



TERRANOVA

CRANE & HEAVY HAULAGE

Kato MR 350Ri



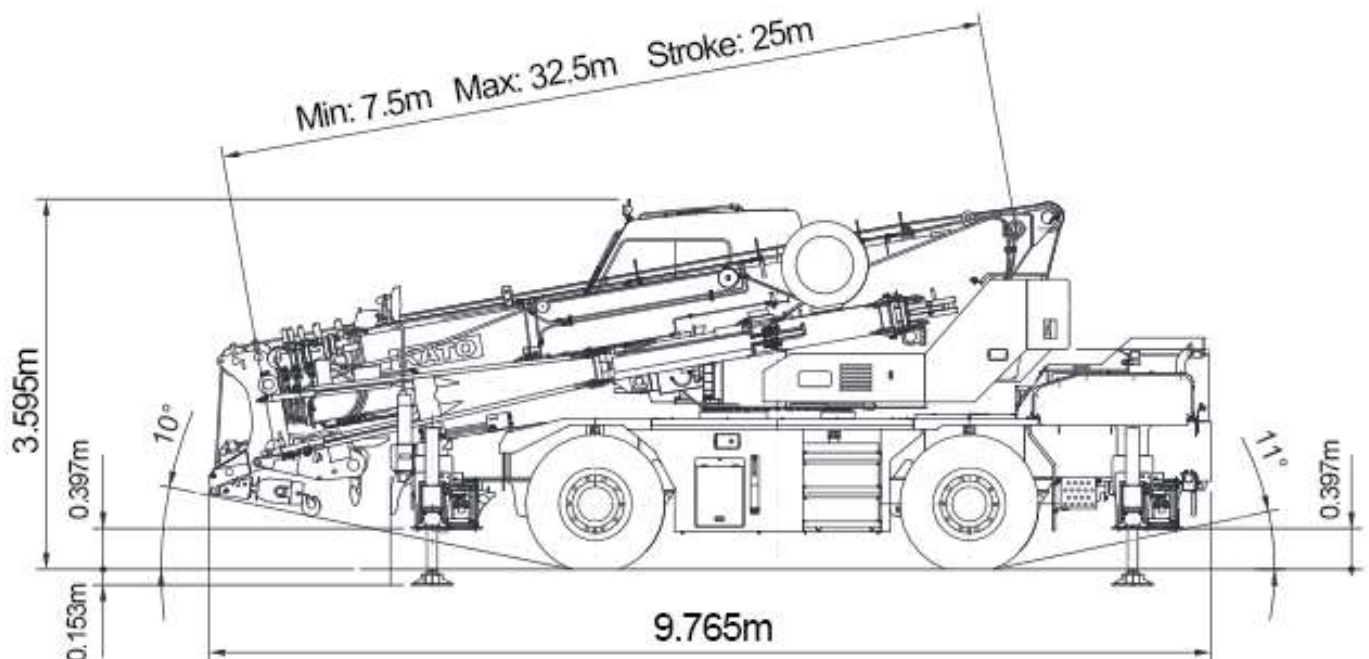
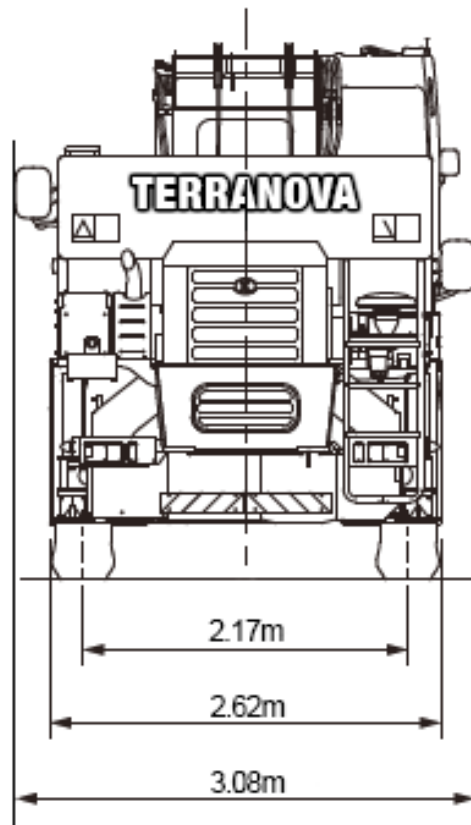
A 35 tonne City Crane with a 32.5m extending main boom on a compact carrier. It has a turning circle of 6.2m, a 35 tonne lifting capacity at 2.6m, and maximum lifting height of 47.3m

