

# MU Series

## MU Disc Brake Caliper Range

The Twiflex MU series of disc brake calipers is the smallest in the Twiflex range and is primarily intended for light stopping and holding duties. Its design permits left or right-handed assembly.

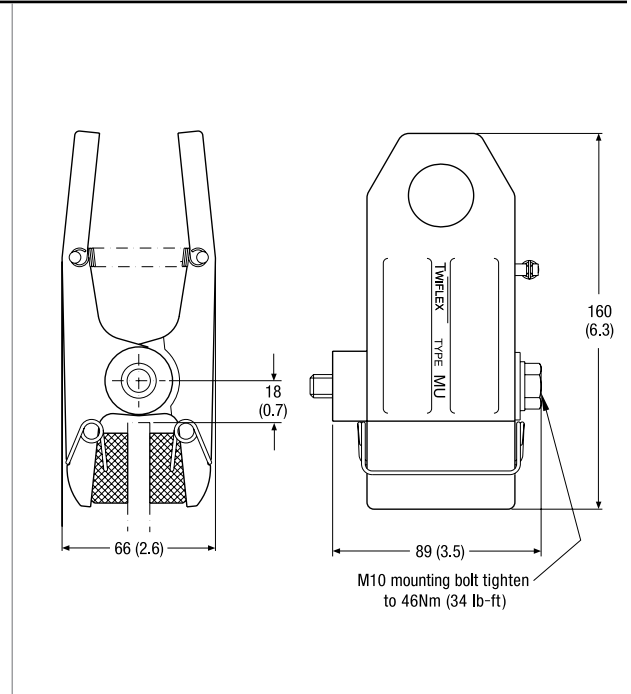
The caliper is suitable for use with a disc thickness of 8mm (.032 in), however, with a revised thruster mounting arrangement, may be used with discs 12.7mm (0.5 in) thick. Minimum disc diameter is 150mm (5.9 in). A range of brake discs is available from Twiflex (see Disc and Hub Assemblies).

Fixing bolt to be supplied by the customer.

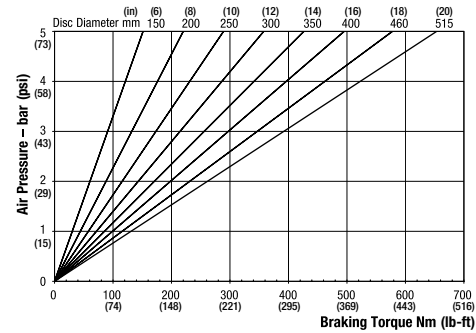
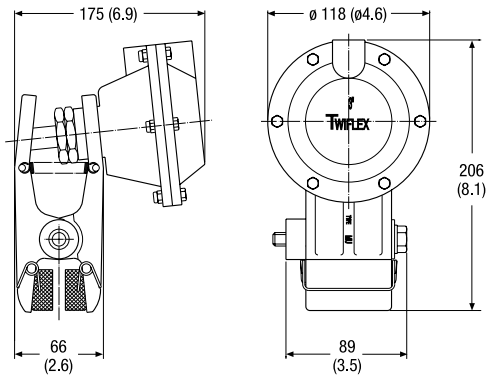
For pneumatic operation use dry, filtered and non-lubricated compressed air. Pneumatic brakes require a control valve, operated either manually or by pneumatic or electrical signal.

The ratings shown on the graphs are based on fully bedded in and conditioned brake pads with a nominal friction coefficient  $\mu = 0.4$ . Twiflex disc brakes must be used with Twiflex asbestos free brake pads.

