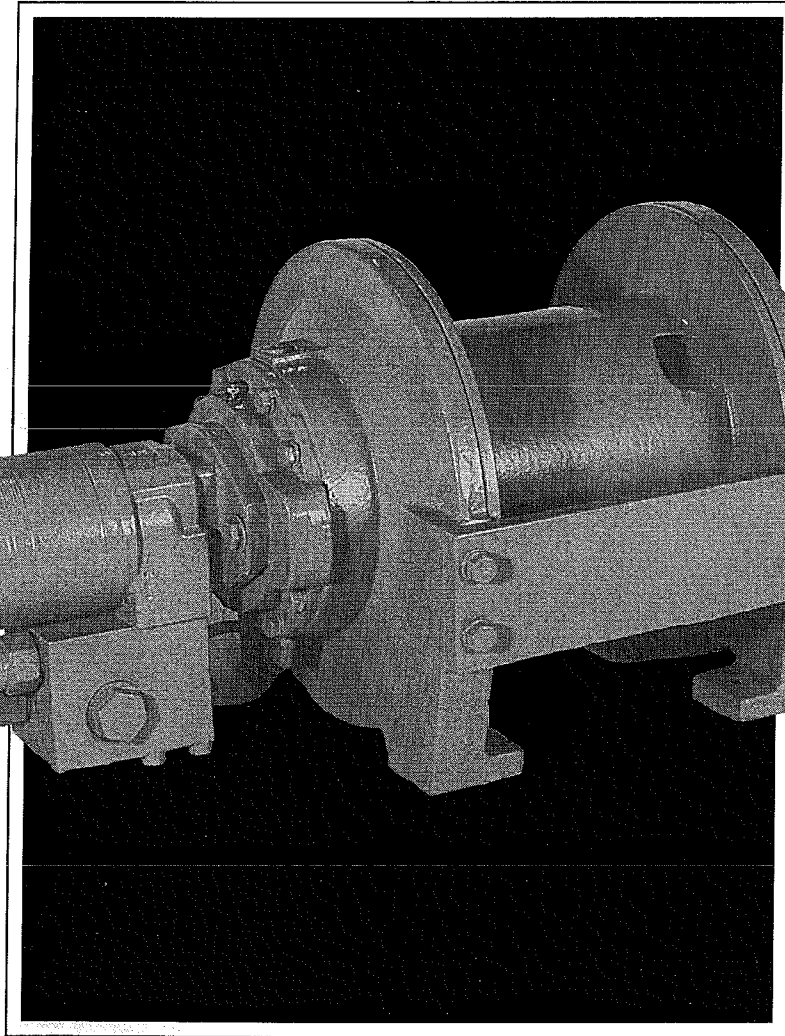

BRADEN[®] Gearmatic[®]

MODEL BG4



HYDRAULIC PLANETARY WINCH

FIRST LAYER LINE PULLS UP TO 4,000 LBS.

PACCAR WINCH DIVISIONS

P.O. BOX 547 • BROKEN ARROW, OK U.S.A. 74013
PHONE (918) 251-8511 • FAX (918) 258-4822

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.

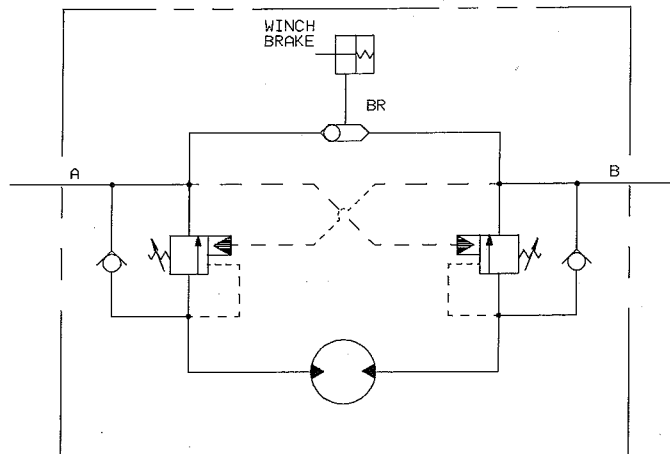
Continuing product development programs at both **Braden** and **Gearmatic** have led the industry with innovative, quality products serving a wide range of markets. The **BG4** series winch is supported with a comprehensive factory warranty, administered through your local distributor.

