

# ZEM Injector

## Series 32, 33, 34, 35, 39



### General

The ZEM Series injector line are positive displacement injectors (PDI) that deliver precise and controlled lubrication outputs which meet exact requirements for diverse applications. They are pre-fixed volumetric injectors that help ensure each lubrication point receives the proper amount of lubricant. Which means you won't have to worry about over or under lubrication.

### Operation

ZEM Series injectors are classic PDIs. Reliable. Accurate. As pressure builds in the manifold, the piston in the injector moves forward, discharging a set amount of lubricant to the application point. As the pressure is relieved, a compression spring returns the piston to its original position. This movement recharges the injector with more lubricant. The injector is now ready to be fired again.



### Features

- + Handles oil and soft greases
- + Multiple output volumes for diverse application types and points
- + Modular design allows different outputs within a single manifold
- + Can be used in the same system with other ZEM series injectors
- + Optional push-to-connect fittings help reduce installation labor costs

### Technical Data

Oil Viscosity Range	20 to 1500 cSt at operating temperature
Lubricant	Soft grease, NLGI 000, NLGI 00*
Maximum Operating Pressure	45 bar (650 psi)
Minimum Operating Pressure	15 bar (220 psi)
Relieving Pressure	0.7 bar (11 psi)
Seals	Viton

\* Please contact a Bijur Delimon representative for applications using soft grease.

### Injector Outputs

Injector	Output (cc)
Series 32, 33, 34	0.01, 0.03, 0.06, 0.1, 0.16
Series 35	0.06, 0.1, 0.2, 0.3, 0.4, 0.6
Series 39	0.2, 0.3, 0.4, 0.6, 1.0, 1.5

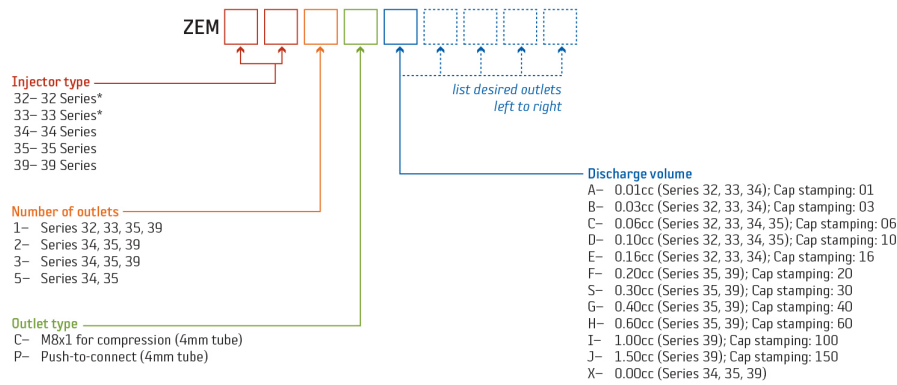


### System Requirements

It is important to note that the lubricating pump used in the ZEM Series injectors system must build pressure to 15 bar (220 psi) at the injector in order to actuate injector discharge. The recommended operating pressure is 21 bar (300 psi). Also, a pressure relief valve is required to quickly drop the line pressure to the 0.3 to 0.7 bar (5 to 11 psi) range between lubrication cycles. This allows the injectors to be fully recharged.

ZEM 32 and 33 Series injectors are used in conjunction with manifolds or tee fittings. Other ZEM Series injectors are manufactured with multiple outlet manifolds. All ZEM injectors are available with either a compression style or push-to-connect outlet fitting.

### How to Order



Note: Manifold part numbers are shown on page 4 and 5.

\* Requires manifold or tee fitting, sold separately.

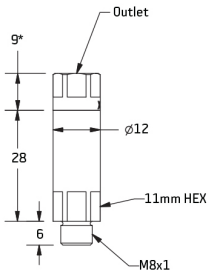
ZEM injectors use a smart part numbering system that allows you to tailor the injector to meet your needs. First, choose the injector type, number of outlets, outlet type and the discharge volume for each outlet. Then, put the numbers into the corresponding squares in the easy-to-use grid.

