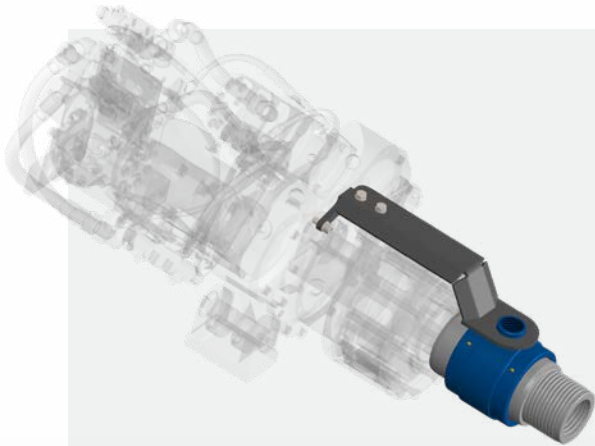




FLUSHING HEADS / SWIVELS



Sysbohr's highly qualified team develop custom tooling and economically efficient solutions for all drilling projects in the special civil engineering and geothermal energy sectors.

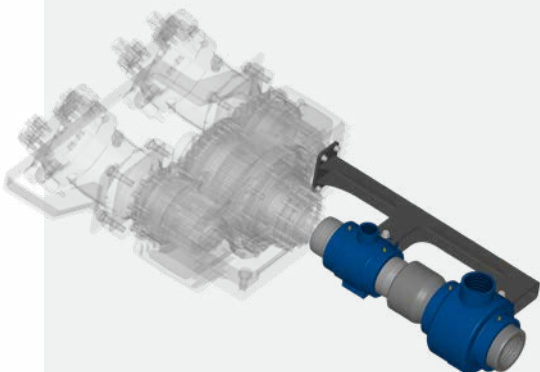
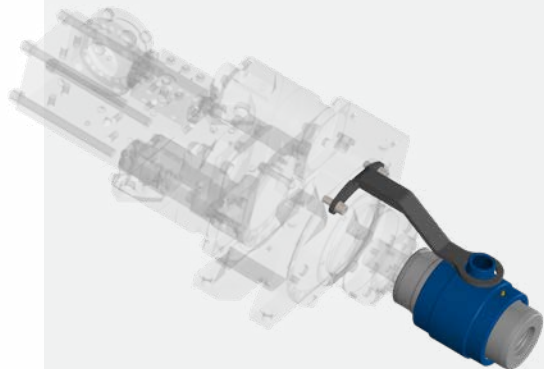
In order to increase the penetration rate of the drill string during the drilling process, and to transport the drilled cuttings from the toe of the borehole to the surface, flushing medium is introduced into the system.

The flushing medium can be water or air, or a combination thereof, and can be introduced into the drill string via the side inlet of the flushing head / swivel.

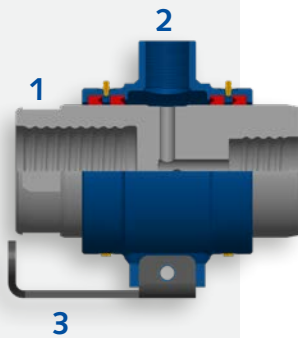
With the incorporation of various ejection bell and flushing ring designs and combinations, the drilled cuttings and flushing medium may be transported and ejected in a controlled manner through the flushing head / swivel.

For the production of grout bodies in anchor work, the cement suspension may be introduced to the system through the flushing head / swivel.

High pressure as well as low pressure flushing head / swivel versions with the respective sealing technology can be supplied for the most challenging projects.



FLUSHING HEADS / SWIVELS

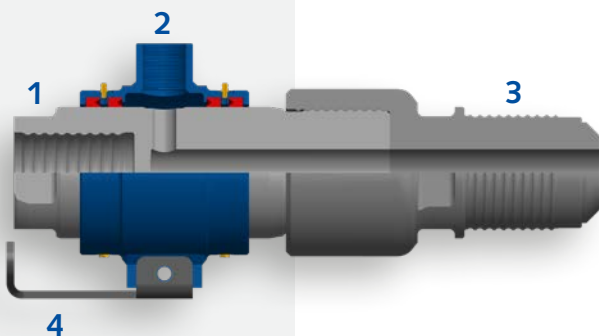


VARIANT 1

This flushing head / swivel variant is mostly used in double head configurations, but can also be encountered in single drifter applications.