T : +44 (0) 1252 854 596
E : hello@terranova.co.uk
W : www.terranova.co.uk

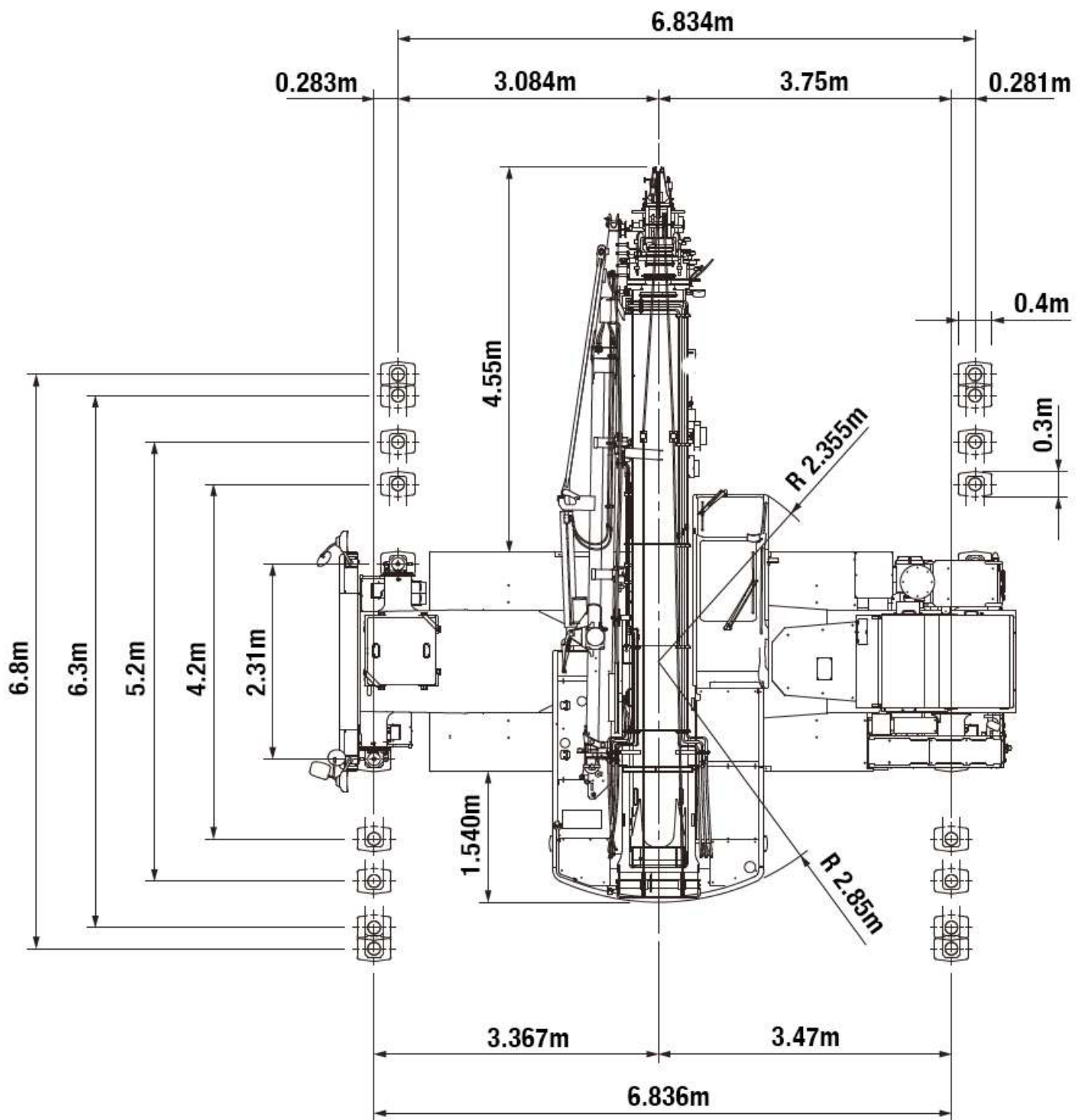
CRANES

Kato MR 350Ri

- City Crane with all terrain capabilities.
- Compact Carrier, short tail model
- Maximum lifting capacity: 35 tonne
- 6 section extending main boom
- 3 Section SL Jib
- Maximum lifting height of 47.3m
- Full 360 degree rotating boom
- Minimum turning circle 6.2m
- Pick and Carry



