

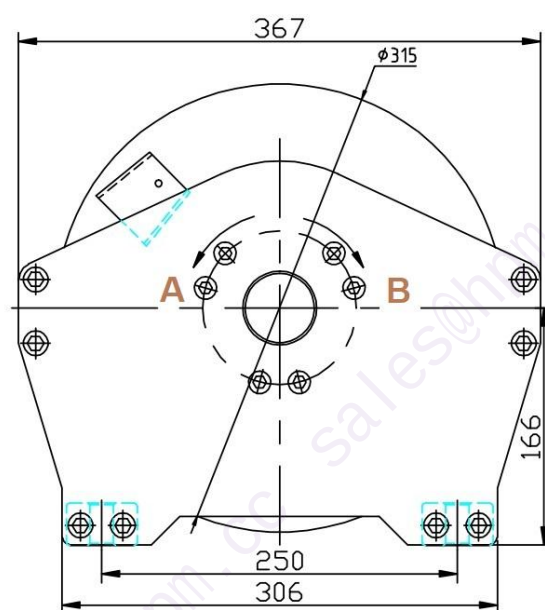
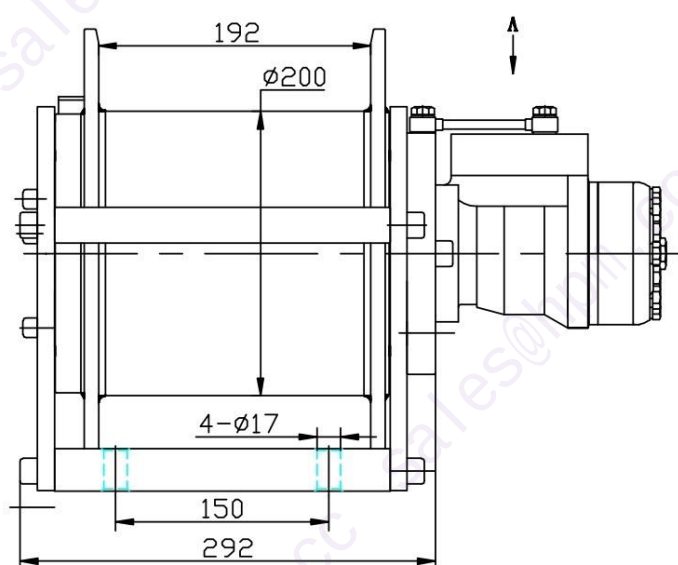
Hydraulic winches



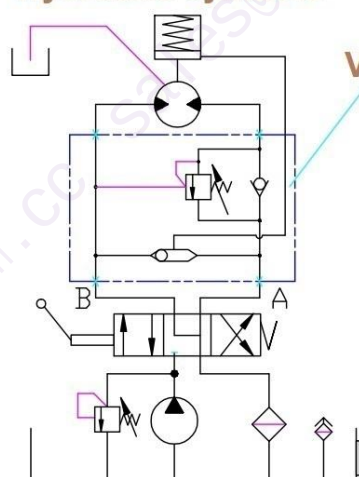
15KN /1.53 ton (contain 10KN/1ton,16KN/1.63ton)

W10(15) -200-292-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)								
W10-200-292-OMR160-E	10	41	762	10	36	10	1st	12	BMR-160	i=4.76
							2nd	26		
							3rd	41		
							4th	57		
W15-200-292-OMR200-E	15	40	953	12	56	10	1st	13	BMR-200	i=4.76
							2nd	27		
							3rd	43		
							4th	57		



