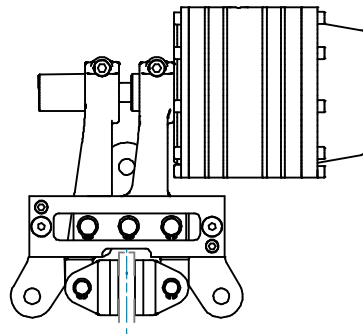
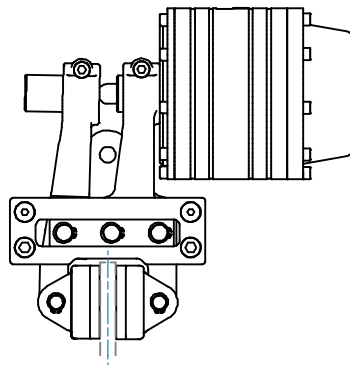


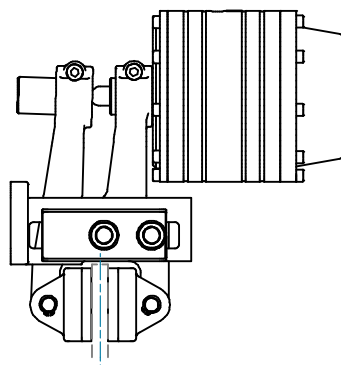
**PPD-PN ...**  
Pag. 62-63



**PPF-PN ...**  
Pag. 64-66



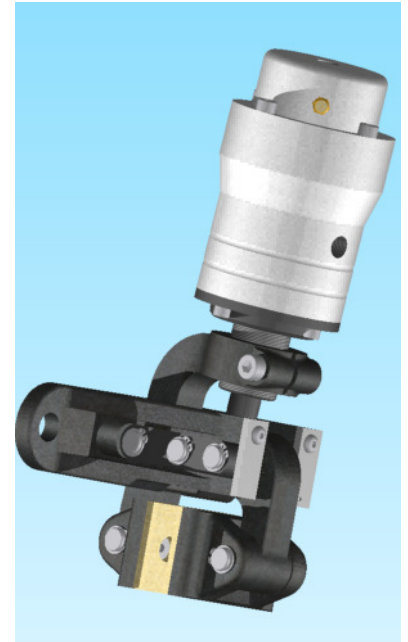
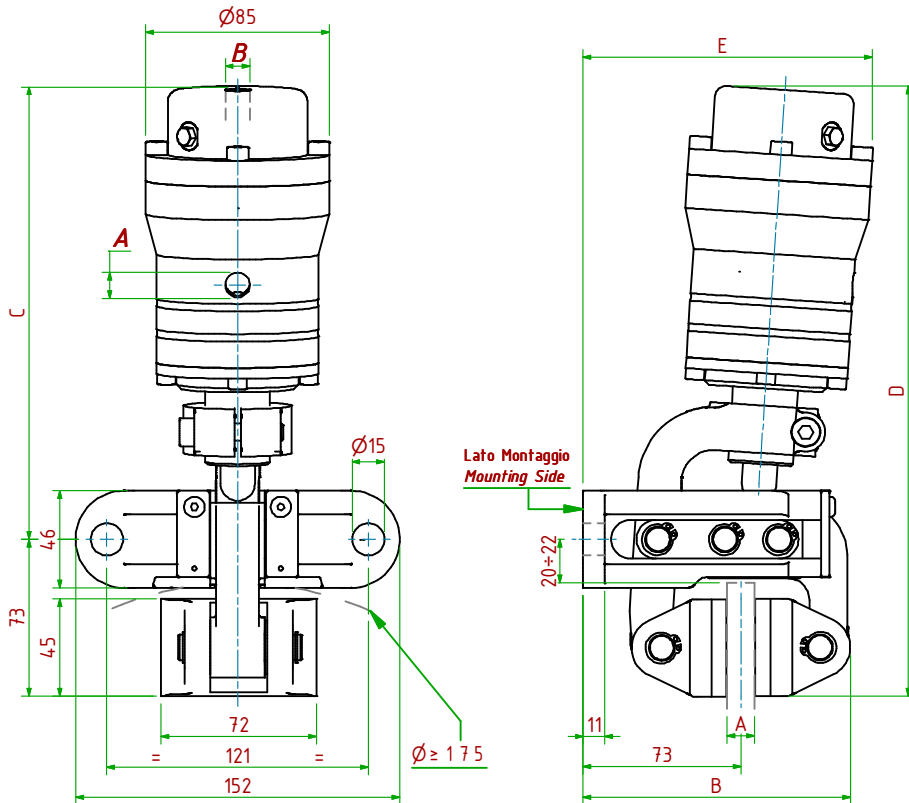
**PPH-PN ...**  
Pag. 67-68



**PPHP-PN ...**  
Pag. 69-70

**PPD-PN011/□□□**

**Pneumatico DUO / Pneumatically DUO**



**Funzionamento Positivo / Pneumatically Applied**

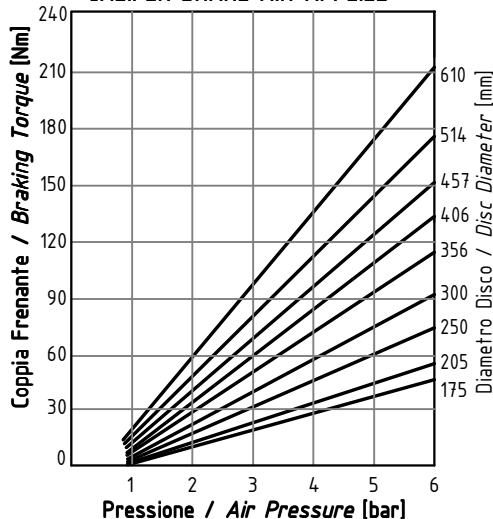
- Pressione di Lavoro / Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro / Pneumatic Cylinder Supply **A: 1/4" Gas**
- Volume Max Cilindro / Max Cylinder Volume **27 cm<sup>3</sup>**
- Coppia Frenante / Braking Torque **Md= [Ft x (Φ(m)/2 - 0.029(m))]**

**Funzionamento Negativo / Pneumatically Released**

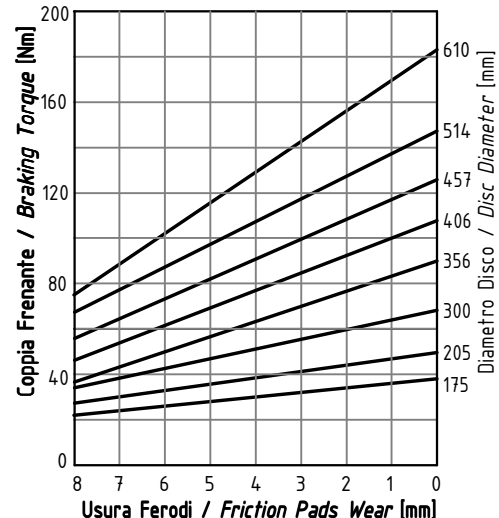
- Pressione di Apertura / Release Pressure **Pa= 6bar**
- Alimentazione Cilindro / Spring Applied Cylinder Supply **B: 1/4" Gas**
- Volume Max Cilindro / Max Cylinder Volume **32 cm<sup>3</sup>**
- Usura Ferodi Massima Totale / Maximum total wear of pads = **9mm**