Out Rigger Layout



The diagram illustrates the operational range of a KATO truck-mounted crane. The main illustration shows the crane's boom extended vertically, with a reach of 32.5m and a rotation angle of 83°. An inset diagram provides a detailed view of the boom's articulation, showing a 5° angle between the boom segments and a 60° range of motion for the boom's rotation. The boom is shown in various positions, with a reach of 14m and a height of 6.5m indicated for one specific configuration.

Terranova, Bowenhurst Lane, Crondall, Farnham, Surrey, GU10 5RP
+44 (0)1252 854 596 - hello@terranova.co.uk - www.terranova.co.uk

Main Boom – Duty Chart (tonne, m)

												
Working radius (m)	Outriggers fully extended (6.8m) - 360° full range						Outriggers intermediately extended (6.3m) - over side					
	7.5m Boom	12.5m Boom	17.5m Boom	22.5m Boom	27.5m Boom	32.5m Boom	7.5m Boom	12.5m Boom	17.5m Boom	22.5m Boom	27.5m Boom	32.5m Boom
2.6	35.00*	19.00	17.00	12.00			35.00*	19.00	17.00	12.00		
3.0	32.00*	19.00	17.00	12.00			32.00*	19.00	17.00	12.00		
3.3	30.00	19.00	17.00	12.00			28.50	19.00	17.00	12.00		
3.5	28.80	19.00	17.00	12.00	9.00		27.80	19.00	17.00	12.00	9.00	
4.0	26.00	19.00	17.00	12.00	9.00		25.00	19.00	17.00	12.00	9.00	
4.5	23.00	19.00	17.00	12.00	9.00	7.00	22.50	19.00	17.00	12.00	9.00	7.00
5.0	20.50	19.00	17.00	12.00	9.00	7.00	20.30	19.00	17.00	12.00	9.00	7.00
5.5		18.50	15.85	12.00	9.00	7.00		18.50	15.85	12.00	9.00	7.00
6.0		17.00	14.75	12.00	9.00	7.00		17.00	14.75	12.00	9.00	7.00
6.5		15.50	13.80	12.00	9.00	7.00		15.50	13.80	12.00	9.00	7.00
7.0		14.20	12.95	11.40	9.00	7.00		13.40	12.95	11.40	9.00	7.00
8.0		11.70	11.50	10.15	8.60	7.00		10.15	10.10	10.15	8.60	7.00
9.0		9.20	9.15	9.05	7.80	6.45		7.95	7.90	8.65	7.80	6.45
10.0		7.45	7.40	8.10	7.10	5.90		6.45	6.35	7.05	7.10	5.90
11.0			6.10	6.75	6.55	5.45			5.20	5.85	6.25	5.45
12.0			5.05	5.70	6.00	5.00			4.30	4.95	5.30	5.00
13.0			4.20	4.85	5.25	4.60			3.55	4.20	4.55	4.60
14.0			3.50	4.15	4.55	4.25			2.90	3.55	3.95	4.15
15.0			2.95	3.55	3.95	3.95			2.40	3.00	3.40	3.60
16.0				3.05	3.45	3.65				2.55	2.95	3.15
17.0				2.65	3.00	3.25				2.20	2.55	2.75
18.0				2.25	2.65	2.85				1.85	2.20	2.40
19.0				1.95	2.30	2.50				1.55	1.90	2.10
20.0				1.65	2.00	2.20				1.30	1.65	1.85
22.0					1.50	1.75					1.20	1.40
24.0					1.15	1.35					0.85	1.05
26.0						1.00						0.75
28.0						0.75						0.50
30.0						0.55						
Critical boom angle	—	—	—	—	—	—	—	—	—	—	—	15°
Standard hook	for 35 ton	For 22 ton					for 35 ton	For 22 ton				
Hook mass	310kg	215kg					310kg	215kg				
Parts of line	10*/8	6		4			10*/8	6		4		

