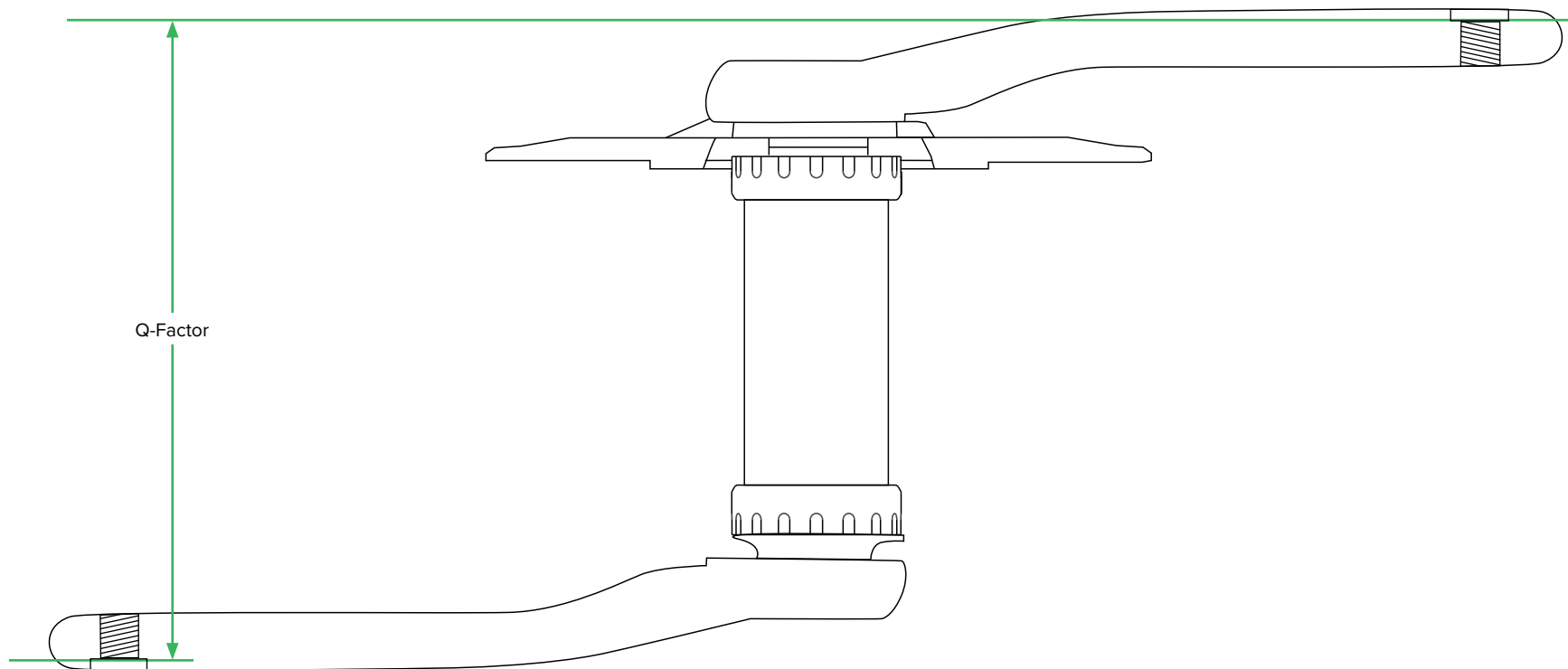


# Cranksets

# Q-Factor

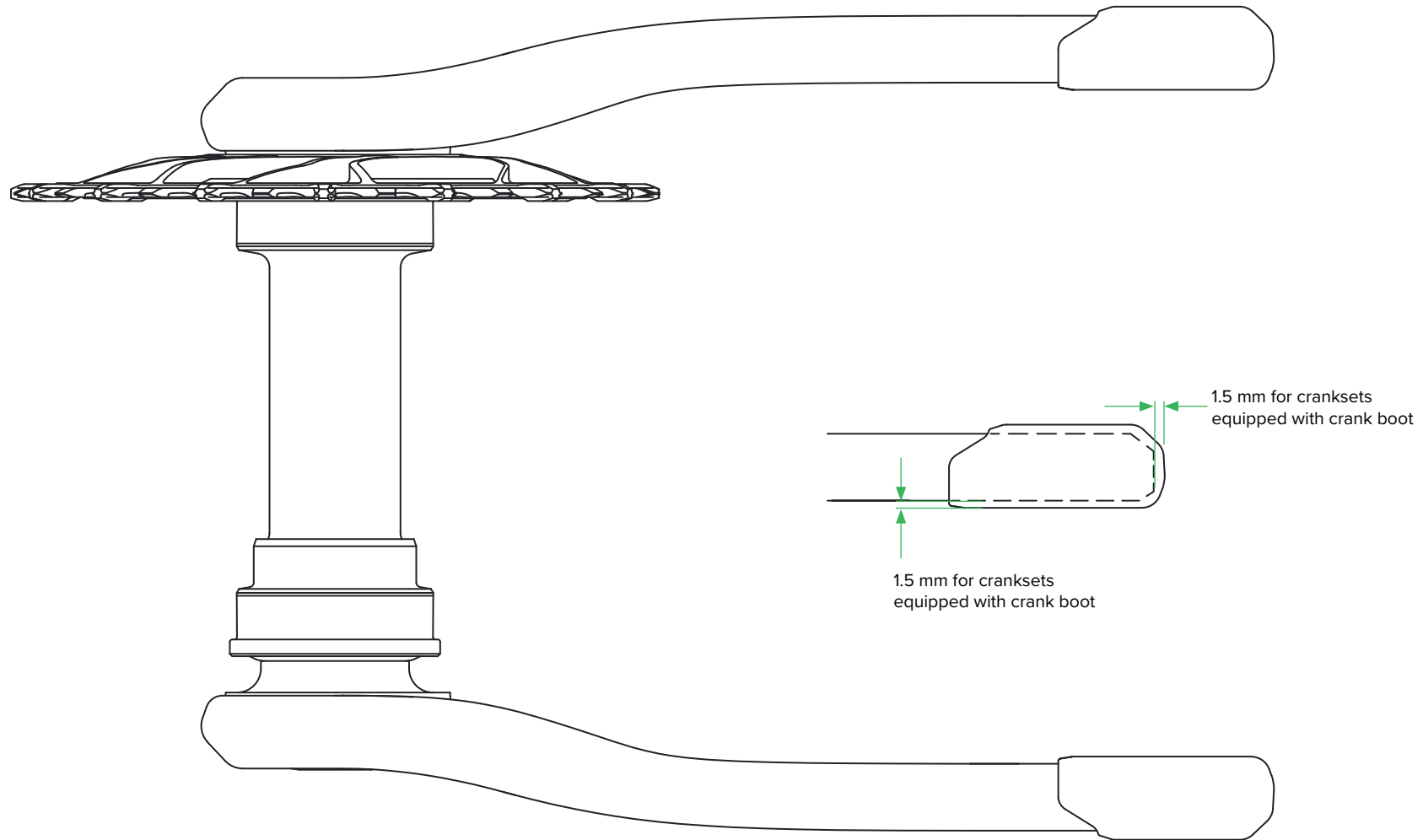
## Measurement Information

Q-Factor is the distance between the two pedal spot faces.



# Crank Boot

## Clearance Information



# DUB Cranks



# XX1 Eagle DUB

# XX1 Eagle DUB

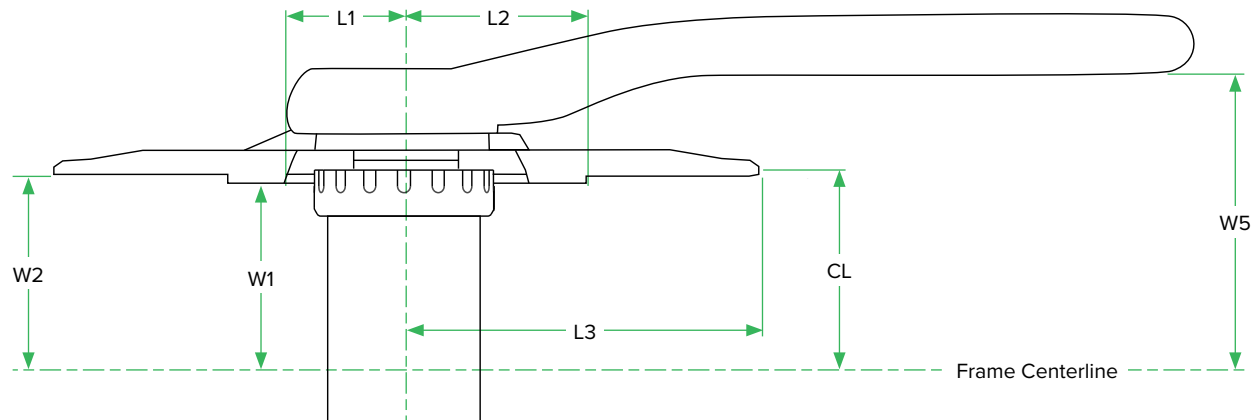
## Drive Side Frame Clearance - BOOST and non-BOOST

Chainring		L1	L2	L3	L3 Oval*	W1	W2	CL	W5**				
		30T	non-BOOST & Eagle DUB 55 CL	27.2	29	64.3	68.3	47.2	47.2	49	70.6		
	BOOST	26.1	31.3										
32T	non-BOOST & Eagle DUB 55 CL	27.2	29	68.3	72.3								
		BOOST	26.1			31.3							
34T	non-BOOST & Eagle DUB 55 CL	27.2	29	72.4	76.4	50 (BOOST Variant)	50 (BOOST Variant)					52 (BOOST Variant)	70.6 (BOOST Variant)
		BOOST	26.1										
36T	non-BOOST & Eagle DUB 55 CL	27.2	29	76.4	80.4	53 (Eagle DUB 55 CL)	53 (Eagle DUB 55 CL)	55 (Eagle DUB 55 CL)	73.6 (Eagle DUB 55 CL)				
		BOOST	26.1							31.3			
38T	non-BOOST & Eagle DUB 55 CL	27.2	29	80.4	85.4								
		BOOST	26.1							31.3			

Q-factor : 168 (non-BOOST & BOOST) / 174 (Eagle DUB 55 CL) Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92

\*Oval chainrings available seperately, not with crank arms.

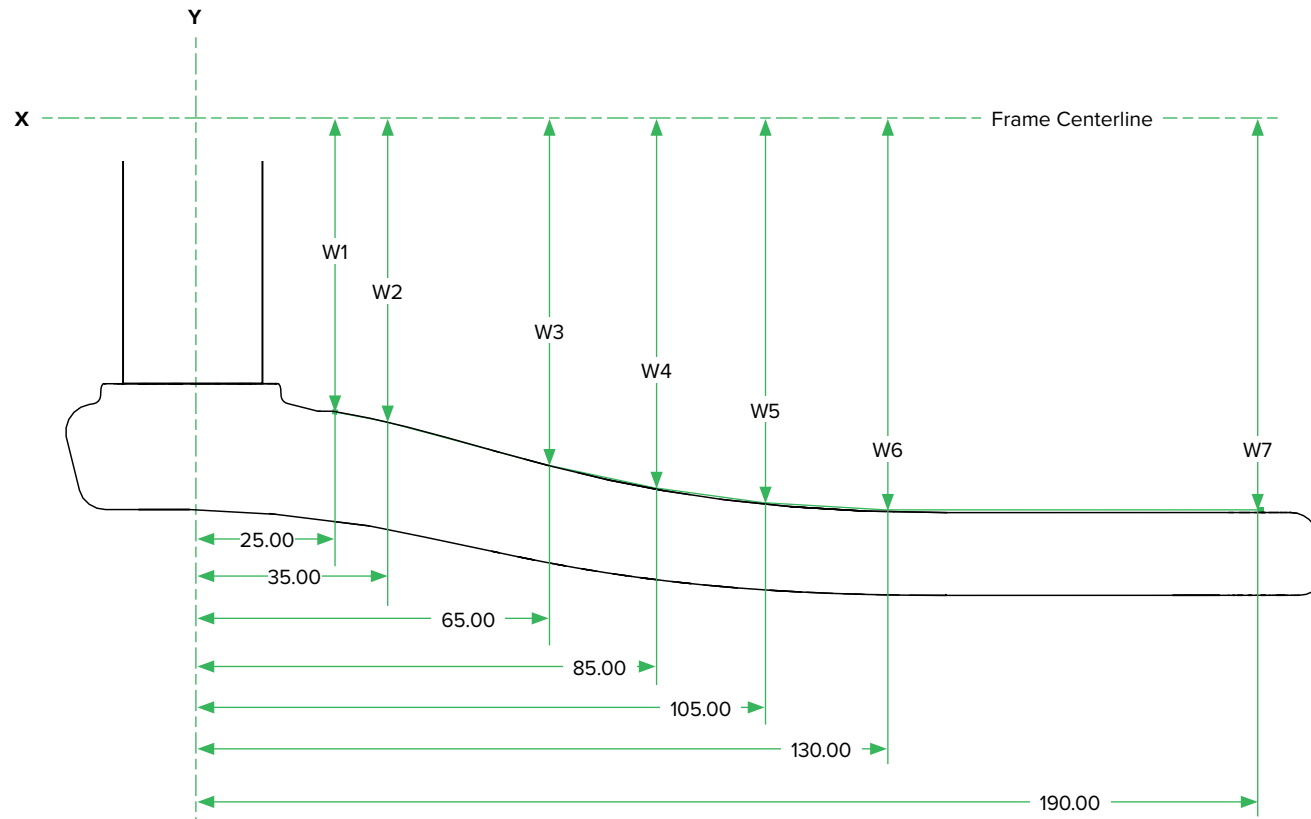
\*\*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."



# XX1 Eagle DUB

## Non-Drive Frame Clearance

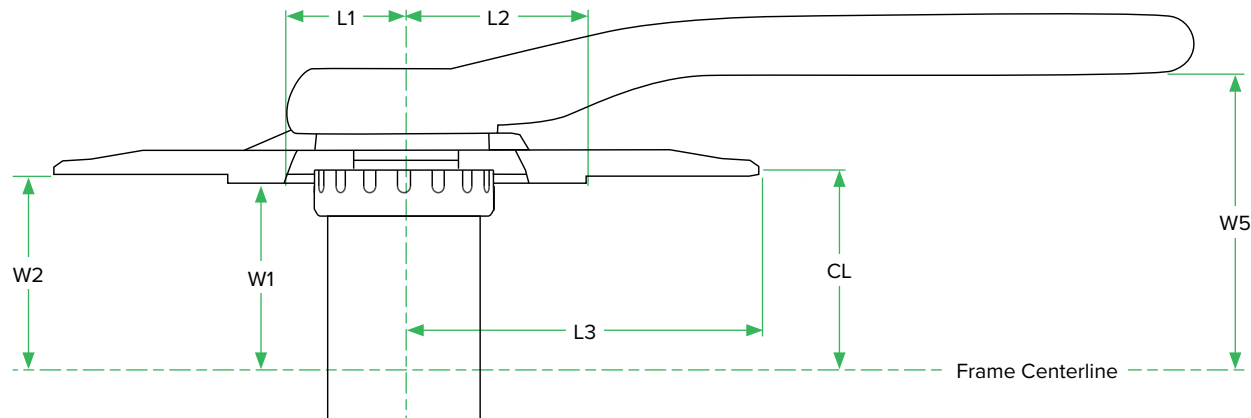
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	56	58	67.5	70	70.5	70.5	70.5
	Y (Eagle DUB 55 CL)	59	61	70.5	73	73.5	73.5	73.5
Q-factor : 168 (non-BOOST & BOOST) / 174 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# XX1 Eagle DUB Power Meter

## Drive Side Frame Clearance

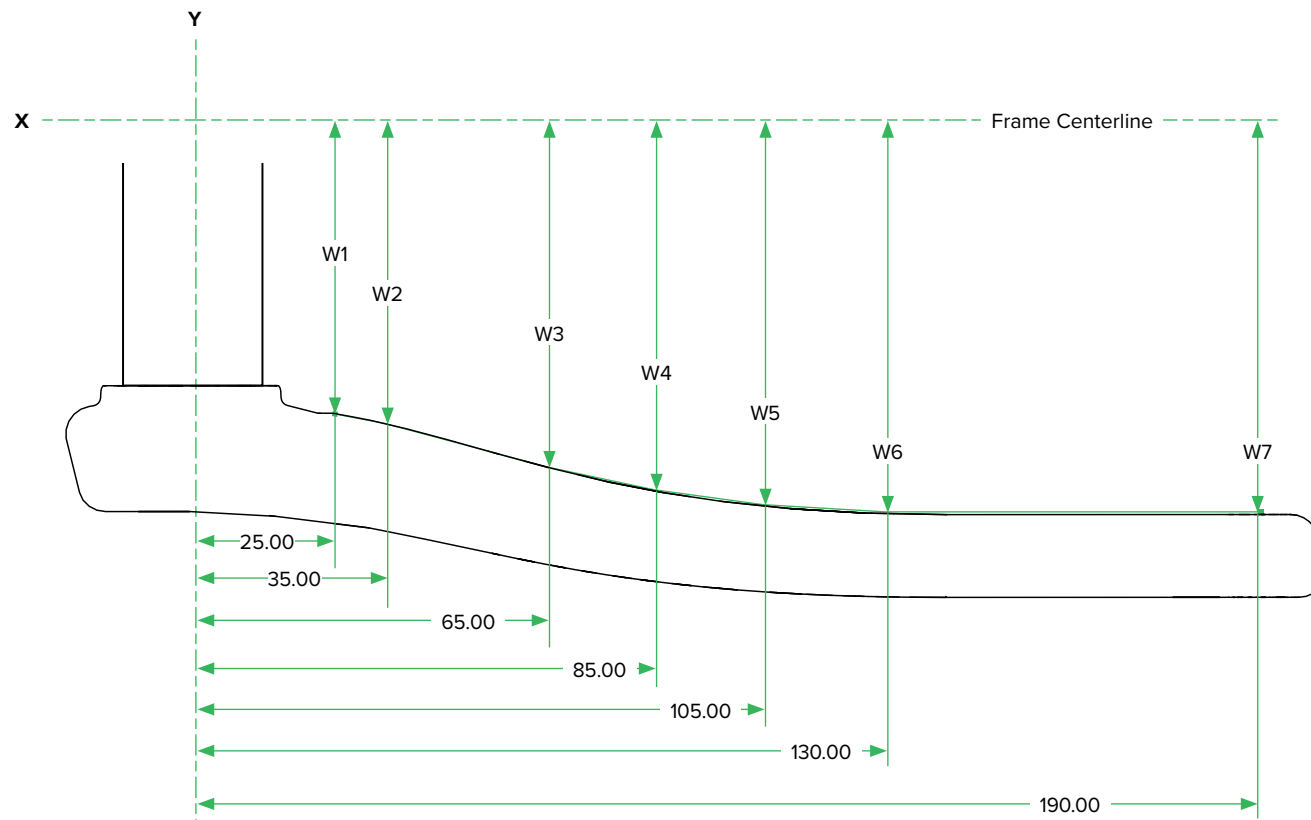
	Chainring	L1	L2	L3	W1	W2	CL	W5**
1x12	30T	24.0	44.0	64.3	46.2	47.2 50 (BOOST Variant)	49 52 (BOOST Variant)	70.6
	32T			68.3				
	34T			72.4				
	36T			76.4				
	38T			80.4				
Q-factor : 168		Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92						
**Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."								



# XX1 Eagle DUB Power Meter

## Non-Drive Frame Clearance

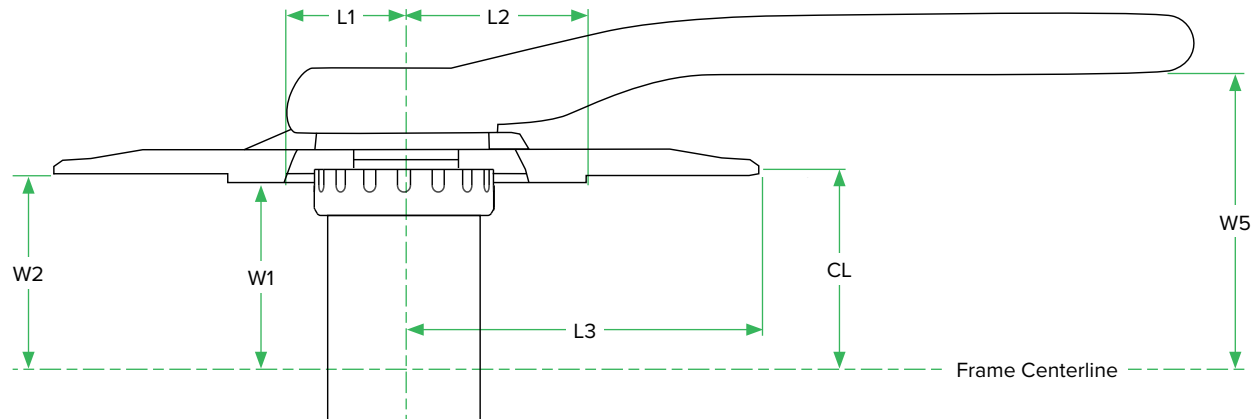
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y	56	58	67.5	70	70.5	70.5	70.5
	Q-factor : 168		Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92					
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# XX1 Eagle DUB - Fatbike

## Drive Side Frame Clearance

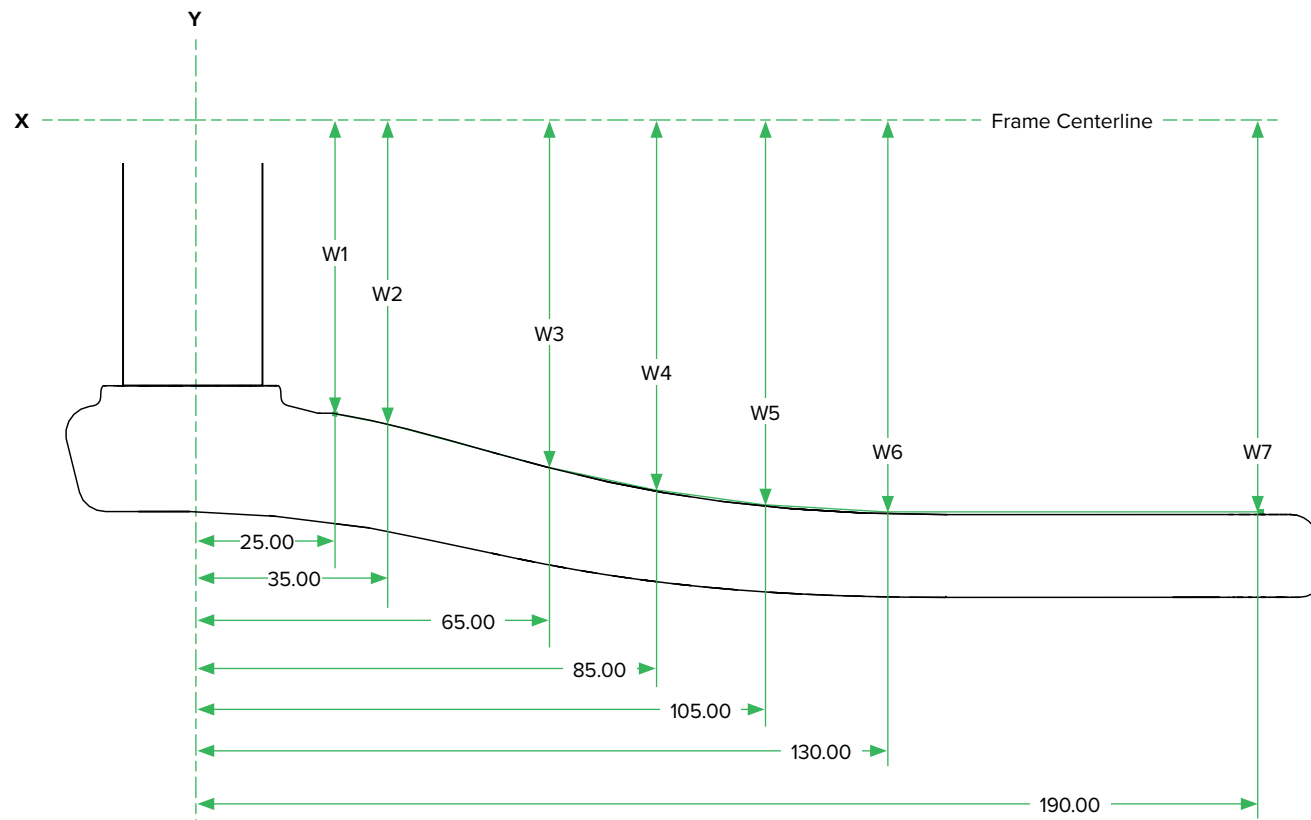
1x12	Chainring		L1	L2	L3	W1	W2	CL	W5
	30T	4" Fatbike (170 OLD)	27.2	29	64.3	64.7	64.7	66.5	88.1
		5" Fatbike (190 OLD)	22.8	29		70	74.7	76.5	
Q-factor : 203.3				Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



# XX1 Eagle DUB - Fatbike

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	75.5	77	84	86.5	87.5	88	88
	Q-factor : 203.3		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



# X01 Eagle DUB



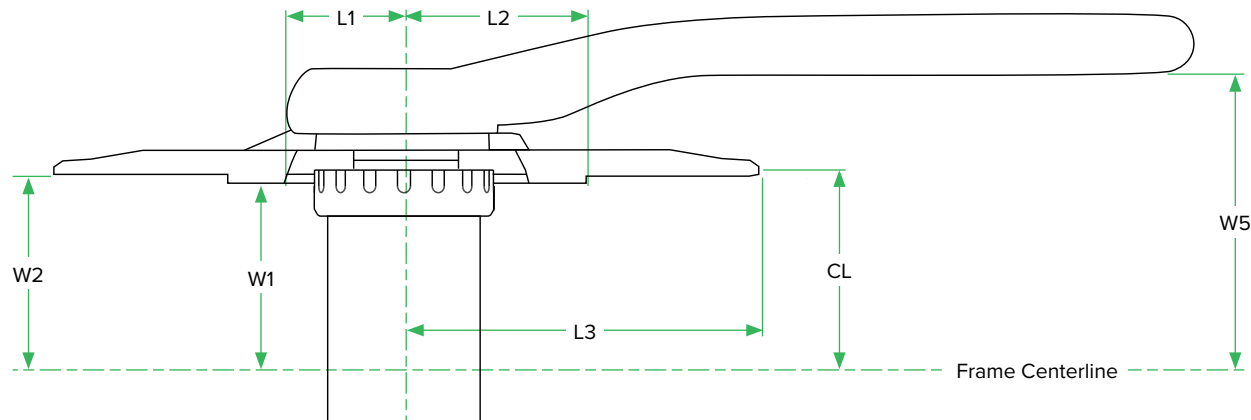
# X01 Eagle DUB

## Drive Side Frame Clearance - BOOST and non-BOOST

Chainring		L1	L2	L3	W1	W2	CL	W5**
		30T	non-BOOST & Eagle DUB 55 CL	27.2	29	64.3	47.2	47.2
	BOOST	26.1	31.3					
32T	non-BOOST & Eagle DUB 55 CL	27.2	29	68.3	50 (BOOST Variant)	50 (BOOST Variant)	52 (BOOST Variant)	70.6 (BOOST Variant)
		BOOST	26.1					
34T	non-BOOST & Eagle DUB 55 CL	27.2	29	72.4	53 (Eagle DUB 55 CL)	53 (Eagle DUB 55 CL)	55 (Eagle DUB 55 CL)	73.6 (Eagle DUB 55 CL)
		BOOST	26.1					
36T	non-BOOST & Eagle DUB 55 CL	27.2	29	76.4				
		BOOST	26.1					

Q-factor : 168 (non-BOOST & BOOST) / 174 (Eagle DUB 55 CL)      Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92

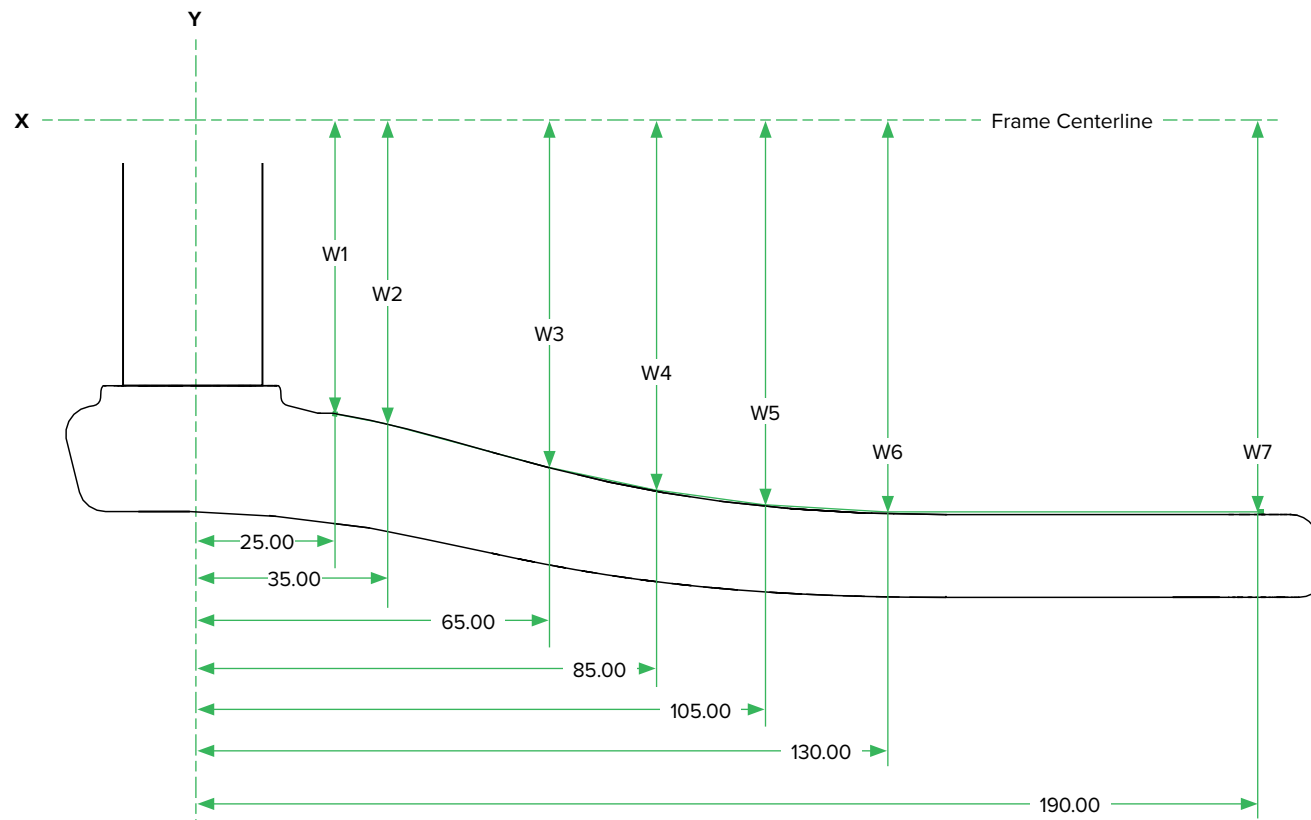
\*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."



# X01 Eagle DUB

## Non-Drive Frame Clearance

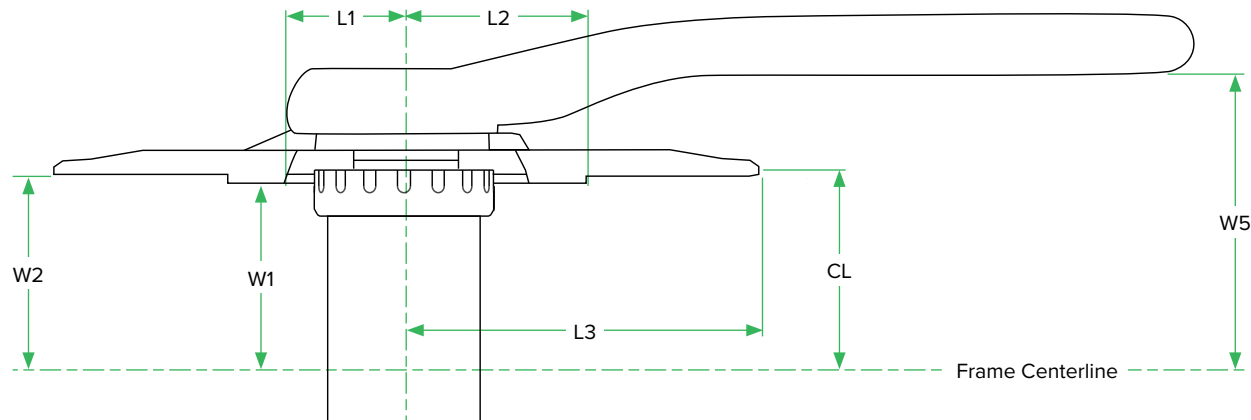
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	56	58	67.5	70	70.5	70.5	70.5
	Y (Eagle DUB 55 CL)	59	61	70.5	73	73.5	73.5	73.5
Q-factor : 168 (non-BOOST & BOOST) / 174 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# X01 Eagle DUB SB+

## Drive Side Frame Clearance

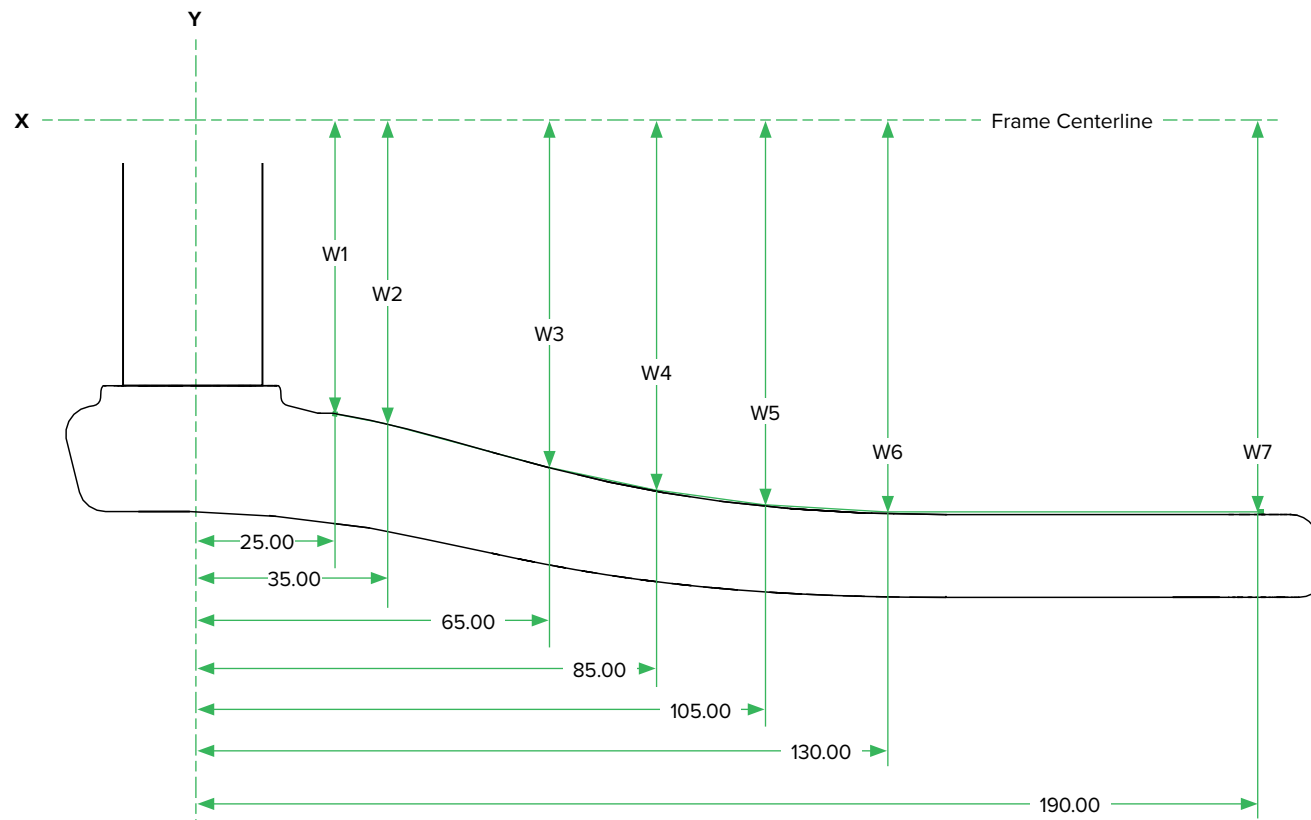
1x12	Chainring	L1	L2	L3	W1	W2	CL	W5*
	30T	26.1	31.3	64.3	54.7	54.7	56.5	75.1
	32T			68.3				
	34T			72.4				
	36T			76.4				
Q-factor : 176.8		Bottom Bracket Type(s): DUB BSA 73 SB+ : DUB PF 92 SB+						
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."								



# X01 Eagle DUB SB+

## Non-Drive Frame Clearance

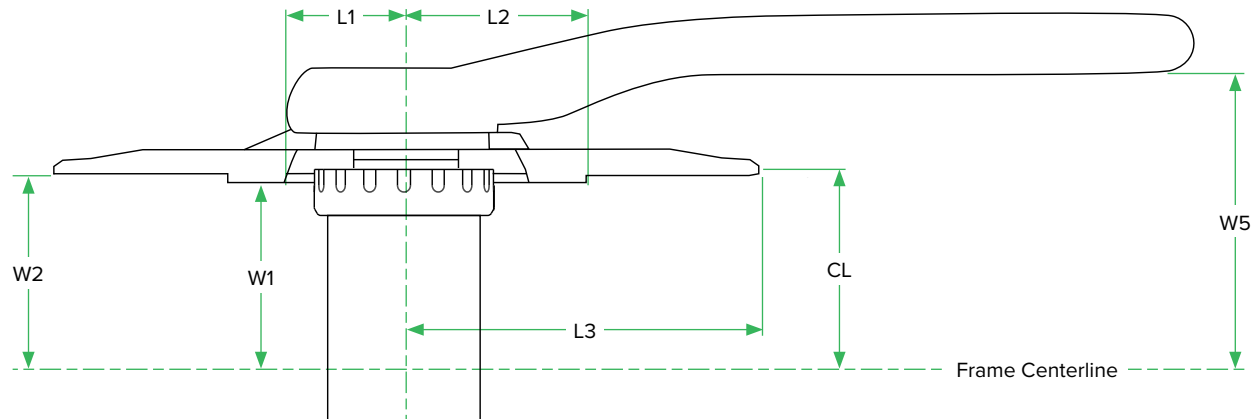
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y	62.6	64.1	71.1	73.6	74.6	75.1	75.1
	Q-factor : 176.8		Bottom Bracket Type(s): DUB BSA 73 SB+ : DUB PF 92 SB+					
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# X01 Eagle DUB - Fatbike

## Drive Side Frame Clearance

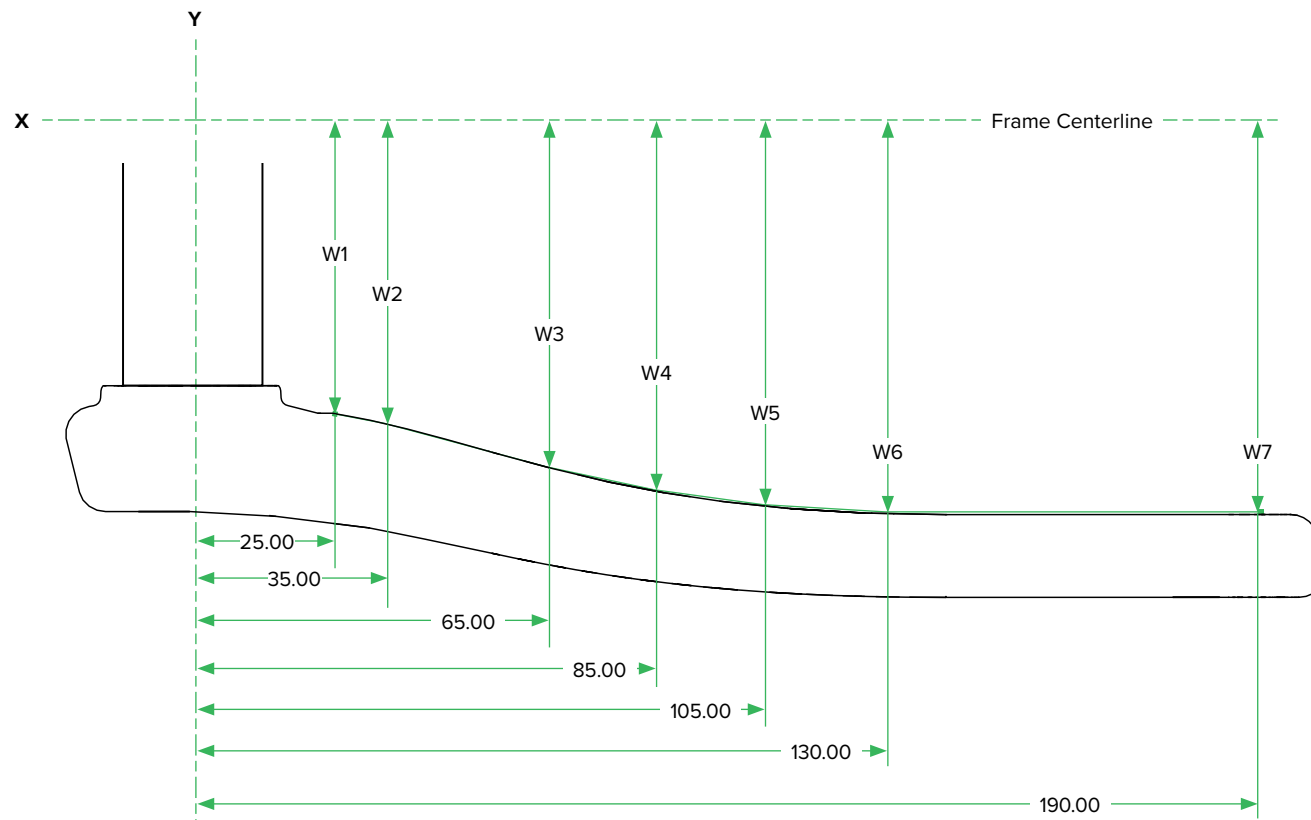
1x12	Chainring		L1	L2	L3	W1	W2	CL	W5
	30T	4" Fatbike (170 OLD)	27.2	29	64.3	64.7	64.7	66.5	88.1
		5" Fatbike (190 OLD)	22.8	29		70	74.7	76.5	
Q-factor : 203.3				Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



# X01 Eagle DUB - Fatbike

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	75.5	77	84	86.5	87.5	88	88
	Q-factor : 203.3		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					

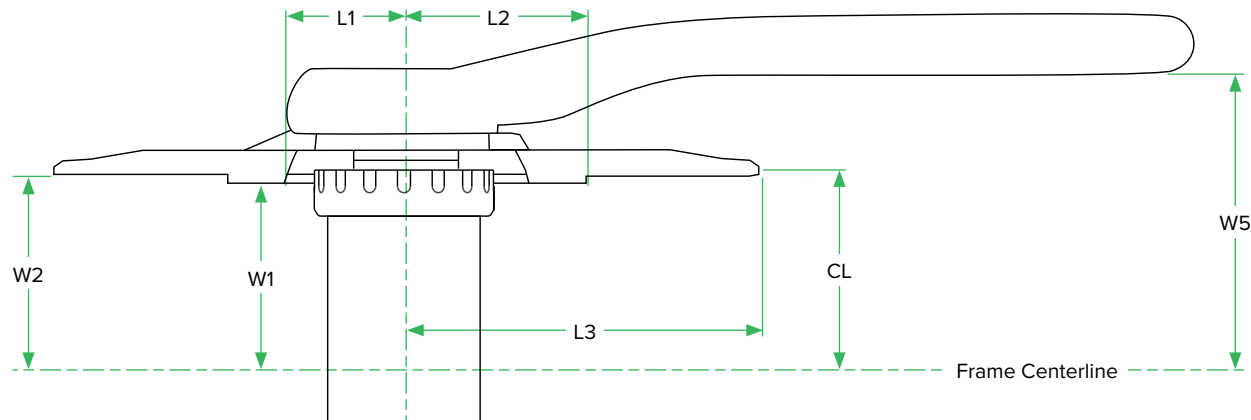


X01 DH

# X01 EAGLE DH DUB73

## Drive Side Frame Clearance - BOOST and non-BOOST

1x12	Chainring		L1	L2	L3	W1	W2	CL	W5**				
	30T	non-BOOST	27.2	29	64.3	47.2	47.2	49	70.6				
		BOOST	26.1	31.3									
	32T	non-BOOST	27.2	29	68.3								
		BOOST	26.1	31.3									
	34T	non-BOOST	27.2	29	72.4					50 (BOOST Variant)	50 (BOOST Variant)	52 (BOOST Variant)	70.6 (BOOST Variant)
		BOOST	26.1	31.3									
36T	non-BOOST	27.2	29	76.4									
	BOOST	26.1	31.3										
Q-factor : 168 (non-BOOST & BOOST)						Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92							
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."													

