

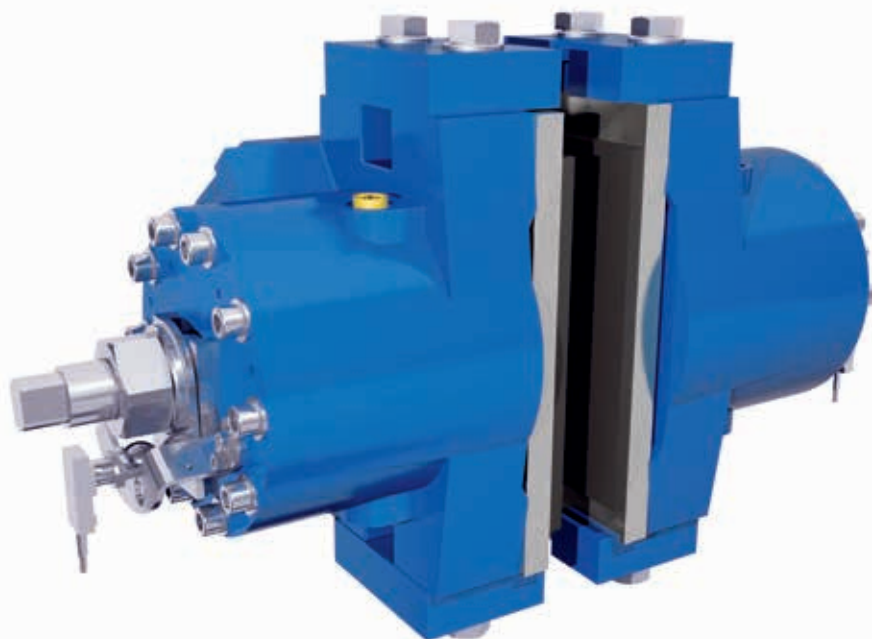


Industrial **brakes**

HYDRAULIC EMERGENCY BRAKES

**antec**®
Reliability is a must.

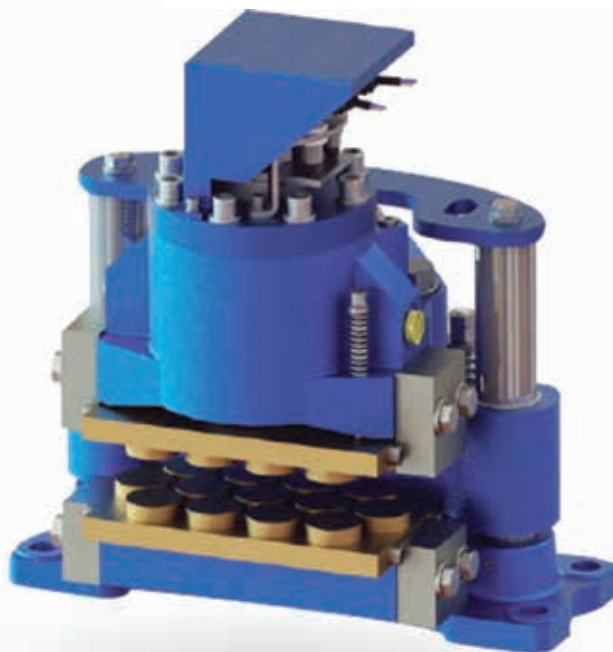
GENERAL DESCRIPTION



Model: NHCD-1400 CSA
(Dual Spring)

NHCD and NHC brakes are fail-safe brakes, which means that they brake using springs when there is no hydraulic pressure.

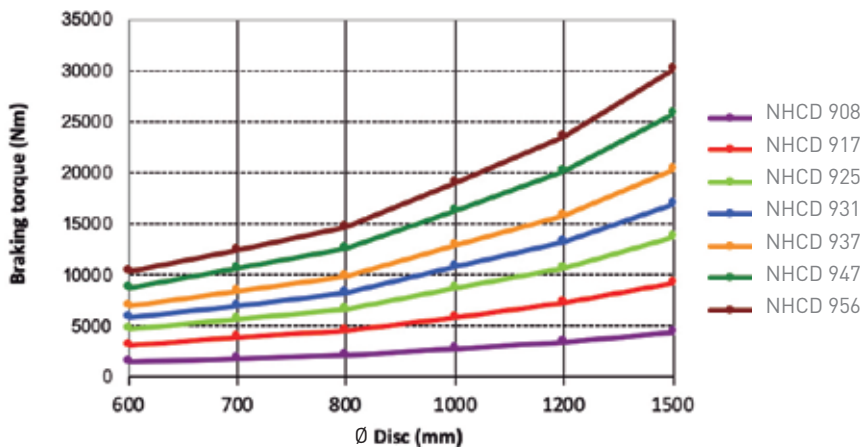
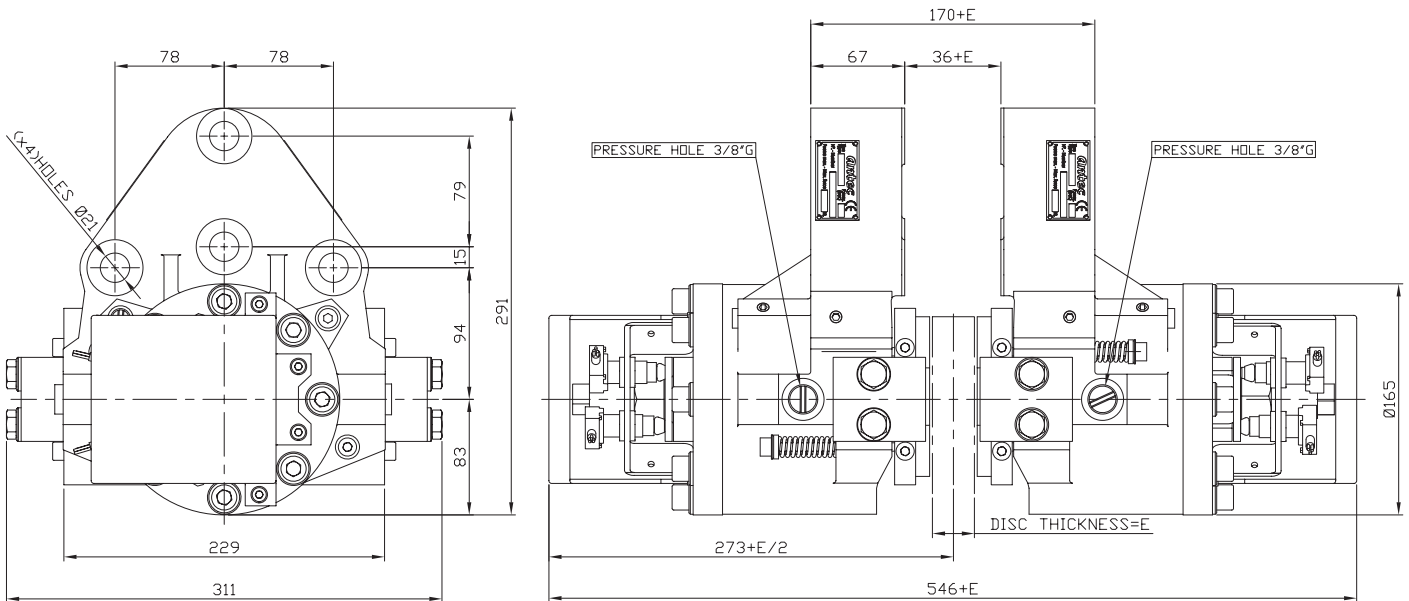
The brake opening force depends directly on the hydraulic pressure. The maximum pressure to open the brake is 21 MPa, while the minimum varies depending on the spring force.



