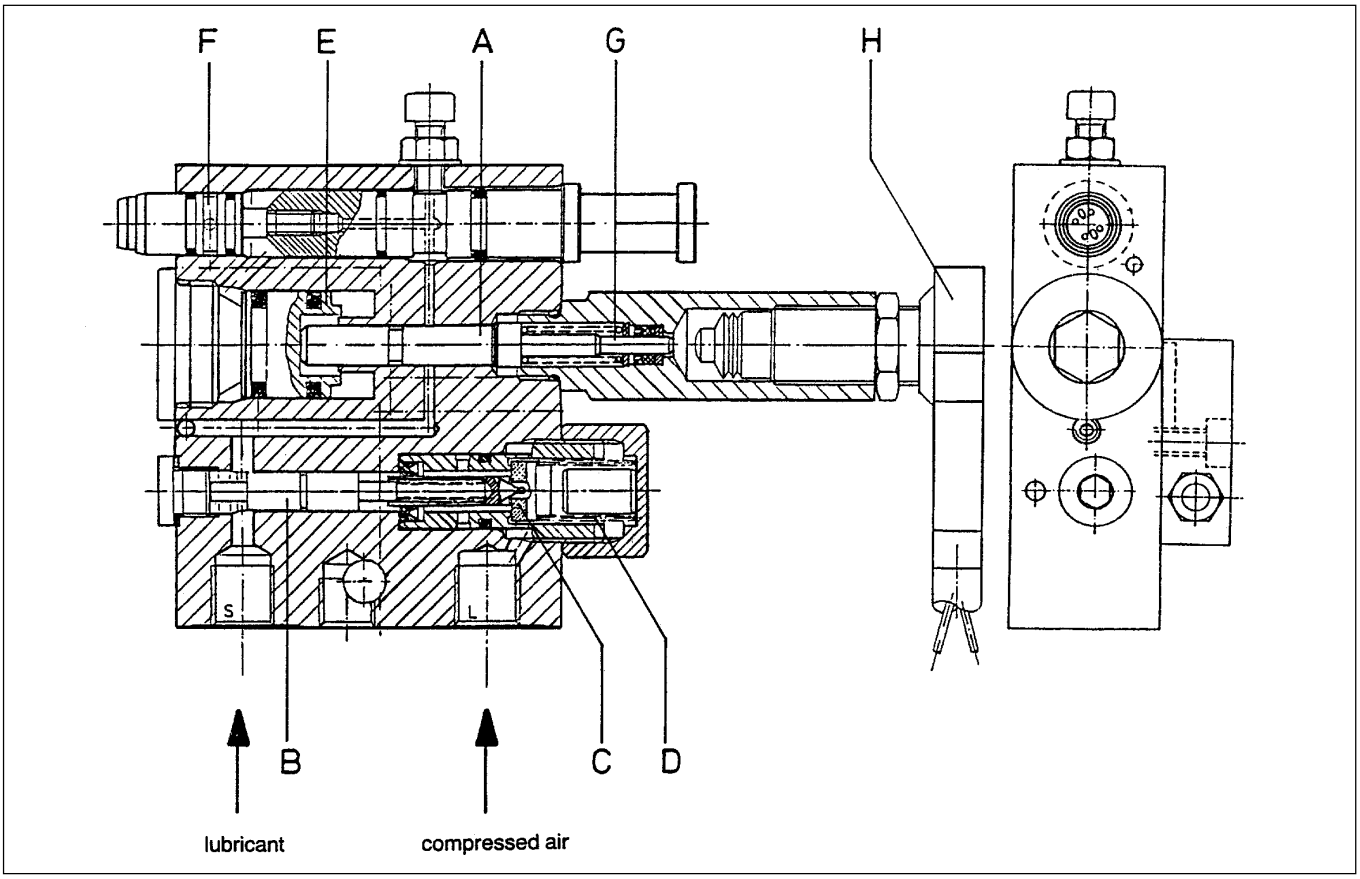
Functional Description
Wide-angle Spray Nozzle SDL..KR-ES



A - piston slide
B - valve piston
C - valve plate
D - compression spring
E - air piston
F - nozzle
G - piston rod
H - limit switch

Via the supply channels integrated in the nozzle the lubricant supplied by the pump first of all reaches piston slide valve **A**, which blocks the supply passage. An overpressure is built-up by the blocked supply passage and results in a displacement of valve piston **B**. The valve piston presses valve plate **C** against the pressure spring **D**. The air valve opens and the air flow towards the nozzle is released.

The air reaches the air piston **E** through a channel not shown in the following drawing. The air pressure now available in front of the air piston results in a displacement of the air piston towards the limit switch thus placing the ring nut of piston slide valve **A** into the supply passage of the spray lubricant. The spray lubricant which was blocked at the piston slide valve can now continue its way via the following channels to nozzle insert **F** with its spray lubricant bores.

At the same time, the compressed air reaches nozzle insert **F** with its air bores via own channels. Spray lubricant and air take separate ways and mix outside of the nozzle only whereby the air as the means of transport applies the lubricant onto the area to be lubricated.

Provided the proper functioning of the nozzle, piston slide valve **A** pushes the piston rod **G** to the limit switch **H** thus indicating the trouble-free operation of the nozzle.

If the nozzle does not receive any spray lubricant, no overpressure can build-up in front of valve piston **B**, the air valve will not open and the air piston with piston slide valve and piston rod **E, A, G** is not displaced. The limit switch is not activated within the prescribed time. A fault indication will be given.

If the nozzle does not receive any air, the air pressure required for the displacement of the air piston with piston slide valve and piston rod **E, A, G** is not available. The limit switch is not activated within the prescribed time. A fault indication will be given.

Änderungen vorbehalten Subject to change witout notice

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