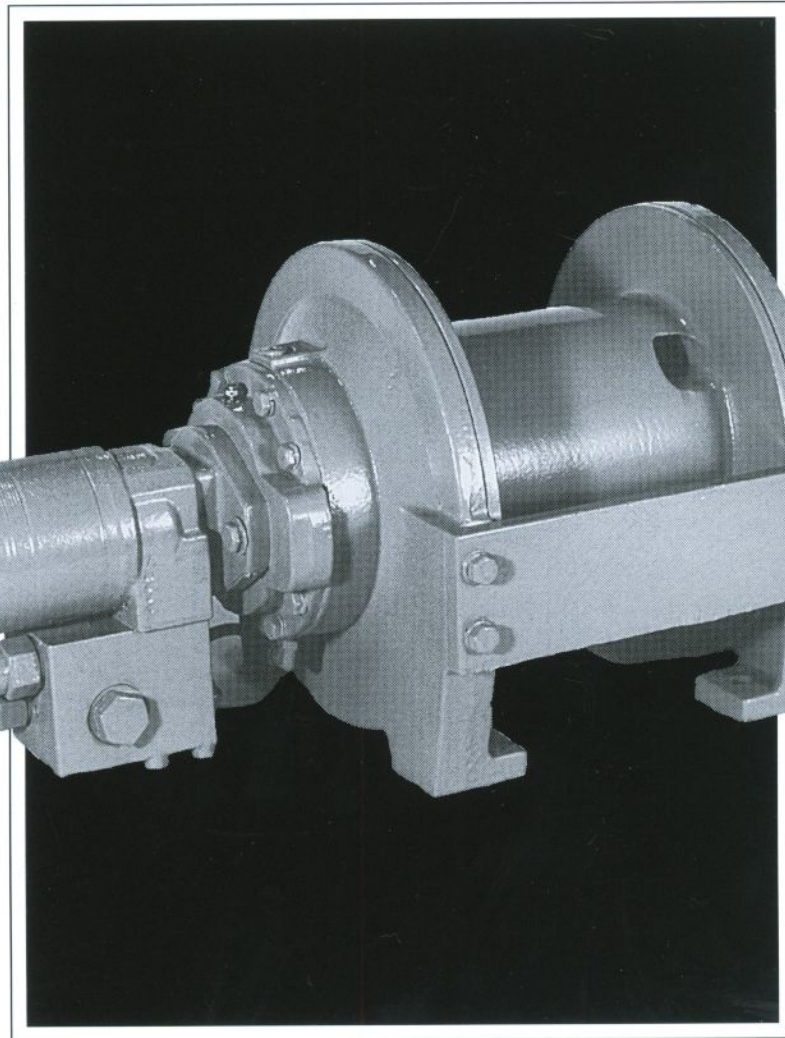


**BRADEN<sup>®</sup>**  
**Gearmatic<sup>®</sup>**

**MODEL BG4**



**HYDRAULIC  
PLANETARY WINCH**

***FIRST LAYER LINE PULLS UP TO 4,000 LBS.***

**PACCAR WINCH DIVISIONS**

## BG4 FEATURES

The **BG4** Series Planetary winch is a high performance product designed to provide many years of service. The **BG4** is powered by a high efficiency motor designed specifically for winch applications to provide smooth operation. Motor torque is transmitted and multiplied by the highly efficient computer-aided designed gear train to the winch drum. All rotating components are supported by anti-friction bearings and run in oil to minimize friction losses. Load control when lowering is maintained by the brake valve to provide smooth reliable performance. The brake valve not only provides smooth load control, but adapts well to most any hydraulic system. The brake valve is also backed up by a spring applied, hydraulically released safety brake. The safety brake is an internal multi disc unit whose operation is completely automatic. The load is held firm, even if the engine stalls or a hydraulic line breaks.

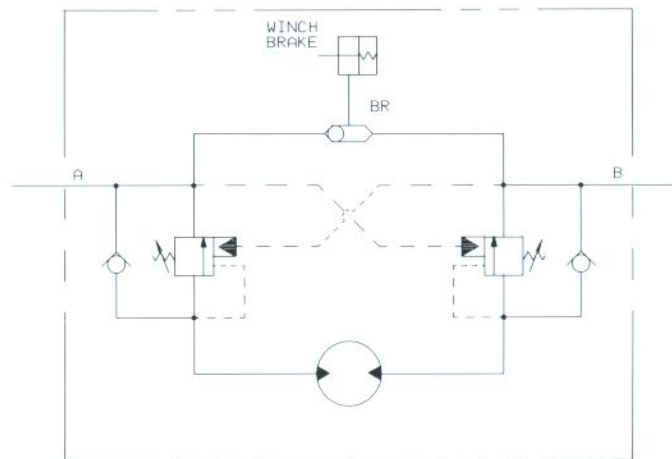
Continuing product development programs at both **Braden** and **Gearmatic** have led the industry with innovative, quality products serving a wide range of markets. The **BG4** series winch is supported with a comprehensive factory warranty, administered through your local distributor.

