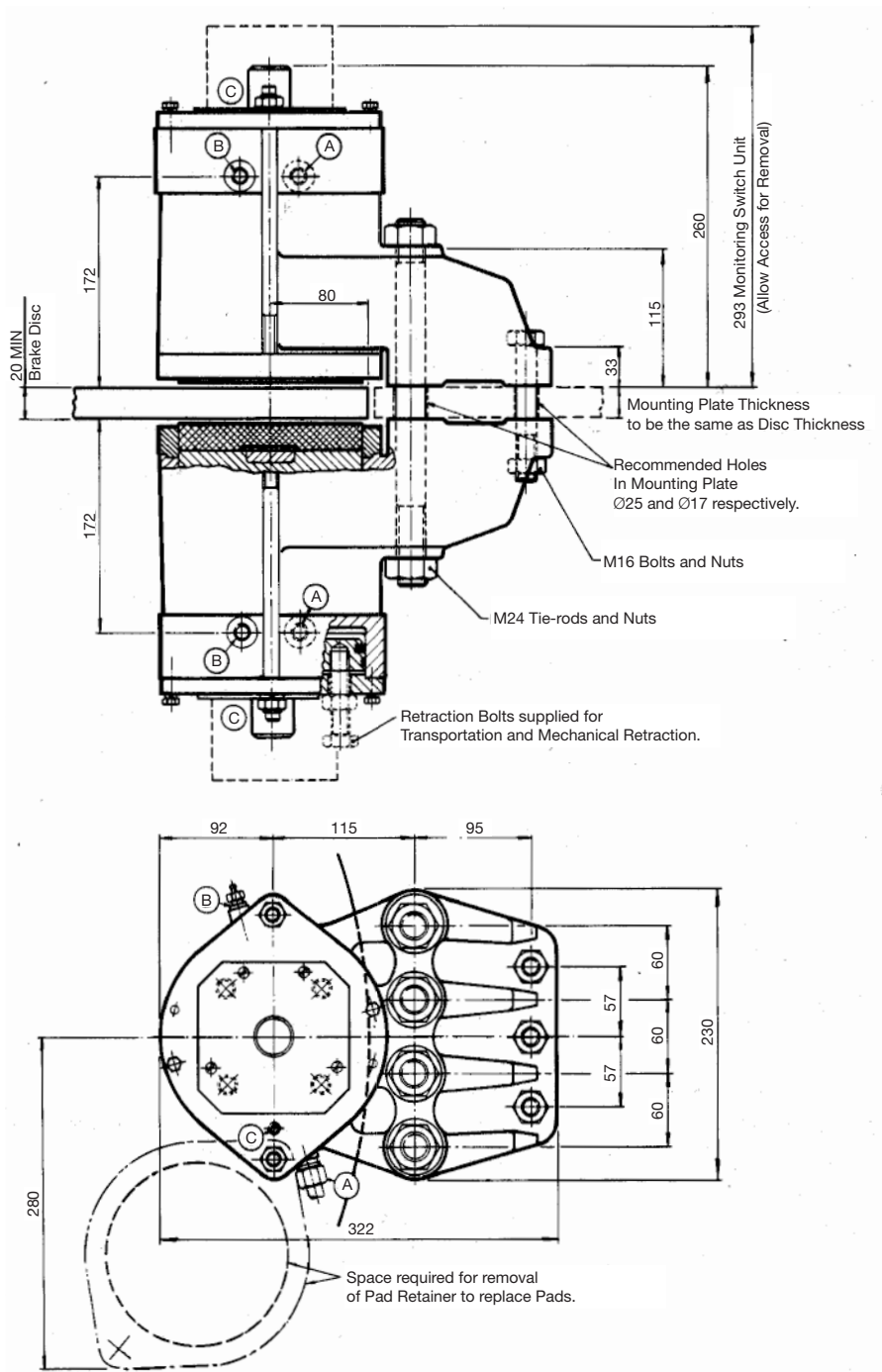


Disc Brake Caliper – Type: VKS Spring Applied, Hydraulically Released

See Publication Ref. No. M230 for Installation, Operation and Maintenance.
Technical and Performance Data on reverse side.



FITTINGS/PORTS

- A. Inlet Port -G3/8 (3/8" BSP) 1 each side*
- B. Bleed Screw Port-G3/8 (3/8" BSP) 1 each side
- C. Drain Connections-G1/8 (1/8" BSP) 1 each side piped to waste container at atmospheric pressure.

*Inlet ports are usually supplied with fittings for Ø 12 x 1.5mm pipe to DIN 2319C.

Disc Brake Caliper – Type: VKS Spring Applied, Hydraulically Released

Technical Data:

Pad dimensions (new) – 150mm diameter x 21mm thick.

Total friction pad area per caliper – 353cm²

Pad wear allowance – 10mm (each pad).

Caliper weight – 110 Kg approx.

Minimum disc diameter – 700mm (suitable brake discs can be made to order).

Brake disc thickness – Calipers can accommodate any brake disc thickness from 20mm upwards. Hydraulic fluid – Use with MINERAL OIL BASED hydraulic fluids only, (such as Shell Tellus 37 or Castrol Hyspin AWS32). Correctly formulated glycol water emulsion may also be used.

Total oil displacement for 4.5mm reaction of both pads – 134ml.

Total oil displacement for 3mm retraction of both pads – 90ml.

Maximum retraction – 6mm.

Mechanical retraction aid – Each caliper module is supplied with four retraction bolts and nuts

which when fitted hold the brakes in the fully retracted condition and are an aid to installation and servicing of the brake.

They must be removed before the brake can be applied. (See Publication M230).

Maximum recommended operating pressure = retraction pressure* (See Table) + 15 bar.

Optional monitoring switch unit – A monitoring unit is available which indicates the need for pad stroke adjustment, provides warning that the pads are nearing limit of wear and indicates that brake is off.

Performance Data: Typical for calipers set at 4.5mm retraction at each pad (for full capacity consult Twiflex graph G.1304).

Caliper Type	Braking Force kN	HYDRAULIC PRESSURE		Caliper Part No.
		To Release Brake bar	To Give Full Retraction bar*	
VKS137	103	103	135	6702206
VKS118	86	86	120	6702214
VKS105	69	69	105	6702215
VKS71	61	58	67	6702216
VKS62	53	50	59	6702217

These are typical performance figures for bedded and conditioned brake pads (Pad Part No. 7080100) having a friction coefficient of 0.4.

An appropriate service factor should be applied when designing the braking system, and in the case of brakes used for holding duties or in wet conditions this should be not less than 2.0.

Braking Torque (kNm) = Braking Force (kN) x Effective Disc Radius (m)

where Effective Disc Radius (m) = Actual Disc Radius (m) – 0.080.

Conversion factor: 1 kNm = 737.6 lbf-ft 1 bar = 14.5 psi.

Spares

A spare set of brake pads should be kept in a dry place where there is no chance of oil contamination.

Service

Address all enquiries regarding this equipment to your Twiflex agent or direct to Twiflex.