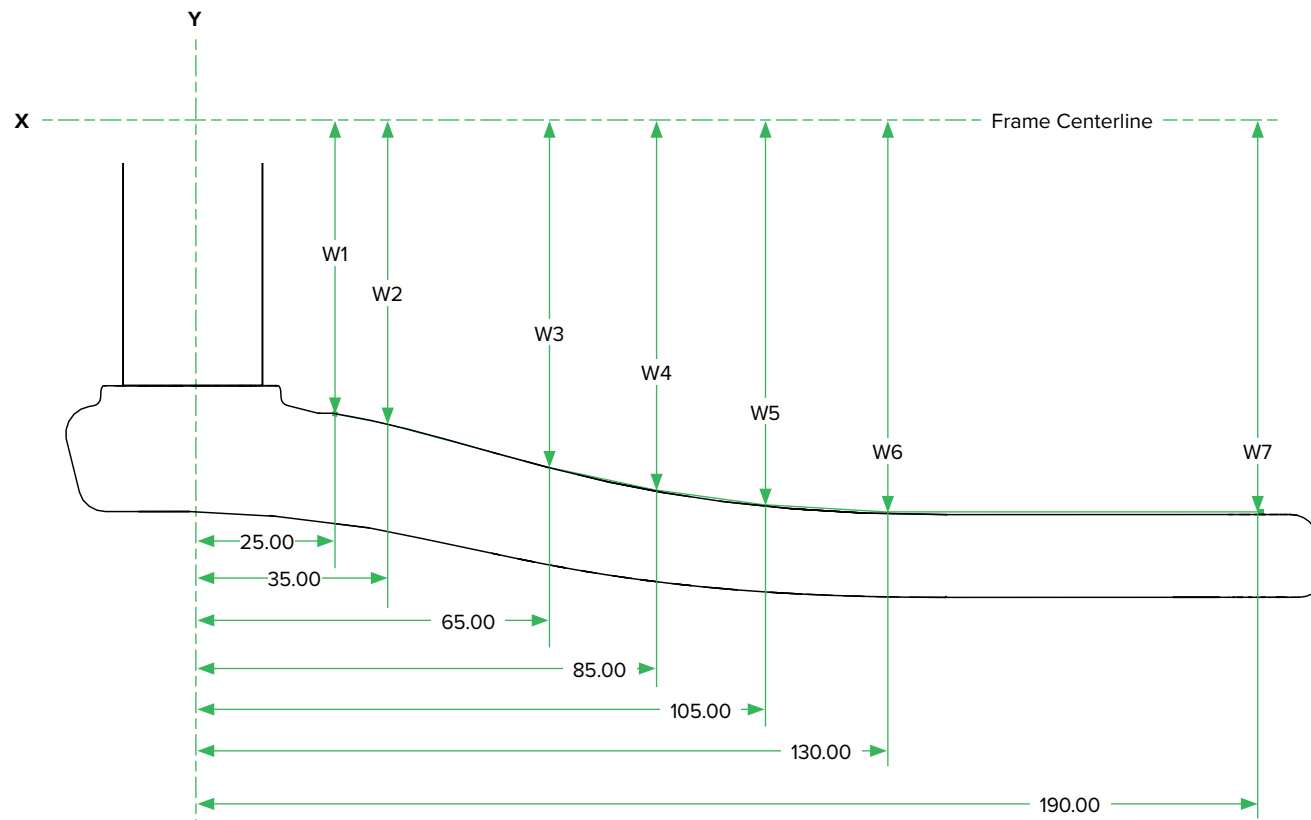




# X01 EAGLE DH DUB73

## Non-Drive Frame Clearance

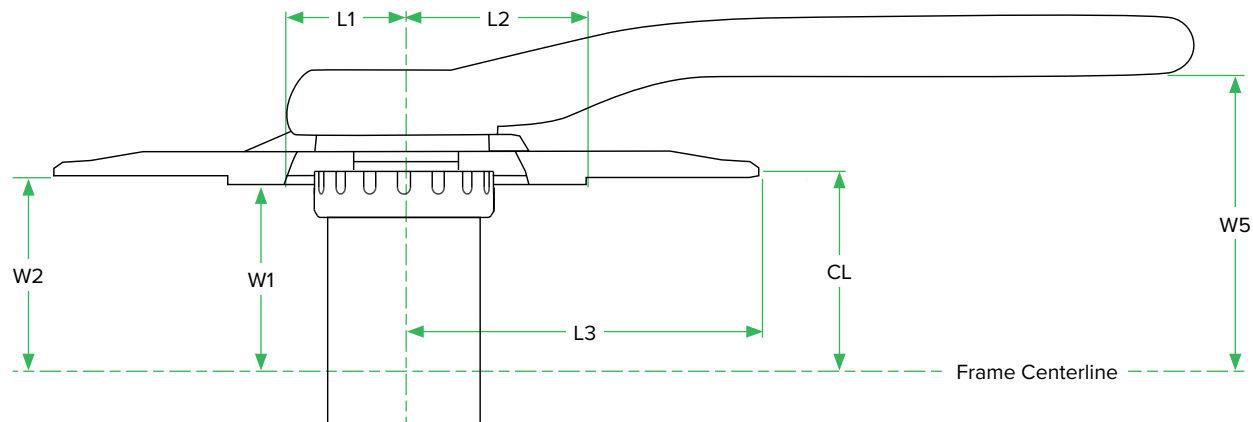
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	56	58	67.5	70	70.5	70.5	70.5
	Q-factor : 168 (non-BOOST & BOOST)				Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# X01 DH DUB

## Drive Side Frame Clearance

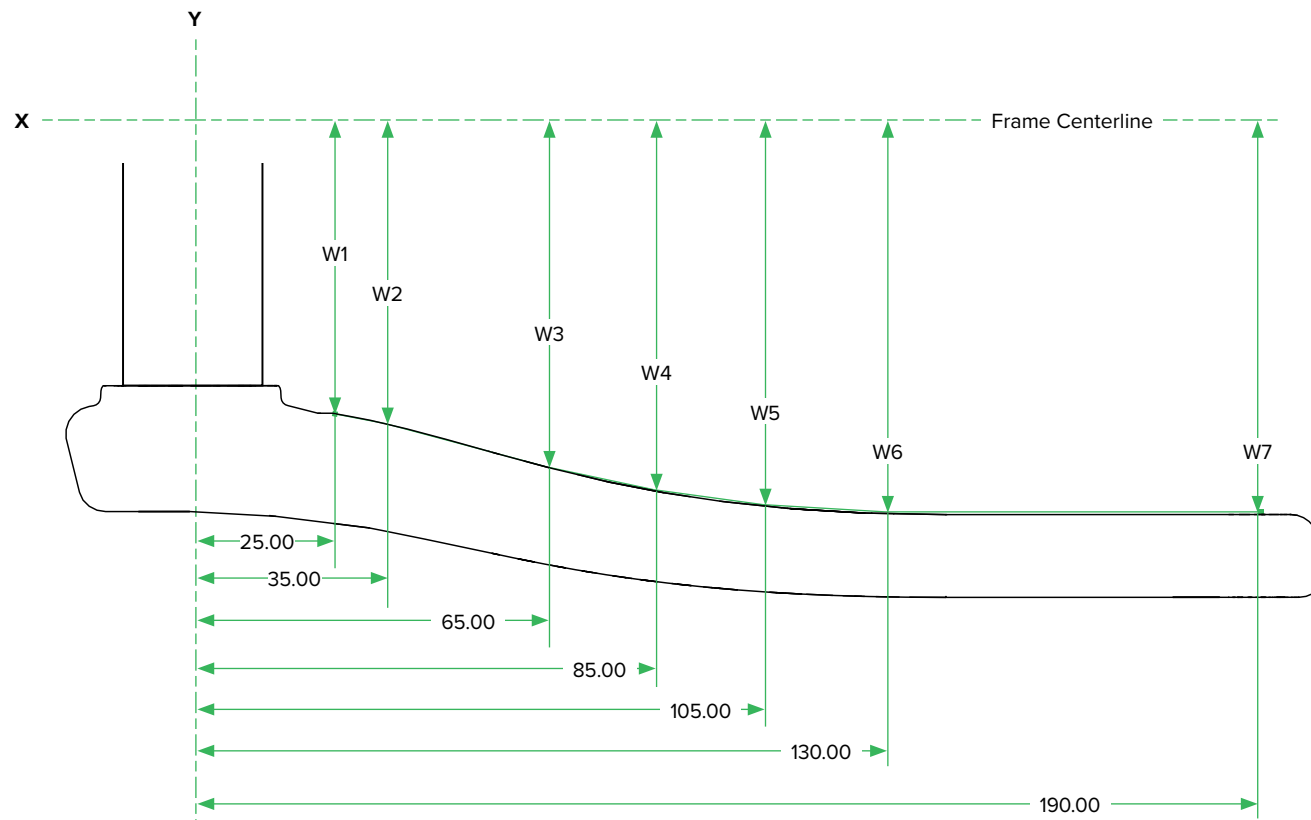
	Chainring	L1	L2	L3	W1	W2	CL	W5
1x7	34T	27.2	29	72.4	54.7	54.7	56.5	78.1
	36T			76.4				
Q-factor : 183			Bottom Bracket Type(s): DUB BSA 83 : DUB PF 104.5/107					



# X01 DH DUB

## Non-Drive Frame Clearance

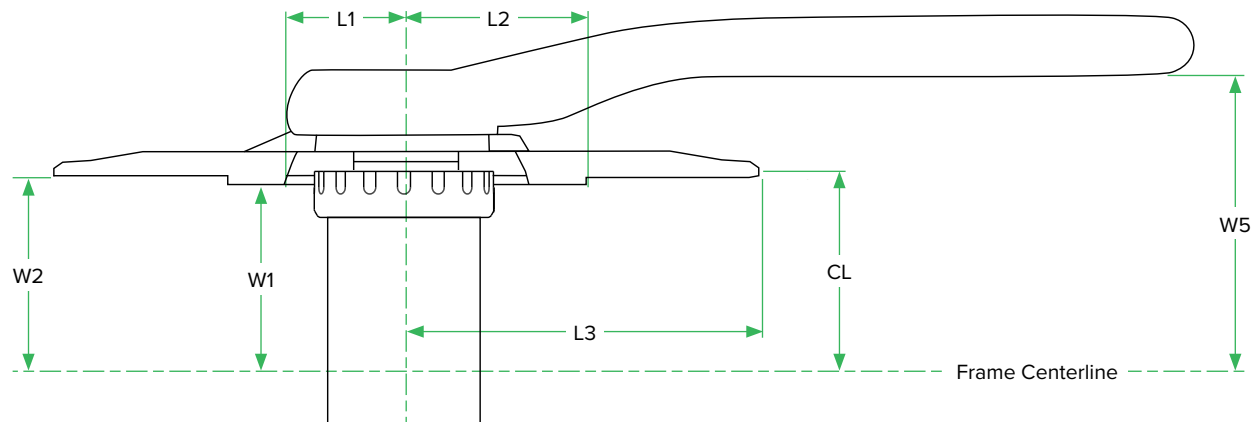
		W1	W2	W3	W4	W5	W6	W7
1x7	X	25	35	65	85	105	130	190
	Y	64.7	67.3	74.3	76.8	77.8	78.3	78.3
Q-factor : 183		Bottom Bracket Type(s): DUB BSA 83 : DUB PF 104.5/107						



# X01 DH DUB73

## Drive Side Frame Clearance

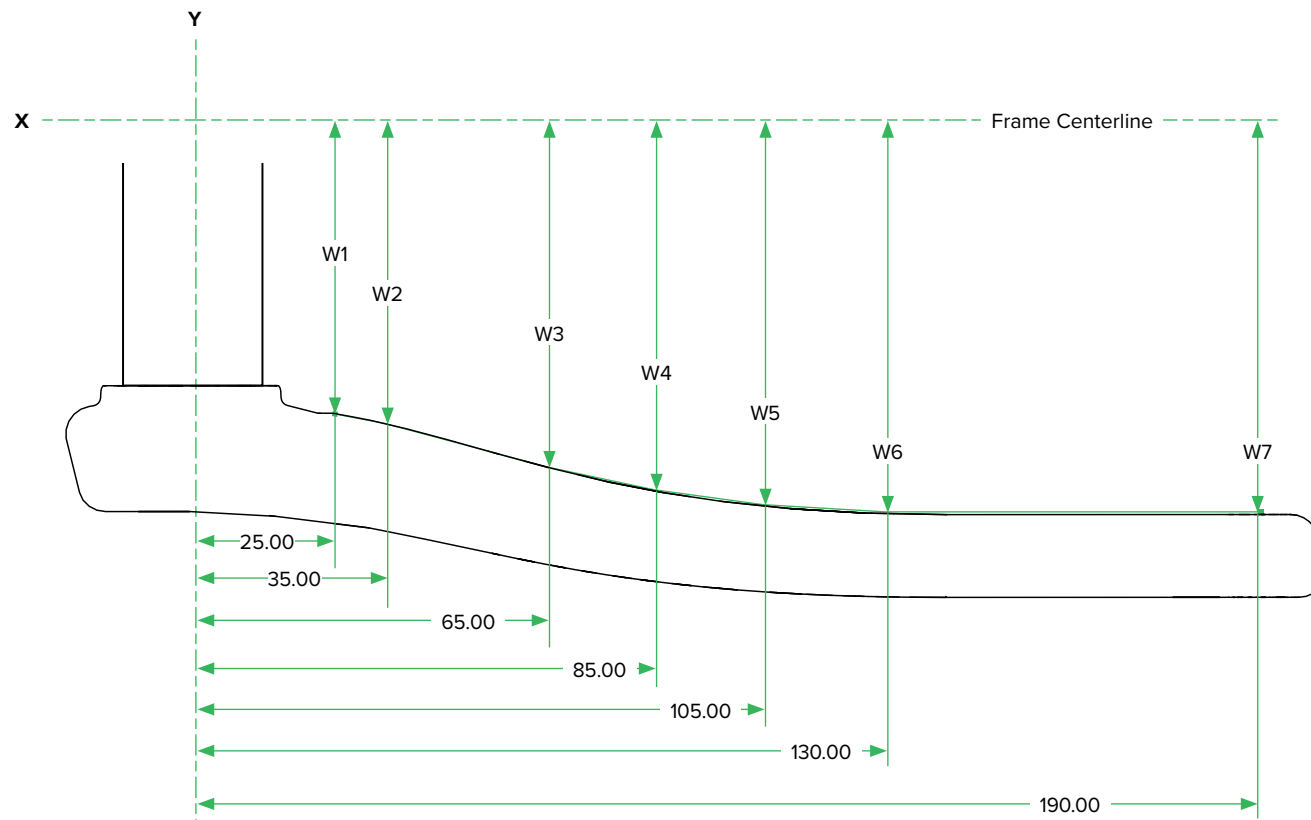
	Chainring	L1	L2	L3	W1	W2	CL	W5
1x7	34T	27.2	29	72.4	54.7	54.7	56.5	78.1
	36T			76.4				
Q-factor : 183		Bottom Bracket Type(s): DUB BSA 73						



# X01 DH DUB73

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x7	X	25	35	65	85	105	130	190
	Y	64.7	67.3	74.3	76.8	77.8	78.3	78.3
	Q-factor : 183		Bottom Bracket Type(s): DUB BSA 73					

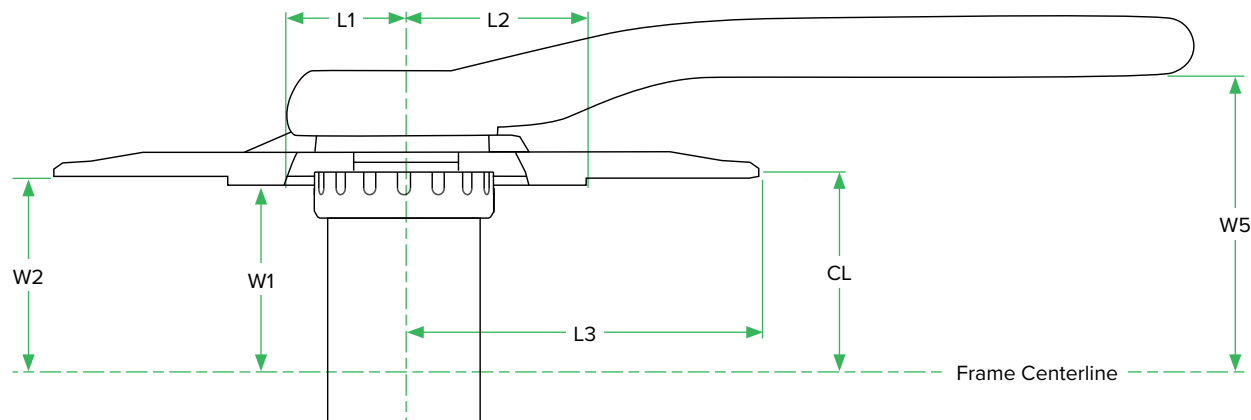


X1 Carbon Eagle DUB/  
Descendant Carbon Eagle DUB/  
Stylo Carbon Eagle DUB

# X1 Carbon Eagle DUB/Descendant Carbon Eagle DUB/Stylo Carbon Eagle DUB

## Drive Side Frame Clearance - BOOST and non-BOOST

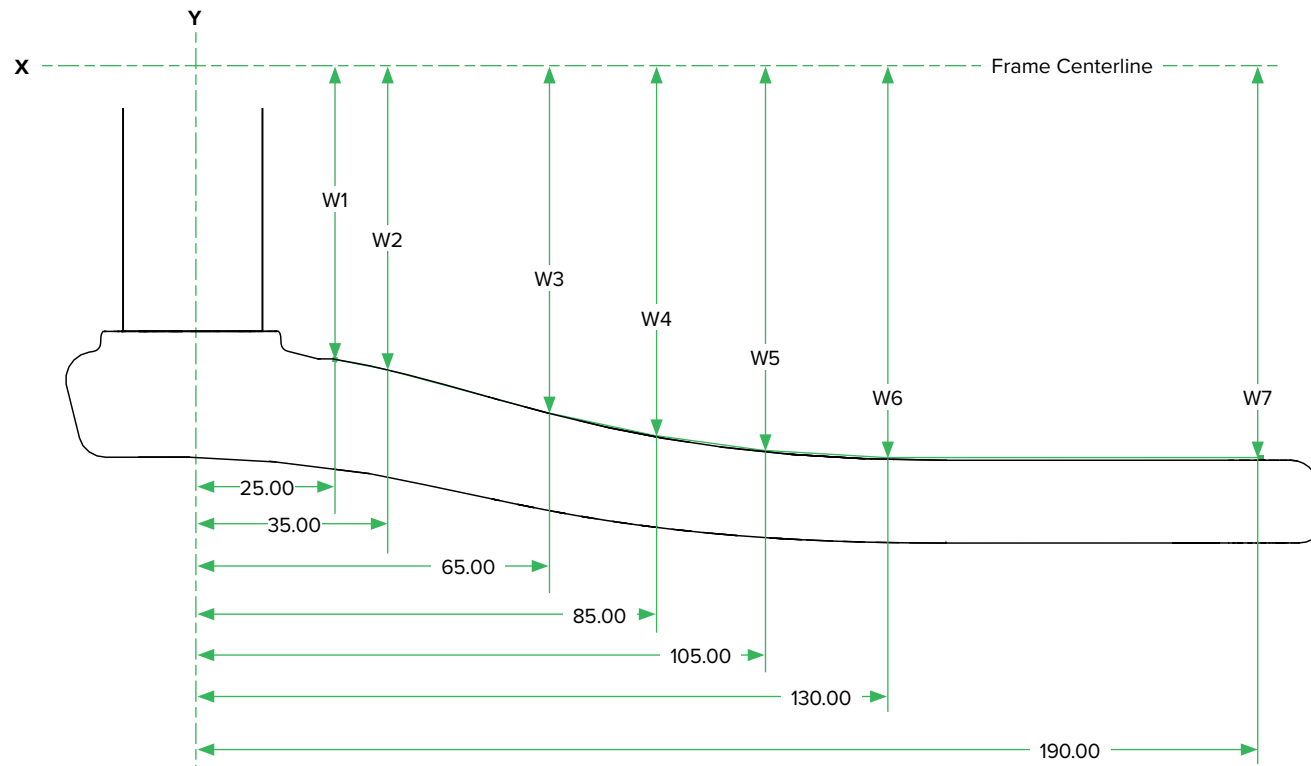
1x12	Chainring		L1	L2	L3	W1	W2	CL	W5**
	30T	non-BOOST & Eagle DUB 55 CL	31.5	31.5	50.7	64.3	48	47.3	49
	BOOST	51.3			51		50.3		
32T	non-BOOST & Eagle DUB 55 CL	31.5	31.5	54.7	68.3	51 (BOOST Variant)	50.3 (BOOST Variant)	52 (BOOST Variant)	72 (BOOST Variant)
	BOOST			55.2					
34T	non-BOOST & Eagle DUB 55 CL	31.5	31.5	58.7	72.3	54 (Eagle DUB 55 CL)	53.3 (Eagle DUB 55 CL)	55 (Eagle DUB 55 CL)	75 (Eagle DUB 55 CL)
	BOOST			59.2					
Q-factor : 169 (non-BOOST & BOOST) / 175 (Eagle DUB 55 CL)						Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."									



# X1 Carbon Eagle DUB/Descendant Carbon Eagle DUB/Stylo Carbon Eagle DUB

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	59	61	67.5	70.5	71	71	71.5
	Y (Eagle DUB 55 CL)	62	64	70.5	73.5	74	74	74.5
Q-factor : 169 (non-BOOST & BOOST) / 175 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								

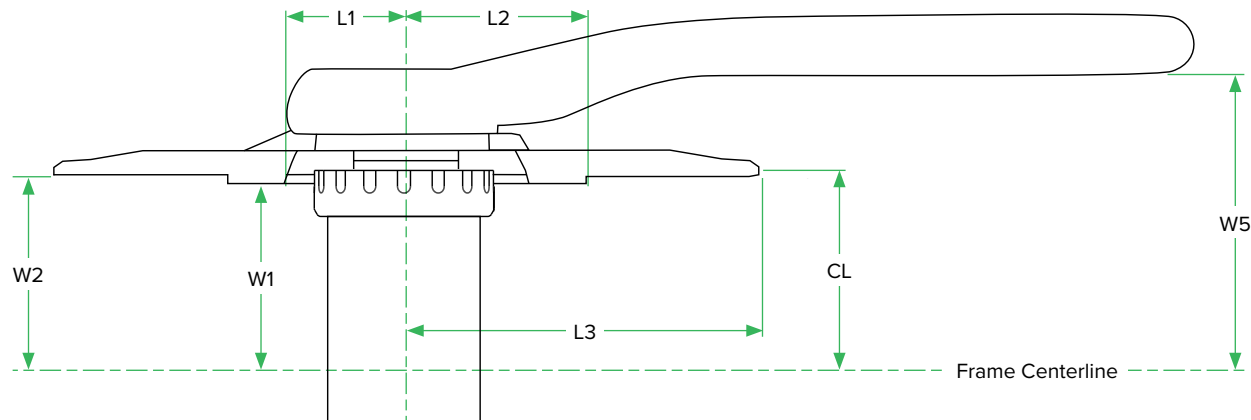




# X1 Carbon Eagle DUB/Descendant Carbon Eagle DUB/Stylo Carbon Eagle DUB - Fatbike

Drive Side Frame Clearance - BOOST and non-BOOST

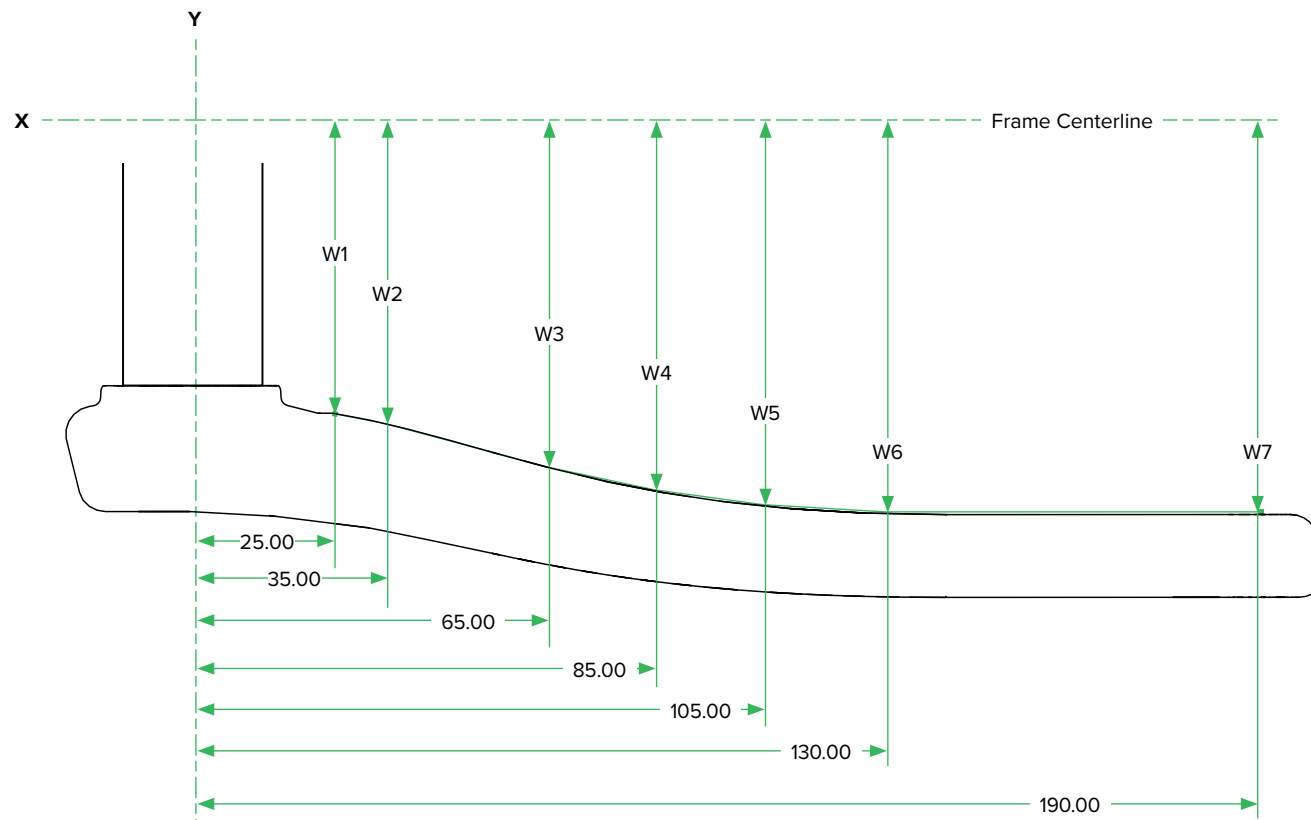
1x12	Chainring		L1	L2	L3	W1	W2	CL	W5
	30T	4" Fatbike (170 OLD)	31.5	50.7	64.3	65.5	64.8	66.5	89.5
		5" Fatbike (190 OLD)	22.8	29		70	74.7	76.5	
Q-factor : 204.5				Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



# X1 Carbon Eagle DUB/Descendant Carbon Eagle DUB/Stylo Carbon Eagle DUB - Fatbike

Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	77	79	85.5	88.5	89	89	89.5
	Q-factor : 204.5		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					

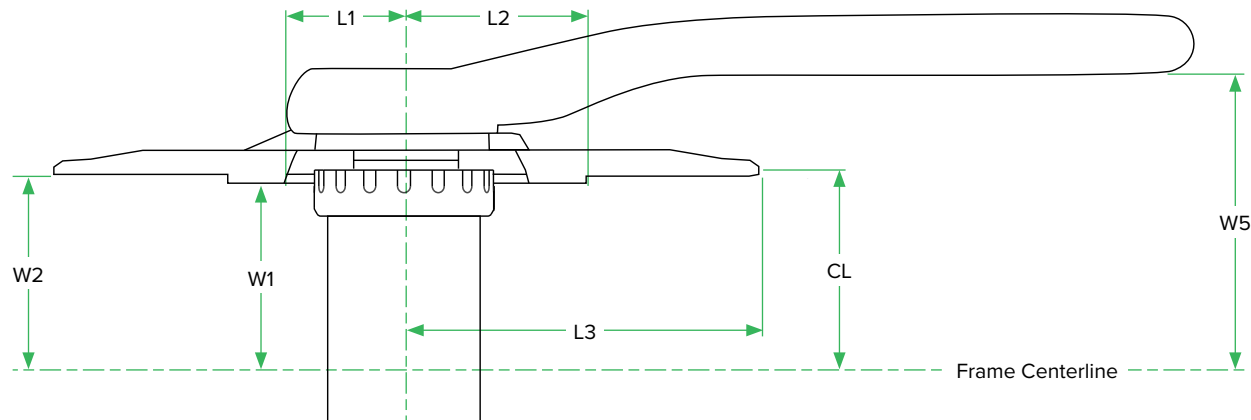


# GX Eagle DUB

# GX Eagle DUB

## Drive Side Frame Clearance - BOOST and non-BOOST

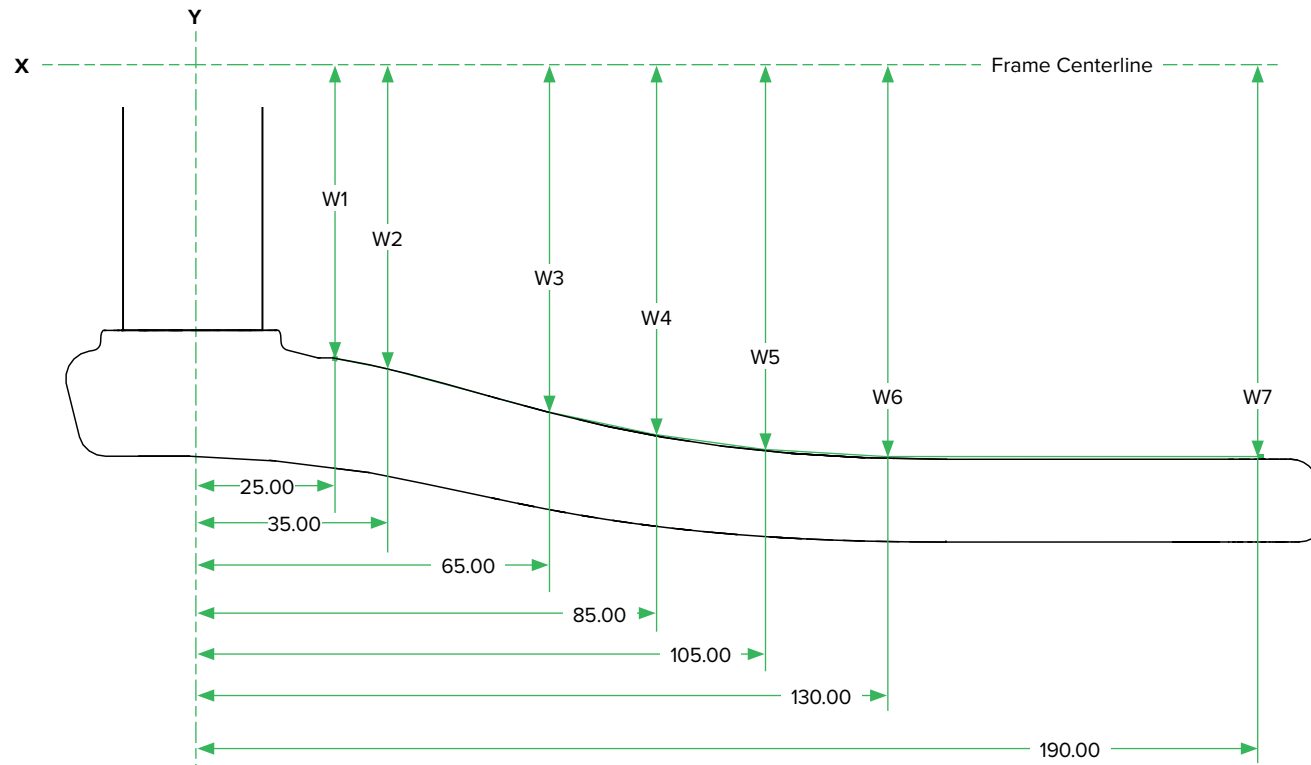
1x12	Chainring		L1	L2	L3	W1	W2	CL	W5*	
	30T	non-BOOST & Eagle DUB 55 CL	35.2	50.7	64.3	48	47.2	49	71.7	
		BOOST	31.5	58.7						
	32T	non-BOOST & Eagle DUB 55 CL	27	54.7	68.3	51 (BOOST Variant)	50.2 (BOOST Variant)	52 (BOOST Variant)	71.7 (BOOST Variant)	
		BOOST	29.3	55.2						
	34T	non-BOOST & Eagle DUB 55 CL	31.5	58.7	72.3	54 (Eagle DUB 55 CL)	53.2 (Eagle DUB 55 CL)	55 (Eagle DUB 55 CL)	74.7 (Eagle DUB 55 CL)	
		BOOST	31.5	59.2						
	Q-factor : 169 (non-BOOST & BOOST) / 175 (Eagle DUB 55 CL)						Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
	*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."									



# GX Eagle DUB

## Non-Drive Frame Clearance

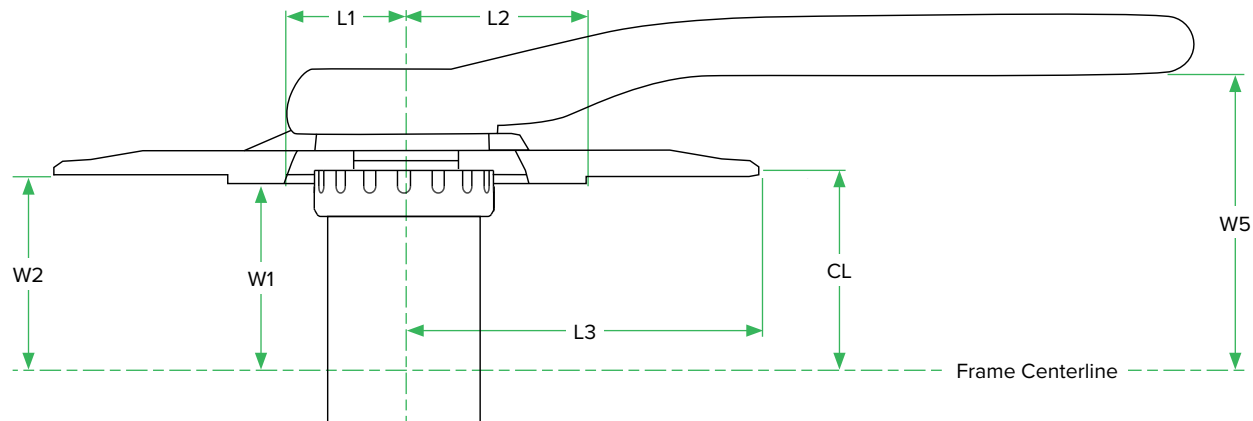
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	57	59.9	67.7	70.4	71.5	71.6	71.6
	Y (Eagle DUB 55 CL)	60	62.9	70.7	73.4	74.5	74.6	74.6
Q-factor : 172 (non-BOOST & BOOST) / 178 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# GX Eagle DUB SB+

## Drive Side Frame Clearance

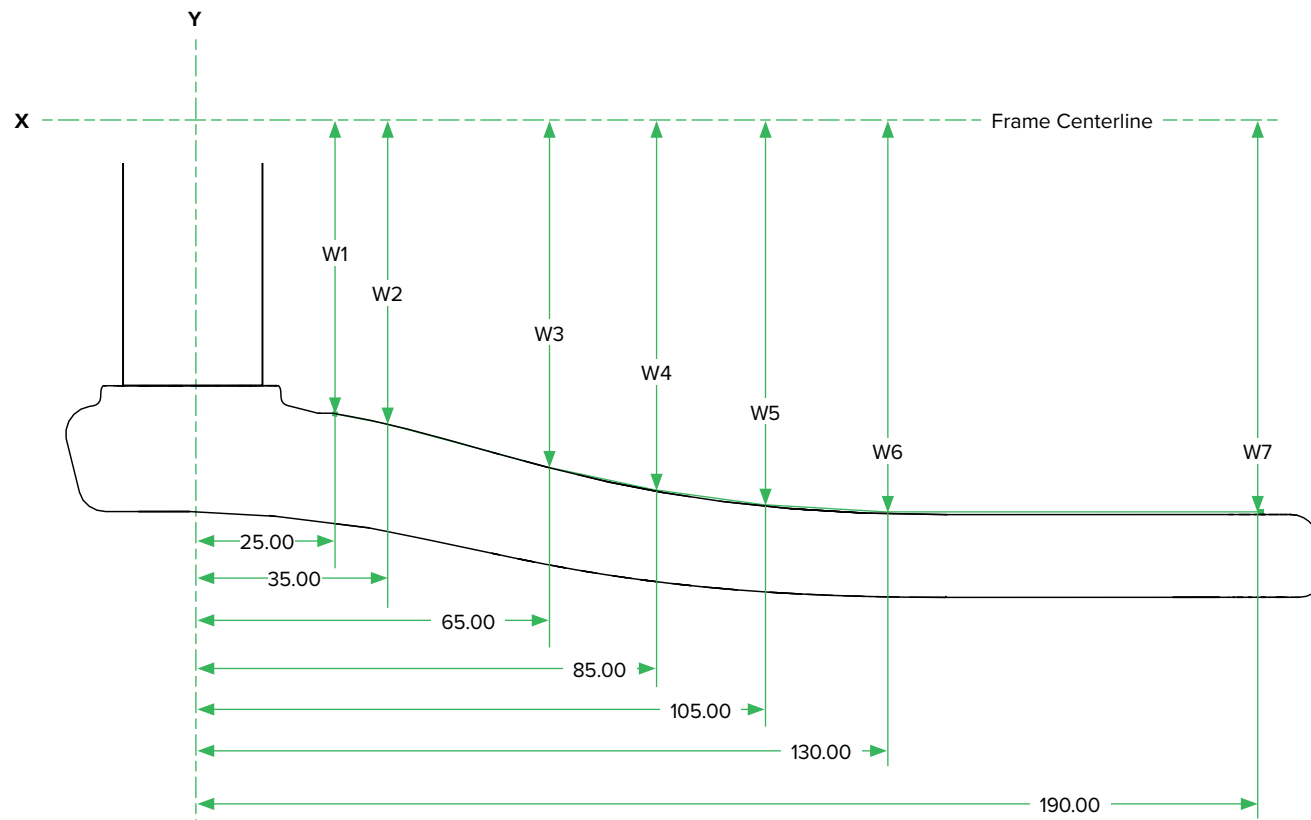
1x12	Chainring	L1	L2	L3	W1	W2	CL	W5*
	30T	28.9	31.4	64.3	57.9	54.7	56.5	76.2
	32T			68.3				
	34T			72.4				
Q-factor : 178		Bottom Bracket Type(s): DUB BSA 73 SB+ : DUB PF 92 SB+						
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."								



# GX Eagle DUB SB+

## Non-Drive Frame Clearance

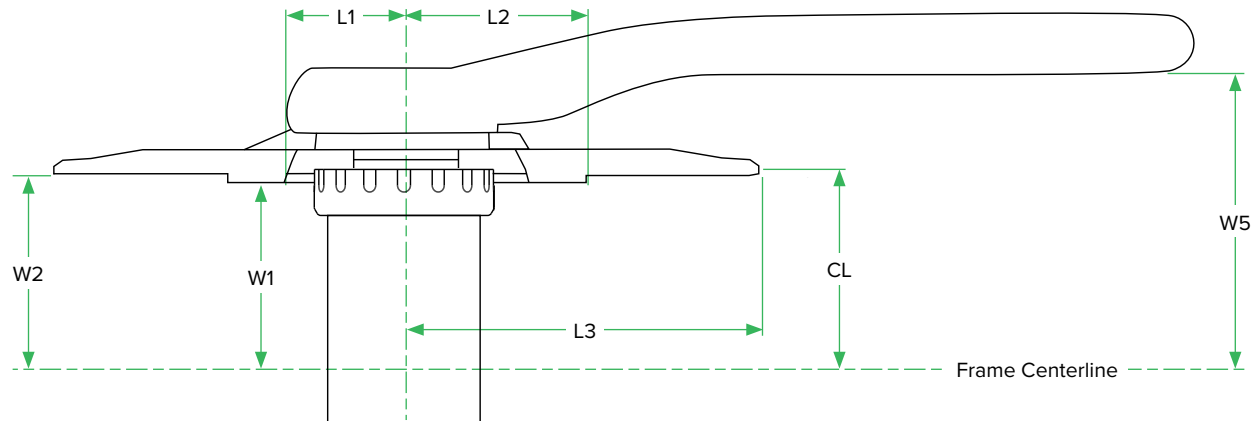
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y	62.9	64.4	72.2	74.9	76	76.2	76.2
	Q-factor : 178		Bottom Bracket Type(s): DUB BSA 73 SB+ : DUB PF 92 SB+					
	*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.							



# GX Eagle DUB - Fatbike

## Drive Side Frame Clearance

1x12	Chainring		L1	L2	L3	W1	W2	CL	W5
	30T	4" Fatbike (170 OLD)	25.9	29.4	64.3	65.5	65	66.5	91.1
		5" Fatbike (190 OLD)	22.8	29		70	74.7	76.5	
Q-factor : 206				Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					

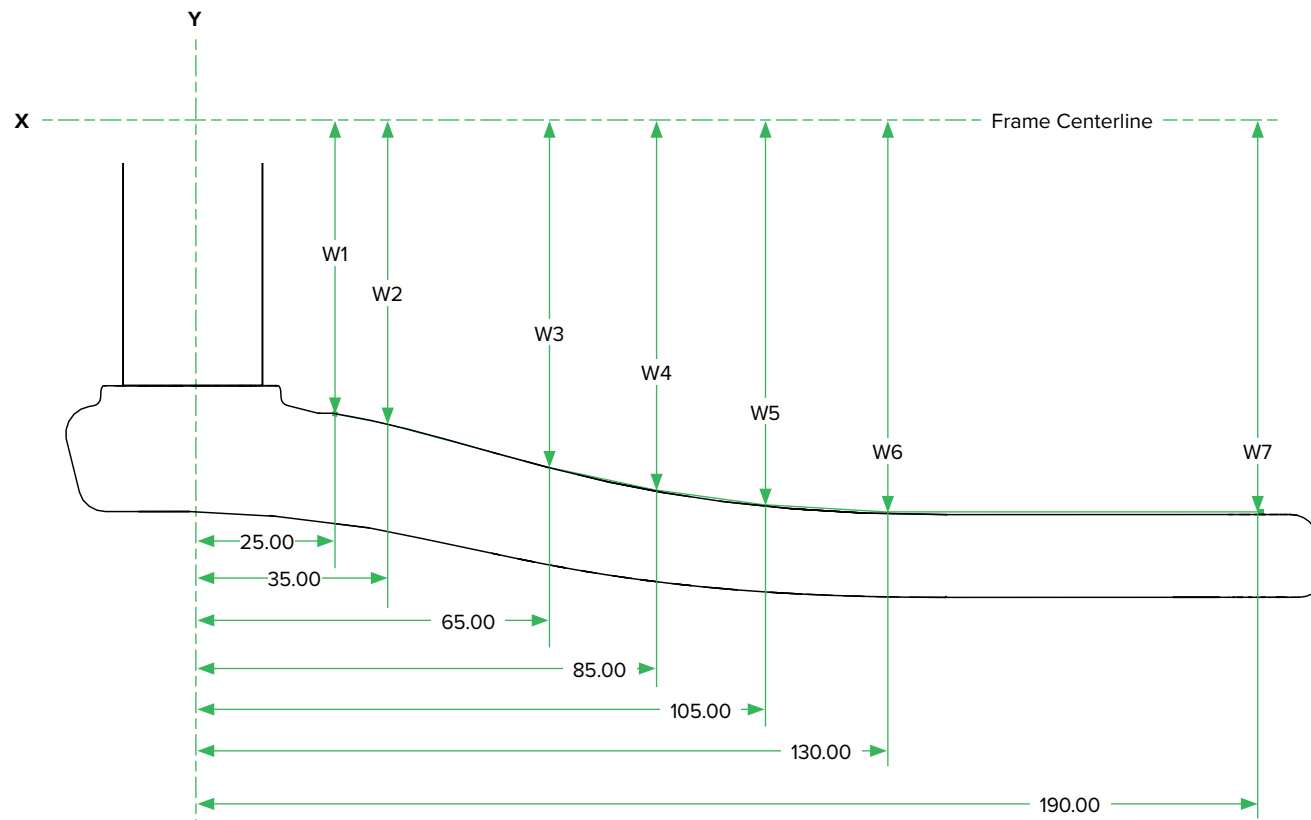




# GX Eagle DUB - Fatbike

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	72.75	77.6	86.6	90.1	91.4	91.5	91.5
Q-factor : 206		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121						

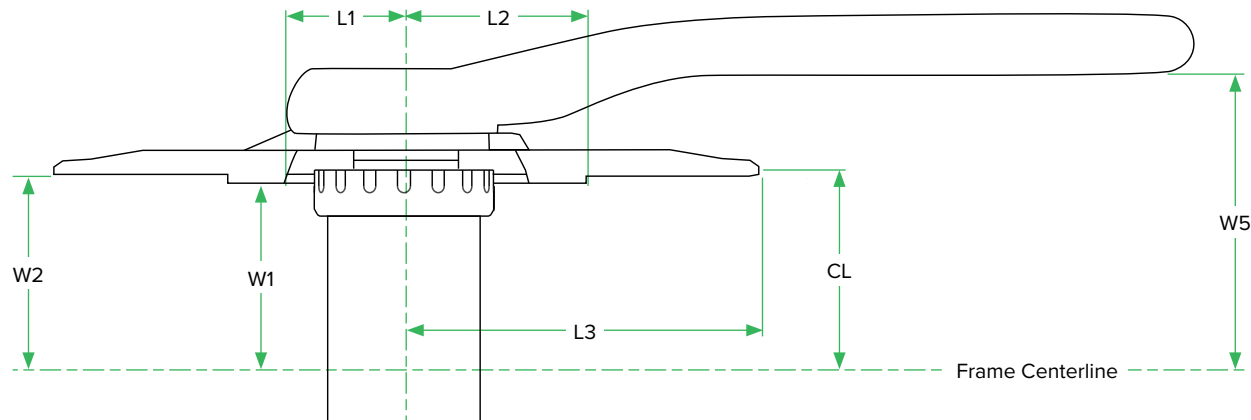


# Descendant 7K Eagle DUB

# Descendant 7K Eagle DUB

## Drive Side Frame Clearance - BOOST and non-BOOST

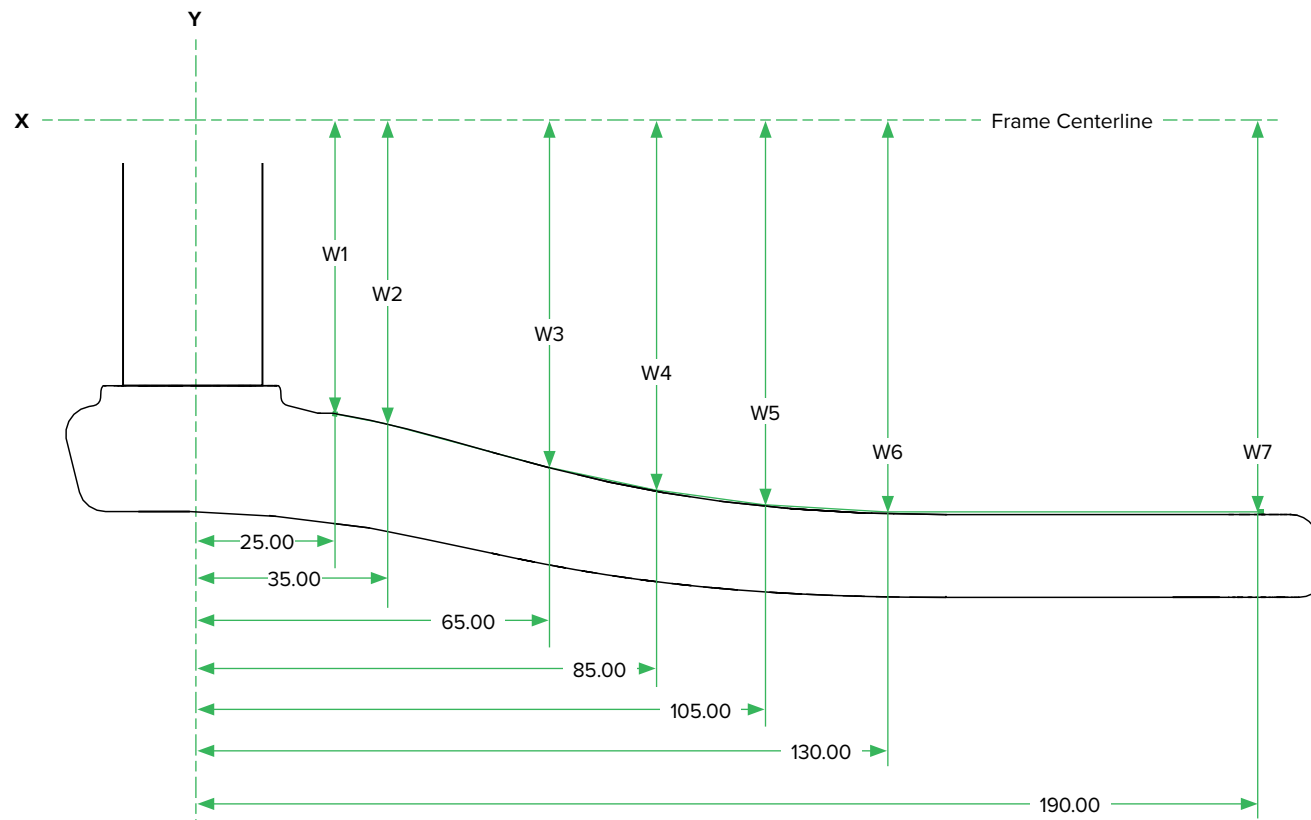
Chainring		L1	L2	L3	W1	W2	CL	W5*
1x12	30T	non-BOOST	50.7	64.3	48 51 (BOOST Variant)	47.3 50.3 (BOOST Variant)	49 52 (BOOST Variant)	71.7
		BOOST	58.7					
	32T	non-BOOST	54.7	68.3				
		BOOST	55.2					
	34T	non-BOOST	58.7	72.3				
		BOOST	59.2					
Q-factor : 169			Bottom Bracket Type(s) : DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92					
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."								



# Descendant 7K Eagle DUB

## Non-Drive Frame Clearance

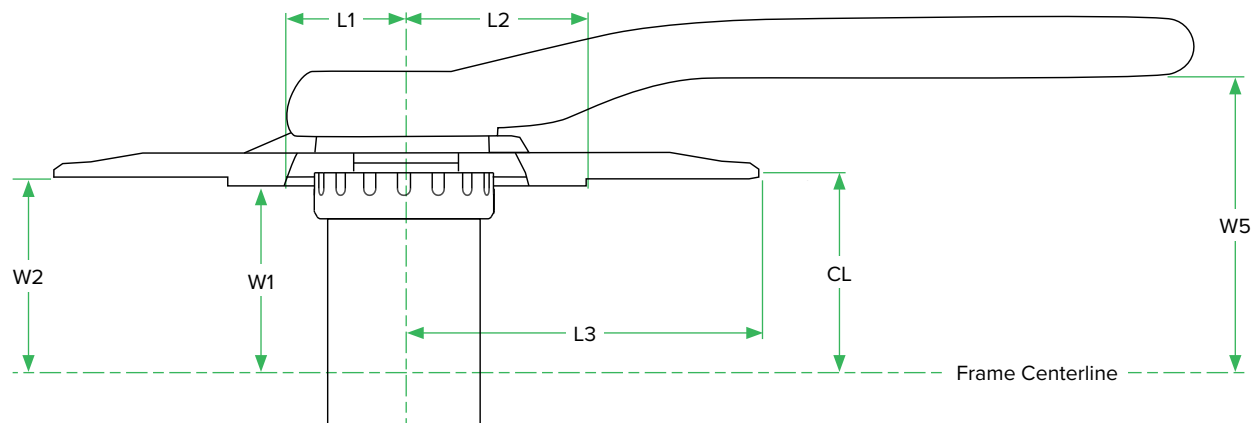
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y	57	59.9	67.7	70.4	71.5	71.6	71.6
	Q-factor : 169		Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92					
	*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."							



