

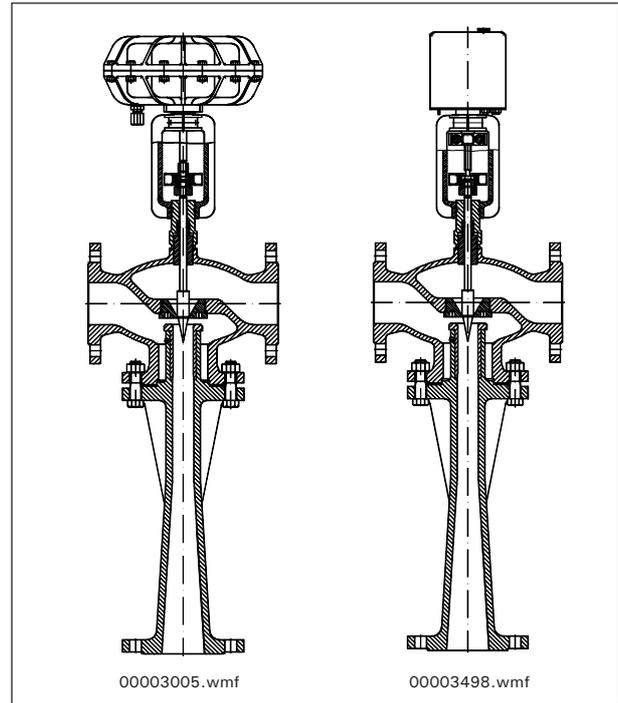
Bälz-vapordynamic - controllable nozzle ejectors steam/steam

Ejector series steam/steam baelz 590

Checklist:
 ND: 15 - 300
 NP: 16 / 25 / 40
 standard body:
 NP 16 + NP 25:
 GJS-400-18-LT (GGG 40.3)
 NP 40: GP240GH (GS-C25)
 temperatures:
 min.: -10°C
 max.: +240°C or
 +350°C type K
 ND 15 - 125 spindle Ø: 10 mm
 up to ND 100/nozzle ≥ 40 mm spindle Ø: 16 mm
 ND 150 - 300 spindle Ø: 22 mm

ND	15	25	32	40	50
nozzle	6.5	10	12.5	16	20
ND	65	80	100	125	150
nozzle	25	32	40	50	65

Short presentation of all electric and pneumatic actuators see BPE 18



controllable steam ejector with pneumatic actuator
 baelz 590-373-P21-6-Fo-S21
 and with electrical motorized actuator
 baelz 590-373-E07-20-18-S21

Text for quotations + orders:

controllable steam ejector Jetomat for vapour compression / recirculation
 without actuator
 body material
 NP 16 + NP 25 : GJS-400-18-LT (GGG 40.3)
 NP 40 : GP240GH (GS-C25)
 diffuser material
 NP 16 + NP 25 : ND 15 - 125 GJS-400-18-LT (GGG 40.3)
 with throat in stainless steel
 ND 150 - 300 with welded diffuser, throat in stainless steel
 NP 40 : ND 15 - 300 with welded diffuser, throat in stainless steel
 nozzle and spindle : stainless steel
 stuffing box : V-rings in PTFE
 temp./pressure
 NP 16: max. 240°C/11 bar or max. 120°C/16 bar
 NP 25: max. 240°C/18 bar or max. 120°C/25 bar
 NP 40: max. 240°C/32 bar or max. 120°C/40 bar
 stroke : ND 15-125 : 22 mm
 up to ND 65/nozzle ≥ 25 mm : 40 mm
 ND 150 : 44 mm
 ND 200 - 300 : 66 mm

Service conditions:

	01	03	04	dB (A)
	motive	suction	discharge	
pressure [bar abs]				
flow [kg/h]				

max. allowable differential pressure
 Δp_0 : bar

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Bälz-vapordynamic

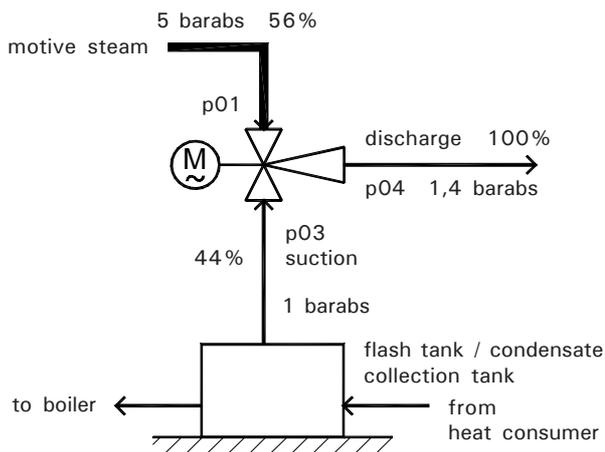
Controllable steam ejectors

Controllable steam ejectors are used for the most different tasks in the heat and process technology. In the following there are only three applications given.

1. **Vapour recompression.** Low pressure steam, which is lost in conventional installations, or re-evaporated condensate is compressed to a higher pressure and can be re-used. The savings of primary energy which are obtained by this technology are considerable.
2. **Steam conditioning.** High pressure steam and low pressure steam are mixed into product steam. If necessary, its temperature can be reduced by water injection in the ejector down to saturated steam temperature. This technology saves primary energy by re-using low pressure steam and it saves investment costs in comparison with conventional methods (reduction valves with integrated or downstream water injection).
3. **Re-circulation and suction of condensate** in drum dryers of paper and textile industry. This technology has, in comparison with heating by control valves, the following advantages: Firstly savings in steam traps, because several cylinders can be controlled in parallel and e.g. for three cylinders only one steam trap is needed. In the second place savings in steam, because the drum is heated equally owing to admixture and suction of condensate and therefore it needs no bad point supply. Thirdly increase of performance and quality.

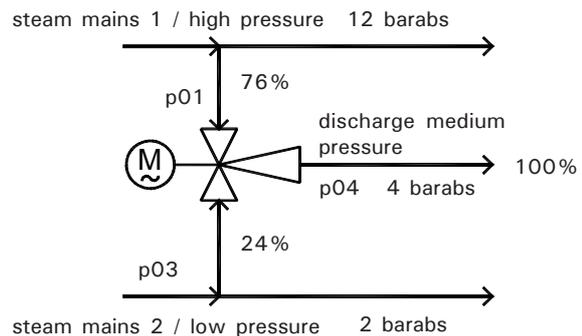
For applying this technology, Baelz offers:

- steam ejectors baelz 590 with electric or pneumatic actuator
- controllers and sensors baelz 6490 - 6496 to control these ejectors



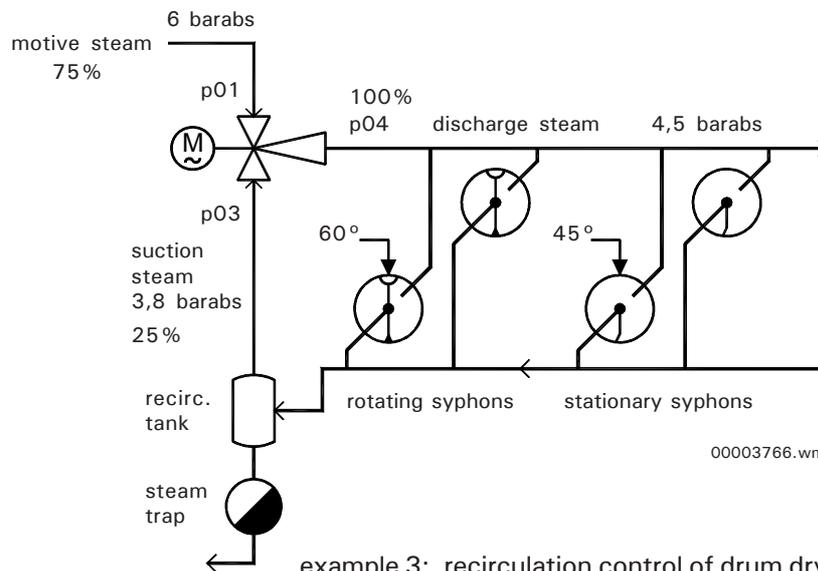
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example 1: vapour compression



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example 2: steam mixing



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example 3: recirculation control of drum dryers