Effective disc radius = actual radius (m) - 0.02m  
(Effective disc radius = actual radius [ft] - 0.07 ft)



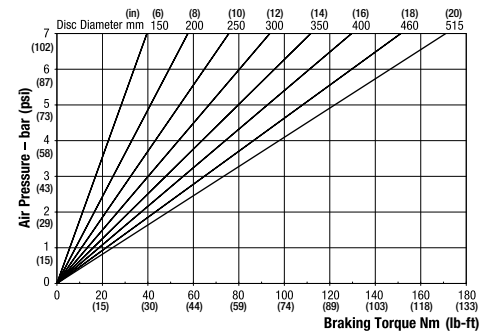
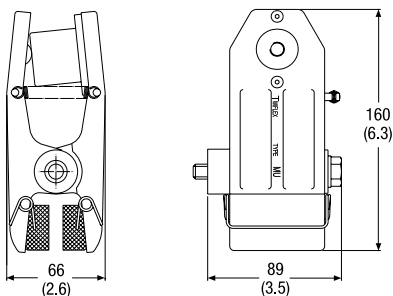
### MU3 Pneumatically Applied – Spring Released



Maximum Pressure 5 bar (73 psi)  
Maximum Braking Force = 2.75kN@ 5 bar (618.22 lbf @ 73 psi)  
Weight of caliper and thruster - 1.9kg (4.19 lb)  
Weight of thruster only - 1.15kg (2.54 lb)  
Volume displacement of thruster at 13mm stroke = 46ml (1.56 fl oz)

Measurements in millimeters, inches in parentheses.

### MUP Pneumatically Applied – Spring Released

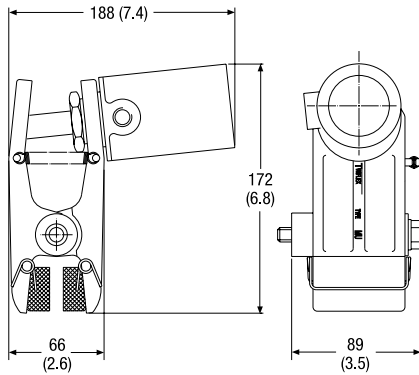


Maximum Pressure 7 bar (102 psi)  
Maximum Braking Force = 0.72kN@ 7 bar (161.86 lbf @ 102 psi)  
Weight of caliper and thruster - 0.8kg (1.76 lb)  
Weight of thruster only - 0.05kg (0.11 lb)  
Volume displacement of thruster at 6mm stroke = 4ml (0.14 fl oz)

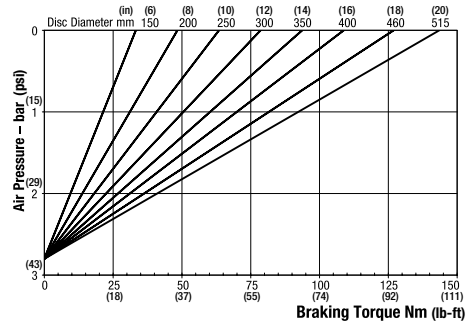
Measurements in millimeters, inches in parentheses.

Retraction pressures where shown are calculated and may vary depending on spring tolerance.

## MUS2 Spring Applied – Pneumatically Released

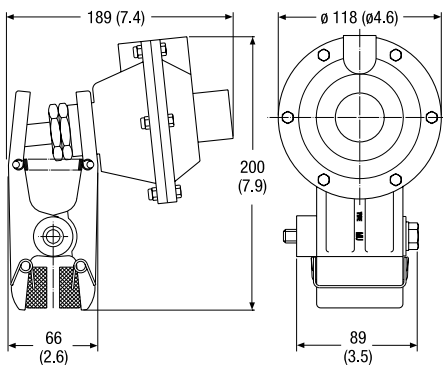


Measurements in millimeters, inches in parentheses.

