

# Explosion-proof Electric Hoist

YUANTAI CRANE

## YT-BCD<sub>1</sub> / BMD<sub>1</sub> CLASSICAL MODEL

### ADVANTAGE

It is very convenient to use, maintain and repair, and can shorten the maintenance period.

Its explosion-proof motor, explosion-proof control box and control buttons are separate flameproof structures.

The parts are highly versatile and interchangeable.

The reducer adopts standard modulus cylindrical gear for easy maintenance.



# YT-BCD<sub>1</sub> / BMD<sub>1</sub> Model Explosion-proof Electric Hoist



## Overview

Explosion-proof electric wire rope hoists are a series of products, designed and fabricated under the National Standard of GB3836-2000 (Electrical Apparatus for Explosive Gas Atmospheres). Both self-made and complemented factory-made explosion-proof motors and electrical apparatuses are designed, fabricated, checked and accepted according to the National Standard GB3836.1-2000 (General Requirements of Electrical Apparatus for Explosive Gas Atmospheres) and GB3836.2-2000 (Electrical Apparatus for Explosive Gas Atmospheres Flame-proof Enclosure “d”).

## Features

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## Application

When there are flammable gases or explosive mixture of vapour and air as shown in the below table (table 1), the explosion-proof electric hoists can be installed on I-beam for lifting and for reciprocating liner or curvilinear movements in a safe manner.

Environment temperature: -20°C ~+40°C

Altitude: below 1000 m

Relative humidity: 85% (20±5 °C)

This series of products can be used with explosion-proof suspension crane or explosion-proof single-beam bridge crane according to different service requirements.

Table 1

Explosion Group	Temperature Class			
	T1	T2	T3	T4
IIA	Ethane, Propane, Styrene, Xylene, Benzene, Acetone, Carbon monoxide, Methyl acetate nitrogen, Pyridine	Ethanol, Butane, Propylene, Alkyd ester, Polyethylene, Methylamine thiophene diacid, Dichloroethane	Pentane, Decane, Turpentine, Ethylcyclopentane, Fuel oil, amyl alcohol, Chlorobutane, Naphtha, THT, Petroleum	Ethylal, Trimethylamine, Aether
IIB	Acrylonitrile, Hydrogen cyanide, Coal oven gas	Ethylene, Epoxyethane, Methyl acrylate, Furan	Dimethyl ether, Acraldehyde, Butylene oxide, Hydrogen sulfide	Diethyl ether, Dibutyl ether, Ethyl methyl ether, Tetrafluoroethylene
IIC	Hydrogen, Water gas	Acetylene		

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## Supply Scope

### For monorail (single girder)

Lifting capacity: 0.5-20 ton

Lifting height: 3m, 6m, 9m 12m, customized

Power supply: 220-550V 50/60Hz 3Phase

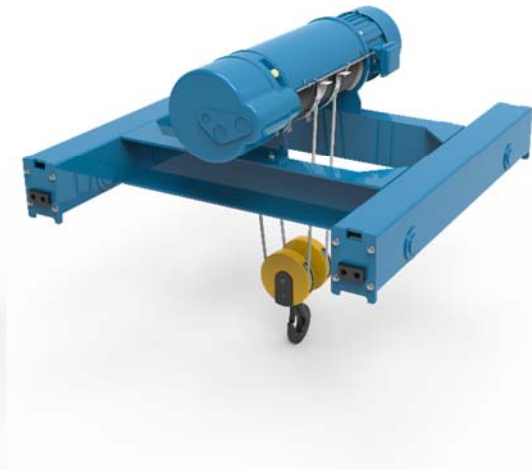
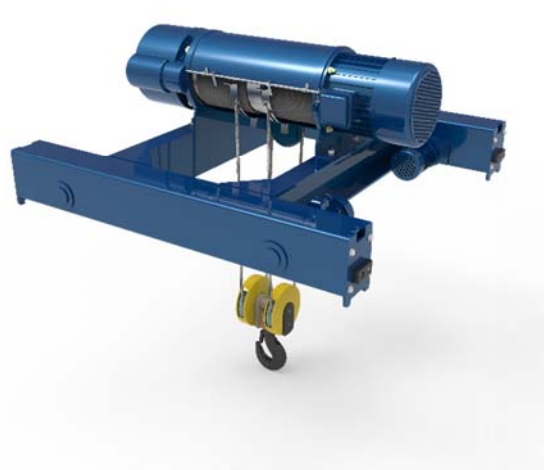


