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.

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 at least one 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 disposable member through a central flowbore of the wellbore assembly;

wherein the disposable member comprises a magnetic field;

transitioning the 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 component, 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.