Model: NHC-900 GS + CSA + DD.
(Mono Spring)



NHCD 900 SERIES (DUAL SPRING)



MAIN FEATURES

- Spring applied braking. (Failsafe)
- Hydraulically released.
- Wear indicator.
- Double spring failsafe emergency brake.
- Organic or sintered metal linings.
- Clamping force up to 60 KN.
- End stops for easy lining replacement.

CALIPER		NHCD-908	NHCD-917	NHCD-925	NHCD-931	NHCD-937	NHCD-947	NHCD-956
Clamping force	N	8000	17000	25000	31000	37000	47000	55000
Releasing pressure	MPa	3	6	9	11	12	17	18
Maximum pressure	MPa	21						
Release stroke	mm	1 each side						
Oil volume	cm ³	47 each side						
Pad surface	cm ²	280 each side						
Friction coefficient (μ)	-	0.4						
Braking Force (Bf)	N	6400	13600	20000	24800	29600	37600	44000
Approximate total weight	Kg	80						

BRAKING TORQUE CALCULATION:

$$T = \text{Braking torque (Nm)}$$

n = no. of calipers

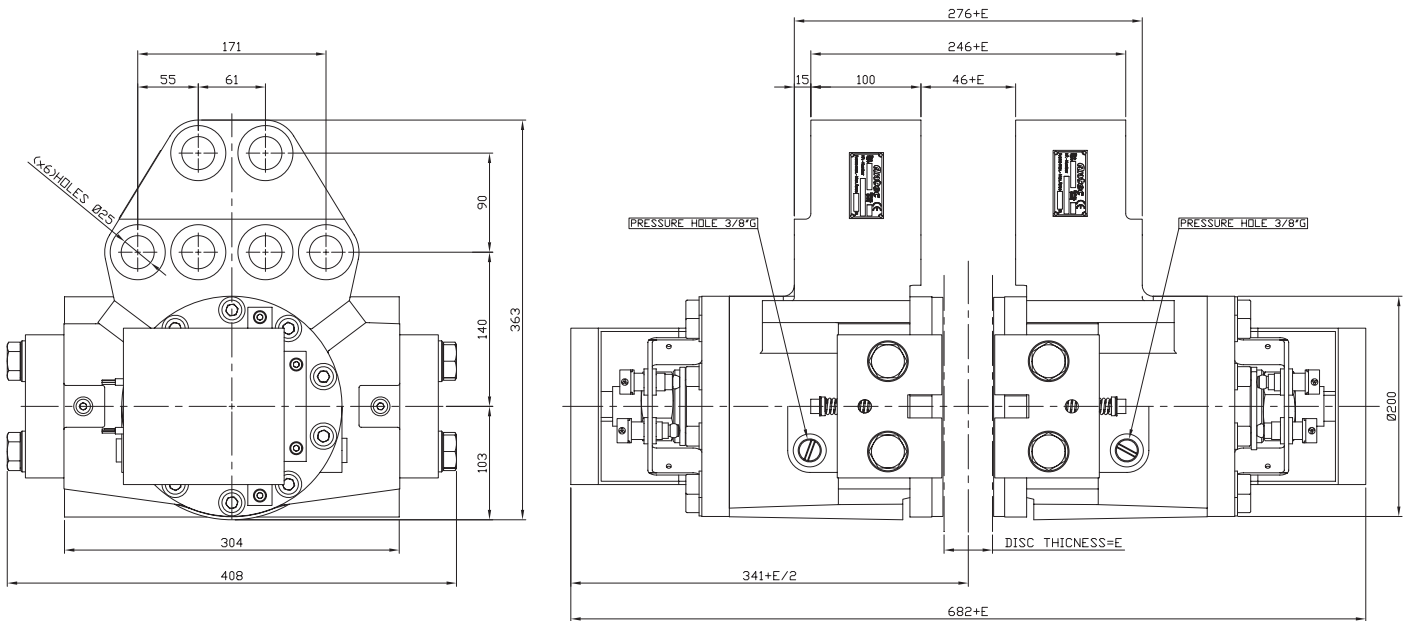
Bf = Braking force (N)

