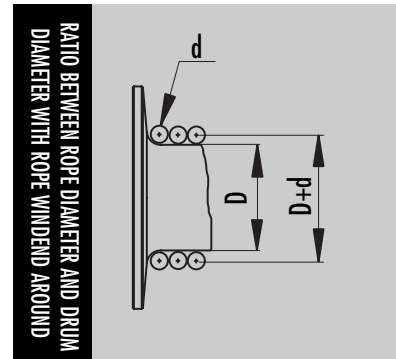


HYDRAULIC PLANETARY WINCHES SERIE EPH FN

Technical specifications according to EN 14492-1:

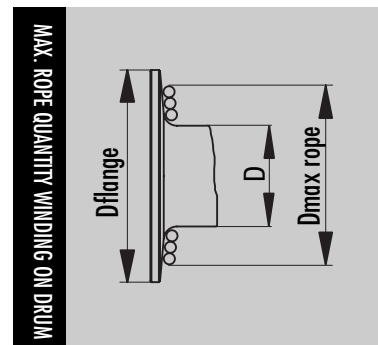
- Ratio between rope diameter (d) and primitive drum diameter with rope wound around (D+d) must be less than or equal to 1/10. In practice drum diameter must be at least nine times rope diameter.
- Wire rope minimum breaking load twice max pulling capacity winch has been rated for.
- Worm gear provides load reversing protection.
- Max. rope quantity winding on drum must respect the following formula :
 $D_{max\ rope} = D_{flange} - 2 \cdot (1,5 \cdot d)$
 (winch technical data sheet gives max.rope length to meet with the rule).
- Rope anchor point on drum according to the rule.
- At the exclusive care of the installer the winch hydraulic control valve must be open center (motorspool) (see hydraulic circuit) with relief valve set at the winch working pressure given on winch technical data sheet.



$$\frac{d}{D+d} \leq \frac{1}{10}$$

In practice
 $D \geq 9 \cdot d$

(d): diameter rope
 (D): diameter drum



$$D_{max\ rope} = D_{flange} - 2 \cdot (1,5 \cdot d)$$

(Dmax rope): Diameter max. rope wound on drum
 (Dflange): Diameter of lateral drum flanges

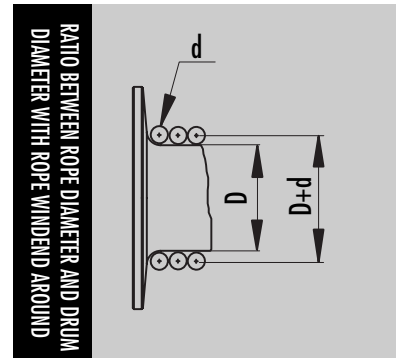
MODEL	PULLING (1st LAYER)	GEAR RATIO	BRAKE	HYDRAULIC MOTOR	DRUM (LENGTH)	DRUM (DIAMETER)	ROPE (DIAMETER)	MIN. ROPE BREAKING LOAD	MAX. ROPE Q.TY EN 14492-1
EPH 3600FN	3.600 kg.	1/5,3	Full load	Omp250 cc	Standard 200 mm	102 mm	10 mm	7.200 kg.	33 mt
EPH/L 3600FN	3.600 kg.	1/5,3	Full load	Omp250 cc	Long 252 mm	102 mm	10 mm	7.200 kg.	43 mt
EPH 4500FN	4.500 kg.	1/5,3	Full load	Omp315 cc	Standard 252 mm	102 mm	11 mm	9.000 kg.	40 mt
EPH 5200FN	5.200 kg.	1/5,3	Full load	MP400 cc	Standard 252 mm	102 mm	11 mm	10.400 kg.	54 mt
EPH 6200FN	6.200 kg.	1/5,3	Full load	MH400 cc	Standard 252 mm	108 mm	12 mm	12.400 kg.	39 mt
EPH 6700FN	6.700 kg.	1/5,3	Full load	MH400 cc	Standard 252 mm	108 mm	12 mm	13.400 kg.	39 mt

HYDRAULIC WORM GEAR WINCHES

mod. JH-RH-MH-MHS-WH-NH-PH

Technical specifications according to EN 14492-1:

