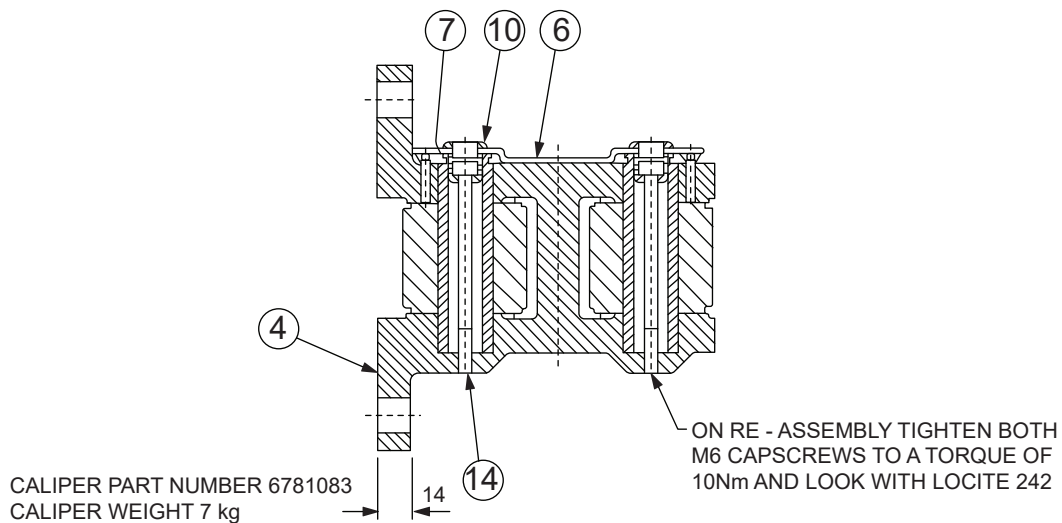
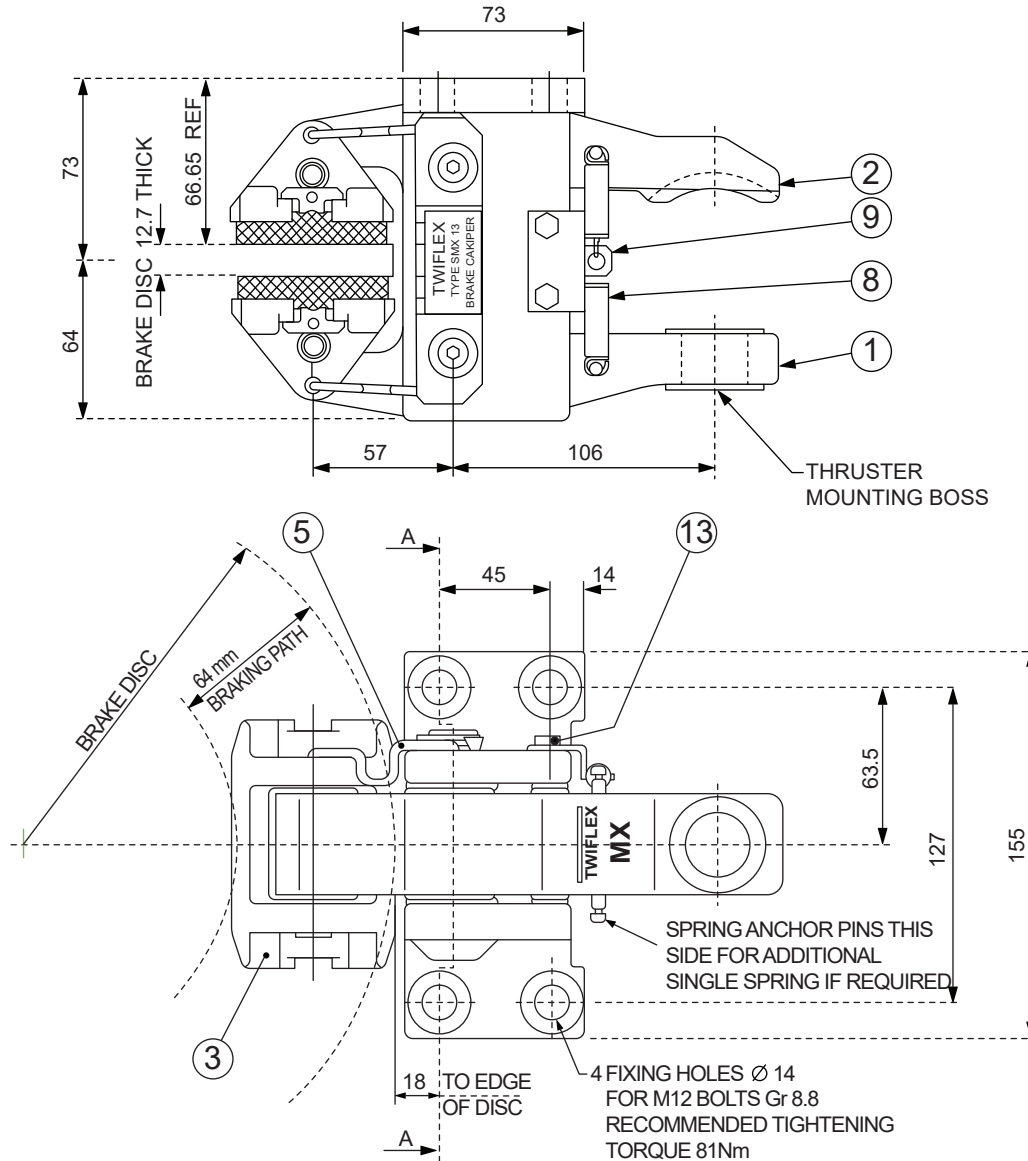


