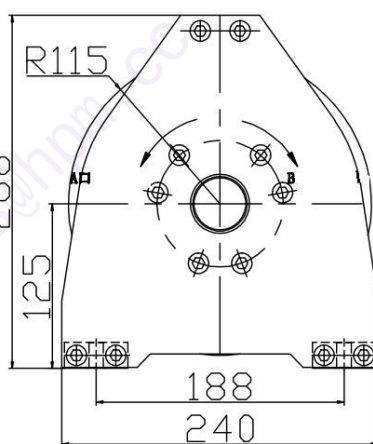
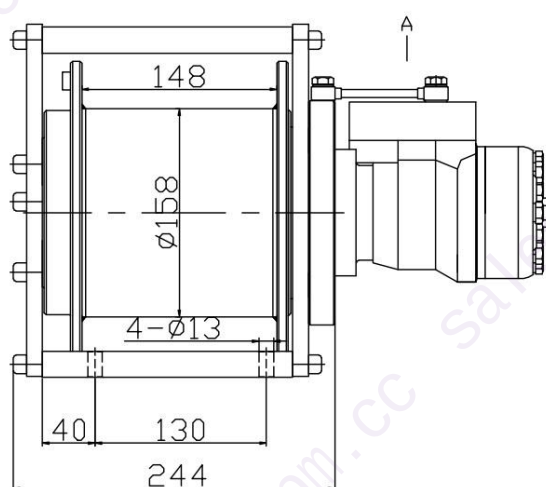


Hydraulic winches

5-13KN /0.5-1.32 ton

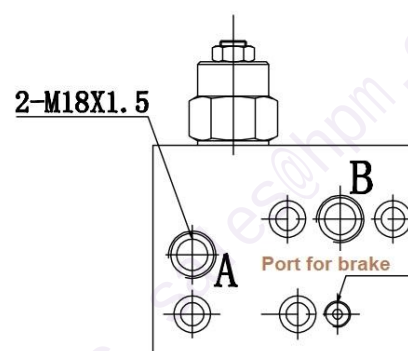
W05(08/10/13) -158-244- OMRXXX-A

Model	The 1st layer rope		Total displacement (ml/rev)	Working pressure (MPa)	Oil (L/min)	Rope diameter (mm)	Layer	rope capacity (m)	Hydraulic motor	Planetary reducer ratio
	Rope Pull (KN)	Rope speed (m/min)								
W05-158-244-OMR80-A	5	33	417	10	38	6	1st	12.8	BMR-80	i=5.23
							2nd	27		
							3rd	42		
							4th	58		
W08-158-244-OMR100-A	8	33	523	10	47	8	1st	9.6	BMR-100	i=5.23
							2nd	20		
							3rd	31.7		
							4th	44		
W10-158-244-OMR125-A	10	33	654	10	59	8	1st	9.6	BMR-125	i=5.23
							2nd	20		
							3rd	31.7		
							4th	44		
W13-158-244-OMR160-A	13	33	835	11	76	8	1st	9.6	BMR-160	i=5.23
							2nd	20		
							3rd	31.7		
							4th	44		



