Planetary Crane Winches

FD series

Specially designed for applications where space is at a premium, these compact and lightweight lifting winches are ideally suited for installation on cranes, davits and derricks. The single drum support enables the rope to leave the drum at any angle. The heavy duty planetary drive is partly located within and protected by the drum core. The large drum diameters ensure a healthy drum to cable diameter ratio and a sufficient working length despite the short drums.

Standard features

- Heavy duty planetary gearbox
- FD E; IP 54 400 V AC / 3-phases / 50 Hz braked motor
- FD H; orbit or radial piston type hydraulic motor complete with brake valve
- FD LV; van type air motor complete with hand control valve and mufflers
- FD GP gear type air motor complete with hand control valve and mufflers
- Steel drum with cable fixing point at flange
- Single drum support
- Double layer 2-component conservation according ISO 12944 category C2-Low, colour RAL 5010
- FEM / ISO class: T4-L3-M5

Available options

- IP 56 TENV cast iron motor for marine applications
- Explosion-proof motors
- Protective steel motor cover
- Drum pressure roller
- Alternative speeds
- Alternative supply voltages
- Drum guards
- Marine / offshore coating systems
- Tubular offshore frame construction with lifting eyes

Available control options

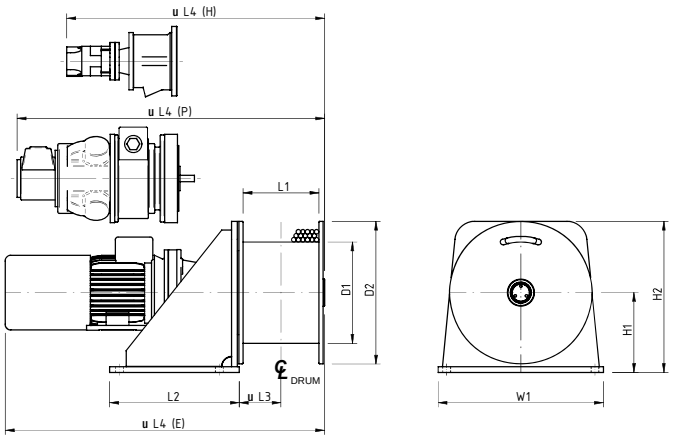
- Control box IP 55 with push-buttons and emergency stop built acc. to NEN 1010
- Control box IP 66 with low voltage IP 65 remote control built acc. to NEN 1010
- Load limiter (required by CE for applications exceeding 1000 kg WLL)
- Frequency inverter for variable speed control
- Wireless radio remote control systems
- Limit switches
- Slack wire switches
- Radio / Infra red remote control

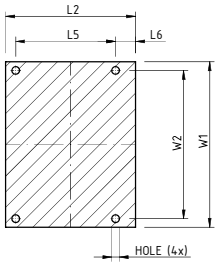
Winch type Electric	WLL 1st layer kg	WLL top layer kg	Recomm. rope diam. mm	Speed 1st layer m/min.	Speed top layer m/min.	Drumcap. 1st layer m	Drumcap. all layers m	Motor power 400 VAC kW
FD 300 E	950	800/4	8	8.5	10	15	70/4	1.5
FD 301 E	1850	1470/4	11	9	11	10	53/4	3
FD 303 E	2300	1970/3	12	7	8.5	11	41/3	3
FD 304 E	2800	2340/3	14	10	12	9	36/3	5,5
FD 305 E	3350	2800/3	14	9	11	10	40/3	5.5
FD 306 E	4100	3500/3	16	7	8.5	15	56/3	5.5
FD 307 E	5250	4490/3	18	12	14	18	67/3	11