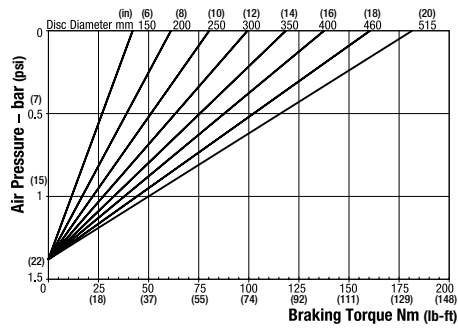


Maximum Pressure = 7 bar (102 psi)  
 Minimum Pressure for full retraction = 4.3 bar (62.37 psi)  
 Maximum Braking Force = 0.6kN (134.89 lbf)  
 Weight of caliper and thruster – 1.36kg (3.00 lb)  
 Weight of thruster only – 0.61kg (1.34 lb)  
 Volume displacement of thruster at full retraction = 20ml (0.68 fl oz)

## MUS3 Spring Applied – Pneumatically Released

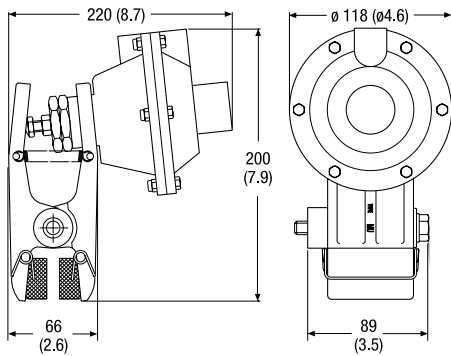


Measurements in millimeters, inches in parentheses.

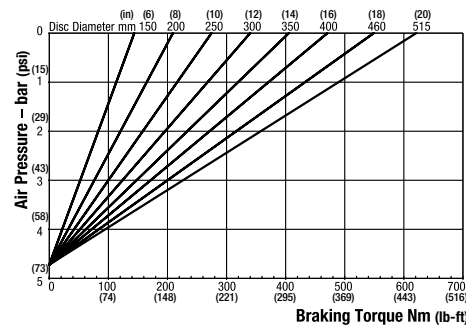


Maximum Pressure = 7 bar (102 psi)  
 Minimum Pressure for full retraction = 1.75 bar (25.38 psi)  
 Maximum Braking Force = 0.76kN (170.85 lbf)  
 Weight of caliper and thruster – 2.2kg (4.85 lb)  
 Weight of thruster only – 1.45kg (3.20 lb)  
 Volume displacement of thruster at full retraction = 46ml (1.56 fl oz)

## MUS4 Spring Applied – Pneumatically Released

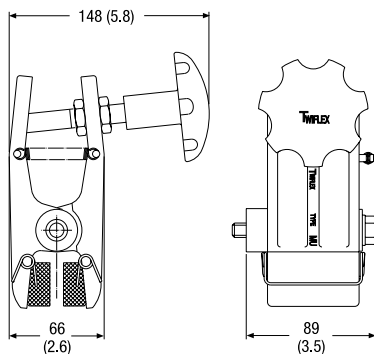


Measurements in millimeters, inches in parentheses.



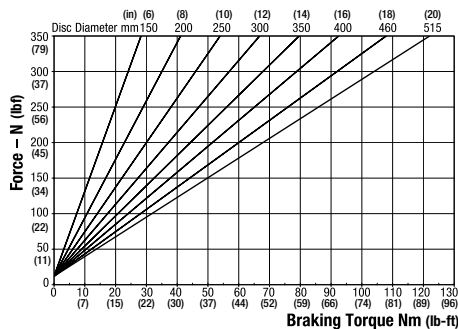
Maximum Pressure = 7 bar (102 psi)  
 Minimum Pressure for full retraction = 6.2 bar (89.92 psi)  
 Maximum Braking Force = 2.6kN (584.50 lbf)  
 Weight of caliper and thruster – 2.24kg (4.94 lb)  
 Weight of thruster only – 1.49kg (3.28 lb)  
 Volume displacement of thruster at full retraction = 46ml (1.56 fl oz)

## MUH Mechanically Applied – Hand Operated



Measurements in millimeters, inches in parentheses.

Retraction pressures where shown are calculated and may vary depending on spring tolerance.



Weight of caliper and thruster – 1.9kg (4.19 lb)  
 Weight of hand wheel assembly only – 1.15kg (2.54 lb)  
 Maximum Braking Force = 0.51kN (114.65 lbf)