

# **WARN Industrial Winch**

Model	Part Number	Motor Type
Series 20XL Hydraulic Winch Manual Clutch	77550	Hydraulic 7.9 ci (130cc)



The Warn Series XL product line combines durable cast iron construction, high efficiency hydraulic motor, and a robust 2X rated load braking system with a permanently lubricated and hardened 2-stage planetary gear train for superior intermittent-duty performance for loads up to 30,000 lbs. Winches are also available with manual or air clutches and 2 drum widths. A roller tension plate is standard along with bi-directional operation and a variety of mounting options to fit a variety of applications.

Warn Series XL winches are not suitable for hoisting applications or movement of persons.

### **Accessories**

 Description:
 Part Number

 Fairlead SRS-XL-STD
 77532

 Wire Rope Assembly 9/16"x140" EIPS
 77451

 Snatch Block XL-60K LB
 80858

Engineering Data						
Rated Pulling Force:	20000	lbf	9072	kgf		
Drum Barrel Diameter:	5.75	in	146	mm		
Drum Flange Diameter:	12.25	in	311	mm		
Distance Between Flanges:	8	in	203	mm		
Recommended Maximum Wire Rope Diameter:	9/16	in	14.3	mm		
Recommended Minimum Wire Rope Breaking Strength:	33600	lbf	15241	kgf		
Approximate Shipping Weight:	297 lb 135 kg		kg			
Duty Cycle (intermittent per SAE J706 section 6.2):	2760	ft	841.2	m		
Mounting Bolt Torque:	159	ft*lbf	216	N*m		
Maximum Layers of Wire Rope:	5					
Gear Reduction:	28.5:1					
Brake Type:	Spring Applied Disk					
Contactor / Remote Type:	N/A					

# Drum Rotation Standards Compliance

1. -SAE J706 2.-CE Machinery Directive 98/37/EC and 2006/42/EC



Viewed from Motor End

Performance By Layer- 9/	/16" (14.3 mm)	dia. rope
Line Load *	Line Speed 15 GPM	Line Speed 20

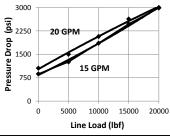
Drum Layer	Line Load *		Line Speed 15 GPM		Line Speed 20 GPM		Drum Capacity		
Druin Layer	lbf	kgf	kN	ft/min	m/min	ft/min	m/min	ft	m
1	20000	9072	89.0	22.8	6.9	28.5	8.7	21	6.4
2	16975	7700	75.5	26.9	8.2	33.5	10.2	46	14.0
3	14745	6688	65.6	31.0	9.4	38.6	11.8	74	22.6
4	13032	5911	58.0	35.0	10.7	43.7	13.3	106	32.3
5	11676	5296	51.9	39.1	11.9	48.8	14.9	142	43.3

Never exceed the Rated Pulling Force. Installation of a Rated Capacity Limiter is recommended.

# First Layer Performance

Line	Load	Pressure Drop at 15 GPM		Pressure Drop	at 20 GPM	Duty Cycle
lbf	kgf	psi	BAR	psi	BAR	min/10min
0	0	870	60.0	1055	72.7	N/A
5000	2268	1256	86.6	1500	103.4	N/A
10000	4536	1855	127.9	2070	142.7	N/A
15000	6804	2470	170.3	2630	181.3	N/A
20000	9072	2985	205.8	3000	206.8	N/A

20 GPM 20 GPM 20 GPM 15 GPM 15 GPM 12 3 4 5



WARN INDUSTRIES, INC Industrial Products

Customer Service (North America): 1.800.543.9276 Customer Service (International): 1.503.722.3008 FAX: 1.503.722.3000 www.warn.com

12900 S.E. Capps Road, Clackamas, OR USA 97015



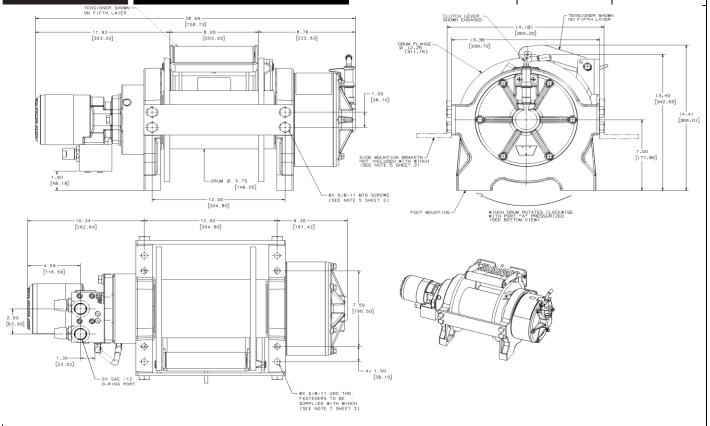
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Model	Part Number	Motor Type
Series 20XL	77550	Hydraulic

**Hydraulic Winch Manual Clutch** 

77550

7.9 ci (130cc)



Motor / Contactor may be rotated in 90 degree increments. Clutch housing may be rotated in 60 degree increments.

Units are given in inches [millimeters], unless otherwise specified

#### **Recommended Mounting- Always Observe Correct Drum Rotation Hydraulic System Specifications** Pull from bottom of winch Pull from bottom of winch Pull from top of winch 207 BAR Maximum System Pressure: 3000 Maximum Motor Pressure Drop: 3000 207 BAR Maximum Rated Input Flow: 20 GPM 76 LPM 3-position, 4-way, open Control Valve Type: center, spring return (motor spool) **Control Valve Schematic** W Feet forward Feet down Feet forward Pull from top of winch Pull from top of winch Pull from top of winch U в∤̂т ∮† A Note: Drum rotates clockwise with Port A pressurized when viewed Feet down without angle brace Feet down with angle brace Angle Braces Only

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