WHAT IS CLAIMED IS:

1. A sensing arrangement for a medical device comprising:

a housing including:

a rigid portion including a tip and a stem;

a flexible portion including:

a collar region and a tail region, a rear flange protruding from the flexible portion in the tail region, a front flange protruding from the flexible portion between the collar region and the rear flange, a throat region being between the front flange and the rear flange, the collar region being attached to the exterior of the rigid portion between the tip and the stem; and

wherein the stem is positioned within the flexible portion between a first plane passing through the collar region and a second plane passing through the throat region.

2. The sensing arrangement of claim 1 comprising a passageway of the rigid portion extending from the tip to the stem and a sensing element positioned at least partially within the interior passageway at the tip.

3. The sensing arrangement of claim 2 comprising at least one wire attached to the sensing element and extending through the passageway to the stem and into the interior of the flexible portion.

4. The sensing arrangement of any preceding claim wherein the collar region is configured to roll over a portion of the rigid portion as the rigid portion moves axially.

5. The sensing arrangement of any preceding claim wherein the collar region comprises a curved region that is configured to roll over an attachment region, the attachment region being the region where the flexible portion connects to the rigid portion.

6. The sensing arrangement of any preceding claim further comprising one or more seals, the seals engaging the housing in use to protect the housing and a sensor associated with the housing.

7. The sensing arrangement of claim 6 wherein the one or more seals have a target region that contacts the sensor.

8. The sensing arrangement of claim 7 wherein a width of the target region is 90% or more of the width of an opening in the seal, wherein the opening is configured to receive the housing and sensor within it.

9. The sensing arrangement of any of claims 7 or 8 wherein the seal comprises a cap portion, said target portion forming at least part of the cap portion, the cap portion comprising at least a portion configured to stretch when the housing and sensor within it is received therein.

10. The sensing arrangement of any of claims 7 to 9 wherein the housing comprises a sealing flange provided between the tip and the collar region, the sealing flange for sealingly mating with the seal at an end thereof distal from the target region.

11. The sensing arrangement of claim 10, wherein the sealing flange protrudes from the exterior of the rigid portion.

12. The sensing arrangement of claim 10 or 11 wherein the seal defines an internal passageway that is closed at a first end, said first end being formed at least in part by the target region, wherein, at rest, a length of said passageway is less than a length of the housing between the tip and the sealing flange.

13. The sensing arrangement of claim 12 wherein the seal is configured to stretch such that a second end of the seal contacts the sealing flange when in an operative position with the housing received inside the passageway, the second end being distal from the first end and defining an opening into the passageway.

14. The sensing arrangement of any preceding claim wherein at least part of the flexible portion is resiliently deformable and/or acts as a spring or resilient member such that the rigid portion is urged towards a rest position.

15. A removable component for a medical device comprising a sensing arrangement according to any of the preceding claims.

16. The removable component of claim 15 comprising a wall having an aperture therein, the aperture being configured to receive the sensing arrangement therein.

17. The removable component of claim 16 wherein the aperture is dimensioned to receive the housing such that the wall is positioned between the rear flange and the front flange.

18. The removable component of any of claims 15 to 17 configured to permanently or removably couple to said medical device.

19. A medical device comprising a sensing arrangement according to any of claims 1 to 14.

20. The medical device of claim 19 comprising a wall having an aperture therein, the aperture being configured to receive the sensing arrangement therein.

21. The medical device of claim 20 wherein the aperture is dimensioned to receive the housing such that the wall is positioned between the rear flange and the front flange.

22. The medical device of any of claims 19 to 21 configured to permanently or removably couple to said sensing arrangement.

23. The medical device of claim 22 wherein said coupling comprises an electrical and/or communicative coupling for enabling signals from sensor(s) of the sensing arrangement, or data derived therefrom, to be communicated to the medical device and/or for components of the sensing arrangement to be electrically powered.

24. The medical device of any of claims 19 to 23, comprising a heater base, the heater base being configured to receive a liquid chamber and heat the contents thereof.

25. The medical device of claim 24, wherein, upon engagement of the chamber with the heater base, at least a portion of the housing of the sensing arrangement is received in an aperture in the chamber, said aperture preferably being provided in an inlet port or an outlet port of the chamber.