**Example:** To order a three outlet, 35 Series injector, with push-to-connect fittings, where the discharge volumes are 0.1cc, 0.2cc and 0.6cc, you would use Part #ZEM353PDFH.



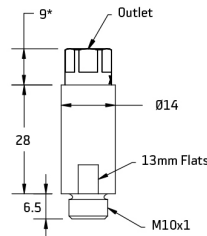
**Dimensional Schematics**

**ZEM Series 32 Injector <sup>1</sup>**



\* 13 For push to connect outlets

**ZEM Series 33 Injector <sup>2</sup>**



\* 13 For push to connect outlets

Measurements shown in millimeters.

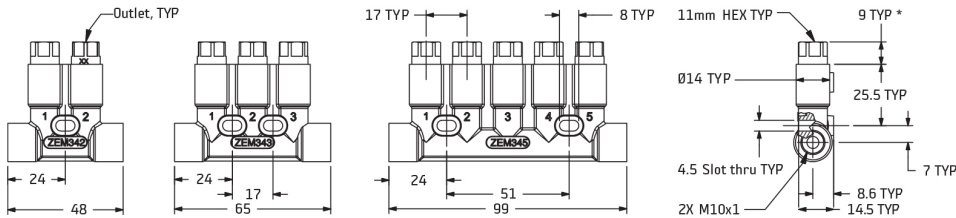
<sup>1</sup> ZEM 32 Series injectors can be used with manifolds (see page 4) or tee fittings (order Part # 22564).

<sup>2</sup> ZEM 33 Series injectors can be used with manifolds (see page 5) or tee fittings (order Part # 73462-3443).

<sup>3</sup> ZEM 35 Series injectors with one outlet can be used with tee fittings (order Part #73462-3443).

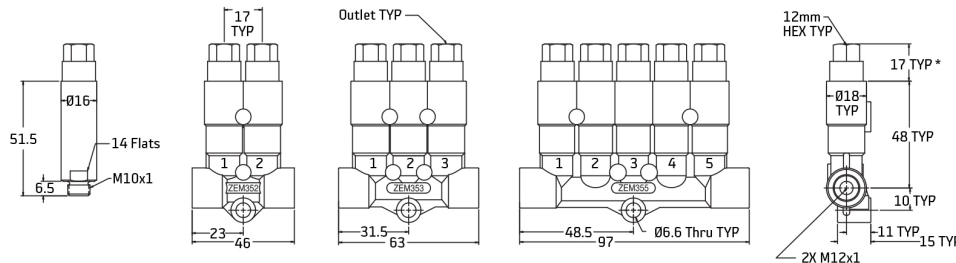
<sup>4</sup> ZEM 39 Series injectors with one outlet can be used with tee fittings (order Part #34547).

