

● HW Series Winch for Vehicle

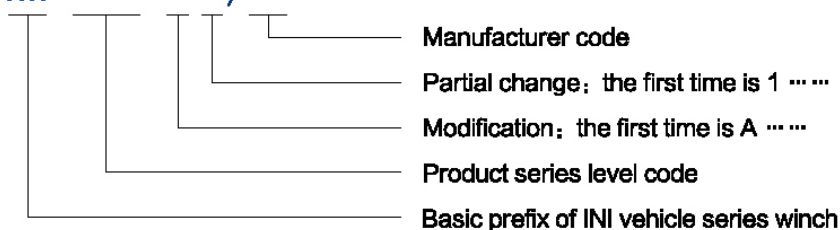
1. Brief introduction

HW series winch for vehicle are patent products of our company. It is mainly composed of axial plunger motor, oil tray or oil valve block, hydraulic normally closed multi-chip brake, multi-stage planetary reducer, normally closed pneumatic clutch, flame, drum, support shaft, etc. The oil tray integrates hydraulic balance valve, overload protection valve, shuttle valve and load unloading valve, etc. Due to fit with valve block, not only simplified the design of hydraulic system but also improved the reliability of drives. In addition, it also has the functions of measuring the tension, speed, capability of drum, adjustable speed, manual rope with clutch, etc. It has the advantages of compact structure, small size, light weight, high power density, beautiful appearance, etc.

The tension of this series of products is 5kN~500Kn, with complete specifications and diverse varieties. Therefore, the series have been widely applied to hoisting salvage vehicles, cross country vehicle, military heavy truck, bulldozer. It can be used to rescue various vehicles damaged or involved in mud and also used to pull heavy objects and to save self. HW series winch for vehicle have been well sold in China, it has also been recognized by major domestic special vehicle manufacturers.

2. Model options

HW-***-* */**

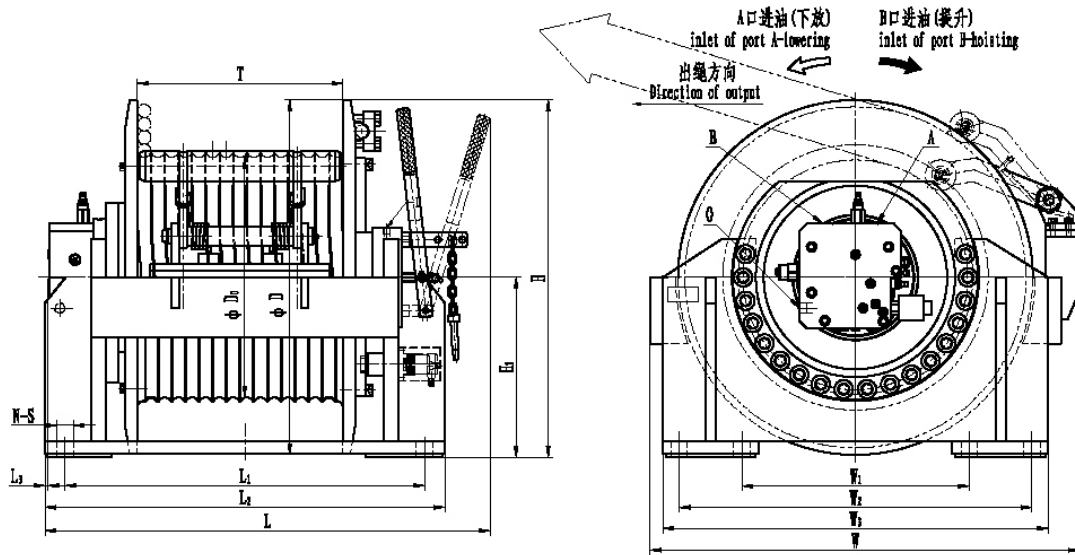


3. Options example

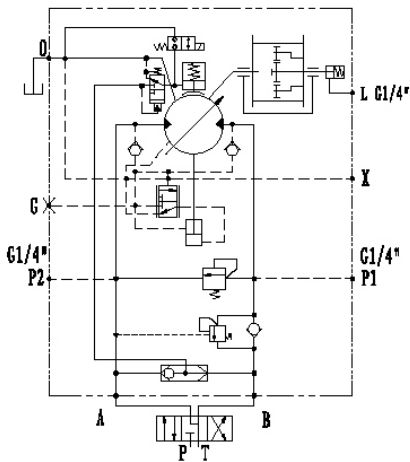
HW-150A/INI,HW represents series winch for vehicle, 150 represents the rated line pull on first layer is 150kN, A represents the first time partial change series winch for vehicle, INI represents the manufacturer is INI HYDRAULIC CO.,LTD.

