XW Series | Movement Restriction System for Construction Plant Machinery

XW2 Series Rated Capacity Indicator with Height Limitation

Suitable for

• Excavators

3.03m

360 DEGREE

• Special purpose machines

The XW2 can be configured to work on any type of hydraulic excavator. Overload and height limitation is controlled using proportional soft-stop hydraulic valves providing accurate and repeatable performance without detriment to the machine. A basic dig depth monitor is available when the RCI is not required. If hazards arise, XW2 will automatically flip to the relevant display page.



0.33t

Λ

0.32t

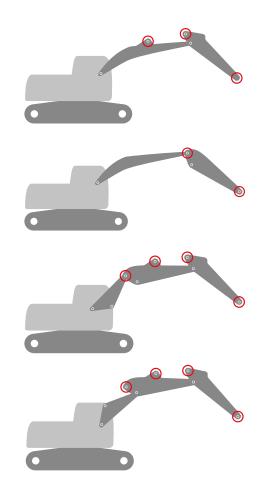
part of Hexagon

XW2 Rated Capacity Indicator with Height Limitation



Operation is fail safe and fully automatic with function selection never more than two key presses away.

Height limitation can be set either manually or by positioning the machine equipment. All motions are individually controlled with ramped slow down on approach and soft stop. There is no machine 'bounce', overshoot or undershoot. An optional chassis sensor can be installed to correct for terrain slope.



Load Charts

Load charts compliant with ISO10567 are supplied for each lifting duty.

							1		-		1			-					
	8.0m	7.5m	7.0m	6.5m	6.0m	5.5m	5.0m	4.5m	4.0m	3.5m	3.0m	2.5m	2.0m	1.5m	1.0m	0.0m			
7.0m					4.56t	4.57t*													
6.5m				3.96t	4.56t	4.61t*											SAFETY	SOLUTIONS	
6.0m			3.45t	3.95t	4.53t	4.72t*											Model	Komatsu PC210-10LC	
5.5m			3.44t	3.92t	4.49t	4.89t*	4.99t*										Serial Number	K60907	
5.0m		3.02t	3.42t	3.88t	4.43t	5.11t	5.29t*	5.50t*									Equipment	5m70 Boom, 2m92 Arm, Q	
4.5m		3.00t	3.38t	3.83t	4.36t	5.01t	5.65t*	5.97t*	6.39t*								Lifting Duty	360° Bucket Pin	
4.0m		2.97t	3.33t	3.76t	4.28t	4.91t	5.70t	6.51t*	7.10t*	7.93t*	9.15t*						-		
3.5m	2.62t	2.93t	3.28t	3.70t	4.19t	4.79t	5.54t	6.52t	7.82t	9.03t*	10.82t						-		
3.0m	2.60t	2.89t	3.23t	3.63t	4.10t	4.67t	5.39t	6.31t	7.52t	9.22t					A				
2.5m	2.57t	2.85t	3.17t	3.56t	4.01t	4.56t	5.24t	6.10t	7.25t	8.81t									
2.0m	2.54t	2.81t	3.12t	3.49t	3.92t	4.45t	5.10t	5.92t	7.00t	8.49t						1			
1.5m	2.51t	2.77t	3.07t	3.42t	3.84t	4.35t	4.97t	5.76t	6.81t	8.26t									
1.0m	2.48t	2.73t	3.02t	3.37t	3.77t	4.26t	4.87t	5.64t	6.66t	8.11t						-			
0.5m	2.46t	2.70t	2.98t	3.32t	3.71t	4.19t	4.78t	5.54t	6.56t	8.02t									
0.0m	2.44t	2.68t	2.95t	3.28t	3.66t	4.13t	4.72t	5.47t	6.49t	7.97t	7.23t*					1			
-0.5m		2.66t	2.93t	3.25t	3.63t	4.09t	4.67t	5.43t	6.46t	7.95t	8.51t*	6.45t*							
-1.0m		2.65t	2.91t	3.23t	3.60t	4.06t	4.64t	5.40t	6.44t	7.96t	9.91t*	7.93t*	6.67t*				Lift capacities are quoted in tonnes, are in compliance with ISO 10567, and assume that		
-1.5m			2.91t	3.22t	3.59t	4.05t	4.63t	5.40t	6.45t	7.98t	10.42t	9.43t*	8.15t*	7.45t*			the machine is operated on firm level ground.		
-2.0m	•••••		2.92t	3.22t	3.59t	4.05t	4.64t	5.41t	6.47t	8.02t	10.49t	11.00t*	9.63t*	8.81t*			They do not exceed 87% of hydraulic lifting capacity (indicated with *) or 75% of the tipping load. Loads are to be suspended		
-2.5m				3.24t	3.61t	4.07t	4.66t	5.43t	6.51t	8.07t	10.56t	12.71t	11.18t*	10.22t*	6.75t*				
-3.0m							·····			••••••	10.66t						vertically below the bucket pin. Do not		
-3.5m							÷			÷	10.78t							r hold any load that is greater	
-4.0m							·····	·		·····	10.93t					·	than these lift capacities at their specified lift point radius and height. Weight of all accessories must be deducted from the quoted lift capacities.		
-4.5m							÷			·····	11.01t								
-4.0111							4.551	5.750	0.051	0.500	11.010		<u>.</u>						

XW2 Rated Capacity Indicator with Height Limitation

Base system

Major components carry a five-year guarantee excluding misuse and physical damage.

IO Controller

Solid state, fully potted IP67, mounted in pump or engine bay. 4 x analogue inputs. 8 x digital inputs. 12 x output. All with full electrical protection and diagnostics, 2 x CAN bus. 11 - 30VDC. Manual key override for motion control valves. <15mS program cycle time with all features enabled.

Angle sensors

Compact solid state 3 axis accelerometer with gyro compensation. Stainless steel, IP67. CAN J1939. Steel mounting bracket. Can be mounted anywhere on the front-end equipment in any orientation. Direct drive performance. Up to three articulations can be monitored with the addition of chassis attitude.

Display

IP65, RAM mount to window or dash. 4.3" LED backlit colour. 800 x 480 px. 11 x RGB backlit, tactile keys. 1 x CAN bus. 1 x Ethernet. 8-32VDC.

Cabling

Industry standard multi-core screened with M12 connectors.

Pressure sensors

400 bar 4-20mA. Stainless steel, IP67. Connected to both piston and annular sides of the boom lift cylinders.

Hydraulics

Custom made hydraulics with super compact aluminium. PWM proportional sandwich valve available in 2, 4 and 6 valve manifolds. Other hydraulic options are available.

Options

Access key switch	Prevents/allows setting changes						
Track lock	Inhibits travel when a height limitation is active						
Beacon	RCI is active indication						
Offset boom sensor	Monitors offset boom angle (single proximity switch detection also available)						
Reeling drum	Monitors telescopic arm extension (single proximity switch detection also available)						
Platform sensor	Monitors chassis pitch and roll angles						
Auto duty switching	Proximity switch detection for up to four lifting duties						
Data Logger	CAN bus mounted event recorder with SD card						



Want to know more?

visit xwatch.co.uk



part of Hexagon