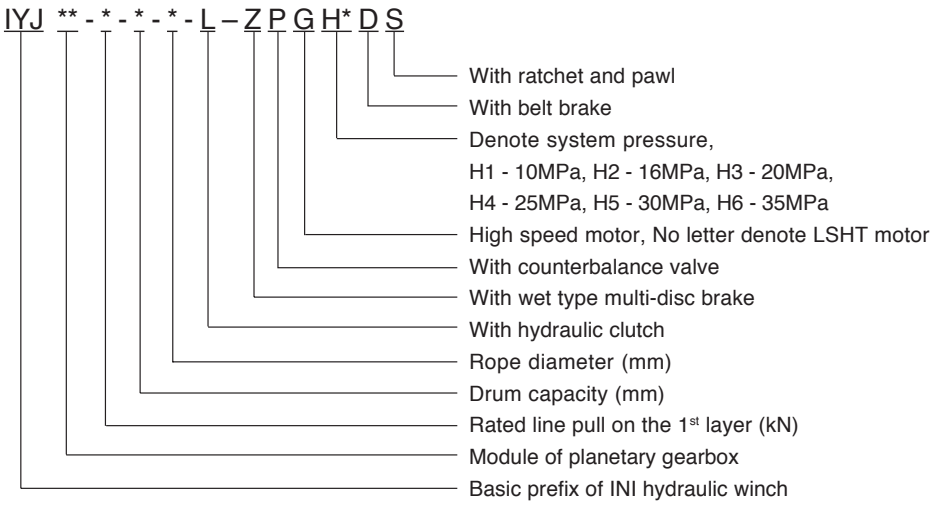
IYJ—L Free Fall Hydraulic Winch Series

1. Brief Introduction

The IYJ—-L free fall hydraulic winch series consist of planetary gearbox, hydraulic motor, wet type brake, various valve blocks of single counterbalance valve and shuttle valve, drum, frame and hydraulic control clutch. So the series not only simplified hydraulic system design, but also improved reliability and durability. The series could get two speed control if fitted with variable displacement two speed hydraulic motor. When fitted with hydraulic axial piston motor, the working pressure and drive power of the series could be greatly improved.

The IYJ——L hydraulic winch series feature smooth performance in hoisting and lowering. The final stage of the series is fitted with hydraulic clutch (invention patent of our company) to get free fall function. The winch series have long life, compact design and good economy. Therefore the series have been widely applied in pipe laying machine, crawler cranes, vehicle cranes, grab bucket cranes, crushers. The series not only widely have been used in domestic market, but also have been exported to Middle East, India, Africa, Russia and Netherlands and so on.

2. Model Options



3. Options Example

IYJ34-75-88-22-L-ZPGH4 type represents that the planetary gearbox has 2 stages with module 3 and 4 respectively. The line pull on the 1st layer is 75kN with drum capacity of 88m and a rope diameter of 22mm. The winch is fitted with a piston motor, parking brake, single counterbalance valve, and hydraulic clutch. The winch system pressure is 25MPa.

注：1、总排量为卷筒每转一转的供油量；

Note: 1. Total displacement represents capacity of oil supply per revolution.

2、容绳量为绞车的理论容绳量，实际允许的有效容绳量应考虑保留钢丝绳 3 圈以防绳头脱出；

2. Maintain mandatory minimum of three wraps of rope to be left on the drum at all times for safety.

3、当系统压力超过 16MPa 时，进入制动器处应设置减压阀；对系统回油背压大于 1MPa 时，制动器控制回路应设置两位三通顺序阀，使制动工况时，制动器油缸直接通油箱；

3. The pressure reducing valve should be setted in brake control circuit if system pressure is above 16MPa.

If back pressure is higher than 1MPa, a 2/3 sequence valve needs to be used to assure that brake circulation oil can be lead back to reservoir without back pressure.

4、离合器控制压力最高不得超过 8MPa;

4. The control pressure of hydraulic clutch is not higher than 8MPa.

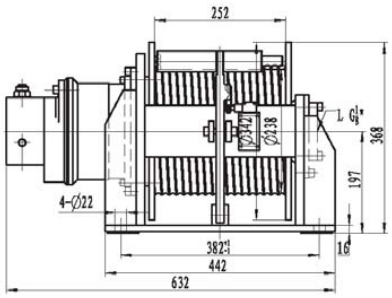
5、本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项，用户订货自选)

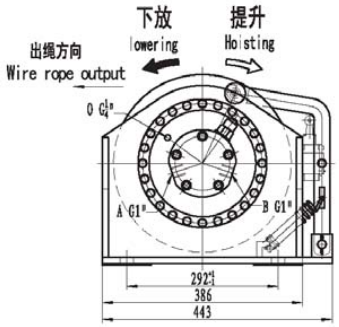
5. Fitted with rope roller and alarm device indicating bottom layer condition. (the item is optional)

6、液压马达泄漏必须直接回油箱，不允许与主回油路连接；马达 3 位 4 通控制阀中位机能必须为“Y” 或“H”型。

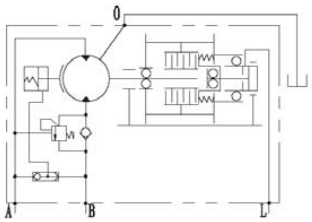
6. The drain port of the hydraulic motor must be separately connected to the reservoir.

The 3/4 directional control valve of motor should be of a “Y” or “H” type in neutral position.





