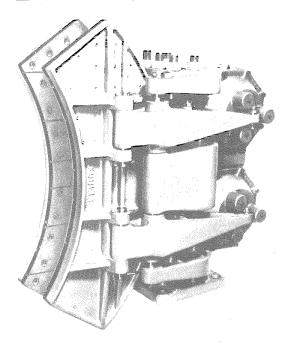
## AIR APPLIED DISC BRAKES CALIPER No. 5040 INDUSTRIAL BRAKE



### **CALIPER**

Total normal force Total shoe area Allowable shoe wear Maximum air pressure Maximum power input Assembly weight 52,560 lb (23,890 Kg) 320 in² (2064 cm²) 0.56 in (14 mm) 100 psi (7.03 Kg/cm²) 768 hp (572.3 Kw) 570 lb (259 Kg)

#### DESCRIPTION

The air applied model 5040 is a pneumatically operated caliper requiring only an air supply and a pressure regulator. The pressure regulator can be adjusted to provide the customer with the desired torque or stopping characteristics. Two air-on actuators consisting of a double diaphragm system provide an equal force to each brake shoe when an air pressure is applied. The action of compression springs return the caliper to the "brake-off" position when the air pressure is shut off.

Caliper 5040 is also available in a mechanically applied model. A 5400 lb. pulling force is required to drive a wedge between the two brake arm levers thereby applying the brake.

Both types employ the balancing link which ensures equal wear on both linings.

DISC - 4" (102 mm)

|                 | (v(m)   |         |         |          |          |          |          |
|-----------------|---------|---------|---------|----------|----------|----------|----------|
| Disc Dia. In.   | 42.5    | 48.5    | 54.5    | 60.5     | 72.0     | 84.0     | 96.0     |
| mm              | (1079)  | (1232)  | (1384)  | (1537)   | (1829)   | (2134)   | (2438)   |
| Acting Rad. Ft. | 1.33    | 1.58    | 1.83    | 2.08     | 2.54     | 3.04     | 3.54     |
| mm ·            | (405)   | (482)   | (558)   | (634)    | (774)    | (927)    | (1079)   |
| Max. RPM        | 1300    | 1100    | 1000    | 900      | 700      | 600      | 500      |
| *HP - Sec.      | 54,000  | 69,000  | 78,000  | 86,000   | 128,000  | 163,000  | 200,000  |
| (Kw — Hr.)      | (671.3) | (857.7) | (969.6) | (1069.0) | (1591.1) | (2026.2) | (2486.1) |

# KOBELT BRAKES ARE PROTECTED UNDER ONE OR MORE OF THE FOLLOWING PATENTS:

### NOTE:

Specifications in metric units shown in parentheses.

\*Figures are based on a continuous application of braking force.

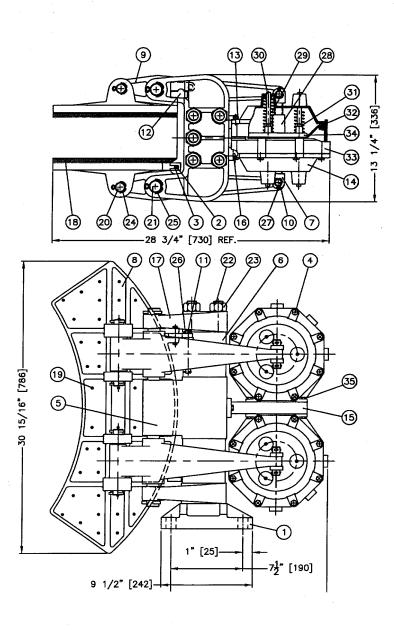
Allowable values will be higher for one-stop applications where disc is allowed to cool between uses.

For more detailed technical information refer to Kobelt's General Engineering section on disc brakes.

| U.S. PATENT Nos. | CAN. PATENT Nos. |
|------------------|------------------|
| 3722636          | 895693           |
| 3815471          | 922603           |
| 4013148          | 1069066          |
| 4060153          | 1072025          |
| 4164993          |                  |
| 4121697          |                  |
| 4108285          |                  |
| 4236608          |                  |
|                  |                  |
|                  |                  |

FURTHER PATENTS PENDING.

## DIMENSION AND PARTS 5040



| ltem | Qty | Part No.   | Description               |
|------|-----|------------|---------------------------|
| 1    | 1   | 5040-0001  | Mounting foot             |
| 2    | 2   | 5040-0037  | Balance link pin no. 1    |
| 3    | 4   | 1026-0510  | Cotter pin                |
| 4    | 16  | 1001-1296  | Hex head capscrew         |
| 5    | 1   | 5040-0005  | Saddle centre             |
| 6    | 2   | 5040-0006  | Saddle spacer             |
| 7    | 4   | 5040-0007  | Clevis                    |
| 8 .  | 2   | 5040-0008  | Brake shoe                |
| 9    | 4   | 5040-0009  | Lever                     |
| 10   | 4   | 1035-1240  | Pot pin                   |
| 1,1  | 2   | 1035-0880  | Balancing link pin no. 2  |
| 12   | 2   | 5040-0012  | Balancing link            |
| 13   | 16  | 1022-0112  | Nut                       |
| 14   | 4   | 5040-0014  | End cap                   |
| 15   | 1   | 5040-0015  | Actuator mounting bracket |
| 16   | 2   | 1001-1116  | Hex head capscrew         |
| 17   | 2   | 5040-0017  | Saddle end                |
| 18   | 2   | 5040-0018  | Lining                    |
| 19   | 104 | 1033-1012  | Rivet                     |
| 20   | 4   | 1035-16104 | Shoe pin                  |
| 21   | 2   | 1035-20336 | Lever pivot pin           |
| 22   | 5   | 5040-0022  | Tie rod                   |
| 23   | 5   | 1022-0123  | Nut                       |
| 24   | 8   | 1026-1032  | Cotter pin                |
| 25   | 4   | 1026-1140  | Cotter pin                |
| 26   | 4   | 1026-0516  | Cotter pin                |
| 27   | 8   | 1026-0824  | Cotter pin                |
| 28   | 4   | 5040-0028  | Push rod                  |
| 29   | 12  | 1201-0059  | Spring                    |
| 30   | 12  | 5040-0030  | Spring guide rod          |
| 31   | 12  | 1022-0311  | Locknut                   |
| 32   | 4   | 1105-0036  | Diaphragm                 |
| 33   | 2   | 5040-0033  | Centre Housing            |
| 34   | 4   | 5040-0027  | Piston                    |
| 35   | 8   | 1001-1116  | Hex head capscrew         |

ALL DIMENSIONS IN INCHES (MM)

Note: All data on this brake selection sheet are for reference and estimating purposes only. To ensure against the danger of brake misapplication, the Customer is urged to fill out the Customer Application Data sheet and include it with each enquiry