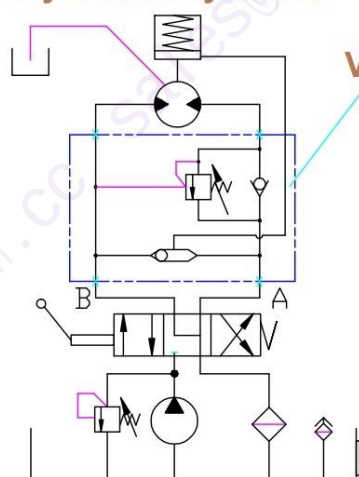
Shelf shape type:A

Oil port A in:lifting up;
Oil port B in:put down



Hydraulic symbols

Valve block



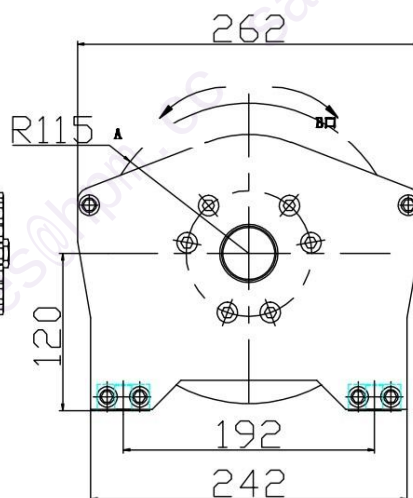
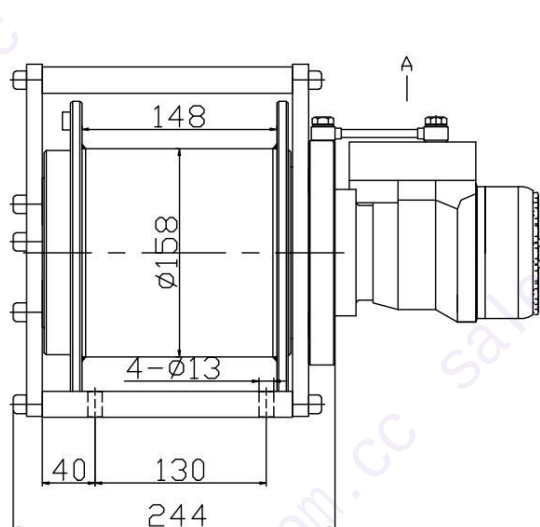
Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05: 5 KN	158	244	OMR/BMR - XXX	A
		08: 8 KN				
		10: 10 KN				
		13: 13 KN				

Hydraulic winches

5-13KN /0.5-1.32 ton

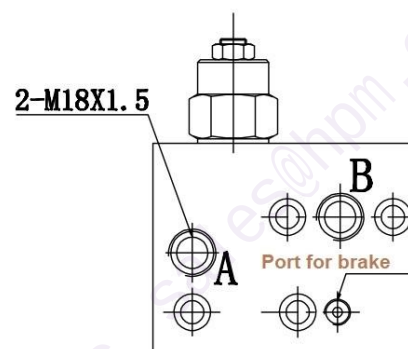
W05(08/10/13) -158-244-OMRXXX-E

Model	The 1st layer rope		Total displacement (ml/rev)	Working pressure (MPa)	Oil (L/min)	Rope diameter (mm)	Layer	rope capacity (m)	Hydraulic motor	Planetary reducer ratio
	Rope Pull (KN)	Rope speed (m/min)								
W05-158-244-OMR80-E	5	33	417	10	38	6	1st	12.8	BMR-80	i=5.23
							2nd	27		
							3rd	42		
							4th	58		
W08-158-244-OMR100-E	8	33	523	10	47	8	1st	9.6	BMR-100	i=5.23
							2nd	20		
							3rd	31.7		
							4th	44		
W10-158-244-OMR125-E	10	33	654	10	59	8	1st	9.6	BMR-125	i=5.23
							2nd	20		
							3rd	31.7		
							4th	44		
W13-158-244-OMR160-E	13	33	835	11	76	8	1st	9.6	BMR-160	i=5.23
							2nd	20		
							3rd	31.7		
							4th	44		