# Descendant Eagle DUB SB+

## Drive Side Frame Clearance

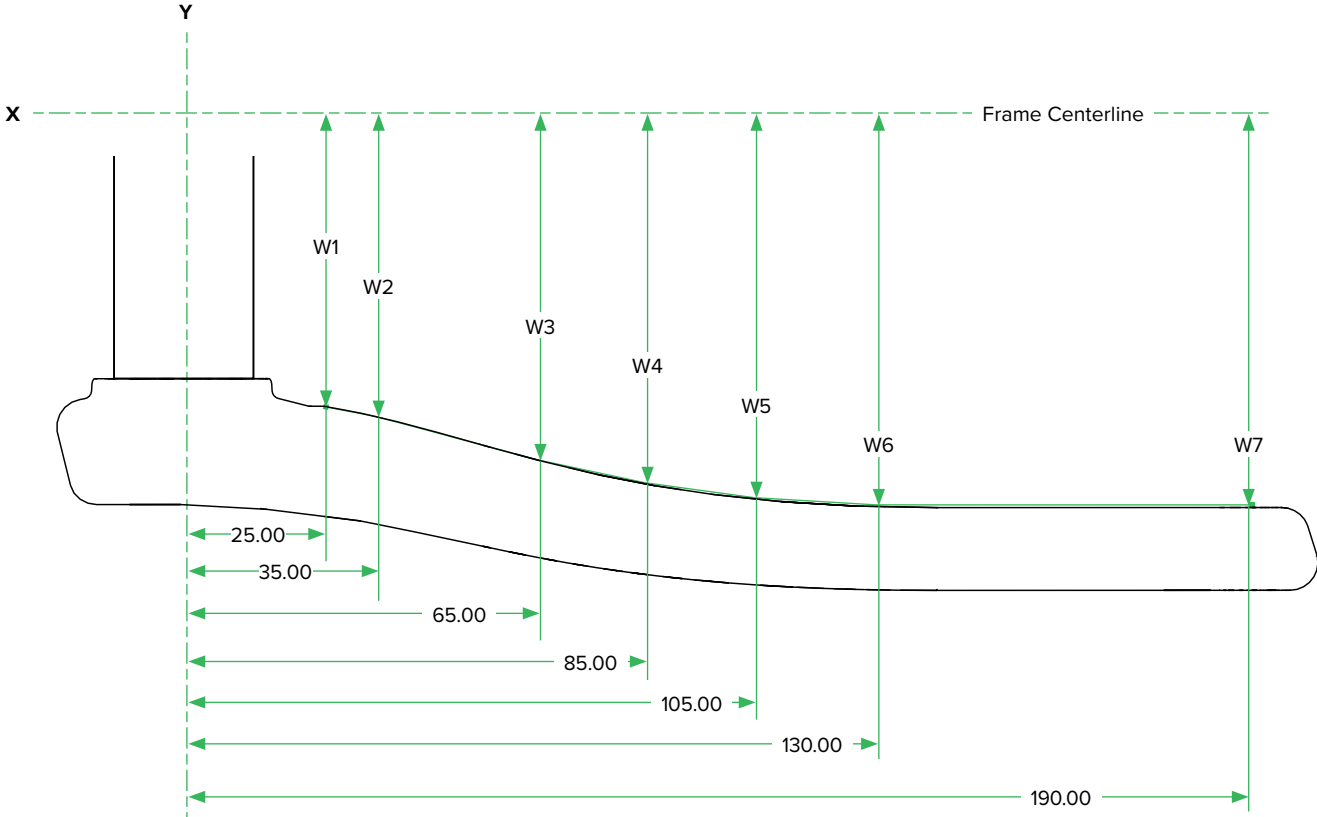
	Chainring	L1	L2	L3	W1	W2	CL	W5
1x12	30T	28.9	31.4	64.3	57.9	54.7	56.5	76.2
	32T			68.3				
	34T			72.4				
	30T Steel			63.8				
	32T Steel			67.8				
	34T Steel			71.9				
Q-factor : 178		Bottom Bracket Type(s): DUB BSA 73 SB+ : DUB PF 92 SB+						



# Descendant Eagle DUB SB+

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	62.9	64.4	72.2	74.9	76	76.2	76.2
Q-factor : 178		Bottom Bracket Type(s): DUB BSA 73 SB+ : DUB PF 92 SB+						

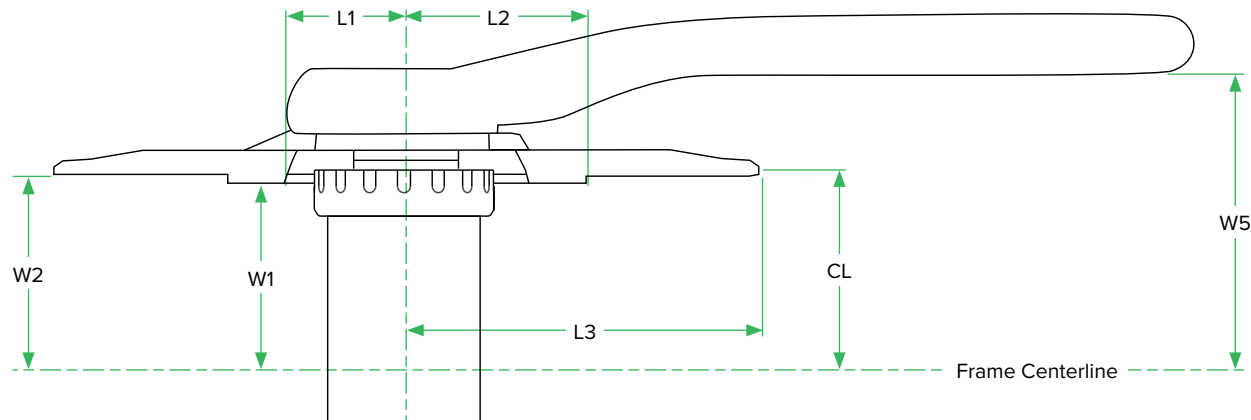


# Descendant 6K Eagle DUB

# Descendant 6K Eagle DUB

## Drive Side Frame Clearance - BOOST and non-BOOST

1x12	Chainring		L1	L2	L3	W1	W2	CL	W5*	
	30T	non-BOOST & Eagle DUB 55 CL	29.6	48.2	63.7	52.4	47.2	49	71.7	
		BOOST		47.1						
	32T	non-BOOST & Eagle DUB 55 CL		50.9	67.8	52.8 (BOOST Variant)	50 (BOOST Variant)	52 (BOOST Variant)	71.7 (BOOST Variant)	
		BOOST		51.2						
	34T	non-BOOST & Eagle DUB 55 CL		53.9	71.8	55.8 (Eagle DUB 55 CL)	53 (Eagle DUB 55 CL)	55 (Eagle DUB 55 CL)	74.7 (Eagle DUB 55 CL)	
		BOOST		54.2						
	Q-factor : 169 (non-BOOST & BOOST) / 175 (Eagle DUB 55 CL)						Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
	*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."									

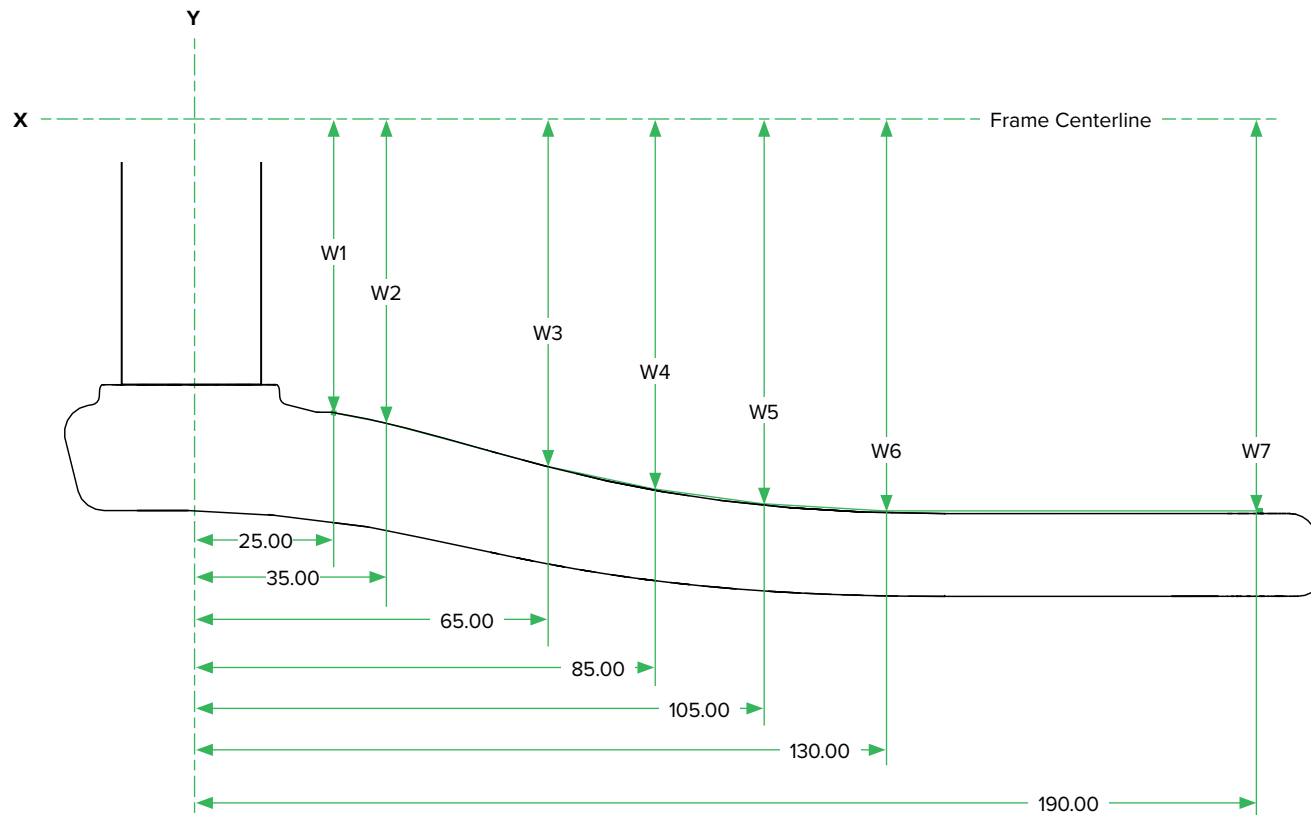




# Descendant 6K Eagle DUB

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	57	59.9	67.7	70.4	71.5	71.6	71.6
	Y (Eagle DUB 55 CL)	60	62.9	70.7	73.4	74.5	74.6	74.6
Q-factor : 169 (non-BOOST & BOOST) / 175 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								

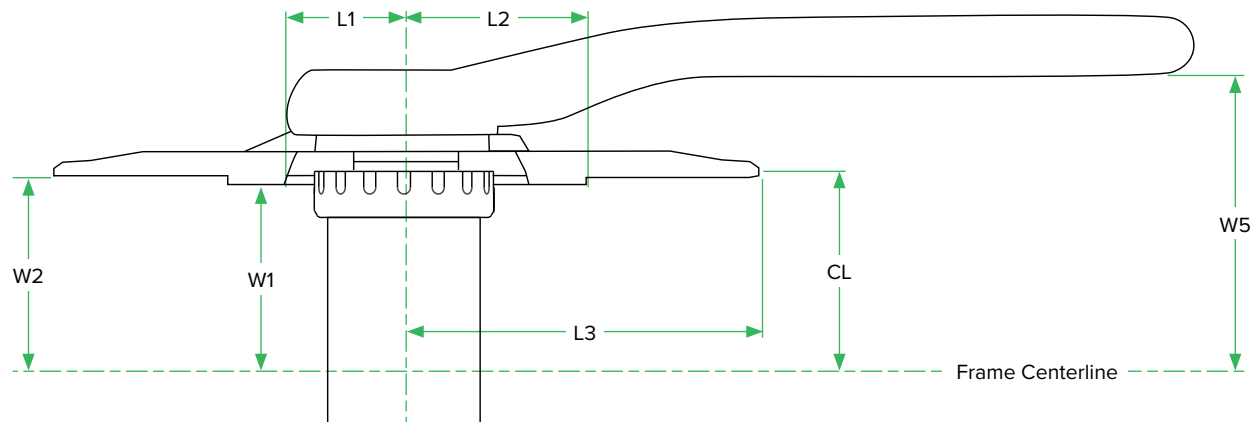


# Descendant DH DUB

# Descendant DH DUB

## Drive Side Frame Clearance

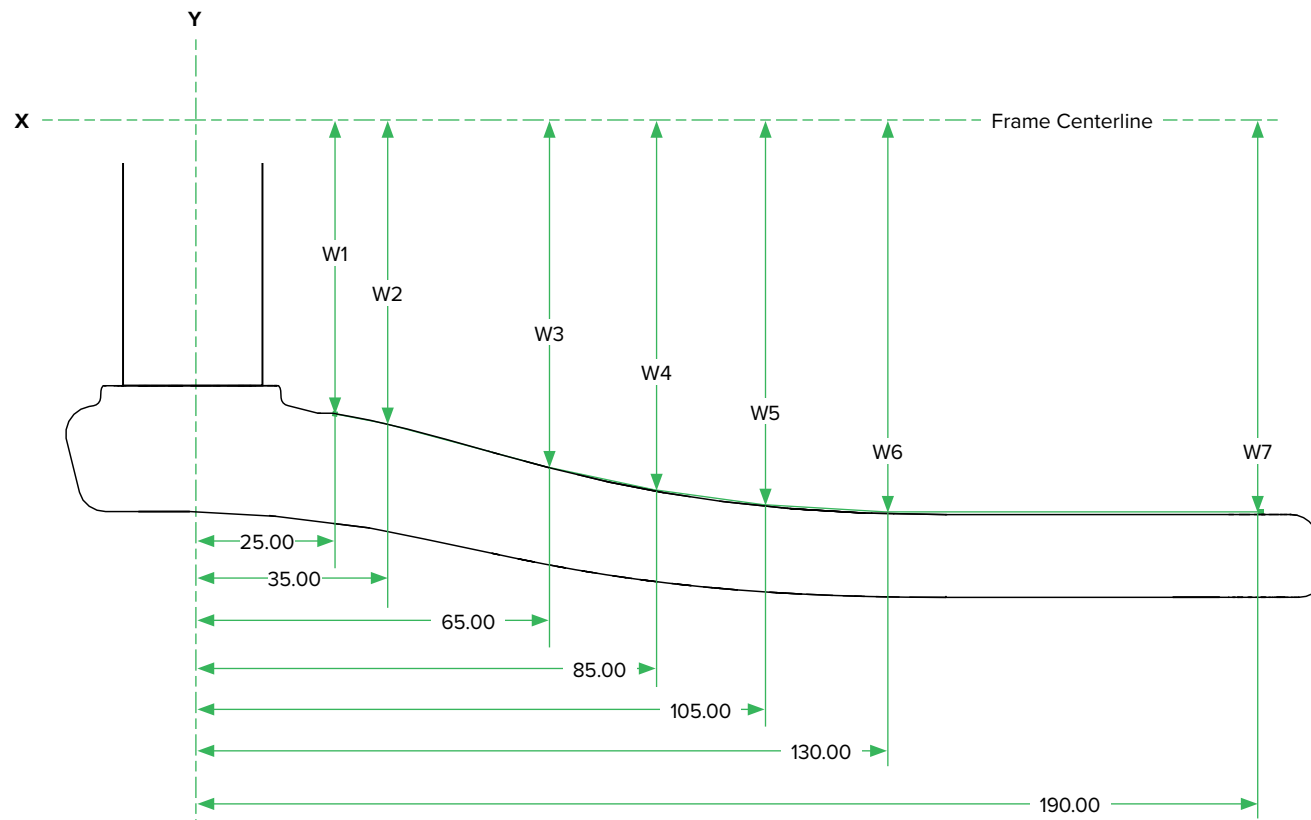
1x7	Chainring	L1	L2	L3	W1	W2	CL	W5
	34 Steel	29.6	54	71.8	60	54.7	56.5	81
	34	31.5	58.7	72.3	55.5			
	36	27.2	29	76.4	54.7			
Q-factor : 187		Bottom Bracket Type(s): DUB BSA 83 : DUB PF 104.5/107						



# Descendant DH DUB

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x7	X	25	35	65	85	105	130	190
	Y	65.8	67.2	76.1	79.7	80.9	81	81
Q-factor : 187		Bottom Bracket Type(s): DUB BSA 83 : DUB PF 104.5/107						

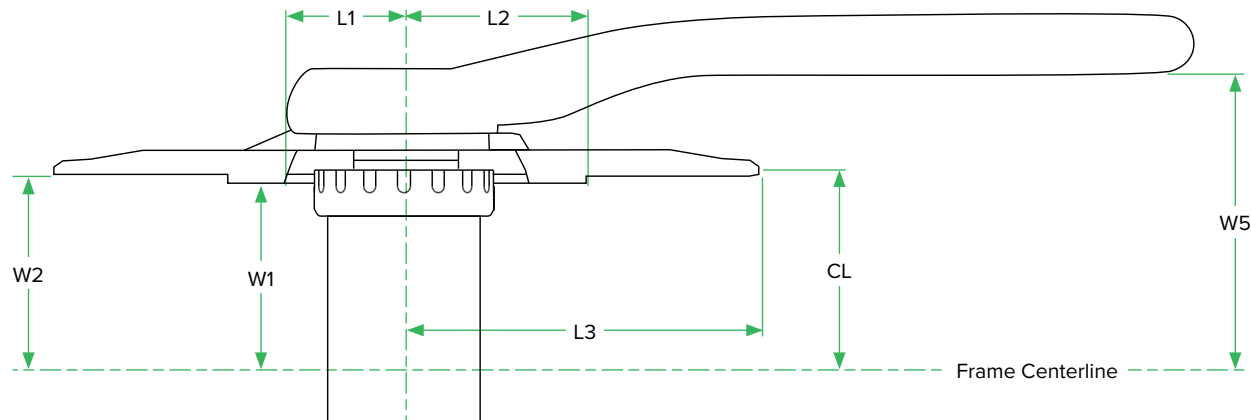


NX Eagle DUB/Stylo 7K Eagle DUB

# NX Eagle DUB/Stylo 7K Eagle DUB

## Drive Side Frame Clearance - BOOST and non-BOOST

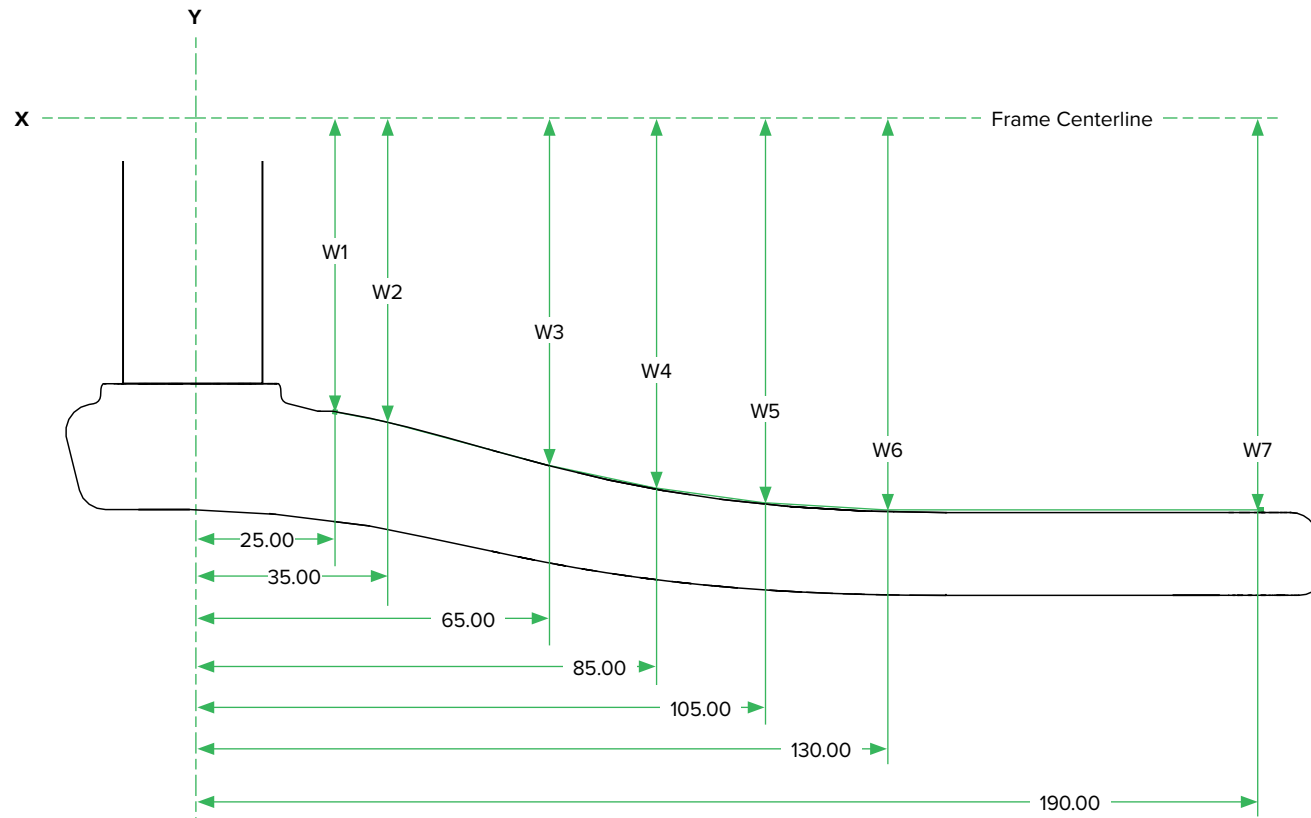
	Chainring		L1	L2	L3	W1	W2	CL	W5*	
1x12	30T	non-BOOST	31.5	50.7	64.3	48 51 (BOOST Variant)	47.3 50 (BOOST Variant)	49 52 (BOOST Variant)	73.5	
		BOOST		58.7					73.5 (BOOST Variant)	
	32T	non-BOOST		54.7	68.3				76.5 (Eagle DUB 55 CL)	
		BOOST		55.2						
	34T	non-BOOST		58.7	72.3					
		BOOST		59.2						
Q-factor : 172 (non-BOOST & BOOST) / 178 (Eagle DUB 55 CL)				Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92						
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."										



# NX Eagle DUB/Stylo 7K Eagle DUB

## Non-Drive Frame Clearance

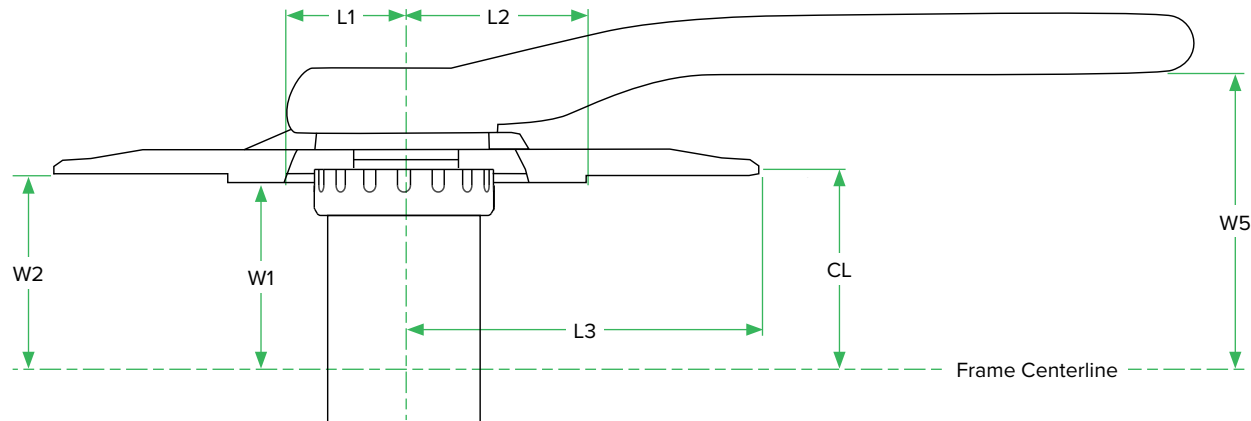
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	58.2	59.7	67.5	71.3	73.1	73.4	73.4
	Y (Eagle DUB 55 CL)	61.2	62.7	70.5	71.3	76.1	76.4	76.4
Q-factor : 169 (non-BOOST & BOOST) / 175 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# NX Eagle DUB/Stylo 7K Eagle DUB - Fat 4

## Drive Side Frame Clearance

1x12	Chainring		L1	L2	L3	W1	W2	CL	W5
	30T	4" Fatbike (170 OLD)	25.9	29.4	64.3	69.7	64.7	66.5	91
Q-factor : 207.5				Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					

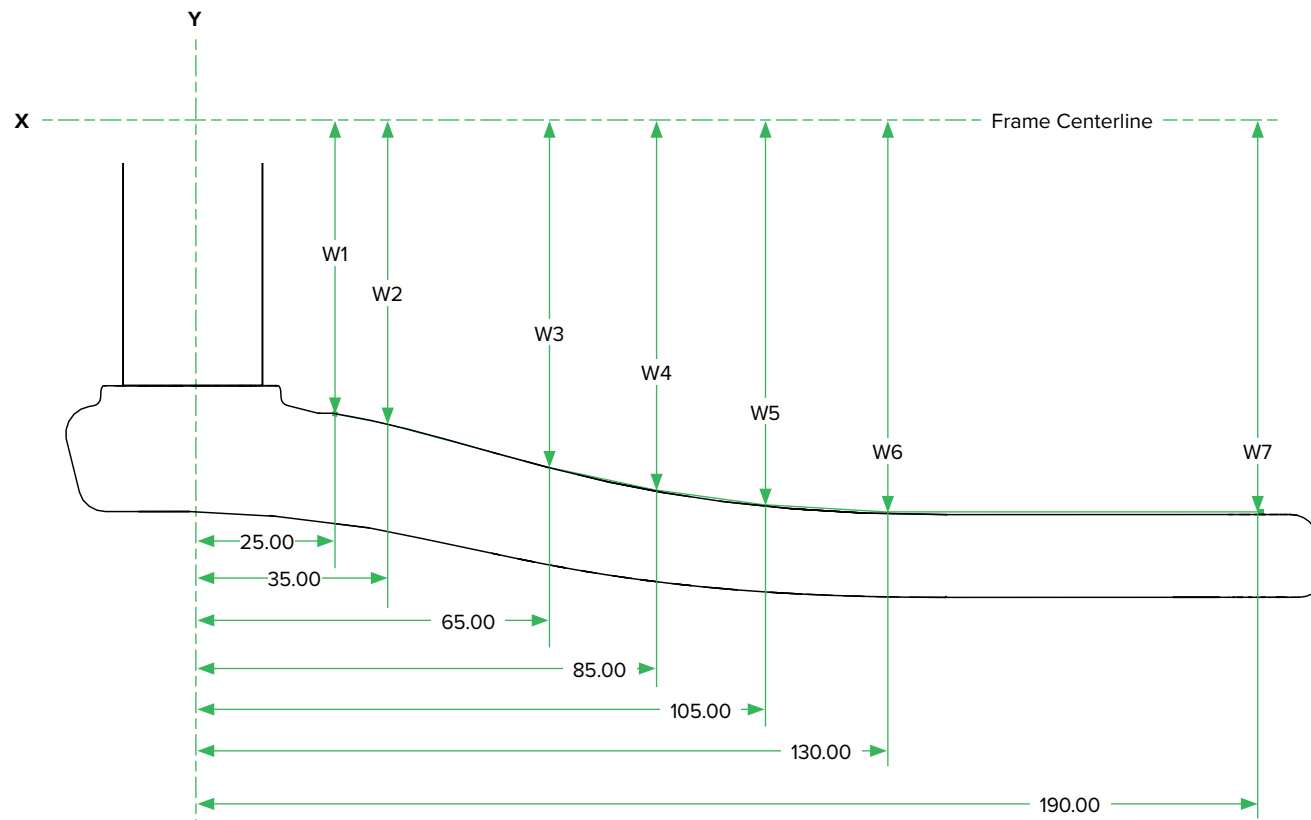




# NX Eagle DUB/Stylo 7K Eagle DUB - Fat 4

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	76.2	77.7	85.5	89.3	91.1	91.4	91.4
	Q-factor : 206		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					

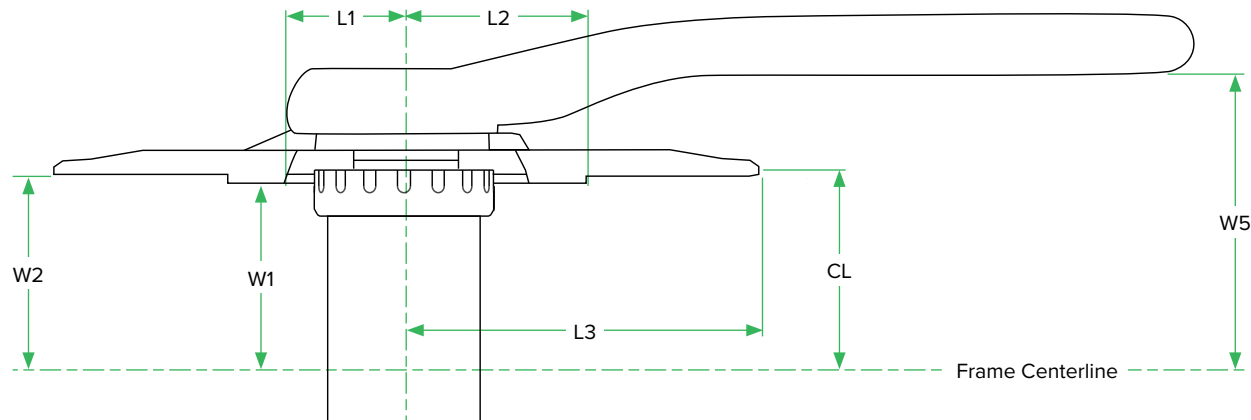


NX Eagle DUB/Stylo 6K Eagle DUB

# NX Eagle DUB/Stylo 6K Eagle DUB

## Drive Side Frame Clearance

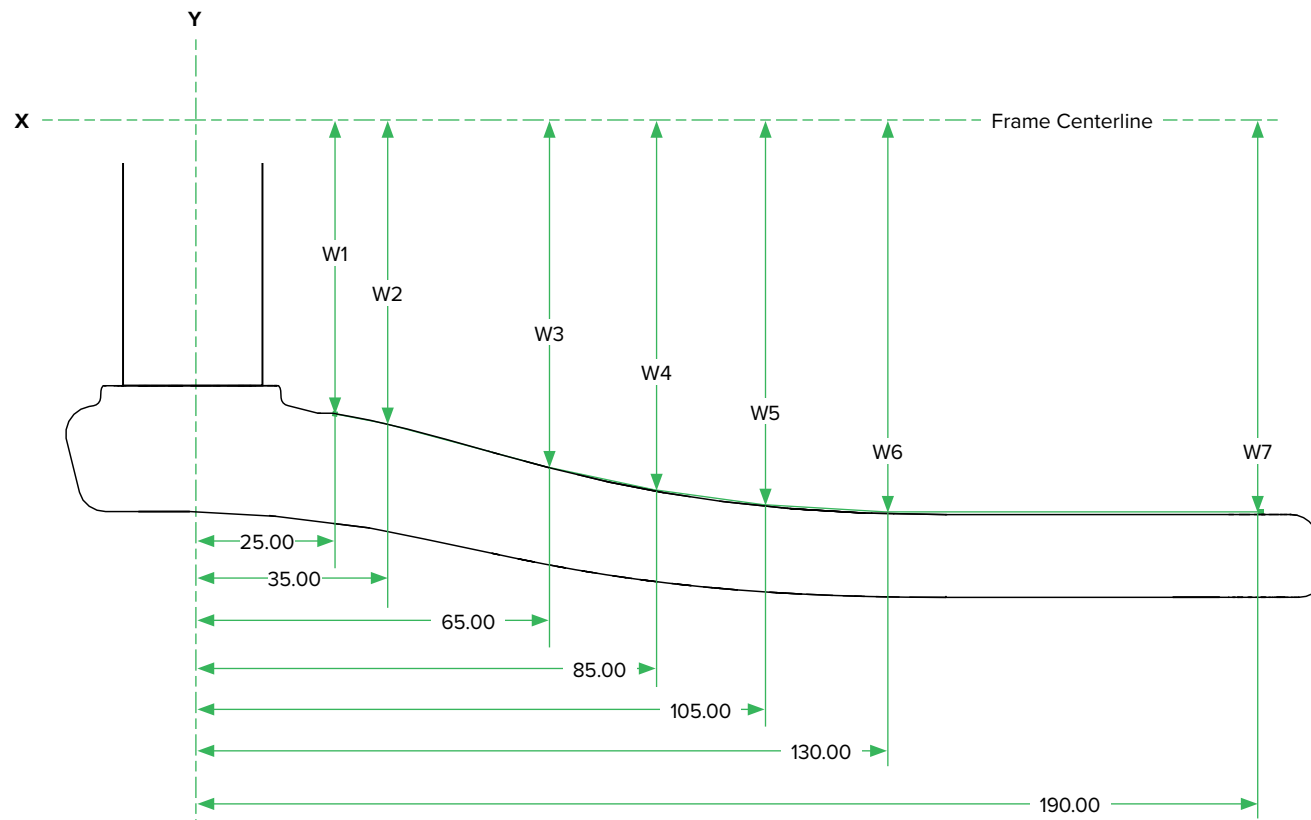
	Chainring		L1	L2	L3	W1	W2	CL	W5*	
1x12	30T	non-BOOST	29.6	46.7	63.7	52.4 52.8 (BOOST Variant)	47.2 50 (BOOST Variant)	49 52 (BOOST Variant)	73.5	
		BOOST		47.1					73.5 (BOOST Variant)	
	32T	non-BOOST		50.9	67.8				76.5 (Eagle DUB 55 CL)	
		BOOST		51.2						
	34T	non-BOOST		53.9	71.8					
		BOOST		54.2						
Q-factor : 172 (non-BOOST & BOOST) / 178 (Eagle DUB 55 CL)			Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92							
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."										



# NX Eagle DUB/Stylo 6K Eagle DUB

## Non-Drive Frame Clearance

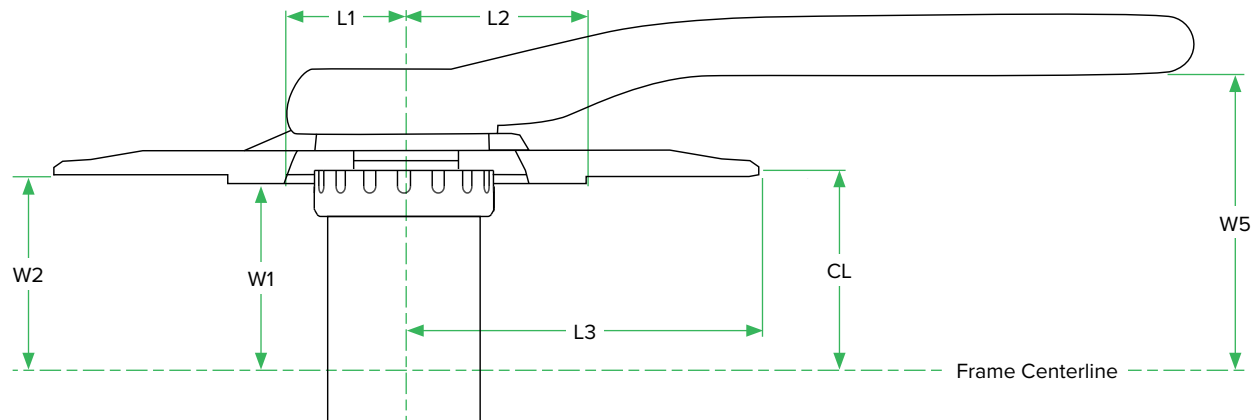
		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	58.2	59.7	67.5	71.3	73.1	73.4	73.4
	Y (Eagle DUB 55 CL)	61.2	62.7	70.5	71.3	76.1	76.4	76.4
Q-factor : 172 (non-BOOST & BOOST) / 178 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the Crank Boot Clearance Information page.								



# NX Eagle DUB/Stylo 6K Eagle DUB - Fat 4

## Drive Side Frame Clearance

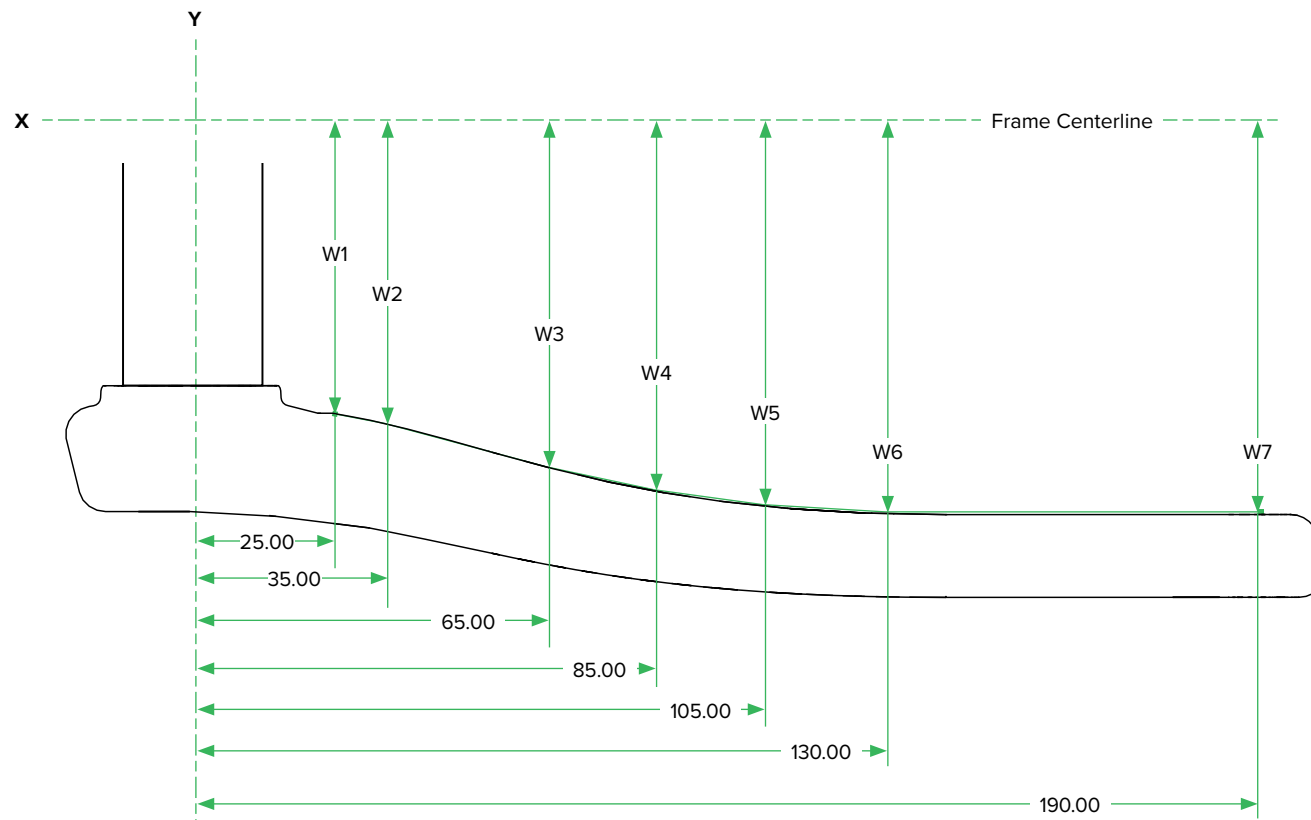
	Chainring		L1	L2	L3	W1	W2	CL	W5
1x12	30T	4" Fatbike (170 OLD)	29.6	46.7	63.7	69.8	64.7	66.5	91
Q-factor : 207.5				Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



# NX Eagle DUB/Stylo 6K Eagle DUB - Fat 4

## Non-Drive Frame Clearance

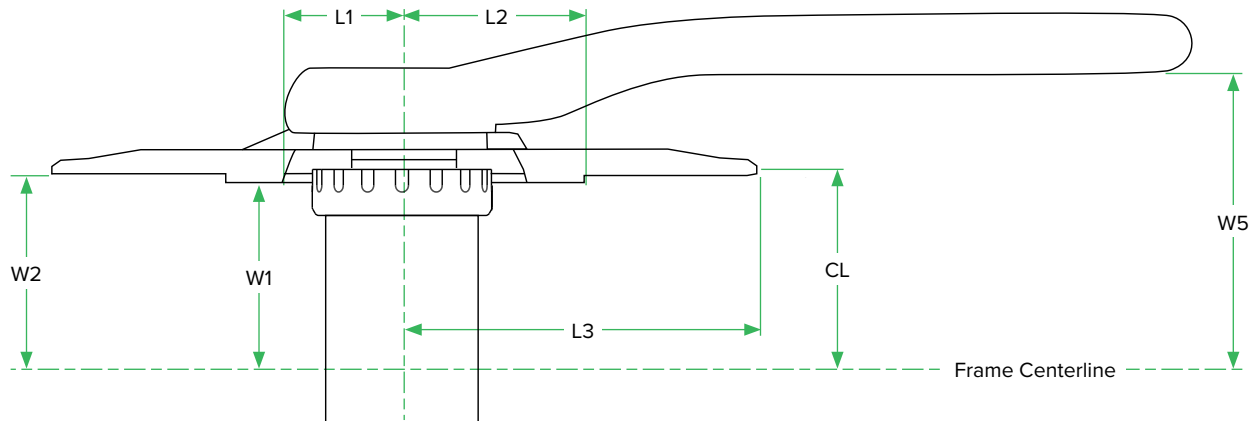
		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	76.2	77.7	85.5	89.3	91.1	91.4	91.4
	Q-factor : 207.5		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



# NX Eagle DUB - Fat 5

## Drive Side Frame Clearance

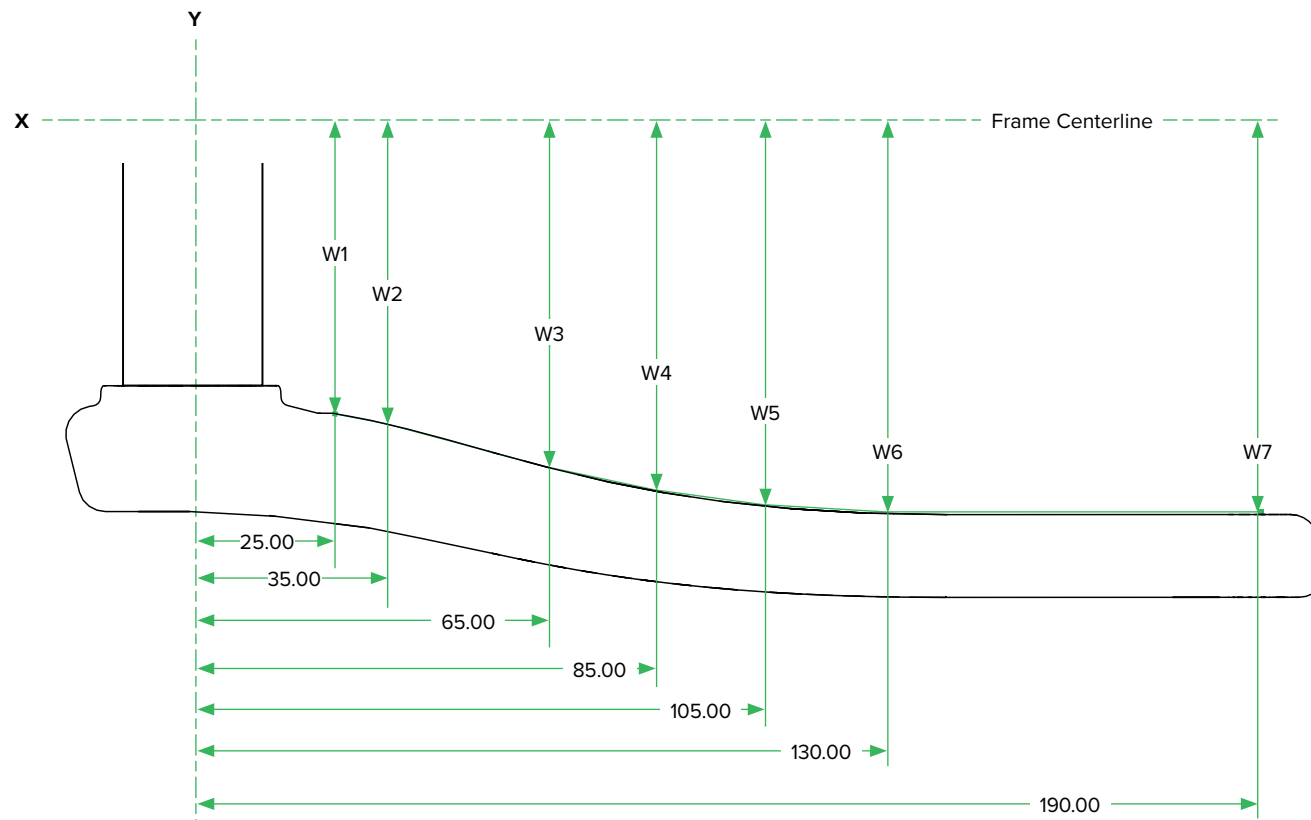
1x12	Chainring		L1	L2	L3	W1	W2	CL	W5
	30T	5" Fatbike (190 OLD)	22.8	29	64.3	70	74.7	76.5	91
Q-factor : 207.5				Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



# NX Eagle DUB - Fat 5

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7
1x12	X	25	35	65	85	105	130	190
	Y	76.2	77.7	85.5	89.3	91.1	91.4	91.4
	Q-factor : 207.5		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					



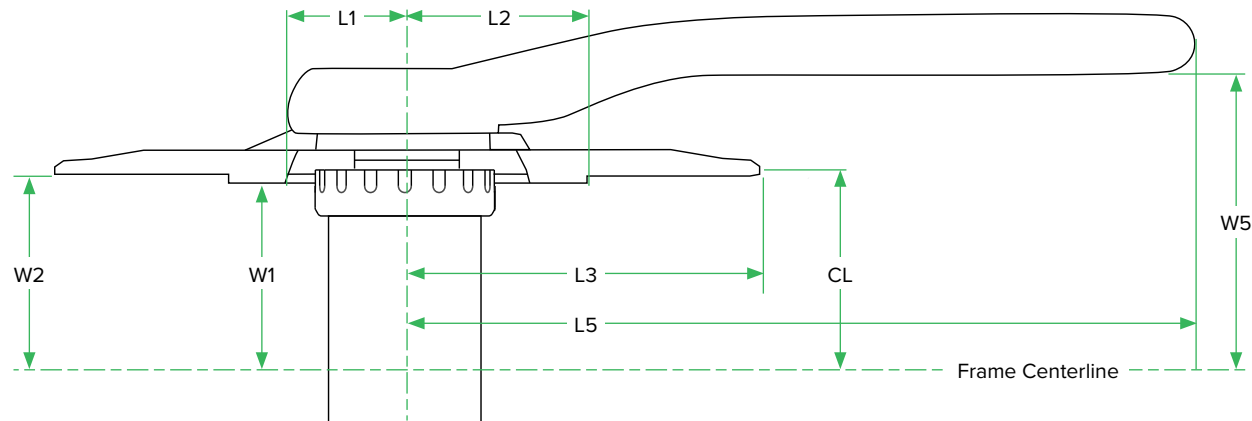


# SX Eagle DUB/X1-1000 DUB

# SX Eagle DUB/X1-1000 DUB

## Drive Side Frame Clearance - BOOST and non-BOOST

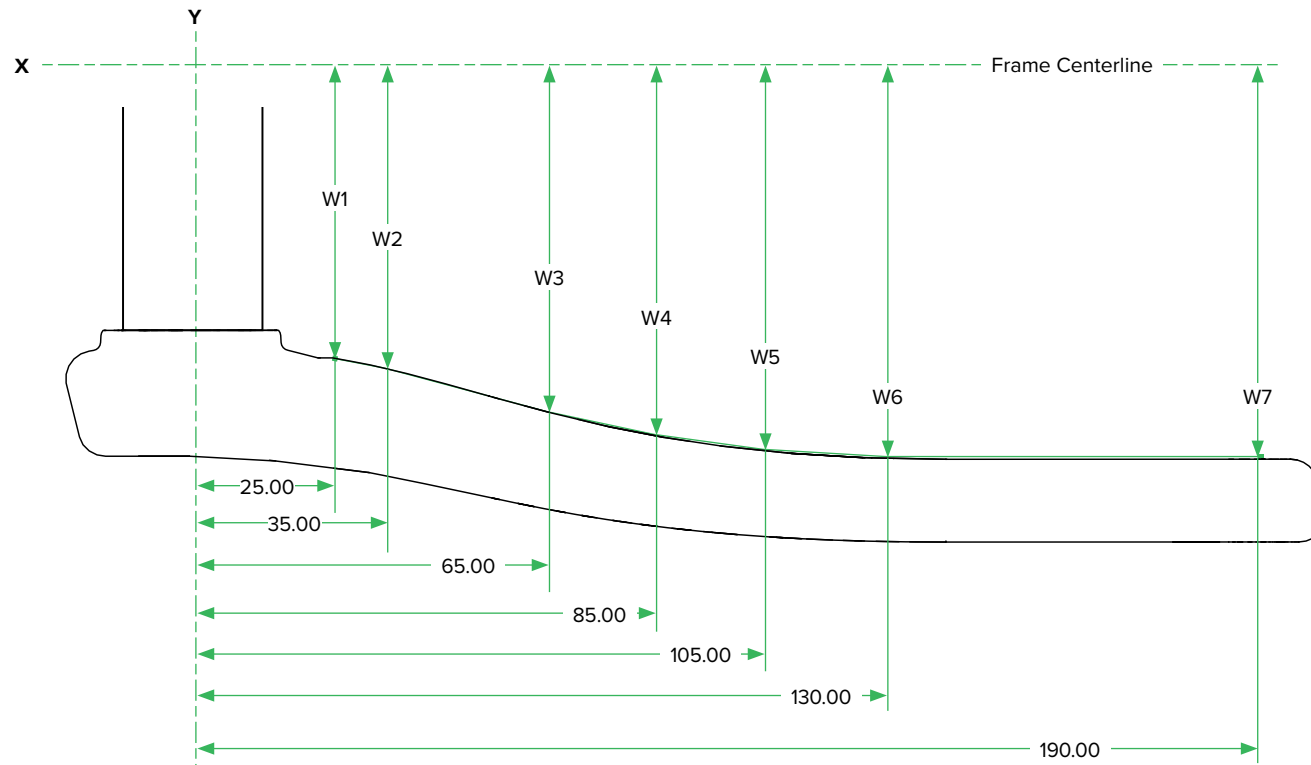
1x12	Chainring		L1	L2	L3	L5	W1	W2	CL	W5*
	30T	non-BOOST & Eagle DUB 55 CL	29.6	46.7	63.7	192	52.4	47.2	49	73.5
		BOOST		47.1						
	32T	non-BOOST & Eagle DUB 55 CL		50.9	67.8		52.8 (BOOST Variant)	50 (BOOST Variant)	52 (BOOST Variant)	73.5 (BOOST Variant)
		BOOST		51.2						
34T	non-BOOST & Eagle DUB 55 CL	53.9		71.8	55.8 (Eagle DUB 55 CL)		53 (Eagle DUB 55 CL)	55 (Eagle DUB 55 CL)	76.5 (Eagle DUB 55 CL)	
	BOOST	54.2								
Q-factor : 173 (non-BOOST & BOOST) / 179 (Eagle DUB 55 CL)						Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92				
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."										