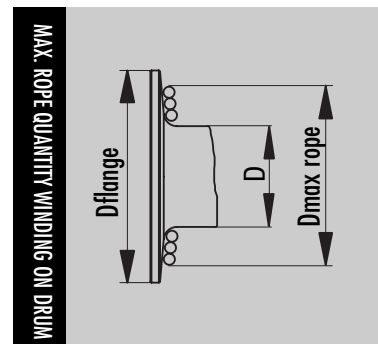
- Ratio between rope diameter (d) and primitive drum diameter with rope wound around (D+d) must be less than or equal to 1/10. In practice primitive drum diameter must be at least nine times rope diameter.
- Wire rope minimum breaking load twice max pulling capacity winch has been rated for.
- Worm gear provides load reversing protection.
- Max. rope quantity winding on drum must respect the following formula :
 $D_{max\ rope} = D_{flange} - 2*(1,5*d)$
 (winch technical data sheet gives max.rope length to meet with the rule).
- Rope anchor point on drum according to the rule.
- At the exclusive care of the installer the winch hydraulic control valve must be (see hydraulic circuit) with relief valve set at the winch working pressure given on winch technical data sheet.



$$\frac{d}{D+d} \leq \frac{1}{10}$$

In practice
 $D \geq 9*d$

(d): diameter rope
 (D): diameter drum



$$D_{max\ rope} = D_{flange} - 2*(1,5*d)$$

(Dmax rope): Diameter max. rope wound on drum
 (Dflange): Diameter of lateral drum flanges

MODEL	PULLING (1st LAYER)	GEAR RATIO	BRAKE	HYDRAULIC MOTOR	DRUM (LENGTH)	DRUM (DIAMETER)	ROPE (DIAMETER)	MIN. ROPE BREAKING LOAD	MAX. ROPE Q.TY EN 14492-1
ZH 2200	2.200 kg.	1/38	Worm gear	Hpk 50 cc	Short 160 mm Long 240 mm	82,5 mm	8 mm	4.400 kg.	19 mt 29 mt
ZH 3000	3.000 kg.	1/50	Worm gear	Hpk 50 cc	Short 160 mm Long 240 mm	82,5 mm	9 mm	6.000 kg.	17 mt 26 mt
JH 2700	2.700 kg.	1/46	Worm gear	Omp 50 cc	Short 162 mm Medium 211 mm Long 352 mm	90 mm	8 mm	5.400 kg.	39 mt 51 mt 87 mt
JH 2700	2.700 kg.	1/46	Worm gear	Omp 50 cc	Short 162 mm Medium 211 mm Long 352 mm	90 mm	10 mm	5.400 kg.	24 mt 32 mt 55 mt
JH 3600	3.600 kg.	1/60	Worm gear	Omp 50 cc	Short 162 mm Medium 211 mm Long 352 mm	90 mm	10 mm	7.200 kg.	24 mt 32 mt 55 mt