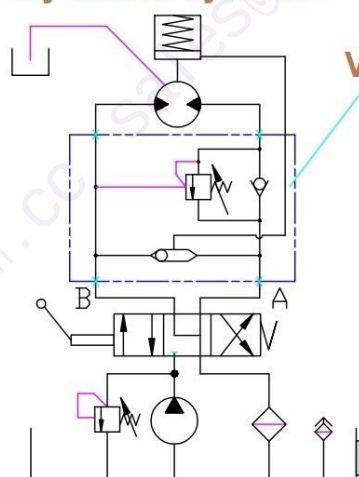
Shelf shape type: E

Oil port A in: lifting up;
Oil port B in: put down



Hydraulic symbols

Valve block



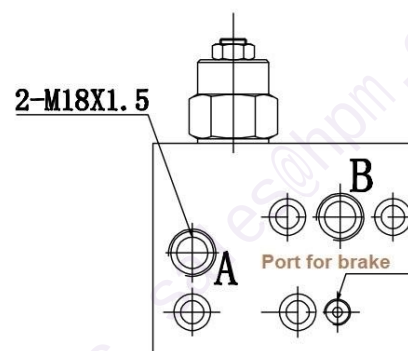
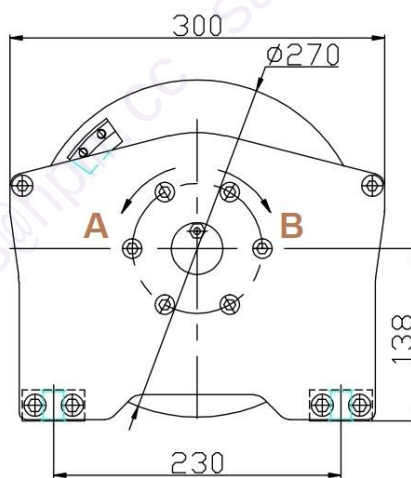
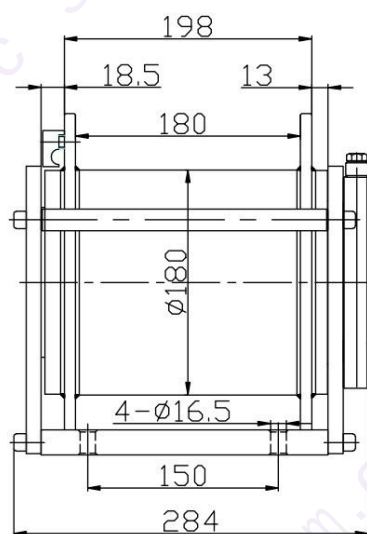
Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05: 5 KN	158	244	OMR/BMR - XXX	E
		08: 8 KN				
		10: 10 KN				
		13: 13 KN				

Hydraulic winches

5-13KN /0.5-1.32 ton

W05(08/10/13) -180-284- OMRXXX-E

Model	The 1st layer rope		Total displacement (ml/rev)	Working pressure (MPa)	Oil (L/min)	Rope diameter (mm)	Layer	rope capacity (m)	Hydraulic motor	Planetary reducer ratio
	Rope Pull (KN)	Rope speed (m/min)								
W05-180-284-OMR100-E	5	37	476	10	36	8	1st	13	BMR-100	i=4.76
							2nd	27		
							3rd	43		
							4th	57		
W08-180-284-OMR125-E	8	40	595	10	56	8	1st	13	BMR-125	i=4.76
							2nd	27		
							3rd	43		
							4th	57		
W10-180-284-OMR160-E	10	35	762	11	56	8	1st	13	BMR-160	i=4.76
							2nd	27		
							3rd	43		
							4th	57		
W13-180-284-OMR160-E	13	35	762	13	56	8	1st	13	BMR-160	i=4.76
							2nd	27		
							3rd	43		
							4th	57		