# SX Eagle DUB/X1-1000 DUB

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y (non-BOOST & BOOST)	61	61.5	67	70.6	71.96	72.5	72.5
	Y (Eagle DUB 55 CL)	64	64.5	70	73.6	74.96	75.5	75.5
Q-factor : 173 (non-BOOST & BOOST) / 179 (Eagle DUB 55 CL)					Bottom Bracket Type(s): DUB BSA 73 : DUB BB30 : DUB PF30 : DUB PF 89.5/92			
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."								

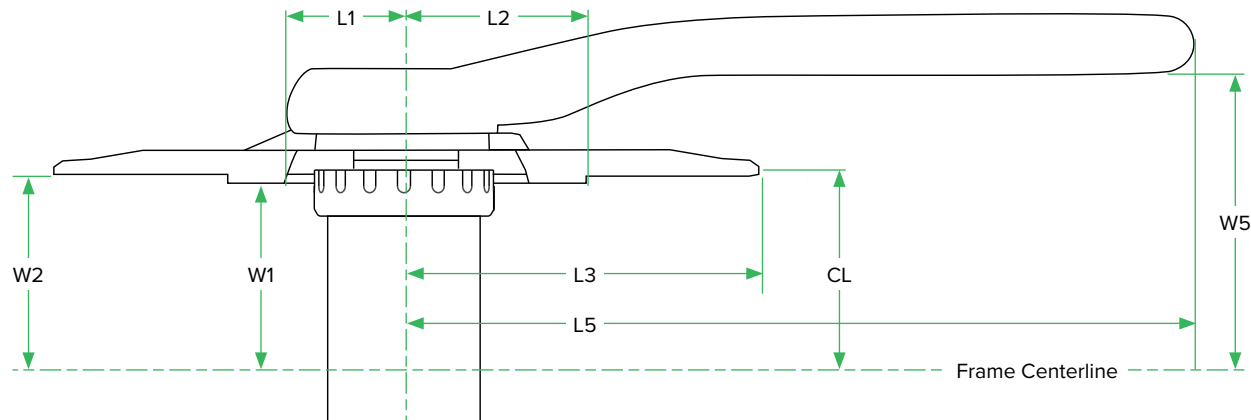


# X1 1000 Eagle DUB Fat 5

# X1 1000 Eagle DUB Fat 5

## Drive Side Frame Clearance

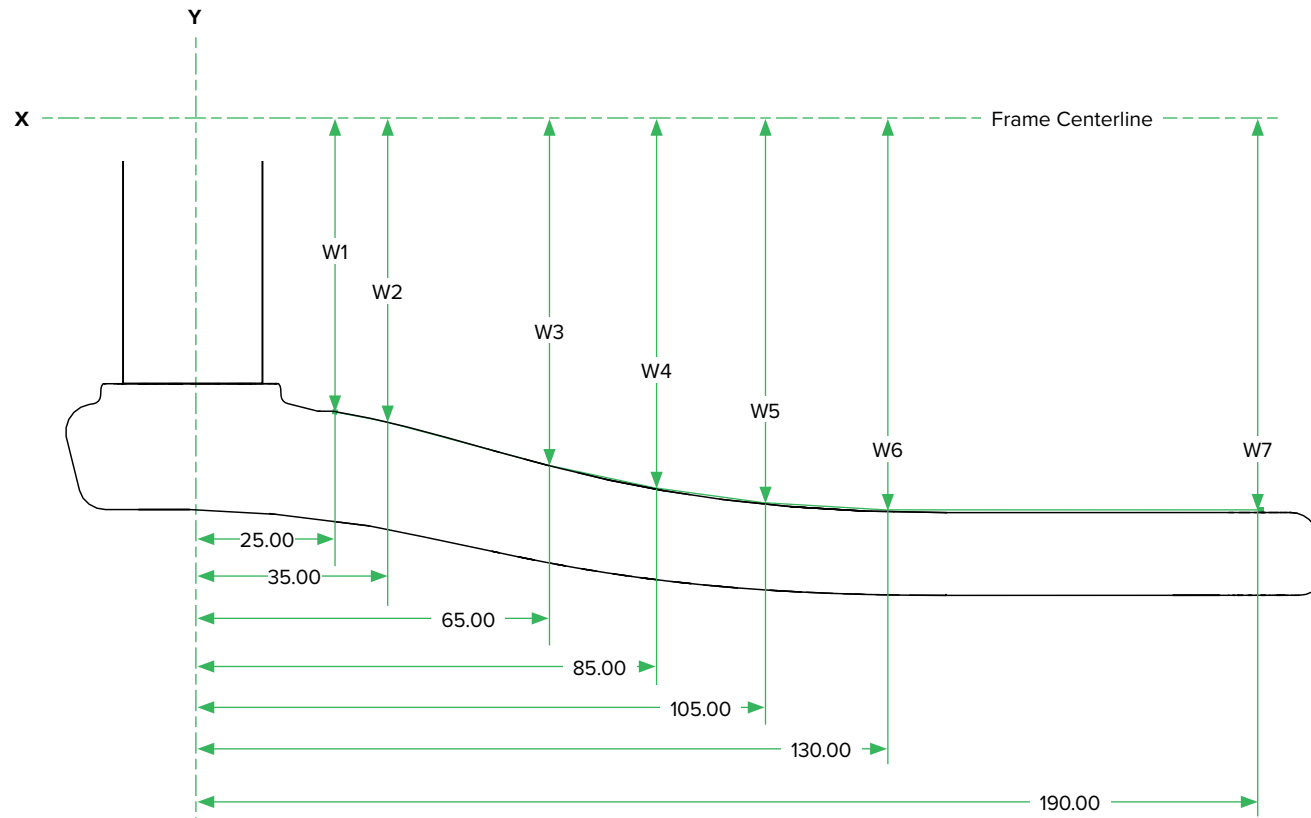
	Chainring	L1	L2	L3	L5	W1	W2	CL	W5*
1x12	30T	27.2	29.8	64.2	192	70	75.5	76.5	91
	Q-factor : 208.5		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121						
	*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."								



# X1 1000 Eagle DUB Fat 5

## Non-Drive Frame Clearance

		W1	W2	W3	W4	W5	W6	W7*
1x12	X	25	35	65	85	105	130	190
	Y	76.2	77.7	85.5	89.3	91.1	91.4	91.4
	Q-factor : 208.5		Bottom Bracket Type(s): DUB BSA 100 : DUB PF 121					
*Dimensions will vary for cranks equipped with crank boots. Consult the section titled "Crank Boot."								

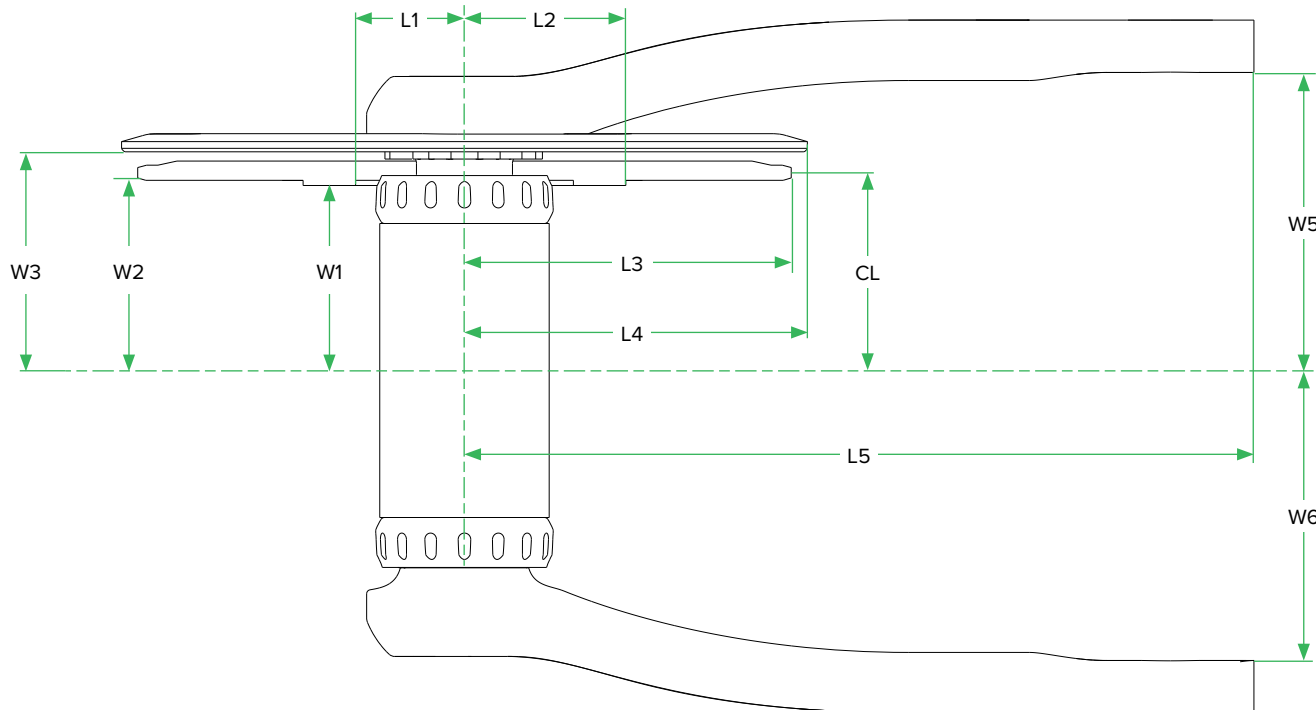


# 1x11 & 1x7 Cranksets

# NX

## Crankset Frame Clearance

	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W5	W6	CL
1x11	28	-	31.5	59.7	-	192	45.5	46.5	55.5	72	72	49
	30			64.5	69.5							
	32			68.5	73.5							
	34	23	40	72.5	77.5							
	36			76.5	81.5							
	38			80.5	85.5							
Q-factor : 169							Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP					

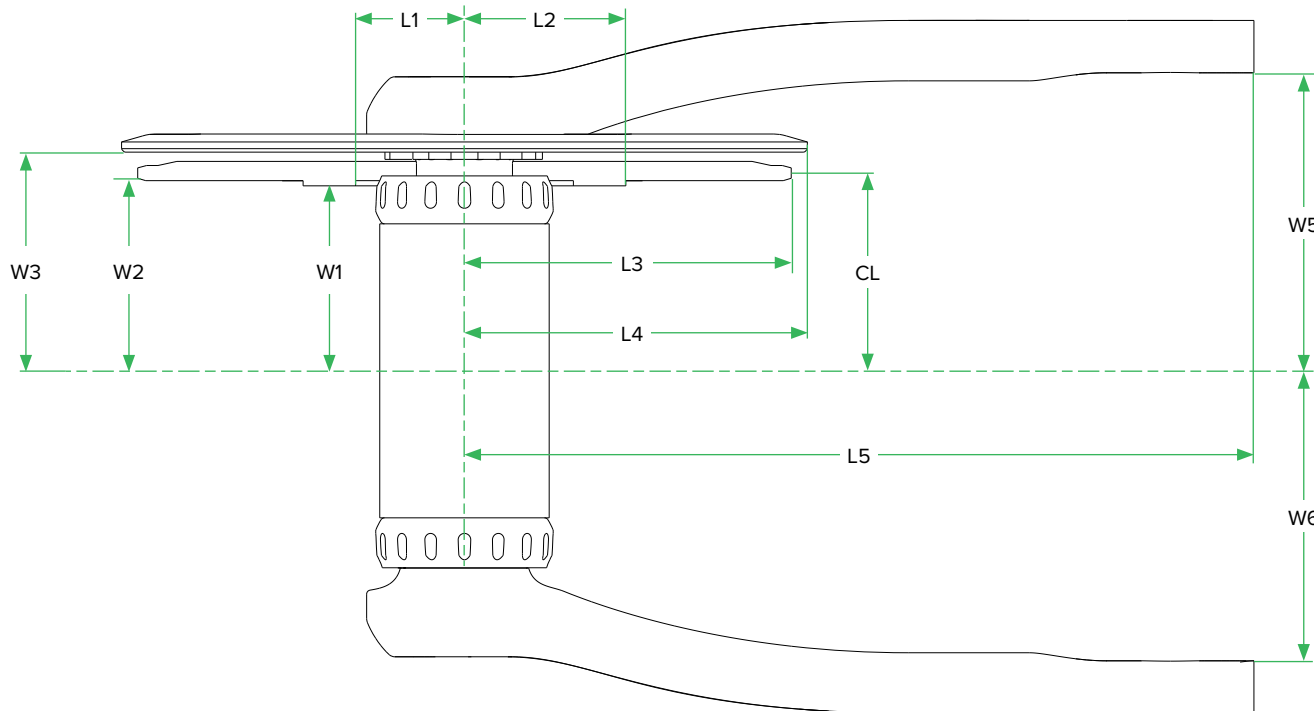




# NX - BOOST 148 Compatible

## Crankset Frame Clearance

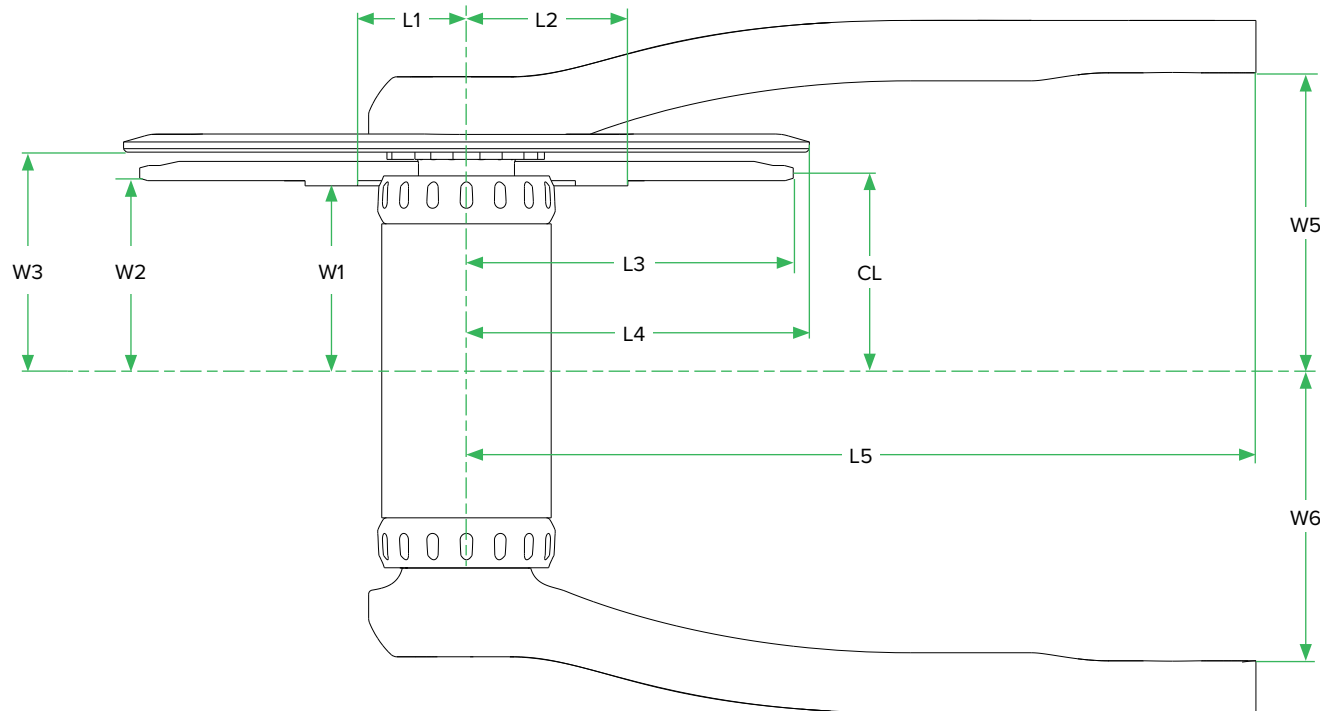
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W5	W6	CL
1x11	30	23	40	64.5	69.5	192	49	50	57.3	72	72	52
	32			68.5	73.5							
	34			72.5	77.5							
	36			76.5	81.5							
	38			80.5	85.5							
Q-factor : 169							Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP					



# NX Power Spline

## Crankset Frame Clearance

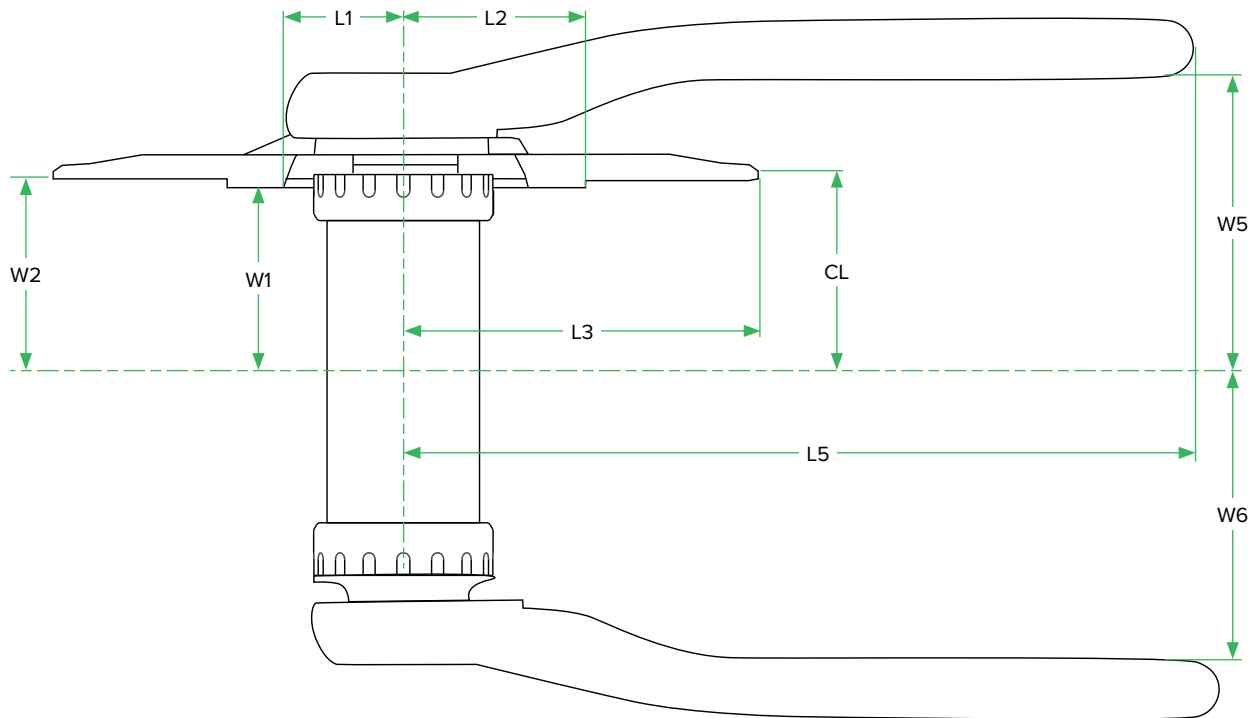
	Chainring	L1	L2	L3	L5	W1	W2	W5	W6	CL
1x11	28	-	31.5	59.7	192	46	47.2	73.5	73.5	49
	30	34.5	39	64	192	46	47.5	73.5	73.5	49
	32			68						
Q-factor : 172						Bottom Bracket Type(s): Power Spline 118/73				



# NX Power Spline - BOOST 148 Compatible

## Crankset Frame Clearance

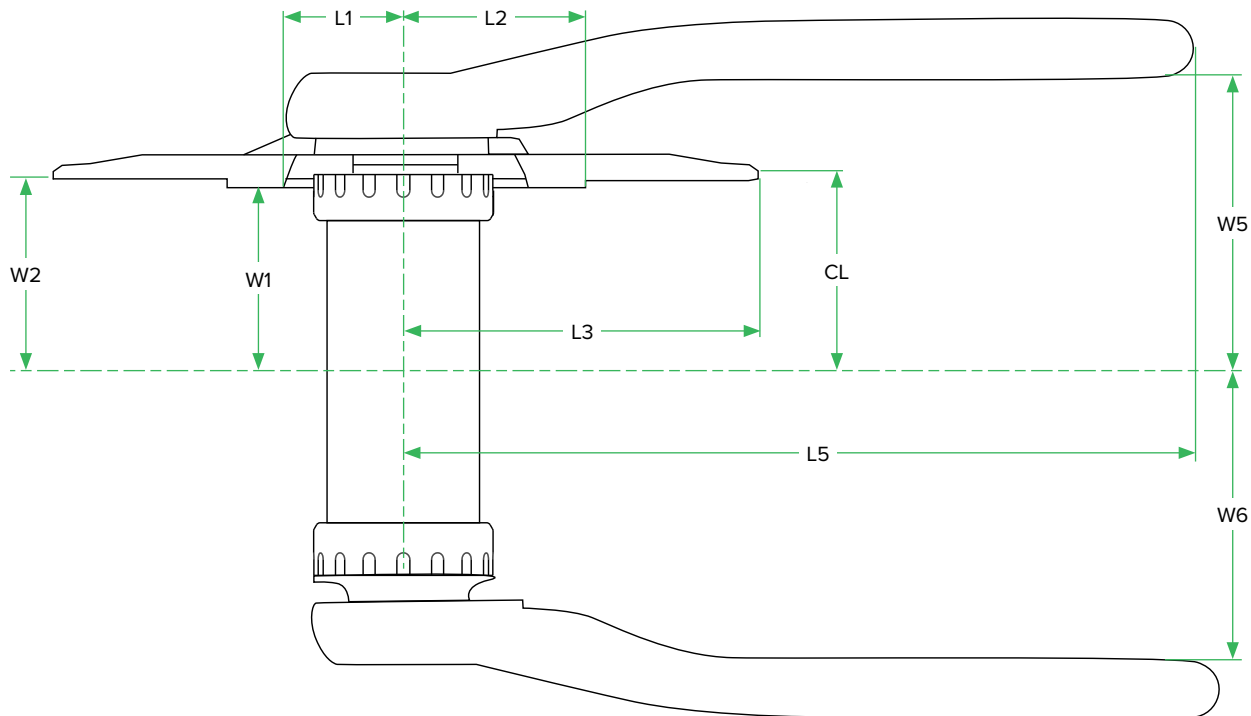
	Chainring	L1	L2	L3	L5	W1	W2	W5	W6	CL
1x11	28	-	31.5	60	192	51.8	50	73.5	73.5	52
	30			64						
	32			68						
Q-factor : 172						Bottom Bracket Type(s): Power Spline 118/73				



# NX - Fatbike

## Crankset Frame Clearance

	Chainring	L1	L2	L3	L5	W1	W2	W5	W6	CL
1x11	30	27	41	64.5	192	67	64.5	89.5	88	66.5
	32			68.5						
Q-factor : 203						Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP				

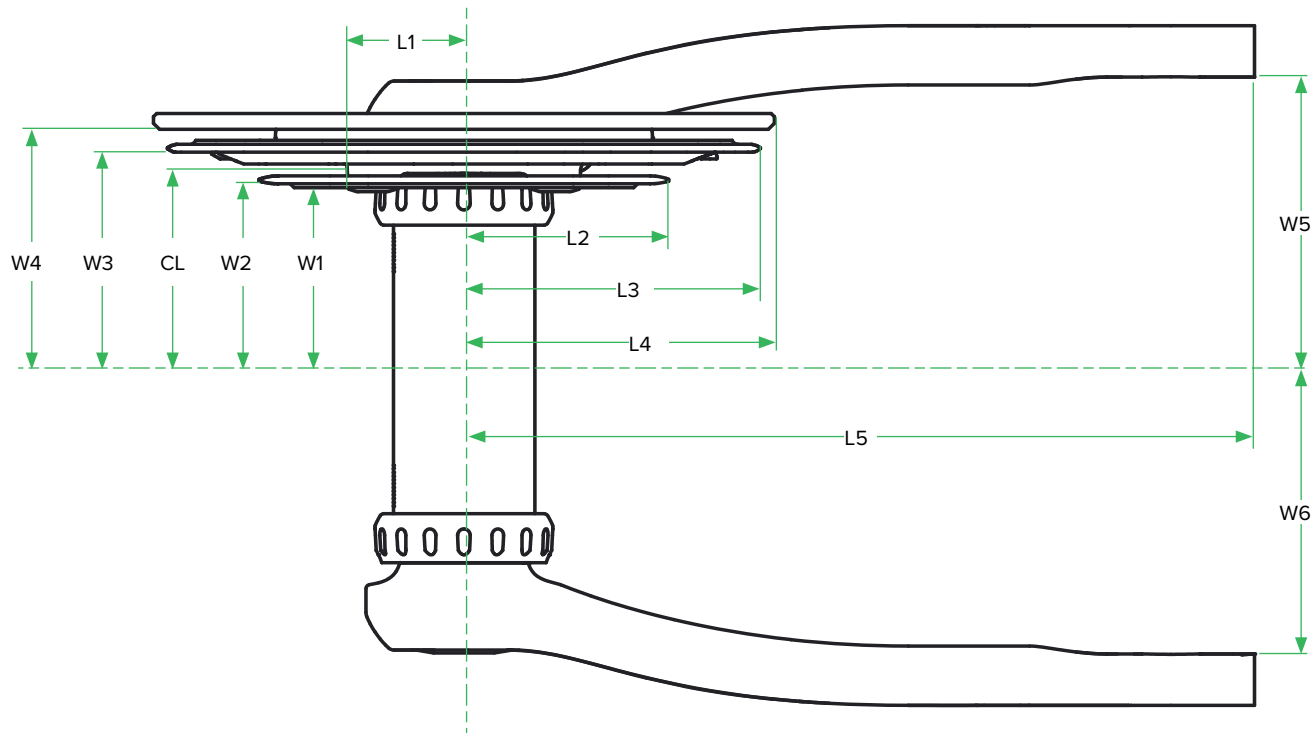


# 2x11 Cranksets

# GX-1400

## Crankset Frame Clearance

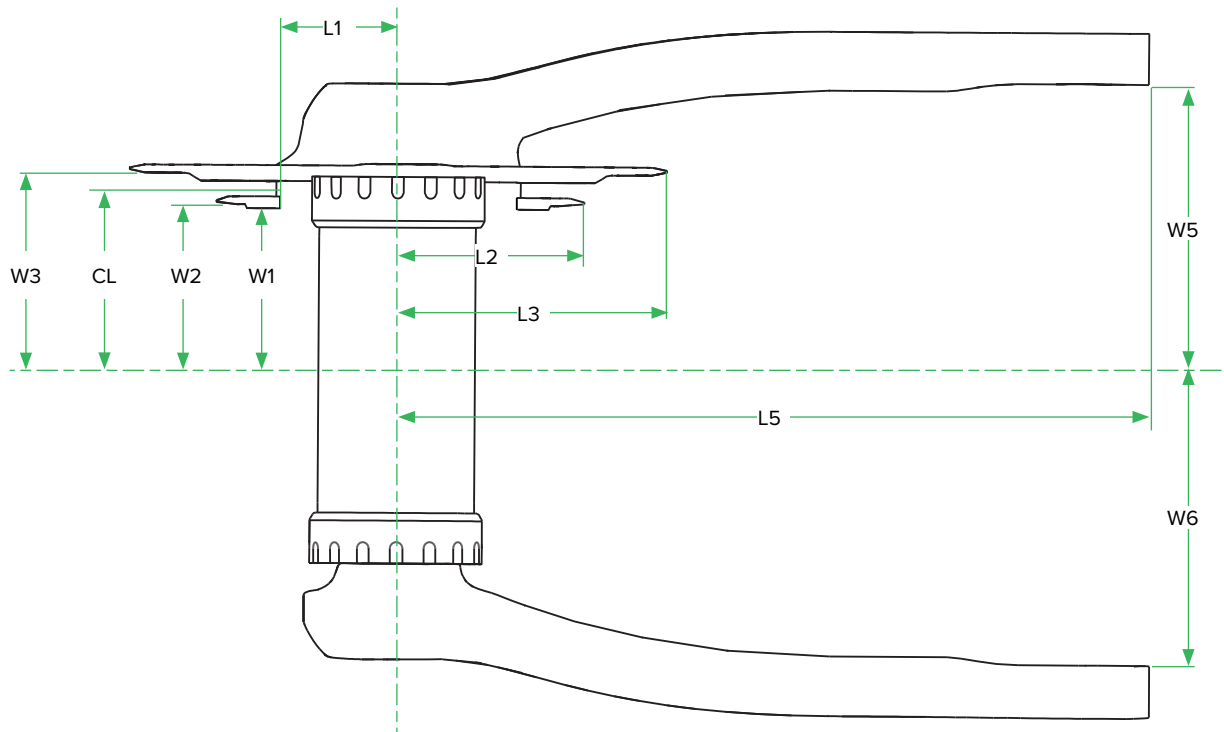
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W4	W5	W6	CL
2x11	36/24	24.5	50.7	74.4	78	192	43	44	52	57.8	72	72	49
	Q-factor : 171						Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP						



# GX-1400 - BOOST 148 Compatible

## Crankset Frame Clearance

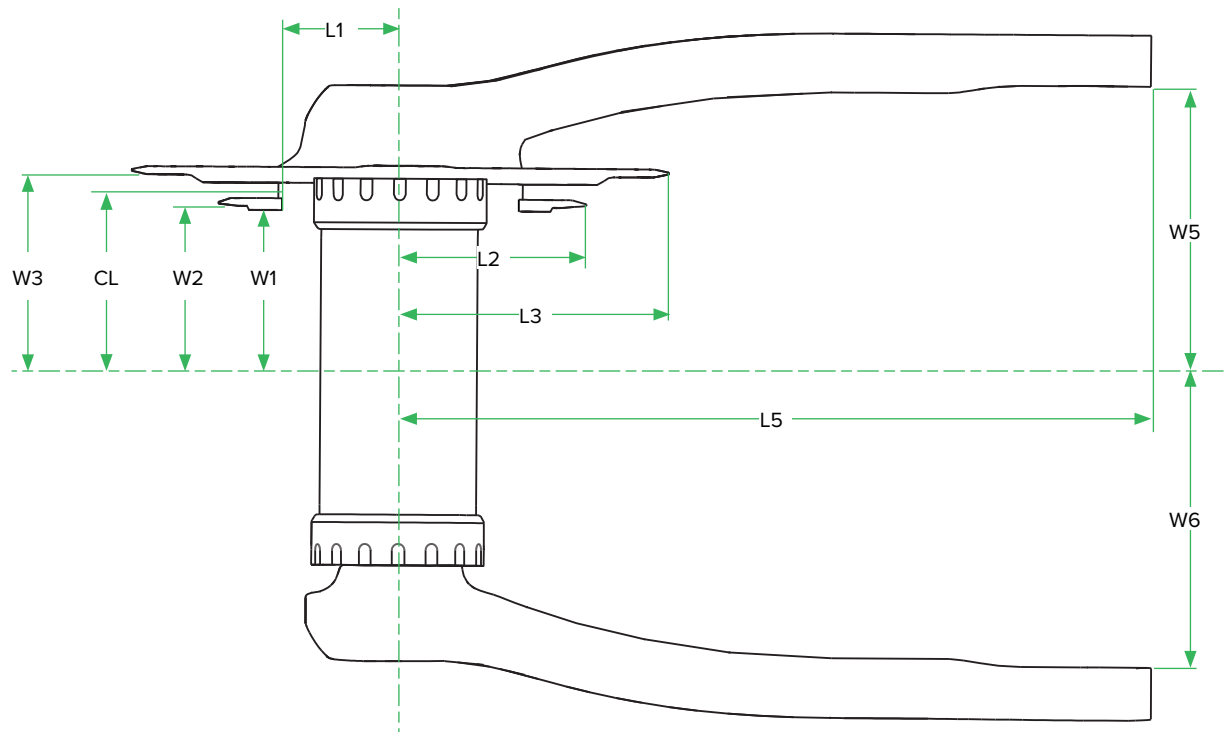
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W5	W6	CL
2x11	36/24	24.5	50.7	74.4	78	192	46	47	55	72	72	52
Q-factor : 169							Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP					



# GX-1400 - Fatbike

## Crankset Frame Clearance

	Chainring	L1	L2	L3	L5	W1	W2	W3	W5	W6	CL
2x11	36/24	24.5	50.7	74.4	192	60.5	61.5	69.5	91.5	88	66.5
	Q-factor : 203.5					Bottom Bracket Type(s): GXP : PFGXP					

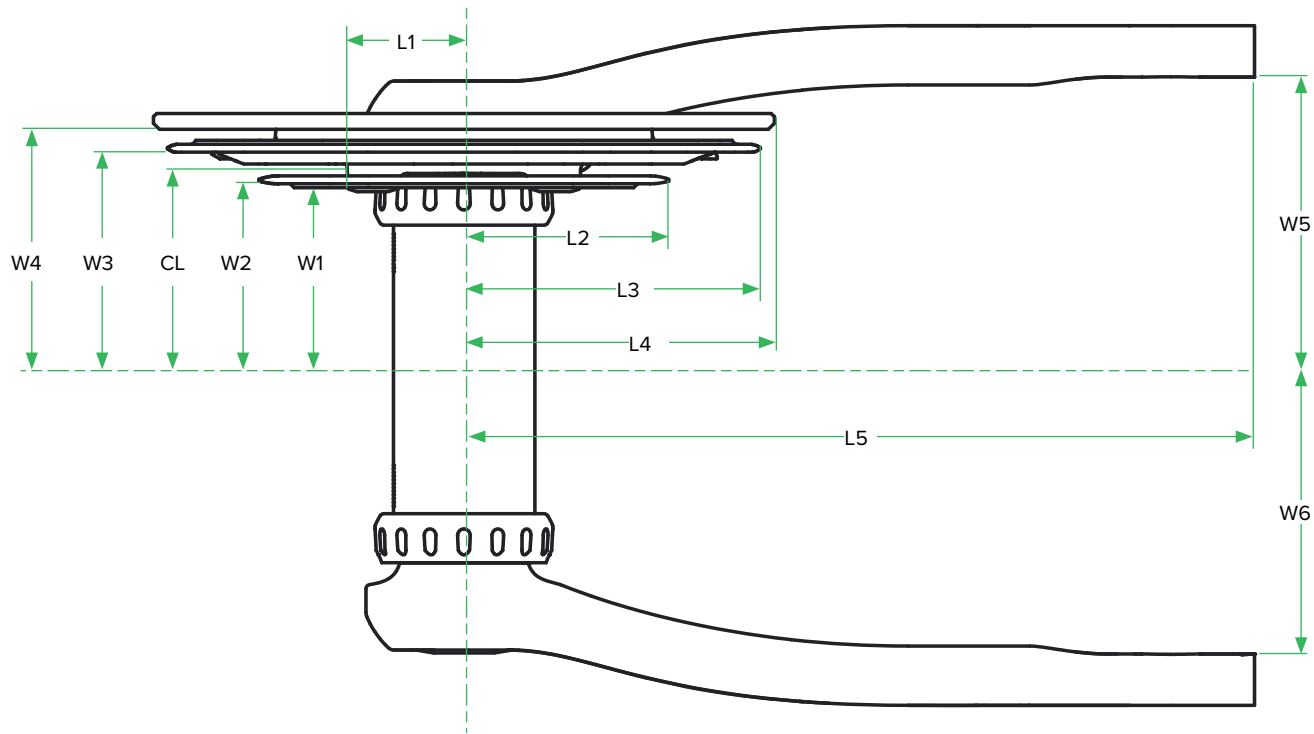




# GX-1200

## Crankset Frame Clearance

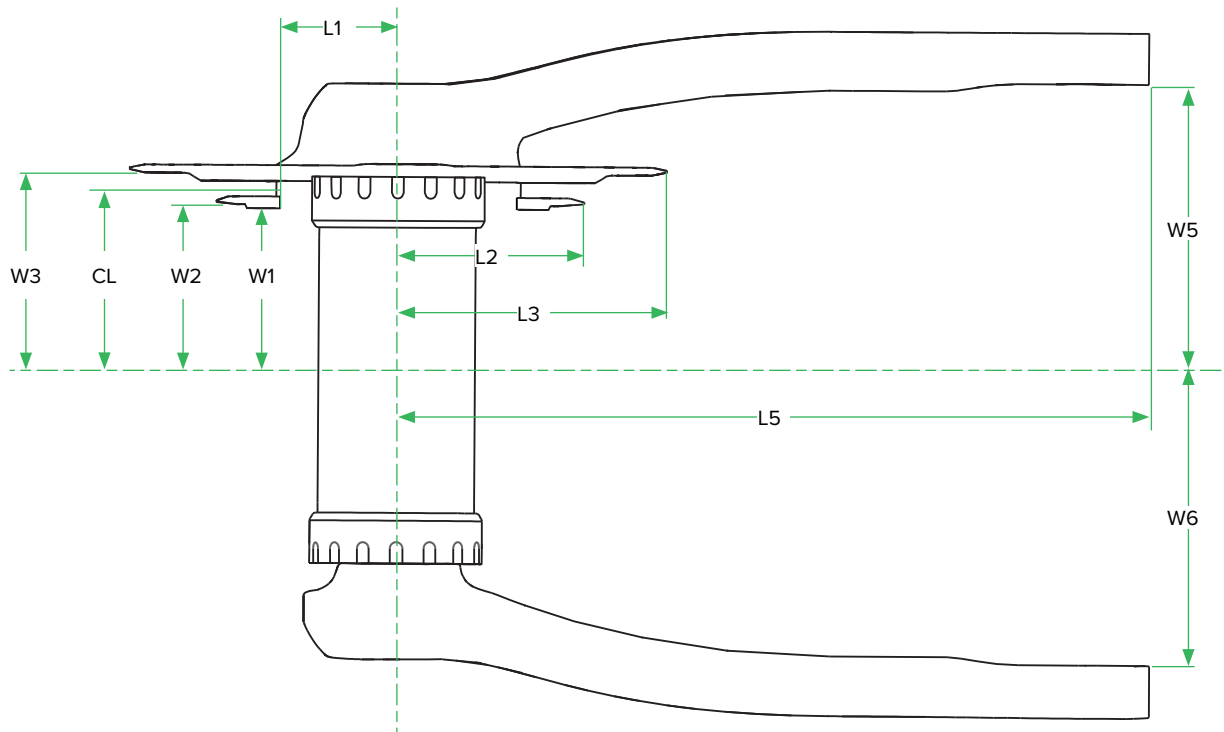
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W4	W5	W6	CL
2x11	36/24	24.5	50.7	74.4	78	192	43	44	52	57.8	72	72	49
	Q-factor : 171						Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP						



# GX-1200 - BOOST 148 Compatible

## Crankset Frame Clearance

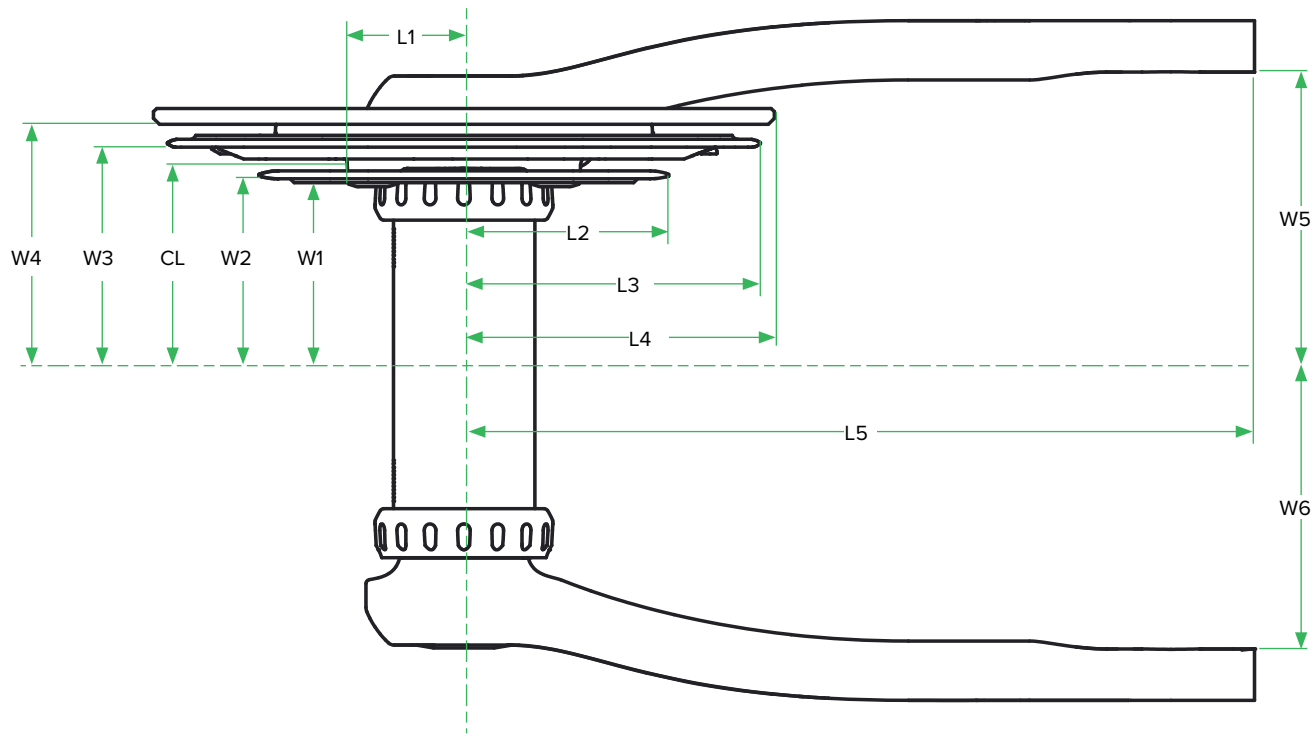
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W5	W6	CL
2x11	36/24	24.5	50.7	74.4	78	192	46	47	55	72	72	52
Q-factor : 169							Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP					



# GX-1000

## Crankset Frame Clearance

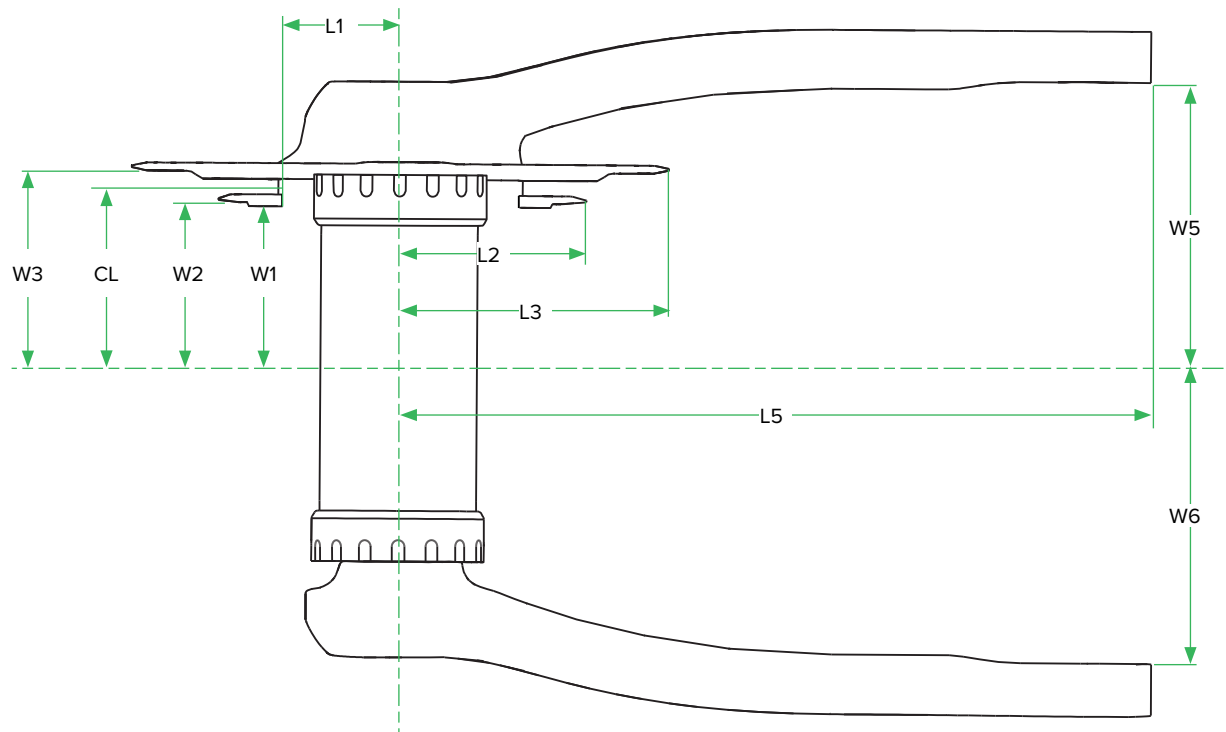
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W4	W5	W6	CL
2x11	36/24	24.5	50.7	74.4	78	192	43	44	52	57.8	72	72	49
	Q-factor : 171						Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP						



# GX-1000 - BOOST 148 Compatible

## Crankset Frame Clearance

	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W5	W6	CL
2x11	36/24	24.5	50.7	74.4	78	192	46	47	55	72	72	52
Q-factor : 169							Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP					

