



Technical Publication No. 08-001

LUER CONNECTION FLOW INTERRUPTER

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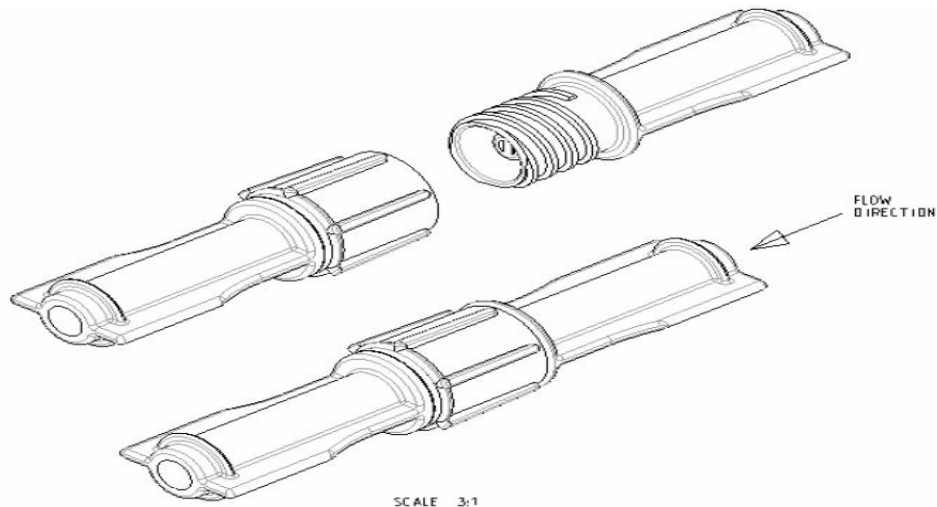
The luer connection flow interrupter is designed to create turbulent flow at the interface of the male luer tip and female luer socket of a luer connection. The ISO Luer standard design is documented in ISO 594/1 and 594/2. The turbulent flow is used to flush or prime away the inherent air trapped at this interface. The interrupter must be used in the luer lumen where the fluid enters the luer interface.

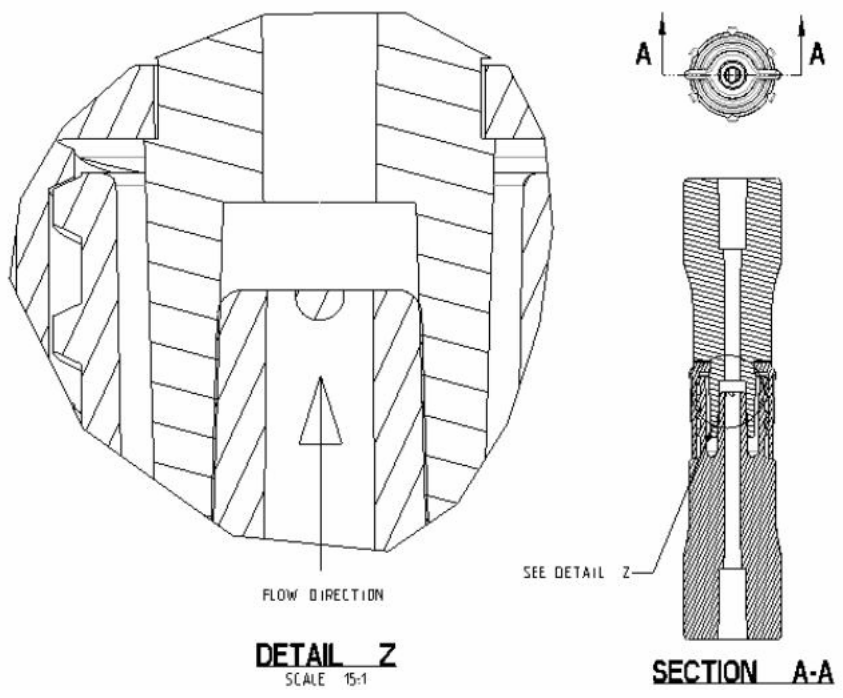
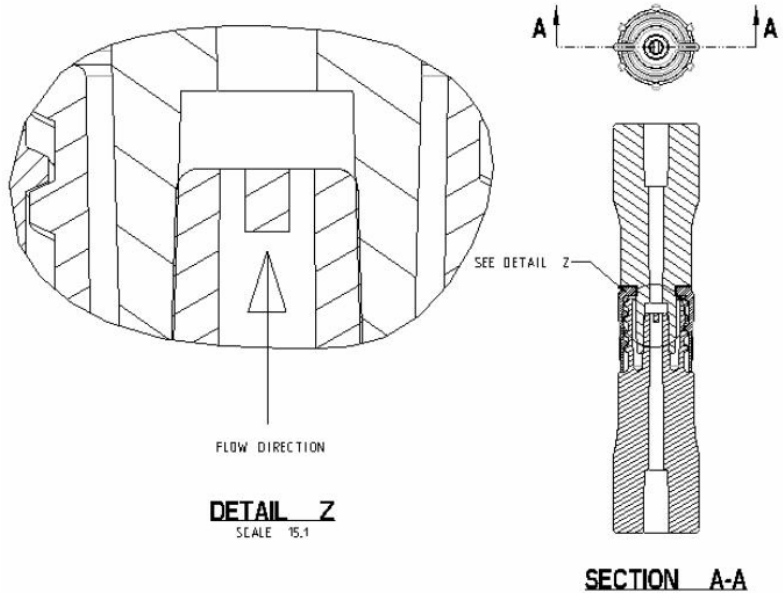
SPECIFICATION