Hydraulic symbols



Valve block

Shelf shape type: E

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

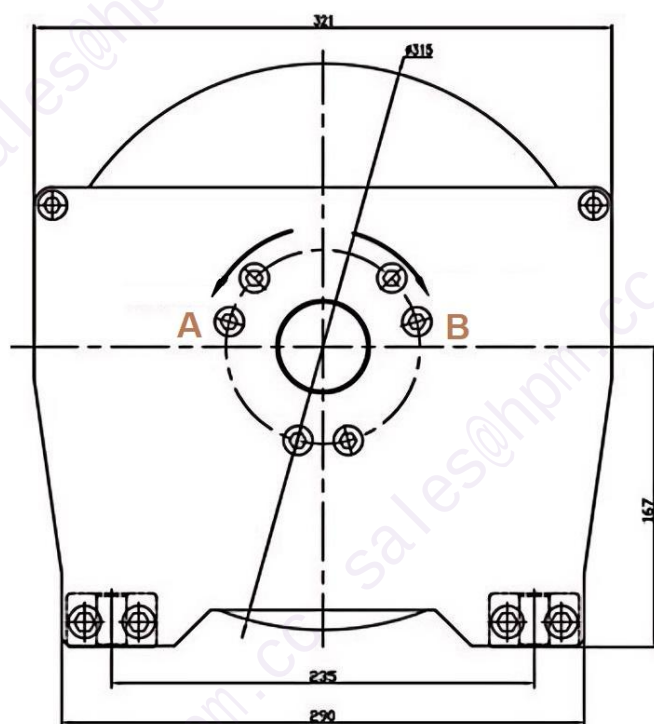
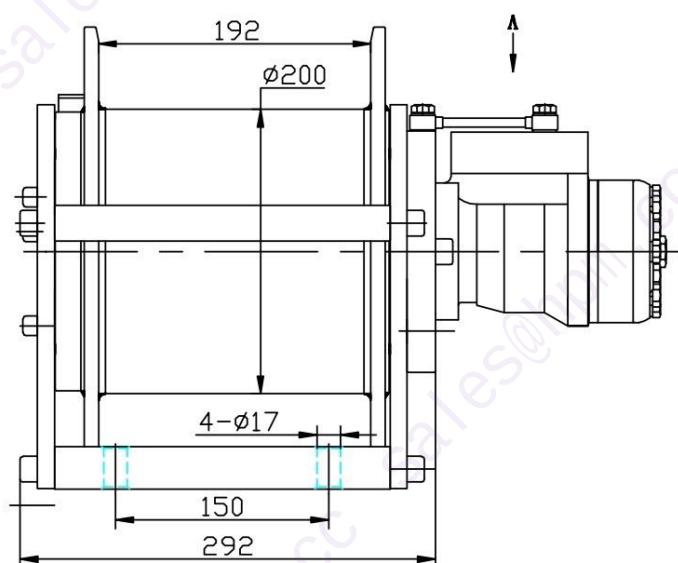
Model description	W	1		2	3	4	5
	Winch	Rope pull		Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		10:	10 KN	200	292	OMR/BMR - XXX	E
		15:	8 KN				

Hydraulic winches

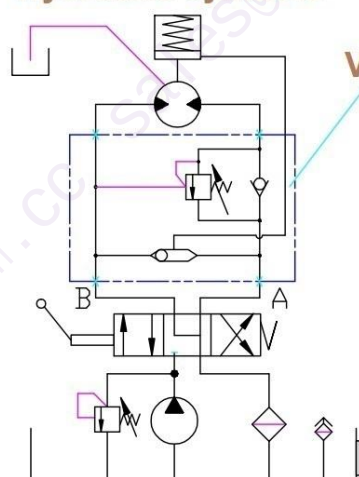
15KN /1.53 ton (contain 10KN/1ton,16KN/1.63ton)

W15-200-292-OMR200-D

Model	The 1st layer rope		Static braking torque (N.m)	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)								
W15-200-292-OMR200-D	15	33	500	12	50	10	1st	12	BMR-200	i=4.76
							2nd	26		
							3rd	41		
							4th	57		
							5th	74		



Hydraulic symbols



Valve block

Shelf shape type: D

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

Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
	15:	15 KN	200	292	OMR/BMR - XXX	D

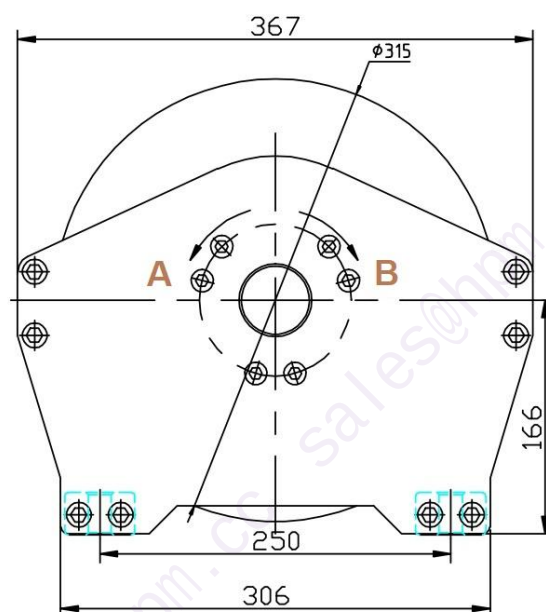
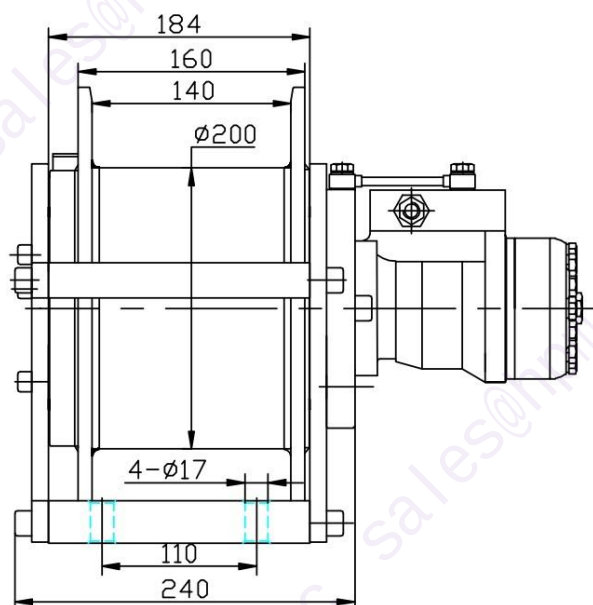
Hydraulic winches