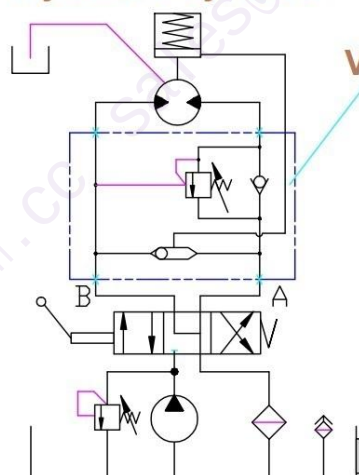


Shelf shape type: E

Oil port A in: lifting up;
Oil port B in: put down

Hydraulic symbols

Valve block



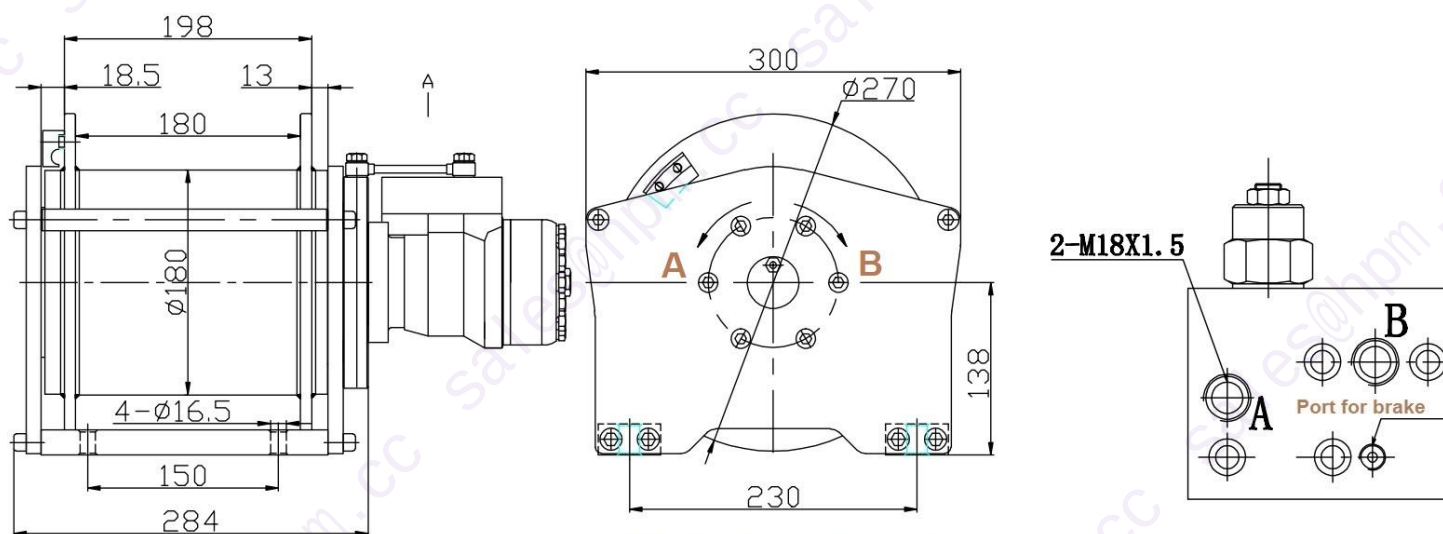
Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05: 5 KN	180	284	OMR/BMR - XXX	E
		08: 8 KN				
		10: 10 KN				
		13: 13 KN				

Hydraulic winches

5-13KN /0.5-1.32 ton

W05(08/10/13) -180-284-OMRXXX-E

Model	The 1st layer rope		Total displacement (ml/rev)	Working pressure (MPa)	Oil (L/min)	Rope diameter (mm)	Layer	rope capacity (m)	Hydraulic motor	Planetary reducer ratio
	Rope Pull (KN)	Rope speed (m/min)								
W05-180-284-OMR100-E	5	37	476	10	36	8	1st	13	BMR-100	i=4.76
							2nd	27		
							3rd	43		
							4th	57		
W08-180-284-OMR125-E	8	40	595	10	56	8	1st	13	BMR-125	i=4.76
							2nd	27		
							3rd	43		
							4th	57		
W10-180-284-OMR160-E	10	35	762	11	56	8	1st	13	BMR-160	i=4.76
							2nd	27		
							3rd	43		
							4th	57		
W13-180-284-OMR160-E	13	35	762	13	56	8	1st	13	BMR-160	i=4.76
							2nd	27		
							3rd	43		
							4th	57		

