CLAIMS

1. A pinch valve assembly for use in bioprocessing, the pinch valve assembly for compression of a fluid conduit and comprising:

an assembly housing (1); and

an interchangeable compressor element (2);

the assembly housing configured to house one of a plurality of interchangeable holder elements (3), each dimensioned for holding a fluid conduit of a different size, the holder element facing the interchangeable compressor element;

the valve assembly being configured such that, in use, the compressor element is moveable towards the holder element within the assembly housing for compression of a fluid conduit between the compressor element and the holder element with sufficient force to seal any one of the fluid conduits of different sizes against internal fluid pressure.

2. The pinch valve assembly of claim 1 wherein, in use, the compressor element is moveable between an open position wherein a fluid conduit between the compressor and the holder elements is uncompressed and a closed position wherein a fluid conduit between the compressor and the holder elements is compressed.

3. The pinch valve assembly of any preceding claim wherein the holder element comprises a threaded channel (5) in a base portion (6).

4. The pinch valve assembly of claim 3 wherein the holder element is fixable to the assembly housing via threaded bolt inserted into the threaded channel of the base portion.

5. The pinch valve assembly of any preceding claim further comprising a closure assembly (8, 15) fixable to the valve assembly housing.

6. The pinch valve assembly of claim 5 wherein the closure assembly is fixed to the valve assembly housing with a clamp (9).

7. The pinch valve assembly of claim 5 or 6 wherein the closure assembly is configured to be manually actuated.

8. The pinch valve assembly of claim 5 or 6 wherein the closure assembly is configured to be pneumatically actuated.

9. The pinch valve assembly of claim 7 wherein the closure assembly comprises an elongate element and wherein the closure assembly is configured to move the compressor element from the open position to the closed positon by application of a twisting force to the elongate element.

10. The pinch valve assembly of claim 8 wherein the closure assembly comprises a biased element and wherein the closure assembly is configured to move the compressor element from the open position to the closed positon by pneumatic actuation of the biased element.

11. The pinch valve assembly of any preceding claim wherein the compressor is fabricated from stainless steel.

12. The pinch valve assembly of any preceding claim wherein the holder element is fabricated from Polyphenylsulfone, PPSU.

13. The pinch valve assembly of any preceding claim wherein the fluid conduit is a polymeric tube.