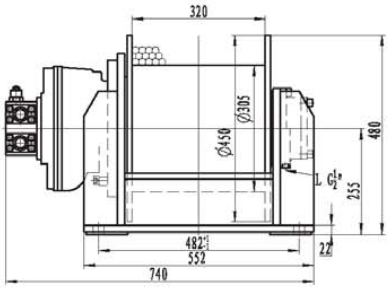
液压原理图
Hydraulic schematic diagram

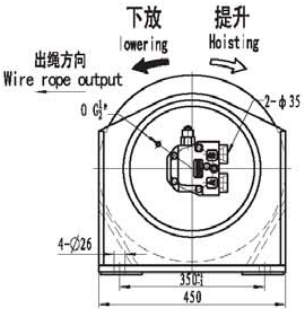


型 号 Model	第一层 The 1st layer 拉力(KN) Pull	第一层 The 1st layer 绳速(m/min) Rope speed	总排量 Total displacement (ml/rev)	工作压差 Working pressure diff. (MPa)	供油流量 Oil flow supply (L/min)	钢丝绳直径 Rope diameter (mm)	层数 Layer (层)	容绳量 Wire rope capacity (m)	液压马达型号 Hydraulic motor	行星减速器型号 Gearbox model	制动器开启压力 The Brake Opening Presure (MPa)	离合器开启压力 The Clutch Opening Presure (MPa)	自由下放时空绳所需钢丝绳小重量 Min. Weight for free fall (Kg)	重量 Weight (Kg)
IYJ2.5-5-75-8-L-ZPH2	5	0-30	430	13	0-19	8	1 2 3	24 48 75	INM05-90D51	C2.5A i=5	3	3	25	120
IYJ2.5-5-75-8-L-ZPH3	5	0-30	295	18	0-13	8	1 2 3	24 48 75	INM05-60D51	C2.5A i=5	3	3	25	120
IYJ2.5-10-60-10-L-ZPH2	10	0-30	755	14	0-32	10	1 2 3	19 39 60	INM05-150D51	C2.5A i=5	3	3	25	120
IYJ2.5-10-60-10-L-ZPH3	10	0-30	575	18	0-25	10	1 2 3	19 39 60	INM05-110D51	C2.5A i=5	3	3	25	120
IYJ2.5-15-50-12-L-ZPH2	15	0-30	1050.5	14	0-44	12	1 2 3	16 33 50	INM05-200D51	C2.5D i=5.5	3	4.5	25	120
IYJ2.5-15-50-12-L-ZPH3	15	0-30	830	18	0-36	12	1 2 3	16 33 50	INM05-170D51	C2.5D i=5.5	3	4.5	25	120
IYJ2.5-20-50-12-L-ZPH2	20	0-30	1337	14.6	0-56	12	1 2 3	16 33 50	INM05-200D51	C2.5 i=7	3	6	25	120
IYJ2.5-20-50-12-L-ZPH3	20	0-30	1050.5	18	0-44	12	1 2 3	16 33 50	INM05-200D51	C2.5D i=5.5	3	6	25	120

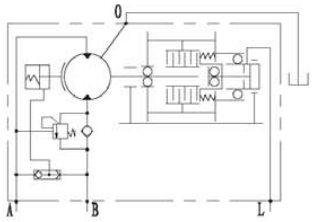
注：1. 总排量为卷筒每转一转的供油量；工作压差为绞车工作时A、B两进出油口的压力差；
2. 供油流量是泵的理论流量，即在考虑系统容积效率为0.9的情况下计算所得；
3. 容绳量为绞车的理论容绳量，实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出；
4. 当系统压力超过16MPa时，进入制动器处应设置减压阀；对系统回油背压大于1MPa时，制动器控制回路应设置两位三通顺序阀，使制动工况时，制动器油缸直接通油箱；
5. 离合器控制压力最高不得超过8MPa；
6. 本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项，用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)





液压原理图
Hydraulic schematic diagram



型 号 Model	第一层 The 1st layer		总排量 Total displacement (ml/rev)	工作压差 Working pressure diff. (MPa)	供油流量 Oil flow supply (L/min)	钢丝绳直径 Rope diameter (mm)	层数 Layer (层)	容绳量 Wire rope capacity (m)	液压马达型号 Hydraulic motor	行星减速器型号 Gearbox model	制动器开启压力 The Brake Opening Presure (MPa)	离合器开启压力 The Clutch Opening Presure (MPa)	自由下放时空钩所需的最小重量 Min. Weight for free fall (Kg)	重量 Weight (Kg)
	拉力(KN) Pull	绳速(m/min) Rope speed												
IYJ3-20-69-14-L-ZPH2	20	0-40	1701	14	0-75	14	1 2 3	22 44 69	INM1-250 D120101	C3 i=7	3	5	35	300
IYJ3-20-69-14-L-ZPH3	20	0-40	1407	17	0-62	14	1 2 3	22 44 69	INM1-200 D120101	C3 i=7	3	5	35	300
IYJ3-25-69-14-L-ZPH2	25	0-40	2030	14.5	0-90	14	1 2 3	22 44 69	INM1-300 D120101	C3 i=7	3	5	35	300
IYJ3-25-69-14-L-ZPH3	25	0-40	1701	17.6	0-76	14	1 2 3	22 44 69	INM1-250 D120101	C3 i=7	3	5	35	300
IYJ3-30-66-15-L-ZPH2	30	0-40	2465	14.4	0-109	15	1 2 3	21 42 66	INM2-500 D120101	C3A i=5	3	5	35	300
IYJ3-30-66-15-L-ZPH3	30	0-40	1908.5	18.8	0-85	15	1 2 3	21 42 66	INM2-350 D120101	C3D i=5.5	3	5	35	300
IYJ3-35-66-15-L-ZPH2	35	0-40	2825	14.7	0-125	15	1 2 3	21 42 66	INM2-600 D240101	C3A i=5	3	7	35	300
IYJ3-35-66-15-L-ZPH3	35	0-40	2337.5	18	0-104	15	1 2 3	21 42 66	INM2-420 D240101	C3D i=5.5	3	7	35	300
IYJ3-40-64-16-L-ZPH2	40	0-40	3426.5	14	0-151	16	1 2 3	20 40 64	INM2-630 D240101	C3D i=5.5	3	7	35	300
IYJ3-40-64-16-L-ZPH3	40	0-40	2711.5	17.5	0-120	16	1 2 3	20 40 64	INM2-500 D240101	C3D i=5.5	3	7	35	300

注：1. 总排量为卷筒每转一转的供油量；工作压差为绞车工作时A、B两进出油口的压力差；
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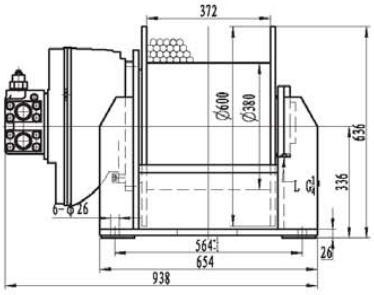
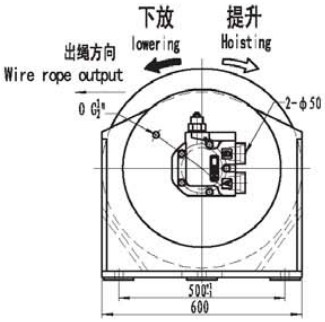
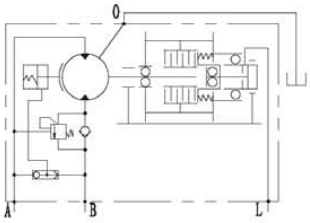
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)