Percussive flushing head consisting of:

- 1 Flushing shaft with thread types to suit shank adaptor and anchor or balancing rod
- 2 Flushing ring with thread type G 1" – G 3"
- 3 Traverse / holder to match hydraulic drifter

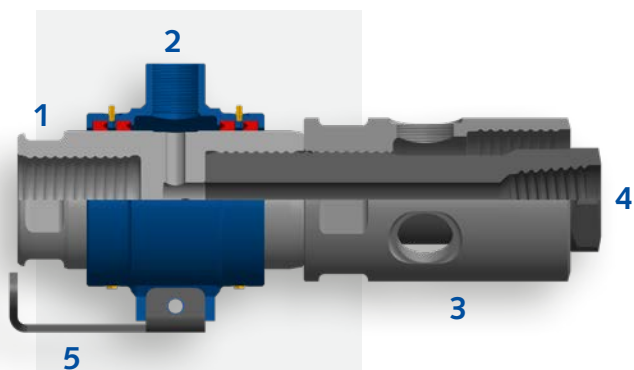


VARIANT 2

This flushing head / swivel is mostly used in outer flushing applications. A thread-saver design has been incorporated into the head to make replacement easier and more versatile.

Percussive flushing head consisting of:

- 1 Flushing shaft with thread types to suit shank adaptor and anchor or balancing rod
- 2 Flushing ring with thread type G 1" – G 3"
- 3 Percussion drive nipple / box to match the flushing shaft and outer casing
- 4 Traverse / holder to match hydraulic drifter

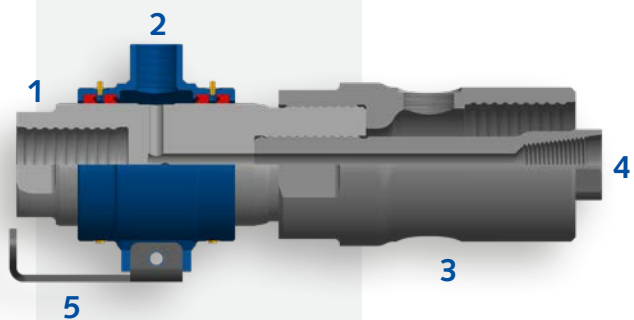


VARIANT 3

This flushing head / swivel is the shortest Duplex variant. The drilled cuttings are transported within the drill string annulus up to, and directed out of the ejection bell. This variant is especially suited to confined operating conditions. All parts are interchangeable.

COMPACT Duplex percussive flushing head consisting of:

- 1 Flushing shaft with thread types to suit shank adaptor and anchor or balancing rod
- 2 Flushing ring with thread type G 1" – G 3"
- 3 Ejection bell to suit balancing rod and outer drill string with ejection bell discharge ports (the ejection bell discharge ports may be closed off if and when required).
- 4 Balancing rod to flushing shaft and inner drill string
- 5 Traverse / holder to match flushing ring and hydraulic drifter

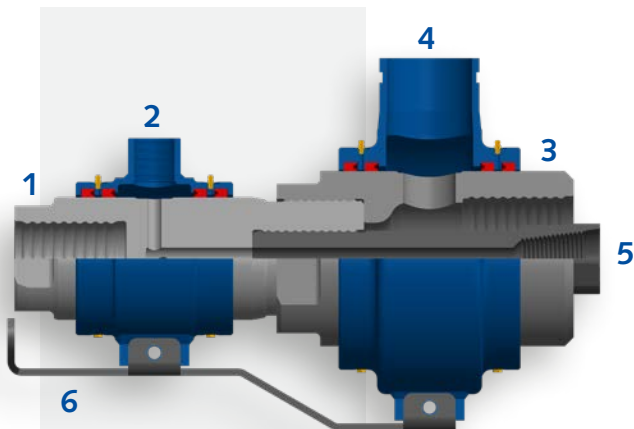


VARIANT 4

This flushing head / swivel is the most common Duplex variant. The drilled cuttings are transported within the drill string annulus up to, and directed out of the ejection bell. All parts are interchangeable.