4. Parameter description

- Total displacement represents the capacity of oil supply per revolution.
- Flow of oil supply indicates theoretical flow of pump when the volumetric efficiency is considered as 85%~94%.
- Drum capacity is theoretical drum capacity. The practical available capacity of rope should subtract the retained 3m wire in case of rope headis out of hand.
- This winch can't be used to carry people.



液压原理图
Hydraulic principle diagram



注意事项:

1. 离合器气压控制, 控制压力 $5\text{bar} < P_L < 8.5\text{bar}$;
2. 马达泄漏口必须直接回油箱, 不允许将马达O口与马达主回油路T口接到一起;
3. 车用绞盘不允许载人;
4. 绞盘在受力情况下不可使用离合器;
5. 离合器合上后必须将防脱出保护板挡住离合器手柄, 以防绞盘在工作过程中, 离合器脱出, 发生危险。

Note:

1. Clutch air pressure control, control pressure $5\text{bar} < P_L < 8.5\text{bar}$;
2. The drain port of the hydraulic motor must be separately connected to the hydraulic reservoir;
3. The winch is not designed for operation involving lifting or moving personnel;
4. The operation of switch off clutch must be carried out under stop of the winch. The operation of switch on clutch should be done without load on drum and put the latch of clutch in proper position when working;
5. After pulling in clutch, please obtain the retained plate to block hand level of clutch to avoid pulling out clutch in working condition.



系列代号 Serial code	第一层拉力 The 1st Layer Pull (kN)		第一层绳速 The 1st Layer Rope Speed (m/min)		总排量 Displacement (ml/r)		工作压力 Working pressure (MPa)	供油流量 Supply oil flow (L/min)	钢丝绳直径 Diameter of rope (mm)	层数 Layer	容量 Capacity of rope (m)	减速器传动比 Gearbox ratio	外形尺寸及油口规格 Overall dimensions and oil ports specifications																
	重载 Heavy load	轻载 Slight load	重载 Heavy load	轻载 Slight load	重载 Heavy load	轻载 Slight load	重载 Heavy load	轻载 Slight load	轻载 Slight load	重载 Heavy load	轻载 Slight load	重载 Heavy load	轻载 Slight load	D _o	T	L ₁	L ₂	L ₃	L	W ₁	W ₂	W ₃	W	H ₁	H	N	S	A、B	O
HW100A	100	-	11	-	7120.7	-	21	90	16	2	45	137.2	295	386	378	636	688	5	693	217	331	433	503	200	393	8	φ26	G3/4"	G3/8"
HW150A	150	50	10~12	23~27	12231.3	5596	17~25	115	22	4	104	139.9	370	555	431	3670	728	31	854	340	544	605	649	282	559	8	φ26	G3/4"	G1/2"
HW200A	200	30~50	6.2~8	17~28.5	14160	6488	17~25	110	22	4	110	162.2	370	555	431	3670	728	131	859	340	544	605	669	297	559	8	φ29	M33x2	M18x1.5
HW250A	250	-	7.4	16.3	22769.6	10432.8	22	120	26	4	100	260	470	695	402	473	695	39	863	486	650	755	840	411	758	16	φ22	G3/4"	G1/2"
HW250B	250	50	7.4	24.5	23005	6880	17~20	120	26	4	105	215	470	695	402	704	783	125	908	445	691	781	841	368	715	8	φ32	M33x2	M18x1.5
HW280A	280	70	7	25	23424	6295	22~23	120	28	4	105	146.4	470	750	441	780	840	25	840	475	715	810	879	425	800	16	φ26	G3/4"	G1/2"
HW280B	280	70	6	13	22769.6	10432.8	15~25	97	28	4	105	260	470	750	441	780	840	146	986	416	656	750	830	380	755	16	φ26	M33x2	M27x2
HW300A	300	50	7	27.5	23424	5856	19~26	120	28	4	96	146.4	470	750	441	733	780	184	964	440	658	750	886	380	755	8	φ32	M33x2	M26x1.5
HW315A	315	60	6.9	25.4	26857	7530	21~25	130	28	4	105	251	470	750	441	787	856	71	942	540	680	800	869	420	795	16	φ32	M33x2	M18x1.5
HW400A	400	100	4.5	11.5	45920	17220	20~22	126	32	4	96	287	555	835	436	742	799	201	1000	605	829	899	946	423	840	16	φ32	M33x2	M27x2
HW450A	450	150	4.5	7	43071.6	27610	15~25	117	34	5	100	251	555	963	357	780	860	146	1006	680	940	1023	1103	492	973	24	φ33	M27x2	G1/2"
HW500A	500	100	7.3	11.7	49249.2	31570	17~27	185	40	4	90	287	630	1030	412	885	955	237	1192	720	950	1090	090	590	1105	16	φ32	φ 30	G1/2"