D = Disc diameter (mm)

$$T = n \times Bf \times \frac{D - 130}{2000}$$

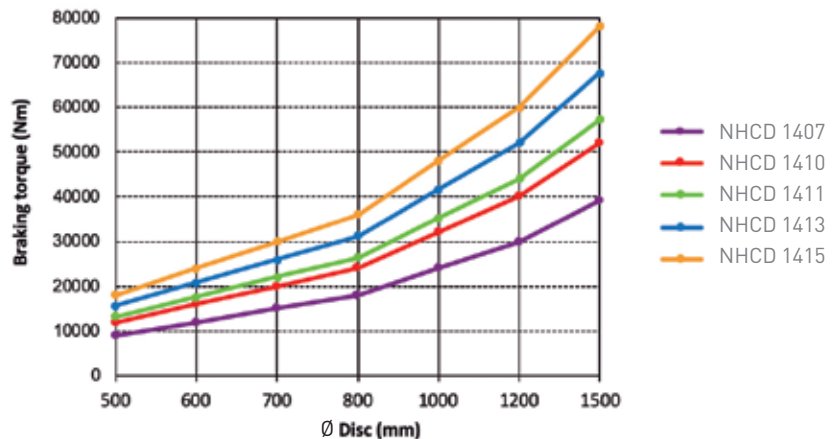
Dimension values are in mm. For other clamping forces, please contact the Antec Sales Department (sales@antecsa.com)

NHCD 1400 SERIES (DUAL SPRING)



MAIN FEATURES

- Spring applied braking. (Failsafe)
- Hydraulically released.
- Wear indicator.
- Double spring failsafe emergency brake.
- Organic or sintered metal linings.
- Clamping force up to 150 KN.
- End stops for easy lining replacement.



BRAKING TORQUE CALCULATION:

T = Braking torque (Nm)

n = no. of calipers

Bf = Braking force (N)

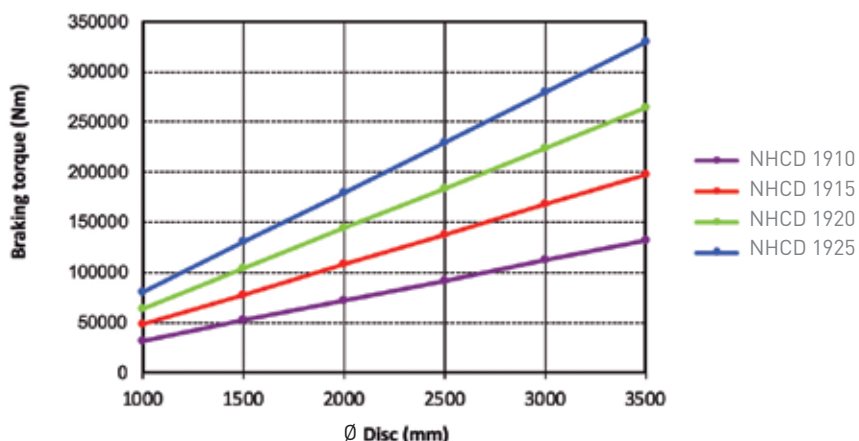
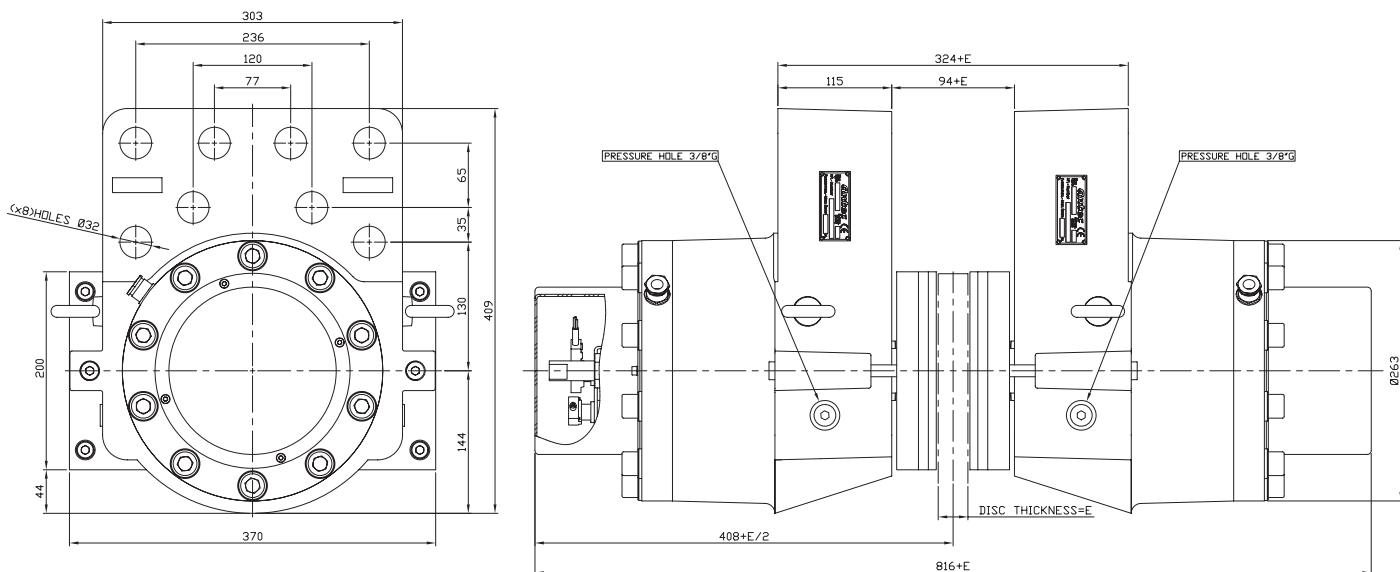
D = Disc diameter (mm)

$$T = n \times Bf \times \frac{D - 200}{2000}$$

CALIPER		NHCD-1407	NHCD-1410	NHCD-1411	NHCD-1413	NHCD-1415
Clamping force	N	75000	100000	110000	130000	150000
Releasing pressure	MPa	11	13	16	19	21
Maximum pressure	MPa	21				
Release stroke	mm	1 each side				
Oil volume	cm ³	113 each side				
Pad surface	cm ²	500 each side				
Friction coefficient (μ)	-	0.4				
Braking Force (Bf)	N	60000	80000	88000	104000	120000
Approximate total weight	Kg	185				

Dimension values are in mm. For other clamping forces, please contact the Antec Sales Department (sales@antecsa.com)

NHCD 1900 SERIES (DUAL SPRING)



MAIN FEATURES

- Spring applied braking. (Failsafe)
- Hydraulically released.
- Wear indicator.
- Double spring failsafe emergency brake.
- Organic or sintered metal linings.
- Clamping force up to 250 KN.
- Easy lining replacement.