液压原理图
Hydraulic schematic diagram



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IYJ4-45-108-18-L-ZPH2	45	0-50	4935	13.6	0-212	18	2 3 4	50 79 108	INM3-1000 D240101	C4A i=5	3	5	50	650
IYJ4-45-108-18-L-ZPH3	45	0-50	3795	17.3	0-169	18	2 3 4	50 79 108	INM3-700 D240101	C4D i=5.5	3	5	50	650
IYJ4-50-97-20-L-ZPH2	50	0-50	5428.5	13.5	0-240	20	2 3 4	45 71 97	INM3-1000 D480101	C4D i=5.5	3	5	50	650
IYJ4-50-97-20-L-ZPH3	50	0-50	3960	18.4	0-175	20	2 3 4	45 71 97	INM3-800 D240101	C4A i=5	3	5	50	650
IYJ4-55-97-20-L-ZPH2	55	0-50	5621	14.3	0-249	20	2 3 4	45 71 97	INM4-1000 D480101	C4D i=5.5	3	5	50	685
IYJ4-55-97-20-L-ZPH3	55	0-50	4520	17.8	0-200	20	2 3 4	45 71 97	INM4-900 D480101	C4A i=5	3	5	50	685
IYJ4-60-93-21.5-L-ZPH2	60	0-50	6138	14.4	0-270	21.5	2 3 4	43 68 93	INM4-1100 D480101	C4D i=5.5	3	7	50	685
IYJ4-60-93-21.5-L-ZPH3	60	0-50	4972	17.7	0-220	21.5	2 3 4	43 68 93	INM4-900 D480101	C4D i=5.5	3	7	50	685
IYJ4-65-93-21.5-L-ZPH2	65	0-50	6858.5	14	0-302	21.5	2 3 4	43 68 93	INM4-1250 D480101	C4D i=5.5	3	7	50	685
IYJ4-65-93-21.5-L-ZPH3	65	0-50	5621	17.2	0-246	21.5	2 3 4	43 68 93	INM4-1100 D480101	C4 i=7	3	7	50	685

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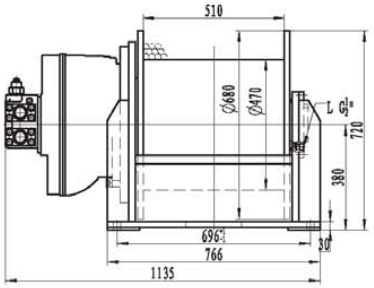
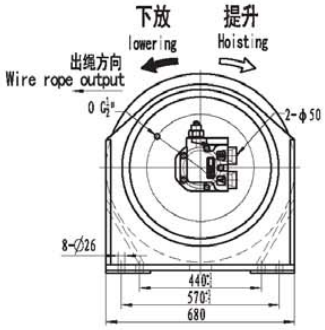
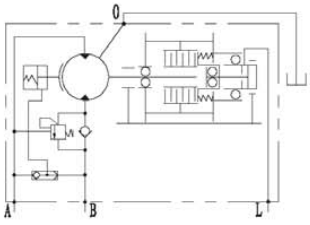




液压原理图
Hydraulic schematic diagram



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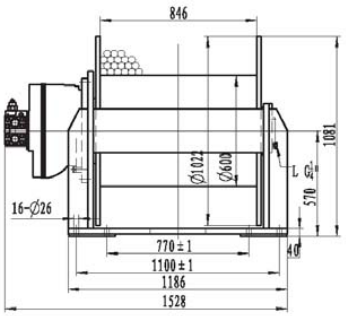
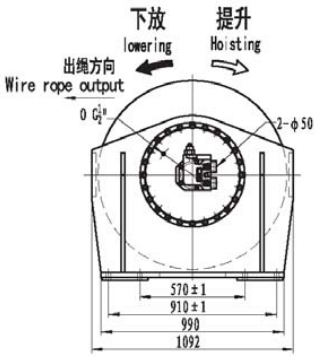
IYJ5-65-112-21.5-L-ZPH2	65	0-40	9212	13	0-239	21.5	1	35	INM4-1300 D480101	C5 i=7	3	6	50	1200
							2	71						
							3	112						
IYJ5-65-112-21.5-L-ZPH3	65	0-40	6328	18.2	0-182	21.5	1	35	INM4-900 D480101	C5 i=7	3	6	50	1200
							2	71						
							3	112						
IYJ5-70-112-21.5-L-ZPH2	70	0-40	8729	14.4	0-251	21.5	1	35	INM4-1250 D480101	C5 i=7	3	6	50	1200
							2	71						
							3	112						
IYJ5-70-112-21.5-L-ZPH3	70	0-40	7154	17.6	0-206	21.5	1	35	INM4-1000 D480101	C5 i=7	3	6	50	1200
							2	71						
							3	112						
IYJ5-80-103-24-L-ZPH2	80	0-40	10035	14.7	0-286	24	1	32	INM5-2000 D480101	C5A i=5	3	6	50	1200
							2	65						
							3	103						
IYJ5-80-103-24-L-ZPH3	80	0-40	8170	17.7	0-234	24	1	32	INM5-1600 D480101	C5A i=5	3	6	50	1200
							2	65						
							3	103						
IYJ5-90-95-26-L-ZPH2	90	0-40	11698.5	14	0-334	26	1	30	INM6-2100 D480101	C5D i=5.5	3	8	50	1200
							2	60						
							3	95						
IYJ5-90-95-26-L-ZPH3	90	0-40	9295	18	0-259	26	1	30	INM6-1700 D480101	C5D i=5.5	3	8	50	1200
							2	60						
							3	95						
IYJ5-100-57-28-L-ZPH2	100	0-40	13821.5	13.2	0-393	28	1	28	INM6-2500 D480101	C5D i=5.5	3	8	50	1200
							2	57						
IYJ5-100-57-28-L-ZPH3	100	0-40	10052	18.1	0-286	28	1	28	INM6-2500 D480101	C5D i=5.5	3	8	50	1200
							2	57						

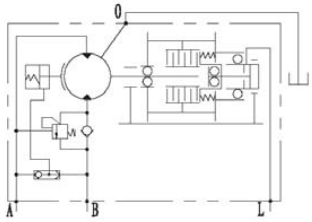
注：1. 总排量为卷筒每转一转的供油量；工作压差为绞车工作时A、B两进出油口的压力差；
2. 供油流量是泵的理论流量，即在考虑系统容积效率为0.9的情况下计算所得；
3. 容绳量为绞车的理论容绳量，实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出；
4. 当系统压力超过16MPa时，进入制动器处应设置减压阀；对系统回油背压大于1MPa时，制动器控制回路应设置两位三通顺序阀，使制动工况时，制动器油缸直接通油箱；
5. 离合器控制压力最高不得超过8MPa；
6. 本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项，用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)