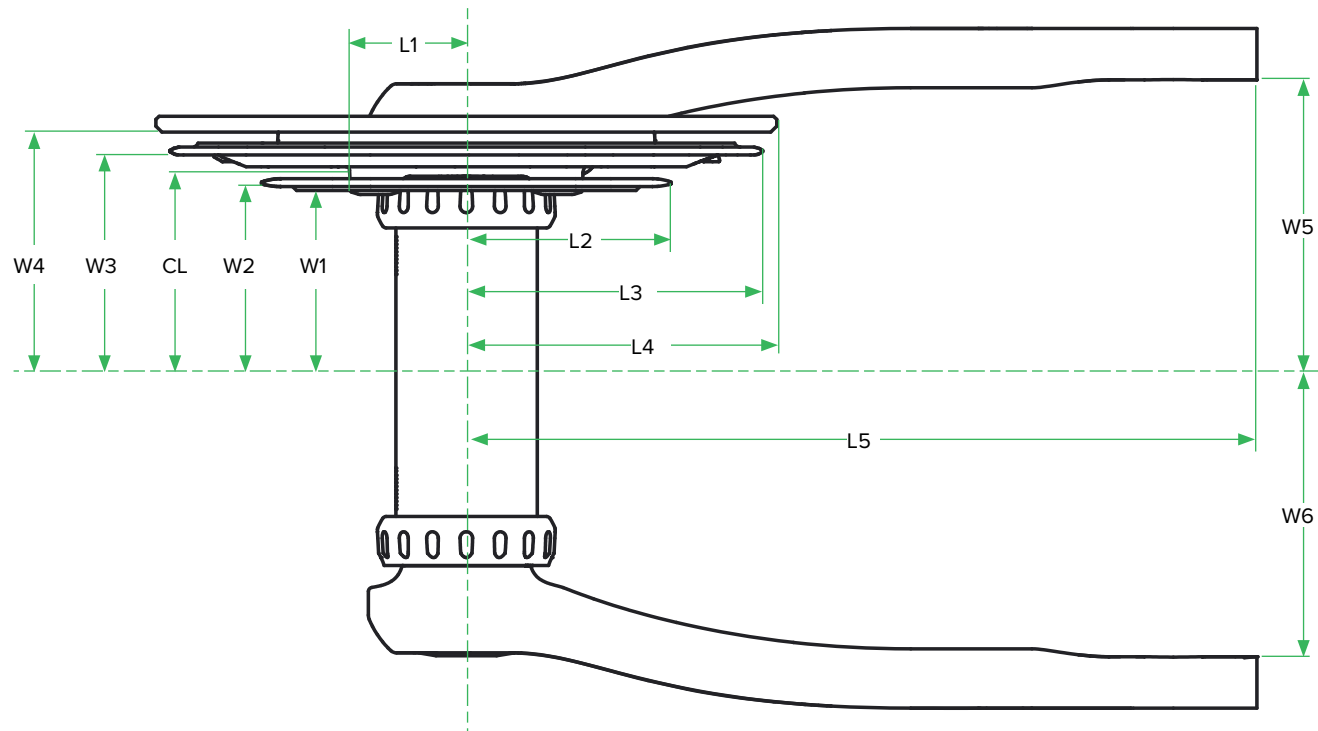


# 2x10 Cranksets

# GX-1200

## Crankset Frame Clearance

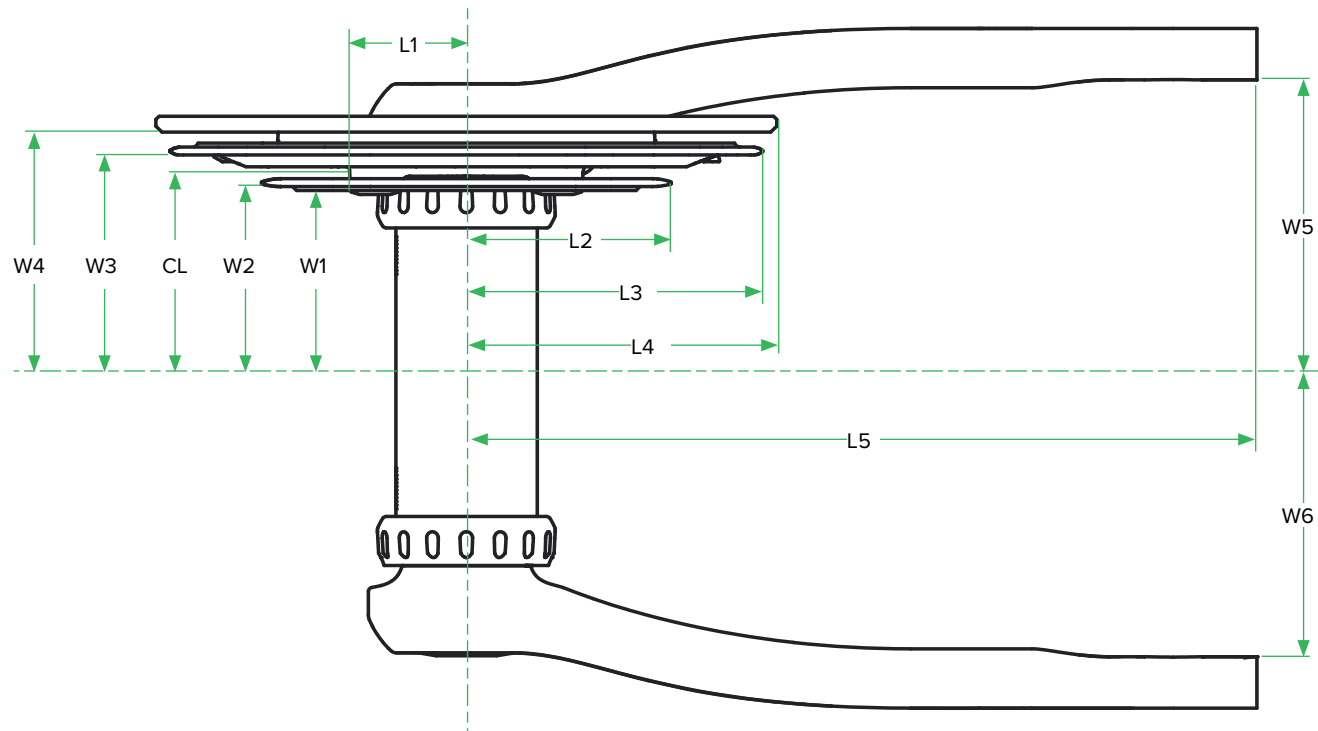
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W4	W5	W6	CL
2x10	34/22	25	47.8	70.6	73	192	43	44	52	57.8	72	70.5	49
	36/22	25	46.7	74.4	78								
	38/24	24.5	50.7	78	82.5								
	39/26	31	55	81	-	192	43.5	44.5	52.5	-	72	70.5	49.5
	42/28	31	60	87	-								
Q-factor : 167.5							Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP						



# GX-1000/X5

## Crankset Frame Clearance

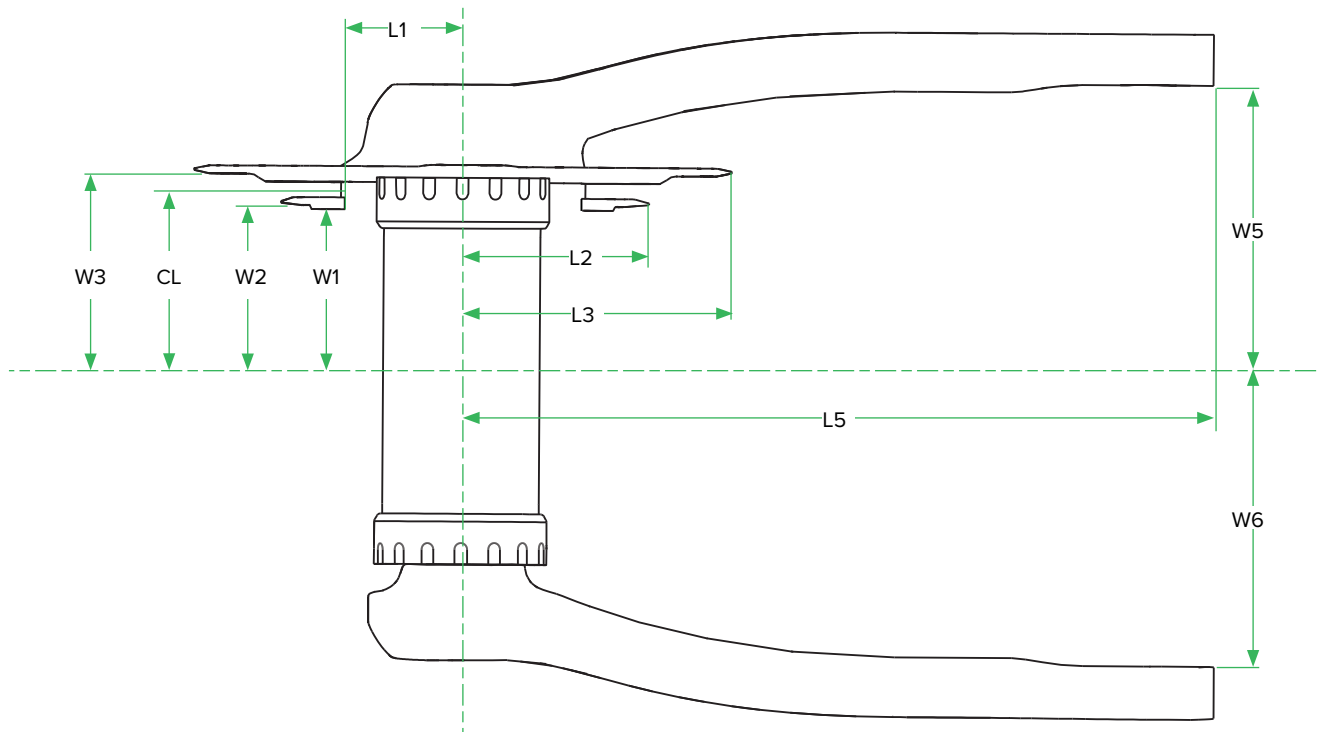
	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W4	W5	W6	CL
2x10	34/22	25	47.8	70.6	73	192	43	44	52	57.8	72	72	49
	36/22	25	46.7	74.4	78								
	38/24	24.5	50.7	78	82.5								
	39/26	31	55	81	-	192	43.5	44.5	52.5	-	72	72	49.5
	42/28	31	60	87	-								
Q-factor : 169							Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP						



# GX-1000 - BOOST 148 Compatible

## Crankset Frame Clearance

	Chainring	L1	L2	L3	L5	W1	W2	W3	W5	W6	CL
2x10	34/22	25	47.8	70.6	192	46	47	55	72	72	52
	36/22	25	46.7	74.4							
	38/24	24.5	50.7	78							
Q-factor : 169						Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP					

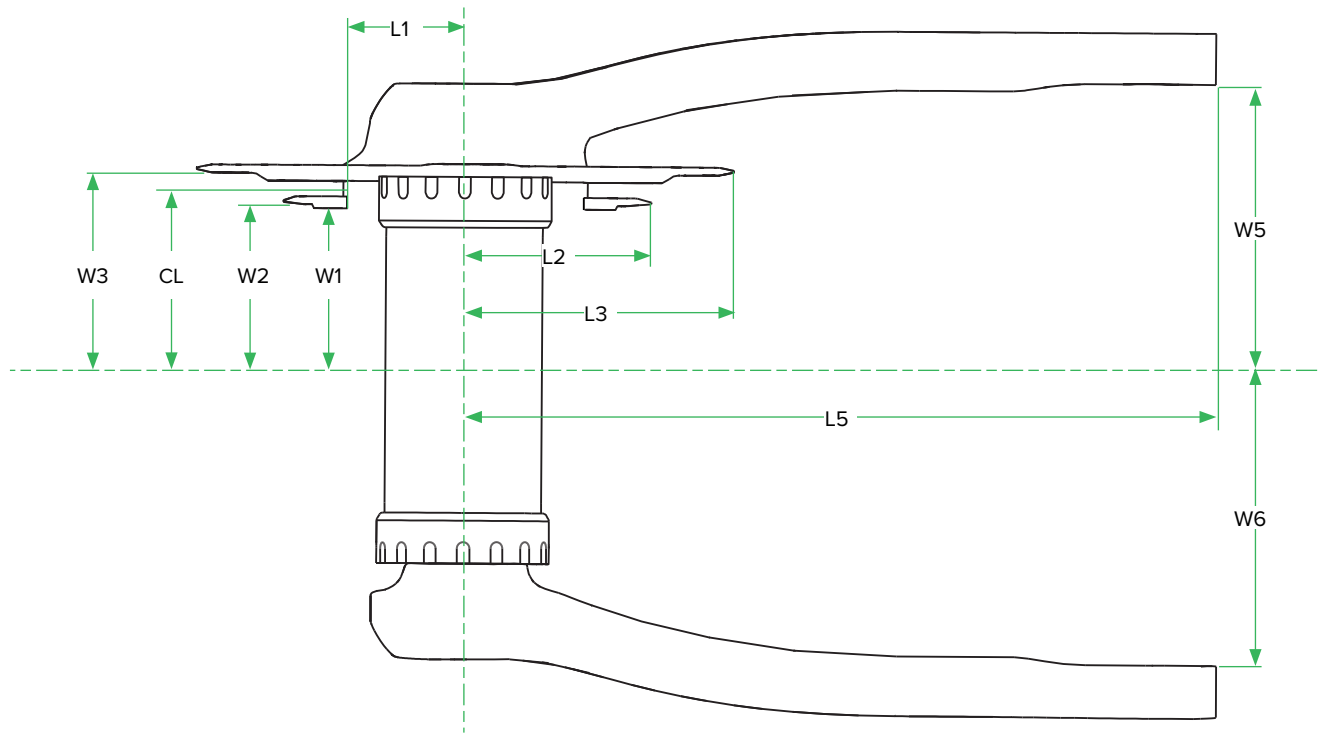




# GX-1000/X5 - Fatbike

## Crankset Frame Clearance

	Chainring	L1	L2	L3	L5	W1	W2	W3	W5	W6	CL
2x10	34/22	25	47.8	70.6	192	60.5	61.5	69.5	89.5	88	66.5
	36/22	25	46.7	74.4							
Q-factor : 202.5						Bottom Bracket Type(s): GXP 100 : PressFit 121					

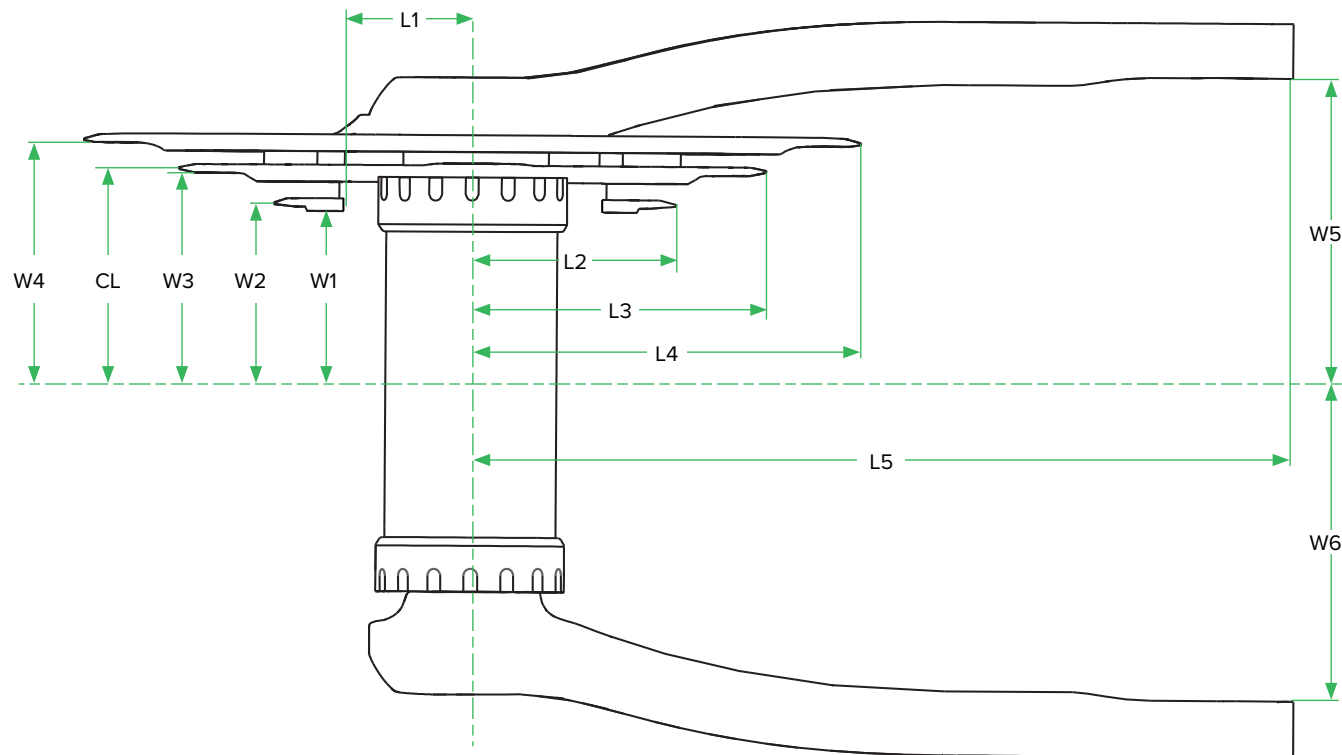


# 3x10 Cranksets

# X5

## Crankset Frame Clearance

	Chainring	L1	L2	L3	L4	L5	W1	W2	W3	W4	W5	W6	CL
2x10	44/34/22	25	47	69	91	191 (175 mm crank arm)	41	42	50	57	72	72	51
	Q-factor : 169						Bottom Bracket Type(s): GXP : BB30 : PF30 : PFGXP						

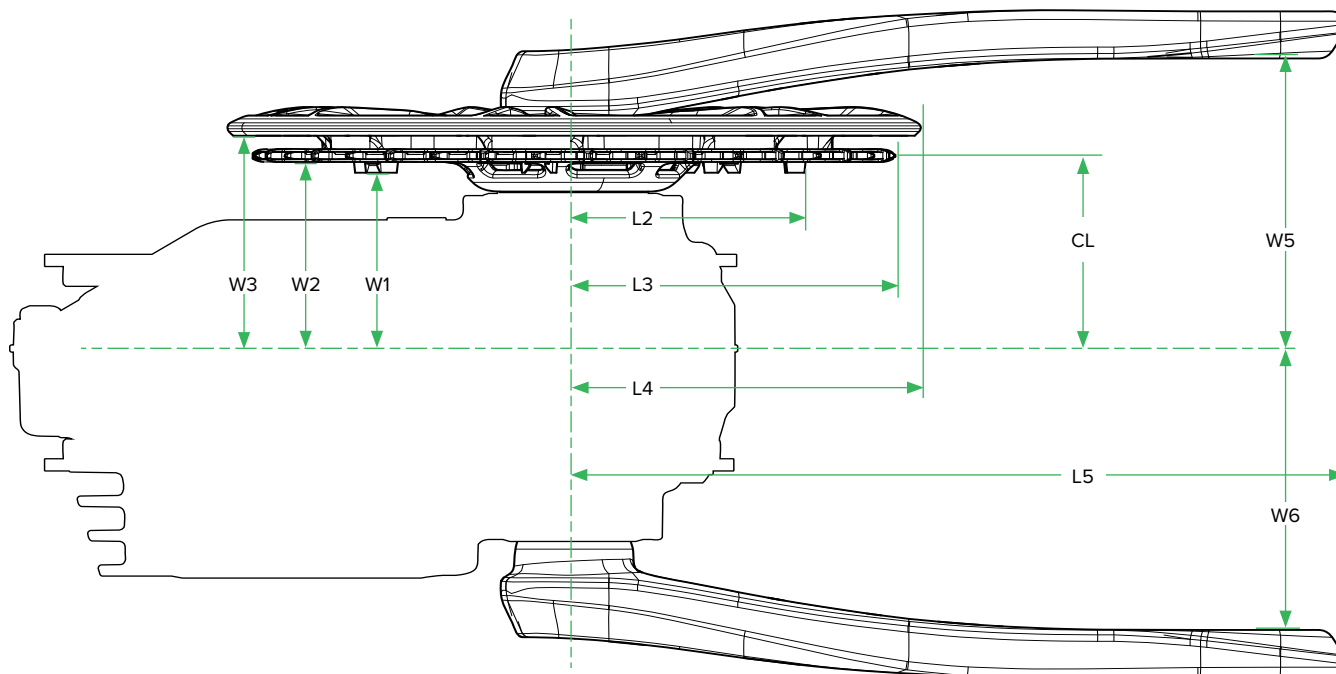


# E-MTB Cranksets

# S800E/X1-1000E/EX1 - BOSCH - Compatible

## Crankset Frame Clearance

	Chainring	L2	L3	L4	L5	W1	W2	W3	W5	W6	CL
BOSCH GEN4	34	-	72	-	191.36	-	50.25	-	78.9	78.9	52
	36	-	76	-		-					
	36T guard	58		86		47		57.5			
	38	-	80	-		-	-				
	38T guard	58		86		47	57.5				
	38	-		-		-	-				
	38T guard	58		86		45	48.25	55.5			49+
Based on crankarm length 175 mm				Q-factor: 183 (including pedal washers)				Bottom Bracket Type: ISIS integrated in BOSCH mid-ship motor			



# Bottom Brackets

# Bottom Bracket Shell Specifications

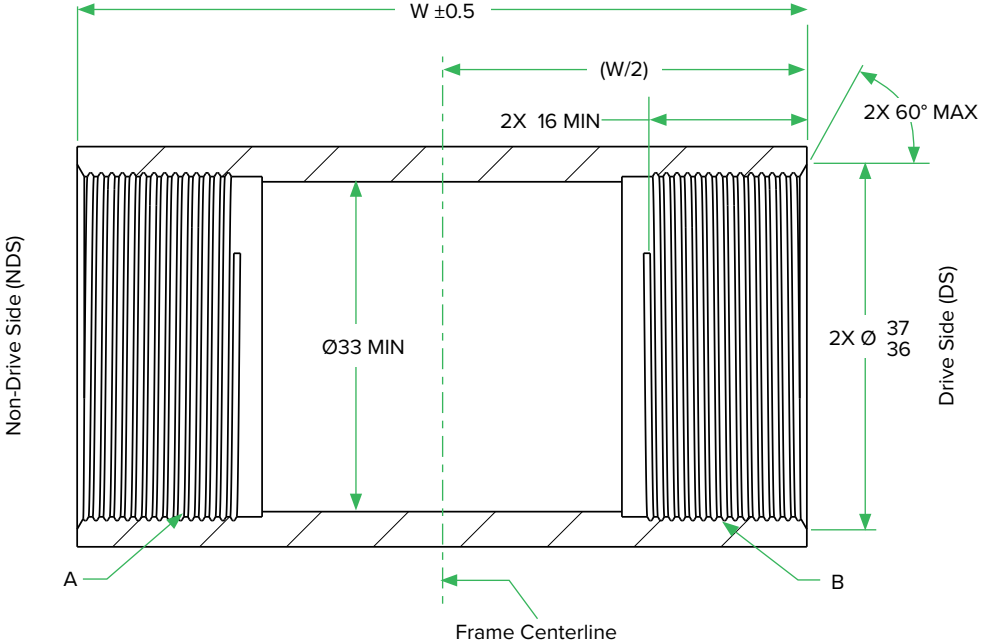
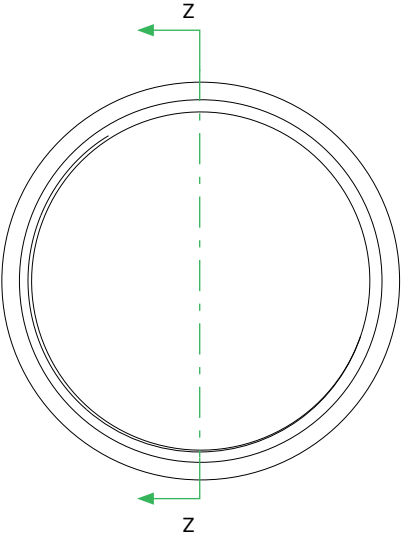
# BSA 68/73/83/100

## Bottom Bracket Shell Specifications

	W**	A*	B*
BSA 68	68	BC 1.37" x 24 TPI R.H.	BC 1.37" x 24 TPI L.H.
BSA 73	73		
BSA 83	83		
BSA 100	100		

\*Reference JIS B 0225

\*\*2.5 mm spacers may be used between the frame-shell and the adapter cups to adjust BB spacing.



Section Z-Z



# PressFit 30 73/83

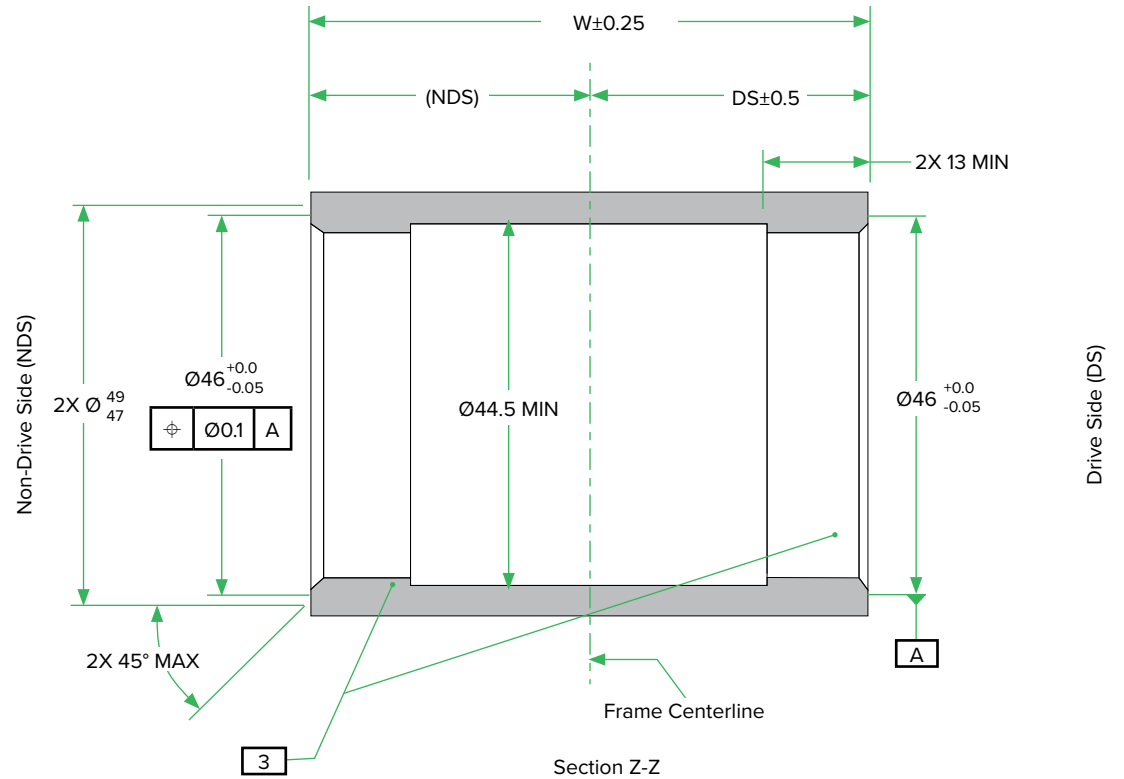
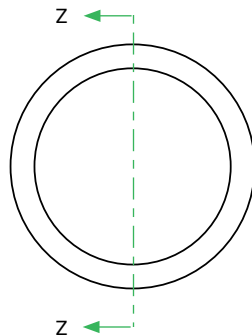
## MTB Bottom Bracket Frame Shell Specification

SRAM PressFit 30 (PF30) bottom brackets have been designed and tested to work within the bounds of the dimensions and tolerances in the shell specifications. Materials, manufacturing methods, and frame shell designs can potentially influence the performance of the bottom bracket, even when the shell is manufactured to these specifications. In these instances, it is recommended that bicycle manufacturers confirm the bottom bracket system performance when implemented in their design.

Things that should be considered when evaluating the frame and bottom bracket interaction include, but are not limited to:

- Loosening of the adapter cups from the bottom bracket shell (frame material choice can greatly affect friction coefficient).
- Binding of bearings within the bottom bracket.

For more information regarding PF30 bottom bracket technical information, contact your SRAM representative.

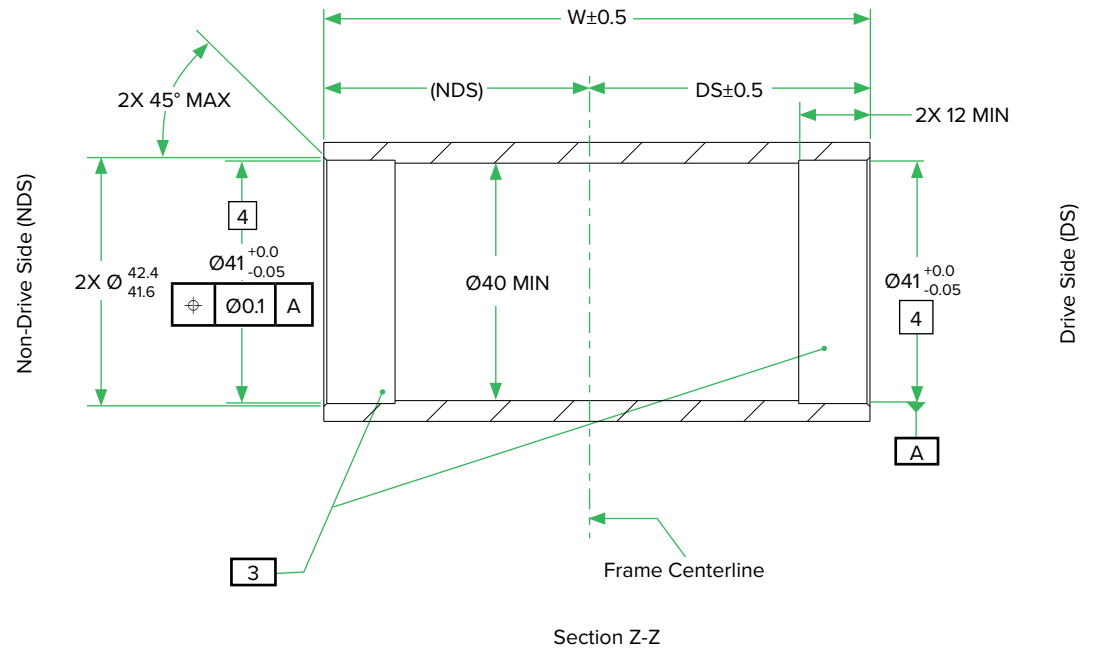
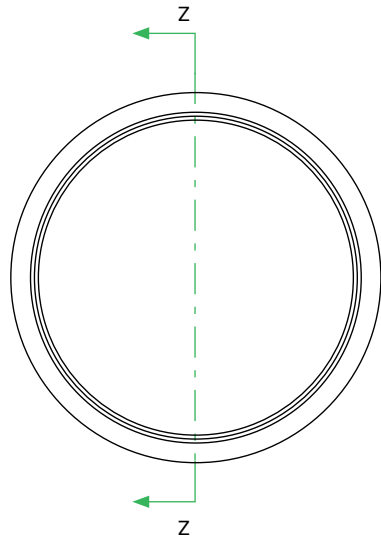


	Dim W	Dim DS	Dim NDS
PF30 73	73	36.5	36.5
PF30 83	83	41.5	41.5

- 1 Dimensions apply after finishing.
- 2 Only dimensions essential to bottom bracket PressFit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.
- 3 PressFit surfaces should be unpainted.

# PressFit

## Bottom Bracket Shell Specification



	Dim W	Dim NDS	Dim DS
PressFit 89.5	89.5	44.75	44.75
PressFit 92 ASYM	92	44.75	47.25
PressFit 104.5 DH	104.5	52.25	52.25
PressFit 107 DH ASYM	107	52.25	54.75
PressFit 121 Fatbike	121	60.5	60.5

- 1 Dimensions apply after finishing.
- 2 Only dimensions essential to bottom bracket PressFit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.
- 3 PressFit surfaces should be unpainted.
- 4 Tolerance applies to depth of 12 mm inboard from the outer face of each side.

# BB30

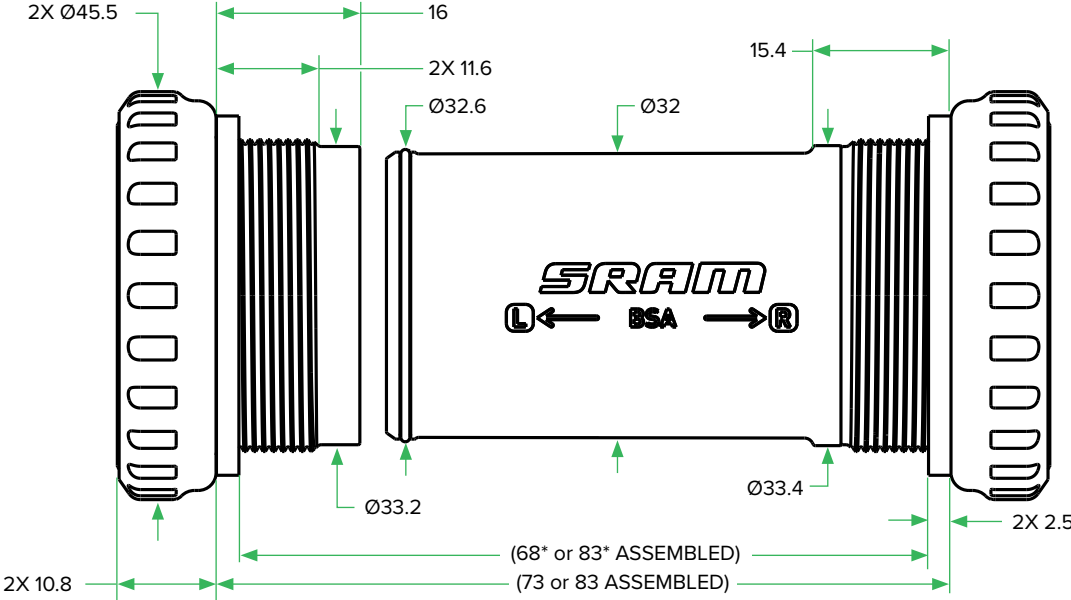
## Information

Information for the BB30 drawing and legal agreement can be found on [www.BB30standard.com](http://www.BB30standard.com). Use of the information contained in the drawing is forbidden without reviewing and agreeing to the legal terms and conditions found on [www.BB30standard.com](http://www.BB30standard.com). By using the information contained in the drawing you are certifying that you have agreed to the terms and conditions found within that legal agreement.

# DUB Bottom Brackets

# DUB BSA 68/73/83

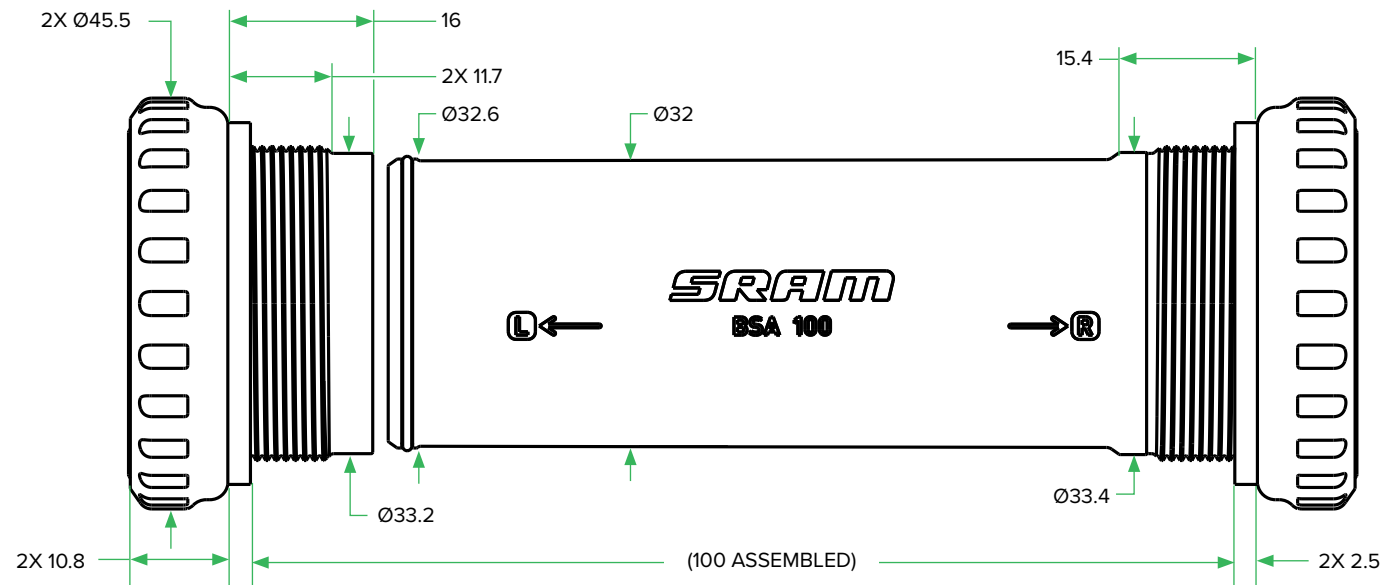
## Bottom Bracket Specification



- 1 Dimensions apply after finishing.
- 2 Only dimensions essential to bottom bracket fit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.
- \* If a 68 mm configuration is used, 2 x 2.5 mm spacers must be installed.

# DUB BSA 100

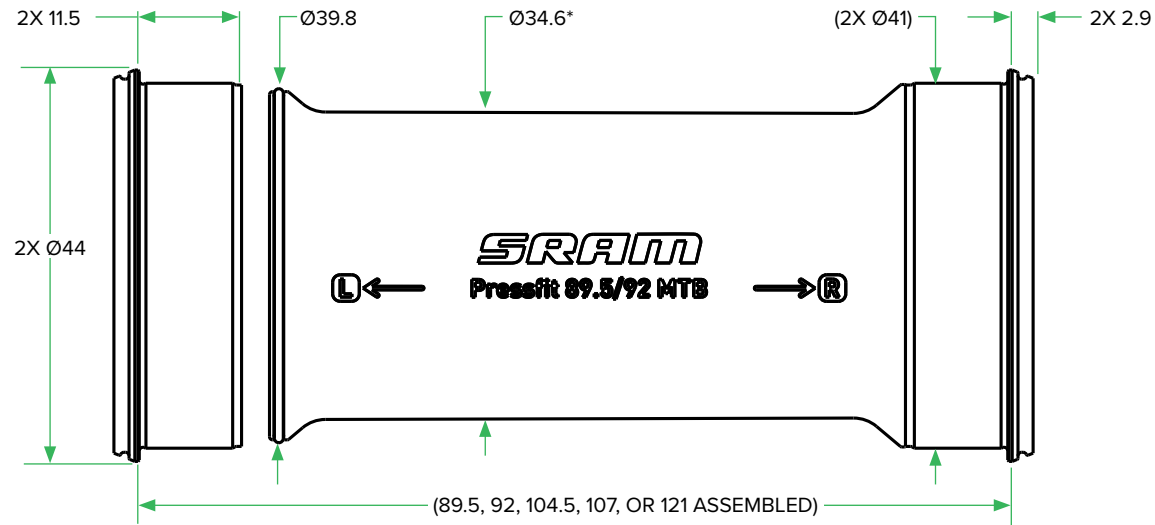
## Bottom Bracket Specification



- 1 Dimensions apply after finishing.
- 2 Only dimensions essential to bottom bracket fit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.

# DUB PressFit MTB

## Bottom Bracket Specification



1 Dimensions apply after finishing.

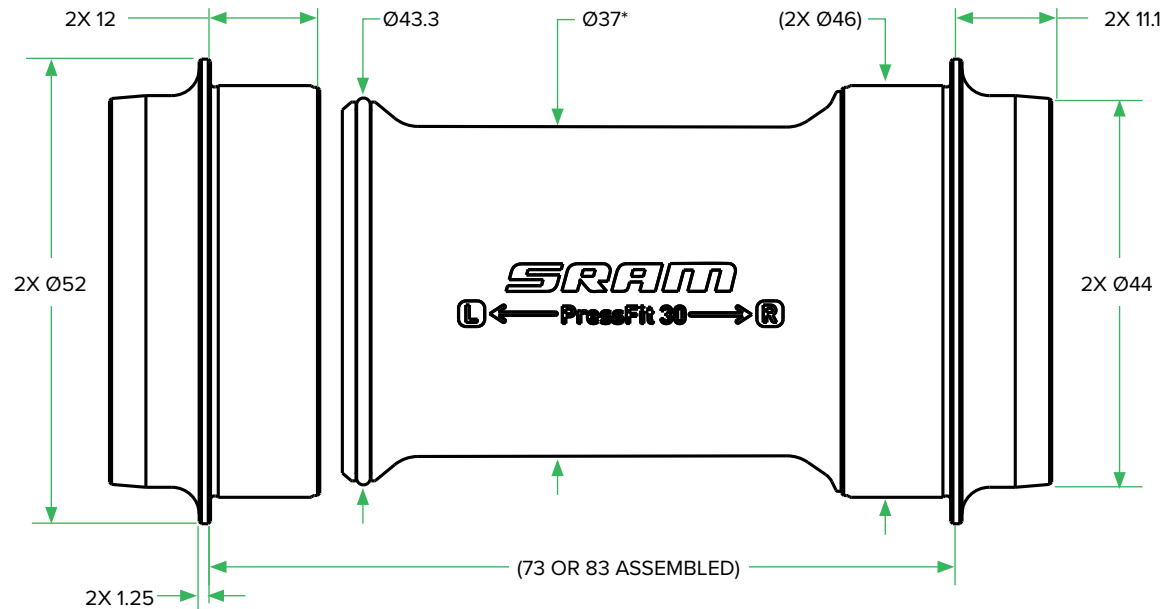
2\* Only dimensions essential to bottom bracket fit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.

**Consider cable and hose clearances through the bottom bracket area of the frame.**

3 Ensure that the bottom bracket cups are completely pressed into the frame shell. There should be no gap between the flange and the bottom bracket shell.

# DUB PressFit 30

## Bottom Bracket Specification

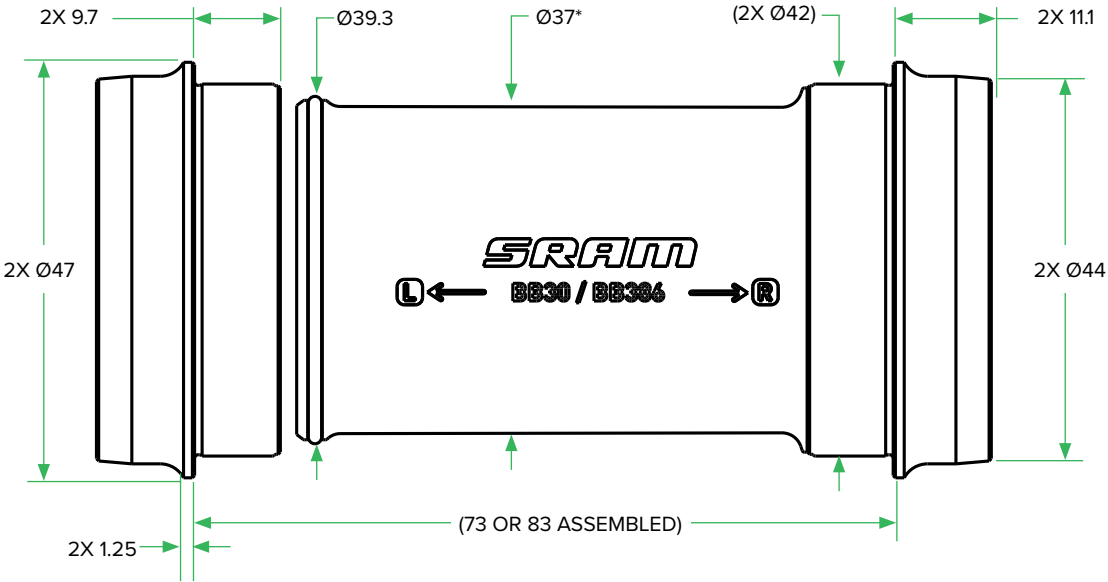


- 1 Dimensions apply after finishing.
- 2\* Only dimensions essential to bottom bracket fit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.  
**Consider cable and hose clearances through the bottom bracket area of the frame.**
- 3 Ensure that the bottom bracket cups are completely pressed into the frame shell. There should be no gap between the flange and the bottom bracket shell.



# DUB BB30

## Bottom Bracket Specification

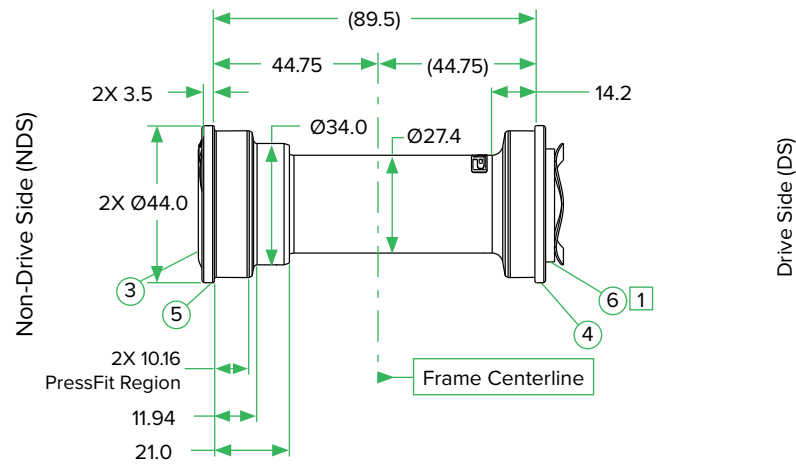


- 1 Dimensions apply after finishing.
- 2\* Only dimensions essential to bottom bracket fit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.  
**Consider cable and hose clearances through the bottom bracket area of the frame.**
- 3 Ensure that the bottom bracket cups are completely pressed into the frame shell. There should be no gap between the flange and the bottom bracket shell.