MODELLO / MODEL	CODICE / CODE	A	B	C	DMax	EMax	Forza Frenante: Positivo-Negativo / Braking Force		Peso
PPD-PN011/12.7	19.56.011.03	12.7	124	217	290	134	Ft <sub>pos</sub> = 770N (6bar)	Ft <sub>neg</sub> = 640N (0bar)	5.4 kg
PPD-PN011/25.4	19.56.011.04	25.4	130	217	290	136	Ft <sub>pos</sub> = 770N (6bar)	Ft <sub>neg</sub> = 640N (0bar)	5.5 kg

**FRENO A PINZA USO POSITIVO  
CALIPER BRAKE AIR APPLIED**



**FRENO A PINZA USO NEGATIVO  
CALIPER BRAKE SPRING APPLIED**



**Coppia Frenante Md**

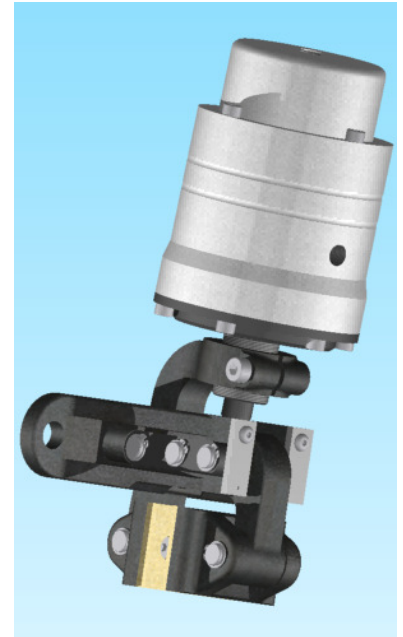
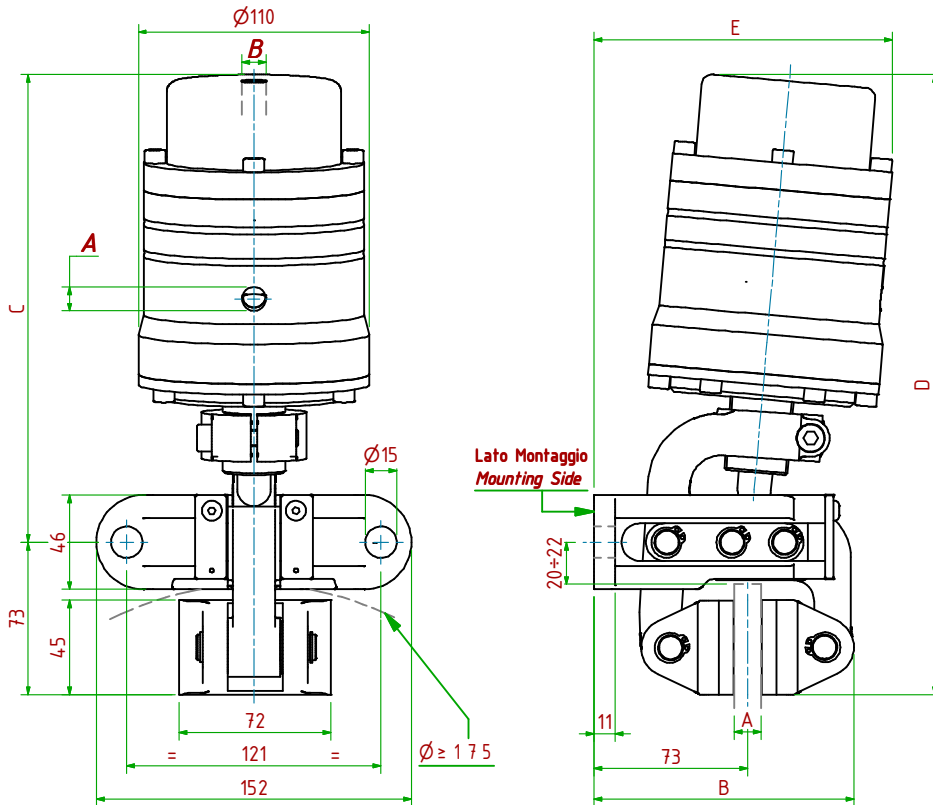
La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assestamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.

PPD-PN012/□□□

Pneumatico DUO / Pneumatically DUO



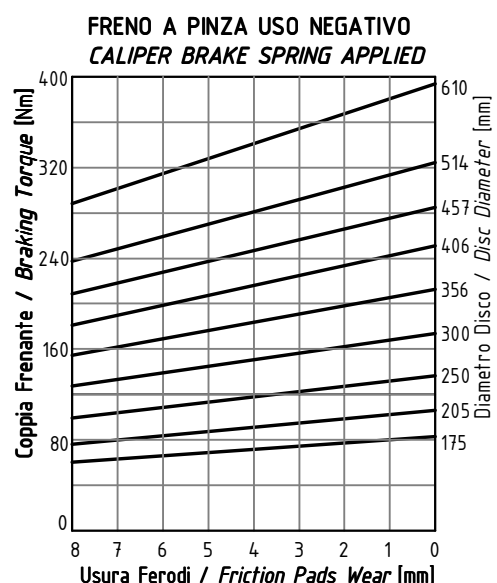
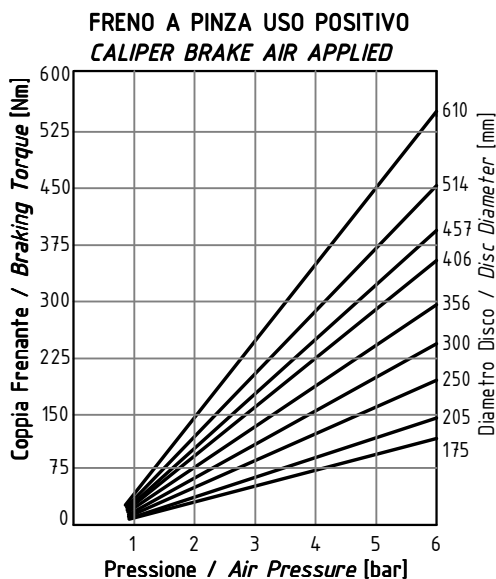
**Funzionamento Positivo/Pneumatically Applied**

- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A:1/4"Gas**
- Volume Max Cilindro/Max Cylinder Volume **63 cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ft×(Φ(m)/2-0.029(m))]**

**Funzionamento Negativo/Pneumatically Released**

- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B:1/4"Gas**
- Volume Max Cilindro/Max Cylinder Volume **75 cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads =9mm