液压原理图
Hydraulic schematic diagram

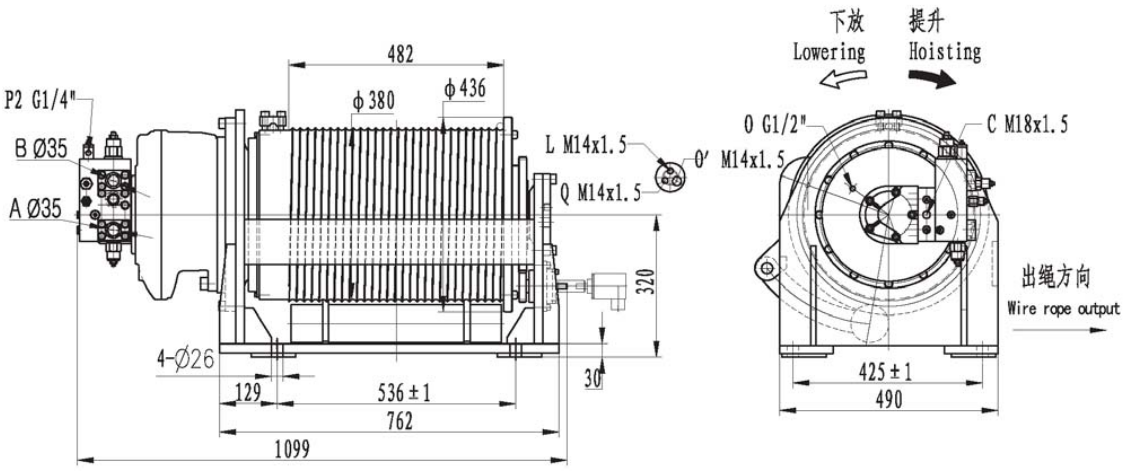


型 号 Model	第一层 The 1st layer 拉力(KN) Pull	第一层 The 1st layer 绳速(m/min) Rope speed	总排量 Total displacement (ml/rev)	工作压差 Working pressure diff. (MPa)	供油流量 Oil flow supply (L/min)	钢丝绳直径 Rope diameter (mm)	层数 Layer (层)	容绳量 Wire rope capacity (m)	液压马达型号 Hydraulic motor	行星减速器型号 Gearbox model	制动器开启压力 The Brake Opening Presure (MPa)	离合器开启压力 The Clutch Opening Presure (MPa)	自由下放时空钩所需的最小重量 Min. Weight for free fall (Kg)	重量 Weight (Kg)
IYJ6-100-335-28-L-ZPH2	100	0-30	17591	13.3	0-297	28	3	188	INM6-2500 D480101	C6 i=7	3	2	75	2200
							4	258						
							5	335						
IYJ6-100-335-28-L-ZPH3	100	0-30	12712	18	0-215	28	3	188	INM5-1800 D480101	C6 i=7	3	2	75	2200
							4	258						
							5	335						
IYJ6-110-335-28-L-ZPH2	110	0-30	17591	14.4	0-297	28	3	188	INM6-2500 D480101	C6 i=7	3	2.2	75	2200
							4	258						
							5	335						
IYJ6-110-335-28-L-ZPH3	110	0-30	13821.5	18.3	0-233	28	3	188	INM6-2500 D480101	C6D i=5.5	3	2.2	75	2200
							4	258						
							5	335						
IYJ6-120-315-30-L-ZPH3	120	0-30	16725.5	17	0-281	30	3	176	INM6-3000 D480101	C6D i=5.5	3	2.4	75	2200
							4	242						
							5	315						
IYJ6-130-298-32.5-L-ZPH3	130	0-30	16725.5	18	0-280	32.5	3	165	INM6-3000 D480101	C6D i=5.5	3	2.6	75	2200
							4	228						
							5	298						
IYJ6-150-276-34-L-ZPH3	150	0-30	19904.5	18	0-235	34	3	153	HGM31-3500 D480101	C6D i=5.5	3	3.0	75	2400
							4	211						
							5	276						
IYJ6-180-198-38-L-ZPH3	180	0-30	23430	18	0-393	38	2	90	HGM31-4000 D480101	C6D i=5.5	3	3.6	75	2400
							3	143						
							4	198						

注：1. 总排量为卷筒每转一转的供油量；工作压差为绞车工作时A、B两进出油口的压力差；
2. 供油流量是泵的理论流量，即在考虑系统容积效率为0.9的情况下计算所得；
3. 容绳量为绞车的理论容绳量，实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出；
4. 当系统压力超过16MPa时，进入制动器处应设置减压阀；对系统回油背压大于1MPa时，制动器控制回路应设置两位三通顺序阀，使制动工况时，制动器油缸直接通油箱；
5. 离合器控制压力最高不得超过8MPa；
6. 本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项，用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

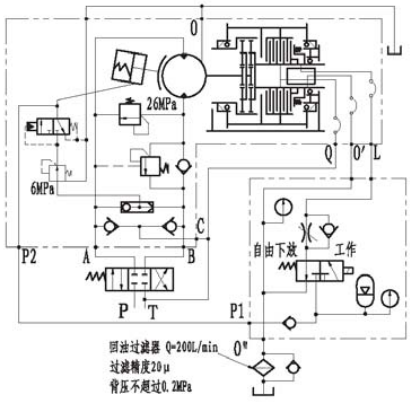
IYJ4-48-20-16-L-ZPH3



主要技术性能参数 (Main Specifition)

第一层最大拉力 Max.full on the 1st layer(kN)		47.5
第一层最大绳速 Max.speed on the 1st layer(m/min)		44
卷筒总排量 Total displacement(mL/r)		2849.7
系统额定压力 System pressure(MPa)		26
液压马达工作压差 Diff.pressure(MPa)		24.5
适用钢丝绳直径 Rope diameter(mm)		16
钢丝绳层数 Number of rope layers		1
容绳量 Drum capacity(m)		20
泵的理论流量 Pump flow(L/min)		106
马达型号 Motor type	INM3-700+F240111P	
减速机型号 Gearbox type	C4F(i=4.13)	
离合器完全开启压力 Clutch openning pressure(MPa)		5.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)		80

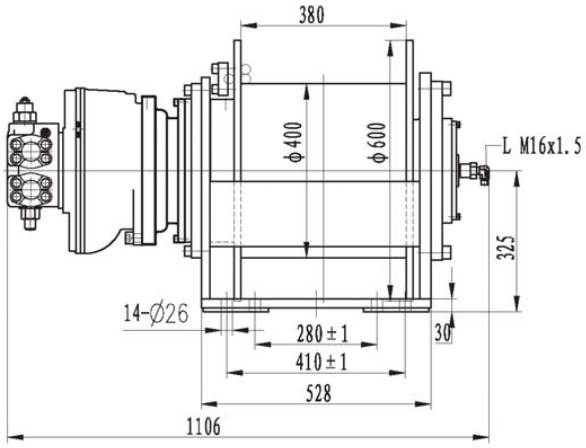
液压原理图(Hydraulic principle diagram)

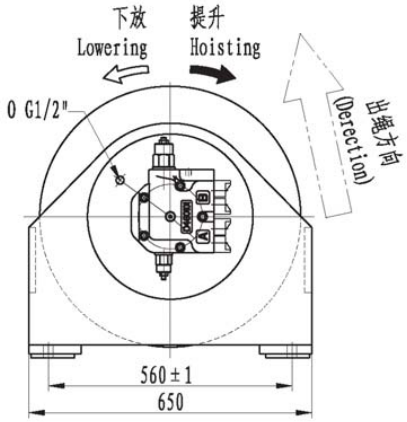


注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope.The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa.When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

IYJ4-50-40-22-L-ZPH3

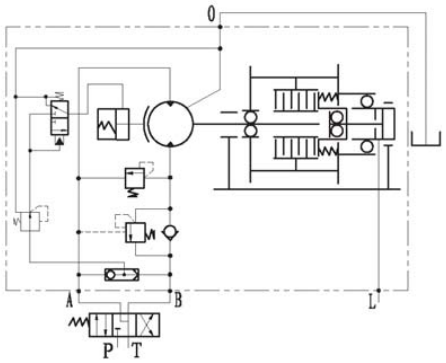




主要技术性能参数 (Main Specifition)

