

Questionnaire for design and application of spring-applied brakes



Company: _____

Address: _____

Responsible department: _____ Official: _____

Inquiry-no.: _____ Date: _____ Telephone-no.: _____

1. General data

a) Application

Ambient temperature: _____ °C

- The brake is used:
- as gantry or trolley brake
 - as hoisting brake
 - as winch brake
 - for another application
- Description _____

b) Data of the driving motor

Rated output	kW	
Rated speed	min ⁻¹	
Highest operating speed	min ⁻¹	
Moment of inertia	kgm ²	

c) Data of the plant

Moment of inertia; gear *)	kgm ²	
Moment of inertia; clutch *)	kgm ²	
Moment of inertia; rope drum (for hoistings and winches) *)	kgm ²	
Gear ratio		
Number of brakes		

*) reduced to the motor shaft (brake)

2. Data for calculation

a) General data

Load torque at the motor shaft (brake)	Nm	
Speed of the load with rated speed of the motor	m/s	
Efficiency of the power transmission from the motor to the load	%	
Braking speed (standard operation)	min ⁻¹	
Number of braking operations per hour in temporally evenly intervals	h ⁻¹	
Shortest switching rate with temporally unevenly intervals	min ⁻¹	
Highest speed for emergency braking	min ⁻¹	
Number of emergency brakings per day		
Moment of inertia of the linear moved masses, reduced to the motor shaft (brake)	kgm ²	

b) Gantry/trolley

Additionally torque caused by wind load (reduced to the motor shaft)	Nm	
Wheel diameter	mm	
Rolling friction	Nm/kg	
Largest mass of the load which has to be stopped	t	

c) Hoisting/winch

Rope drum diameter	mm	
Largest mass of the load which has to be stopped	t	
Ratio of the tackle/pulley		
Maximum speed after delay time	min ⁻¹	

3. Information for assembly

a) Standard intermediate flange

Designation in accordance with:

DIN 42948: _____

DIN EN 50347: _____

NEMA (motor frame)-size: _____

b) Pinion

Bore Ø _____ mm H7; Keyseat according to DIN 6885/1; width P9

Bore Ø _____ " H7; Bore according to ANSI B4.1-1967 (R1987)
Keyseat according to ANSI B17.1-1967 (R1998) class 1

c) Special assembly / additional information

