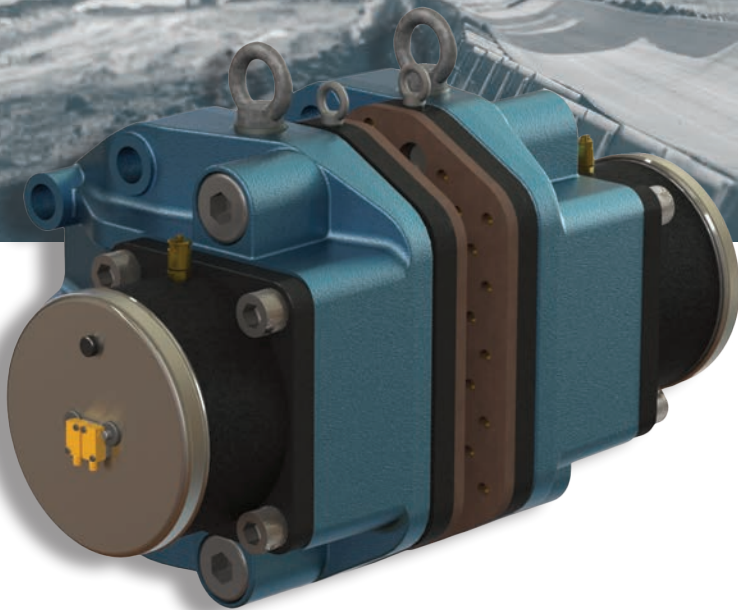


5300 SERIES | SPRING APPLIED/HYDRAULIC RELEASED CALIPER DISC BRAKE



KEY BENEFITS

- Ideal for emergency braking duty on draw works, hoists, conveyors and more
- Low 'k' spring stack with less than 6% torque loss per mm of stroke
- Modular actuator design utilizes a separable hollow rod cylinder for ease of maintenance
- Optional sintered brake pads available for high energy applications
- Optional release, wear and temperature sensors available

SPECIFICATIONS

PART NO.	NORMAL FORCE ¹	MIN DISC DIA.	SHOE WIDTH	RUNNING CLEARANCE ²	PRESSURES		RELEASE VOLUME
					RELEASE	HOLD-OFF	
5303-SH	2,450 lbs [10.9 kN]	9.84 in [250 mm]	2.95 in [75 mm]	.02-.04 in [0.5-1.0 mm]	1360 psi [94 bar]	1170 psi [81 bar]	0.2 in ³ [3.5 cc]
5305-SH	17,530 lbs [78.0 kN]	19.69 in [500 mm]	5.12 in [130 mm]	.02-.04 in [0.5-1.0 mm]	2000 psi [138 bar]	1810 psi [125 bar]	1.0 in ³ [17 cc]
5308-SH	37,210 lbs [165.5 kN]	39.37 in [1000 mm]	7.87 in [200 mm]	.04-.08 in [1.0-2.0 mm]	1970 psi [136 bar]	1790 psi [124 bar]	4.1 in ³ [68 cc]
5310-SH	66,310 lbs [295.1 kN]	49.21 in [1250 mm]	9.84 in [250 mm]	.06-.12 in [1.5-3.0 mm]	1970 psi [136 bar]	1800 psi [124 bar]	10.6 in ³ [174 cc]
5312-SH	90,960 lbs [404.8 kN]	59.06 in [1500 mm]	11.81 in [300 mm]	.06-.12 in [1.5-3.0 mm]	2030 psi [140 bar]	1720 psi [119 bar]	14.6 in ³ [239 cc]

Maximum Pressure: 3000 psi [207 bar]

Temperature Range: -40°F...+131°F
-40°C ...+55°C

¹Torque:

$$T_B = 2F_N\mu \left(\frac{OD - W_s}{24} \right)$$

Where:

T_B = brake torque (ft-lbf)

F_N = normal force (lbf)

μ = coefficient of friction

= 0.38 (steel disc)