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	E <sub>Max</sub>	Forza Frenante: Positivo-Negativo / Braking Force		Peso
PPD-PN012/12.7	19.56.012.03	12.7	124	227	300	142	Ft <sub>pos</sub> = 1990N (6bar)	Ft <sub>neg</sub> = 1420N (0bar)	6.9 kg
PPD-PN012/25.4	19.56.012.04	25.4	130	227	300	146	Ft <sub>pos</sub> = 1990N (6bar)	Ft <sub>neg</sub> = 1420N (0bar)	7.0 kg



**Coppia Frenante Md**

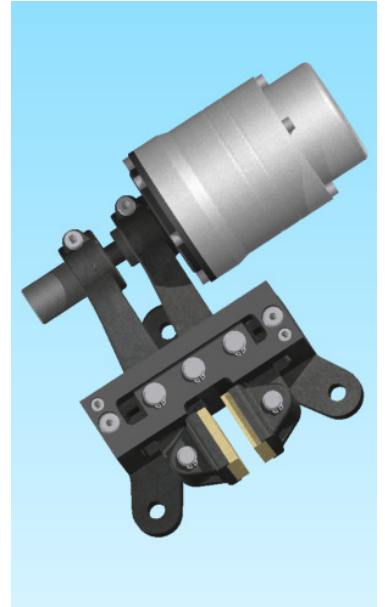
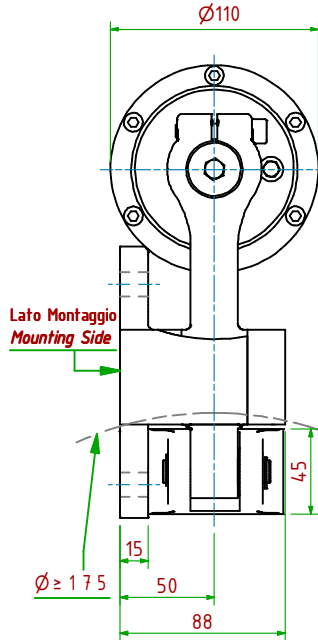
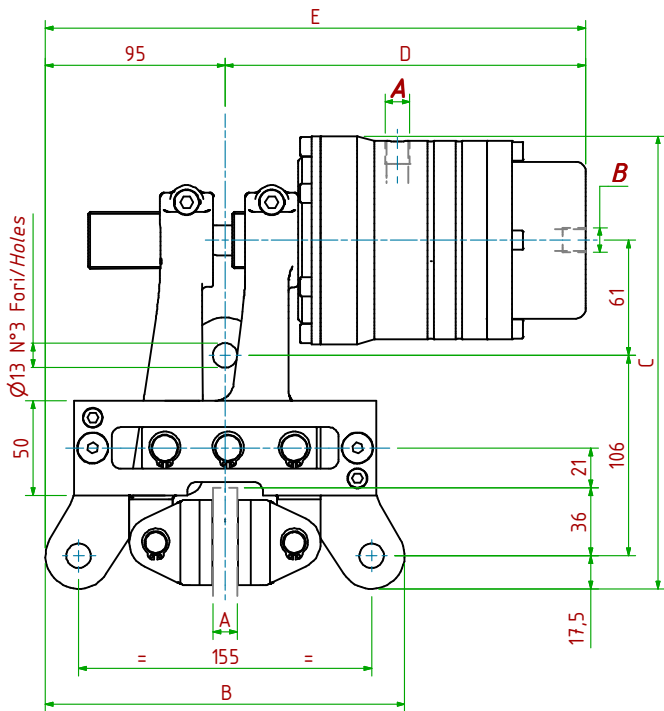
La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assestamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.

PPF-PN022/ □□□

Pneumatico DUO / Pneumatically DUO



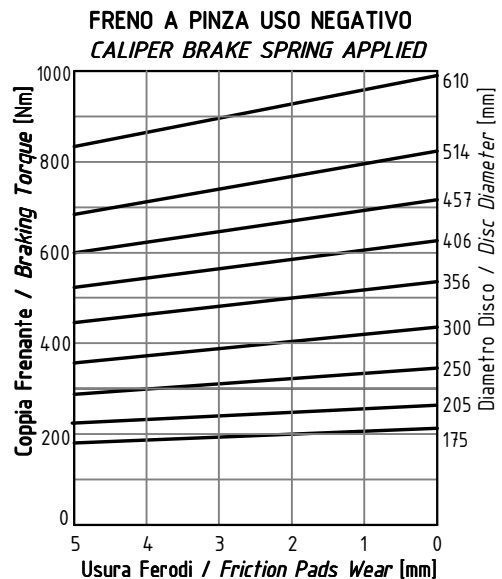
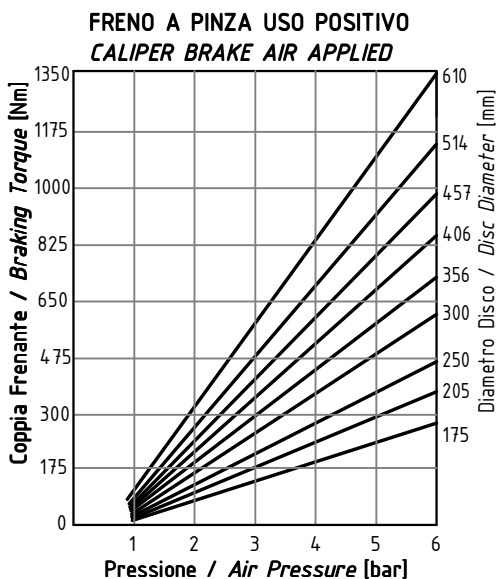
**Funzionamento Positivo/Pneumatically Applied**

- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A:1/4"Gas**
- Volume Max Cilindro/Max Cylinder Volume **63 cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ftx(Φ(m)/2-0.029(m))]**

**Funzionamento Negativo/Pneumatically Released**

- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B:1/4"Gas**
- Volume Max Cilindro/Max Cylinder Volume **75 cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads =9mm

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	EMax	Forza Frenante: Positivo-Negativo / Braking Force	Peso
PPF-PN022/12.7	19.56.022.03	12.7	190	240	191	286	Ft <sub>pos</sub> = 4880N (6bar) Ft <sub>neg</sub> = 3590N (0bar)	10.7 kg
PPF-PN022/25.4	19.56.022.04	25.4	190	240	197	292	Ft <sub>pos</sub> = 4880N (6bar) Ft <sub>neg</sub> = 3590N (0bar)	10.8 kg