(Unit: Metric ton)

Main Boom – Duty Chart (tonne, m)

	 (5.2m)						 (4.2m)						 (2.31m)					
Working radius (m)	Outriggers intermediately extended (5.2m) - over side						Outriggers intermediately extended (4.2m) - over side						Outriggers completely retracted (2.31m) - over side					
	7.5m Boom	12.5m Boom	17.5m Boom	22.5m Boom	27.5m Boom	32.5m Boom	7.5m Boom	12.5m Boom	17.5m Boom	22.5m Boom	27.5m Boom	32.5m Boom	7.5m Boom	12.5m Boom	17.5m Boom	22.5m Boom	27.5m Boom	32.5m Boom
2.6	30.00	19.00	17.00	12.00			30.00	19.00	17.00	12.00			12.00	12.00	10.50	10.50		
3.0	30.00	19.00	17.00	12.00			27.00	19.00	17.00	12.00			12.00	12.00	10.50	10.50		
3.5	26.50	19.00	17.00	12.00	9.00		23.00	19.00	17.00	12.00	9.00		9.10	9.00	8.65	8.80	7.40	
4.0	23.50	19.00	17.00	12.00	9.00		19.00	19.00	17.00	12.00	9.00		7.10	7.00	7.00	7.35	6.30	
4.5	21.00	19.00	17.00	12.00	9.00	7.00	15.65	15.50	15.35	12.00	9.00	7.00	5.70	5.60	5.60	6.15	5.45	5.30
5.0	19.00	18.50	17.00	12.00	9.00	7.00	12.55	12.45	12.45	12.00	9.00	7.00	4.65	4.50	4.55	5.25	4.70	4.65
5.5		15.35	15.35	12.00	9.00	7.00		10.25	10.25	11.15	9.00	7.00		3.75	3.70	4.40	4.10	4.10
6.0		12.75	12.75	12.00	9.00	7.00		8.60	8.60	9.45	9.00	7.00		3.10	3.05	3.75	3.50	3.60
6.5		10.80	10.80	11.65	9.00	7.00		7.35	7.35	8.10	8.60	7.00		2.55	2.55	3.15	3.15	3.20
7.0		9.30	9.30	10.10	9.00	7.00		6.30	6.30	7.05	7.50	7.00		2.10	2.10	2.70	2.75	2.80
8.0		7.10	7.10	7.80	8.30	7.00		4.80	4.80	5.45	5.90	6.10		1.35	1.30	1.95	2.10	2.20
9.0		5.60	5.55	6.25	6.65	6.45		3.75	3.70	4.30	4.70	4.90				1.40	1.55	1.70
10.0		4.50	4.40	5.05	5.45	5.70		2.90	2.90	3.45	3.85	4.05						
11.0			3.50	4.20	4.55	4.75			2.20	2.80	3.20	3.35						
12.0			2.80	3.45	3.85	4.05			1.65	2.30	2.65	2.80						
13.0			2.20	2.85	3.25	3.45			1.20	1.80	2.20	2.35						
14.0			1.75	2.35	2.75	2.95			0.75	1.40	1.80	2.00						
15.0			1.35	1.95	2.30	2.50			0.40	1.10	1.45	1.65						
16.0				1.60	1.95	2.15				0.80	1.15	1.35						
17.0				1.25	1.65	1.85				0.50	0.90	1.10						
18.0				1.00	1.35	1.55					0.65	0.90						
19.0				0.80	1.10	1.35					0.45	0.70						
20.0				0.55	0.90	1.10						0.55						
22.0					0.55	0.75												
24.0						0.45												
Critical boom angle	—	—	—	—	26°	36°	—	—	—	32°	40°	48°	—	35°	55°	61°	67°	72°
Standard hook	for 35 ton	For 22 ton					for 35 ton	For 22 ton					for 35 ton	For 22 ton				
Hook mass	310kg	215kg					310kg	215kg					310kg	215kg				
Parts of line	8	6					8	6					8	6				

(Unit: Metric ton)

