1 TRT01

Static ejector

1.1 Front view

Fig. 1: Front view

1.2 Features

- **Efficient conveyance:** The static ejector facilitates the reliable conveyance of gaseous and liquid refrigerant from a lower to a higher pressure level.
- **High suction effect:** Thanks to its design, the ejector features an exceptionally high suction effect.
- **High-quality material:** Made from robust stainless steel, the ejector offers durability and reliability.
- **Maintenance-free:** Thanks to its well-conceived design, the ejector is completely maintenance-free, ensuring smooth operation.

Validity of the documentation

Date	
2024-04	Basis of documentation

This document will automatically cease to be valid if a new technical description is issued.
Manufacturer: Wurm (Schweiz) AG, Industriestr. 5, CH 6034 Inwil

1.3 Safety instructions

Writing conventions

NOTICE

- Notices provide you with helpful information for handling the device.

DANGER

- Avoid the described hazard: Otherwise death or **serious** bodily injury will be a direct result.

For your safety

For safe operation and to avoid personal injury and equipment damage through operator error, always read these instructions, become familiar with the device, and follow all safety instructions on the product and in this document, as well as the safety guidelines of Wurm GmbH & Co. KG Elektronische Systeme. Keep these instructions ready to hand for quick reference and pass them on with the device if the product is sold.

Wurm GmbH & Co. KG Elektronische Systeme accepts no liability in the case of improper use or use for purposes other than the intended purpose.

Target group	This manual is intended for "service technician" personnel.
Intended use	**TRT01** is an ejector to be installed in refrigeration plants and air conditioning systems.

DANGER

DANGER TO LIFE DUE TO PRESSURE SURGE!

- Make sure the line is free of pressure when installing and dismantling the ejector.
- Observe the high pressure levels of refrigerant R744! When stationary, the pressure in the plant increases and there is a risk of bursting. Install pressure relief valves on the compressor and in the lockable plant sections on both the suction pressure side and the high pressure side (requirements and design in accordance with EN 378-2 and EN 13136).
- Wear safety shoes, protective clothing and safety goggles when performing work of any kind.
- Make sure all pipes mounted to the ejector are free from loads and tension. The ejector may break if subjected to high mechanical strain.
- Never completely fill the blocked off components and pipes with liquid. Leave sufficient volume above liquids. The components and pipes could break if subjected to excessive fluid pressure.
- Make sure the maximum permitted pressure levels are not exceeded.
- Stop operating the device if it is faulty or damaged and its safe operation is compromised!
- Do not repair the device yourself! If the device requires repairs, send it in with an exact description of the fault!

DANGER

DANGER DUE TO DANGEROUS REFRIGERANTS!

- In the case of hazardous refrigerants, the relevant regulations must be observed in addition to all general rules. Failure to do so could result in hazards to people, equipment and the environment.
- Adequate ventilation must be ensured.
- Wear safety shoes, protective clothing and safety goggles when performing work of any kind.
- Wear cold protection gloves when working on the open refrigerant circuit and components that may contain refrigerant.
- Always prevent the refrigerant R744 from being blown out in an uncontrolled manner. Otherwise, there is a risk of sustaining cryogenic and cold burns. Liquid refrigerant R744 evaporates quickly, cooling down in the process and forming dry ice.

Wurm Infocenter

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1.4 Installing the device

DANGER TO LIFE DUE TO PRESSURE SURGE!

DANGER

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- Wear safety shoes, protective clothing and safety goggles when performing work of any kind.
- Make sure all pipes mounted to the ejector are free from loads and tension. The ejector may break if subjected to high mechanical strain.
- Never completely fill the blocked off components and pipes with liquid. Leave sufficient volume above liquids. The components and pipes could break if subjected to excessive fluid pressure.
- Make sure the maximum permitted pressure levels are not exceeded.