15KN /1.53 ton (contain 10KN/1ton,16KN/1.63ton)

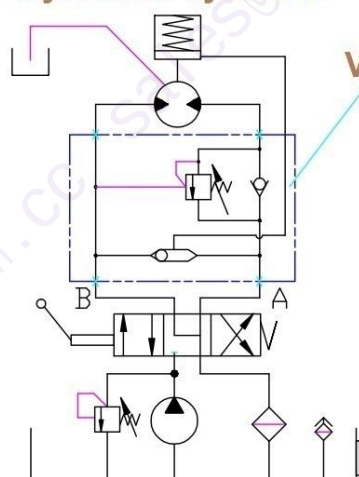
W10(15) -200-240-OMRXXX-E

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)								
W10-200-240-OMR160-E	10	41	762	10	36	10	1st	9	BMR-160	i=4.76
							2nd	19		
							3rd	30		
							4th	42		
W15-200-240-OMR200-E	15	40	952	15	56	10	1st	9	BMR-200	i=4.76
							2nd	19		
							3rd	30		
							4th	42		



Hydraulic symbols

Valve block



Shelf shape type: E

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

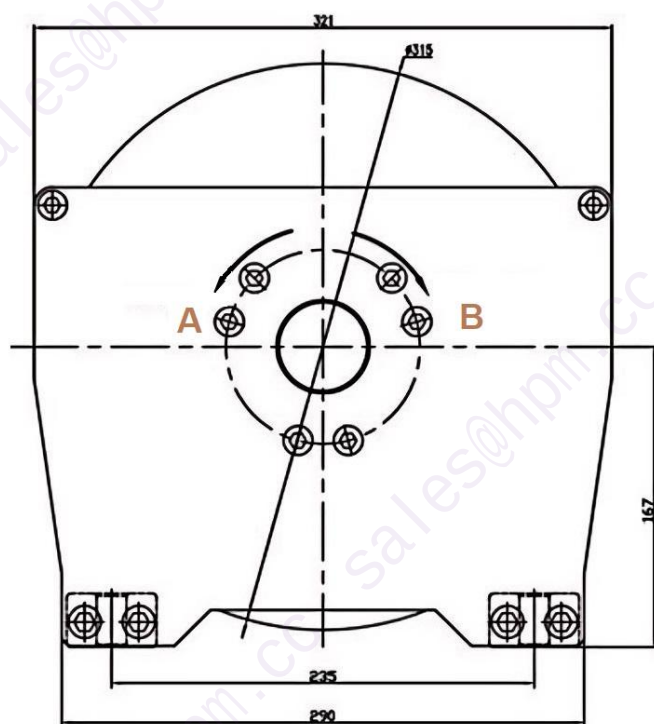
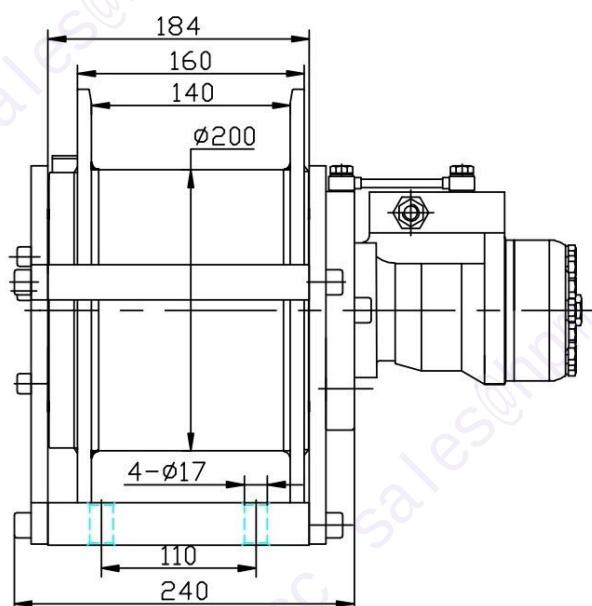
Model description	W	1		2	3	4	5
	Winch	Rope pull		Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		10:	10 KN	200	240	OMR/BMR - XXX	E
		15:	8 KN				

