CLAIMS

What is claimed:

1. An actuation device comprising:
   a housing comprising one or more ports, a magnetic valve component, and a central flowbore,
   wherein the central flowbore is configured to receive a disposable member configured to emit a magnetic field, and
   wherein the magnetic valve component is configured to radially shift from a first position to a second position in response to interacting with the magnetic field.
2. The actuation device of claim 1, wherein when the magnetic valve component is in the first position, the magnetic valve component prevents a route of fluid communication in a first direction between an exterior of the housing and the central flowbore of the housing via the one or more ports, and when the magnetic valve component is in the second position, the magnetic valve component allows fluid communication in the first direction via the one or more ports.
3. The actuation device of claim 1, wherein the magnetic valve component is configured to act as a check valve.
4. The actuation device of claim 1, wherein when the magnetic valve component is in the first position, the magnetic valve is configured to prevent fluid communication in all directions.
5. The actuation device of claim 1, further comprising a ball disposed within the housing, wherein the ball is configured to prevent flow through one or more of the one or more ports, and wherein the magnetic valve component is configured to release the ball upon transitioning to the second position.
6. The actuation device of claim 1, wherein the magnetic valve component comprises a selector switch in an autonomous inflow control device.
7. The actuation device of claim 1, wherein the magnetic field is emitted by at least one of a permanent magnet or an electro-magnet.
8. The actuation device of claim 1, further comprising an inflow control device disposed in a flow path between an exterior of the housing and the central flowbore of the housing via the one or more ports, wherein when the magnetic valve component is in the first position, the magnetic valve component prevents a route of fluid communication through the inflow control device, and when the magnetic valve

component is in the second position, the magnetic valve component allows fluid communication through the inflow control device.

9. The actuation device of claim 1, further comprising disposable member disposed within the central flowbore, wherein the disposable member comprises at least one magnet.

10. The actuation device of claim 9, wherein the at least one magnet comprises a first polarity alignment and a second polarity alignment, wherein the first polarity alignment is configured to radially shift the magnetic valve component from the first position to the second position, and wherein the second polarity alignment is configured to radially shift the magnetic valve component from the second position to the first position.

11. An actuation system for a downhole component comprising:

a wellbore tubular comprising a central flowbore and a magnetic valve seat, wherein the magnetic valve seat is disposed about the wellbore tubular; and

a disposable member comprising at least one magnet, wherein the disposable member is configured to be received within the central flowbore,

wherein the at least one magnet is configured to axially shift the magnetic valve seat from a first position to a second position when the plug passes within the central flowbore.

12. The actuation system of claim 11, further comprising a flow path disposed between an exterior of the wellbore tubular and an interior of the wellbore tubular, wherein the magnetic valve seat is configured to block flow through the flow path in the first position, and wherein the magnetic valve seat is configured to allow flow through the flow path in the second position.

13. The actuation system of claim 12, further comprising at least one of an autonomous inflow control device or an inflow control device in the flow path.

14. The actuation system of claim 11, further comprising a ball, wherein the ball is configured to sealingly engage the magnetic valve seat, wherein the magnetic valve seat is configured to retain and engage the ball when the magnetic valve seat is in the first position, and wherein the magnetic valve seat is configured to release the ball into the central flowbore when the magnetic valve seat is in the second position.

15. A method of actuating a magnetic valve in a wellbore comprising:

preventing, by a magnetic valve component disposed about a wellbore tubular, fluid flow through a fluid pathway in a wellbore assembly in a first direction,

wherein the fluid pathway is configured to provide fluid communication between an exterior of a wellbore assembly and an interior of the wellbore assembly;

passing a magnetic member through a central flowbore of the wellbore assembly; wherein the disposable member comprises a magnetic field;

transitioning at least one magnetic valve component from a first position to a second position in response to the magnetic field of the magnetic member; and

allowing fluid flow through the fluid pathway in the first direction in response to the transitioning of the at least one magnetic valve component.

16. The method of claim 15, wherein the transitioning of the at least one magnetic valve component comprises radially translating the at least one magnetic valve component.

17. The method of claim 15, wherein the at least one magnetic valve component comprises a magnetic seat configured to engage a ball, and wherein transitioning the at least one magnetic valve component comprises axially shifting the magnetic seat to release the ball.

