



ELECTRIC TRACTORS

BULL 10
BULL 10 P
CAB

Bull 10 is a four-wheel tractor designed for continuous, heavy-duty service and features a 10-ton towing capacity. Also suitable for outdoor use, in which case it is equipped with cab, it is closed in the lower part or protected where exposed to wet ground.

The tractor components are designed for the intended use and include a hydraulic steering system and a cylinder to operate the steering wheels. Front and rear suspensions minimize the vibrations caused by irregular terrain and transmitted to the operator, who sits on a cushioned seat that provides optimum conditions in which to work. The cab is generously sized and soundproofed. The transmission system features an axle with differential, which supports a high-power AC motor controlled by an AC electronic system ensuring gradual acceleration, delicate manoeuvres and regenerative braking. The braking system includes three circuits: a circuit for the front hydraulic drum brakes, a circuit for the rear hydraulic drum brakes and electronic regenerative braking. On request, the machine can be equipped with numerous optionals: starting by badge, cabs of various kinds, Rockinger hitch with or without unhitching device on board, no-marking wheels, double seat and many other items. BULL 10 can be fitted with a loading platform of different standard dimensions. On request, platforms can also be made with dimensions and characteristics to suit the customers' requirements. The platform deck can be covered in various materials and fitted with side panels of different sizes and characteristics. Our standard side panels are like the ones on trucks. They are made of aluminium and can be opened. As well as the loading platform, BULL 10 NP can be equipped with a cab and various types of wheels.





BULL 10 - BULL 10 P - CAB

Electric arc welded steel sheet forms a rigid bearing structure. The special shape allows the components to be very easily accessed. The cushioned box-shaped sheet metal front axle comprises hubs, bushes and pins of remarkable size and precision.

DRIVE UNIT: comprises a differential specifically designed for reliable and silent operation and a long-lasting, high-performance AC motor.

The motor has an encoder and thermal valve that dialogue with the electronic control system. The rear axle is linked to the chassis by connecting rods, while the chassis itself is cushioned on the axle by rubber shock-absorbers.

STEERING SYSTEM: a hydraulic cylinder operated by a controller and driven by a power steering unit ensures smooth steering within a small space.

ELECTRIC SYSTEM: mainly consists of an AC electronic controller and motor. The system provides power at low speeds, an optimum maximum speed and controlled movements, controlled speed during descents, energy recovery when braking, regenerative braking. Brake system: hydraulic drum brakes on the four wheels for an excellent braking action and absolute reliability in all conditions. Mechanical parking brake.

WHEELS: 4.00-8 superelastic tyres on modular rims.

INSTRUMENTATION: complete motor car type instrumentation including low battery warning indicator, hours worked and fault indicators, hare / tortoise indicator, horn, light switch, turn indicator switch, rear control buttons.

POWER SUPPLY: a 48 V 375 A battery with considerable autonomy allows the tractor to operate for a long period of time and thanks to its large capacity, will not normally be subjected to stress. This makes it extremely long-lasting.

SAFETY DEVICES: seat occupancy micro, maximum speed selector on request, battery quick release device, battery safety retainer, double brake circuit, AC system for speed control, automatic parking brake.



BULL 10 B - CAB

BULL 10 can be fitted with a loading platform of different standard dimensions. On request, platforms can also be made with dimensions and characteristics to suit the customers' requirements.

The platform deck can be covered in various materials and fitted with side panels of different sizes and characteristics. Our standard side panels are like the ones on trucks. They are made of aluminium and can be opened.

As well as the loading platform, BULL 10 NP can be equipped with a cab and various types of wheels.