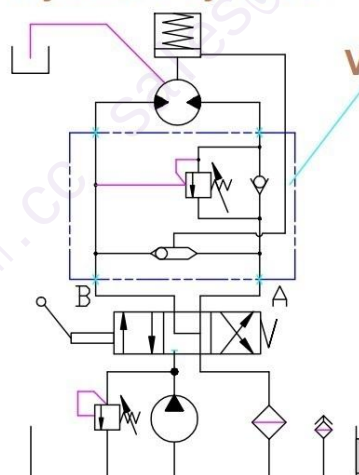


Shelf shape type: E

Oil port A in: lifting up;
Oil port B in: put down

Hydraulic symbols

Valve block



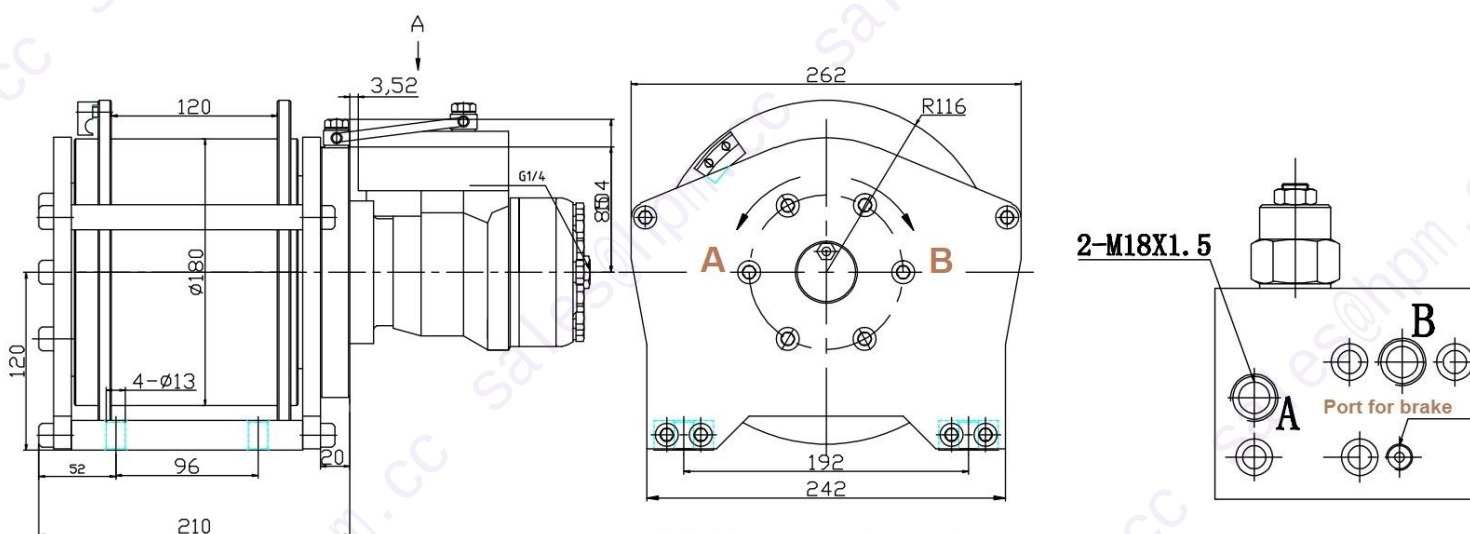
Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05: 5 KN	180	284	OMR/BMR - XXX	E
		08: 8 KN				
		10: 10 KN				
		13: 13 KN				

Hydraulic winches

5-13KN /0.5-1.32 ton

W05(08/10/13) -180-210-OMRXXX-E

Model	The 1st layer rope		Total displacement (ml/rev)	Working pressure (MPa)	Oil (L/min)	Rope diameter (mm)	Layer	rope capacity (m)	Hydraulic motor	Planetary reducer ratio
	Rope Pull (KN)	Rope speed (m/min)								
W05-180-210-OMR80-E	5	41	381	10	36	8	1st	8	BMR-80	i=4.76
							2nd	18		
							3rd	28		
							4th			
W08-180-210-OMR125-E	8	40	595	10	56	8	1st	8	BMR-125	i=4.76
							2nd	18		
							3rd	28		
							4th			
W10-180-210-OMR160-E	10	35	762	12.5	56	8	1st	8	BMR-160	i=4.76
							2nd	18		
							3rd	28		
							4th			
W13-180-210-OMR160-E	13	35	762	13	56	8	1st	8	BMR-160	i=4.76
							2nd	18		
							3rd	28		
							4th			

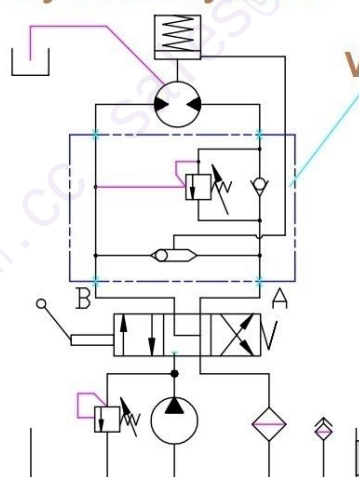


Shelf shape type: E

Oil port A in: lifting up;
Oil port B in: put down

Hydraulic symbols

Valve block



Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05: 5 KN	180	210	OMR/BMR - XXX	E
		08: 8 KN				
		10: 10 KN				
		13: 13 KN				