第二层最大拉力 Max.full on the 2nd layer(kN)		50
第二层最大绳速 Max.speed on the 2nd layer(m/min)		50
卷筒总排量 Total displacement(mL/r)		5544
系统额定压力 System pressure(MPa)		17
液压马达工作压差 Diff.pressure(MPa)		15.5
适用钢丝绳直径 Rope diameter(mm)		22
钢丝绳层数 Number of rope layers		2
容绳量 Drum capacity(m)		40
泵的理论流量 Pump flow(L/min)		202
马达型号 Motor type	INM3-800D480111P	
减速机型号 Gearbox type	C4I(i=7)	
离合器完全开启压力 Clutch openning pressure(MPa)		7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)		100

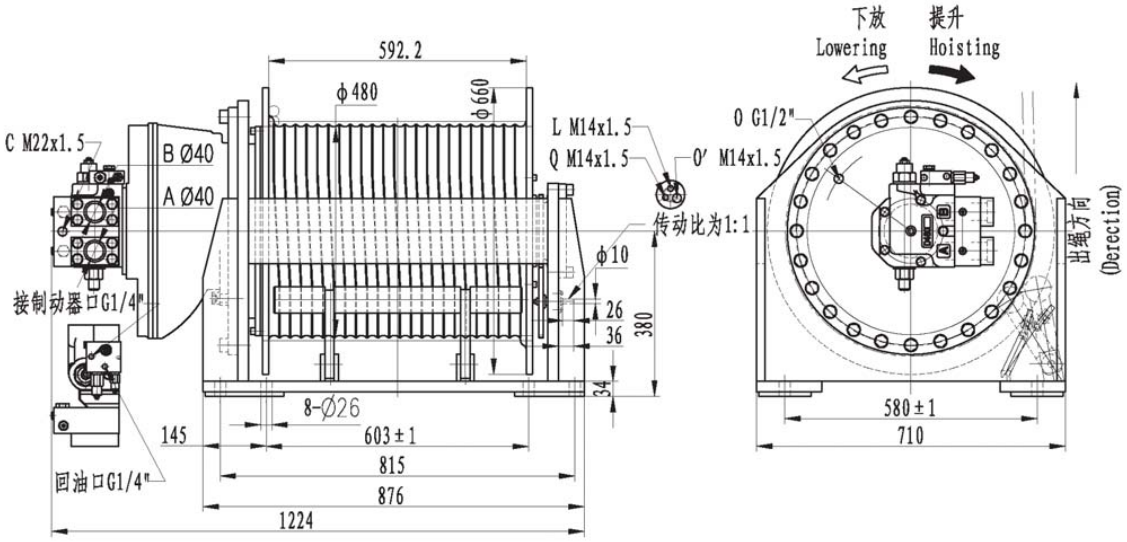
液压原理图(Hydraulic principle diagram)



注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope.The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa.When ruturn oil back pressure is higher than 1MPa,setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

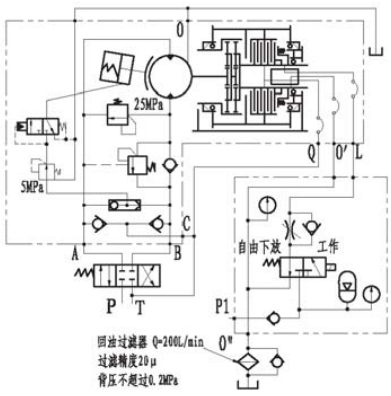
IYJ5-125-70-24-L-ZPH4



主要技术性能参数 (Main Specifition)

第二层最大拉力 Max.full on the 2nd layer(kN)		125
第二层最大绳速 Max.speed on the 2nd layer(m/min)		55
卷筒总排量 Total displacement(mL/r)		11038.5
系统额定压力 System pressure(MPa)		25
液压马达工作压差 Diff.pressure(MPa)		23
适用钢丝绳直径 Rope diameter(mm)		24
钢丝绳层数 Number of rope layers		2
容绳量 Drum capacity(m)		70
泵的理论流量 Pump flow(L/min)		375
马达型号 Motor type	INM5-2000D480111P	
减速机型号 Gearbox type	C5DI(i=5.5)	
离合器完全开启压力 Clutch openning pressure(MPa)		7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)		120

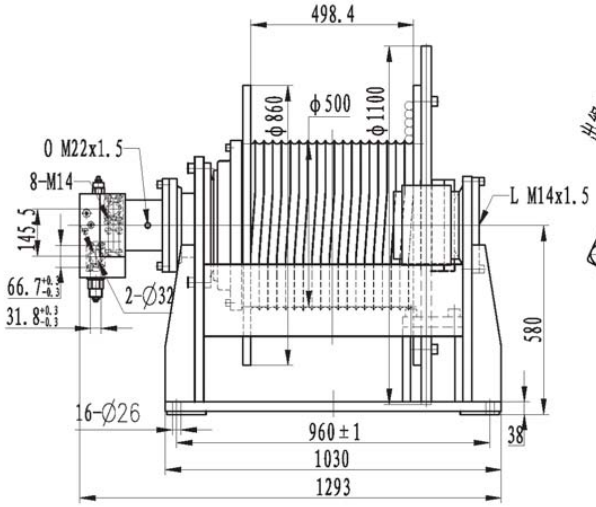
液压原理图(Hydraulic principle diagram)

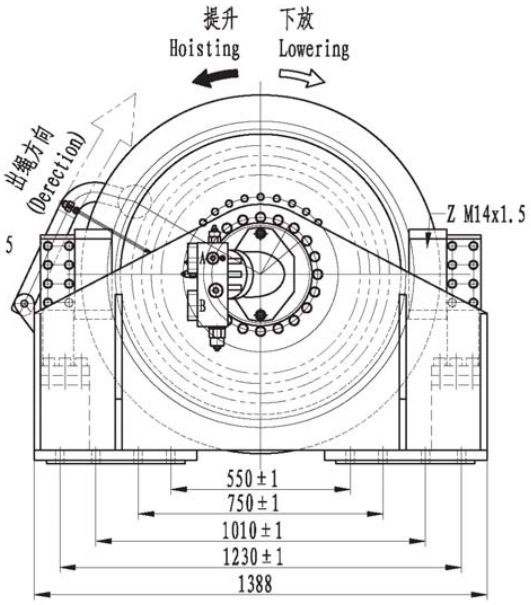


注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

IYJ46-94-180-26-ZPGH5Q

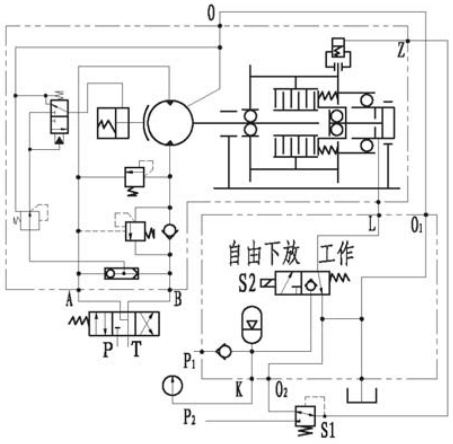




主要技术性能参数 (Main Specifition)