## SMX Disc Brake Caliper



CALIPER PART NUMBER 6781083  
CALIPER WEIGHT 7 kg

SECTION 'A - A'

# SMX Disc Brake Caliper

## General Description

The Twiflex SMX disc brake caliper is used with a brake disc of 12.7mm thick. It may be used with any of the range of actuators listed below. Normally one or two brake calipers will be used per disc but the number may be increased, depending on disc size and brake torque required.

Type	Description	Braking Force	Data Sheet
A	Pneumatically applied - spring released	6.9 kN @ 7 bar	DS2551
B5	Pneumatically applied - spring released	11.0 kN @ 7bar	DS2552
D	Pneumatically applied - spring released	3.6 kN @ 7bar	DS2553
XS	Spring applied - pneumatically released	6.8 kN / 11.2 kN / 14.3 kN	DS2559
XSH	Spring applied - hydraulically released	6.8 kN / 11.2 kN / 14.3 kN	DS2560
EMX	Spring applied - electrically released		
E	Pneumatically applied - spring released	0.745 kN	DS2554
G	Pneumatically applied - spring released	1.9 kN	DS2555
W	Mechanically applied hand operated	2.68 kN manual	DS2561
H	Mechanically applied lever operated	8.3 kN manual @ 0.9 kN force	DS2556

The brake units may be positioned at any angle around the periphery of the disc, but ideally they should be mounted horizontally (in 3 or 9 o'clock positions) in relation to the disc.

If a caliper is mounted at any angle of more than about 10° from the horizontal, it should be fitted with an incline mounting kit. This also applies to calipers used on vertical shaft installations.

The SMX brake caliper can be used for braking in either direction.

## Discs:

A range of standard discs of 12.7mm thick are available from Twiflex (Data Sheet DB5002).

Minimum disc size 300mm diameter, no maximum.

The discs are manufactured from spheroidal graphite cast iron, which is the preferred material. Grey iron can be used, but the maximum speed is reduced by one third. Forged or wrought (not cast) steel having a hardness of 200 HB minimum may also be used. Disc rubbing paths should have a surface of 2µm CLA or better, and be flat and parallel within 0.05mm. It is essential that the mounting bolt holes have clearance to allow for thermal expansion between disc and hub. It is recommended that maximum end float is 2mm.

## Controllers:

Standard Twiflex Controllers are available for single or multi-caliper installations for use with electric, pneumatic and hydraulic signalling systems.

## Friction Pads:

High friction material of moulded asbestos-free type is used with standard SMX brake calipers. For special purposes other friction materials are available.

Allowable pad wear is 5mm. Total pad area = 104cm<sup>2</sup> (2 pads).

New pad dimensions: 60 x 90 x 13mm thick. Standard pad part number 7080118. (Two pads required).

Item	Component	Qty	Part No.
1	Arm assembly (thruster)	1	6630147
2	Arm assembly (Slotted)	1	6630148
3	Brake pad assembly	2	7080118
4	Caliper base	1	7932505
5	Spring link	2	2500198
6	Component	1	7951480

Item	Component	Qty	Part No.
7	Pivot pin	2	7952383
8	Tension spring	2	2400158
9	Spring anchor bracket	1	7951501
13	M6 x 1 O Setscrew	2	5300228
14	M6 x 80 Capscrew	2	5400455

Twiflex Disc Brakes must be used with Twiflex asbestos free brake pads. The use of any other brake pads will invalidate the warranty.

For bedding-in and conditioning procedures see publication M1060.

Twiflex reserves the right to modify or change the design without prior notice.

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