**Coppia Frenante Md**

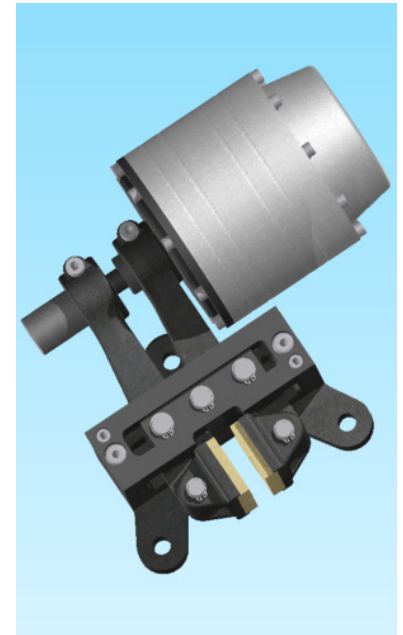
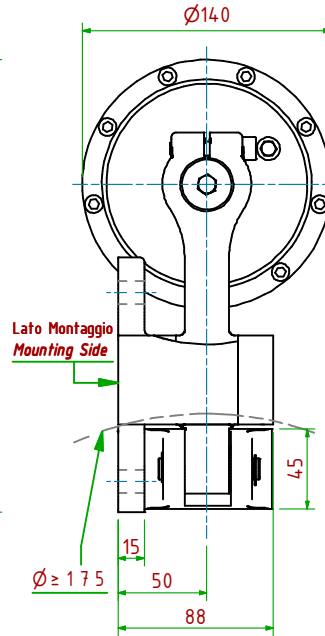
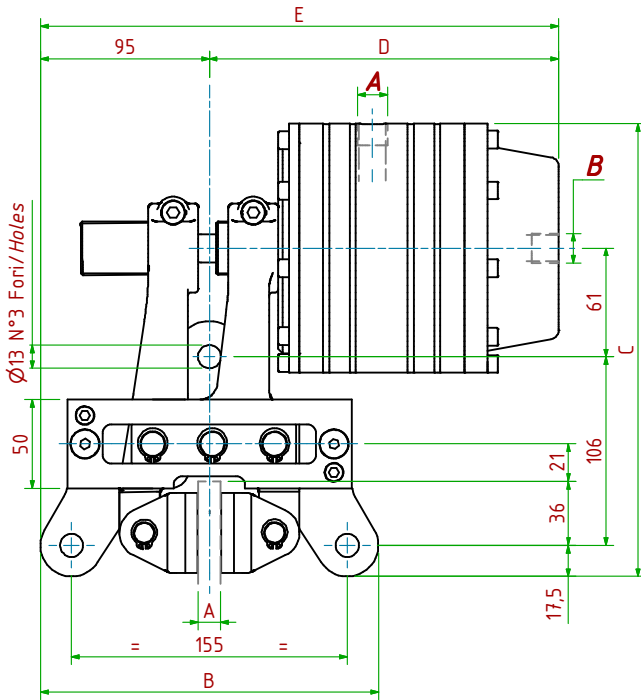
La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assettamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.

**PPF-PN023/** □ □ □

**Pneumatico DUO / Pneumatically DUO**



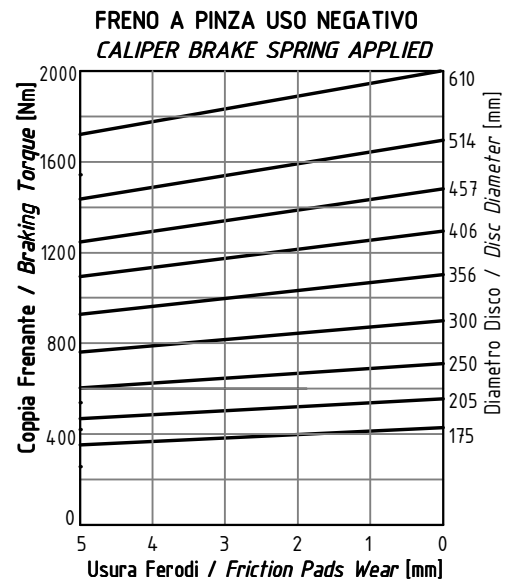
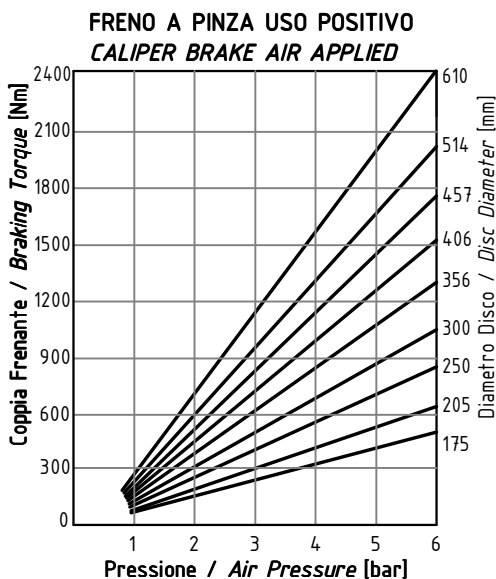
**Funzionamento Positivo/Pneumatically Applied**

- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **110 cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ftx( $\Phi$ (m)/2-0.029(m))]**

**Funzionamento Negativo/Pneumatically Released**

- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **160 cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads =9mm

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	EMax	Forza Frenante: Positivo-Negativo / Braking Force	Peso
PPF-PN023/12.7	19.56.023.03	12.7	190	255	196	291	Ft <sub>pos</sub> = 8770N (6bar) Ft <sub>neg</sub> = 7430N (0bar)	12.9 kg
PPF-PN023/25.4	19.56.023.04	25.4	190	255	203	298	Ft <sub>pos</sub> = 8770N (6bar) Ft <sub>neg</sub> = 7430N (0bar)	13.0 kg



**Coppia Frenante Md**

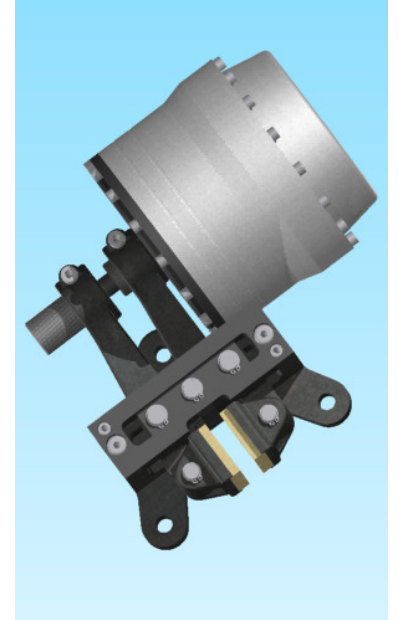
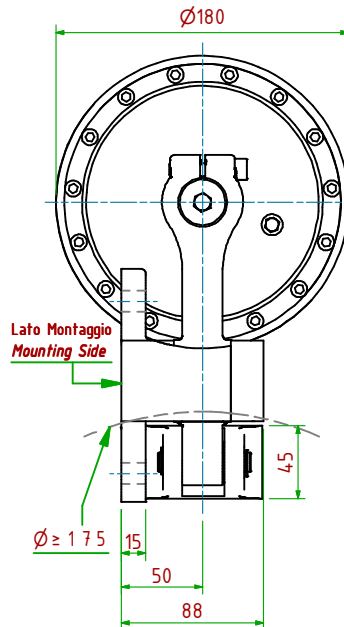
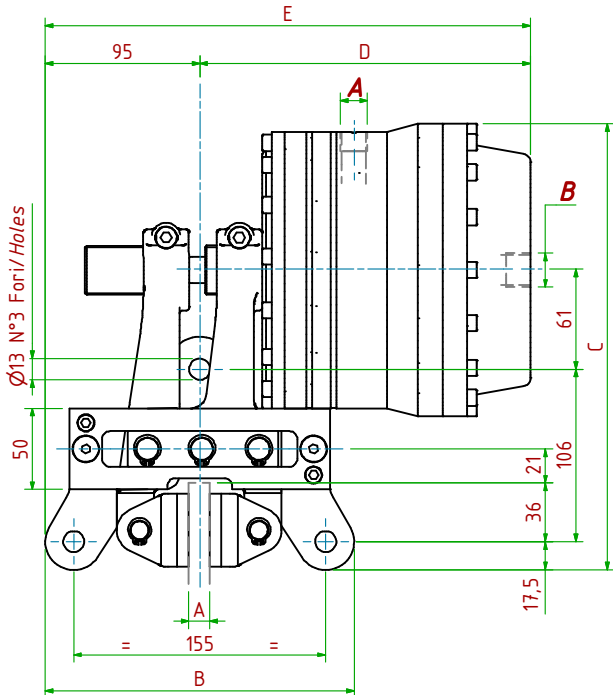
La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assetamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.