CALIPER		NHCD-1910	NHCD-1915	NHCD-1920	NHCD-1925
Clamping force	N	100000	150000	200000	250000
Releasing pressure	MPa	8	11	15	18
Maximum pressure	MPa	21			
Release stroke	mm	2 each side			
Oil volume	cm ³	230 each side			
Pad surface	cm ²	600 each side			
Friction coefficient (μ)	-	0.4			
Braking Force (Bf)	N	80000	120000	160000	200000
Approximate total weight	Kg	320			

BRAKING TORQUE CALCULATION:

$T = \text{Braking torque (Nm)}$

$n = \text{no. of calipers}$

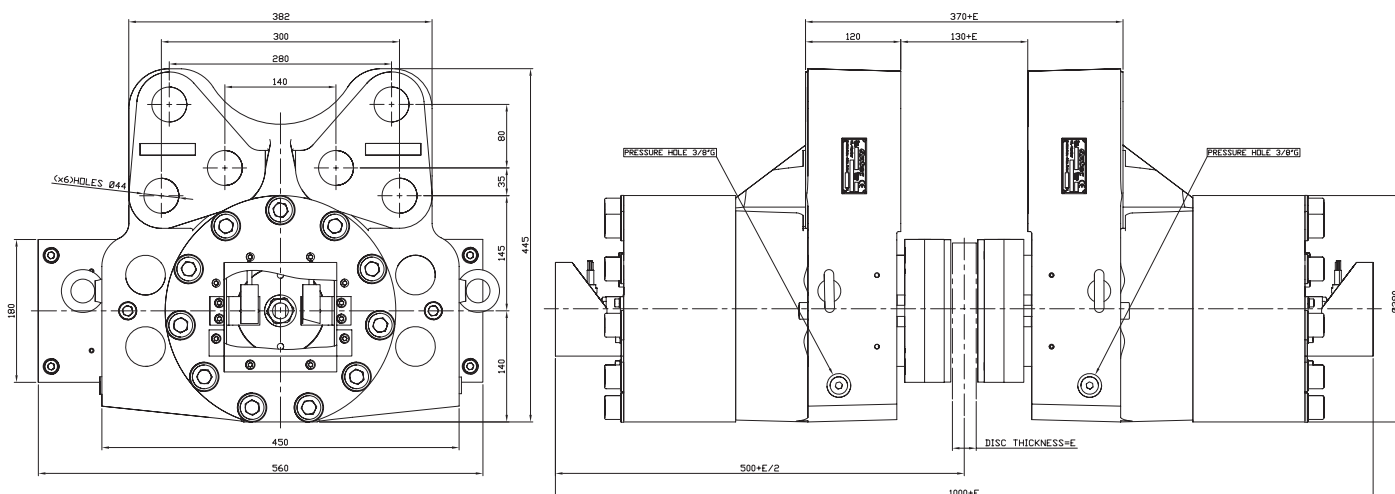
$Bf = \text{Braking force (N)}$

$D = \text{Disc diameter (mm)}$

$$T = n \times Bf \times \frac{D - 200}{2000}$$

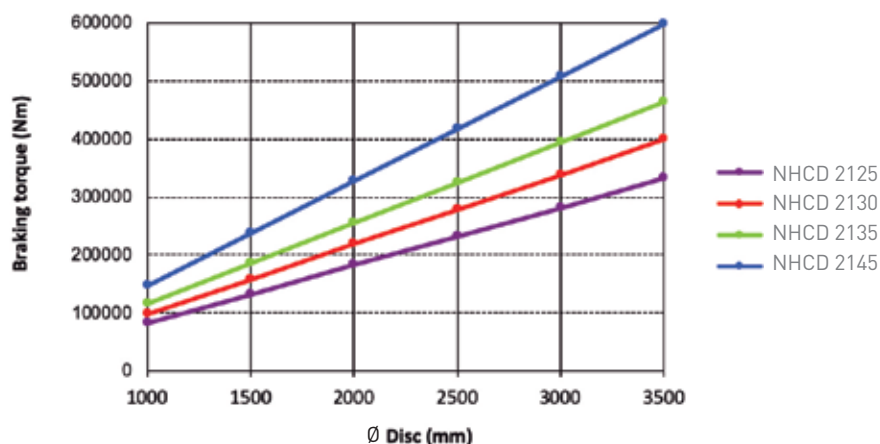
Dimension values are in mm. For other clamping forces, please contact the Antec Sales Department (sales@antecsa.com)

NHCD 2100 SERIES (DUAL SPRING)



MAIN FEATURES

- Spring applied braking. (Failsafe)
- Hydraulically released.
- Wear indicator.
- Double spring failsafe emergency brake.
- Organic or sintered metal linings.
- Clamping force up to 450 KN.
- Easy lining replacement.