Duplex percussive flushing head consisting of:

- 1 Flushing shaft with thread types to suit shank adaptor, ejection bell and balancing rod
- 2 Flushing ring with thread type G 1" – G 3"
- 3 Ejection bell to suit balancing rod and outer drill string with ejection bell discharge ports (the ejection bell discharge ports may be closed off if and when required).
- 4 Balancing rod to flushing shaft and inner drill string
- 5 Traverse / holder to match flushing ring and hydraulic drifter

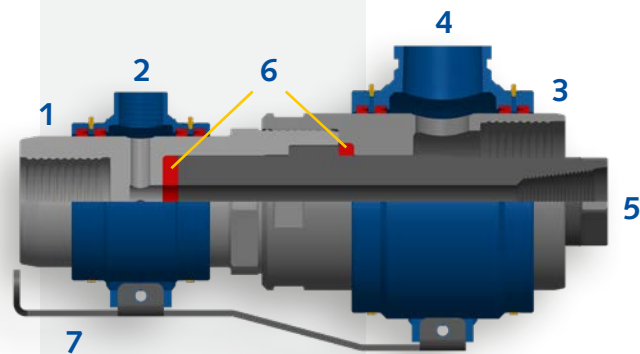


VARIANT 5

This flushing head / swivel is a duplex variant with an additional discharge flushing ring. The drilled cuttings are transported within the drill string annulus up to, and directed out of the ejection bell, thereby discharging in a controlled manner. All parts are interchangeable.

Duplex percussive flushing head consisting of:

- 1 Flushing shaft with thread types to suit shank adaptor, ejection bell and balancing rod
- 2 Flushing ring with thread type G 1" – G 3"
- 3 Ejection bell to suit flushing shaft and outer drill string with ejection ports
- 4 Discharge preventer / diverter flushing ring to suit ejection bell
- 5 Balancing rod to flushing shaft and inner drill string
- 6 Traverse / holder to hold flushing ring, discharge preventer / diverter flushing ring to hydraulic drifter

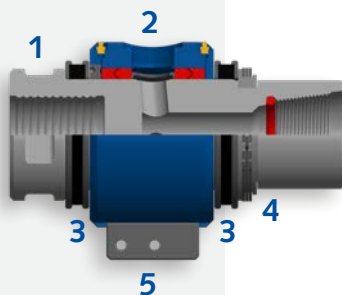


VARIANT 6

This flushing head / swivel is a duplex variant with an additional discharge flushing ring and a damped unit connected to the balancing rod. This enables the simultaneous use of a hydraulic drifter and DTH hammer. The drilled cuttings are transported within the drill string annulus up to, and directed out of the ejection bell, thereby discharging in a controlled manner. All parts are interchangeable..

Dual percussive flushing head consisting of:

- 1 Flushing shaft with thread types to suit shank adaptor, ejection bell and balancing rod
- 2 Flushing ring with thread type G 1" – G 3"
- 3 Ejection bell to suit flushing shaft and outer drill string with ejection ports
- 4 Discharge preventer / diverter flushing ring to suit ejection bell
- 5 Balancing rod to flushing shaft and inner drill string
- 6 Damper units
- 7 Traverse / holder to hold flushing ring, discharge preventer / diverter flushing ring to hydraulic drifter



VARIANT 7

This flushing head / swivel is a high pressure variant and can withstand up to 500 bar (7252 psi). Mostly utilised in water driven DTH hammer applications, and can be easily coupled to a shank adaptor.

High pressure flushing head consisting of:

- 1 Flushing shaft with thread type to suit shank adaptor and high pressure tubes
- 2 Flushing ring with thread type G 1-1/2"
- 3 Damper units
- 4 Securing elements
- 5 Traverse / holder to hold flushing ring, and to suit hydraulic drifter

PRECISION ENGINEERED DRILLING SOLUTIONS FROM INITIAL CONCEPT TO FINAL TOOL SYSTEMS – EVERYTHING UNDER ONE UMBRELLA!



Sysbohr's highly qualified team develop custom tooling and economically efficient solutions for all drilling projects in the special civil engineering and geothermal energy sectors.

THE ADDED ADVANTAGE

Project planning including: Support and guidance of drilling personnel over the entire duration of the project at hand. Quick and on-track customer results mirrored by Sysbohr's quick turn around times from order to final delivery.

We look forward to being your partner of choice on your next projects and challenges.

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Sysbohr's offering includes the development and production of tools and accessories for the entire range of applications in diameters from 51 mm (2") to 610 mm (24").

The systems shown in this product catalogue show standard system variants and can be combined together to form unique systems if required.

Non-off-the-shelf products for complex drilling applications and extreme drilling conditions can be tailor-made to meet customer needs and expectations.

Sysbohr's sales team look forward to guiding customers through a detailed in-house consulting process, whereby a comprehensive drilling solution is identified and generated.