第五层最大拉力 Max.full on the 5th layer(KN)		94
第一层最大绳速 Max.speed on the 1st layer(m/min)		66
卷筒总排量 Total displacement(mL/r)		13525.12
系统额定压力 System pressure(MPa)		30
马达最大工作压差 Max diff.pressure(MPa)		28.7
适用钢丝绳直径 Rope diameter(mm)		26
钢丝绳层数 Number of rope layers		5
容绳量 Drum capacity(m)		180
泵的理论流量 Pump flow(L/min)		428
马达型号 Motor type	A2FB160/6.1WVZL10+F480111P	
减速机型号 Gearbox type	C46I(i=63.5072)	
离合器完全开启压力 Clutch openning pressure(MPa)		7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)		100

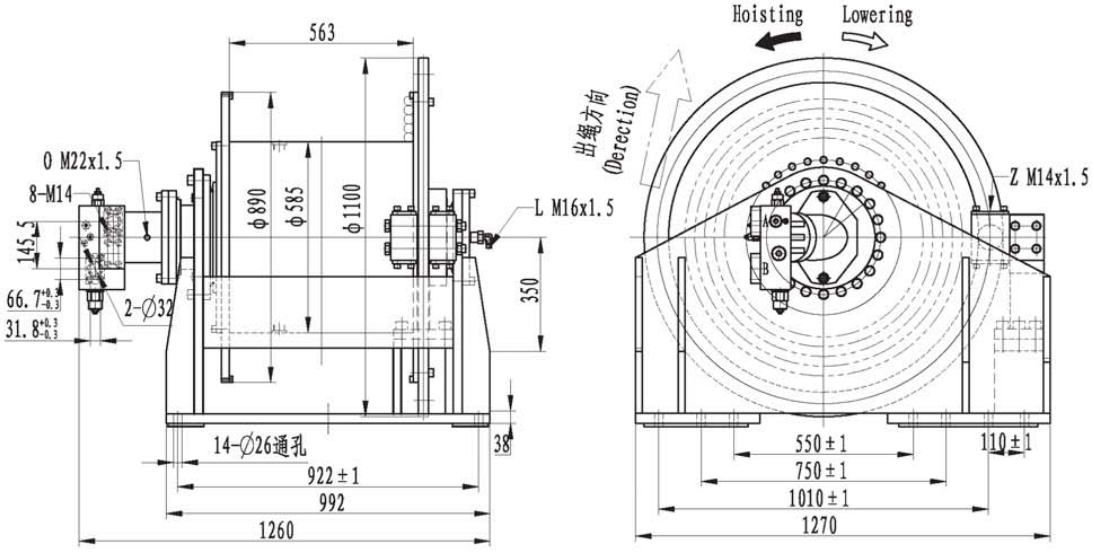
液压原理图(Hydraulic principle diagram)



注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

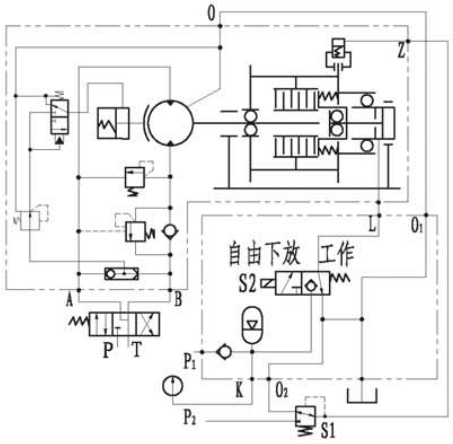
IYJ46-110-180-26-L-ZPGH5Q



主要技术性能参数 (Main Specifition)

第一层最大拉力 Max.full on the 1st layer(KN)		110
第一层最大绳速 Max.speed on the 1st layer(m/min)		66
卷筒总排量 Total displacement(mL/r)		10161.152
系统额定压力 System pressure(MPa)		28
液压马达工作压差 Diff.pressure(MPa)		26
适用钢丝绳直径 Rope diameter(mm)		26
钢丝绳层数 Number of rope layers		4
容绳量 Drum capacity(m)		180
泵的理论流量 Pump flow(L/min)		376
马达型号 Motor type	A2FE160/6.1WVZL10+F480111P	
减速机型号 Gearbox type	C46I(i=63.5072)	
离合器完全开启压力 Clutch openning pressure(MPa)		7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)		100

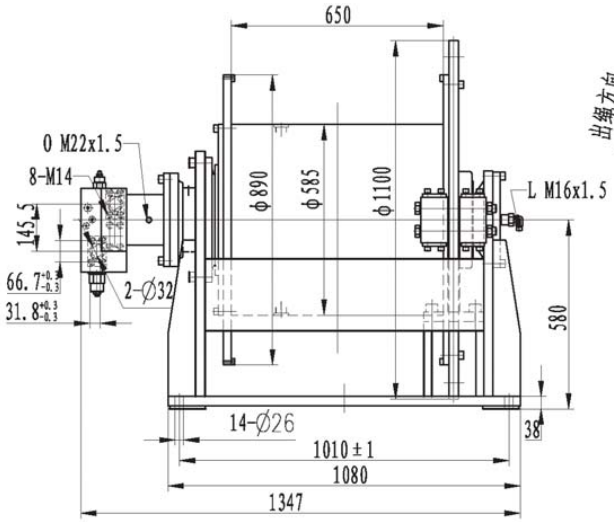
液压原理图(Hydraulic principle diagram)

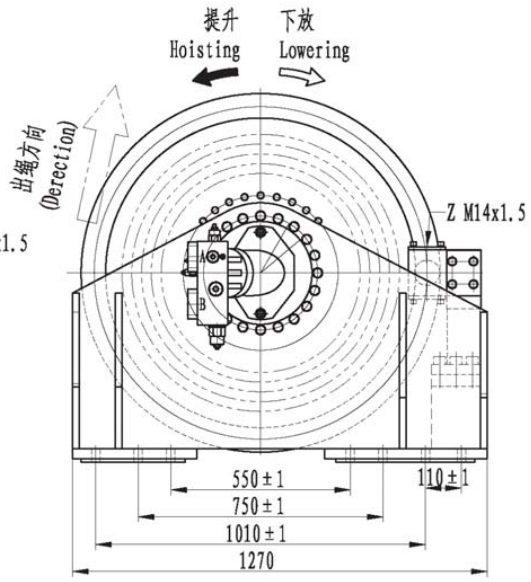


注: 1.总容量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

IYJ46-125-210-26-ZPGH5Q

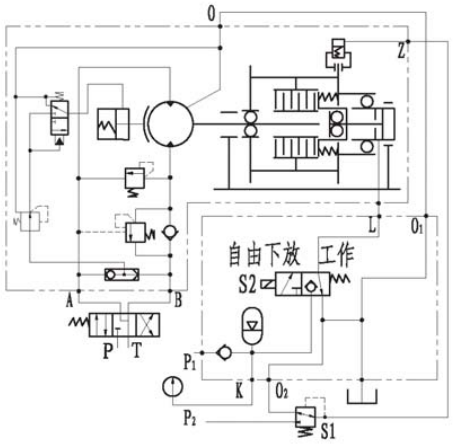




主要技术性能参数 (Main Specifition)