BRAKING TORQUE CALCULATION:

T = Braking torque (Nm)

n = no. of calipers

Bf = Braking force (N)

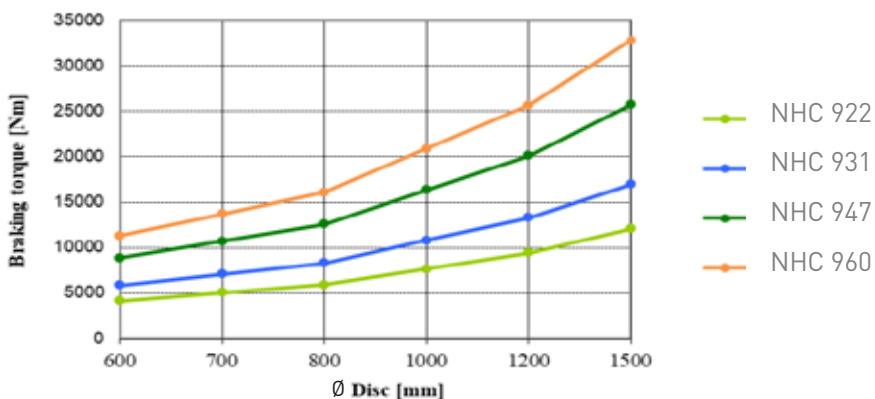
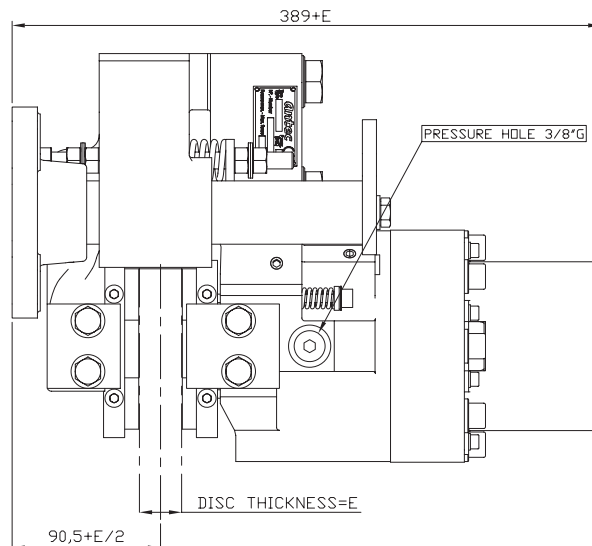
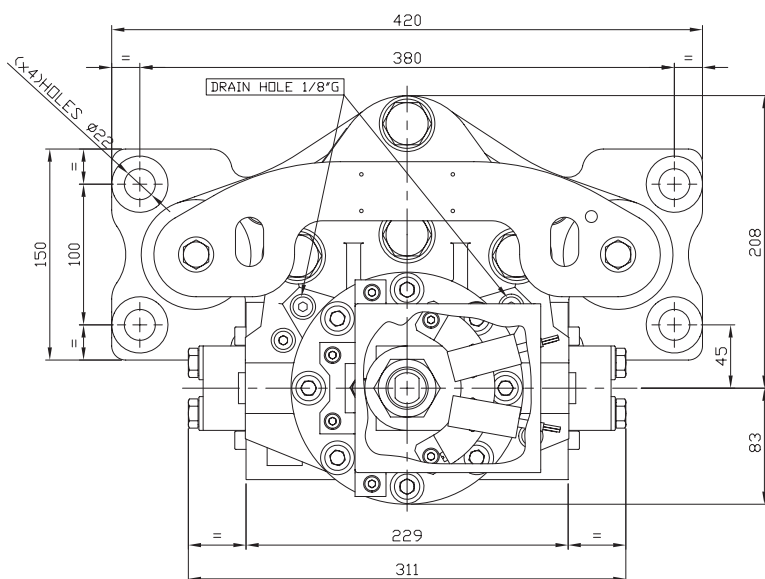
D = Disc diameter (mm)

$$T = n \times Bf \times \frac{D - 180}{2000}$$

CALIPER		NHCD-2125	NHCD-2130	NHCD-2135	NHCD-2145
Clamping force	N	250000	300000	350000	450000
Releasing pressure	MPa	12	13	16	21
Maximum pressure	MPa	21			
Release stroke	mm	2 each side			
Oil volume	cm ³	350 each side			
Pad surface	cm ²	750 each side			
Friction coefficient (μ)	-	0.4			
Braking Force (Bf)	N	200000	240000	280000	360000
Approximate total weight	Kg	530			

Dimension values are in mm. For other clamping forces, please contact the Antec Sales Department (sales@antecsa.com)

NHC 900 SERIES (MONO SPRING)



MAIN FEATURES

- Spring applied braking. (Failsafe)
- Hydraulically released.
- Self-aligning.
- Wear indicator.
- Floating caliper.
- Organic or sintered metal linings.
- Clamping force up to 60 KN.
- End stops for easy lining replacement.

CALIPER		NHC-922	NHC-931	NHC-947	NHC-960
Clamping force	N	22000	31000	47000	60000
Releasing pressure	MPa	7	11	17	20
Maximum pressure	MPa	21			
Release stroke	mm	0,5 each side			
Oil volume	cm ³	47			
Pad surface	cm ²	300 each side			
Friction coefficient (μ)	-	0.4			
Braking Force (Bf)	N	17600	24800	37600	48000
Approximate total weight	Kg	90			

BRAKING TORQUE CALCULATION:

T = Braking torque (Nm)