Hydraulic winches

15KN /1.53 ton (contain 10KN/1ton,16KN/1.63ton)

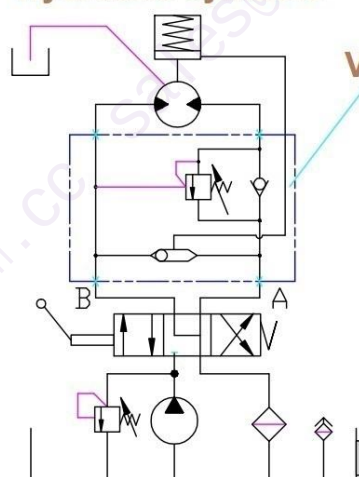
W15-200-240-OMR200-D

Model	The 1st layer rope		Static braking torque (N.m)	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)								
W15-200-240-OMR200-D	15	30	480	12	45	10	1st	9.2	BMR-200	i=4.76
							2nd	19.3		
							3rd	30.3		
							4th	42		



Hydraulic symbols

Valve block



Shelf shape type: D

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

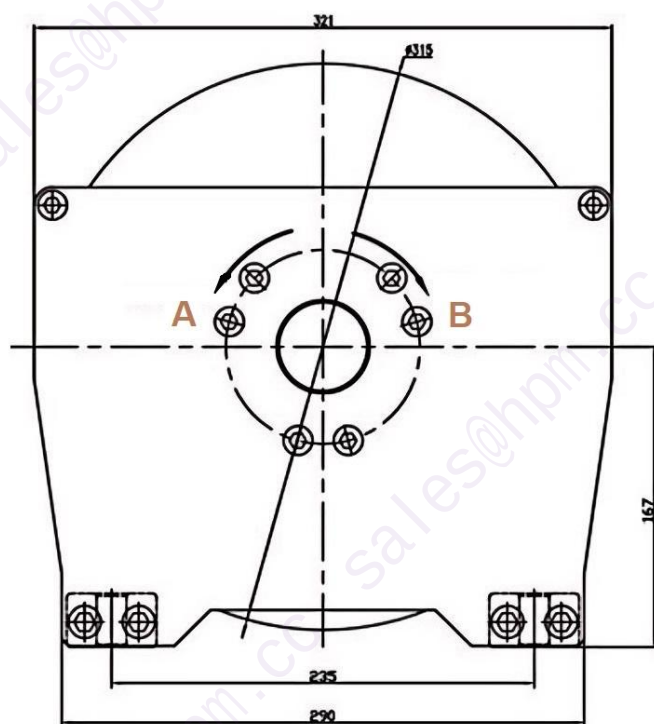
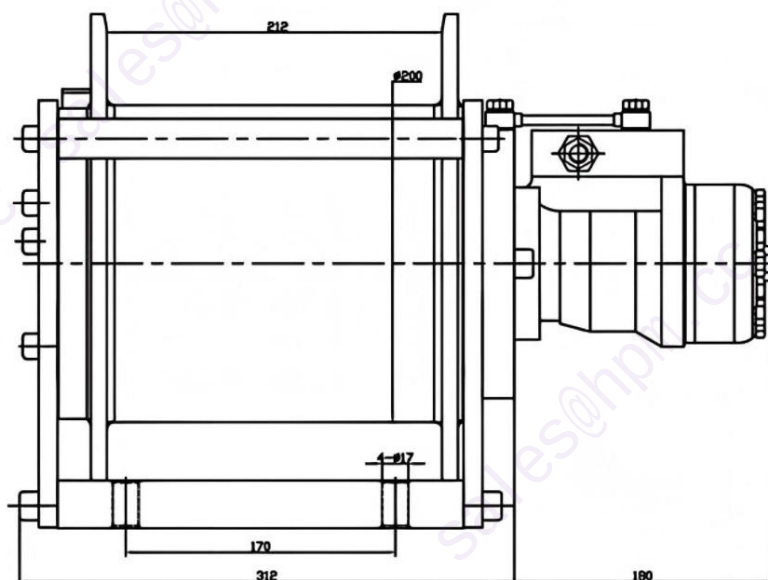
Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
	15:	15 KN	200	240	OMR/BMR - XXX	D