**ZEM Series 34 Injector**



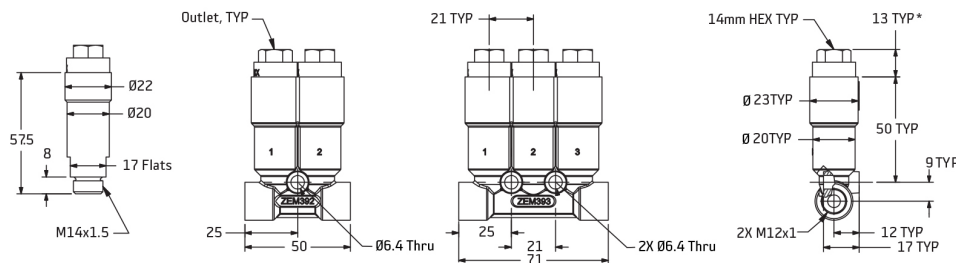
\* 13 For push to connect outlets

**ZEM Series 35 Injector <sup>3</sup>**



\* 21 For push to connect outlets

**ZEM Series 39 Injector <sup>4</sup>**



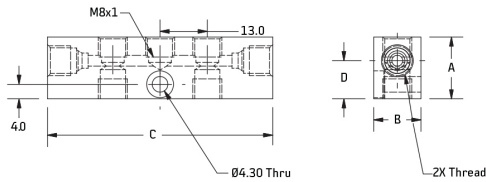
\* 17 For push to connect outlets



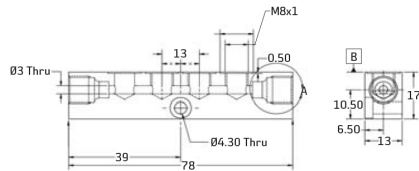
**Dimensional Schematics**

**ZEM Series 32 Manifold**

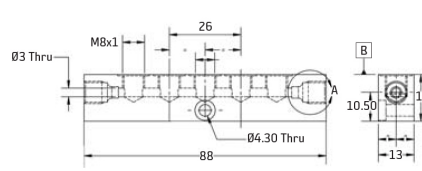
**5-Way Double Manifold**



**4-Way Inline Manifold**

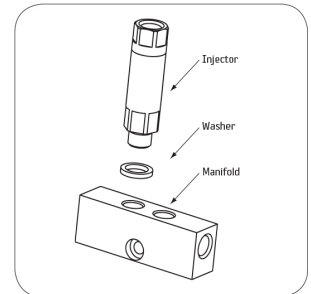


**5-Way Inline Manifold**



Measurements shown in millimeters.

Note: ZEM 32 Series injectors and manifolds are purchased separately.

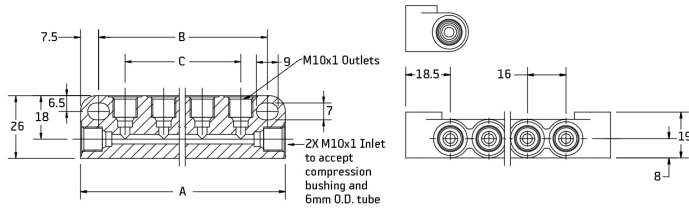


# of Lube Points	Main Line Tube Diameter	Inlet Thread	Outlet Thread	A (mm)	B (mm)	C (mm)	D (mm)	Part #
<b>Inline Manifold</b>								
1	4mm	M8x1	M8x1	N/A	N/A	N/A	N/A	22564
2	4mm	M8x1	M8x1	17.0	13.0	49.0	10.5	34539-1
2	6mm	M10x1	M8x1	17.0	13.0	52.0	10.5	34539-2
2	8mm	M14x1.5	M8x1	20.0	18.0	61.0	11.0	ZEM32M28
3	4mm	M8x1	M8x1	17.0	13.0	62.0	10.5	34540-1
3	6mm	M10x1	M8x1	17.0	13.0	65.0	10.5	ZEM32M36
3	8mm	M14x1.5	M8x1	20.0	18.0	74.0	11.0	ZEM32M38
4	6mm	M10x1	M8x1	17.0	13.0	78.0	10.5	ZEM32M46
<b>Double Manifold</b>								
5	4mm	M8x1	M8x1	17.0	13.0	88.0	10.5	ZEM32M54D
5	6mm	M10x1	M8x1	17.0	13.0	91.0	10.5	34541-2
5	8mm	M14x1.5	M8x1	20.0	18.0	100.0	11.0	ZEM32M58D



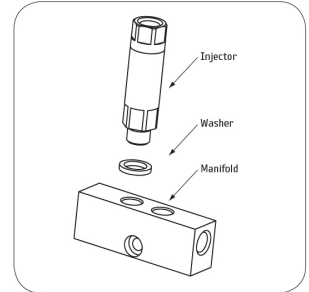
**Dimensional Schematics**

**ZEM Series 33 Manifold**



Measurements shown in millimeters.

Note: ZEM 33 Series injectors and manifolds are purchased separately.



Part #	# of Lube Points	Main Line Tube Dia.	A	B 7 0.3	C 7 0.3
31000-4	2	6mm	53mm	38mm	16mm
31000-5	3	6mm	69mm	54mm	32mm
31000-6	4	6mm	85mm	70mm	48mm
31000-7	5	6mm	101mm	86mm	64mm
31000-8	6	6mm	117mm	102mm	80mm
31000-9	7	6mm	133mm	118mm	96mm
31000-10	8	6mm	149mm	134mm	112mm