**PPF-PN024/** □ □ □

**Pneumatico DUO / Pneumatically DUO**



**Funzionamento Positivo/Pneumatically Applied**

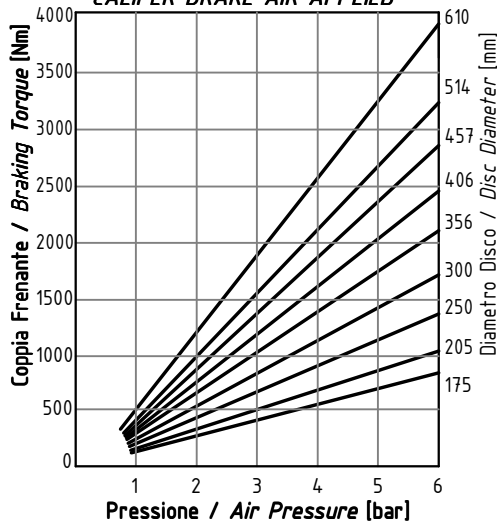
- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **175cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ftx(Φ(m)/2-0.029(m))]**

**Funzionamento Negativo/Pneumatically Released**

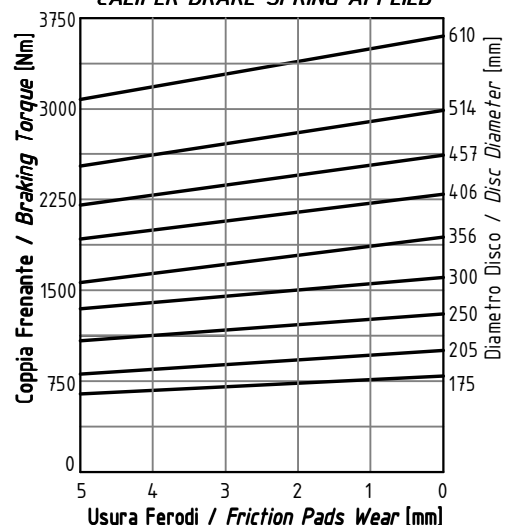
- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B: 1/2"Gas**
- Volume Max Cilindro/Max Cylinder Volume **285cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads = **9mm**

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	EMax	Forza Frenante: Positivo-Negativo / Braking Force	Peso
PPF-PN024/12.7	19.56.024.03	12.7	190	275	203	298	Ft <sub>pos</sub> = 14100N(6bar) Ft <sub>neg</sub> = 13100N(0bar)	16.4 kg
PPF-PN024/25.4	19.56.024.04	25.4	190	275	210	305	Ft <sub>pos</sub> = 14100N(6bar) Ft <sub>neg</sub> = 13100N(0bar)	16.5 kg

**FRENO A PINZA USO POSITIVO  
CALIPER BRAKE AIR APPLIED**



**FRENO A PINZA USO NEGATIVO  
CALIPER BRAKE SPRING APPLIED**



**Coppia Frenante Md**

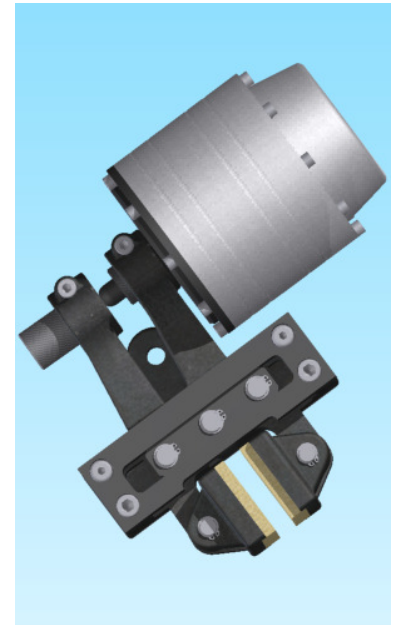
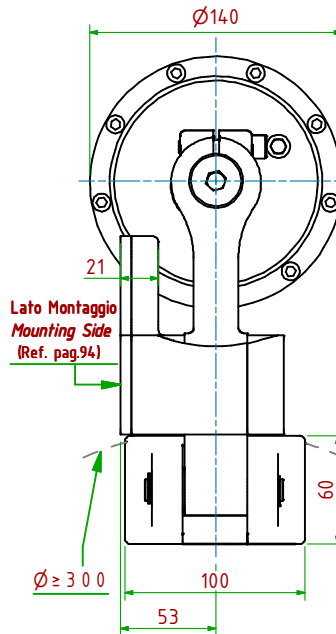
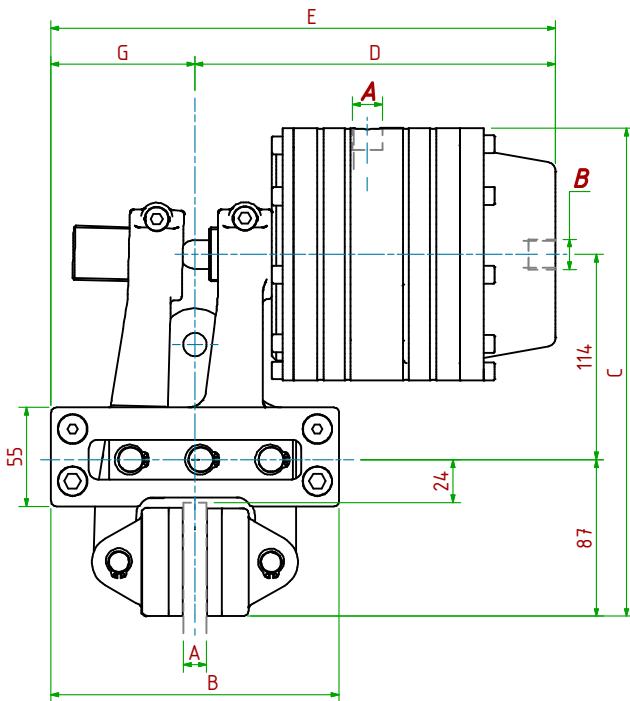
La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assestamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.