Hydraulic winches

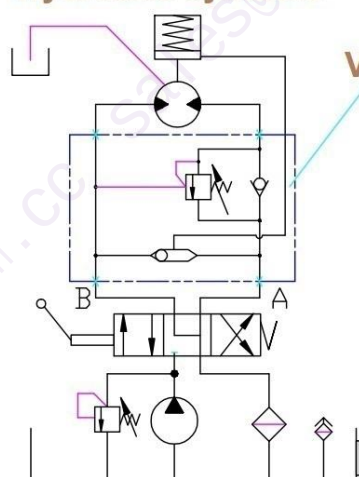
15KN /1.53 ton (contain 10KN/1ton,16KN/1.63ton)

W16-200-312-OMR250-D

Model	The 1st layer rope		Static braking torque (N.m)	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)								
W16-200-312-OMR250-D	16	33	500	14	50	10	1st	13	BMR-250	i=4.76
							2nd	28		
							3rd	44		
							4th	63		
							5th	82		



Hydraulic symbols



Valve block

Shelf shape type: D

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

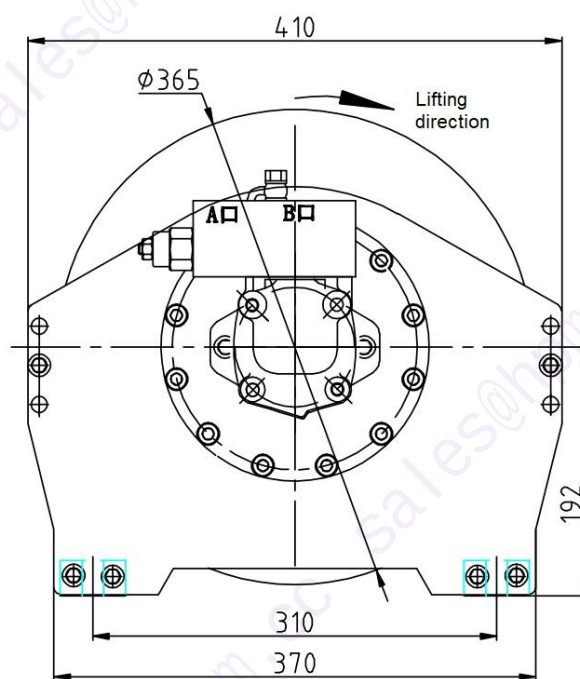
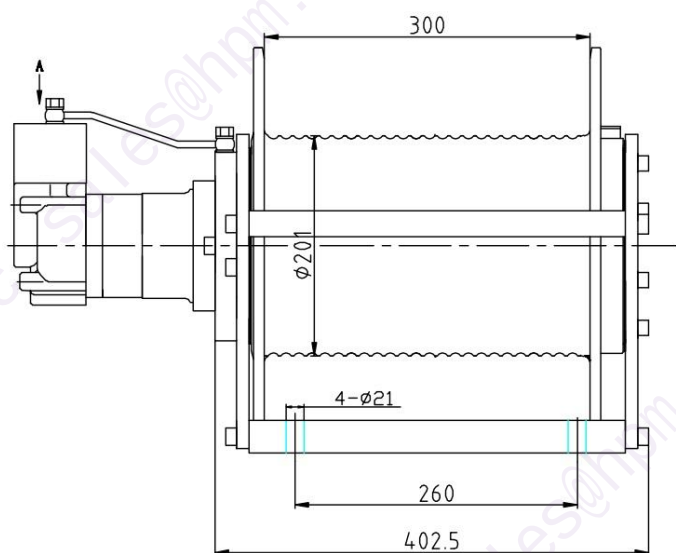
Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		16: 16 KN	200	312	OMR/BMR - XXX	D

Hydraulic winches

15KN /1.53 ton (contain 10KN/1ton,16KN/1.63ton)

