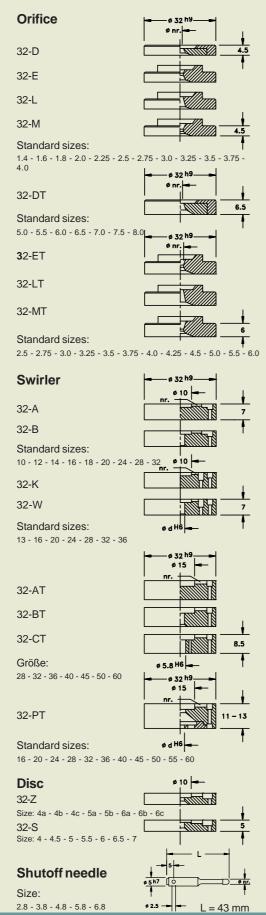
## **Disc Atomizer 32**

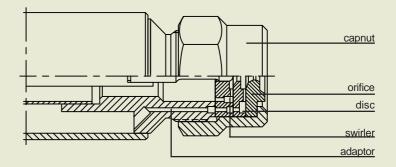


General description



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The disc atomizer 32 is the most flexible industrial nozzle for an output range of 460 kg/h up to 2200 kg/h.

The nozzle is available as a two disc or three disc construction atomizer using an orifice and swirler or resp. a flow disc. By combining different disc types it is possible to acchieve different spray patterns at high and low flow rate and spray angles between 50 and 110 degree at nominal output. Thus it is always possible to adapt the nozzle to the special characteristics of an existing burner head.

If a nozzle cut off is requested this can be done by using a shutoff needle together with a special swirler disc. This system is TÜV approved and allows oil to circulate through the nozzle under operating conditions. So immediately after opening the needle a good atomization will result even after long periods of idling and when using heavy oil.

When using high supply pressure, for constant operation or heavy oil, an orifice with a 3 micron thin layer of high resistant TiN (2.300 HV) is recommended.

## Simplex nozzle 32

There are two output ranges available. The first one is using a swirler disc of type A with an orifice of type D or L, the second one with swirler of type AT and orifice of type DT or LT will extend flow rate up to 3000 kg/h.

## Two disc return flow nozzle 32

Beside the code number of the combination, flow rate of a return flow nozzle is depending basically on supply and return pressure. Thus turn down ratios up to 1 : 6 can be acchieved. Flow rate and spray angle are given at maximum return pressure, i. e. with closed return line. Only in this case increasing of supply pressure will result in flow rate enlargement. With return line open, increase of supply pressure will result in a flow rate decrease at constant return pressure.

For return flow nozzles without shutoff needle the most commonly used swirler is type B with orifice type D, E, L or M for the lower output range. For the higher output range a swirler of type BT together with an orifice of type DT, ET, LT or MT can be used. Swirler disc type P or PT is mostly to be used together with a shutoff needle due to its integrated needle guidance and central bore for return line. Please select the needle size depending on the swirler disc size according to information sheet 325FFMCG.

## Three disc return flow nozzle 32

Using this return flow nozzle larger turn down ratios are possible because oil flow to the nozzle will be split whereas supply and return line are changed.

For a better flow adjustment this nozzle is equipped with an additional disc between orifice and swirler. This disc is available in two sizes to fit any requirement.

To close the orifice using a needle, a disc of type W has to be used together with a needle of type L.

The disc of type Z can be used together with any orifice of type D, E, L or M. The orifice of type M will mostly be used for binary system burner applications.

Using of disc type S together with an orifice of type LS or MS will produce a special droplet size distribution so that a huge turn down ratio will result for most of the oil burner constructions.

For all applications burner lances are available with hydraulic and pneumatic control of the shutoff needle and integrated or external volume regulator.