

The Institute of Materials Handling



Client logo

Data sheet Belt feeder

Project name
Project no.
Tag no.
Tag description

Document no.
Revision no.
P&ID no.
Status

	Originator	Date	Checked by	Date
Process				
Mechanical				
Electrical				
Approved by		Date	Professional registration no.	
Client (if applicable)				
Lead engineer				

General information

Corrosion protection	Reference drawing no.
Engineering specifications	Service
Installation	
Remarks	

Site

Altitude(AMSL)	m	Location	
Ambient temperature maximum	°C	Rainfall	mm/y
Ambient temperature minimum	°C	Wind velocity	km/h
Barometric pressure	kPa	Humidity	%
Underground atmospheric classification		Class	Division

Process

Material handled			
Capacity maximum	tph	Particle density	kg/m ³
Capacity normal	tph	Bulk density	kg/m ³
Temperature	°C	Particle shape	
Feed from static head		Angle of repose	degree
Drop height	mm	Angle of surcharge	degree
Feed type		Moisture content (free)	%m/m
Covered		Particle size maximum	mm
Number of feed points		Particle size median	mm
		Particle size minimum	mm

Material characteristics

Abrasive	Flowability
Combustible	Friable
Corrosive	Hygroscopic
Dusty	Toxic
Explosive	

Feeder containment

Dust tight	Enclosed
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Mechanical

Design data						
Maximum capacity		tph	Horizontal pulley centres			mm
Maximum temperature		°C	Angle of inclination			degree
Maximum loading		%	Troughing angle			degree
Belt speed maximum		m/s	Slope at feed point			degree
Belt speed minimum		m/s	Idler spacing carrying			mm
Belt width		mm	Idler spacing return			mm
Belt length		mm	Idler spacing loading point			mm
Height of lift / fall		mm	Power absorbed			kW
Feed area dimensions	width	m	length	m	area	m ²
Information to be supplied by the vendor						
Belt data						
Manufacturer			Breaker strip			
Top cover		mm	Edge cut			
Bottom cover		mm	Splice			
Tension maximum operating		N	Material carcass			
Tension rated		N	Material cover			
No. of plies			Rip stop			
Total length		mm				
Belt cleaning data						
Cleaner locations			Cleaner disposal			
Cleaner types						
Pulley data						
Angle of belt wrap on drive pulley		degree	Bearings type			
Drive bearings diameter		mm	Bearings centers			mm
			Tail bearings diameter			mm
Pulley materials of construction						
			Material			Thickness
Shell						mm
Discharge						mm
Shaft						
Pulley diameter						
Drive pulley diameter		mm	Tail diameter pulley			mm
Drive pulley shaft diameter		mm	Tail pulley shaft diameter			mm
Drive pulley profile			Tail pulley profile			
Drive pulley width		mm				
Chain drive data			Idlers data			
Casing dust tight		mm	Carrying			
Chain drive casing			Carrying training			
No. of strands			Impact			
No. of teeth drive sprocket			Return			
Service factor			Return training			
Size			Transition			



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V-belt data		Take up data	
Antistatic		Travel	mm
Guards type		Location	
Overload protection		Type	
Pitch diameter	mm	Supplied by	
Pitch drive pulley	mm		
Pitch driven pulley	mm		
Section			
Service factor			
Supporting structure data			
Enclosure		Supporting structure type	
Guards location		Windhoops	
Minimum section	mm		
Minimum stringer	mm		
Drive data			
Type			
Gear reducer data			
Manufacturer		Base type	
Output speed	rpm	Casing material	
Power rating	kW	Input/output ratio	
Size		Service factor	
Type		Thermal rating	kW
Coupling data			
Gearbox manufacturer			
Gearbox input		Gearbox output	
Fitted by		Fitted by	
Size	mm	Size	mm
Supplied by		Supplied by	
Type		Type	
Electrical			
System information			
Supply voltage	V	Type of system earthing	
Voltage variations	V	Area classification (SABS 0108)	
Maximum voltage unbalance	%	Hazardous gas/dust	
Total voltage harmonic content	%	Cable size	mm ²
Supply frequency	Hz	Cable type	
Variable speed	yes/no		
Temperature classification of gas/dust			



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Data to be supplied by vendor			
Manufacturer		Equivalent circuit	
Frame size		Winding connection	
Year of manufacture		Insulation class	
Serial number		Insulation type	
Rating	kW	Method of cooling (IC Code)	
Full load current	A	Method of mounting (IM Code)	
Class of rating (IEC 60034-1 class 4 2)		Lubricant type/grade	
Enclosure classification IP code		Type of explosion protection	
Power factor at 100% load		Efficiency at 100% load	%
Power factor at 75% load		Efficiency at 75% load	%
Power factor at 50% load		Efficiency at 50% load	%
Temperature rise	°C	Break away torque	Nm
Locked rotor current	A	Pull out torque	Nm
Locked rotor power factor		Pull up torque	Nm
Locked rotor withstand time cold	s	Full load torque	Nm
Locked rotor withstand time warm	s	Moment of inertia of load (MIL)	kg/m ²
Allowable no. of starts per hour cold		Moment of inertia of motor rotor	kg/m ²
Allowable no. of starts per hour warm		MIL referred to motor shaft	kg/m ²
Maximum thrust continuous (down)		Temperature rating	
Maximum thrust momentary (down)		Sound intensity	db
Type of bearing non-drive end		Type of bearing drive end	
Direction of rotation viewed from non-drive end			
Terminal box position viewed from non-drive end			
Speed vs. torque curve at full volts required			
Speed vs. torque curve at 85% full volts required			
Speed vs. current curve at full volts required			
Speed vs. current curve at 85% full volts required			
Speed vs. power curve at full volts required			
Speed vs. power curve at 85% full volts required			
Inspection & testing			
Electrical			
Shop inspection required		Type test	
Routine test			
Shipping & installation			
Information to be supplied by vendor			
Heaviest lift	kg	Overall height	mm
Heaviest maintenance lift	kg	Overall length	mm
Weight driver	kg	Overall width	mm
Maximum foundation loading	kg	Total shipping weight	kg
Net weight	kg	Total shipping volume	m ³
Operating weight	kg		