# PressFit GXP 89.5/92

## Bottom Bracket Specification

MTB Symmetric 89.5 Bottom Bracket

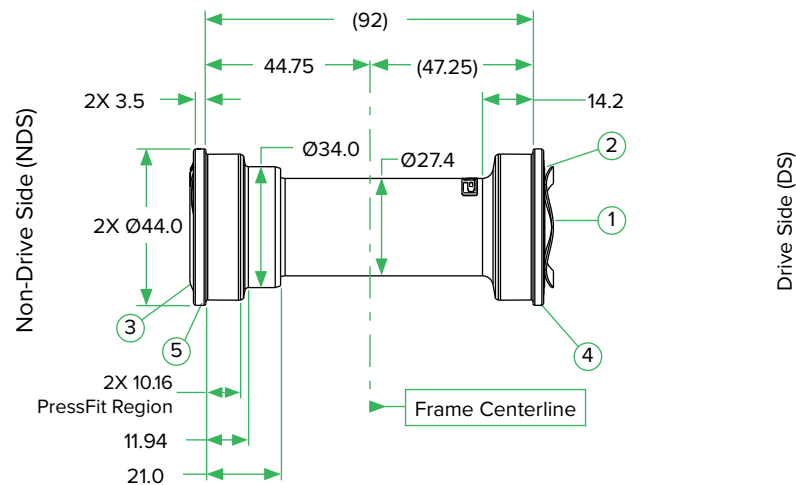


PressFit GXP MTB BB-Key Dimensions

ITEM NO.	DESCRIPTION
1	WAVE WASHER
2	DS SHIELD
3	NDS SHIELD
4	DS CUP
5	NDS CUP
6	DS SHIM WASHER 2.5 MM

1 DS shim washer to be used only on MTB symmetric shell.

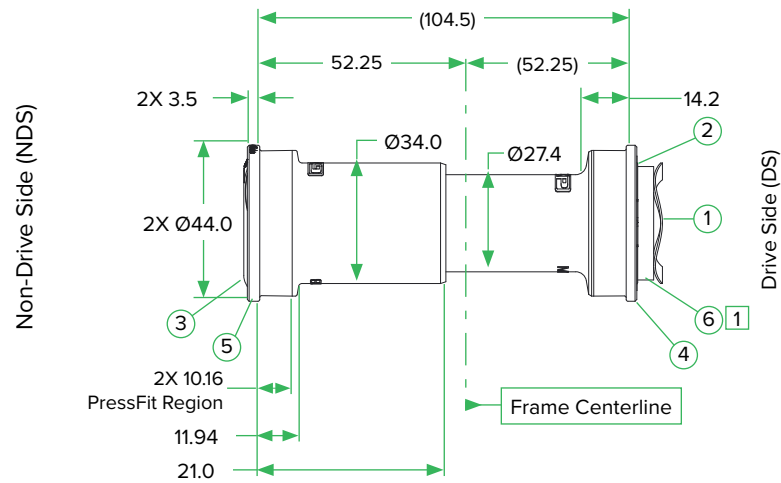
MTB Asymmetric 92 Bottom Bracket



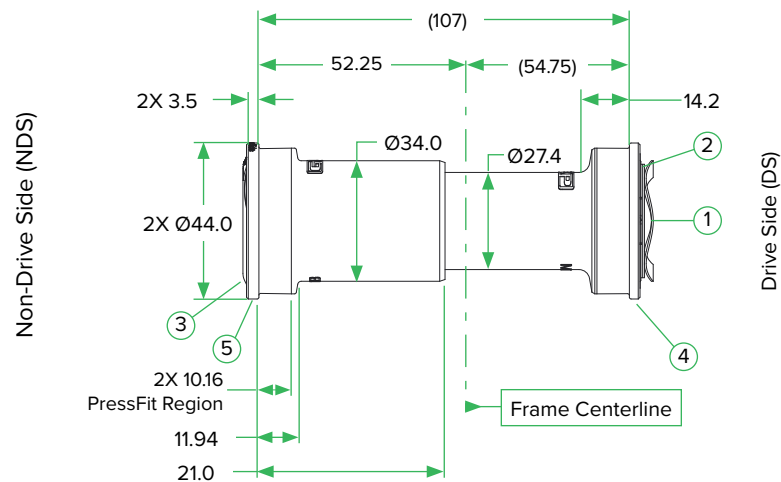
# PressFit GXP 104.5 DH/107 DH

## Bottom Bracket Specification

MTB Symmetric 104.5 DH Bottom Bracket



MTB Asymmetric 107 DH Bottom Bracket



PressFit GXP MTB BB-Key Dimensions

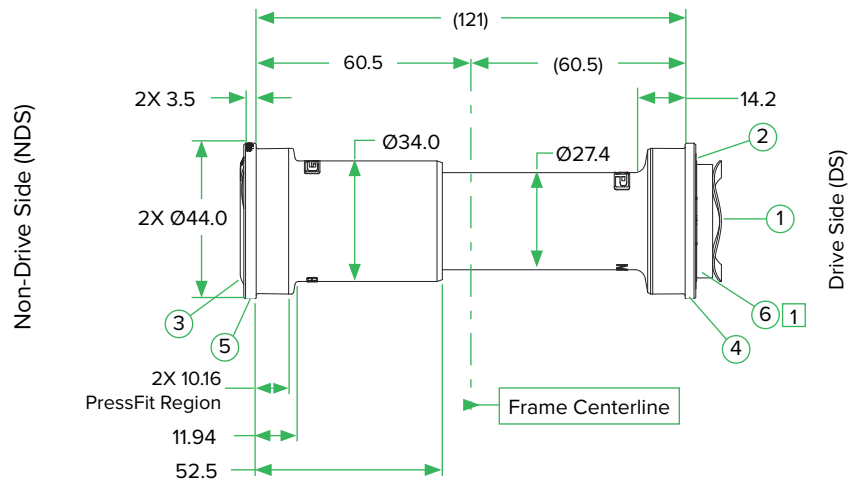
ITEM NO.	DESCRIPTION
1	WAVE WASHER
2	DS SHIELD
3	NDS SHIELD
4	DS CUP
5	NDS CUP
6	DS SHIM WASHER 2.5 MM

**1** DS shim washer to be used only on MTB symmetric shell.

# PressFit GXP 121 Fatbike

## Bottom Bracket Specification

MTB Symmetric 121 Fatbike Bottom Bracket



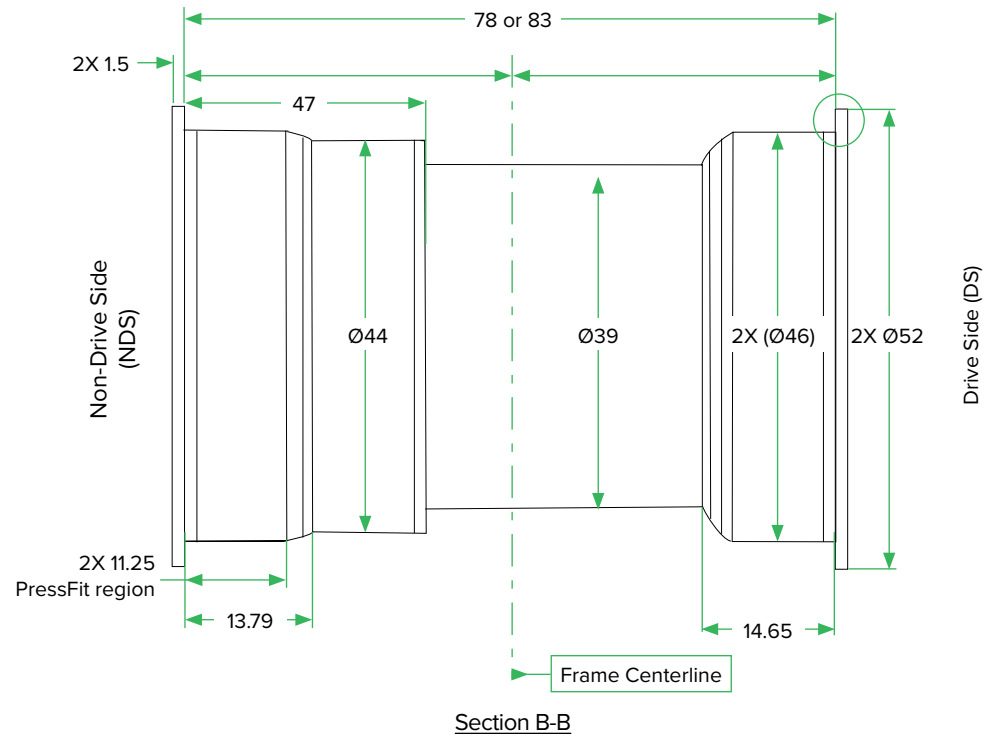
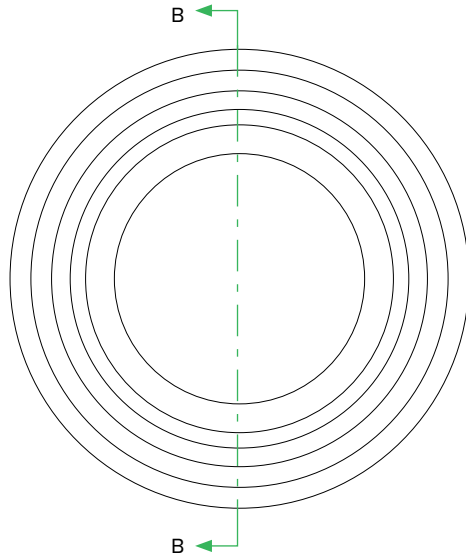
PressFit GXP MTB BB-Key Dimensions

ITEM NO.	DESCRIPTION
1	WAVE WASHER
2	DS SHIELD
3	NDS SHIELD
4	DS CUP
5	NDS CUP
6	DS SHIM WASHER 4.5 MM

1 DS shim washer to be used only on MTB symmetric shell.

# PressFit 30

## Bottom Bracket Specification

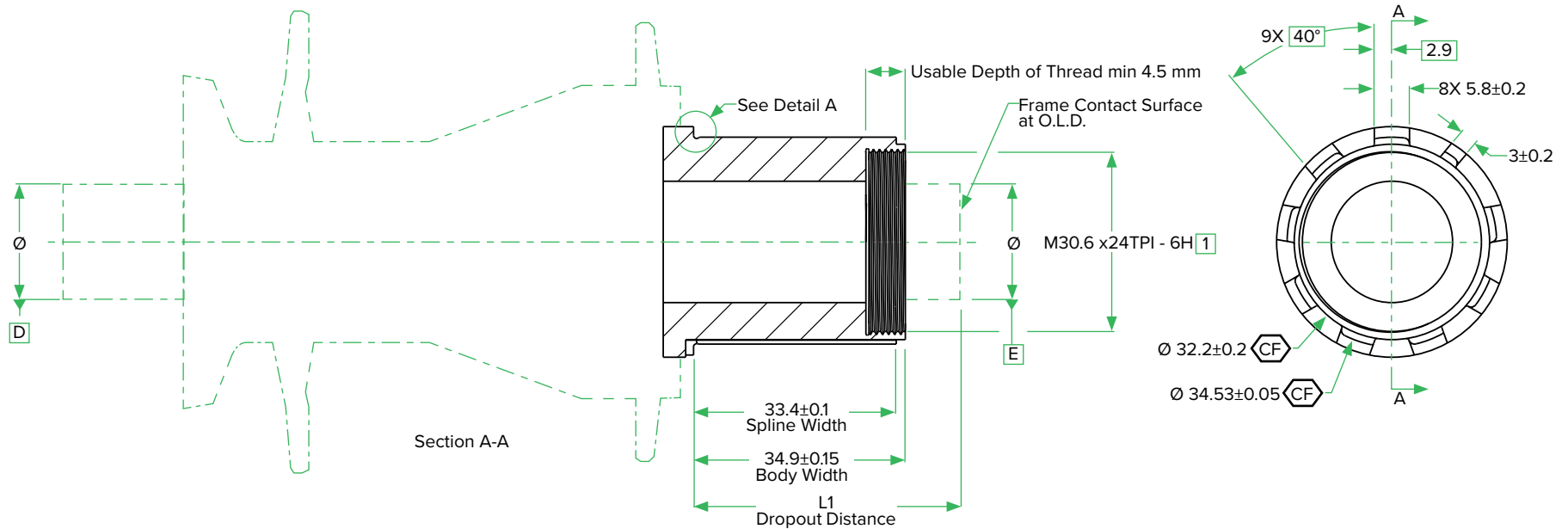


- 1 Dimensions apply after finishing.
- 2\* Only dimensions essential to bottom bracket fit and function are shown. All other details are left to the discretion of the frame or component designer. Dimensions shown do not take the place of proper frame, bottom bracket shell, or crankset design.  
**Consider cable and hose clearances through the bottom bracket area of the frame.**
- 3 Ensure that the bottom bracket cups are completely pressed into the frame shell. There should be no gap between the flange and the bottom bracket shell.

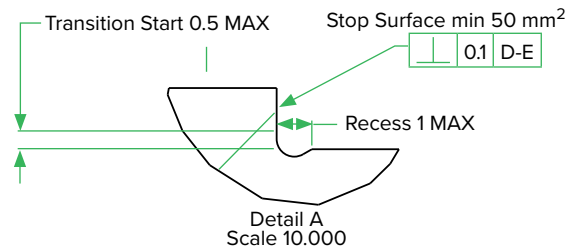
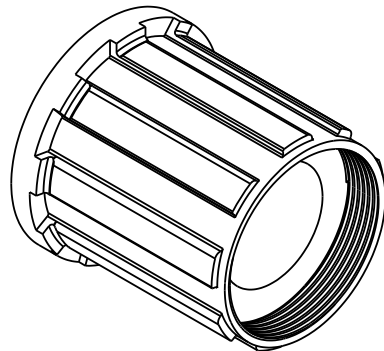
# Wheels & Hubs

# Splined MTB Driver Body Specifications

(for Compatibility with SRAM non-XD Cassettes)



Hub O.L.D.	L1 +0.6 / -0.3
130	40.6
135	40.6
142	44.1
148	44.1
150	40.6
157	44.1

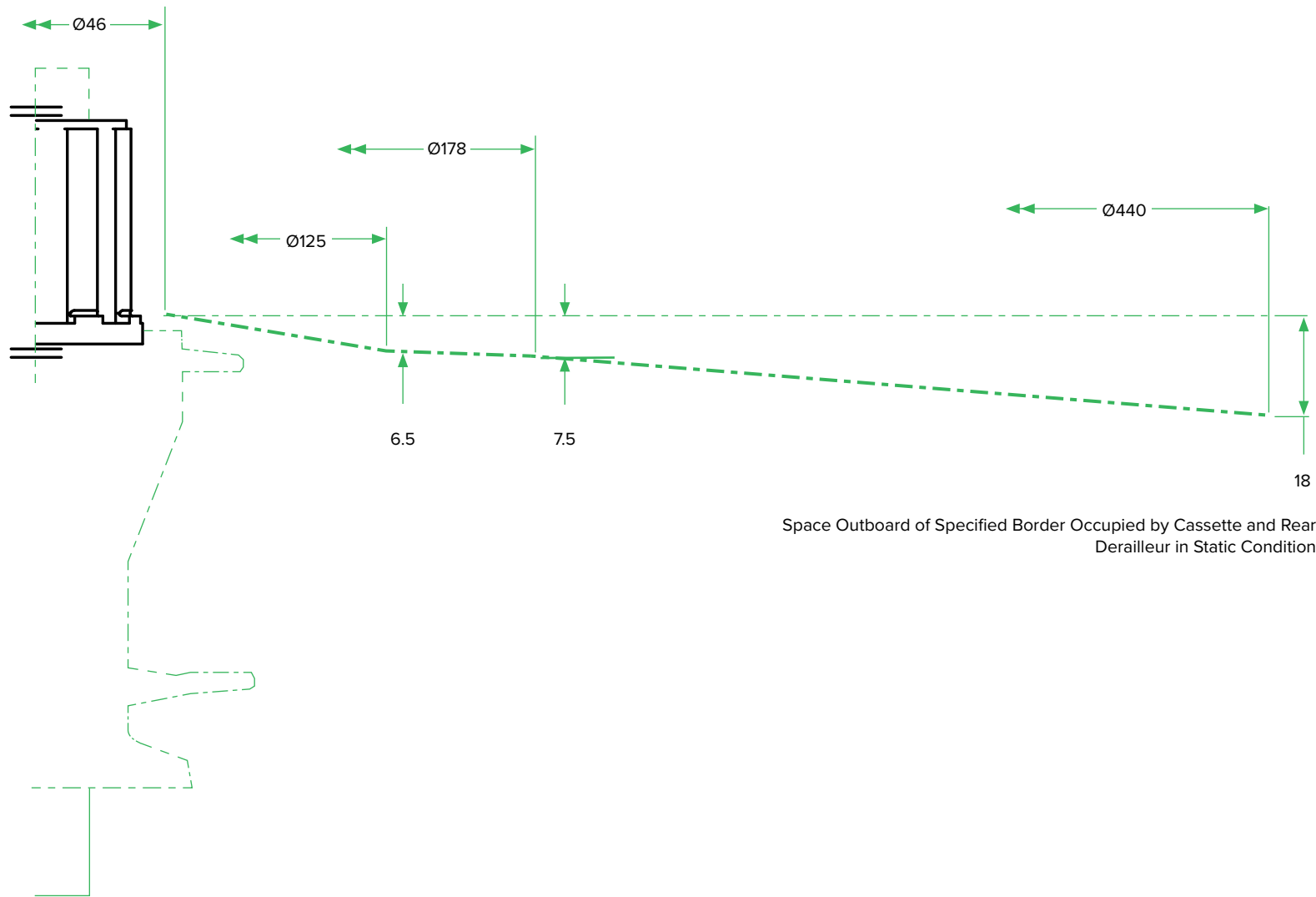


Notes:

- 1 Thread Per ISO-965
2. All Dimensions Valid for Complete Width of Driver Body.

# Splined MTB Driver Body Specifications

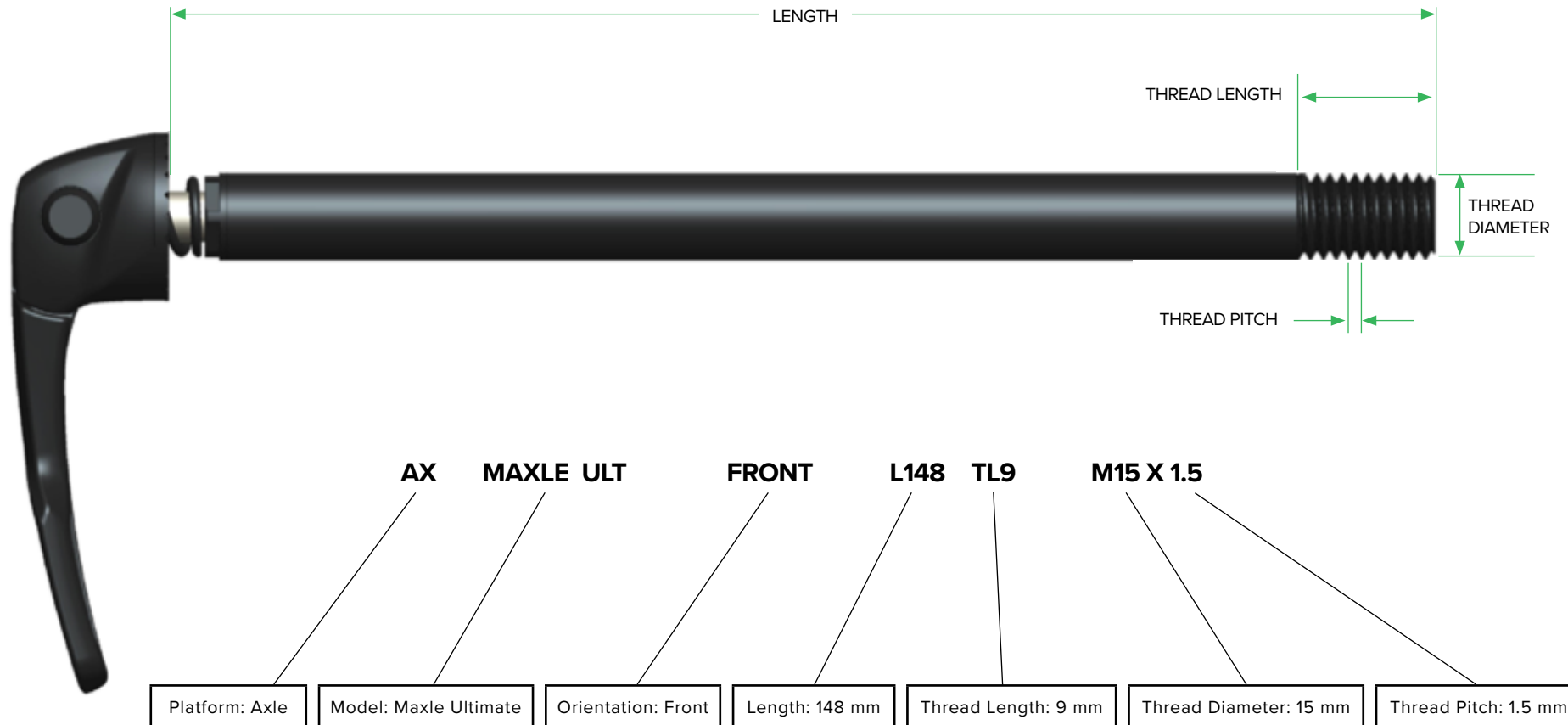
(for Compatibility with SRAM non-XD Cassettes)



Space Outboard of Specified Border Occupied by Cassette and Rear Derailleur in Static Condition



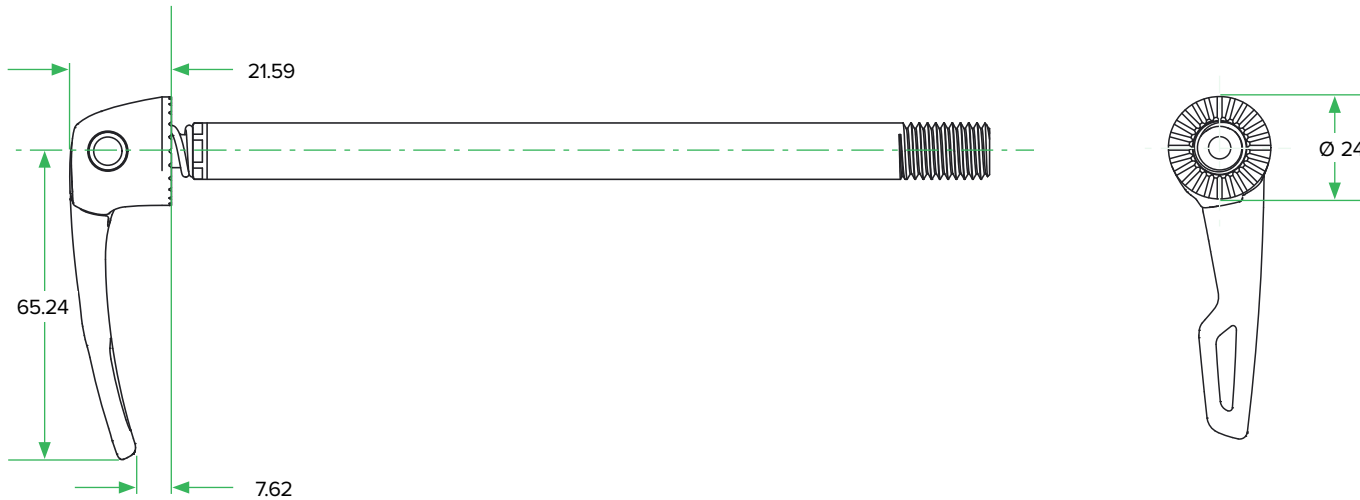
# Maxle Description Decoder



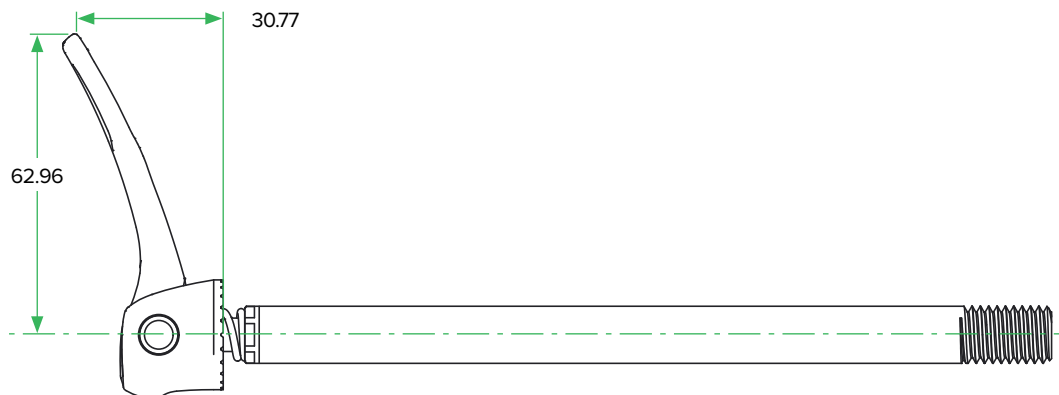
# Maxle Ultimate

## Frame/Fork Clearance

Lever in Closed Position



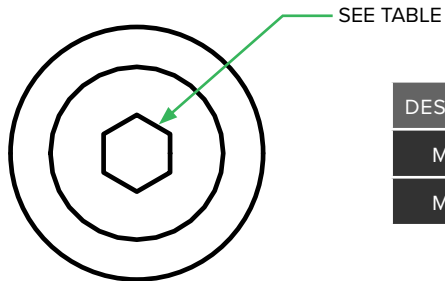
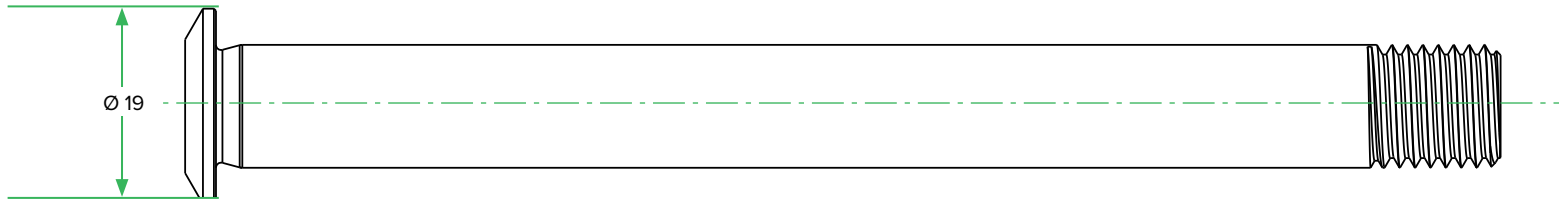
Lever in Open Position



### NOTES:

- 1 Drawing is not to scale.
- 2 Customer is responsible for ensuring hub, frame, and axle compatibility.
- 3 The frame manufacturer is responsible for ensuring the frame and/or fork assemblies using Maxles are compliant with existing safety standards.
- 4 Head translates along the Maxle axis approximately 1.46 mm when lever is moved from open to closed.

# Maxle Stealth



DESCRIPTION	HEX SIZE	TORQUE VALUE
Maxle 12	5	9-13.5 N•m
Maxle 15	6	9-13.5 N•m

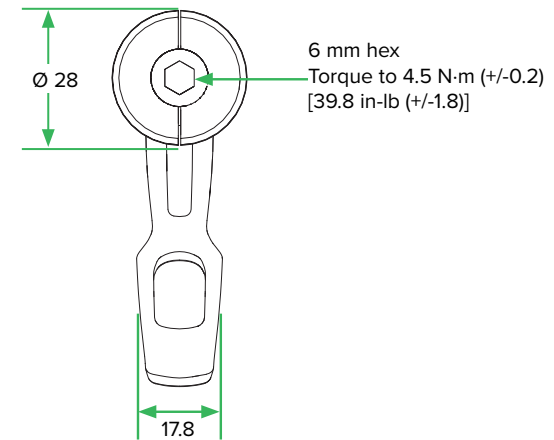
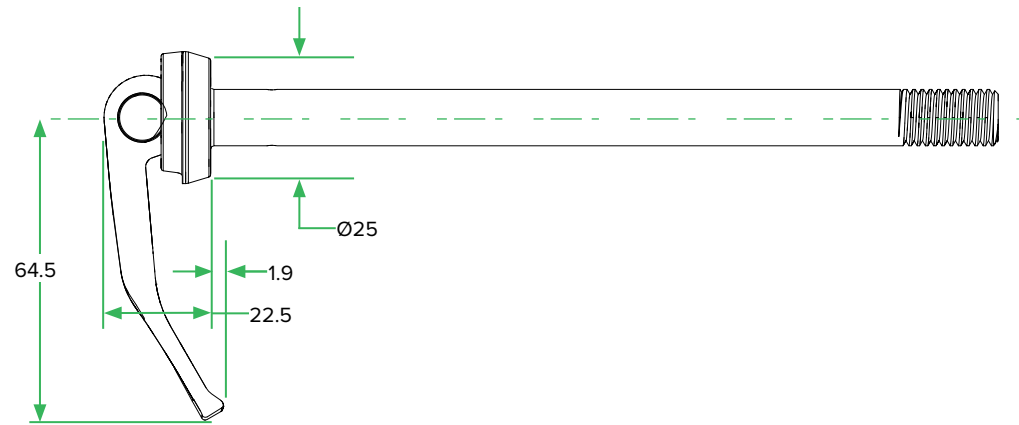
#### NOTES:

- 1 Drawing is not to scale.
- 2 Customer is responsible for ensuring hub, frame, and axle compatibility.
- 3 The frame manufacturer is responsible for ensuring the frame and/or fork assemblies using Maxles are compliant with existing safety standards.

# Maxle Lite & Maxle

## Frame/Fork Clearance

Lever in Closed Position



Lever in Open Position

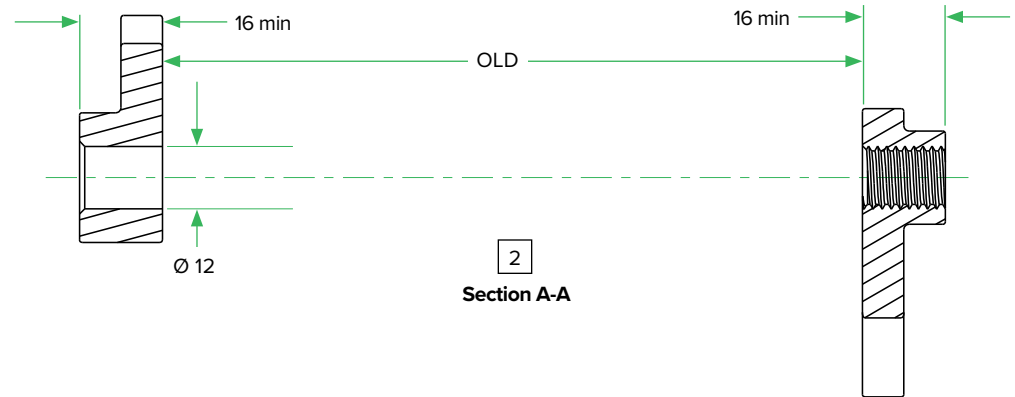
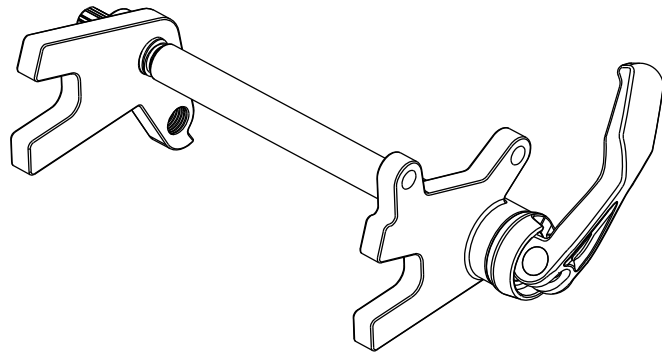


- 1 Drawing is not to scale.
- 2 Customer is responsible for ensuring hub, frame, and axle compatibility.
- 3 The frame manufacturer is responsible for ensuring the frame and/or fork assemblies using Maxles are compliant with existing safety standards.

# Maxle, Maxle Lite, Maxle Ultimate, Maxle Stealth

## Rear Frame Specification

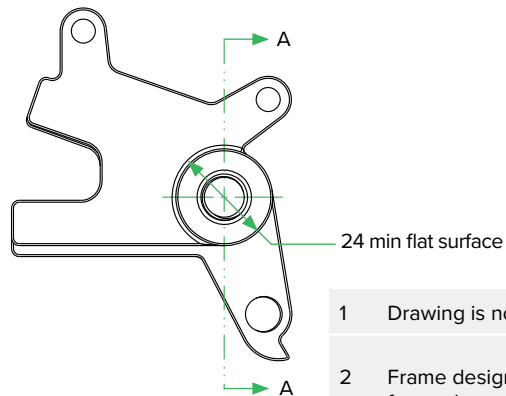
Frame dropouts with axle installed



2  
Section A-A

Part Number	Description
00.4318.009.001	AX MAXLE ULT REAR L174 TL20 M12X1.75
00.4318.009.013	AX MAXLE ULT REAR L180 TL20 M12X1.75
00.4318.017.004	AX MAXLE STLTH REAR L174 TL20 M12X1.75
00.4318.017.005	AX MAXLE STLTH REAR L180 TL20 M12X1.75

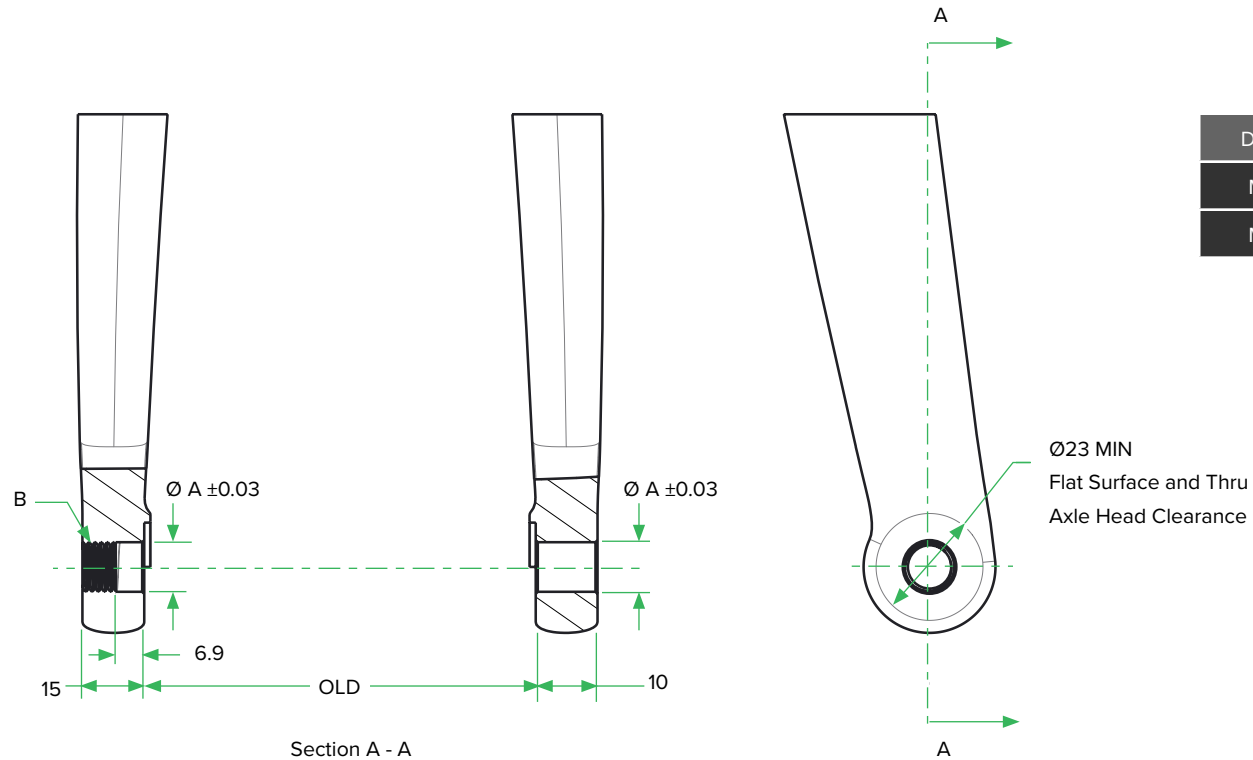
- 1 Drawing is not to scale.
- 2 Dimensions apply to the standard Maxle sizes in the table.
- 3 Frame designers may request a custom Maxle for their specific frame dropouts. However, frame designers are responsible for ensuring compatibility between their frame and custom Maxle.



- 1 Drawing is not to scale.
- 2 Frame designers may request a custom Maxle for their specific frame dropouts. However, frame designers are responsible for ensuring compatibility between their frame and custom Maxle.

# Maxle, Maxle Lite, Maxle Ultimate, Maxle Stealth

## Fork Specification

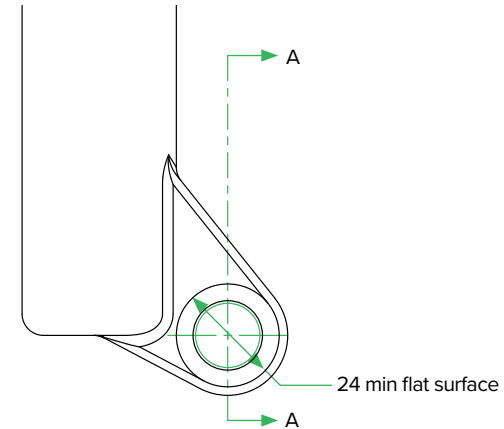
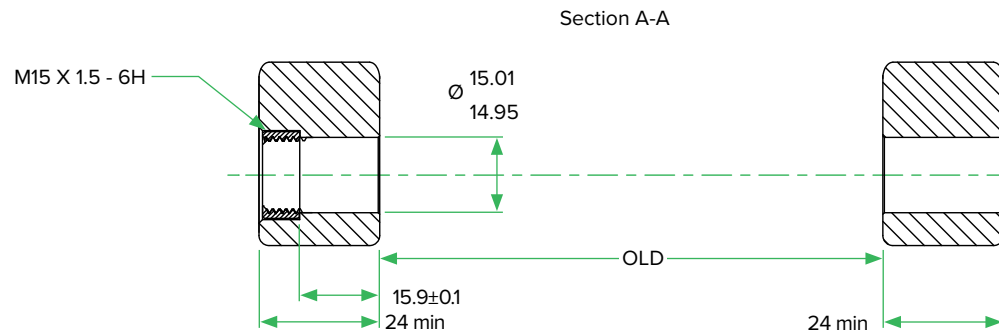


Description	A	B
MAXLE 15	14.98	M15 X 1.5 - 6H
MAXLE 12	12.03	M12 X 1.5 - 6H

- 1 Drawing is not to scale.
- 2 Customer is responsible for ensuring hub, frame, and axle compatibility.
- 3 The frame manufacturer is responsible for ensuring the frame and/or fork assemblies using Maxles are compliant with existing safety standards.

# Maxle, Maxle Lite, Maxle Ultimate, Maxle Stealth

## Fork Specification



- 1 Drawing is not to scale.
- 2 Customer is responsible for ensuring hub, frame, and axle compatibility.
- 3 The frame manufacturer is responsible for ensuring the frame and/or fork assemblies using Maxles are compliant with existing safety standards.

# Brakes



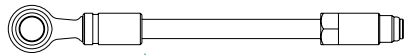
# Brake Fluid & Hydraulic Line

## Disc Brake Hose Length Specification



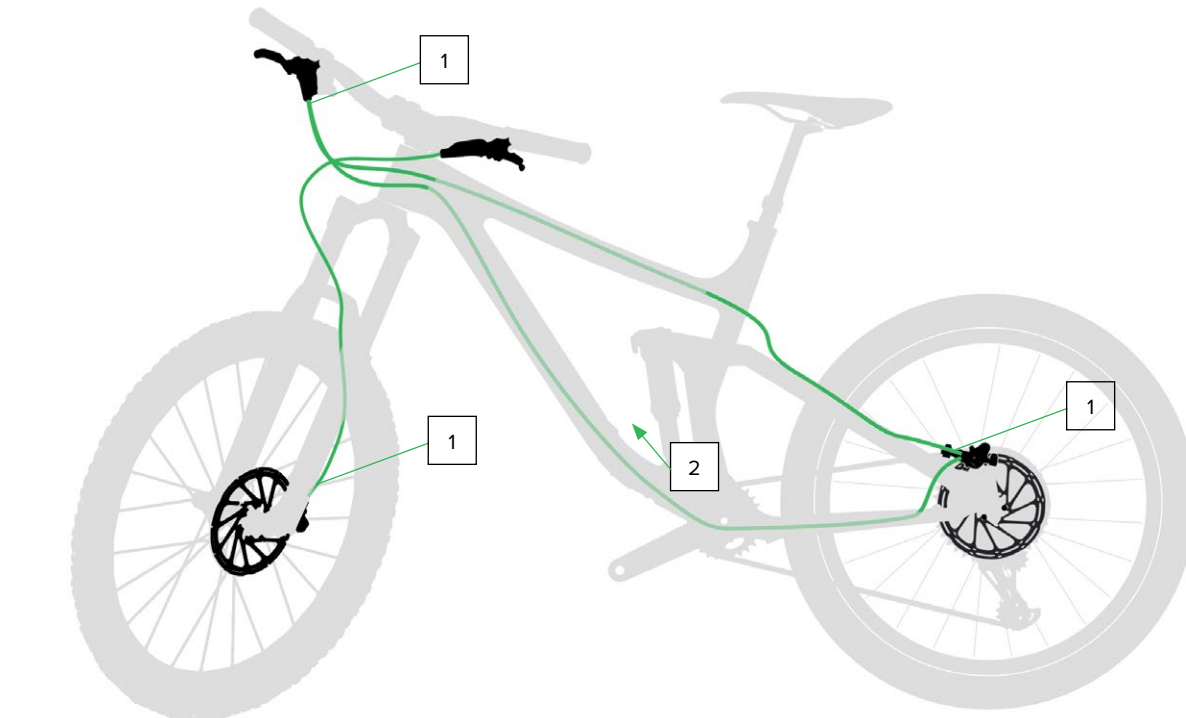
Measured hose length

1



Measured hose length

1



OEM shipping condition - brakes are shipped filled and pre-bled, unless otherwise specified.

### Calculating Hydraulic Line Lengths:

The brakes should be installed with the hose properly routed and secured to the bicycle. To determine where to cut the hose, hold the hose up to the brake lever with a length that creates a gentle bend in the hose and allows the handlebar to freely turn from side to side. For internally-routed frames, insert the hose through the frame, determine the proper length, then cut the hose.

- 1 FG (Finished Good) hose equals the measured hose length from the lever body to the caliper plus 35 mm.
- 2 The SJ (Stealth-a-majig) hose routing is from back to front of bike.
- 3 For internal routing, the SJ connection requires a hole in the frame or fork that is at least  $\text{Ø}5.1$  mm.
- 4 Hose bend radius at  $20^\circ\text{C}$  = 30 mm minimum.
- 5 All surfaces that come in contact with brake hose to be free of burrs and sharp edges.
- 6 SJ is used for initial assembly only. A bleed is required if the system is disconnected and reconnected.
- 7 SRAM Brake systems are not compatible with mineral based fluids such as damping fluid, mineral oil, fork fluid, or RockShox Reverb fluid. **Use only DOT 4 and DOT 5.1 brake fluids with SRAM Hydraulic brakes.**

# SRAM MTB Hydraulic Disc Brakes

## Safety Guidelines for Rotor Size and Brake Pad Material

SRAM disc brakes pass laboratory testing designed to simulate worst case riding conditions. The rotor size and pad compound materials recommendations were generated through controlled testing. Use of any combination not mentioned below will void the warranty and could result in a crash.

Front Rotor Size	160	180	180	200	200	220	220
Rear Rotor Size	160	160	180	180	200	200	220
Weight Rider+Bike (kg)	190	210	215	235	240	260	265

	Intended use	Brake pad material	Minimum rotor size (mm)
Riding Type	Road Riding	Organic or Metal Sintered	160
	Cyclocross Racing	Organic or Metal Sintered	140
	Cross Country Mountain Biking	Organic or Metal Sintered	160
	Downhill Mountain Biking	Organic or Metal Sintered	160

### **⚠️ WARNING - CRASH HAZARD**

SRAM disc brakes pass laboratory testing designed to simulate worst case riding conditions. The rotor size and pad compound materials recommendations were generated through controlled testing. Use of any combination not mentioned above will void the warranty and could result in a crash.

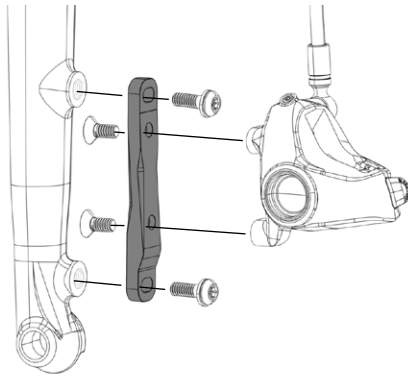
# Mounting Options

## Flat Mount, Post Mount, and International Standard Mount

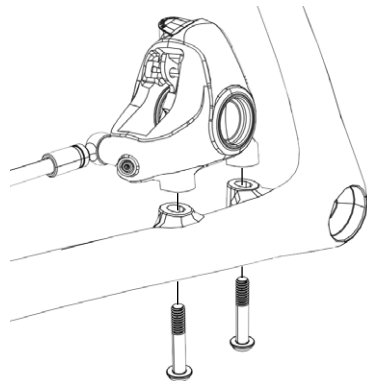
### Flat Mount

#### Flat Mount Bracket

A bracket may be needed to attach the caliper to the frame or fork.



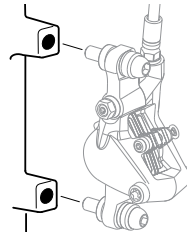
#### Flat Mount (Direct)



### Post Mount

#### Direct Mount (Direct)

No post brackets or spacers are needed to attach the caliper to the frame or fork.



#### Post Spacers (S)

Some rotor sizes require the use of spacers to fit the caliper on the frame or fork.



#### Post Brackets (P)

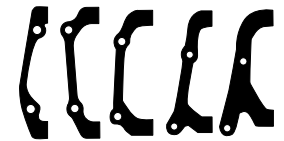
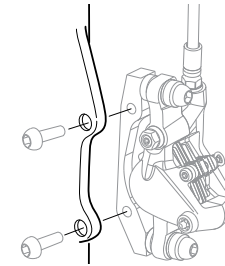
Some rotor sizes require the use of post brackets to fit the caliper on the frame or fork.



### International Standard Mount (IS)

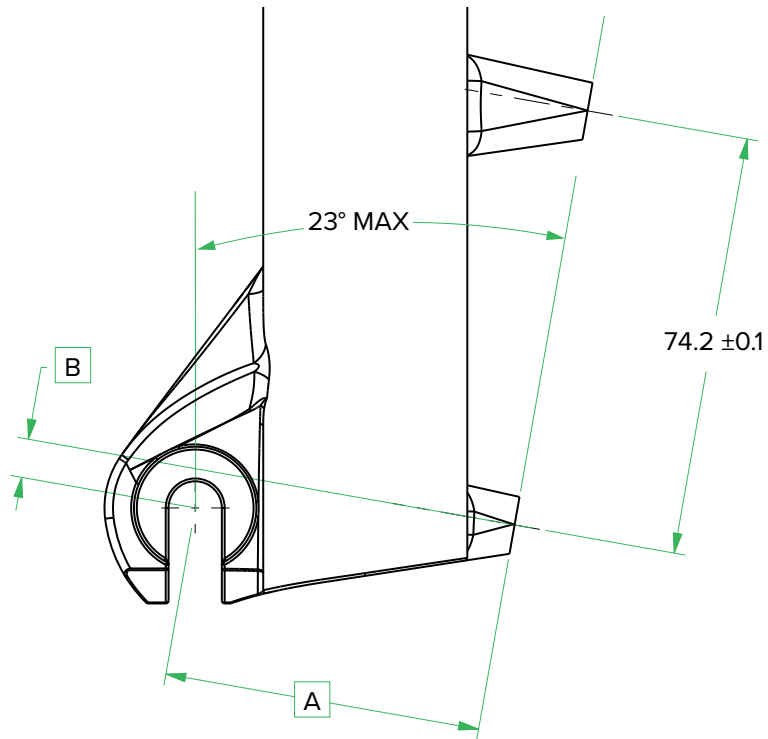
#### International Standard Bracket (IS)

SRAM brakes are Post Mount. To convert an IS frame or fork to Post Mount, an IS bracket is required.