### For crab hoist (double girder)

Lifting capacity: 0.5-32 ton

Lifting height: 3m, 6m, 9m 12m, customized

Power supply: 220-550V 50/60Hz 3Phase



Model		BCD <sub>1</sub>														BMD <sub>1</sub>																		
Lifting capacity	Ton	0.5			1						2					3						5						10-16						
Lifting height	M	6	9	12	6	9	12	18	24	30	6	9	12	18	24	30	6	9	12	18	24	30	6	9	12	18	24	30	6	9	12	18	24	30
Lifting speed	m/min	8(0.8)			8(0.8)						8(0.8)					8(0.8)						8(0.8)						4(0.4)						
Travelling speed	m/min	20			20						20					20						20						20						
Wire rope	diameter mm	4.8			7.4						11					13						15.5						15.5-17.5						
	line mm	0.22			0.34						0.5					0.6						0.7						0.7						
	structure	D-6x37+1			D-6x37+1						D-6x37+1					D-6x37+1						D-6x37+1						D-6x37+1						
I beam rail (GB706-65)		16-28b			16-28b						20a-30c					20a-30c						25a-63c						25a-63c						
Round rail Min. radius	M	1.5			1.5		2	3	4	2		2.5	3	4	2		2.5	3	4	2.5		2.5	4	5	2.5		3.5	4	6	7.5	9			
Lifting motor	Model	BZD21-4			BZD22-4						BZD31-4					BZD32-4						BZD41-4						BZD41-4						
	KW	8			1.5						3					4.5						7.5						7.5						
	rotation r/min	1380			1380						1380					1380						1400						1400						
	Phase	3			3						3					3						3						3						
	voltage V	380			380						380					380						380						380						
	currency A	2.4			4.3						7.6					11						18						30						
	frequency r/s	50			50						50					50						50						50						
Traveling motor	Model	BZDY11-4			BZDY11-4						BZDY12-4					BZDY12-4						BZDY21-4						BZDY21-4						
	capacity KW	0.2			0.2						0.4					0.4						0.8						0.8x2						
	rotation r/min	1380			1380						1380					1380						1380						1380						
	Phase	3			3						3					3						3						3						
	voltage V	380			380						380					380						380						380						
	currency A	0.72			0.72						1.25					1.25						2.4						2.4x2						
	frequency r/s	50			50						50					50						50						50						
Start times	t/week	120			120						120					120						120						120						

Work class	JC%	25%			25%			25%			25%			25%			25%																	
Dimension	H(mm)	~630			~685			~780			~860			~960			~958			~1085			~1160			~1310			~1350					
	L2(mm)	126			159						187						230						274						303					
	L1(mm)	276			315						341						372						425						458					
	L(mm)	675	747	820	818	916	1014	1210	1406	1602	880	980	1018	1280	1480	1680	991	1094	1197	1403	1609	1815	1112	1217	1322	1532	1742	1952	1650	1834	2015	2377	2730	3101
	m(mm)	318	390	462	401	499	597	793	989	1185	412	512	612	812	1012	1212	457	561	658	869	1075	1281	488	615	704	895	1105	1315	967	1148	1329	1691	2053	2415
	n (mm)	190			196						240						264						264						375					
	h mm	120			124						155						173						173						234					
	Φ mm	14.5			19						23						25						25						37					
	B(mm)	~950			~950						~1010						~1010						~1010						~1120					
	E(mm)	490			584						740						848						848						1068					
	F(mm)	355			354						400						438						438						612					
Weight (kg)	Travel type	215	218	223	247	256	264	282	300	318	325	344	363	401	439	471	411	431	471	511	551	591	617	640	688	733	778	823	1070	1190	1310	1501	1710	1910
	fixed type	147	150	155	179	188	296	214	232	250	246	265	284	322	360	398	332	352	392	432	472	512	479	502	550	595	610	685	794	914	1034	1234	1434	1634



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