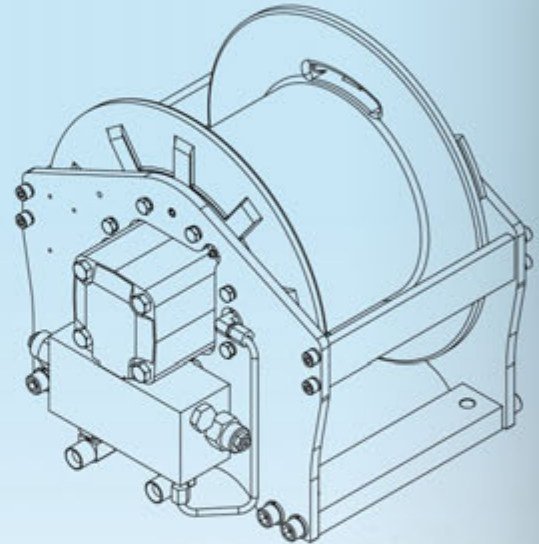
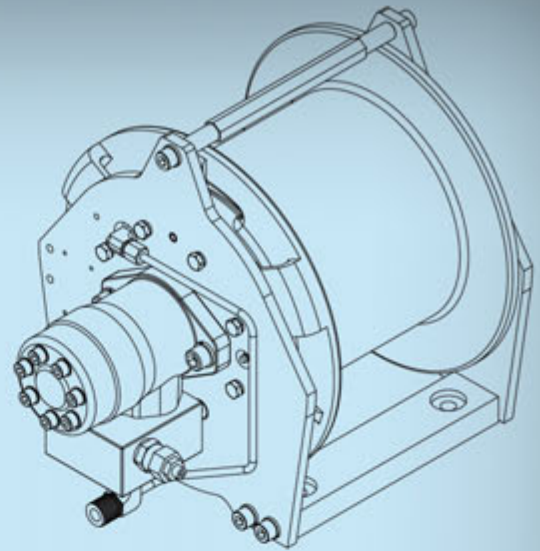


# HYDRAULIC HOIST for Mobile Crane Vehicle

## APE Series

**900 – 1,200 – 1,600 – 1,900 kg lifting capacity**

- Internally lubricated for reliable power and an exceptionally long service life.
- Compact, hardened and high efficiency gear trains reduce power loss and placed inside the drum.
- Multi-Disc Brake (MDB) patented and two ways counter-balance valve together for holding full load.
- The normal lifting capacity is rated at the top layer of wire rope. It always lifts its rated load no matter what layer of wire rope it is.
- The drum is dimensioned to obtain a minimum D/d ratio of 18:1 with a 5:1 minimum safety factor at the rated load.
- The hoist meets the requirement of FEM9.511 covering rating and classification and FEM 1001 standard for the calculation of lifting equipment.
- Compliance with international standards such as ASME B30.7 and, CE Machinery Directive 2006/42/EC



**1,900 ~ 1,600 KG Hydraulic Hoist for Mobile Crane**



**SPECIFICATIONS :**

**Rated line lift :**

APE 19 : 1,900 kg (4,190 lb) single line at the top layer of rope  
 APE 16 : 1,600 kg (3,527 lb) single line at the top layer of rope

**Motor :**

APE 19 : 200 cm³/rev ( 12.2 in³/rev )  
 APE 16 : 159.7 cm³/rev ( 9.7 in³/rev )

**Operation pressure :** 205 bar (2,973 psi) with maximum back pressure on return line of 5 bar

**Max-Min pump flow :**

APE 19 : 60 / 20 l/min ( 15.9 / 5.3 g/min )  
 APE 16 : 45 / 15 l/min ( 11.9 / 4.0 g/min )

**Gear train & ratio :** 1-stage planetary, 5.8:1

**Brake :** Multi-Disc Brake (MDB) patented and counter-balance valve together

**Hoist construction :** Steel housings with steel drum

**Hoist Rotation :** Counter clockwise rotation of the drum

**Drum size (dXDL) :**

APE 19 (Std. drum) /16 : 210 x 344 x 191 mm (8.3" x 13.5" x 7.5")  
 APE 19 (Long drum) : 210 x 344 x 320 mm (8.3" x 13.5" x 12.6")

