

# ZEG Injector

## Junction Mounting, Positive Displacement Injector, Oil



### General

ZEG Injectors deliver a fixed pre-measured quantity of lubricant at the outlet connection during each discharge cycle. ZEG Injectors are available in six discharge rates. System distribution connections utilizing Bijur Delimon standard junctions and 4mm (5/32") secondary tubing can be used with these units.

### Application

ZEG Injectors can only be used in cyclic operation oil systems and feed in one direction only. These injectors can be mounted in any direction.



### System Requirements

The lubricating pump in a PDI oil system must build up line pressure to 145 psi (10 bar) minimum to actuate injector discharge, maximum operating pressure is 435 psi (30 bar). A pressure relief device must be used in the system to permit pressure to drop quickly to approximately 36 psi (2.5 bar) between lubrication cycles to allow injectors to fully reset, ready for next lubrication cycle.

### Technical Data

Oil Viscosity	30-3000 cSt at operating temperature
Mounting	Junction
Discharge	Preset (non-adjustable) in six various rates
Maximum Operating Pressure	435 psi (30 bar)
Minimum Operating Pressure	145 psi (10 bar)
Maximum Relieving Pressure	36 psi (2.5 bar)
Maximum Operating Temperature	175°F (80°C)
Leak tight Junction Connection	4.5 Newton-Meter (40 pound inch maximum)
Material	Brass
Inlet	M10X1 male threads
Outlet	M8X1 female threads (for 4mm (5/32) tubing connection*)

\*Compression sleeve 35001 & male compression bushing 73511-5133

#### BIJUR DELIMON INTERNATIONAL

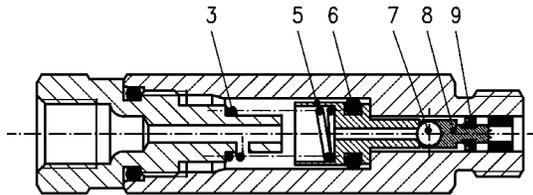
(919) 465 4448 LOCAL  
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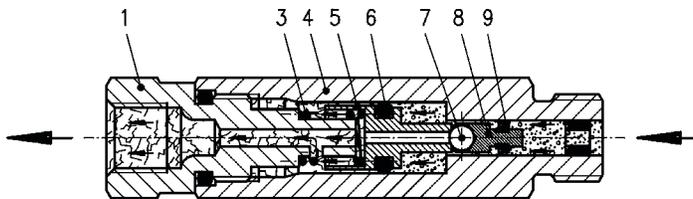
## Operation

### Idle Position



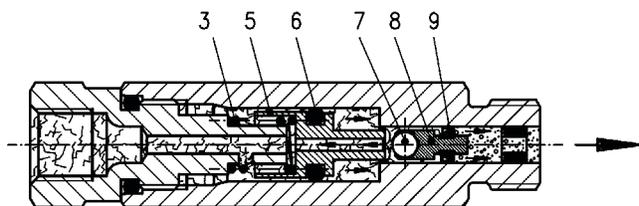
Pressure in the supply line has been relieved. The compression spring (3) pushes the delivery pistons (5&6) against the control piston(7, 8 & 9). Thus pushing the ball (7) onto the delivery piston seat (5&6).

### Compression Stroke



Due to the pressure build up in the supply line, the control piston (7, 8 & 9) and the delivery piston (5 & 6) are moved to the left against the force of the compression spring (3), and the ball (7) in the control piston (7, 8 & 9) always remains pressed onto the seat of the delivery piston (5 & 6). With the displacement of the pistons, the sealing effect of the groove Ring (9) against the housing (4) is cancelled. This fact causes lubricant to get on the right side in front of the delivery piston (5 & 6). The lubricant, which as a result of the preceding lubricating cycle is on the left side in front for the delivery piston (5 & 6), is pressed - due to the displacement of the pistons to the left - into the line towards the lubrication point by the metering screw (1).

### Relief Stroke



When the supply line is released, the groove ring (9) reseals the space in the distributor against the supply line. At the same time, the compression spring (3) displaces the delivery piston (5&6) to the right, and the ball (7) of the control piston (7, 8 & 9) is lifted off the seat of the delivery piston (5&6).

*Illustrations and specifications are not binding in detail.*

*Designs are subject to modification and improvement without notice.*

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## How to Order

Model	Discharge	Part #
ZEG	0.01cc (10mm <sup>3</sup> )	ZEG01A
	0.025cc (25mm <sup>3</sup> )	ZEG03A
	0.05cc (50mm <sup>3</sup> )	ZEG05A
	0.10cc (100mm <sup>3</sup> )	ZEG10A
	0.15cc (150mm <sup>3</sup> )	ZEG15A
	0.20cc (200mm <sup>3</sup> )	ZEG20A

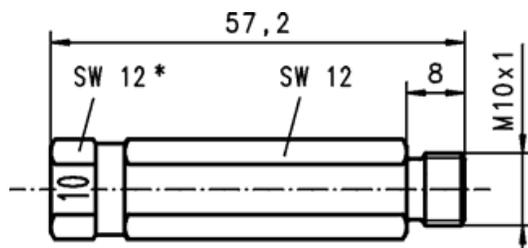
Note:

3-way Junction available:

P.N. 73462-3442

When ordering, specify by model, discharge and part number, e.g. ZEG-10 Injector, 0.01cc Discharge, Part #ZEG01A.

## Dimensional Schematics



ZEG previous part number cross:

Previous	Current
35636-1211	ZEG01A
35636-1221	ZEG03A
35636-1231	ZEG05A
35636-1241	ZEG10A
35636-1251	ZEG15A
35636-1261	ZEG20A

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