BULL 10



BULL 10 P - CAB 1

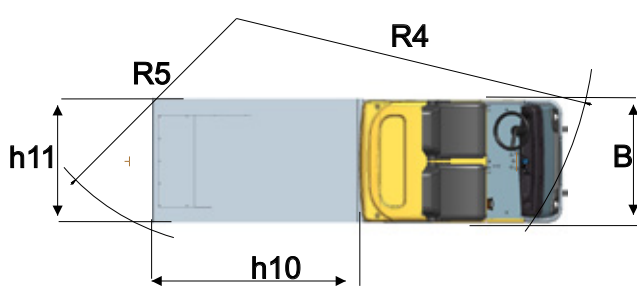
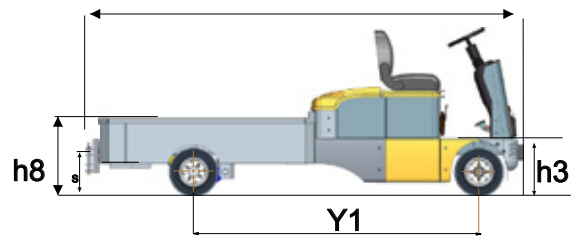
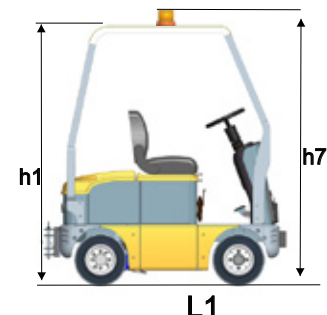
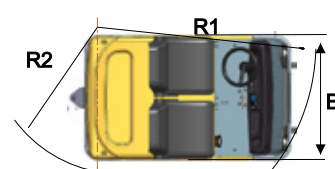
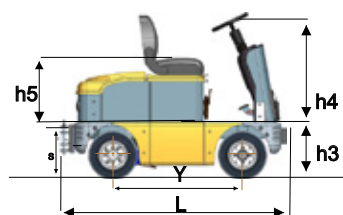


BULL 10 P - CAB 2



BULL 10 BULL 10 P CAB

ELECTRIC TRACTORS



CHARACTERISTICS		dim.un.	
Manufacturer			
Model		Bull10	Bull10P
Platform loading capacity	Nominal capacity	Kg. ----	1000
Pull capacity	Load nominal capacity	Kg. 10000	10000
Power type	Electric/Endothermic	Elettr.	Elettr.
Control type	Pedestrian/stand-on/Seated	sitting	sitting
Tyres	Pn - pneum. / se - superel.	Se-Se	Se-Se
Wheels	Number front/rear X=drive	Nr. 4 - 2/2x	4 - 2/2x
Platform dimensions	L x B (length x width)	mm. ----	see table

DIMENSIONS			
h= machine body hight	mm.	----	----
L= length	mm.	1692	1692
B=width	mm.	1020	1020
h 3 = feet panel hight	mm.	470	470
h 4 = steering/handle hight	mm.	780	780
h 2 = thiller hight	mm.	----	----
h 5 = seat hight	mm.	470	470
h 6 = turning light hight	mm.	----	----
h 7 = cabin turning light hight	mm.	2100	2100
h 1 = cabin hight	mm.	1960	1960
h 9 = cabin width	mm.	1020	1020
Turning radius			
R1= front min. external	mm.	2010	see table
R2=rear min. external	mm.	1520	see table
R3=rear min.internal	mm.	545	see table
Aisle width	U-turn	mm. 3524	see table
Hook hight	s = hook center to ground	mm. 260-405	260-405

PERFORMANCE			
Speed	Without / with load	Km./h	16-8 15-8
Tractive effort	Continuative work 60'	N.	2100 2100
	Max in plane x 5"	N.	6800 6800
Gradeability	Without/width	%	20-4
Weight	With battery	Kg.	1500 see table
Axles load	Front/rear with battery	Kg.	700-800 see table

TRACTION			
Wheels	Front diam./ width	mm.	400-125 400-125
	Rear diam./ width	mm.	400-125 400-125
Wheelbase	y = pitch	mm.	1060 see table
Trach	C posterior wheels center	mm.	876 876
Ground clearance	clearance at half chassis	mm.	120 120
Working brake	Mecc./hydraul./elettr.	hydraul.	hydraul.
	Brake axes number	N.	2 2
Parking brake	Mecc./hydraul./elettr.	Elettr.	Elettr.
Suspensions	Spring/laf spring/schock absorber	schock absorber	schock absorber

POWER SUPPLY			
Battery	Type	Reinforced	Reinforced
	Capacity	V./Ah. 48-375(C5)	48-375(C5)
	Weight	Kg.	560 560
Electric motor	Translation.power S2=60°	Kw. 8 AC	8 AC
Electric system	electronic control	Inverter AC/Inverter AC	Inverter AC
Steering	Mecc./hydraul./elettr.	Mechanics	Mechanics
Transmission	Mecc.	Mechanics	Mechanics
Towing hook	manual - automatic	Manual	Manual
Autonomy	working hours with medium work	h.	6-8 6-8

BULL10P-1			
hight of platform (h8)	mm	635	
width-length (h10 x h11)	mm	2125x1060	
	L	mm	3820
	Y	mm	2405
	R4	mm	4400
	R5	mm	3300
	R6	mm	1230
	U-turn	mm	7770
weight with battery	kg	2150	