**Recommended wire rope :**

APE 19 :  
 12 mm x 48 m for std. drum and 12 mm x 82 m for long drum with 1,960 N/mm² grade with minimum breaking strength of 100. kN for EN 14492-2 rating  
 1/2" x 157 ft for std. drum and 1/2" x 269 ft for long drum with EIPS grade with minimum breaking strength of 22,487 lbf for ASME 30.7 rating

APE 16 :  
 10 mm x 57 m with 2,160 N/mm² grade with minimum breaking strength of 78.2 kN for EN 14492-2 rating  
 3/8" x 187 ft with EIPS grade with minimum breaking strength of 17,593 lbf for ASME 30.7 rating

**Mounting bolts pattern :**

APE 19 (Std. drum) /16 : 290 x 196 mm (11.4" x 7.7")  
 APE 19 (Long drum) : 290 x 325 mm (11.4" x 12.8")

**Hoist weight :** APE 19 (Std. drum) : 88 kg / 194 lb  
 APE 19 (Long drum) : 101 kg / 223 lb  
 APE 16 : 87 kg / 192 lb

**Gross weight :** APE 19 (Std. drum) : 106 kg / 234 lb  
 APE 19 (Long drum) : 123 kg / 271 lb  
 APE 16 : 105 kg / 232 lb

**Box dimension :** APE 19 (Std. drum) / 16 : 490x490x600mm (19.3"x19.3"x23.6")  
 APE 19 (Long drum) : 620x510x600mm (24.4"x20.1"x23.6")

APE 19 **PN 681930** (Std. drum) / **PN 681940** (Long drum)  
 APE 16 **PN 681920**

**PERFORMANCE DATA :**

**Line Lift and Rope Capacity**

**APE 19**

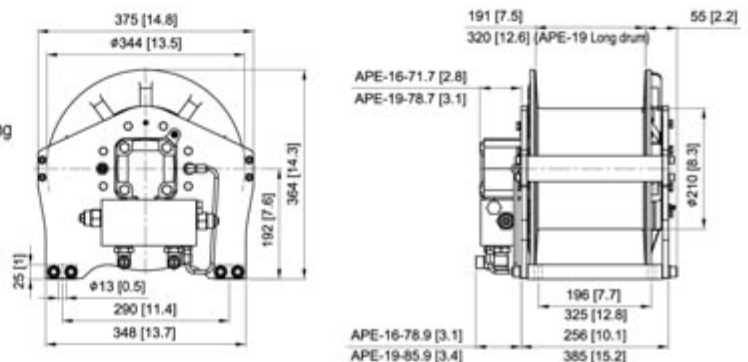
Layer of Rope	Lift by Layer, kg / lb	Line Speed, mpm / fpm	Total Rope on the Drum, m / ft	
			Std. drum	Long drum
1 <sup>st</sup>	2,515 / 5,545	35.0 / 115	10.4 / 34	18 / 59
2 <sup>nd</sup>	2,270 / 5,004	38.8 / 127	22 / 72	38 / 124
3 <sup>rd</sup>	2,068 / 4,559	42.6 / 140	35 / 114	60 / 195
4 <sup>th</sup>	1,900 / 4,190	46.4 / 153	48 / 157	82 / 269

**APE 16**

Layer of Rope	Lift by Layer, kg / lb	Line Speed, mpm / fpm	Total Rope on the Drum, m / ft	
			Std. drum	Long drum
1 <sup>st</sup>	2,036 / 4,489	33.8 / 111	12.5 / 41	
2 <sup>nd</sup>	1,866 / 4,144	36.8 / 121	26.2 / 86	
3 <sup>rd</sup>	1,723 / 3,796	40 / 131	41 / 134	
4 <sup>th</sup>	1,600 / 3,527	43 / 141	57 / 187	

The total rope on the drum may vary from figures stated elsewhere

**DIMENSION mm/in**



- Option Accessories
- Cable tensioner
  - Wire rope with hook
  - Up and Down limit protection device



**1,200 ~ 900 KG Hydraulic Hoist for Mobile Crane**



APE 12 PN 681910

APE 9 PN 681900

**SPECIFICATIONS :**

**Rated line lift :**

APE 12 : 1,200 kg (2,640 lb) single line at the top layer of rope

APE 9 : 900 kg (1,984 lb) single line at the top layer of rope

**Motor :**

APE 12 : 194.6 cm<sup>3</sup>/rev ( 11.9 in<sup>3</sup>/rev )