Winch type Hydraulic	WLL 1st layer kg	WLL top layer kg	Recomm. rope diam. mm	Speed 1st layer m/min.	Speed top layer m/min.	Drumcap. 1st layer m	Drumcap. all layers m	Pressure drop in bar	Flow in l/min.
FD 300 H	950	800/4	8	30	35	15	70/4	140	35
FD 301 H	1850	1470/4	11	20	25	10	53/4	130	55
FD 303 H	2300	1970/3	12	15	17	11	41/3	130	50
FD 304 H	2800	2340/3	14	17	20	9	36/3	140	60
FD 305 H	3350	2800/3	14	13	16	10	40/3	135	60
FD 306 H	4100	3500/3	16	13	15	15	56/3	140	70
FD 307 H	5250	4490/3	18	13	15	18	67/3	170	70

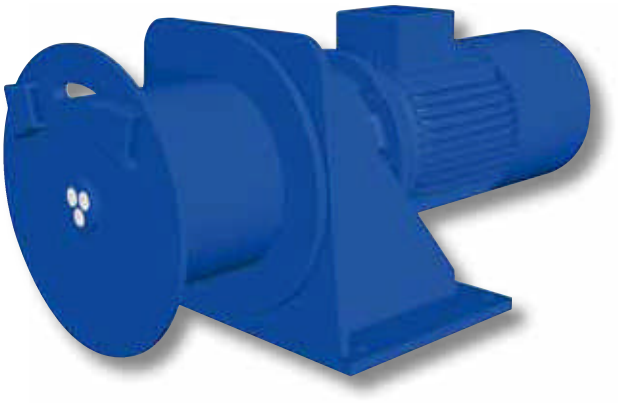
Winch type Pneumatic	WLL 1st layer kg	WLL top layer kg	Recomm. rope diam. mm	Average Speed* m/min	Maximum Speed** m/min	Drumcap. 1st layer m	Drumcap. 5th layer m	Pressure drop bar	Flow in l/sec
FD 300 GP2	950	800 (4)	8	12	18	15	70 (4)	7	65
FD 300 LV	950	800 (4)	8	20	25	15	70 (4)	6,5	90
FD 301 GP2	1500	1200 (4)	8	8	12	15	70 (4)	7	65
FD 301 GP4	1850	1470 (4)	11	10	14	10	53 (4)	7	100
FD 301 LV	1850	1470 (4)	11	10	13	10	53 (4)	6,5	90
FD 303 GP4	2300	1800 (3)	12	9,5	12	11	41 (3)	7	100
FD 303 LV	2300	1970 (3)	12	15	18	11	41 (3)	6,5	150
FD 304 GP4	2600	2200 (3)	14	7,5	10	9	36 (3)	7	100
FD 304 LV	2800	2340 (3)	14	12	14	9	36 (3)	6,5	150
FD 305 LV	3350	2800 (3)	14	10	12	10	40 (3)	6,5	150
FD 306 GP10	4100	3500 (3)	16	15	26	15	56 (3)	7	300
FD 307 GP10	5250	4490 (3)	18	11	20	18	67 (3)	7	300

* Average speed is based on the speed in the middle layer at 75% of W.L.L.
** Maximum speed is based on the speed in the top layer at unloaded conditions





FOOTPRINT
- TOP VIEW -



Type	Mass	D1	D2	L1	L2	L3	L4(E)	L4(H)	L4(P)	L5	L6	H1	H2	W1	W2	Hole Ø
FD 300	130	244	380	176	310	96	733	520	765	240	44	215	405	440	400	18
FD 301	140	244	380	176	310	96	760	558	785	240	44	215	405	440	400	18
FD 303	180	272	410	191	350	107	818	595	905	275	50	235	440	500	450	22
FD 304	230	272	410	191	350	107	1012	595	905	275	50	235	440	500	450	22
FD 305	255	272	410	210	350	116	1030	625	950	275	50	235	440	500	450	22
FD 306	365	355	500	266	455	146	1098	780	1110	350	70	285	535	580	520	27
FD 307	535	406	625	310	510	172	1316	885	1215	400	75	348	660	750	680	27