ANHUI FEICHUN SPECIAL CABLE CO., LTD.

TECHNICAL SPECIFICATION DOCUMENT

Power Cable for Cement Stacker Reeling Drum Application

CABLE IDENTIFICATION & OVERVIEW

Cable Type:	Power Cable for Reeling Drum
Primary Application:	Cement Stacker Main Power Supply
Cable Configuration:	3 × 16 + 16 + 12 × 1.5 quad (+ 4 cores)
Total Length:	120 meters
Reeling Diameter:	2.4 meters
Motor Type:	R 33.M.28

ELECTRICAL SPECIFICATIONS

Power Supply Parameters

Nominal Voltage:	380 V AC
Frequency:	50 Hz
Phase Configuration:	Three-Phase
Earth Connection:	Protected Earth (PE)

Motor Specifications

Motor Designation:	R 33.M.28
Power Rating:	As per motor nameplate
Operating Voltage:	380 V ± 10%
Starting Method:	Direct-on-line / Soft start

CABLE CONSTRUCTION DETAILS

Conductor Configuration

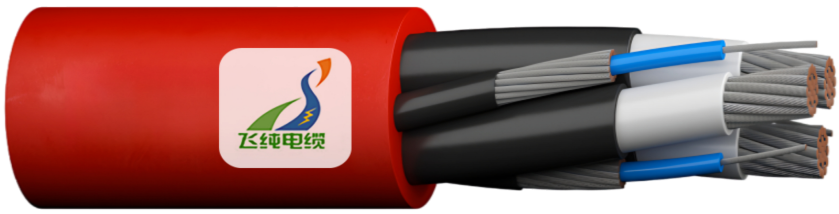
Main Power Conductors:	3 × 16 mm^2
Earth Conductor:	1 × 16 mm^2
Control Cables:	12 × 1.5 mm^2+4 cores
Conductor Material:	Tinned copper, stranded

Insulation & Sheathing

Insulation Type:	EPR compound
Inner Sheath:	PUR compound
Outer Sheath:	Heavy duty rubber compound
Sheath Color:	Black (standard)

MECHANICAL & ENVIRONMENTAL PARAMETERS

Parameter	Specification	Unit	Standard	Notes
Overall Diameter	35-40	mm	IEC 60502	Complete assembly
Cable Weight	2.5-3.0	kg/m	Calculated	Nominal weight
Min. Bending Radius	12 × D (480)	mm	IEC 60502	Static installation
Dynamic Bending	15 × D (600)	mm	Mfg. spec	Reeling operation
Max. Tensile Load	1500	N	Construction	Static loading
Dynamic Tensile	2250	N	150% static	During operation



FEICHUN SPECIAL CABLES

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OPERATING CONDITIONS & ENVIRONMENTAL REQUIREMENTS

Temperature Ratings

Conductor Operating Temperature:	90°C maximum
Ambient Temperature Range:	-40°C to +80°C
Installation Temperature:	-10°C minimum
Short Circuit Temperature:	250°C (1 second)

Environmental Resistance

UV Resistance:	Excellent
Oil Resistance:	Good per IEC 60811
Water Resistance:	IP65 equivalent
Chemical Resistance:	Industrial grade

CURRENT CARRYING CAPACITY & PERFORMANCE DATA

Conductor Size	Current Rating (30°C ambient)	Voltage Drop (per 100m)	Resistance (20°C)	Short Circuit Current (1 sec)	Application
16 mm² (Power)	76 A	1.15 V	1.15 Ω/km	2.29 kA	Main power supply
16 mm² (Earth)	76 A	1.15 V	1.15 Ω/km	2.29 kA	Protective earth
1.5 mm² (Control)	17.5 A	12.1 V	12.1 Ω/km	0.21 kA	Control circuits

Application Note: This cable is specifically designed for cement stacker applications involving continuous reeling and unreeling operations. The robust construction ensures reliable performance under demanding industrial conditions with frequent mechanical stress cycles.

Technical Note: The cable configuration includes dedicated power conductors for the main drive motor and multiple control cores for instrumentation and control signals. The quad arrangement of control cables provides enhanced signal integrity and electromagnetic compatibility.

STANDARDS COMPLIANCE & CERTIFICATIONS

International Standards:	IEC 60502, IEC 60811
European Standards:	EN 50525, HD 516
Fire Performance:	IEC 60332-1
Manufacturing Standard:	ISO 9001:2015
Environmental Compliance:	RoHS Directive
Quality Assurance:	Factory tested