

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)

Rope speed V_{empty} _____ (m/min)

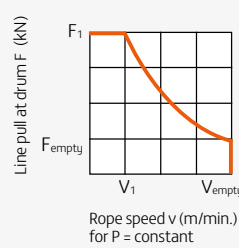
Installed power P _____ (kW)

Rating acc. to FEM Section I

Drive unit class M Load conditions L Betriebsklasse T

Approval acc. to classification society

ABS DNV GL LRS RMRS Others _____



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)

// Technical data

Diameter of rope drum D_1 _____ (mm) **Drum Lead** right left

Length of drum between flanges L_2 _____ (mm) **Type of rope groove** DIN 15061 Special grooveless

Rope diameter d _____ (mm) **Position of rope anchor** drive side opposite to drive

Rope groove pitch p _____ (mm)

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

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

// Drive hydraulic motor

Manufacturer _____

Type _____

Available oil flow Q _____ (l/min)

Available differential pressure Δp _____ (bar)

// Remarks and special operating conditions