## EXPLANATION OF MODEL NUMBER

BG	4	A	05	119 - 01
BRADEN GEARMATIC	MAX. RATING	DESIGN MODEL	GEAR RATIO	MOTOR SIZE
				DRUM SIZE

BG	DESIGNATES <b>BRADEN GEARMATIC</b>
4	DESIGNATES 4,000 lb (1,810 kg) FIRST LAYER LINE PULL
A	DESIGNATES THE MODEL SERIES RELATING TO DESIGN CHANGES
05	DESIGNATES TOTAL GEAR REDUCTION
119	DESIGNATES HYDRAULIC MOTOR DISPLACEMENT IN cu in./rev (119 = 11.9 cu in./rev [195 cu cm])
01	DESIGNATES THE DRUM

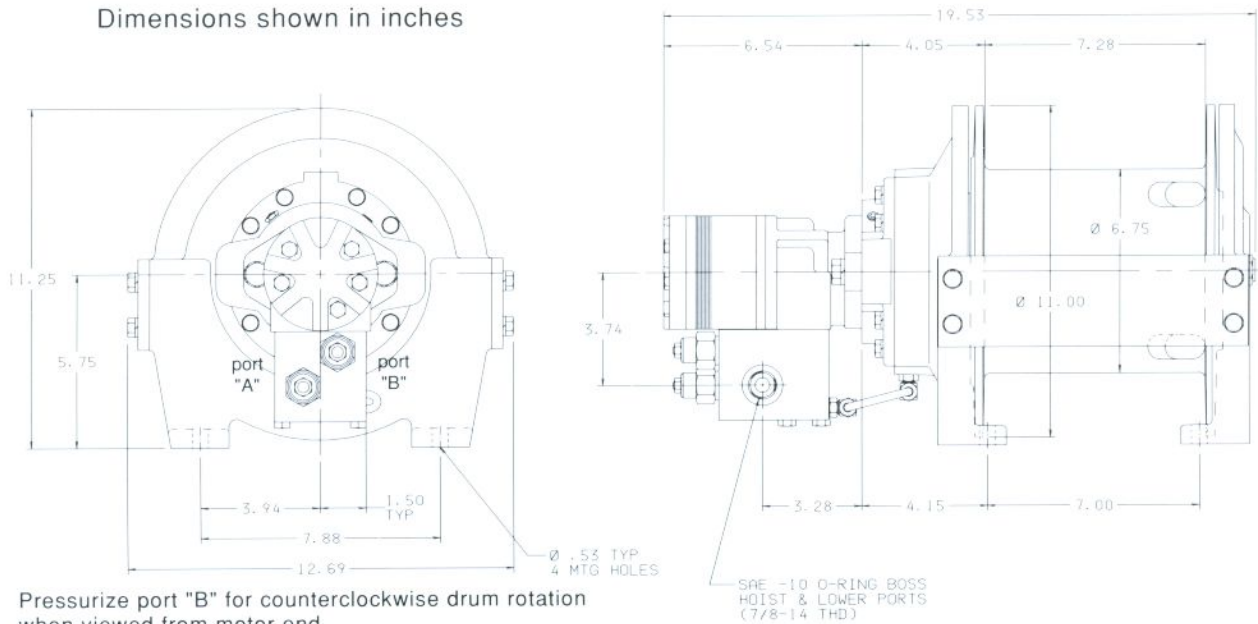
## HYDRAULIC CIRCUIT



**Winch Control Circuit - Single Speed  
Brake Effective Both Directions (Double Counterbalance with Shuttle)**

# DIMENSIONAL DATA

Dimensions shown in inches

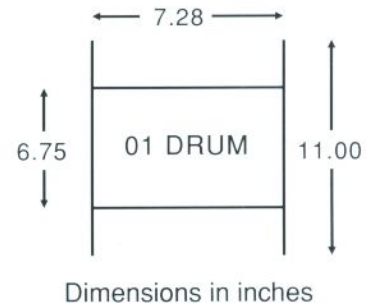


Pressurize port "B" for counterclockwise drum rotation when viewed from motor end.