PPH-PN033/□□□

Pneumatico DUO / Pneumatically DUO



**Funzionamento Positivo/Pneumatically Applied**

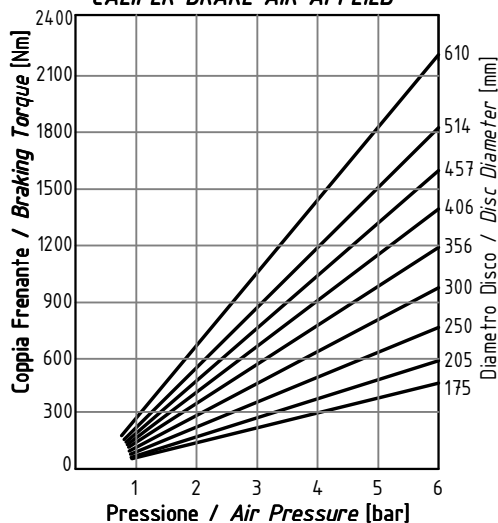
- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **110 cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ftx(Φ(m)/2-0.029(m))]**

**Funzionamento Negativo/Pneumatically Released**

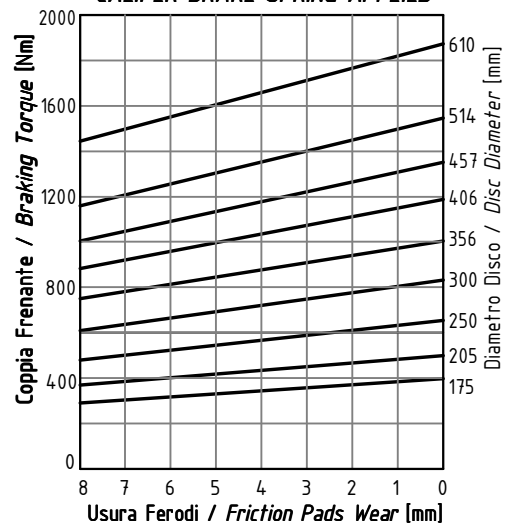
- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **160 cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads =9mm

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	EMax	G	Forza Frenante: Positivo-Negativo / Braking Force	Peso
PPH-PN033/12.7	19.56.033.03	12.7	160	271	200	280	80	Ft <sub>pos</sub> = 8020N (6bar) Ft <sub>neg</sub> = 6800N (0bar)	14.8 kg
PPH-PN033/25.4	19.56.033.04	25.4	180	271	207	297	90	Ft <sub>pos</sub> = 8020N (6bar) Ft <sub>neg</sub> = 6800N (0bar)	15.2 kg

FRENO A PINZA USO POSITIVO  
CALIPER BRAKE AIR APPLIED



FRENO A PINZA USO NEGATIVO  
CALIPER BRAKE SPRING APPLIED



**Coppia Frenante Md**

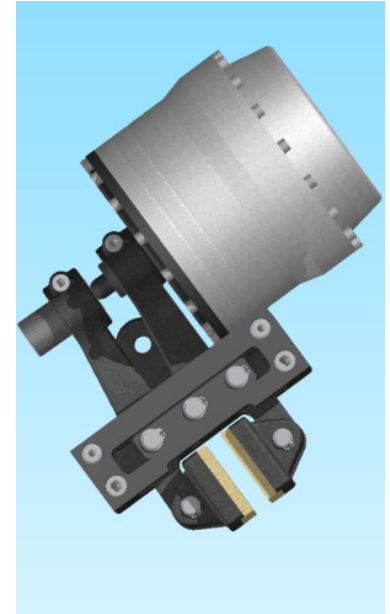
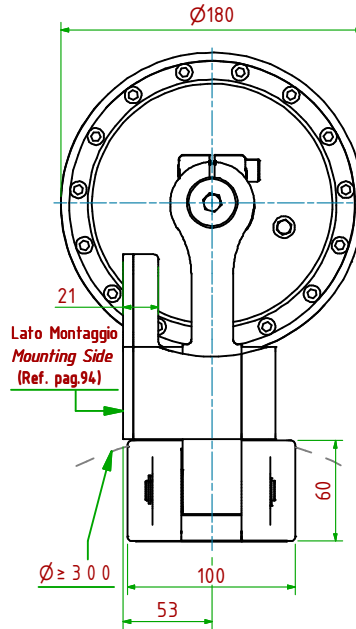
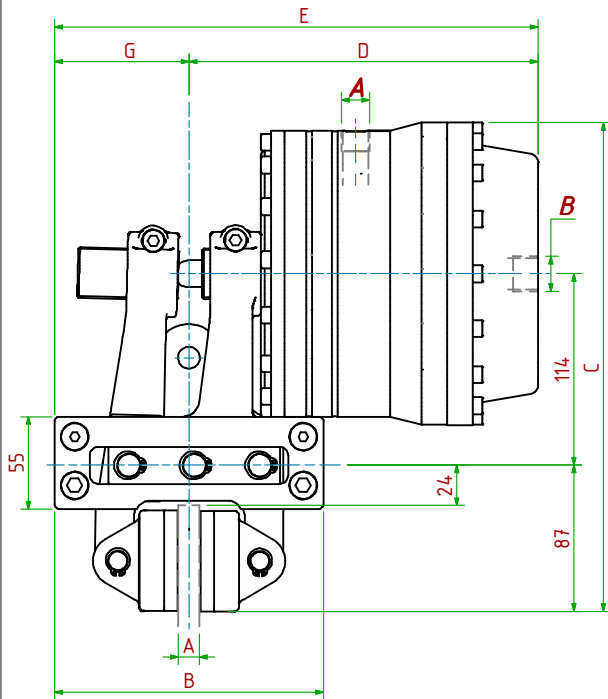
La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assestamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.