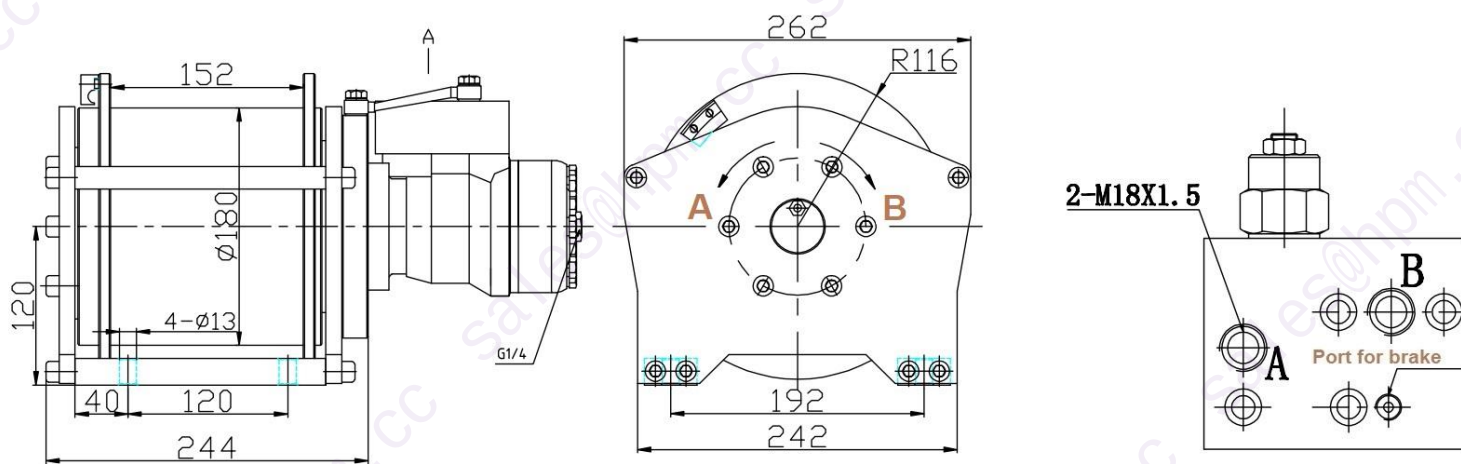
Hydraulic winches



5-13KN /0.5-1.32 ton

W05(08/10/13) -180-244-OMRXXX-E

Model	The 1st layer rope		Total displacement (ml/rev)	Working pressure (MPa)	Oil (L/min)	Rope diameter (mm)	Layer	rope capacity (m)	Hydraulic motor	Planetary reducer ratio
	Rope Pull (KN)	Rope speed (m/min)								
W05-180-244-OMR80-E	5	41	381	10	36	8	1st	11	BMR-80	i=4.76
							2nd	22		
							3rd	37		
							4th			
W08-180-244-OMR125-E	8	40	595	10	56	8	1st	11	BMR-125	i=4.76
							2nd	22		
							3rd	37		
							4th			
W10-180-244-OMR160-E	10	35	762	11	56	8	1st	11	BMR-160	i=4.76
							2nd	22		
							3rd	37		
							4th			
W13-180-244-OMR160-E	13	35	762	13	56	8	1st	11	BMR-160	i=4.76
							2nd	22		
							3rd	37		
							4th			

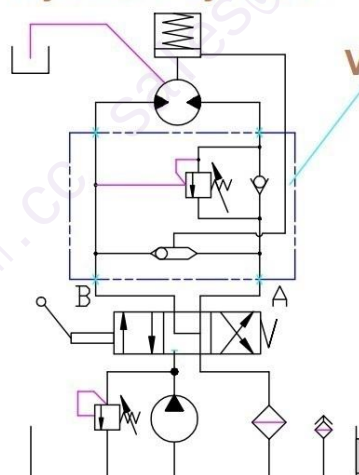


Shelf shape type: E

Oil port A in:lifting up;
Oil port B in:put down

Hydraulic symbols

Valve block



Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05: 5 KN	180	244	OMR/BMR - XXX	E
		08: 8 KN				
		10: 10 KN				
		13: 13 KN				