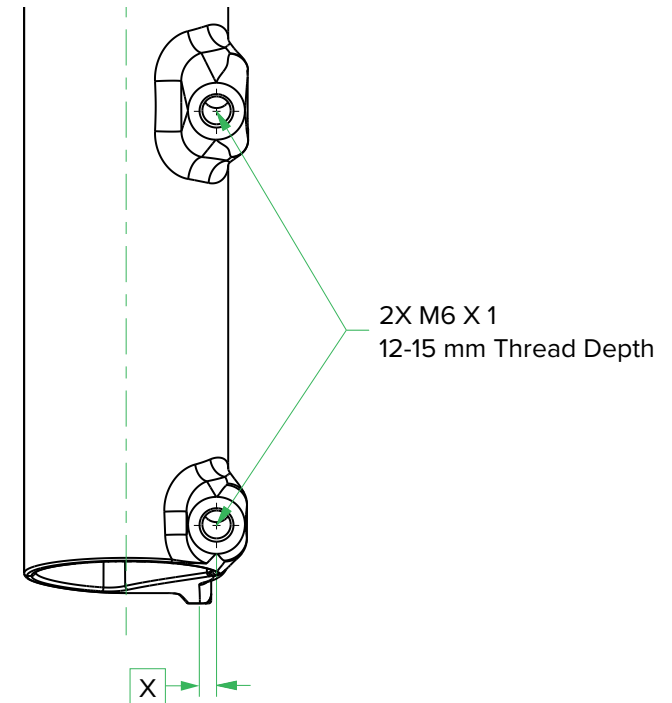
# Disc Brake Mount Specification

## Fork Post Mount



Name References: Post Mount

Rotor Diameter	A	B
140 mm	47.2	2.2
160 mm	56.0	6.8
170 mm	60.3	9.9
180 mm	64.7	11.8
200 mm	73.3	16.8
203 mm	74.8	16.8
220 mm	82	21.8

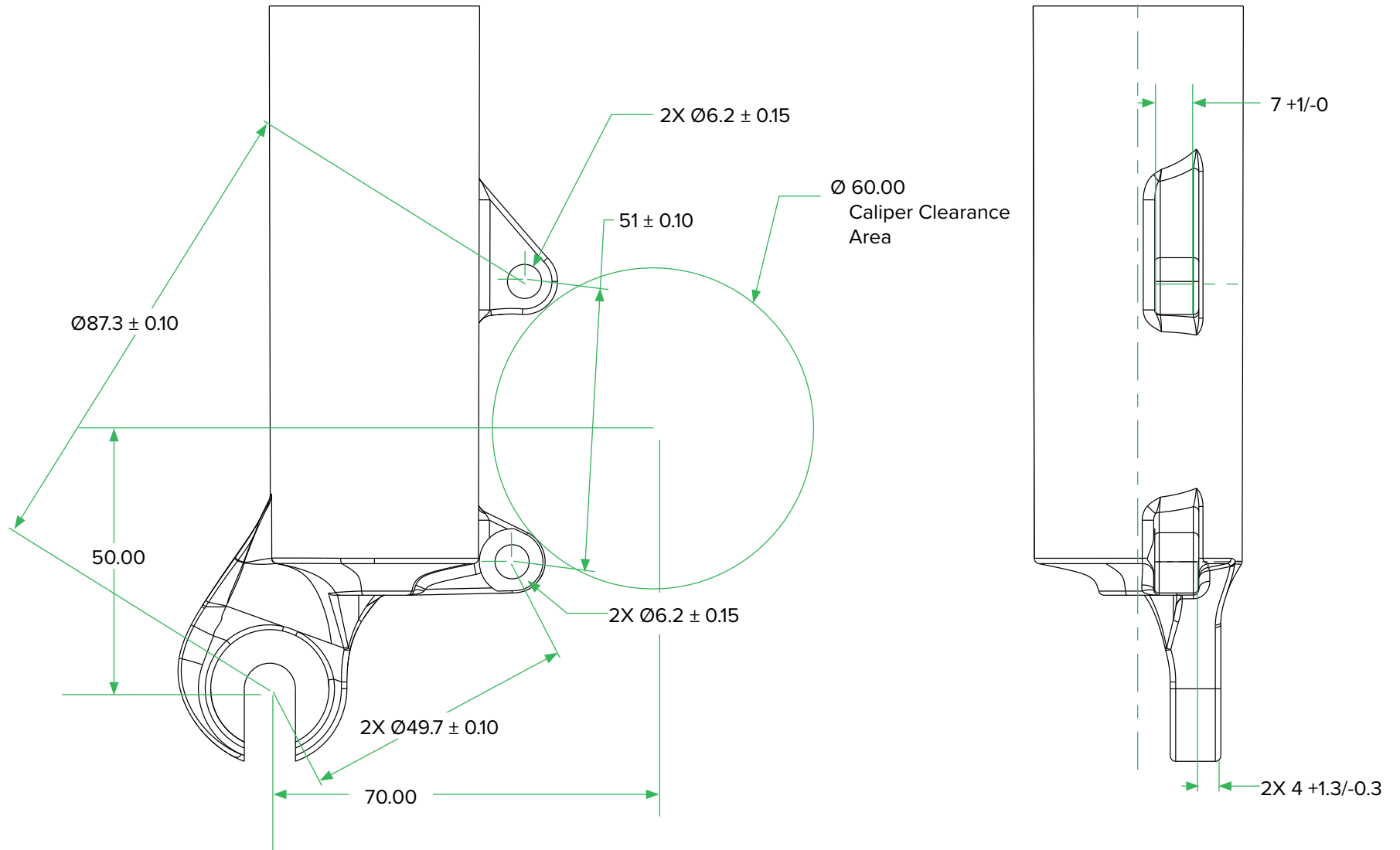


Hub Standard	X
9x100 (QR)	0.94
15x100	0.94
15x110 Boost	0.94
20x110 Boost	0.94
Legacy 20x110	5.94

# Disc Brake Mount Specification

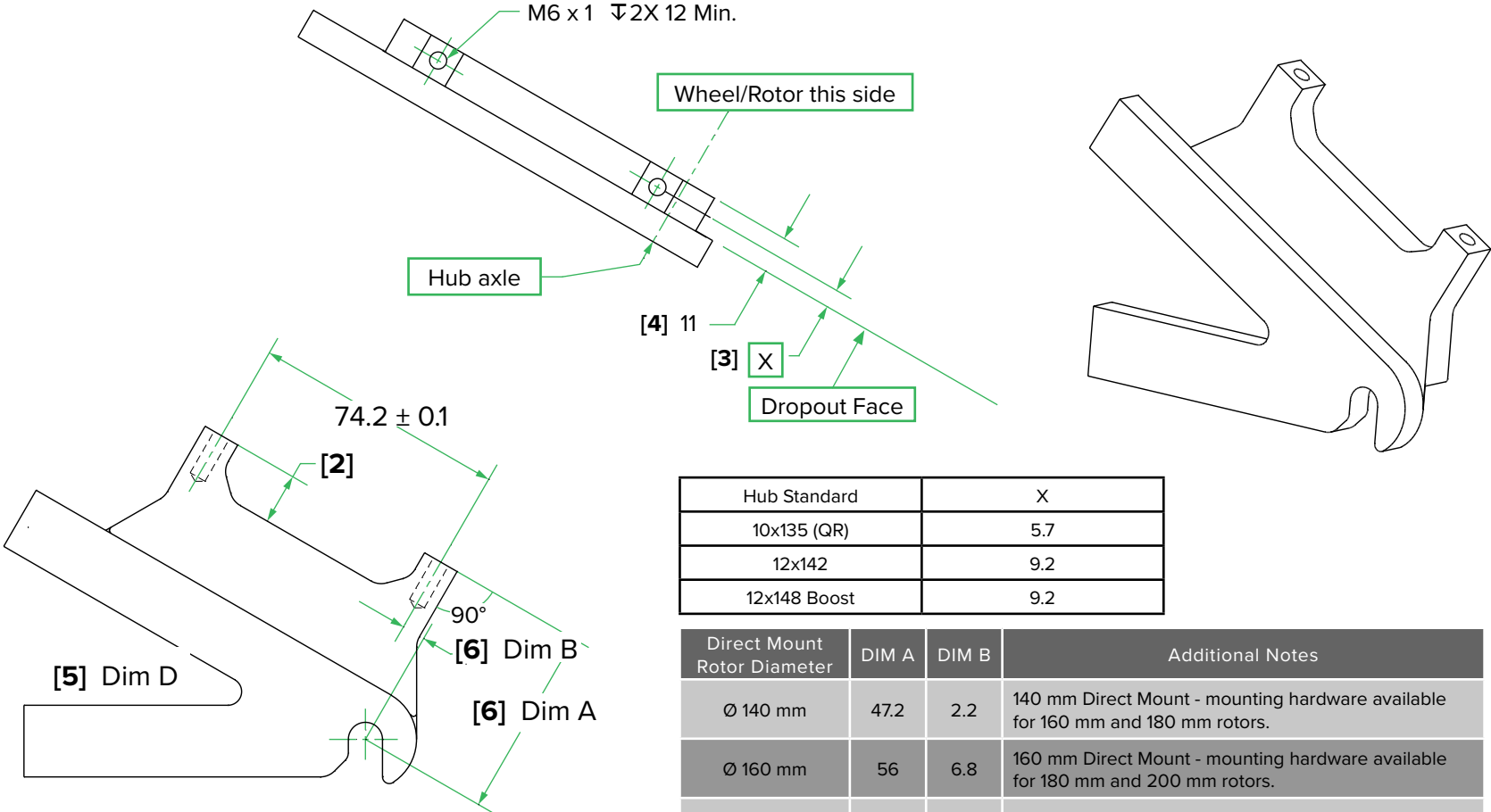
## International Standard Fork Mount

International Standard Fork Mount



# Disc Brake Mount Specification

Direct Mount for SRAM Rotors MY2012 Forward

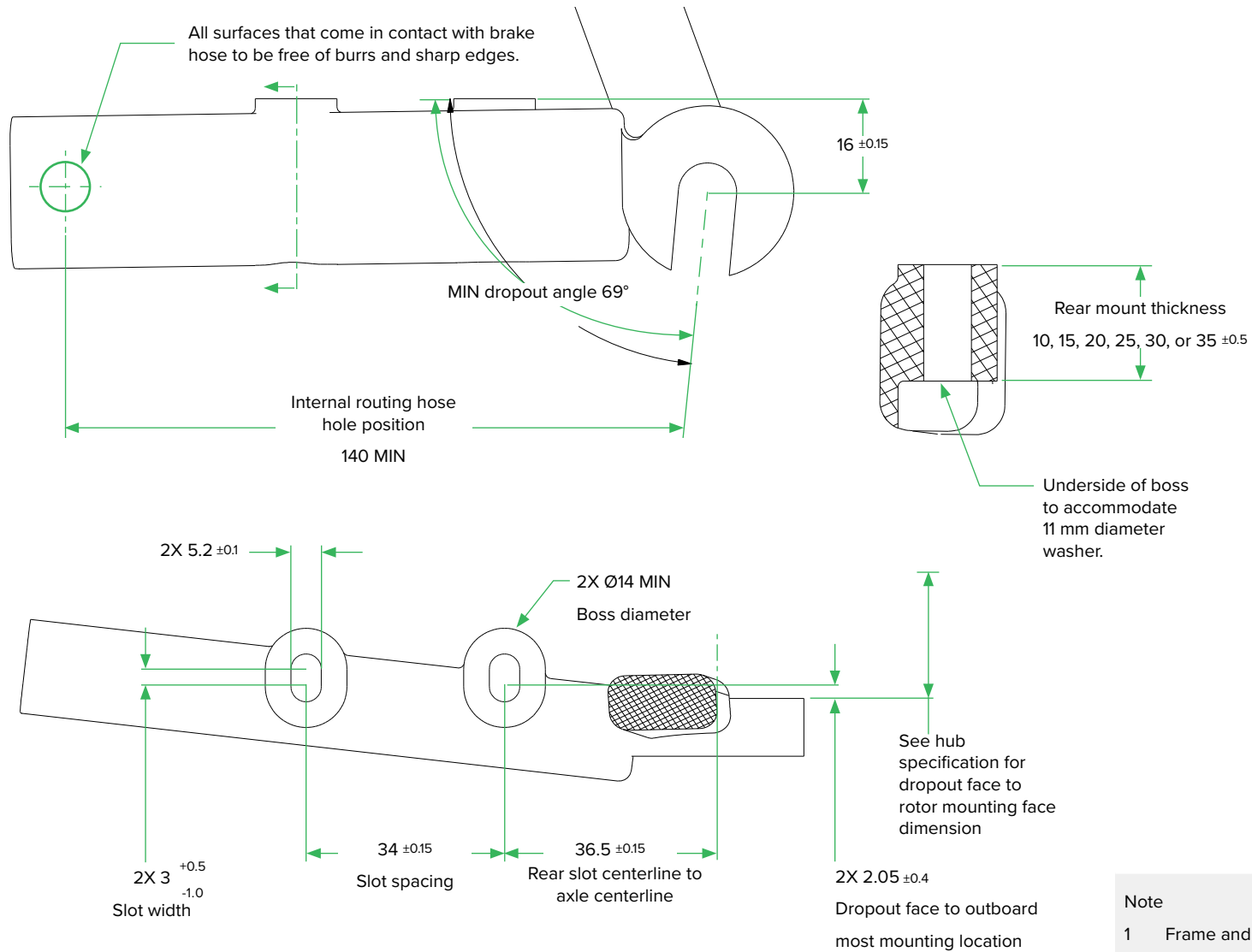


Hub Standard	X
10x135 (QR)	5.7
12x142	9.2
12x148 Boost	9.2

Direct Mount Rotor Diameter	DIM A	DIM B	Additional Notes
Ø 140 mm	47.2	2.2	140 mm Direct Mount - mounting hardware available for 160 mm and 180 mm rotors.
Ø 160 mm	56	6.8	160 mm Direct Mount - mounting hardware available for 180 mm and 200 mm rotors.
Ø 170 mm	60.3	9.9	170 mm Direct Mount only.
Ø 180 mm	64.7	11.8	180 mm Direct Mount - mounting hardware available for 200 mm and 220 mm rotors.
Ø 200 mm	73.3	16.8	200 mm Direct Mount - mounting hardware available for 203 mm and 220 mm rotors.
Ø 203 mm	74.8	16.8	203 mm Direct Mount only.
Ø 220 mm	82	21.8	220 mm Direct Mount only.

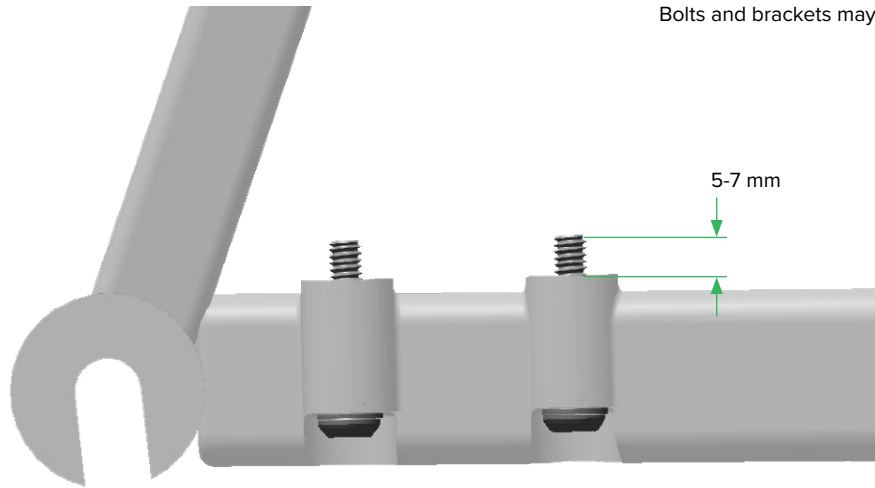
- Note
- 1 Check fit with SRAM caliper and rotor.
  - [2] 15 mm **minimum** clearance for caliper.
  - [3] Measured from inside dropout face.
  - [4] Recommended **maximum** thickness.
  - [5] Perpendicular to thread axis and mounting surface.

# Flat Mount Caliper Frame Specification



# Flat Mount Caliper Frame Specification

Bolts and brackets may need to be purchased separately.



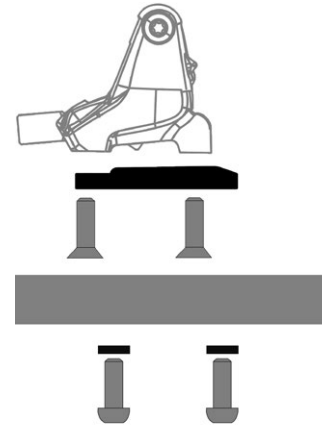
## Note

1 Available in rear bolt lengths: 17, 22, 27, 32, 37, and 42 mm

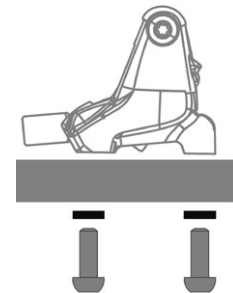
### **⚠️ WARNING - CRASH HAZARD**

There must be 5-7 mm of mounting bolt thread engagement when mounting brake calipers to forks and frames with flat mount hardware and brackets. Riding a bike with improper bolt engagement can allow the brakes to disengage from the bicycle, which can lead to a crash and serious injury or death to the rider.

## Rear Flat 20F



## Rear Flat Direct- 0F Direct



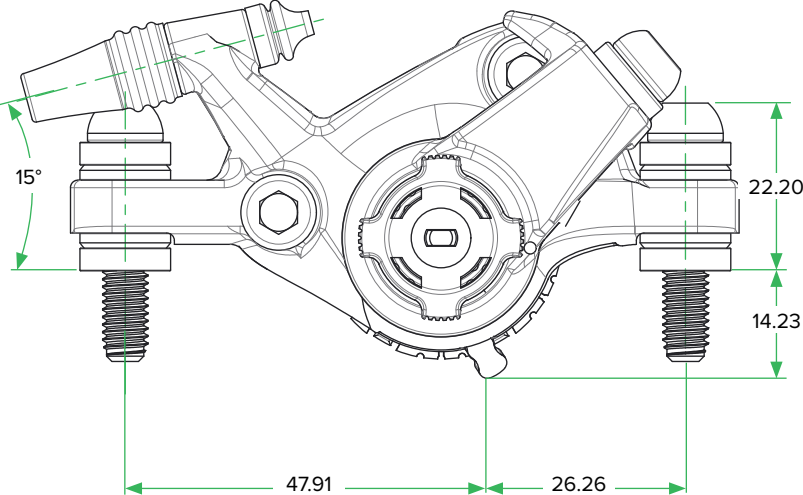
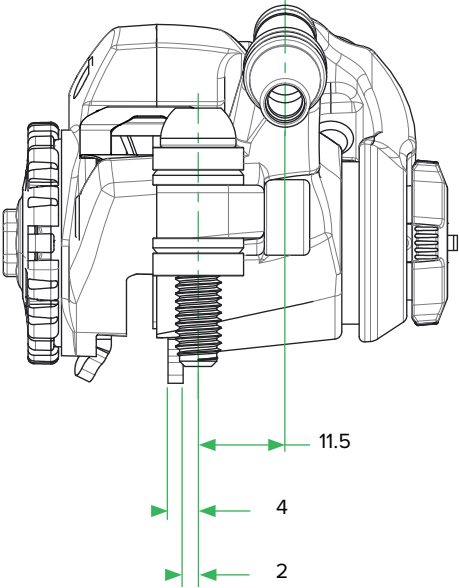
Chainstay Frame Thickness	Button Head Bolts	Flat Head Bolts
10 mm	17 mm	10.7 mm
15 mm	22 mm	10.7 mm
20 mm	27 mm	10.7 mm
25 mm	32 mm	10.7 mm
30 mm	37 mm	10.7 mm
35 mm	42 mm	10.7 mm

Chainstay Frame Thickness	Button Head Bolts
10 mm	17 mm
15 mm	22 mm
20 mm	27 mm
25 mm	32 mm
30 mm	37 mm
35 mm	42 mm



# BB7/ BB5

## Mechanical Disc Brake Clearance

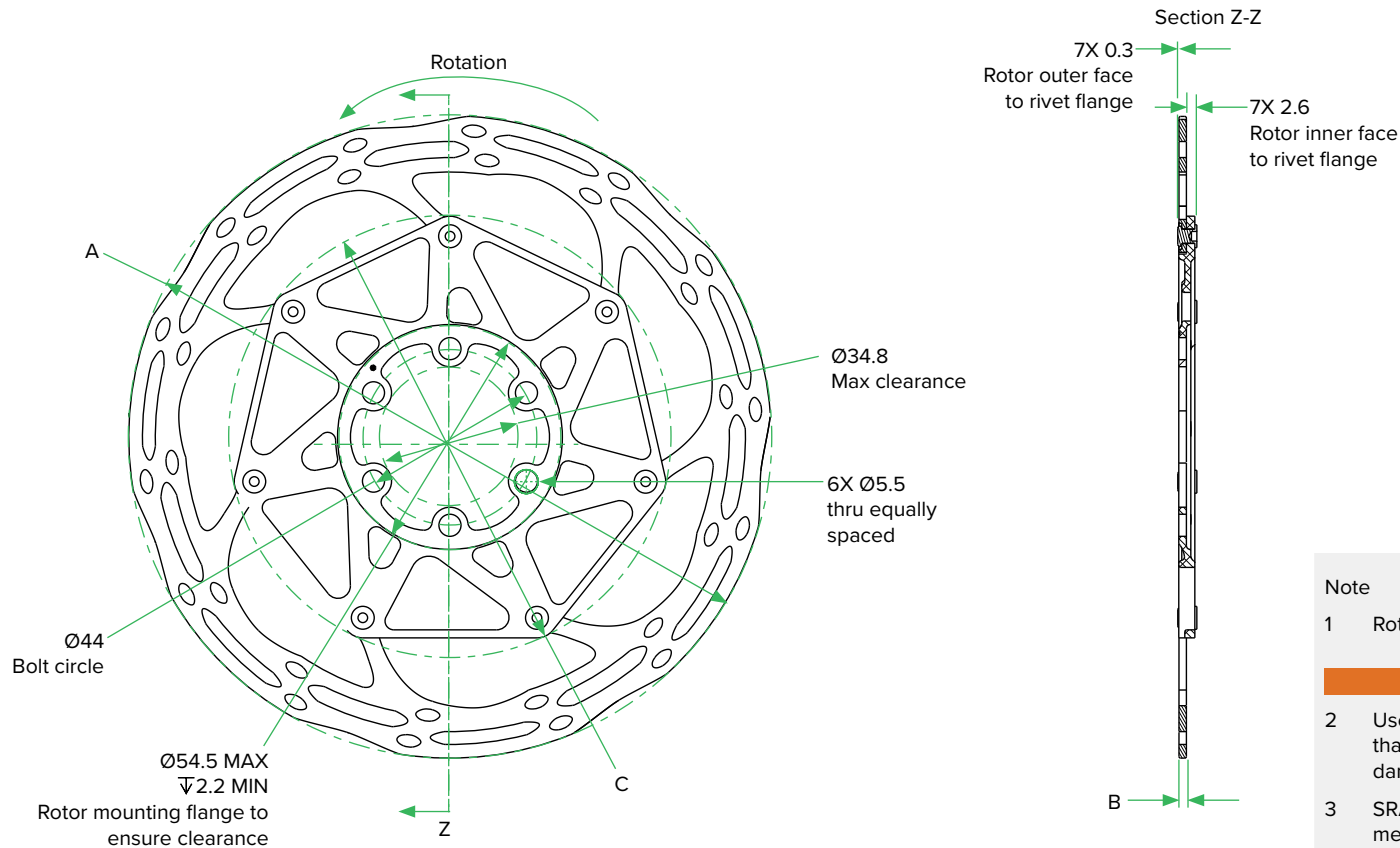


# Rotors

# CenterLine X

## Two-Piece 6-Bolt Rotor Dimensions

Rotor size	Radiused Outer Diameter	Rotor Thickness	Carrier Diameter
	A (mm)	B (mm)	C (mm)
160	160	1.85	110.1
180	180	1.85	130.1



### Note

- 1 Rotor mounting bolt torque value is 6.2 N·m (55 in·lb).

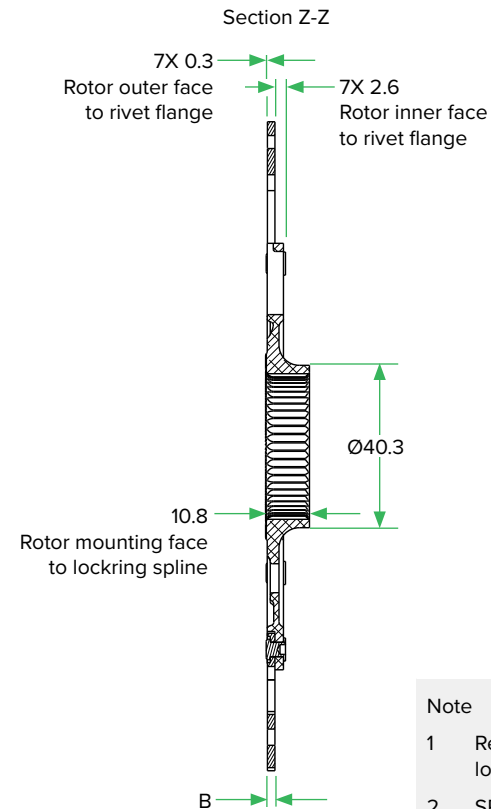
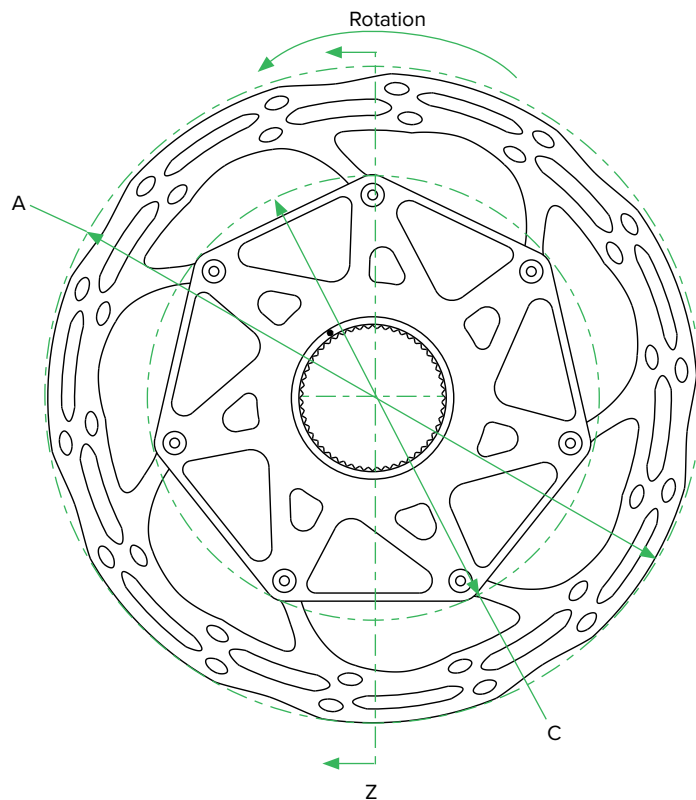
### ⚠ WARNING

- 2 Use only 10 mm length rotor bolts. Rotor bolts longer than 10 mm will not properly secure rotor and could damage the hub.
- 3 SRAM two-piece rotors are not approved for use with mechanical disc brakes.

# CenterLine X

## Two-Piece Center Locking Rotor Dimensions

Rotor size	Radiused Outer Diameter	Rotor Thickness	Carrier Diameter
	A (mm)	B (mm)	C (mm)
160	160	1.85	110.1
180	180	1.85	130.1



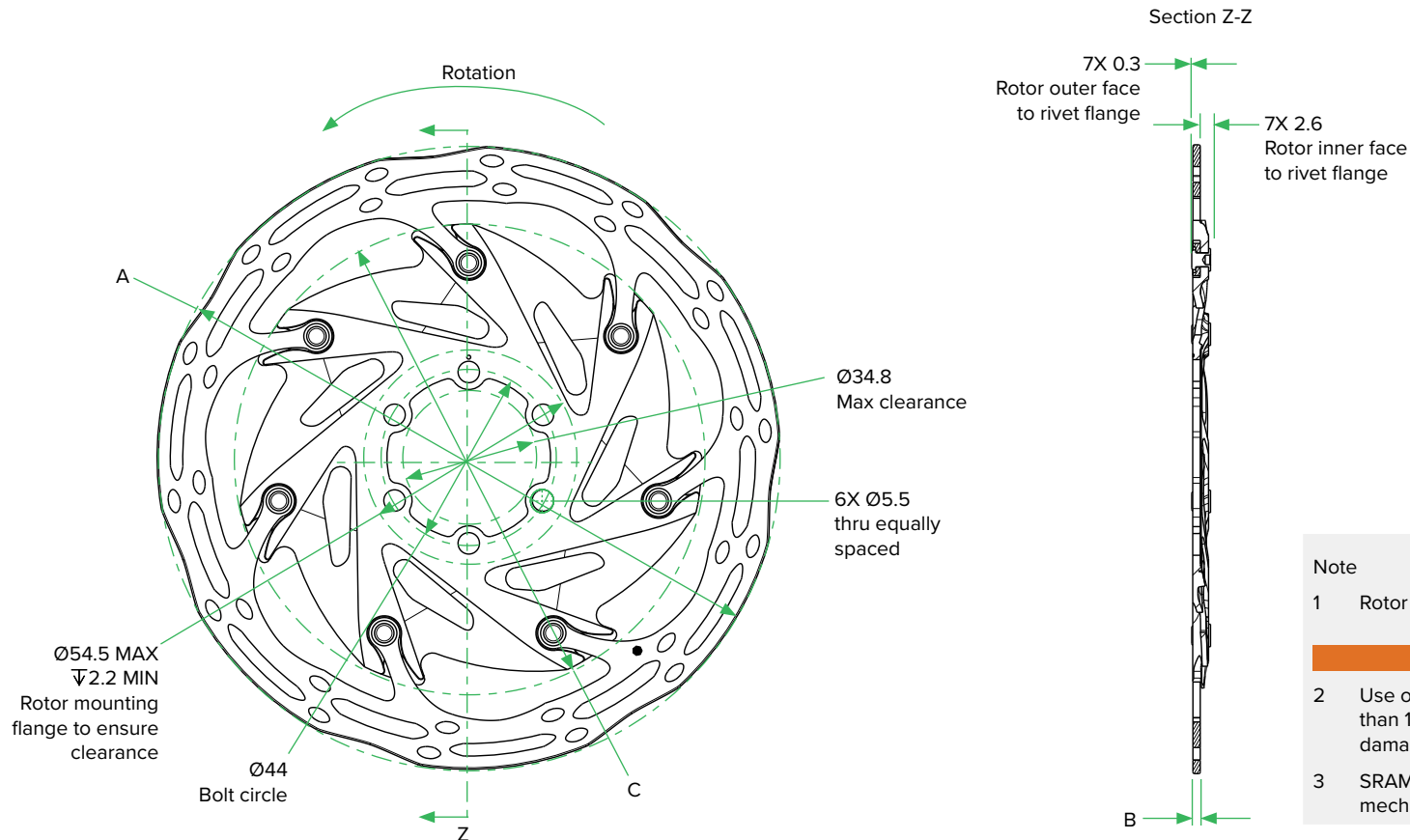
### Note

- 1 Refer to the locking manufacturer's instructions for locking torque specification.
- 2 SRAM two-piece rotors are not approved for use with mechanical disc brakes.

# CenterLine XR

## Two-piece 6-Bolt Rotor Dimensions

Rotor Size	Radiused Outer Diameter	Rotor Thickness	Carrier Diameter
	A (mm)	B (mm)	C (mm)
160	160	1.85	120



### Note

- 1 Rotor mounting bolt torque value is 6.2 N·m (55 in-lb).

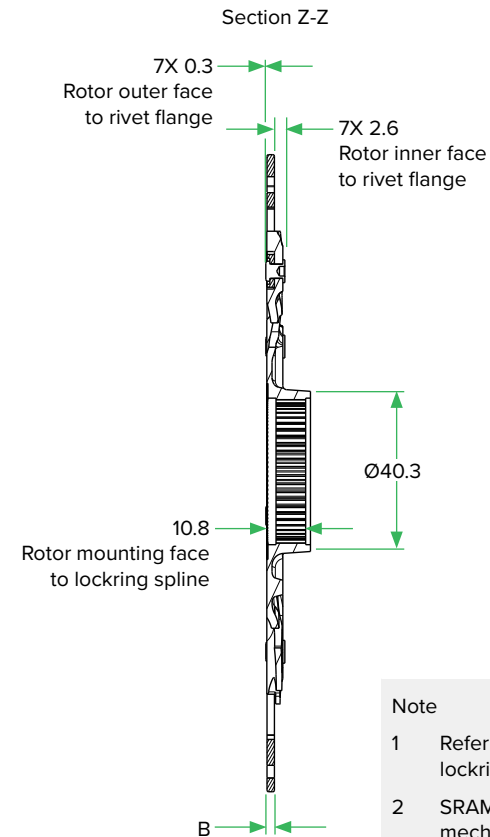
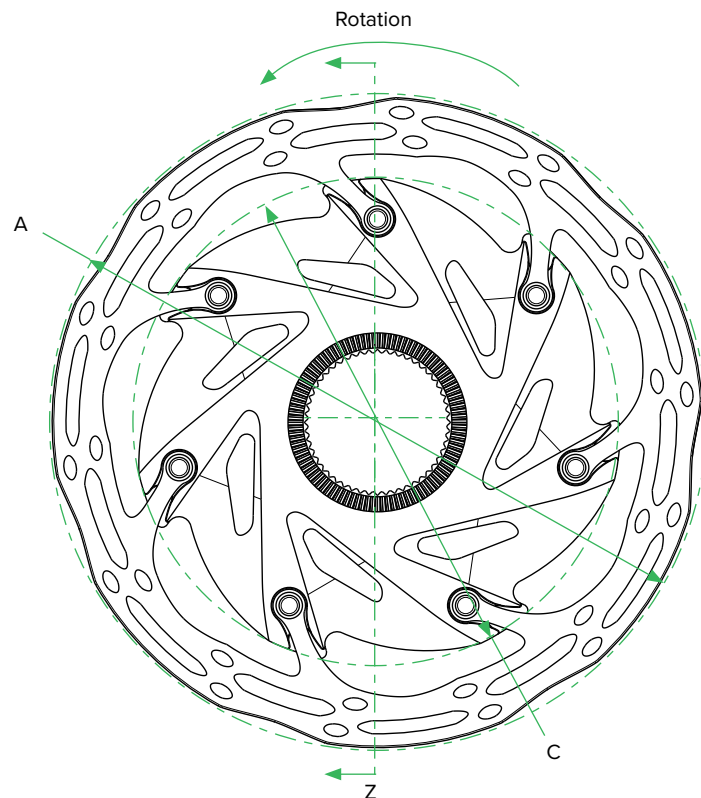
### WARNING

- 2 Use only 10 mm length rotor bolts. Rotor bolts longer than 10 mm will not properly secure rotor and could damage the hub.
- 3 SRAM two-piece rotors are not approved for use with mechanical disc brakes.

# CenterLine XR

## Two-piece Center Locking Rotor Dimensions

Rotor Size	Radiused Outer Diameter	Rotor Thickness	Carrier Diameter
	A (mm)	B (mm)	C (mm)
160	160	1.85	120



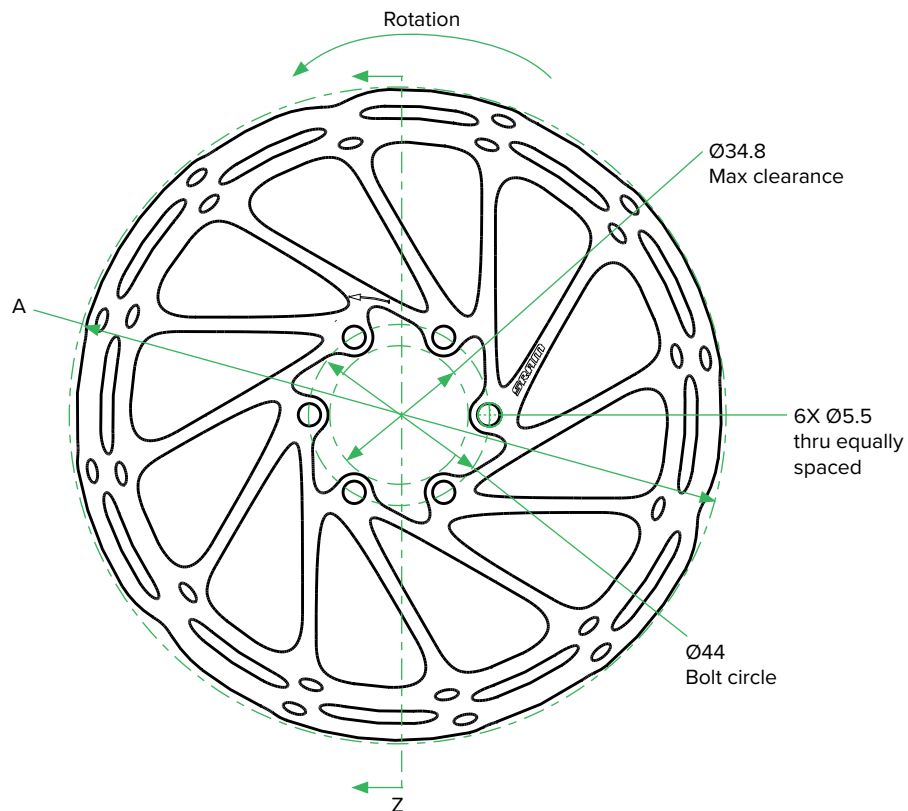
### Note

- 1 Refer to the locking manufacturer's instructions for locking torque specification.
- 2 SRAM two-piece rotors are not approved for use with mechanical disc brakes.

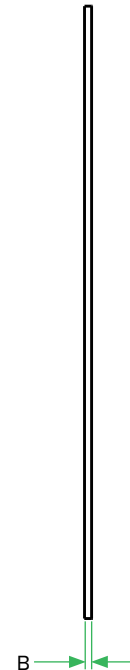
# CenterLine

## 6-Bolt Rotor Dimensions

Rotor size	Radiused Outer Diameter	Rotor Thickness
	A (mm)	B (mm)
160	160	1.85
180	180	
200	200	
203	203	
220 <sup>2</sup>	220	2.0 non-radiused



Section Z-Z



Note

- 1 Rotor mounting bolt torque value is 6.2 N·m (55 in-lb).
- 2 220 mm rotors are only to be used with 4-piston brake calipers.

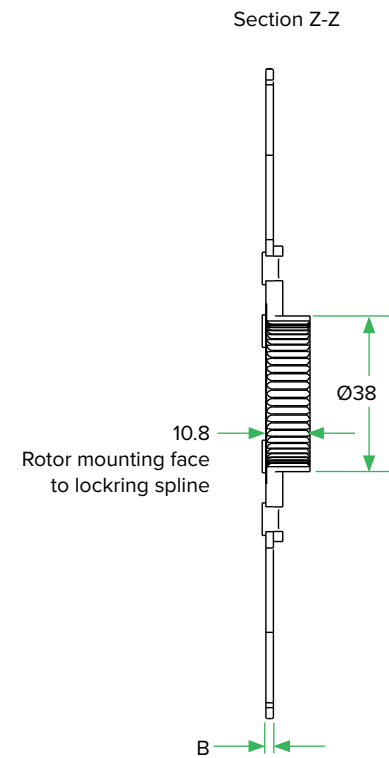
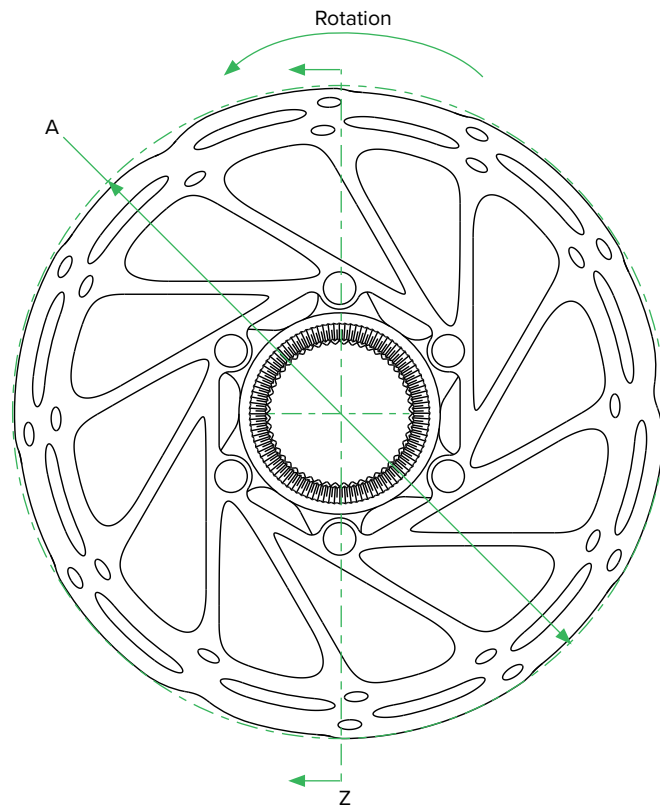
**⚠ WARNING**

- 3 Use only 10 mm length rotor bolts. Rotor bolts longer than 10 mm will not properly secure rotor and could damage the hub.

# CenterLine

## One-Piece Center Locking Rotor Dimensions

Rotor size	Rotor Thickness	
	A (mm)	B (mm)
160	160	1.85
180	180	
200	200	

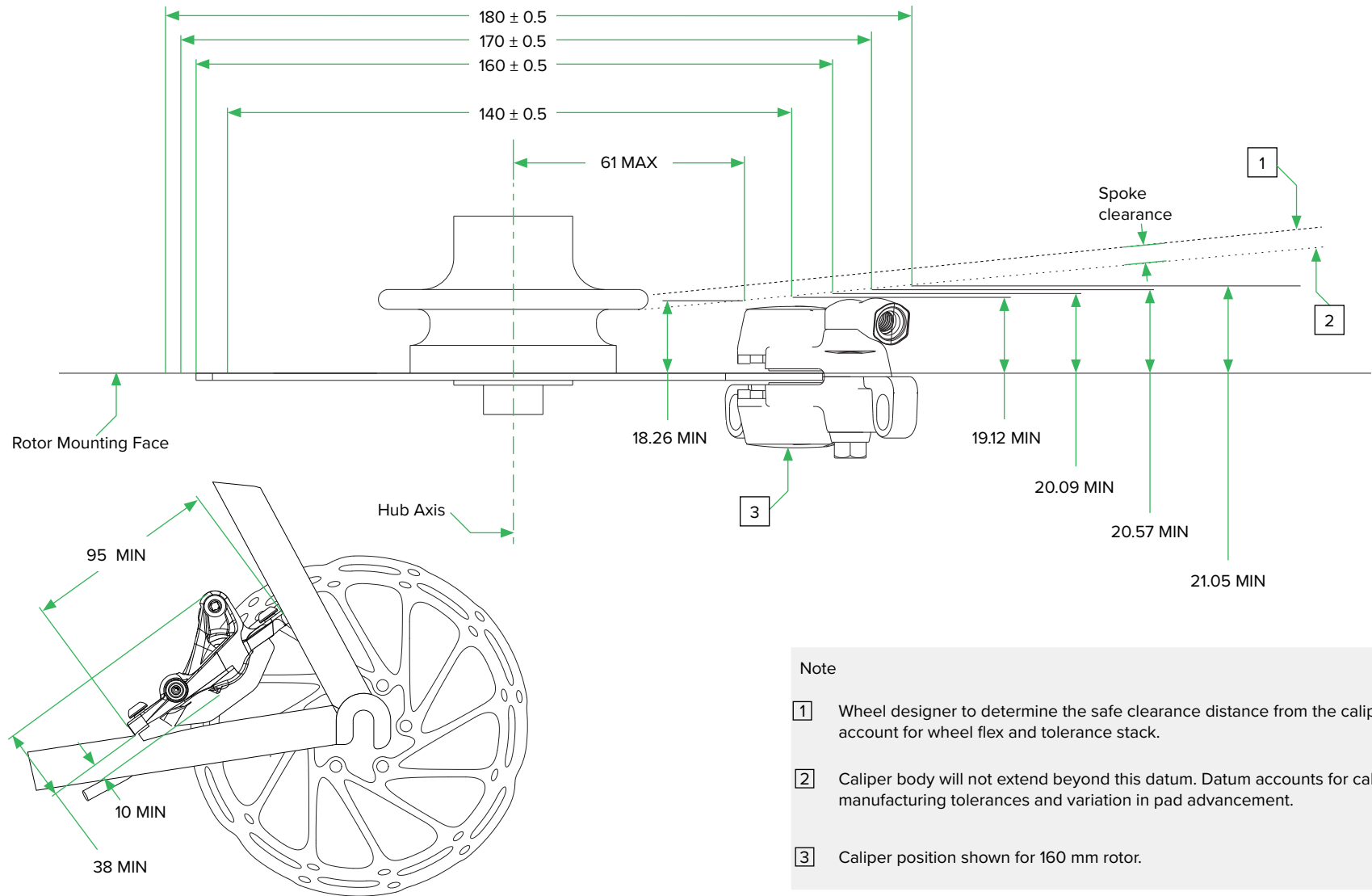


### Note

- 1 Refer to the locking manufacturer's instructions for locking torque specification.



# Spoke Clearance



# Mechanical Brake Specifications

## Rear International Standard and Post Fork Mount

Caliper/Lever Compatibility				
Levers/Brakes	Shorty Ultimate	BB7 MTB & BB5 MTB	BB7 Road & BB5 Road	Hydraulic Disc
FR-5	—	X	—	—
Hydraulic	—	—	—	X
Road Brake Levers	X	—	X	—

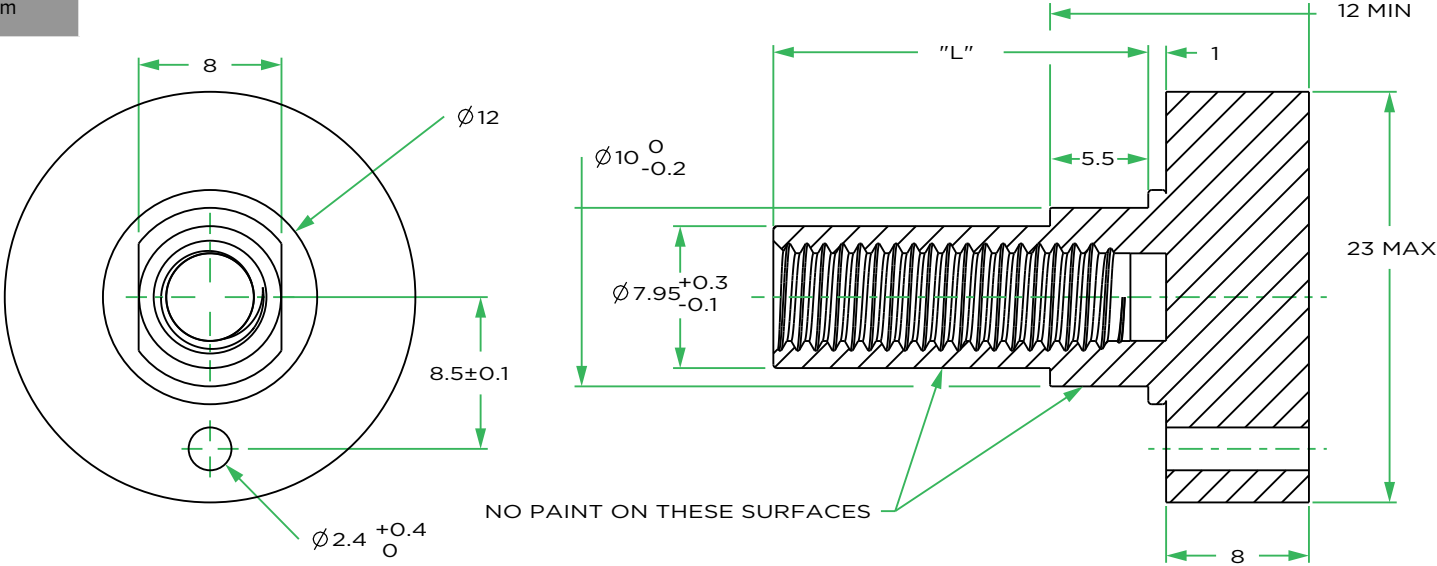
Lever Cable Pull	Shorty Ultimate	BB7 MTB & BB5 MTB	BB7 Road & BB5 Road	Hydraulic Disc
Less than 20 mm	X	—	X	—
20 mm - 32 mm	—	X	—	—
Greater than 32 mm	—	X <sup>1</sup>	—	—

1 Brake levers with a cable pull of more than 32 mm are compatible with SRAM Single Digit, BB7 MTB, and BB5 MTB mechanical disc brakes, but reduce brake power.

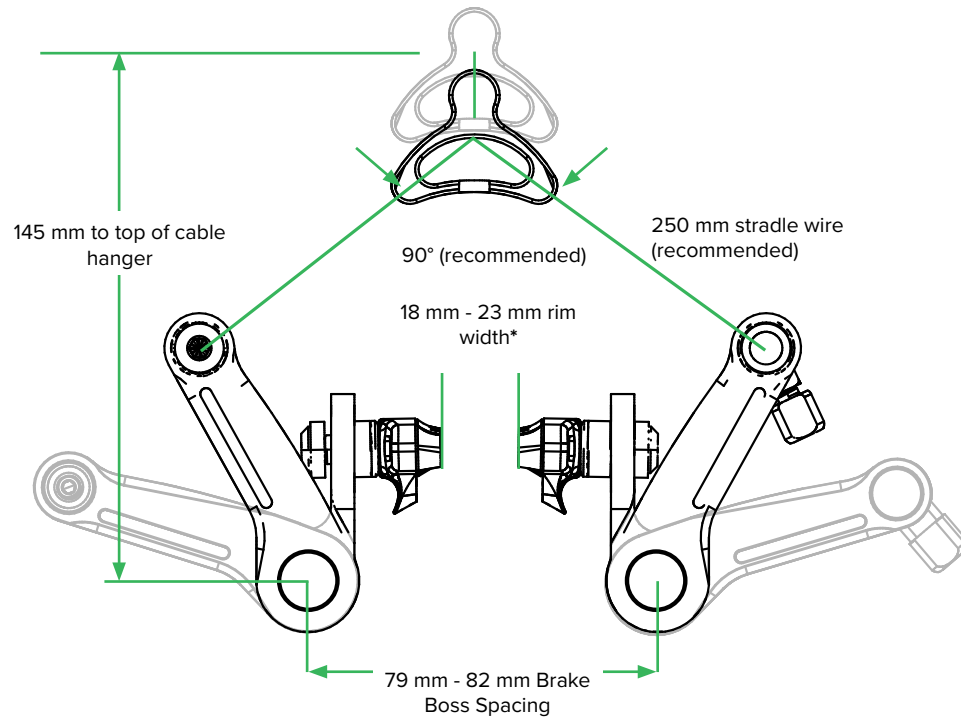
Range of Adjustment	
	FR-5
<b>Minimum</b> Cable Pull	25 mm
Leverage Ratio	2:1
<b>Maximum</b> Cable Pull	29 mm
Leverage Ratio	2.75:1

# Brake Boss Dimensions

Brake Post Length Standards	Dimension "L"
Post-2008 Shimano Standard	21.0 mm
Pre-2008 Shimano Standard	22.0 mm

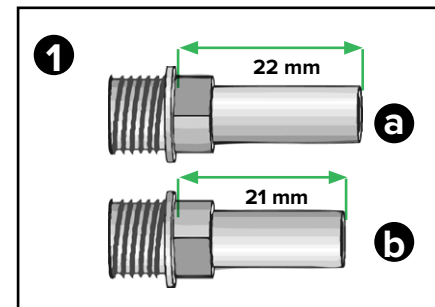


# Shorty Ultimate



## COMPATIBILITY

**\*Wheel rims wider than 23 mm (ex. Zipp 303 Cyclocross):**  
Use aftermarket brake pad kit part number 00-5115-044-020.