PPH-PN034/□□□

Pneumatico DUO / Pneumatically DUO



**Funzionamento Positivo/Pneumatically Applied**

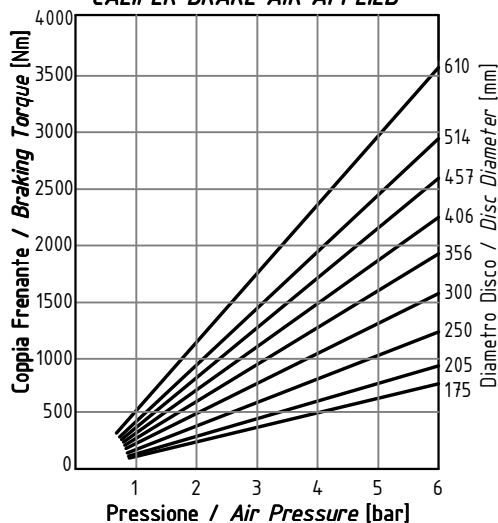
- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **175cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ft x (Φ(m)/2-0.029(m))]**

**Funzionamento Negativo/Pneumatically Released**

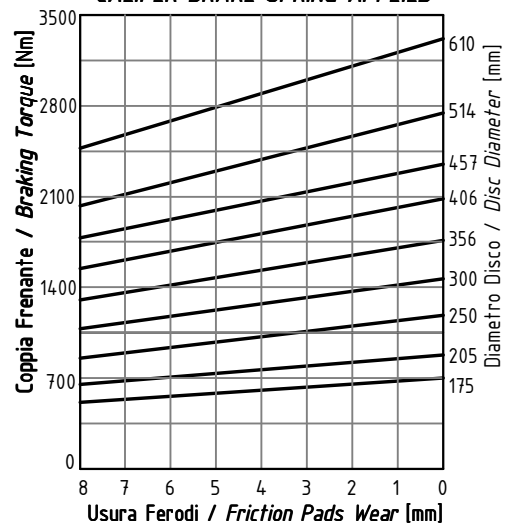
- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B: 1/2"Gas**
- Volume Max Cilindro/Max Cylinder Volume **285cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads =9mm

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	EMax	G	Forza Frenante: Positivo-Negativo / Braking Force	Peso
PPH-PN034/12.7	19.56.034.03	12.7	160	291	208	288	80	Ft <sub>pos</sub> = 12910N (6bar) Ft <sub>neg</sub> = 12000N(0bar)	18.3 kg
PPH-PN034/25.4	19.56.034.04	25.4	180	291	214	304	90	Ft <sub>pos</sub> = 12910N (6bar) Ft <sub>neg</sub> = 12000N(0bar)	18.7 kg

FRENO A PINZA USO POSITIVO  
CALIPER BRAKE AIR APPLIED



FRENO A PINZA USO NEGATIVO  
CALIPER BRAKE SPRING APPLIED



**Coppia Frenante Md**

La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assestamento del ferodo sulla superficie del disco.

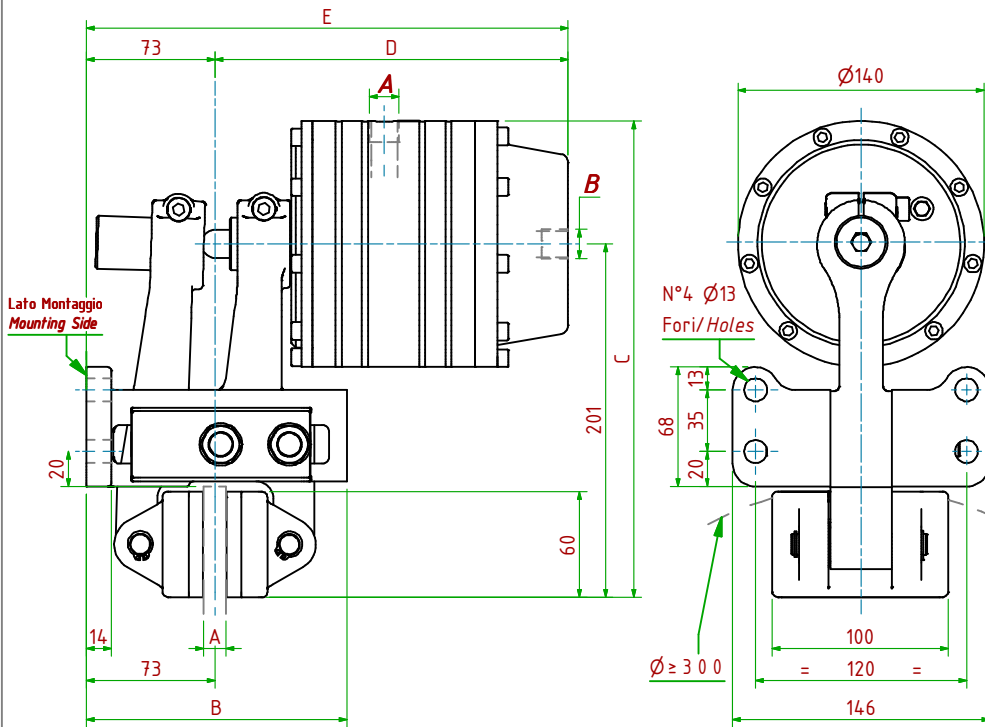
**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.



PPHP-PN330/□□□

Pneumatico DUO / Pneumatically DUO



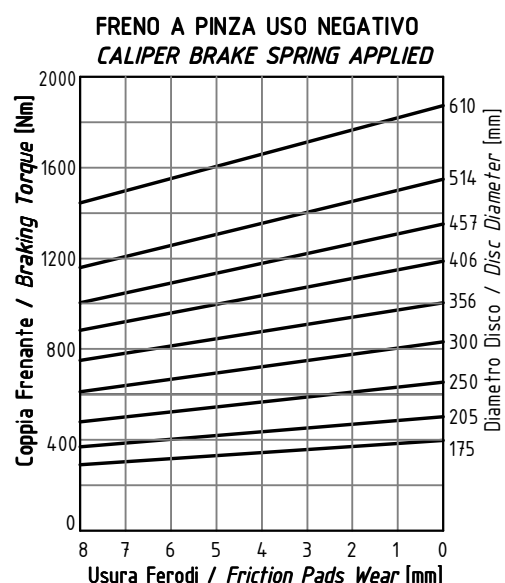
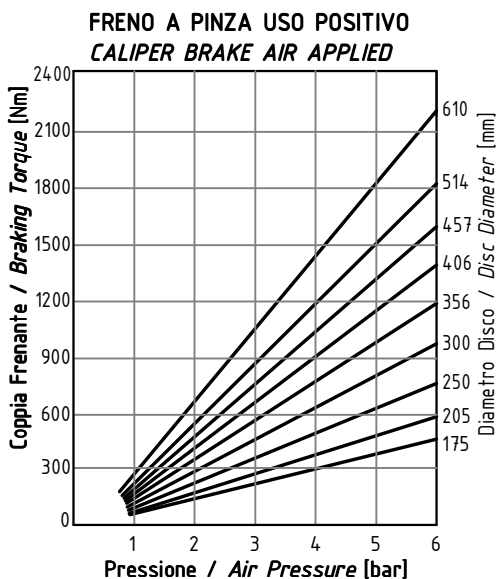
**Funzionamento Positivo/Pneumatically Applied**

- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **110 cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ft x (Φ(m)/2 - 0.029(m))]**

**Funzionamento Negativo/Pneumatically Released**

- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **160 cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads = **9mm**

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	EMax	Forza Frenante: Positivo-Negativo / Braking Force		Peso
PPHP-PN330/12.7	19.56.330.03	12.7	148	271	201	274	Ft <sub>pos</sub> = 8020N (6bar)	Ft <sub>neg</sub> = 6800N (0bar)	13.4 kg
PPHP-PN330/25.4	19.56.330.04	25.4	148	271	207	280	Ft <sub>pos</sub> = 8020N (6bar)	Ft <sub>neg</sub> = 6800N (0bar)	13.5 kg