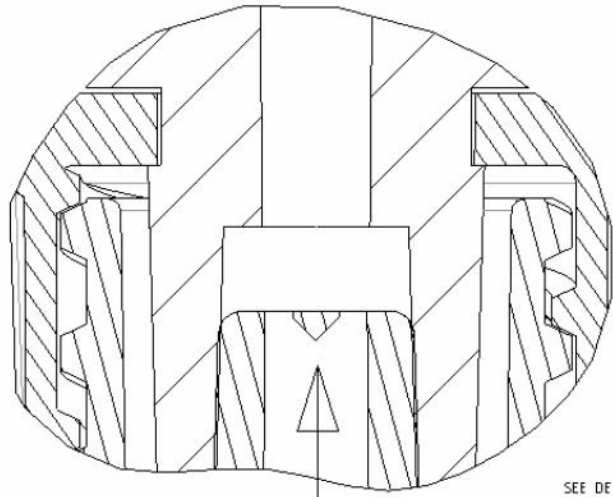
Many luer fitting connections are used in a gravity flow system, where airtraps are not a significant risk and they will usually rise and clear the luer interfaces or can be eliminated with aggressive purging technics. In the venous side of the heart, these small air bubbles are less harmful. Cardiovascular or angiography procedures are on the arterial side where the presence of air bubbles is significant and a higher risk.

This invention is an enhancement to the ISO luer standard design, to be used in pressurized tubing sets where gravity or aggressive purging technics cannot reliably flush or prime away the airtrap.

This design can be used to automatically purge air from a pressurized fluid delivery system, where gravity cannot be used. Different profiles can be used to allow the flushing or priming of the air trap under pressurized flow.

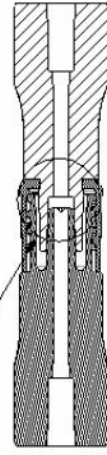






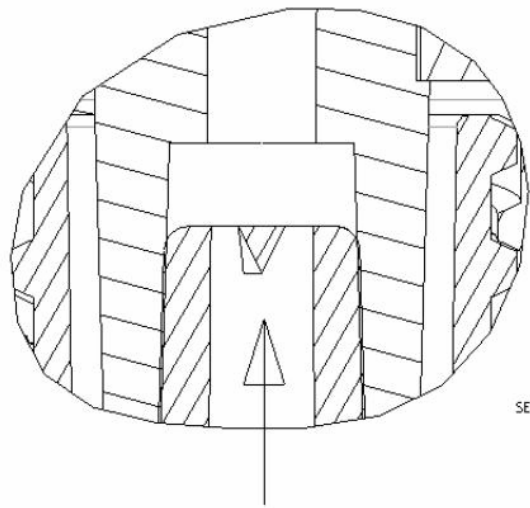
FLOW DIRECTION

DETAIL X
SCALE 15:1



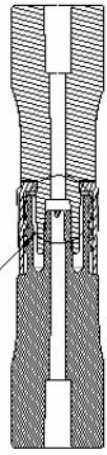
SEE DETAIL X

SECTION A-A



FLOW DIRECTION

DETAIL Z
SCALE 15:1



SEE DETAIL Z

SECTION A-A