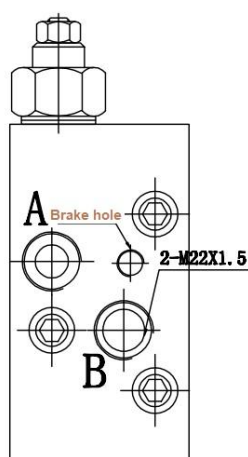
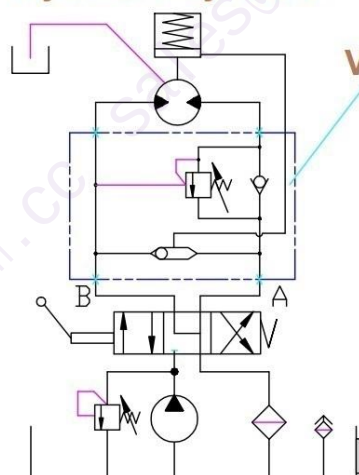
W15-201-402.5-OMS200-BE

Model (Big Shelf)	The 1st layer rope		Static braking torque	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)								
W15-201- 402.5- OMS200-BE	15	30	420	13.5	62	10	1st	20	BMS-200	i=4.76
							2nd	42		
							3rd	66		
							4th	91		



Hydraulic symbols

Valve block



Shelf shape type: E

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

Model description	W	1		2	3	4	5
	Winch	Rope pull		Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
		15:	15 KN	201	402.5	OMS/BMS - XXX	BE (Big Shelf)

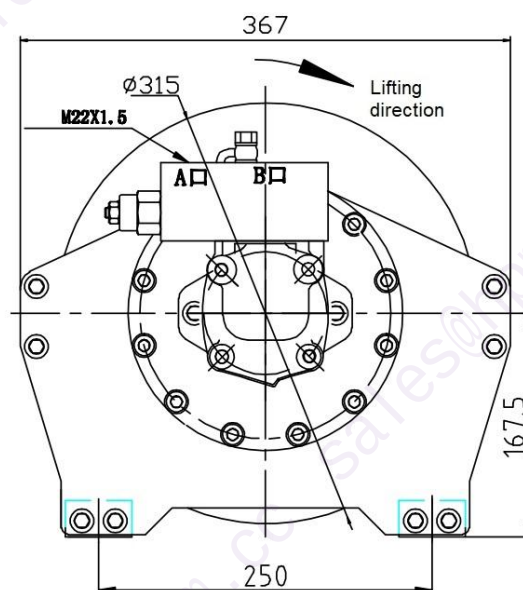
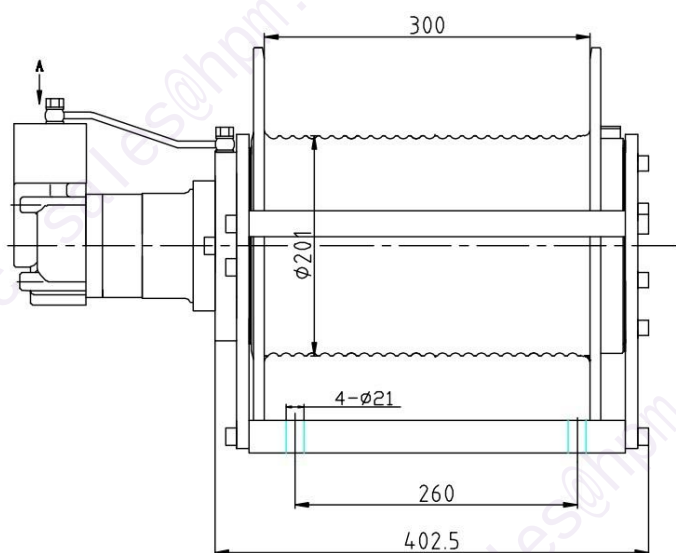
Hydraulic winches



15KN /1.53 ton (contain 10KN/1ton,16KN/1.63ton)

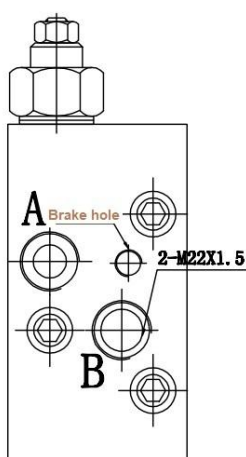
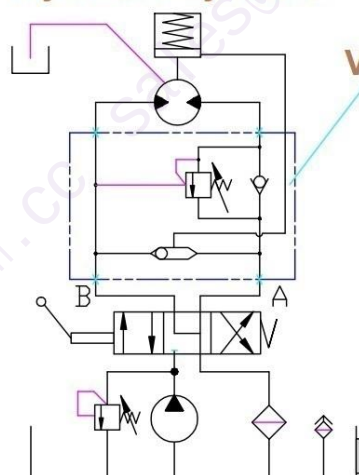
W15-201-402.5-OMS200-SE

