

Hydraulic winch

Selection table

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)

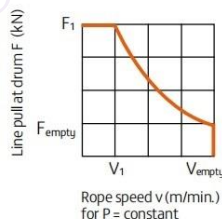
Rope speed V_1 _____ (m/min)

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 Load conditions Betriebsklasse

☐ M ☐ L ☐ 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)

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_s _____ (m)

Diameter of drum flanges D_2 _____ (mm)

Ratio i _____ (-)

Drive electric motor

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 _____

Drive hydraulic motor

Available oil flow Q _____ (l/min)

Available differential pressure Δp _____ (bar)

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)

Hydraulic winch

HPM
GROUP