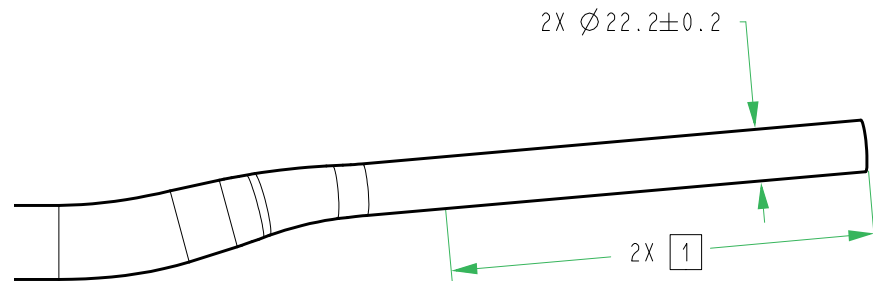


## Measure Brake Boss

Measure your bicycle's brake bosses to determine which spacer configuration is required.

- 1 Measure the brake boss from the end of the brake boss to the shoulder.  
**22 mm:** Use the black, 1 mm plastic spacers (a) that fit over the brake boss.  
**21 mm:** Use the silver, 1 mm steel spacers (b) that fit over the mounting bolt threads.

# Handlebar Specification



## Notes

- 1  $\varnothing 22.2$  shall extend far enough along the handlebar to accommodate grip.
- 2 All SRAM brake lever clamp styles will fit handlebars that conform to this specification.

# Front Derailleurs

Leave adequate clearance between bottle cage mounts and front derailleur clamp. Be sure to consider the full travel range for suspension frames.

$\alpha$  = Chainstay angle (angle between seat tube and chainstay).

SRAM does not create a unique front derailleur for BOOST 148 standard frames.

To achieve front derailleur compatibility for BOOST 148 Standard frames, frame manufacturers must modify the low direct mount or high direct mount front derailleur mounting plane 3 mm outboard for proper alignment with a 52 mm chainline.

# Overview

	Gearing	Chainring	Low Clamp Mount		Low Direct Mount	High Clamp Mount		High Direct Mount		Mid Direct Mount	Mid Clamp
			Ø 31.8	Ø 34.9	S3	Ø 31.8	Ø 34.9	155-160	155		
GX	2x11	36/24	TP/BP	TP/BP	TP/BP/FP	TP/BP	TP/BP	-	TP/BP/FP	TP/BP	FP
	2x10	38/24 36/22 34/22	DP	DP	DP	TP/BP	TP/BP	-	TP/BP	TP/BP	-
X5	2x10	42/28 39/26	DP	DP	DP	TP/BP	TP/BP	-	TP/BP	-	-
	2x10	38/24 36/22	-	-							
	2x10	34/22	DP	DP							
	3x10	44/33/22	DP	DP				TP/BP	-		

DP = Dual pull link TP = Top pull only link BP = Bottom pull only link FP = Front pull link

# BOOST 148 Compatibility

## Frame Compatibility for BOOST 148 Standard Frames

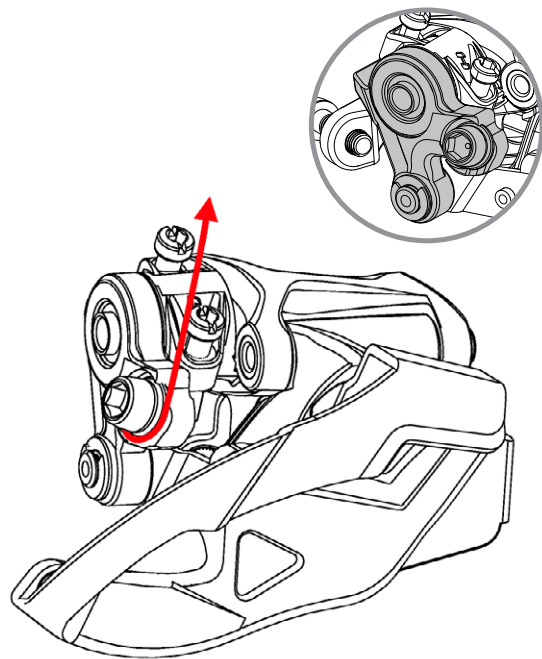
To achieve front derailleur compatibility for BOOST 148 Standard frames, frame manufacturers must modify the low direct mount or high direct mount front derailleur mounting plane 3 mm outboard for proper alignment with a 52 mm chainline.



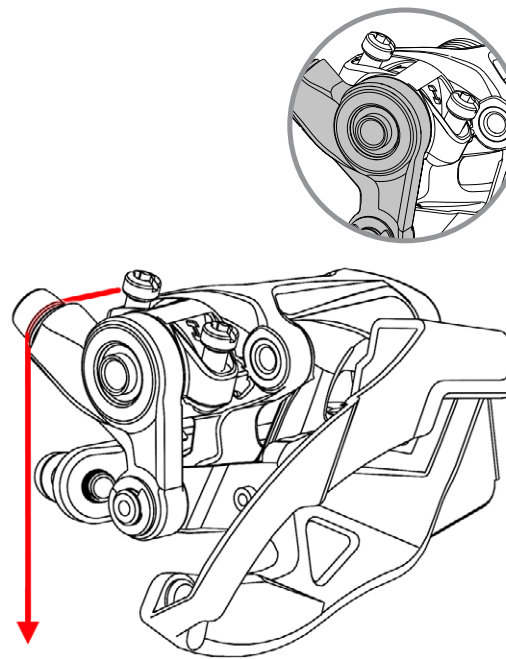
# GX/X5 Low Clamp Mount

Frame Compatibility and Capacity Information

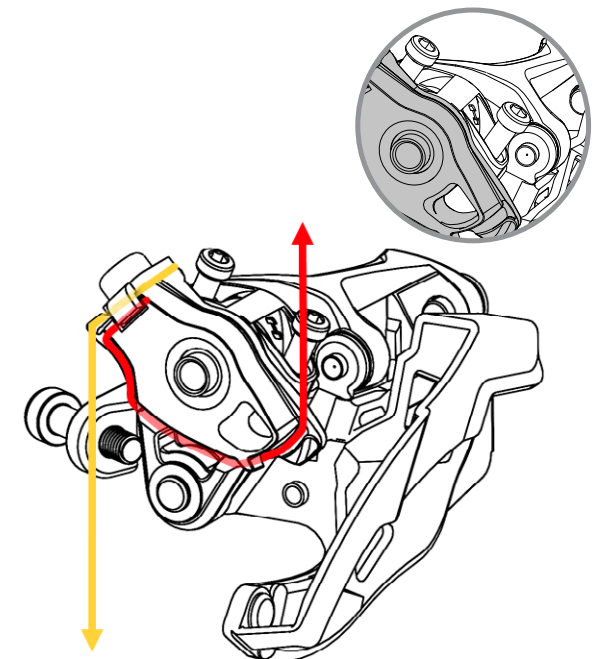
	Clamp diameter	Rear capacity	Index	Cable routing	Chainstay angle ( $\alpha$ )	Chainline
2x11	31.8 (w/adapter) 34.9	11 speed	Yes	Top Bottom	66° - 69°	49.0 (36/24)
2x10	31.8 (w/adapter) 31.8 (XX - w/o adapter) 34.9	10 speed	Yes	Dual	66° - 69°	49.0 (34/22, 36/22, 38/24) 49.5 (39/26, 42/28)
3x10	31.8 (w/adapter) 34.9	10 speed	Yes	Dual	66° - 69°	51 (44/33/22)



Top Pull

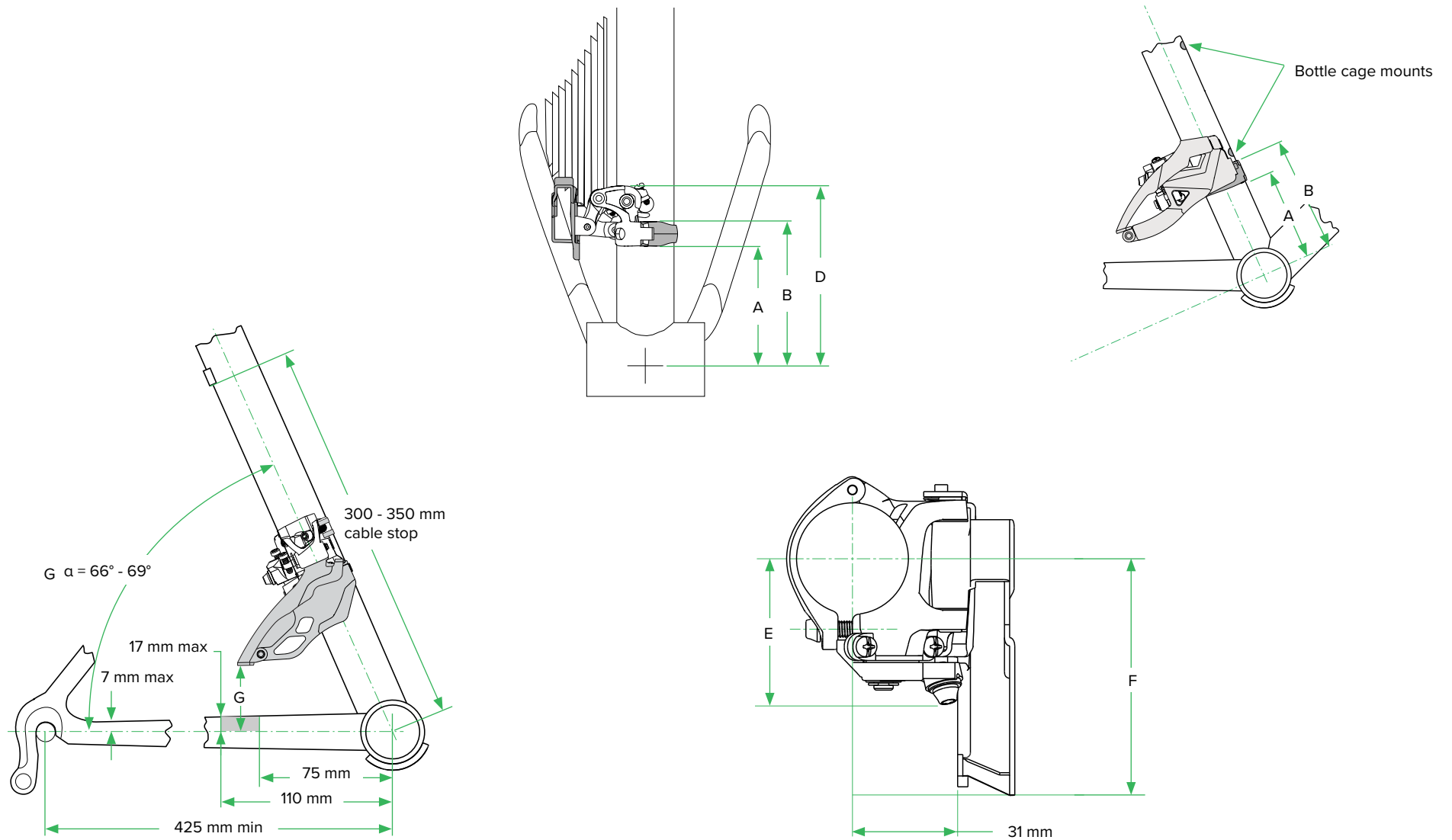


Bottom Pull



Dual Pull

# GX/X5 Low Clamp Mount



# GX/X5 Low Clamp Mount

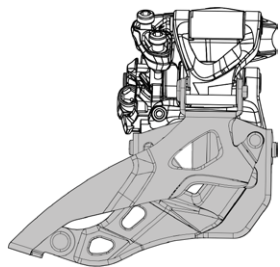
	Chainring	Cable routing	A	B	D	E	F	G	
								$\alpha = 66^\circ$	$\alpha = 69^\circ$
2x11	36/24	Top and Bottom	62	82	107	48/42	70	23	28
2x10	34/22	Dual	62	82	107	48/42	65	22	26
						44			
	36/22	Dual	58	78	103	48	70	18	21
						46			
	38/24	Dual	62	82	107	48	70	22	26
						46			
39/26	Dual	56	79	101	48	74	16	21	
					46				
42/28	Dual	62	82	107	48	74	22	27	
					46				
3x10	44/33/22	Dual	65	85	110	48	89	17	22
						46			

Clamp/Body Position - Be sure to leave adequate clearance between bottle cage mounts and front derailleur clamp.

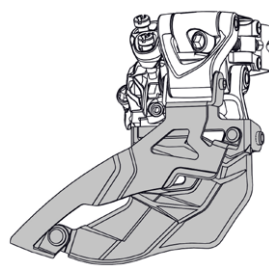
# GX/X5 High Clamp Mount

## Frame Compatibility and Capacity Information

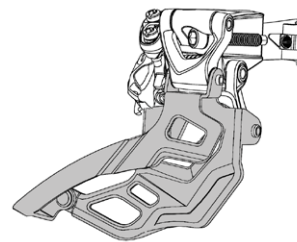
	Clamp diameter	Rear capacity	Index	Cable routing	Chainstay angle ( $\alpha$ )	Chainline
2x11	31.8 (w/adaptor) Body clamp 34.9 Body clamp	11 speed	Yes	Top Bottom	66° - 69°	49.0 (36/24)
2x10	31.8 Band clamp 31.8 (w/adaptor) Body clamp 34.9 Band clamp 34.9 Body clamp 38.2 Band clamp	10 speed	Yes	Top Bottom	66° - 69°	49.0 (34/22, 36/22, 38/24) 49.5 (39/26, 42/28)
3x10	31.8 Band clamp 31.8 (w/adaptor) Body clamp 34.9 Band clamp 34.9 Body clamp 38.2 Band clamp	10 speed	Yes	Top Bottom	66° - 69°	51 (44/33/22)



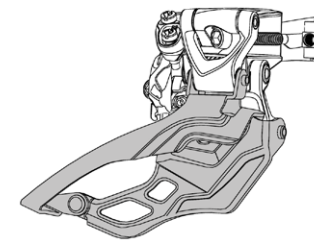
36/24 2x11 cage



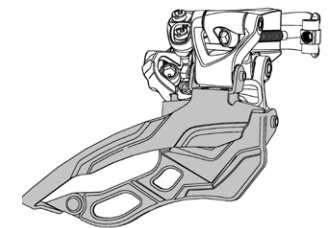
34/22 2x10 cage



36/22 and 38/24 2x10 cage

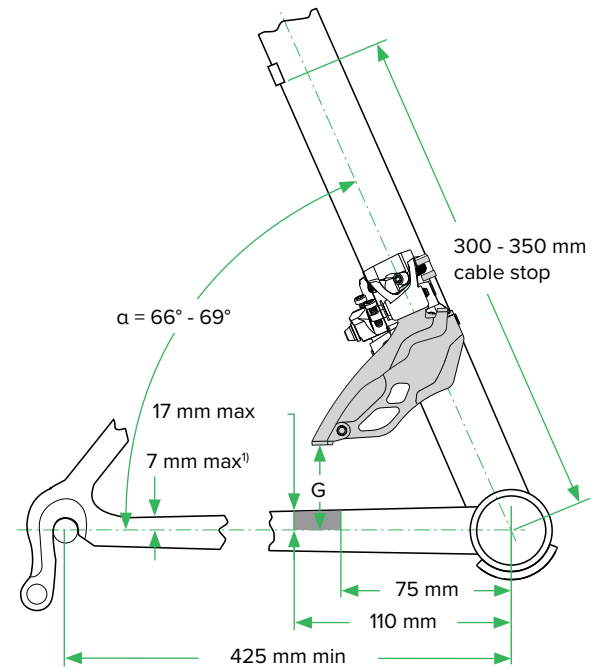
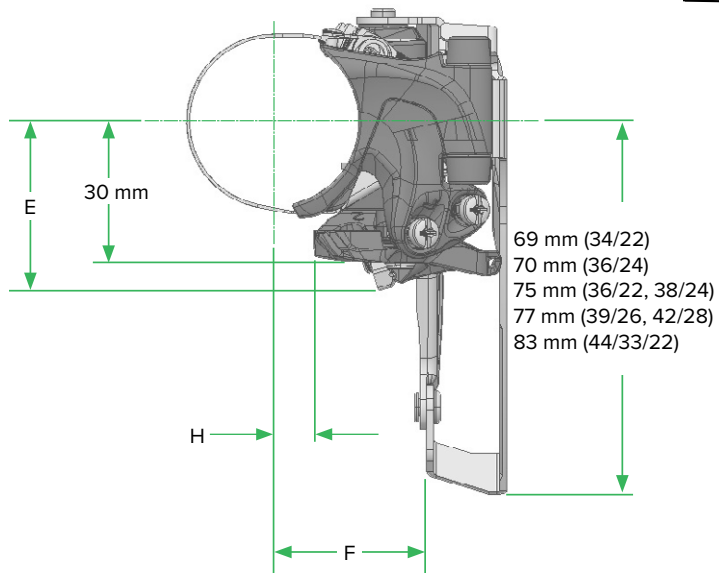
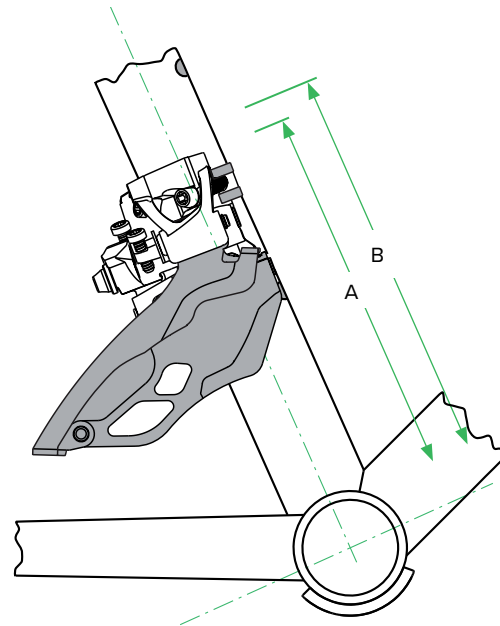
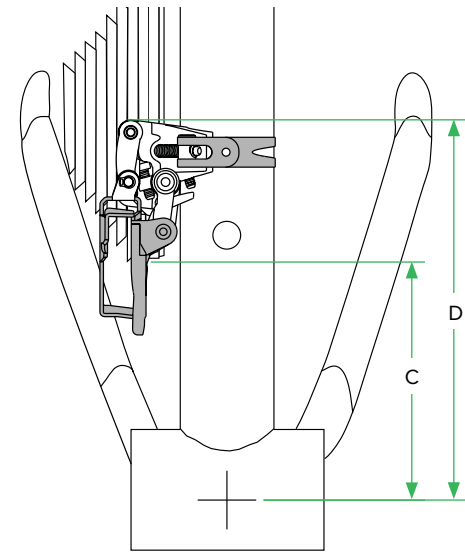


39/26 and 42/28 2x10 cage



44/33/22 3x10 cage

# GX/X5 High Clamp Mount



<sup>1)</sup> 7 mm Max applies where the chain crosses the chainstay while in the smallest cog.

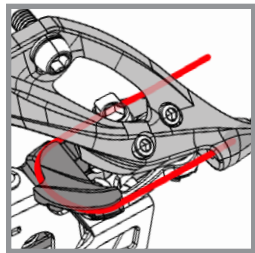
# GX/X5 High Clamp Mount

Clamp/Body Position													
	Chainring	Cable routing	Clamp Version	A	B	C	D	E	F	G		H	
										$\alpha = 66^\circ$	$\alpha = 69$		
2x11	36/24	Top Bottom	Body	119	137	84	139	34	35	24	28	12 Top	
												0 Bottom	
2x10	34/22	Top Bottom	Body	118	142	88	143	34	38	22	27	12 Top	
				123								8 Bottom	
	36/22	Top Bottom	Body	114	137	84	139	34	33	18	23	12 Top	
				119								7 Bottom	
	38/24	Top Bottom	Body	118	141	88	143	34	33	22	27	12 Top	
				123								7 Bottom	
	39/26	Top Bottom	Body	112	135	82	137	34	33	22	27	12 Top	
				117								7 Bottom	
	42/28	Top Bottom	Body	118	141	88	143	34	33	28	33	12 Top	
				123								7 Bottom	
	3x10	44/33/22	Top Bottom	Body	129	148	98	151	36	34	24	29	13 Top
					132								5 Bottom

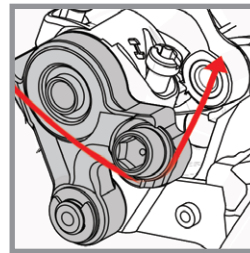
# GX/X5 Low Direct Mount

## Frame Compatibility and Capacity Information

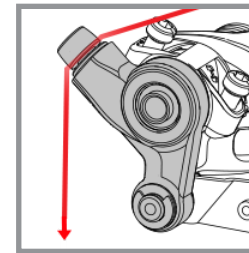
Rear capacity	Index	Cable routing	Chainstay angle ( $\alpha$ )	Chainline
11 speed	Yes	Front Top Bottom	66° - 69°	49.0 (36/24)
10 speed	Yes	Top Bottom Dual	66° - 69°	49.0 (34/22, 36/22, 38/24) 49.5 (39/26, 42/28) 51 (44/33/22)



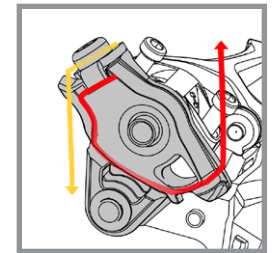
Front pull



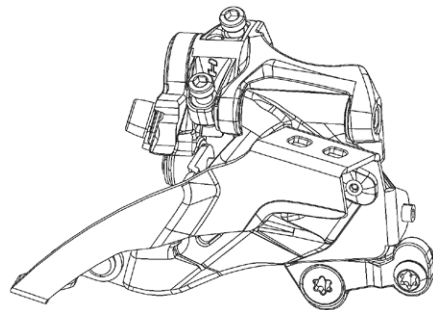
Top pull



Bottom pull

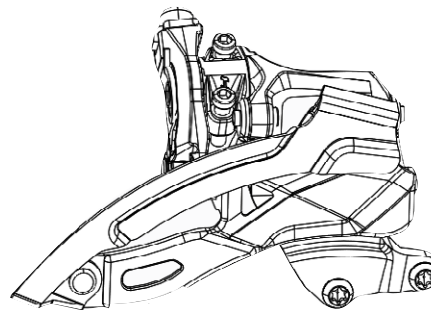


Dual pull



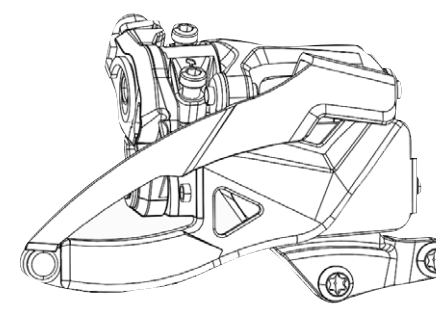
S3 - Standard

2x11 49.0 mm (36/24) Top pull



S3 - Standard

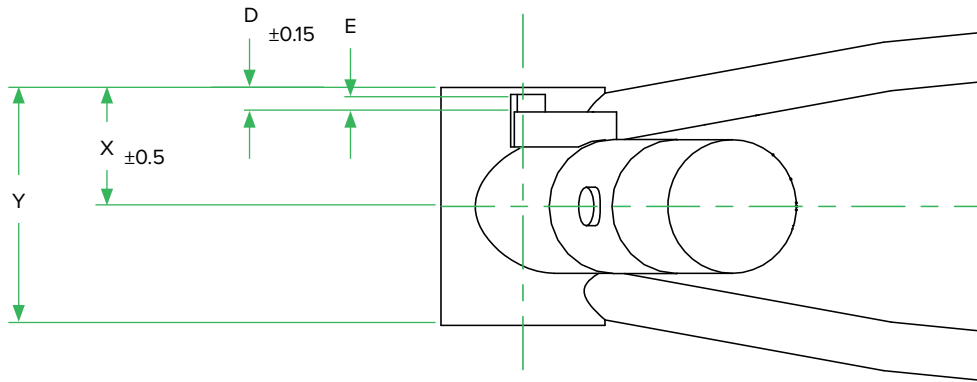
3x10 51 mm (44/33/22) Dual pull



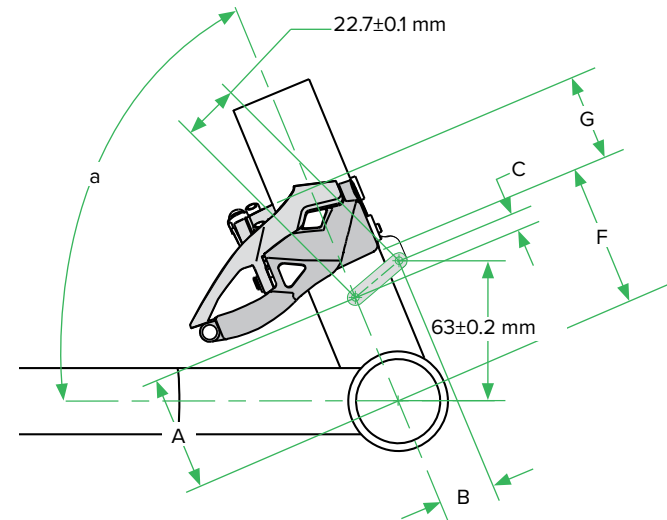
S3 - Standard

2x10 49.0 mm (34/22, 36/22, 38.24)  
2x10 49.5 mm (39/26, 42/28) Dual pull

# GX/X5 Low Direct Mount



Low Direct Mount Type : S2 + S3





# GX/X5 Low Direct Mount

## Mounting Hole Position - Swing Arm Fully Extended

Type	A	B	C	D		E	F	G	a/θ
				68 mm	73 mm				
S3	54 ±0.15	22.1 ±0.05	5 ±0.05	See S3 Mount below		5 ±0.1	65	48 45 (XX)	α = 66°- 69°

## S3 Mount

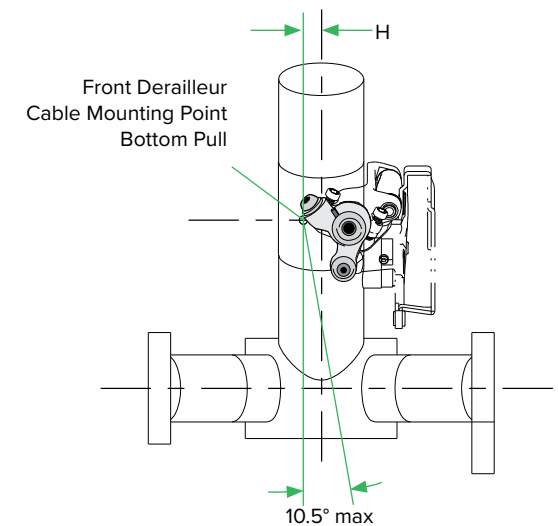
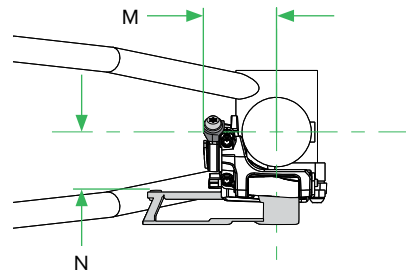
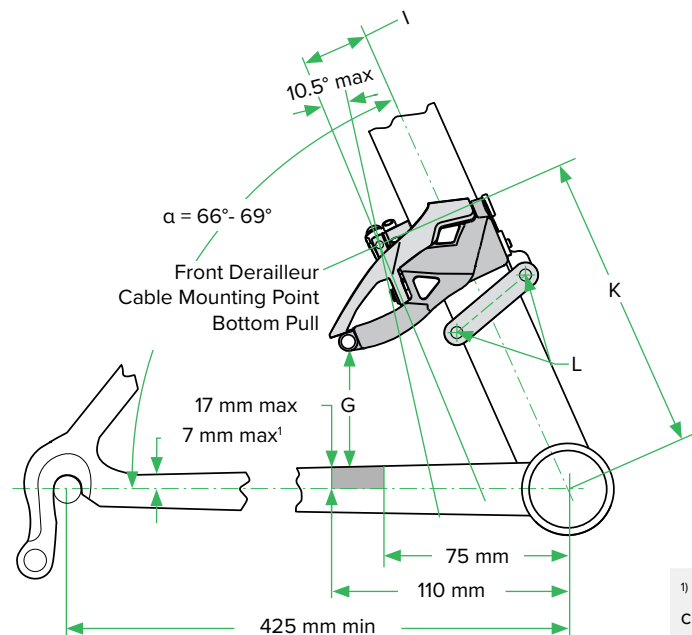
Bottom bracket type	X	Y	D	
	Frame centerline - BB shell (DS)	BB shell width	Standard	BOOST*
English/BSA 68 mm	34.0	68	7.0	4.0
English/BSA 73 mm	36.5	73	9.5	6.5
English/BSA 100 mm (Fatbike)	50.0	100	5.5	-
PressFit 30 73 mm	36.5	73	9.5	6.5
PressFit 89.5 GXP	44.75	89.5	17.75	14.75
PressFit 92 GXP	47.25	92	20.25	17.25
PressFit 121 GXP (Fatbike)	60.5	121	16.0	-

\* Frame manufacturers must modify the front derailleur mounting plane 3 mm outboard to get proper alignment with a 52 mm chainline.

# GX/X5 Low Direct Mount

Cable Routing - Bottom Pull - Swing arm fully extended

	Chainring	H	I	G		K	Thread pitch	Tire clearance	
				a = 66°	a = 69°		L	M	N
2x11	36/24	13 8 (XX)	34 33 (XX)	23	28	92	M5x0.8-6H	42	33
2x10	34/22			22	26	104		42 40 (XX)	33
	36/22			18	21	88			
	38/24			22	26	92			
	39/26			16	21	94			
	42/28			22	27	100			
3x10	44/33/22			17	22	104		45	29

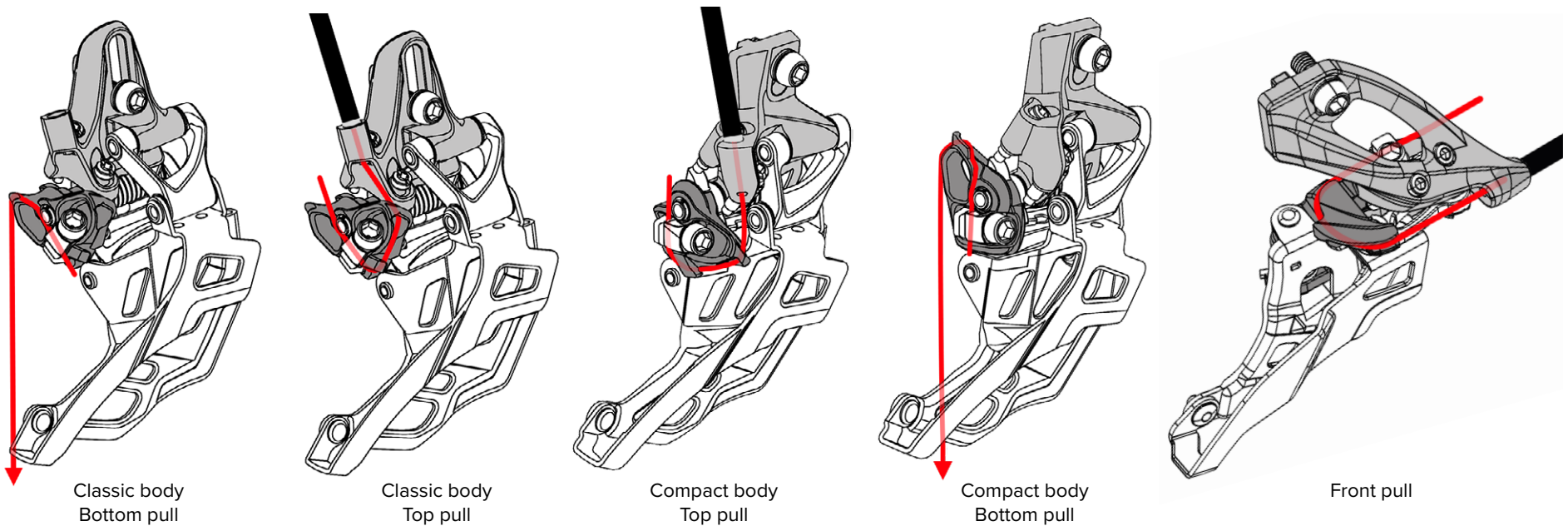


¹ 7 mm Max applies where the chain crosses the chainstay while in the smallest cog.

# GX/X5 High Direct Mount

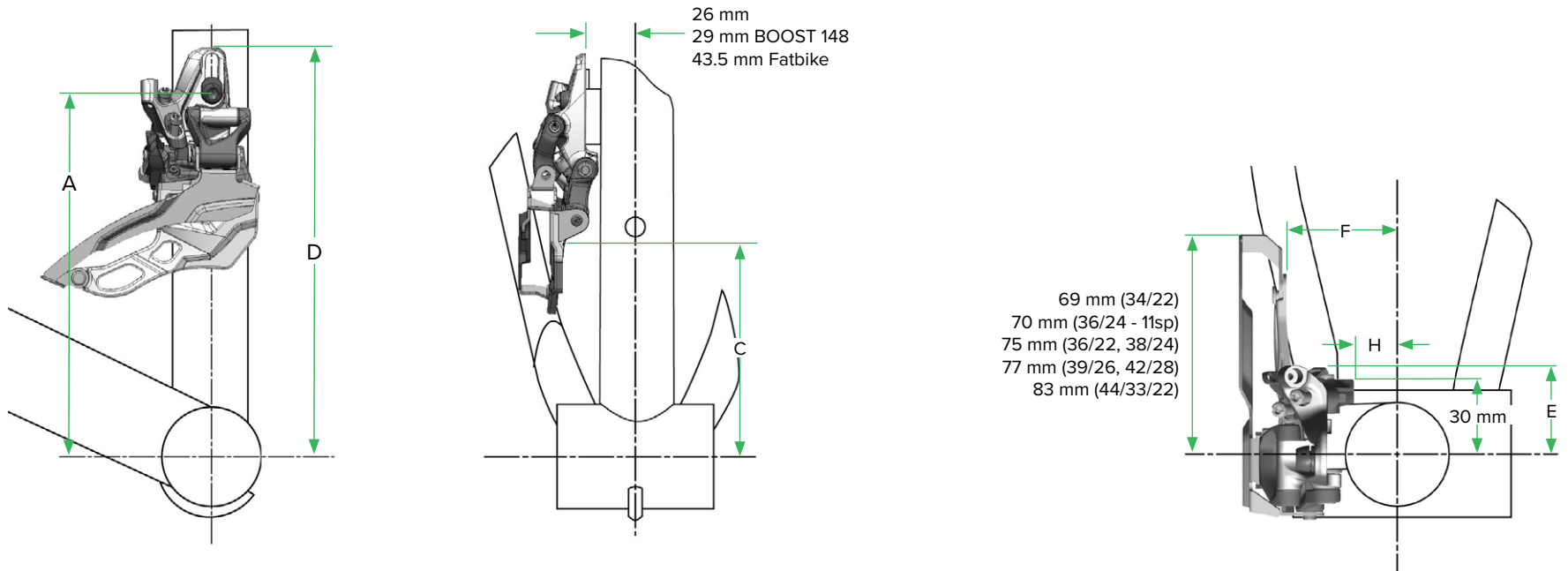
Frame Compatibility and Capacity Information

	Rear capacity	Index	Cable routing	Chainstay angle ( $\alpha$ )	Chainline
Classic Body	10 speed	Yes	Top Bottom	66° - 69°	49 (36/22, 38/24) 49.5 (39/26, 42/28) 51 (44/33/22)
Compact Body	10 speed	Yes	Top Bottom	66° - 69°	49 (34/22, 36/22, 38/24) 49.5 (39/26, 42/28)
	11 speed	Yes	Front	66° - 69°	49 (36/24)



# GX/X5 High Direct Mount

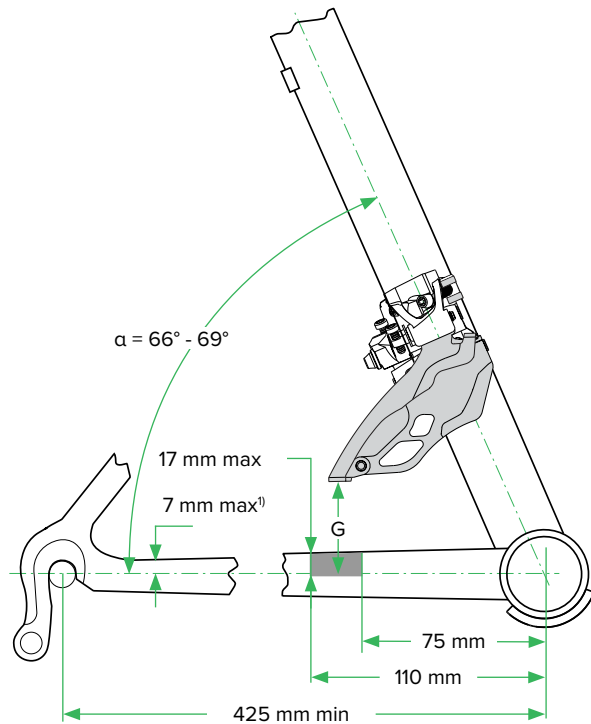
Standard, BOOST 148, and Fatbikes



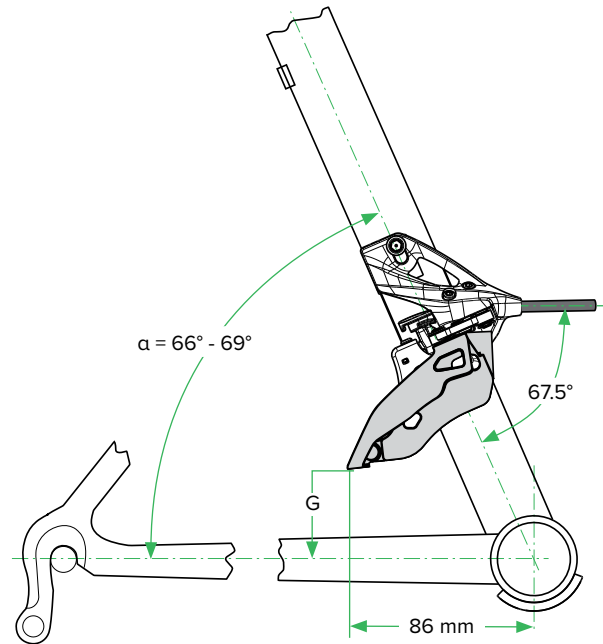
# GX/X5 High Direct Mount

Standard, BOOST 148, and Fatbikes

Top Pull/Bottom Pull



Front Pull



<sup>1)</sup> 7 mm Max applies where the chain crosses the chainstay while in the smallest cog.

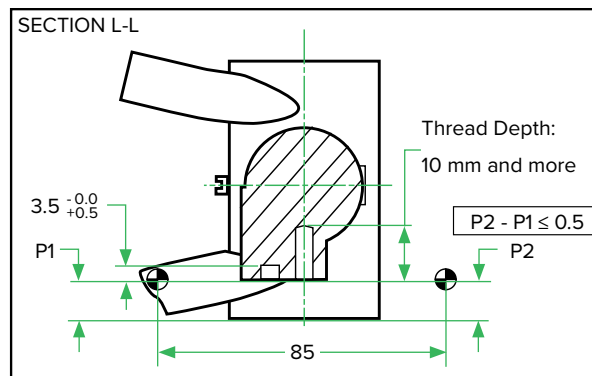
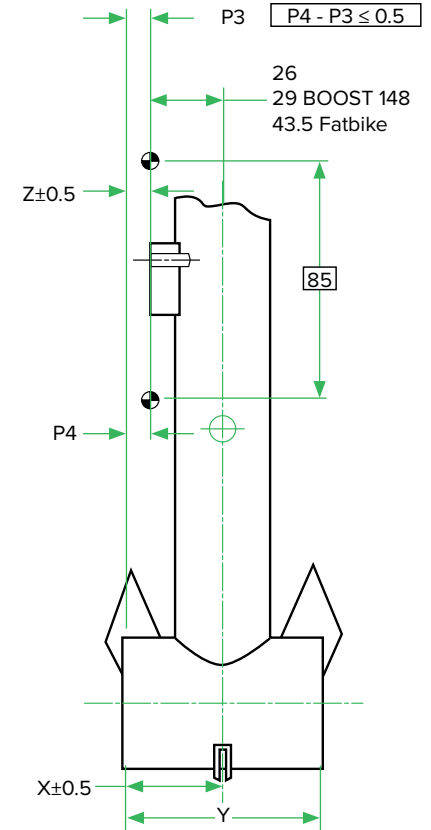
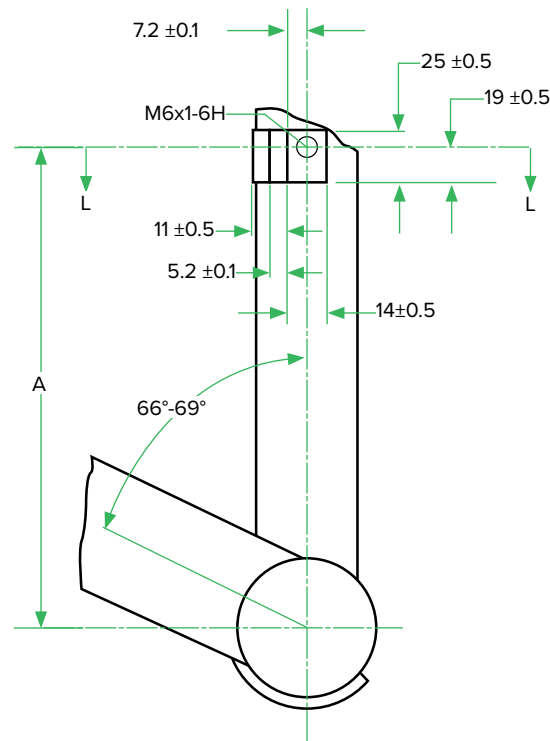
# GX/X5 High Direct Mount

Mount Dimensions												
	Chainring	Cable routing by body style		A	C	D	E	F	G		H	
		Compact	Classic						$\alpha = 66^\circ$	$\alpha = 69^\circ$		
2x11	36/24	Top	-	155 Compact	84	164 Compact	34	35	24	28	14	
		Bottom									7	
		Front										
2x10	34/22	Top	-	155 Compact	88	163 Compact	34	38 55.5 (Fatbike)	22	27	12 29.5 (Fatbike)	
		Bottom									8 25.5 (Fatbike)	
	36/22	Top	Top	155 Compact 155 - 160 Classic	84	164 Compact 168 Classic	34	33 50.5 (Fatbike)	18	23	14 31.5 (Fatbike)	
		Bottom	Bottom								7 24.5 (Fatbike)	
	38/24	Top	Top	155 Compact 155 - 160 Classic	88	169 Compact 173 Classic	34	33 50.5 (Fatbike)	22	27	14 31.5 (Fatbike)	
		Bottom	-								7 24.5 (Fatbike)	
	39/26	Top	Top	155 Compact 155 - 160 Classic	82	163 Compact 167 Classic	34	33	22	27	14	
		Bottom	-								7	
	42/28	Top	Top	155 Compact 155 - 160 Classic	88	169 Compact 173 Classic	34	33	28	33	14	
		Bottom	-								7	
	3x10	44/33/22	-	Top	155 - 160 Classic	98	180 Classic	36	31	24	29	14
			-	Bottom								6

# GX/X5 High Direct Mount

Bottom bracket	X	Y	Z	
	Frame centerline - BB shell (DS)	BB shell width	Standard	BOOST*
English/BSA 68 mm	34.0	68	8.0	5.0
English/BSA 73 mm	36.5	73	10.1	7.5
English/BSA 100 mm (Fatbike)	50.0	100	6.5	-
PressFit 30 73 mm	36.5	73	10.5	7.5
PressFit 89.5 GXP	44.75	89.5	18.75	15.75
PressFit 92 GXP	47.25	92	21.75	18.75
PressFit 121 GXP (Fatbike)	60.5	121	17.0	-

\* Frame manufacturers must modify the front derailleur mounting plane 3 mm outboard to get proper alignment with a 52 mm chainline.

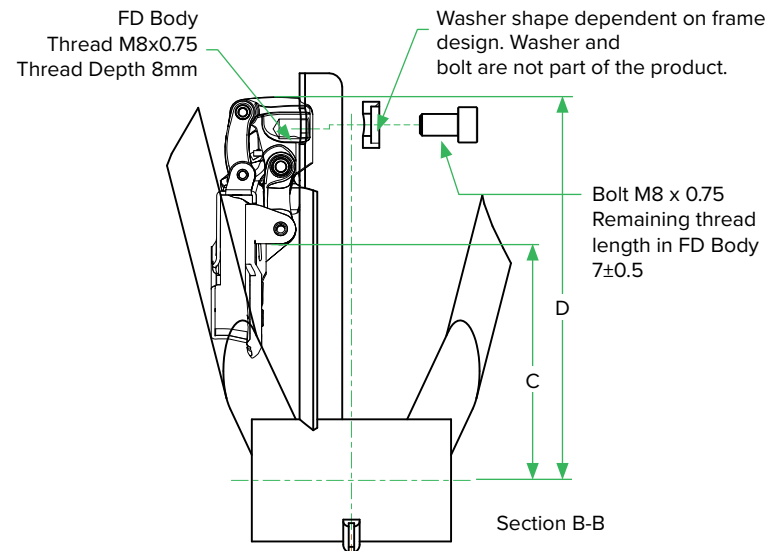
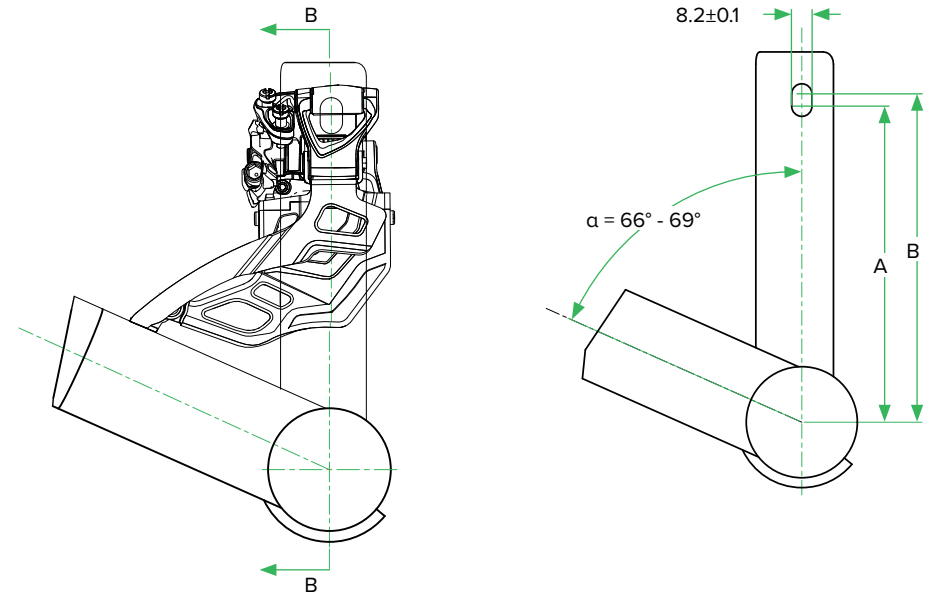
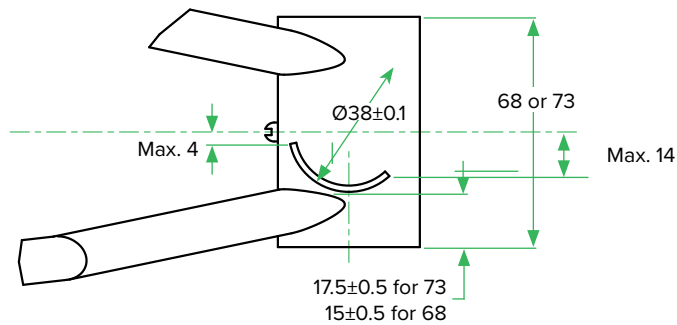


# GX/X5 Mid Direct Mount

Mount Dimensions

	Chainring	Guard	A	B	C	D
			Mounting slot		Mounting area*	
2x11	36/24	Yes	130.5	132.5	86.5	141.5
		No	128	130	84	139
2x10	34/22	Yes	129.5	131.5	93	148
		No	127	129	88	143
	33/22	Yes	128.5	130.5	84.5	139.5
	36/22	Yes	130.5	132.5	86.5	141.5
		No	128	130	84	139
	38/24	Yes	135	137	93	148
No		132.5	134.5	88		

\*Requires a 38 mm diameter.





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