n = no. of calipers

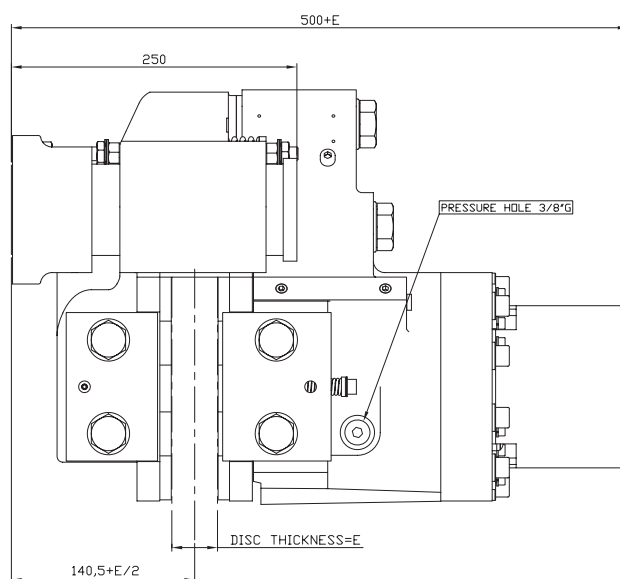
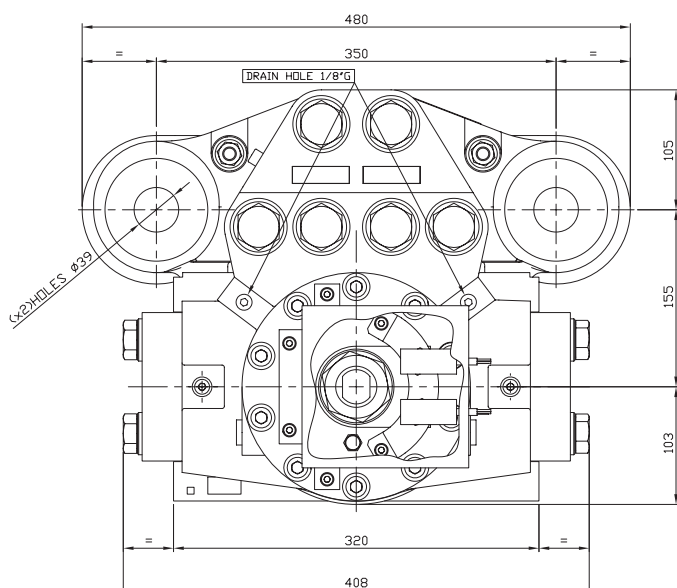
Bf = Braking force (N)

D = Disc diameter (mm)

$$T = n \times Bf \times \frac{D - 130}{2000}$$

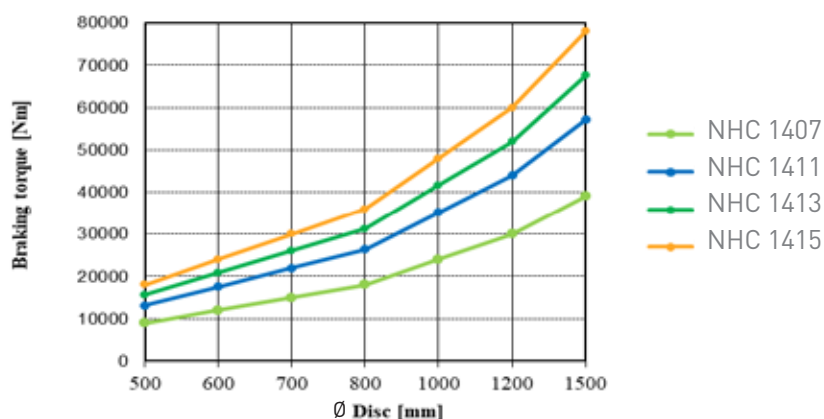
Dimension values are in mm. For other clamping forces, please contact the Antec Sales Department (sales@antecsa.com)

NHC 1400 SERIES (MONO SPRING)



MAIN FEATURES

- Spring applied braking. (Failsafe)
- Hydraulically released.
- Self-aligning.
- Wear indicator.
- Floating caliper.
- Organic or sintered metal linings.
- Clamping force up to 150 KN.
- End stops for easy lining replacement.



BRAKING TORQUE CALCULATION:

T = Braking torque (Nm)

n = no. of calipers

Bf = Braking force (N)

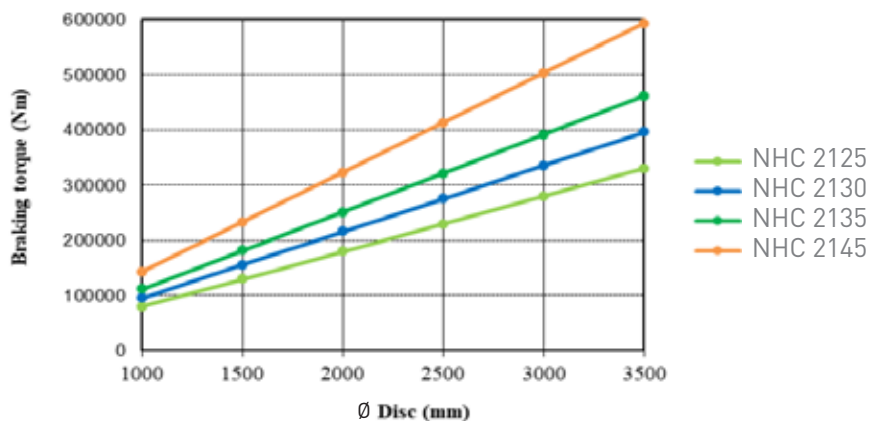
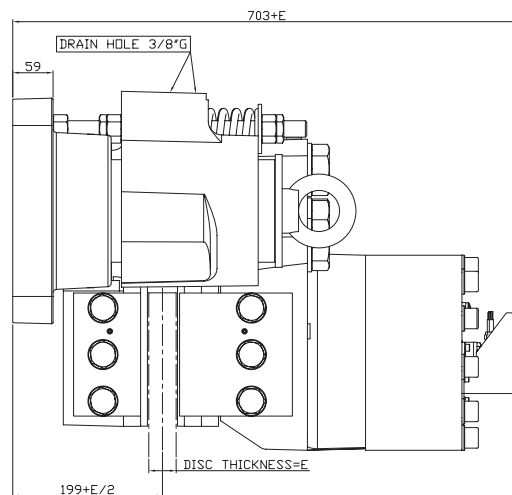
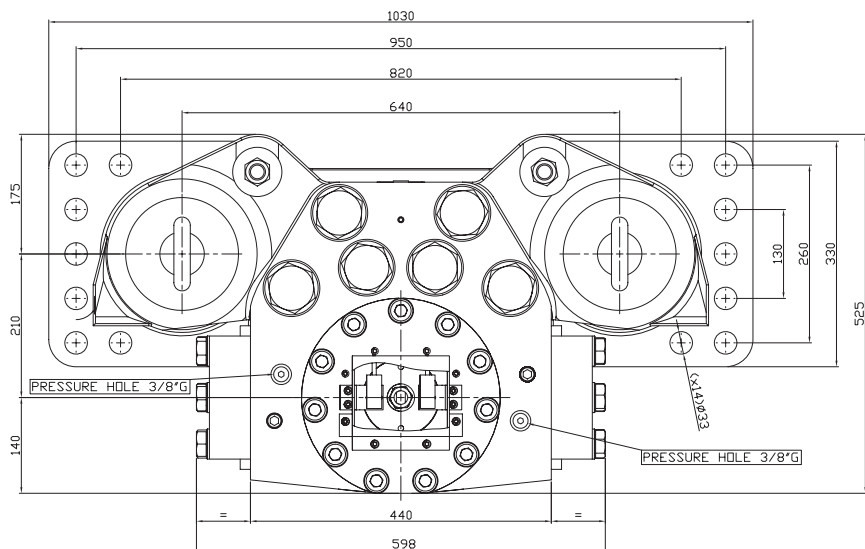
D = Disc diameter (mm)