Model (Small Shelf)	The 1st layer rope		Static braking torque	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)								
W15-201- 402.5- OMS200-SE	15	30	420	13.5	62	10	1st	20	BMS-200	i=4.76
							2nd	42		
							3rd	68		
							4th	91		



Hydraulic symbols

Valve block



Shelf shape type: E

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

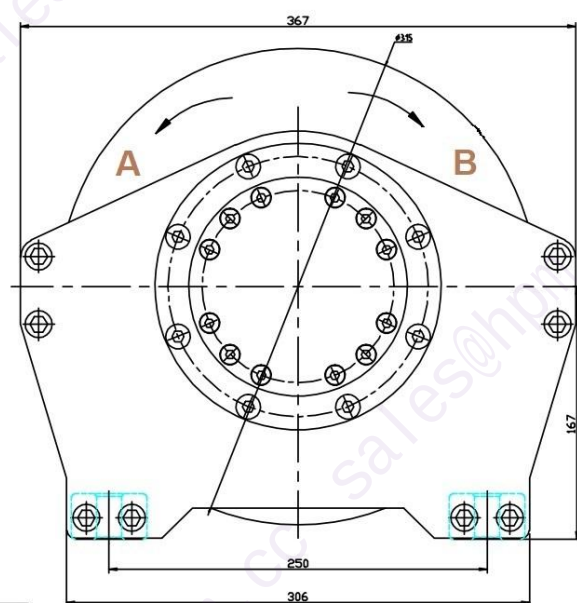
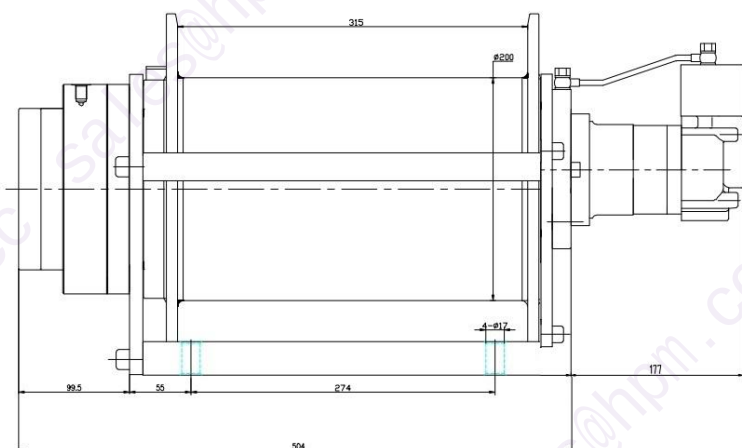
Model description	W	1	2	3	4	5
	Winch	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type
	15:	15 KN	201	402.5	OMS/BMS - XXX	SE (Small Shelf)

Hydraulic winches

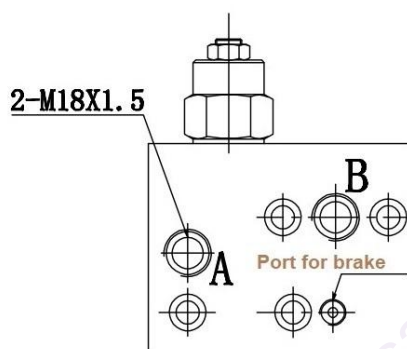
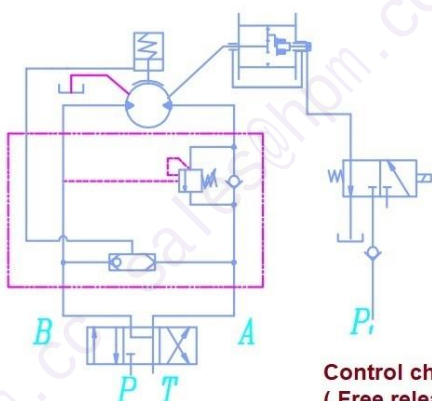
15KN /1.53 ton (Reverse rotation)

WRR15-200-505- OMS200-E

Model (Reverse rotation)	The 1st layer rope		Static braking torque (N.m)	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)								
WRR15-200-505-OMS200-E	15	31	580	16.0	62	10	1st	20.0	BMS-200	i=4.76
							2nd	43.0		
							3rd	67.0		
							4th	93		



Hydraulic symbols



Shelf shape type: E

Oil port A in: put down
Oil port B in: lifting up;
(Reverse rotation)

Control channel:
(Free release of rope)