第一层最大拉力 Max.full on the 1st layer(KN)	125
第一层最大绳速 Max.speed on the 1st layer(m/min)	70
卷筒总排量 Total displacement(mL/r)	11431.296
系统额定压力 System pressure(MPa)	28
液压马达工作压差 Diff.pressure(MPa)	26
适用钢丝绳直径 Rope diameter(mm)	26
钢丝绳层数 Number of rope layers	4
容绳量 Drum capacity(m)	210
泵的理论流量 Pump flow(L/min)	448
马达型号 Motor type	A2FE180/6.1WVZL10+F480111P
减速机型号 Gearbox type	C46I(i=63.5072)
离合器完全开启压力 Clutch openning pressure(MPa)	7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)	100

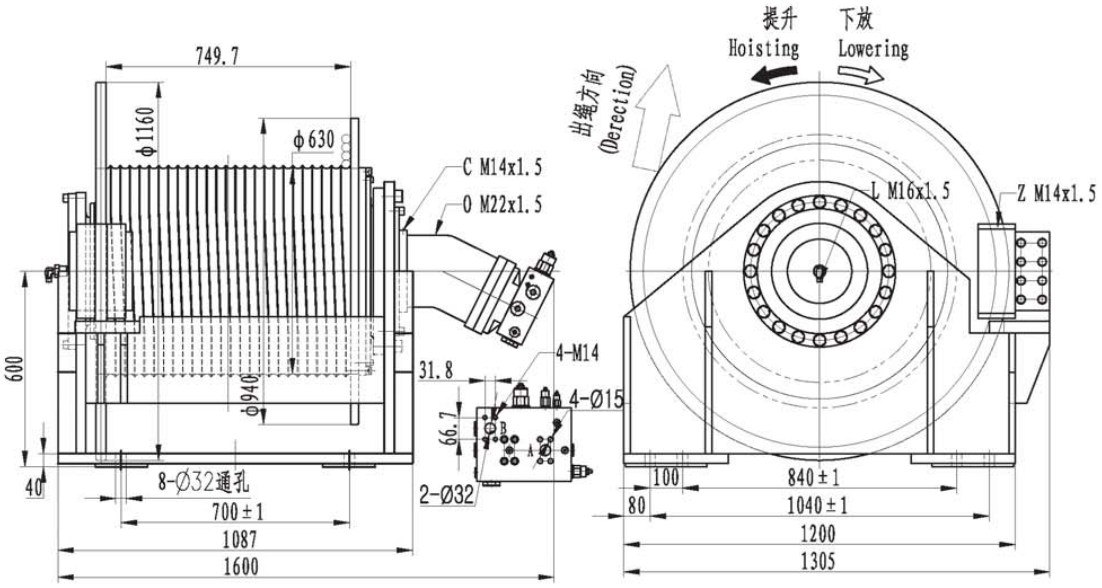
液压原理图(Hydraulic principle diagram)



注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

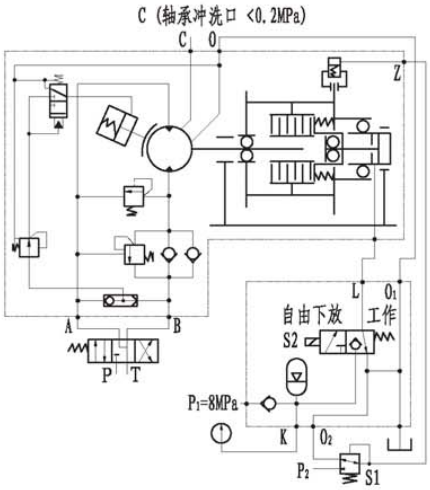
IYJ4.57-150-232-28-ZPGH5Q



主要技术性能参数 (Main Specifition)

第一层最大拉力 Max.full on the 1st layer(KN)		150
第一层最大绳速 Max.speed on the 1st layer(m/min)		81
卷筒总排量 Total displacement(mL/r)		12937.5
系统额定压力 System pressure(MPa)		30
液压马达工作压差 Diff.pressure(MPa)		28.9
适用钢丝绳直径 Rope diameter(mm)		28
钢丝绳层数 Number of rope layers		4
容绳量 Drum capacity(m)		232
泵的理论流量 Pump flow(L/min)		540
马达型号 Motor type	A2F250W5Z1+F720111P	
减速机型号 Gearbox type	C4.57I(i=51.75)	
离合器完全开启压力 Clutch openning pressure(MPa)		7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)		100

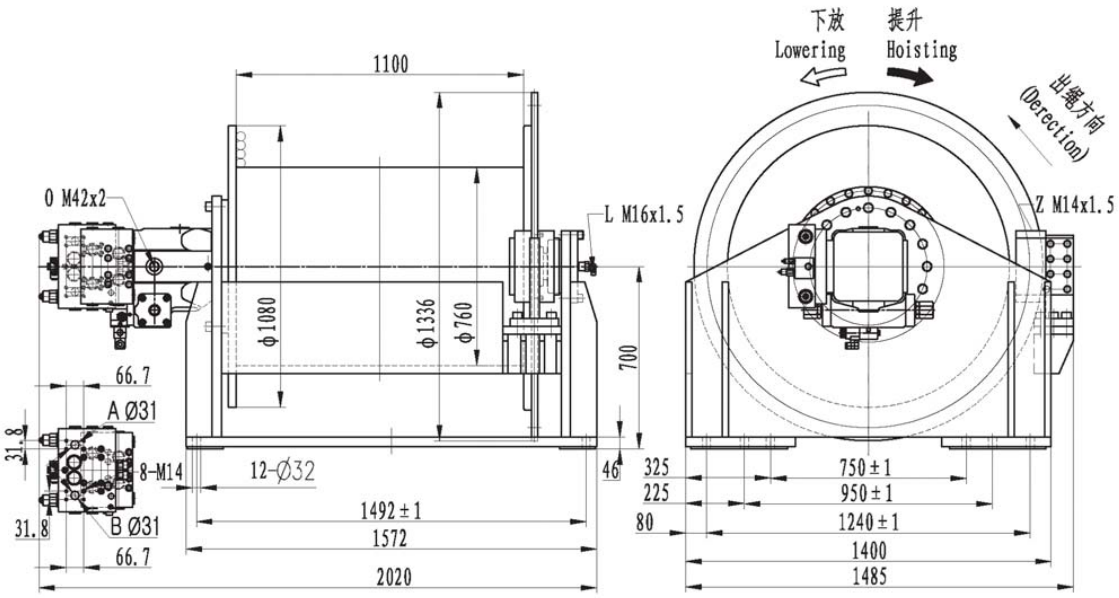
液压原理图(Hydraulic principle diagram)