17.5m Boom + 14.0m SL Jib

								
Outriggers fully extended (6.8m) 360° full range								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	4.0	1.35	8.7	0.80	12.1	0.50	14.0	0.40
80	6.8	1.35	10.2	0.80	13.5	0.50	15.3	0.40
75	8.5	1.35	12.7	0.71	15.6	0.48	17.1	0.40
70	11.1	1.22	15.0	0.63	17.6	0.45	18.5	0.40
66	13.0	1.03	16.7	0.59	19.0	0.44	19.7	0.40
63	14.5	0.92	18.0	0.55	20.1	0.43	20.0	0.40
60	15.8	0.83	19.1	0.53	20.9	0.42		
55	18.0	0.72	21.0	0.49	22.3	0.42		
50	20.0	0.64	22.7	0.46	23.8	0.41		
46	21.5	0.59	24.0	0.45	25.0	0.41		
40	23.4	0.54	25.5	0.43				
35	25.1	0.50	26.5	0.42				
30	26.3	0.47	27.4	0.42				
26	27.2	0.46	28.0	0.42				
20	28.1	0.44						
15	28.9	0.43						
6	29.3	0.43						
Critical boom angle	5°		25°		45°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

(Unit: Metric Tonne)

Stationary on Rubber - Duty Chart



Working radius (m)	Stationary on rubber							
	7.5m Boom		12.5m Boom		17.5m Boom		22.5m Boom	
	Over front	360° full range	Over front	360° full range	Over front	360° full range	Over front	360° full range
2.5	14.00	8.20	12.00	6.50	8.00	6.50		
3.0	14.00	8.20	12.00	6.50	8.00	6.50	6.50	5.00
3.5	12.50	6.10	11.00	5.30	8.00	5.20	6.50	5.00
4.0	11.00	4.70	10.00	4.20	8.00	4.00	6.50	5.00
4.5	10.00	3.80	9.00	3.40	8.00	3.30	6.50	4.10
5.0	9.00	2.80	8.00	2.70	8.00	2.70	6.50	3.45
5.5			6.80	2.20	7.30	2.20	6.50	2.90
6.0			5.80	1.80	6.50	1.80	5.80	2.45
6.5			5.10	1.40	5.70	1.40	5.10	2.00
7.0			4.40	1.00	4.90	1.00	4.70	1.60
8.0			3.40		3.40		3.90	1.00
9.0			2.60		2.60		3.15	
10.0			2.00		1.90		2.50	
11.0					1.30		1.85	
12.0					0.80		1.35	
13.0					0.50		0.90	
14.0							0.55	
Critical boom angle	—	—	—	44°	31°	60°	45°	64°
Standard hook	For 22 ton							
Hook mass	215kg							
Parts of line	4							

(Unit: Metric Tonne)

Pick and Carry - Duty Chart



								
Pick & carry (less than 2km/h)								Working radius (m)
7.5m Boom		12.5m Boom		17.5m Boom		22.5m Boom		
Over front	360° full range	Over front	360° full range	Over front	360° full range	Over front	360° full range	
9.50	6.00	9.50	5.50	7.00	5.50			2.5
9.50	6.00	9.50	5.50	7.00	5.50	6.00	4.50	3.0
8.50	4.50	8.60	4.40	7.00	4.40	6.00	4.50	3.5
7.50	3.55	7.50	3.55	7.00	3.55	6.00	3.90	4.0
6.60	2.85	6.60	2.85	6.40	2.85	6.00	3.40	4.5
5.80	2.30	5.90	2.25	5.80	2.25	5.60	2.90	5.0
		5.30	1.75	5.20	1.75	5.20	2.40	5.5
		4.70	1.30	4.70	1.30	4.70	2.00	6.0
		4.20	0.90	4.20	0.85	4.20	1.50	6.5
		3.70		3.70		3.70	1.10	7.0
		2.80		2.80		2.90		8.0
		1.90		1.90		2.30		9.0
		1.00		1.00		1.70		10.0
				0.60		1.10		11.0
						0.70		12.0
						0.50		13.0
								14.0
—	—	—	48°	37°	62°	48°	67°	Critical boom angle
For 22 ton								Standard hook
215kg								Hook mass
4								Parts of line

(Unit: Metric Tonne)



Terranova, Bowenhurst Lane, Crondall, Farnham, Surrey, GU10 5RP
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