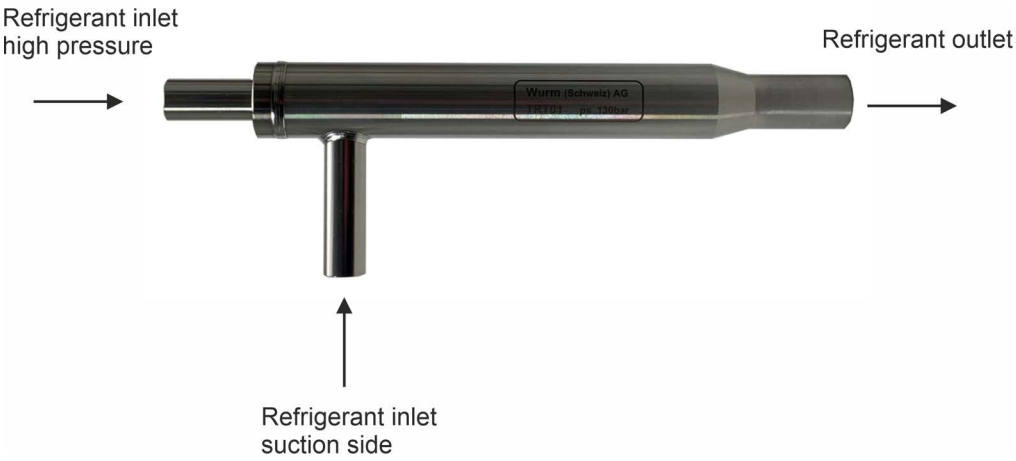

Fig. 2: Installation notes

NOTICE

- Upon delivery, the ejector's connections are sealed with caps and the valve is open.
- The ejectors can be installed horizontally or vertically with the refrigerant outlet at the bottom.
- Install a filter in the propellant pressure line upstream of the ejector inlet and the high-pressure control valve connected in parallel.
- Install a non-return valve in the ejector's suction line.
- On the outlet side, install an aligned settling line to the diffuser. The settling line must be at least 1.5-times longer than the ejector.
- Use pipe elbows instead of T-pieces downstream of the settling line.

1.5 Dimensions

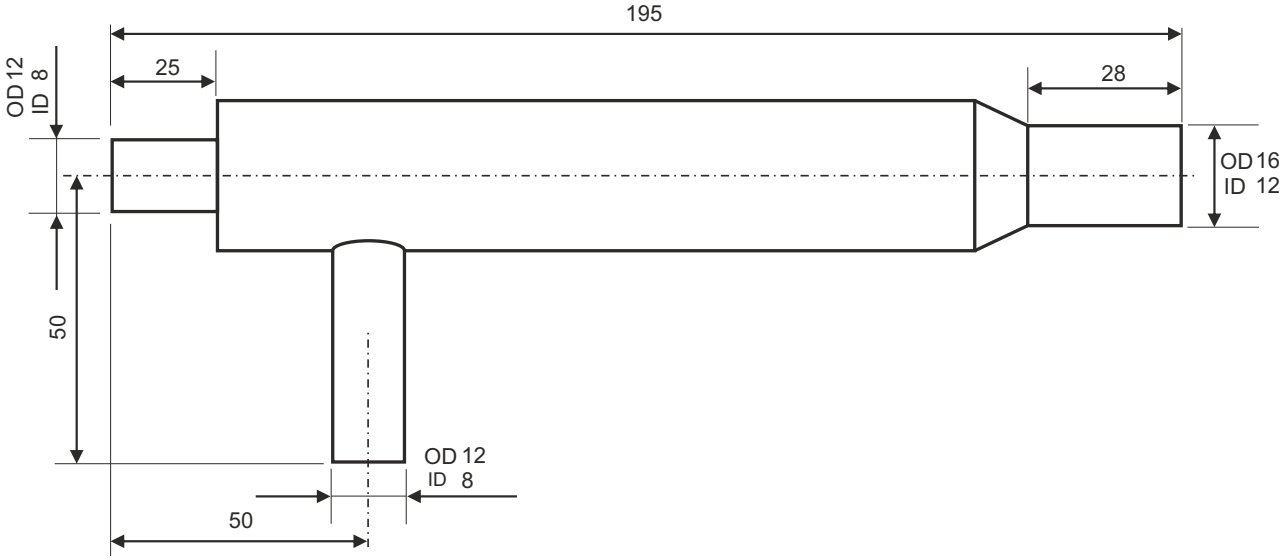

Fig. 3: Dimensions in mm

* OD: outer diameter; ID: inner diameter

1.6 Technical data

Max. permitted pressure	130bar
Medium temperature	-45...200°C
Ambient temperature	-45...200°C
Throughput under normal conditions CO_2 92bar/32°C	240kg/h
Connections	- Inlet DN 12mm - Suction manifold DN 12mm - Outlet (diffuser) DN 16mm
Weight	0.42kg
Materials	Stainless steel 1.4301
CE conformity	- 2014/68/EU (EU Pressure Equipment Directive) fluid group 2 CE
	RoHS II