HYDRAULIC WORM GEAR WINCHES

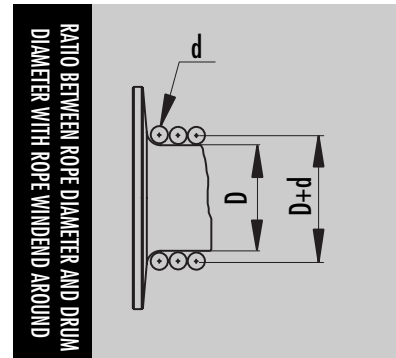
mod. JH-RH-MH-MHS-WH-NH-PH

MODEL	PULLING (1st LAYER)	GEAR RATIO	BRAKE	HYDRAULIC MOTOR	DRUM (LENGTH)	DRUM (DIAMETER)	ROPE (DIAMETER)	MIN. ROPE BREAKING LOAD	MAX. ROPE Q.TY EN 14492-1
RNH 4400	4.400 kg.	1/29	Worm gear	Omr 125 cc	Standard 295,5 mm	94 mm	10 mm	8.800 kg.	48 mt
RSH 4500	4.500 kg.	1/29	Worm gear	Omr 125 cc	Standard 295,5 mm	102 mm	11 mm	9.000 kg.	81 mt
RSH 5250	5.250 kg.	1/29	Worm gear	Omr 160 cc	Standard 295,5 mm	102 mm	11 mm	10.500 kg.	81 mt
RCH 4500	4.500 kg.	1/29	Worm gear	Hrk 125 cc	Standard 295,5 mm	102 mm	11 mm	9.000 kg.	81 mt
RCH 5250	5.250 kg.	1/29	Worm gear	Hrk 160 cc	Standard 295,5 mm	102 mm	11 mm	10.500 kg.	81 mt
MH 7000	7.000 kg.	1/35	Worm gear	Omts 250 cc	Standard 278 mm	117 mm	13 mm	14.000 kg.	58 mt
MH 7850	7.850 kg.	1/35	Worm gear	Omts 250 cc	Standard 278 mm	117 mm	13 mm	15.700 kg.	58 mt
MHS 8000	8.000 kg.	1/35	Worm gear	Omts 250 cc	Standard 278 mm	126 mm	14 mm	16.000 kg.	74 mt
WH 15000	15.000 kg	1/35	Worm gear	Omvs 500 cc	Short 230 mm Long 460 mm	171 mm	19 mm	30.000 kg	34 mt 72 mt
NH 20000	20.000 kg	1/30	Worm gear	IAM 800 cc	Standard 380 mm	195 mm	20 mm	40.000 kg	83 mt
PH 30000	30.000 kg	1/37	Worm gear	IAM 1000 cc	Standard 320 mm	234 mm	26 mm	60.000 kg	47 mt

ELECTRIC DC WORM GEAR WINCHES mod. JE

Technical specifications according to EN 14492-1:

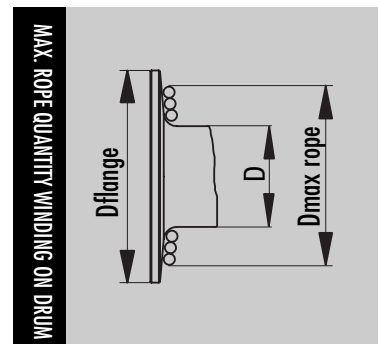
- Ratio between rope diameter (d) and primitive drum diameter with rope wound around (D+d) must be less than or equal to 1/10. In practice drum diameter must be at least nine times rope diameter.
- Wire rope minimum breaking load twice max pulling capacity winch has been rated for.
- Worm gear provides load reversing protection.
- Max. rope quantity winding on drum must respect the following formula :
 $D_{max\ rope} = D_{flange} - 2*(1,5*d)$
 (winch technical data sheet gives max.rope length to meet with the rule).
- Rope anchor point on drum according to the rule.
- Winches must be equipped with Limiting load device pre-set at the winch max. pulling capacity.



$$\frac{d}{D+d} \leq \frac{1}{10}$$

In practice
 $D \geq 9*d$

(d): diameter rope
 (D): diameter drum



$$D_{max\ rope} = D_{flange} - 2*(1,5*d)$$

(Dmax rope): Diameter max. rope wound on drum
 (Dflange): Diameter of lateral drum flanges

MODÈLE	PULLING (1st LAYER)	LOAD LIMITING PRE-SET AT	GEAR RATIO	BRAKE	ELECTRIC MOTOR DC	DRUM (LENGTH)	DRUM (DIAMETER)	ROPE (DIAMETER)	MIN. ROPE BREAKING LOAD	MAX. ROPE Q.TY EN 14492-1
JES 1000	1.000 kg.	1.000 kg.	1/360	Worm gear	12V-24V	Standard 132 mm	125 mm	6 mm	2.000 kg.	36 mt
JES 1300	1.300 kg.	1.300 kg.	1/470	Worm gear	12V-24V	Standard 132 mm	125 mm	6 mm	2.600 kg.	36 mt
JE 2700	2.700 kg.	2.700 kg.	1/360	Worm gear	12V-24V	Short 162 mm Medium 211 mm Long 350 mm	90 mm	8 mm	5.400 kg.	39 mt 51 mt 87 mt
JE 3600	3.600 kg.	3.600 kg.	1/470	Worm gear	12V-24V	Short 162 mm Medium 211 mm Long 350 mm	90 mm	10 mm	7.200 kg.	24 mt 32 mt 55 mt