**Coppia Frenante Md**

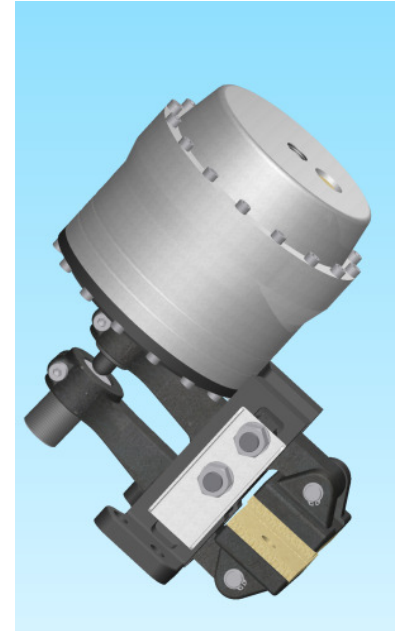
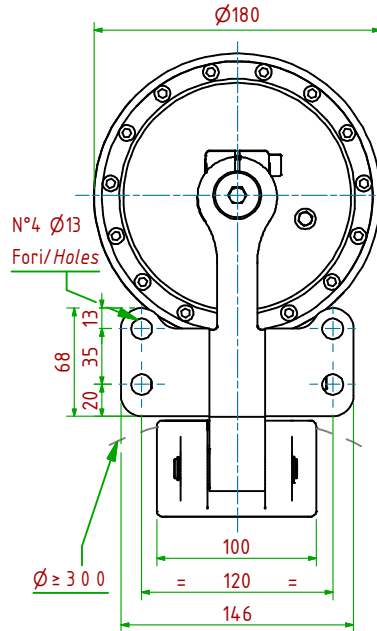
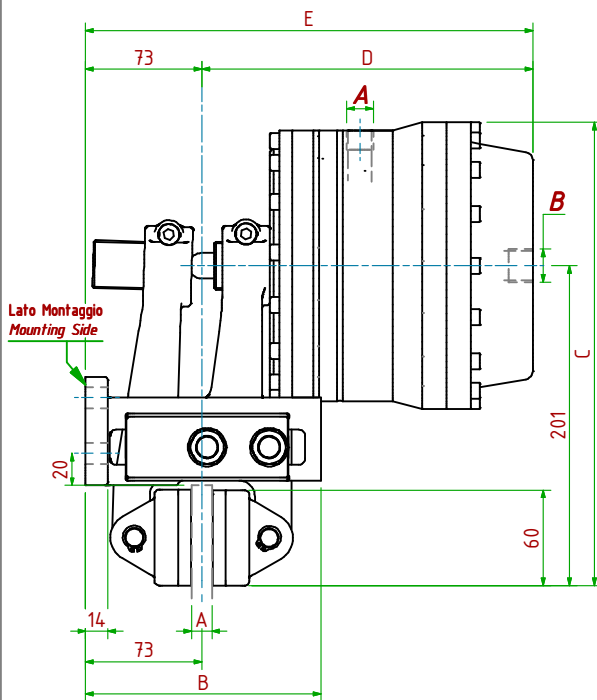
La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assestamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.

PPHP-PN340/□□□

Pneumatico DUO / Pneumatically DUO



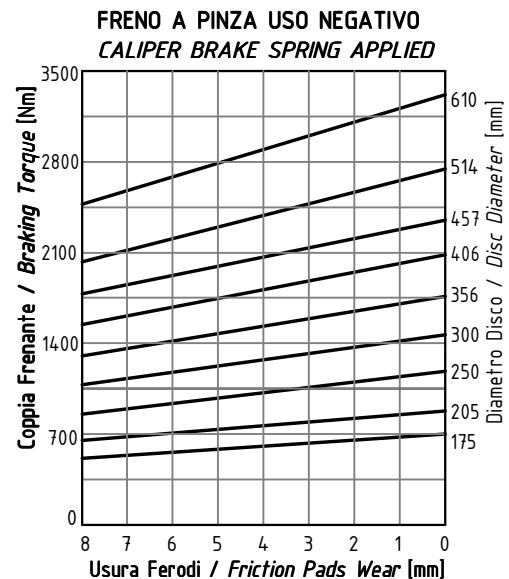
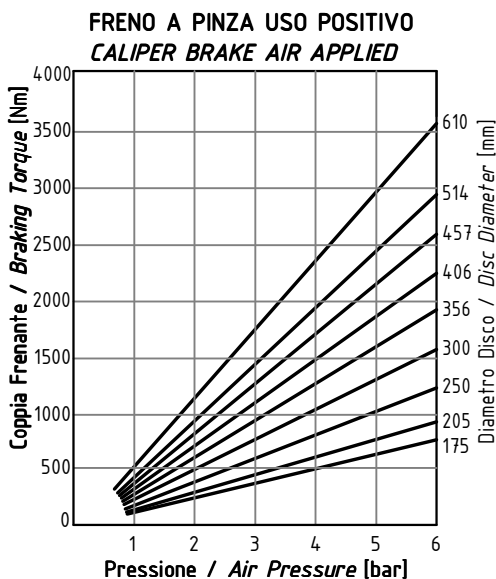
**Funzionamento Positivo/Pneumatically Applied**

- Pressione di Lavoro/Operating Pressure **Pl= 6bar**
- Alimentazione Cilindro/Pneumatic Cylinder Supply **A: 3/8"Gas**
- Volume Max Cilindro/Max Cylinder Volume **175cm<sup>3</sup>**
- Coppia Frenante/Braking Torque **Md= [Ftx( $\Phi(m)/2-0.029(m)$ )]**

**Funzionamento Negativo/Pneumatically Released**

- Pressione di Apertura/Release Pressure **Pa= 6bar**
- Alimentazione Cilindro/Spring Applied Cylinder Supply **B: 1/2"Gas**
- Volume Max Cilindro/Max Cylinder Volume **285cm<sup>3</sup>**
- Usura Ferodi Massima Totale/Maximum total wear of pads =9mm

MODELLO/MODEL	CODICE/ CODE	A	B	C	DMax	EMax	Forza Frenante: Positivo-Negativo / Braking Force	Peso
PPHP-PN340/12.7	19.56.340.03	12.7	14.8	291	208	281	Ft <sub>pos</sub> = 12910N (6bar) Ft <sub>neg</sub> = 12000N(0bar)	16.8 kg
PPHP-PN340/25.4	19.56.340.04	25.4	14.8	291	214	287	Ft <sub>pos</sub> = 12910N (6bar) Ft <sub>neg</sub> = 12000N(0bar)	16.9 kg



**Coppia Frenante Md**

La coppia frenante iniziale può essere dal 30% al 50% in meno rispetto al valore nominale, fino al completo assestamento del ferodo sulla superficie del disco.

**Braking Torque Md**

The initial braking torque can be from 30% up to 50% less than nominal torque, until the friction pad works correctly on the disc surface.