注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)

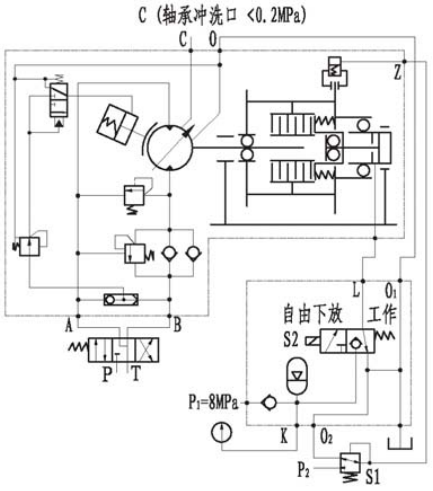
IYJ577-200-260-32-L-ZPGH5Q



主要技术性能参数 (Main Specifition)

第一层最大拉力 Max.full on the 1st layer(KN)	200	142
第一层最大绳速 Max.speed on the 1st layer(m/min)	57	92.5
卷筒总排量 Total displacement(mL/r)	21881	15491.748
系统额定压力 System pressure(MPa)		30
液压马达工作压差 Diff.pressure(MPa)		28.5
适用钢丝绳直径 Rope diameter(mm)		32
钢丝绳层数 Number of rope layers		3
容绳量 Drum capacity(m)		260
泵的理论流量 Pump flow(L/min)		580
马达型号 Motor type	A4VSM250Z-142+F720111P	
减速机型号 Gearbox type	C577I(i=87.524)	
离合器完全开启压力 Clutch openning pressure(MPa)		7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)		250

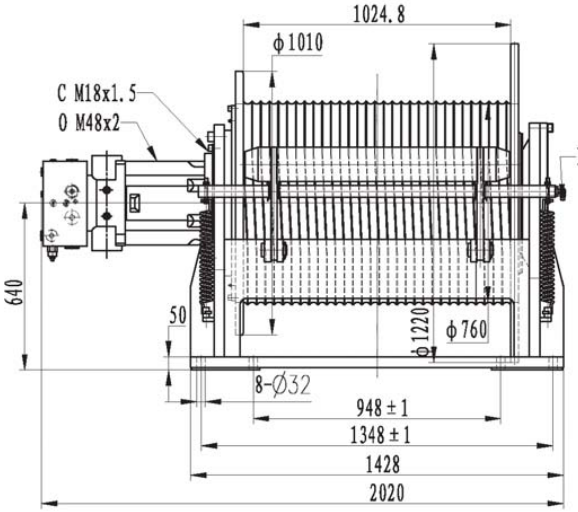
液压原理图(Hydraulic principle diagram)

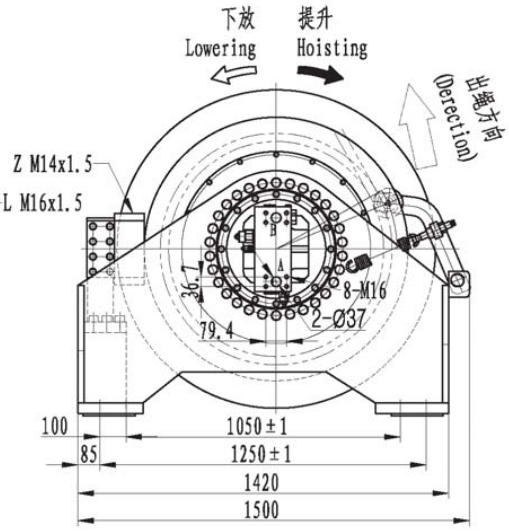


注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两近出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope.The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa.When ruturn oil back pressure is higher than 1MPa,setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum.(the item as option)

IYJ577-225-145-32-L-ZPGH5Q

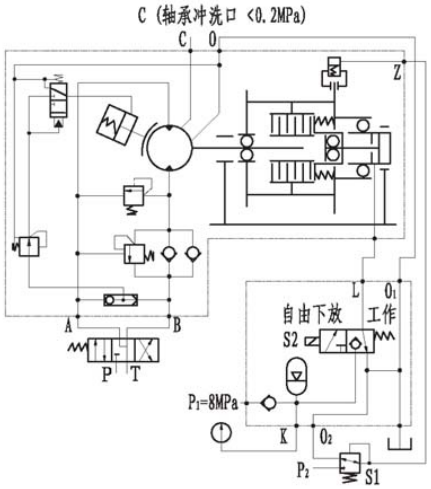




主要技术性能参数 (Main Specifition)

第一层最大拉力 Max.full on the 1st layer(KN)	225
第一层最大绳速 Max.speed on the 1st layer(m/min)	57
卷筒总排量 Total displacement(mL/r)	26425
系统额定压力 System pressure(MPa)	28
液压马达工作压差 Diff.pressure(MPa)	26.5
适用钢丝绳直径 Rope diameter(mm)	32
钢丝绳层数 Number of rope layers	2
容绳量 Drum capacity(m)	145
泵的理论流量 Pump flow(L/min)	595
马达型号 Motor type	A4FM500+F720111P
减速机型号 Gearbox type	C577I(i=52.85)
离合器完全开启压力 Clutch openning pressure(MPa)	7.5
自由下放空钩最小重量 Single rope pull on free rotary(Kg)	400

液压原理图(Hydraulic principle diagram)



注: 1.总排量为卷筒每转一转的供油量; 工作压差为绞车工作时A、B两进出油口的压力差;
2.供油流量是泵的理论流量, 即在考虑系统容积效率为0.9的情况下计算所得;
3.容绳量为绞车的理论容绳量, 实际允许的有效容绳量应考虑保留钢丝绳3米以防绳头脱出;
4.当系统压力超过16MPa时, 进入制动器处应设置减压阀; 对系统回油背压大于1MPa时, 制动器控制回路应设置两位三通顺序阀, 使制动工况时, 制动器油缸直接通油箱;
5.离合器控制压力最高不得超过8MPa;
6.本系列绞车可带压绳机构及最后三圈钢丝绳防脱绳报警装置(此项为选项, 用户订货自选)

Note: 1. Total displacement represents the capacity of oil supply pre revolution; Working pressure difference represents the pressure drop between Port A and Port B.
2. Flow of oil supply indicates theoretical flow of pump when the volumet-ric efficiency considered as 90 percent.
3. Capacity of rope is theoretical capacity of rope. The practical availab-le capacity of rope should subtract the retained 3m wire in case of rope head is out of hand.
4. The reducing valve should be setted in brake control circuit if system pressure is above 16MPa. When ruturn oil back pressure is higher than 1MPa, setting 2/3 sequence valve to promise oil in brake cylinder directly conduct to tank in braking function.
5. The control pressure of hydraulic clutch is not higher than 8MPa.
6. Fitted with pressure roller and alarm device for ensuring 3 dead wraps of cable on the drum. (the item as option)