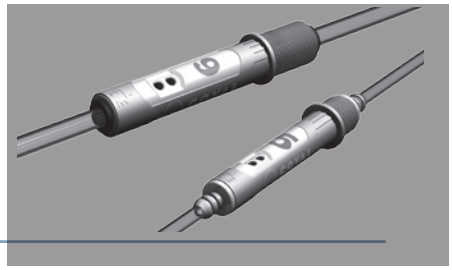
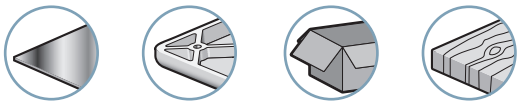
CIL series

In-line ejectors



Branch-specific applications



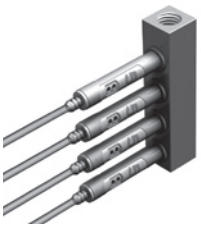
Flexible installation

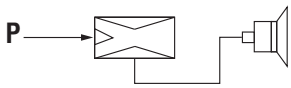
Push fitting
Removable axial mounting directly on the pipe using push to connect fittings.

Permanent connection
Permanent axial mounting directly on the pipe using hollow shaft fittings. An economical, ultra-light solution.

Integrated fitting
M12 (size 1) or M14 (size 2) incorporated male thread allows the CIL in-line module to be fitted easily and securely.

Manifold mounting
M12 (size 1) or M14 (size 2) incorporated male thread allows several CIL in-line vacuum modules to be integrated into a machined block to feed several suction pads simply and economically from a single source of compressed air.





Description

Due to their light weight (from 7 to 13 g depending on the version) and small dimensions, the "just plug it in" CILs can be easily integrated into the compressed air network near the suction pads, even in the most inaccessible parts of the machine.

Use

COVAL advises using CIL in-line ejectors for handling electronic components and light-weight objects, feed systems, Pick and Place applications and separating systems for machining sheet metal or plastics.

Advantages

■ Simple, efficient connection
Push fitting, hollow shaft fittings, M12 male or M14 male thread.

■ Improved reliability
No moving mechanical parts.

■ Silent operation
Nozzle-mixer combination resulting from new COVAL fluidics.

■ Optimized performance
CILs are available in 3 nozzle diameters (0.5, 0.7 and 0.9mm) and 2 levels of vacuum (60 % and 90 %).

Characteristics

model	Ø nozzle (mm)	air consumed (Nl/min)	air drawn in (Nl/min)	
			CIL 60	CIL 90
CIL 05	0.5	9.5	9.5	7
CIL 07	0.7	18.5	18.5	13.7
CIL 09	0.9	30.5	30.5	22.6

Evacuation time in seconds per liter

% vacuum	10	20	30	40	50	60	70	80	85
CIL 05	0.92	1.96	3.18	4.63	6.38	8.79	12.17	18.96	27.39
CIL 07	0.46	0.98	1.58	2.28	3.13	4.27	5.8	8.55	11.01
CIL 09	0.31	0.65	1.05	1.52	2.09	2.85	3.87	5.7	7.34

Specifications

Supply	non-lubricated filtered air, 5 microns(ISO standard 8573-1 class 4).
Optimal operating pressure	5 bar
Weight	7 to 13 g, depending on the model.
Materials	PA6.6 15 % FV – 2017A
Operating temperature	0 to 60 °C / 14 to 140°F.

Delivered with a zinc-plated steel fastening nut.

For all orders, please specify: Model+ Size + Vacuum level + X + Nozzle diameter + Fitting

1: Model
CIL

2: Size	
1	M12 male thread
2	M14 male thread

3: Vacuum level	
60	60 %
90	90 %

X

4: Nozzle diameter	
05	Ø 0.5mm
07	Ø 0.7mm
09 (1)	Ø 0.9mm

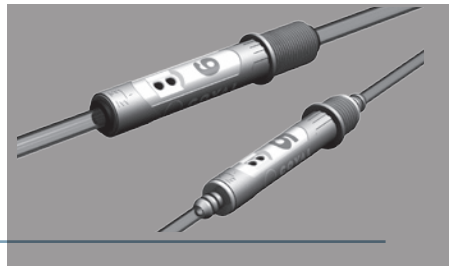
5: Fitting	
C	Hollow shaft
R	Push to connect fitting

(1) only in size 2

E.g. **CIL 190 X 07 C**
(CIL in-line vacuum module, size 1, maximum vacuum 90 %, nozzle diameter 0.7mm, hollow shaft fitting).

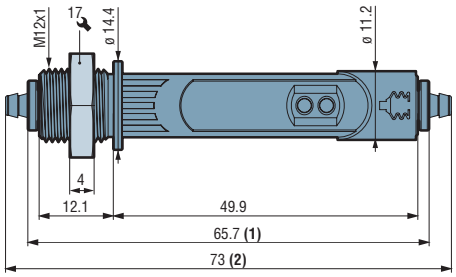
CIL series

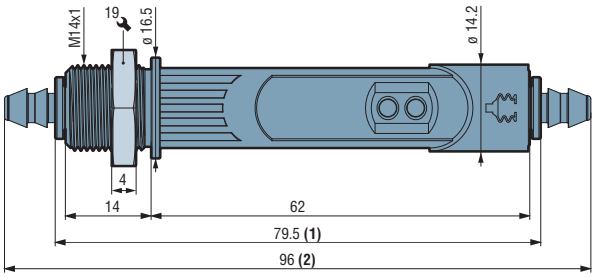
Dimensions
Curves



Dimensions

(1) Push fitting
(2) Hollow shaft





Advantages

- Can be adapted to all branches
- In-line connection
- Installation very close to the suction pads
- No clogging
- Very flexible installation
- Silent operation

Curves