W05(08/10/13) -180-240-OMR-NO

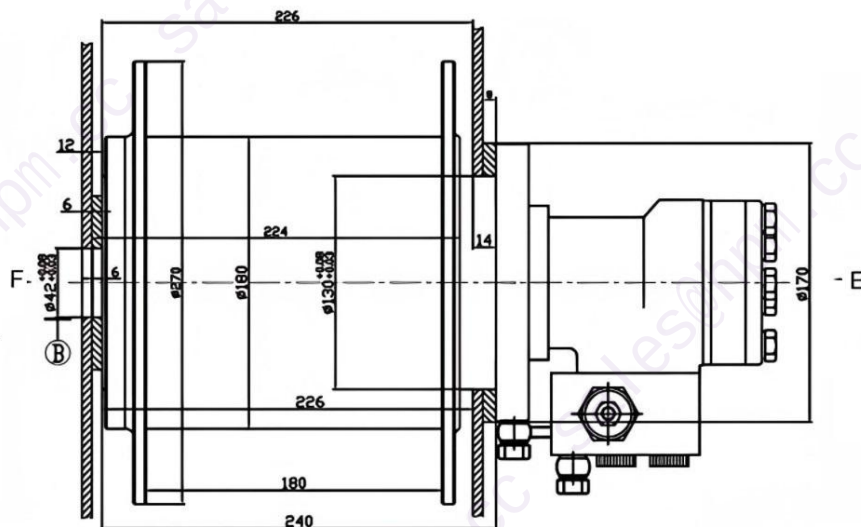
F Direction

A **B**

$\phi 104$ $\phi 42$ $6-\phi 10,5$

30°

Oil port A is:lifting up
Oil port B is:put down



The diagram shows a hydraulic circuit. At the top, a pump (circle with a diagonal line) is connected to a valve (square with a diagonal line and a handle). The valve has two positions: one where fluid flows from the pump to a cylinder (bottom right) and another where fluid flows from the cylinder back to the pump. The cylinder is represented by a rectangle with two chambers. The left chamber is connected to the pump line, and the right chamber is connected to the return line. The return line goes back to the pump. There are also two pressure gauges (circles with a 'P' inside) connected to the lines. One gauge is on the line between the pump and the valve, and the other is on the line between the cylinder and the pump. The diagram is labeled with 'B' at the bottom left and 'A' at the bottom right.

Valve block

Model description	W	1		2	3	4	5
	Winch	Rope pull		Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05:	5 KN	180	240	OMR/BMR - XXX	NO
		08:	8 KN				
		10:	10 KN				
		13:	13 KN				

W05(08/10/13) -180-293-OMR-NO

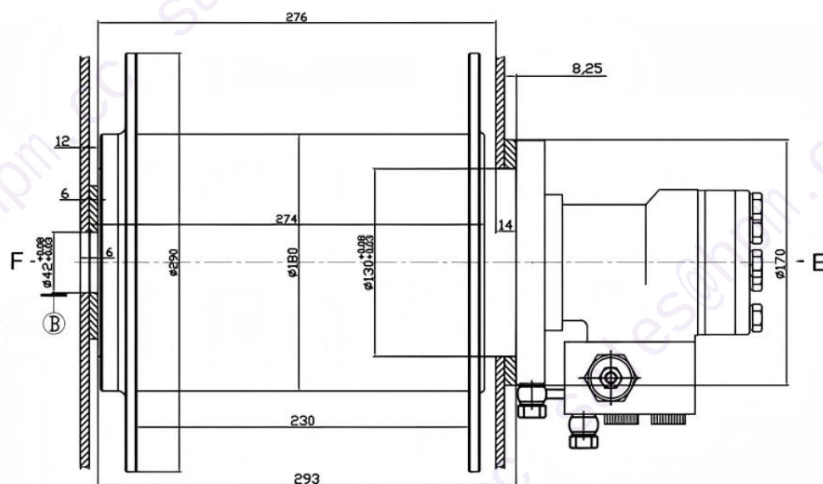
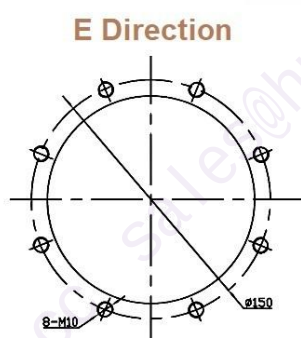
F Direction

A **B**

$\phi 104$ $\phi 42$ $6-\phi 10,5$

30°

Oil port A in:lifting up
Oil port B in:put down



The diagram shows a hydraulic circuit. At the top, a pump (circle with a diagonal line) is connected to a valve (square with a diagonal line and a handle). The valve has two positions: one where fluid flows from the pump to a cylinder (bottom right) and another where fluid flows from the cylinder back to the pump. The cylinder is represented by a rectangle with two chambers. The left chamber is connected to the pump line, and the right chamber is connected to the return line. The return line goes back to the pump. There are also two check valves (diamonds) on the lines connecting the valve to the cylinder. The entire system is enclosed in a dashed box.

Valve block

Model description	W	1		2	3	4	5
	Winch	Rope pull		Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		05:	5 KN	180	293	OMR/BMR - XXX	NO
		08:	8 KN				
		10:	10 KN				
		13:	13 KN				