$$T = n \times Bf \times \frac{D - 200}{2000}$$

CALIPER		NHCD-1407	NHCD-1411	NHCD-1413	NHCD-1415
Clamping force	N	75000	110000	130000	150000
Releasing pressure	MPa	11	16	19	21
Maximum pressure	MPa	21			
Release stroke	mm	0,5 each side			
Oil volume	cm ³	113			
Pad surface	cm ²	600 each side			
Friction coefficient (μ)	-	0.4			
Braking Force (Bf)	N	60000	88000	104000	120000
Approximate total weight	Kg	200			

Dimension values are in mm. For other clamping forces, please contact the Antec Sales Department (sales@antecsa.com)

NHC 2100 SERIES (MONO SPRING)



MAIN FEATURES

- Spring applied braking. (Failsafe)
- Hydraulically released.
- Self-aligning.
- Wear indicator.
- Floating caliper.
- Organic or sintered metal linings.
- Clamping force up to 450 KN.
- End stops for easy lining replacement.

BRAKING TORQUE CALCULATION:

T = Braking torque (Nm)

n = no. of calipers

Bf = Braking force (N)

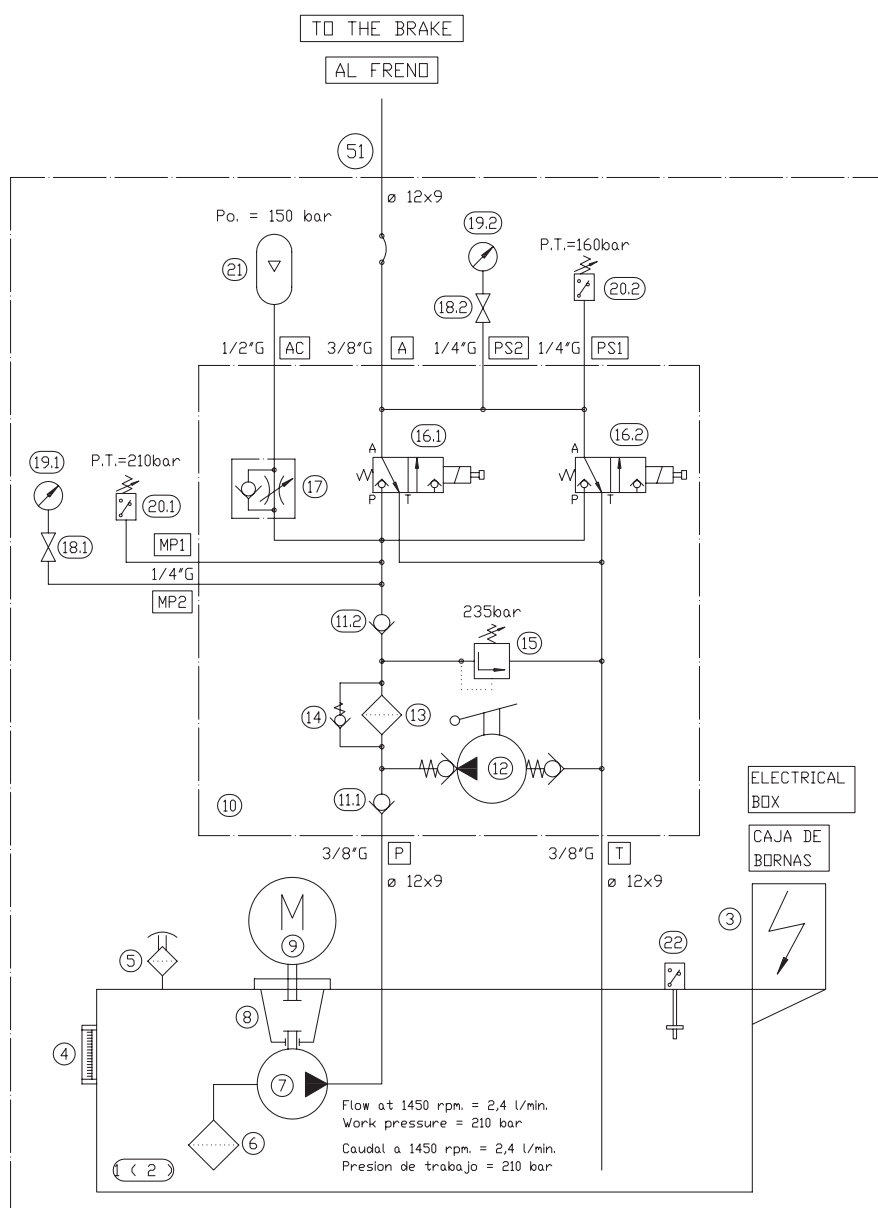
D = Disc diameter (mm)

$$T = n \times Bf \times \frac{D - 210}{2000}$$

CALIPER		NHC-2125	NHC-2130	NHC-2135	NHC-2145
Clamping force	N	250000	300000	350000	450000
Releasing pressure	MPa	12	13	16	20,5
Maximum pressure	MPa	21			
Release stroke	mm	2 each side			
Oil volume	cm ³	350			
Pad surface	cm ²	900 each side			
Friction coefficient (μ)	-	0.4			
Braking Force (Bf)	N	200000	240000	280000	360000
Approximate total weight	Kg	530			