APE 9 : 155.7 cm<sup>3</sup>/rev ( 9.5 in<sup>3</sup>/rev )

**Operation pressure :**

APE 12 : 150 bar ( 2,176 psi )with maximum back pressure on return line of 5 bar

APE 9 : 140 bar (2,031 psi) with maximum back pressure on return line of 5 bar

**Max-Min pump flow :**

APE 12 : 40 / 20 l/min ( 10.6 / 5.3 g/min )

APE 9 : 35 / 15 l/min ( 9.2 / 4.0 g/min )

**Gear train & ratio :** 1-stage planetary, 5:1

**Brake :** Multi-Disc Brake (MDB) patented and counter-balance valve together

**Hoist construction :** Steel housings with steel drum

**Hoist Rotation :** Counter clockwise rotation of the drum

**Drum size (dXDxL) :** 205 x 305 x 191 mm( 8.1" x 12.0" x 7.5")

**Recommended wire rope :**

**APE 12 :**

10 mm x 55 m with 1,960 N/mm<sup>2</sup> grade with minimum breaking strength of 69.8 kN for EN 14492-2 rating

3/8" x 180 ft with EIPS grade with minimum breaking strength of 15,663 lbf for ASME 30.7 rating

**APE 9 :**

8 mm x 68 m with 1,960 N/mm<sup>2</sup> grade with minimum breaking strength of 44.7 kN for EN 14492-2 rating

5/16" x 223 ft with EIPS grade with minimum breaking strength of 10,003 lbf for ASME 30.7 rating

**Mounting bolts pattern :** 200 x 170 mm (7.9" x 6.7")

**Hoist weight :** APE 12 : 64 kg / 141 lb

APE 9 : 63 kg / 140 lb

**Gross weight :** APE 12 : 81 kg / 179 lb

APE 9 : 80 kg / 176 lb

**Box dimension :** APE 12 / 9 : 550x440x570mm (21.7"x17.3"x22.4")

**PERFORMANCE DATA :**

**Line Lift and Rope Capacity**

**APE 12**

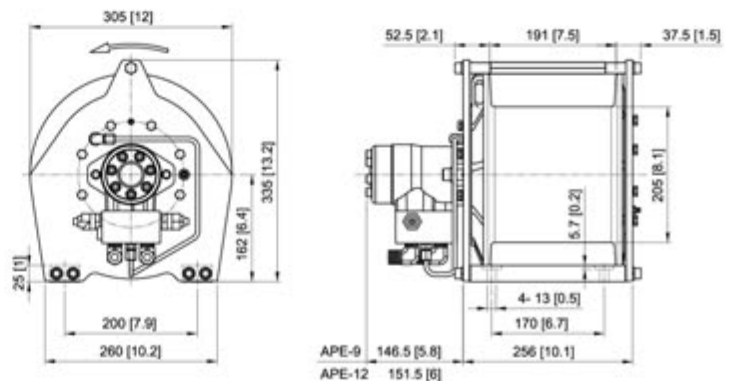
Layer of Rope	Lift by Layer, kg / lb	Line Speed, mpm / fpm	Total Rope on the Drum, m / ft
1 <sup>st</sup>	1,535 / 3,384	27.8 / 91	12.2 / 40
2 <sup>nd</sup>	1,404 / 3,094	30.4 / 100	25.6 / 84
3 <sup>rd</sup>	1,294 / 2,853	33 / 108	40 / 131
4 <sup>th</sup>	1,200 / 2,645	35.5 / 116	55 / 180

**APE 9**

Layer of Rope	Lift by Layer, kg / lb	Line Speed, mpm / fpm	Total Rope on the Drum, m / ft
1 <sup>st</sup>	1,100 / 2,425	30.1 / 99	15 / 50
2 <sup>nd</sup>	1,023 / 2,255	32.3 / 106	31.8 / 104
3 <sup>rd</sup>	956 / 2,108	34.6 / 114	49.4 / 162
4 <sup>th</sup>	900 / 1,984	37 / 121	68 / 223

The total rope on the drum may vary from figures stated elsewhere

**DIMENSION mm/in**



- ▲ Option Accessories
- Cable tensioner
  - Wire rope with hook
  - Up and Down limit protection device