EXPLANATION OF MODEL NUMBER

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

| | |
|-----|--|
| BG | DESIGNATES BRADEN GEARMATIC |
| 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 |

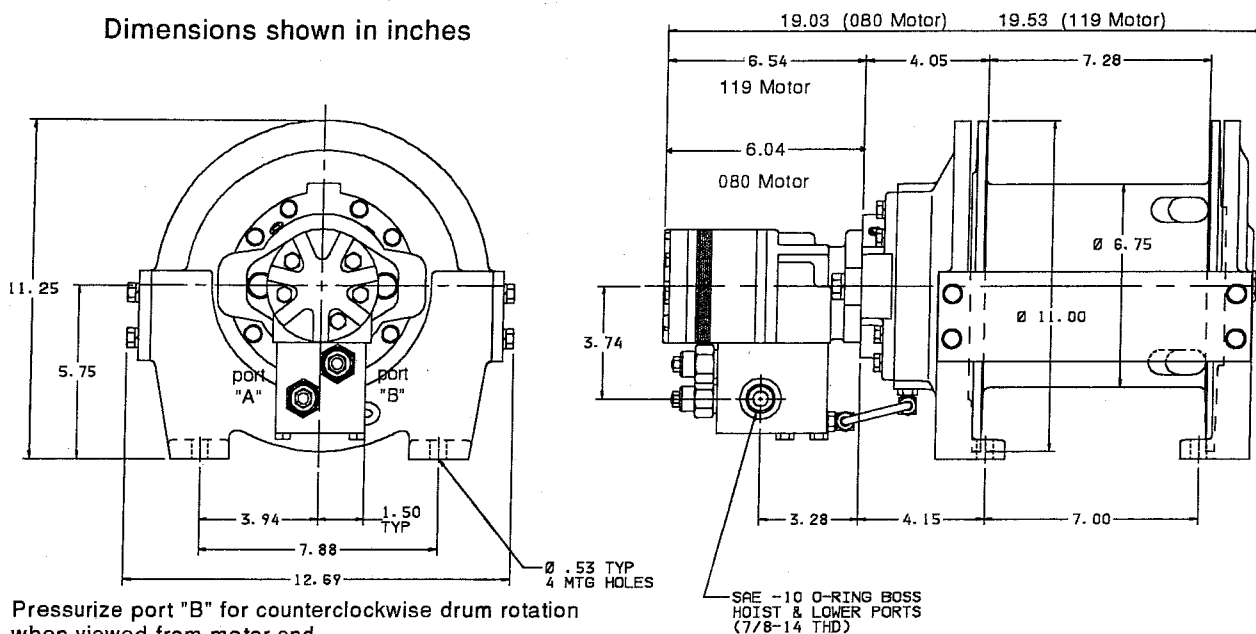
HYDRAULIC CIRCUIT



**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.

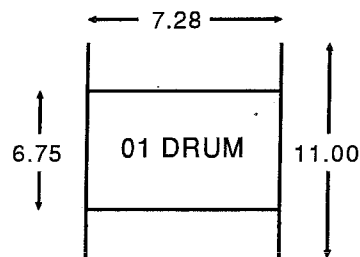
SAE -10 O-RING BOSS
HOIST & LOWER PORTS
(7/8-14 THD)

