What is claimed is:

1. A flow rate sensor, said flow rate sensor comprising:

a housing having an inlet and an outlet, said housing defining a flow path between said inlet and said outlet;

a shaft rotatably mounted within said housing;

an obturation body positioned within said housing between said inlet and said outlet, said obturation body being mounted on said shaft and movable relatively thereto and relatively to said housing in response to fluid flow between said inlet and said outlet;

a sensing arm having a first end fixedly mounted on said shaft and a second end engaging said obturation body;

a sensor system adapted to sense rotation of said shaft relatively to said housing.

2. The flow rate sensor according to claim 1, wherein said obturation body comprises a disk oriented transversely to said flow path.

3. The flow rate sensor according to claim 2, wherein said obturation body further comprises at least one lug extending between said disk and said shaft, said lug defining a hole receiving said shaft.

4. The flow rage sensor according to claim 3, wherein said hole is sized to permit rotational and translational motion of said disk relatively to said shaft.

5. The flow rate sensor according to claim 2, further comprising a seat surrounding said inlet, said obturation body being engageable with said seat.

6. The flow rate sensor according to claim 5, further comprising a spring acting between said obturation body and said housing for biasing said obturation body into engagement with said seat.

7. The flow rate sensor according to claim 1, further comprising a projection extending from said sensor system into said housing, said spring acting between said projection and said sensing arm.

8. The flow rate sensor according to claim 5, further comprising a seal positioned between and mounted on one of said seat or said obturation body.

9. The flow rate sensor according to claim 1, further comprising a weight mounted on said sensing arm distal to said shaft.

10. The flow rate sensor according to claim 1, further comprising a link extending between said sensing arm and said obturation body, said link being positioned distal to said shaft for flexibly connecting said sensing arm to said obturation body.

11. The flow rate sensor according to claim 1, further comprising an actuator for moving said sensing arm, said actuator comprising a push rod having a first end extending from said housing and a second end engageable with said sensing arm proximate to said shaft, said push rod defining a line of action eccentric to said shaft thereby enabling a force applied to said push rod to rotate said sensing arm about said shaft.

12. The flow rated sensor according to claim 11, wherein said actuator further comprises a solenoid adapted to move said push rod.

13. The flow rate sensor according to claim 1, further comprising an actuator for moving said sensing arm, said actuator comprising:

an axle having a first end projecting from said housing and a second end positioned within said housing proximate to said shaft;

a cam mounted on said second end of said axle, said cam being rotatable into and out of engagement with said sensing arm upon rotation of said axle to effect rotation of said sensing arm and said shaft.

14. The flow rate sensor according to claim 13, further comprising an electric motor engaged with said axle and adapted to rotate said axle for rotating said cam.

15. The flow rate sensor according to claim 1, wherein said actuator further comprises a lever arm attached to said first end of said axle, said lever arm extending transversely to said axle.

16. The flow rate sensor according to claim 14, further comprising a solenoid engaging said lever arm and adapted to move said lever arm and thereby rotating said axle.

17. The flow rate sensor according to claim 1, further comprising a magnet fixedly mounted on said shaft, said magnet being positioned proximate to said sensor system.

18. The flow rate sensor according to claim 17, wherein said magnet is positioned within said housing.

19. The flow rate sensor according to claim 18, wherein said magnet is mounted on an end of said shaft.

20. The flow rate sensor according to claim 19, wherein said magnet is surrounded by a non-magnetic sheath projecting from said housing.

21. The flow rate sensor according to claim 1, wherein said sensor system is positioned on an exterior of said housing.

22. The flow rate sensor according to claim 1, wherein said sensor system comprises a non-contact sensor.

23. The flow rate sensor according to claim 1, wherein said sensor system comprises a sensor selected from the group consisting of magnetic sensors, Hall effect sensors and capacitive sensors.

24. The flow rate sensor according to claim 1, wherein said sensor system comprises a magnetic position sensor.

25. The flow rate sensor according to claim 22, wherein said sensor system further comprises a controller in communication with said magnetic position sensor.

26. The flow rate sensor according to claim 23, wherein said sensor system further comprises an adjustable delay circuit in communication with said controller for delaying communication of an alarm signal from said controller.

27. The flow rate sensor according to claim 7, wherein said projection extending from said sensor system into said housing has an eccentric cross section.