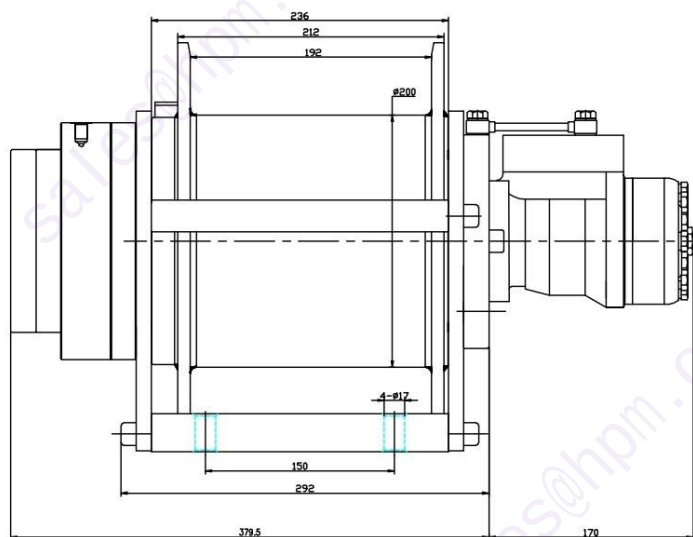
Model description	WRR	1	2	3	4	5	6
	Winch (Reverse rotation)	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type	With clutch
		15: 15 KN	200	505	OMS/BMS - XXX	E	C

Hydraulic winches

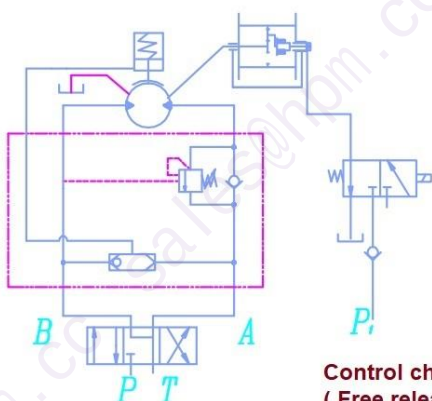
15KN /1.53 ton (Reverse rotation)

WRR15-200-379.5-OMR200-E

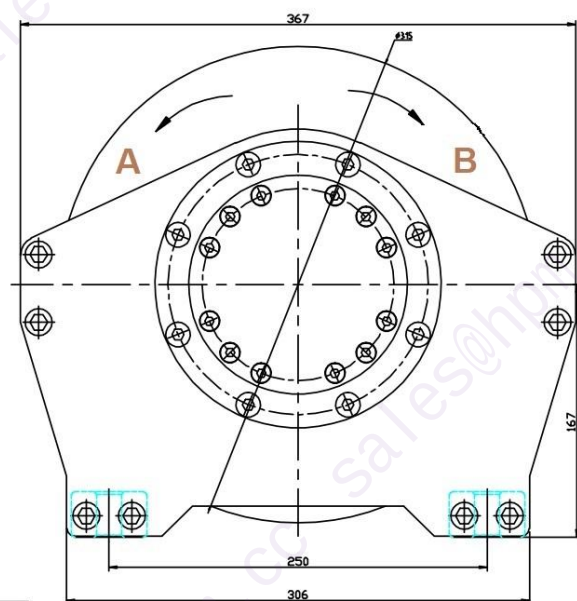
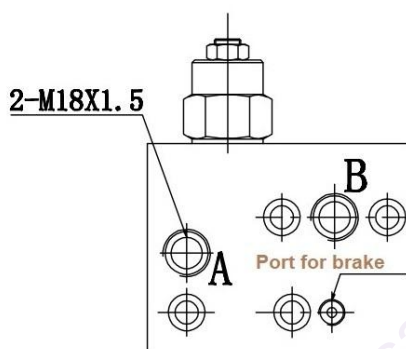
Model (Reverse rotation)	The 1st layer rope		Static braking torque (N.m)	Working pressure (MPa)	Oil (L/min)	Rope diameter (mm)	Layer	rope capacity (m)	Hydraulic motor
	Rope Pull (KN)	Rope speed (m/min)							
WRR15-200-379.5-OMR200-E	15	31	420	16.0	62	10	1st	12.7	BMR-200
							2nd	26.6	
							3rd	41.7	
							4th	58	



Hydraulic symbols



Control channel:
(Free release of rope)



Shelf shape type: E

Oil port A in: put down
Oil port B in: lifting up;
(Reverse rotation)

Model description	WRR	1	2	3	4	5	6
	Winch (Reverse rotation)	Rope pull	Drum diameter	Winch length (without motor)	Hydraulic motor type	Shelf shape type	With clutch
	15:	15 KN	200	379.5	OMR/BMR - XXX	E	C