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



Dimensions in inches

PERFORMANCE CHART

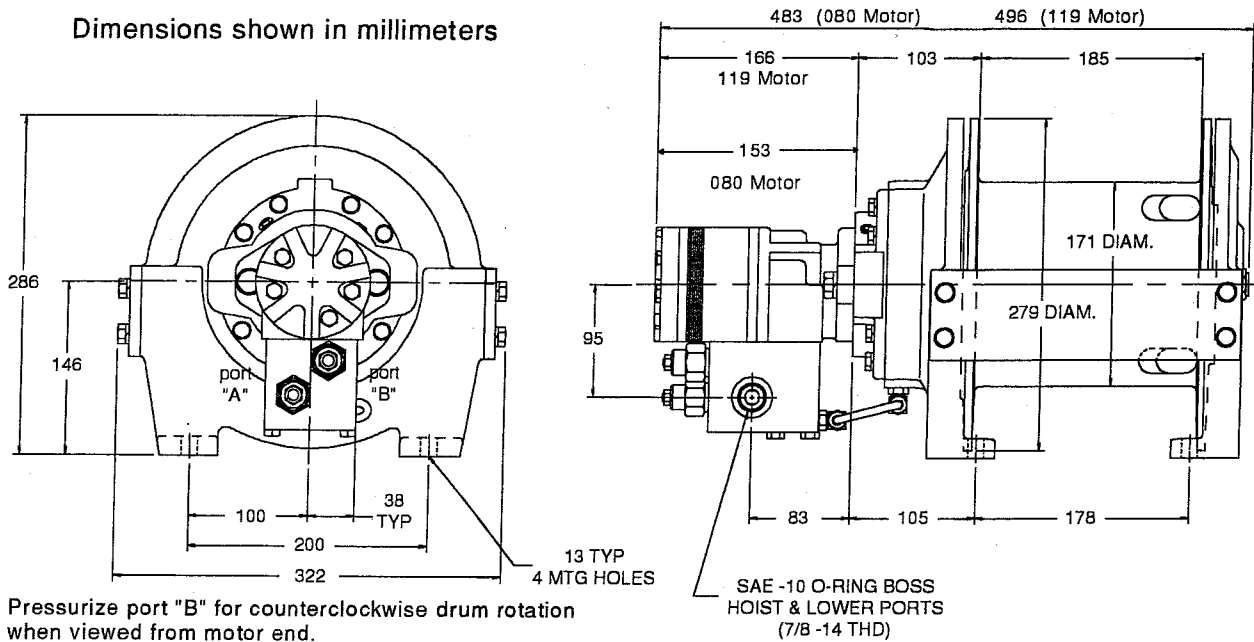
| ROPE SIZE (in.) | LAYER | 080 MOTOR 8.0 cu in. DISP 2,125 psi* @ 15 gpm | | 119 MOTOR 11.9 cu in. DISP 2,250 psi* @ 20 gpm | |
|-----------------|-------|---|------------------|--|------------------|
| | | LINE PULL (lb) | LINE SPEED (fpm) | LINE PULL (lb) | LINE SPEED (fpm) |
| 3/8 | 1 | 2,160 | 148 | 4,000 | 133 |
| | 2 | 1,960 | 163 | 3,620 | 147 |
| | 3 | 1,790 | 179 | 3,300 | 161 |
| | 4 | 1,650 | 194 | 3,040 | 175 |
| | 5** | 1,520 | 210 | 2,810 | 189 |

* Pressure shown is ΔP 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

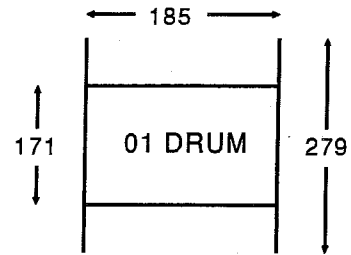
Dimensions shown in millimeters



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 | 080 MOTOR 131 cu cm DISP 146 bar* @ 57 l/min | | 119 MOTOR 195 cu cm DISP 155 bar* @ 76 l/min | |
|----------------|-------|--|------------------|--|------------------|
| | | LINE PULL (kg) | LINE SPEED (mpm) | LINE PULL (kg) | LINE SPEED (mpm) |
| | | 10 | 1 | 982 | 45 |
| 2 | 891 | | 50 | 1,640 | 45 |
| 3 | 814 | | 55 | 1,500 | 49 |
| 4 | 750 | | 59 | 1,380 | 53 |
| 5 | 691 | | 64 | 1,280 | 58 |

*Pressure shown is ΔP across motor.