## ACCUMULATIVE ROPE CAPACITY IN FEET

ROPE SIZE (in.)	LAYER										
	1	2	3	4	5	6	7	8	9	10	11
3/16*	70	144	222	303	388	477	570	667	768	872	980
1/4*	53	110	170	234	302	374	450	530			
5/16	43	89	139	193	251	313					
3/8	36	76	119	166	217						
7/16	31	66	104	146							
1/2	27	58	93	132							
9/16**	24	52	84								
5/8**	22	48	78								
3/4**	19	41									

\* REQUIRES SPECIAL WIRE ROPE ANCHOR  
 \*\* RECOMMENDED FOR POLY ROPE ONLY



## PERFORMANCE CHART

ROPE SIZE (in.)	LAYER	119 MOTOR 11.9 cu in. DISP 2,250 psi* @ 20 gpm	
		LINE PULL (lb)	LINE SPEED (fpm)
3/8	1	4,000	133
	2	3,620	147
	3	3,300	161
	4	3,040	175
	5**	2,810	189

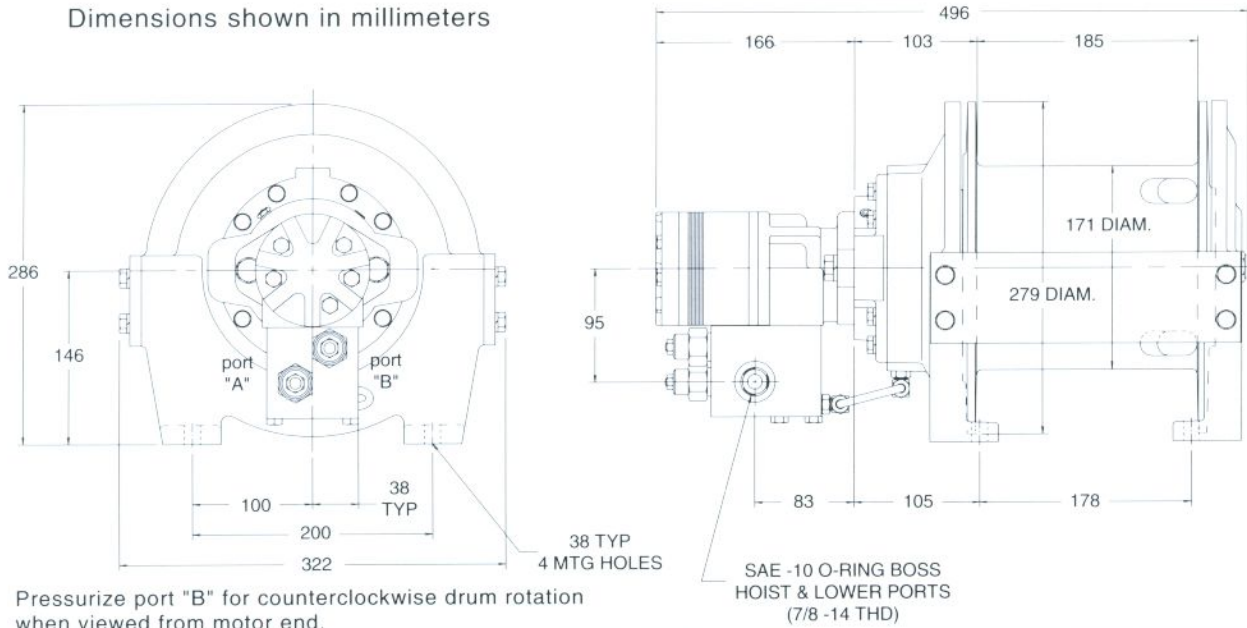
\* Pressure shown is  $\Delta P$  across motor.

\*\* This layer does not comply with ANSI Spec. B30.5C Par. 5-1.3.2c for 1/2 in. exposed flange.



# DIMENSIONAL DATA

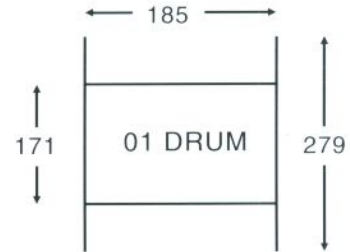
Dimensions shown in millimeters



## ACCUMULATIVE ROPE CAPACITY IN METERS

ROPE SIZE (mm)	LAYER										
	1	2	3	4	5	6	7	8	9	10	11
5*	21	44	68	92	118	145	174	203	234	266	299
6*	16	34	52	71	92	114	137	162			
8	13	27	42	59	77	95					
10	11	23	36	51	66						
11	9.4	20	32	45							
13	8.2	18	28	40							
14**	7.3	16	26								
16**	6.7	15	24								
19**	5.8	12									

\* REQUIRES SPECIAL WIRE ROPE ANCHOR  
 \*\* RECOMMENDED FOR POLY ROPE ONLY



Dimensions in millimeters

## PERFORMANCE CHART

ROPE SIZE (mm)	LAYER	119 MOTOR 195 cu cm DISP 155 bar* @ 76 l/min	
		LINE PULL (kg)	LINE SPEED (mpm)
10	1	1,810	41
	2	1,640	45
	3	1,500	49
	4	1,380	53
	5	1,280	58

\*Pressure shown is  $\Delta P$  across motor.