

Winch Gearboxes

Application Questionnaire

Company/Address _____

Proper department _____

Person concerned _____

Date _____

Phone _____

e-mail _____

Number of inquiry _____

Demand _____

Application (e.g. mobile crane, ship-offshore-harbour cranes, tower cranes) _____

Used for (e.g. hoisting-, luffing-, pulling winch) _____

Operating conditions – Design criteria (All values related to first / top rope layer)

Rope loads and winch ratings

No. of ropes on drum w _____

Nominal line pull (for each rope)

Line pull at drum F_1 _____ (kN)

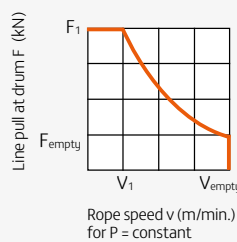
Rope speed V_1 _____ (m/min)

Empty hook

Line pull at drum F_{empty} _____ (kN)

Seilgeschwindigkeit V_{empty} _____ (m/min)

Installed power P _____ (kW)



Alternative rating

Load cond.	F_1 (kN)	T_{dyn} (Nm)	V_1 (m/min)	n_1 (min ⁻¹)	Time slice (%)
1	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____
4	_____	_____	_____	_____	100 %

Calculated life time _____ (hour)

Safety against _____ (-)

Yield strength Break

with

T_{dyn} T_{stat} _____ (Nm)

F_{dyn} F_{stat} _____ (kN)

Rating acc. to FEM Section I

Drive unit class Load conditions Betriebsklasse

M L T

Approval acc. to classification society

ABS DNV GL
 LRS RMRS Others _____

// Technical data

Diameter of rope drum D_1 _____ (mm)

Length of drum

between flanges L_2 _____ (mm)

Rope diameter d _____ (mm)

Rope groove pitch p _____ (mm)

Drum Lead

right left

Type of rope groove

DIN 15061 Special grooveless

Position of rope anchor

drive side opposite to drive

No. of rope layers z _____ (-)

Length of rope to be wound including

3 safety turns L_5 _____ (m)

Diameter of drum flanges D_2 _____ (mm)

Ratio i _____ (-)

// Drive electric motor

Manufacturer _____

Type _____

Power _____ (kW)

Speed _____ (min.)

Control (Frequency inverter; ON/OFF; Softstarter) _____

Voltage, AC/DC _____

Starting torque T_A _____ (Nm)

Breakdown torque T_k _____ (Nm)

Power-on time ED _____ (%)

Starting per hour _____

// Brake

Apply as

Parking brake Service brake

Design

Spring loaded multi disc brake

with backstop

Brake motor

Disc brake

Drum brake

Actuation

hydraulically min. release pressure _____ (bar)

electric max. release pressure _____ (bar)

expected back pressure _____ (bar)

// Scope of supply

- Motor
- Lay-on roller
- Load holding valve
- Rope spooling device
- Brake for drive unit
- Rope tension control
- Motor flange
- Rope
- Reaction torque arm
- Rope limit switch
- Winch frame
- Geared limit switch
- Steel mesh guard
- Rope
- Rope guard
- Incremental encoder
- Rope drum
- Hydraulic power pack
- End support bearing
- Frequency control
- End support bearing with plate
- Hydraulic control
- Fail save brake
- Approval
- Material Certificates

// Drive hydraulic motor

Manufacturer _____

Type _____

Available oil flow Q _____ (l/min)

Available differential pressure Δp _____ (bar)

// Remarks and special operating conditions