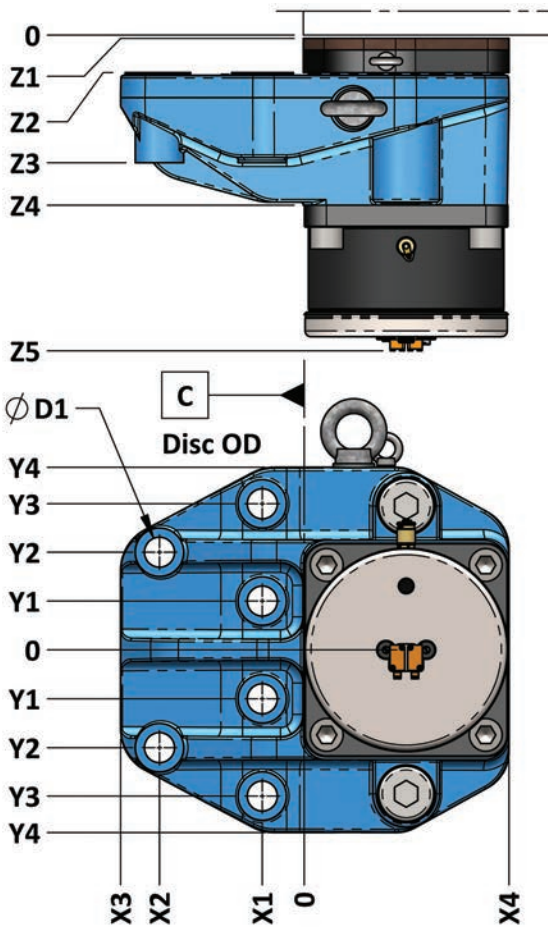
OD = brake disc diameter (in)

W_s = shoe width

²Per side

Friction values are theoretical and for reference only. They are based on properly bedded and burnished linings acting on a rotor at 20°C, manufactured to required specifications.

PARTS LISTING



PART NO.	5303-SH	5305-SH	5308-SH	5310-SH	5312-SH
X1	0.65 in [16.5 mm]	0.98 in [25 mm]	1.57 in [40 mm]	1.97 in [50 mm]	2.36 in [60 mm]
X2	2.26 in [57.5 mm]	3.58 in [91 mm]	5.51 in [140 mm]	6.89 in [175 mm]	8.27 in [210 mm]
X3	3.05 in [77.5 mm]	4.86 in [124 mm]	7.48 in [190 mm]	9.35 in [238 mm]	11.22 in [285 mm]
X4	2.95 in [75 mm]	5.12 in [130 mm]	7.87 in [200 mm]	9.84 in [250 mm]	11.81 in [300 mm]
Y1	.73 in [18.5 mm]	1.22 in [31 mm]	1.87 in [47.5 mm]	2.34 in [59.5 mm]	2.81 in [71.5 mm]
Y2	1.48 in [37.5 mm]	2.44 in [62 mm]	3.74 in [95 mm]	4.69 in [119 mm]	5.63 in [143 mm]
Y3	2.32 in [59 mm]	3.74 in [95 mm]	5.75 in [146 mm]	7.28 in [185 mm]	8.74 in [222 mm]
Y4	2.95 in [75 mm]	4.92 in [125 mm]	7.19 in [183 mm]	9.15 in [233 mm]	11.02 in [280 mm]
Z1	.02 in [0.5 mm]	.02 in [0.5 mm]	.04 in [1.0 mm]	.06 in [1.5 mm]	.06 in [1.5 mm]
Z2	0.70 in [17.9 mm]	1.10 in [28 mm]	1.44 in [36.7 mm]	1.75 in [44.5 mm]	1.95 in [49.6 mm]
Z3	2.20 in [56 mm]	3.40 in [86 mm]	4.91 in [125 mm]	6.05 in [154 mm]	7.13 in [181 mm]
Z4	3.20 in [81 mm]	5.17 in [131 mm]	6.59 in [167 mm]	8.28 in [210 mm]	9.74 in [247 mm]
Z5	6.83 in [173 mm]	10.29 in [261 mm]	12.5 in [318 mm]	15.45 in [393 mm]	17.62 in [448 mm]
D1	7/16 in [M10]	5/8 in [M16]	1-1/8 in [M27]	1-1/2 in [M36]	1-3/4 in [M42]
PORT	-2 ORB	-6 ORB	-8 ORB	-8 ORB	-12 ORB
WEIGHT	40 lbs [18 kg]	173 lbs [78 kg]	521 lbs [237 kg]	1115 lbs [506 kg]	1759 lbs [798 kg]

Brake Model Code Key