18. The method of claim 15, wherein the wellbore assembly comprises an autonomous inflow control device, and wherein transitioning the at least one magnetic valve component comprises shifting the at least one magnetic valve component from a closed position to a restricted position.

19. The method of claim 15, wherein the at least one magnetic valve component prevents fluid communication in all directions along the fluid pathway in the first position.

20. The method of claim 15, further comprising releasing a ball in response to the transitioning of the at least one magnetic valve, wherein the ball is configured to prevent fluid flow through the fluid pathway in the wellbore assembly in a second direction when the at least one magnetic valve component is in the first position.

21. The method of claim 15, wherein the at least one magnetic valve component prevents fluid communication in a second direction through the fluid pathway when the at least one magnetic valve component is in the second position.

CLAIMS

1. An actuation device comprising:

a housing comprising one or more ports, a magnetic valve component, and a central flowbore; and

a ball disposed within the housing,

wherein the central flowbore is configured to receive a disposable member configured to emit a magnetic field,

wherein the magnetic valve component is configured to radially shift from a first position to a second position in response to interacting with the magnetic field,

wherein the ball is configured to prevent flow through one or more of the one or more ports, and

wherein the magnetic valve component is configured to release the ball upon transitioning to the second position.

2. The actuation device of claim 1, wherein when the magnetic valve component is in the first position, the magnetic valve component prevents a route of fluid communication in a first direction between an exterior of the housing and the central flowbore of the housing via the one or more ports, and when the magnetic valve component is in the second position, the magnetic valve component allows fluid communication in the first direction via the one or more ports.

3. The actuation device of claim 1, wherein the magnetic valve component is configured to act as a check valve.

4. The actuation device of claim 1, wherein when the magnetic valve component is in the first position, the magnetic valve component is configured to prevent fluid communication through the housing.

5. The actuation device of claim 1, wherein the magnetic valve component comprises a bistable switch in an autonomous inflow control device.

6. The actuation device of claim 1, wherein the magnetic field is emitted by at least one of a permanent magnet or an electro-magnet.

7. The actuation device of claim 1, further comprising an inflow control device disposed in a flow path between an exterior of the housing and the central flowbore of the housing via the one or more ports, wherein when the magnetic valve component is in the first position, the magnetic valve component prevents a route of fluid communication through the inflow control device, and when the magnetic valve component is in the second position, the magnetic valve component allows fluid communication through the inflow control device.

8. The actuation device of claim 1, further comprising disposable member disposed within the central flowbore, wherein the disposable member comprises at least one magnet.

9. The actuation device of claim 8, wherein the at least one magnet comprises a first polarity alignment and a second polarity alignment, wherein the first polarity alignment is configured to radially shift the magnetic valve component from the first position to the second position, and wherein the second polarity alignment is configured to radially shift the magnetic valve component from the second position to the first position.

10. A method of actuating a magnetic valve in a wellbore comprising:

preventing, by a magnetic valve component disposed about a wellbore tubular, fluid flow through a fluid pathway in a wellbore assembly in a first direction,

wherein the fluid pathway is configured to provide fluid communication between an exterior of a wellbore assembly and an interior of the wellbore assembly;

passing a magnetic member through a central flowbore of the wellbore assembly; wherein the disposable member comprises a magnetic field;

transitioning at least one magnetic valve component from a first position to a second position in response to the magnetic field of the magnetic member; and allowing fluid flow through the fluid pathway in the first direction in response to the transitioning of the at least one magnetic valve component; and

wherein the method further comprising releasing a ball in response to the transitioning of the at least one magnetic valve, wherein the ball is configured to prevent fluid flow through the fluid pathway in the wellbore assembly in a second direction when the at least one magnetic valve component is in the first position.

11. The method of claim 10, wherein the transitioning of the at least one magnetic valve component comprises radially translating the at least one magnetic valve component.

12. The method of claim 10, wherein the wellbore assembly comprises an autonomous inflow control device, and wherein transitioning the at least one magnetic valve component comprises shifting the at least one magnetic valve component from a closed position to a restricted position.

13. The method of claim 10, wherein the at least one magnetic valve component prevents fluid communication in all directions along the fluid pathway in the first position.

14. The method of claim 10, wherein the at least one magnetic valve component prevents fluid communication in a second direction through the fluid pathway when the at least one magnetic valve component is in the second position.