Dimension values are in mm. For other clamping forces, please contact the Antec Sales Department (sales@antecsa.com)

HYDRAULIC POWER UNIT



LEGEND

1. Aluminum tank
2. Cap
3. Electrical box
4. Level indicator
5. Air filter
6. Suction filter
7. Gear pump
8. Housing
9. Electrical motor
10. Manifold block
11. Check valve
12. Hand pump
13. Pressure line filter
14. Check valve
15. Pressure relief valve
16. 3/2 Solenoid directional valve
17. Flow control valve
18. Needle valve
19. Manometer
20. Pressure switch
21. Acumulator
22. Electric level

OPTIONS:

BT = Low Temperature Resistance (from -25 to -40 °C)

PC = Protection Cover

SP = Special Painting

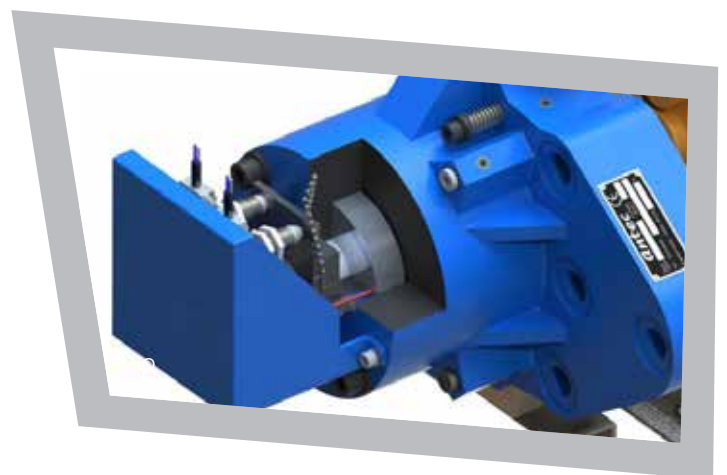
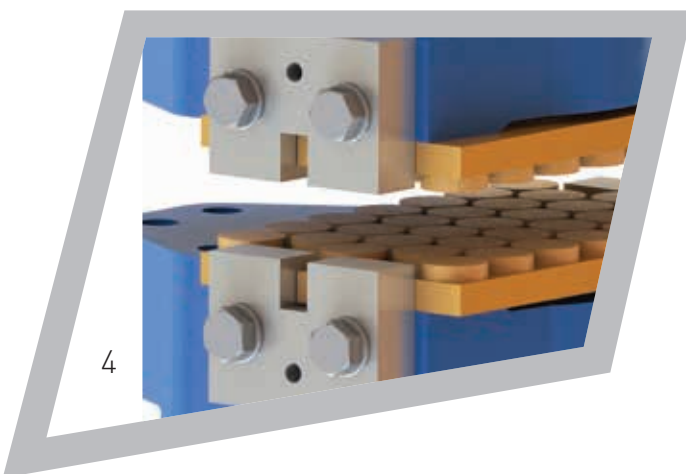
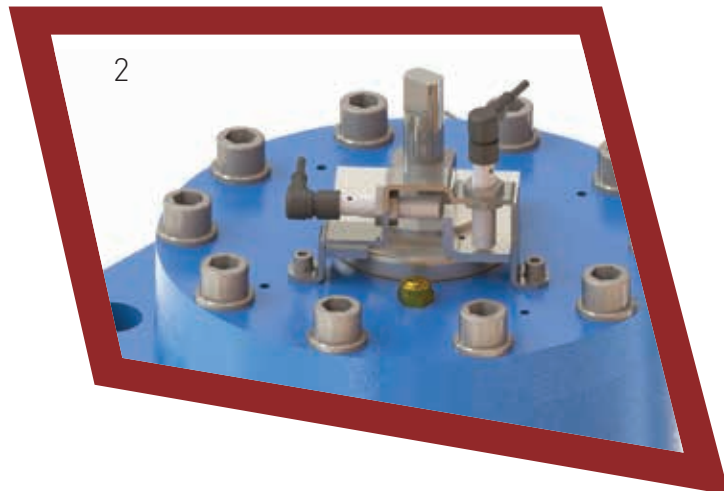
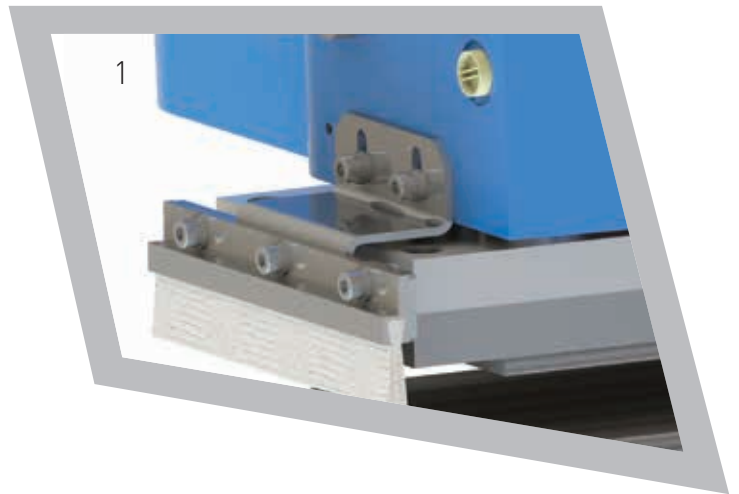
SM = Special Motor (DC)

SV = Special Valve



OPTIONS

1. Brushes.
2. Mechanical or inductive open switch indicator (CSA).
3. Mechanical or inductive lining wear indicator (DD).
4. Sintered metal brake linings (GS).
5. Fastening bolts.
6. Bracket.
7. Special paint (PE).
8. Clamping force indicator.



For further information about options, please contact the Antec Sales Department (sales@antecsa.com)



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