

BEAM STOPPER / BEAM STOPPER INSERT, SERIES 79.0 / 79.3

For use in multiple applications, e. g. photon stopper.



Beam stopper
Series 79.0



Beam stopper insert
Series 79.3

One-piece water guide

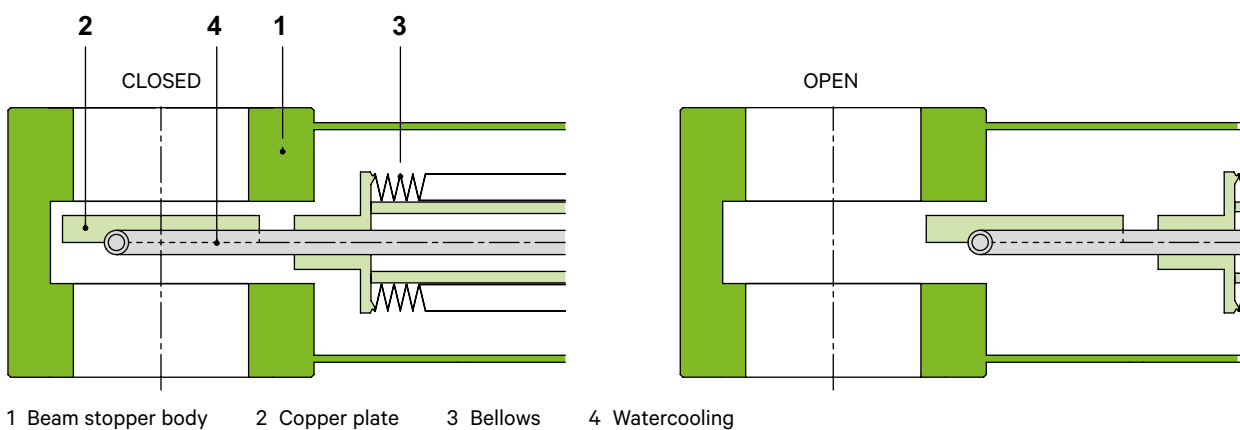
Industrially manufactured

UHV compatible

MAIN FEATURES

Sizes	DN 63 – 160 mm (2½" – 6")
Actuators	pneumatic: double acting
Body material	stainless steel
Feedthrough	bellows
Standard flanges	CF-F

FUNCTIONAL PRINCIPLE



TECHNICAL DATA

Leak rate	Beam stopper body	$< 1 \cdot 10^{-10}$ mbar ls ⁻¹
Pressure range		UHV to 1 bar (abs)
Cycles until first service		5 000 (option: 50 000)
Bake-out temperature ¹⁾	Beam stopper body Pneumatic actuator	≤ 250 °C ≤ 80 °C (Option: 200 °C)
Heating and cooling rate		≤ 80 °C h ⁻¹
Material	Beam stopper body, mechanism Bellows Watercooled plate	AISI 304 (1.4301) AISI 316L (1.4404) copper
Seal	Bonnet	metal
Feedthrough		bellows
Mounting position		any
Compressed air (min. – max. overpressure)		4 – 7 bar / 58 – 102 psi
Closing time	DN 63 DN 100 DN 160	1 s 2 s 3 s
Load	Beam $\varnothing < 60$ mm Beam $\varnothing > 60$ mm	max. 5 kW max. 6 kW
Specific load		max. 25 W / mm ²
Cooling water	Quantity Temperature	min. 15 l / min < 15 °C

¹⁾ Maximum values: depending on operating conditions and sealing materials.

OPTIONS, CUSTOMIZED SOLUTIONS

ACTUATOR

- Bakeable position indicator:
pneumatic actuator bakeable to max. 200 °C¹⁾ (standard: 80 °C)

BEAM STOPPER

- Without watercooling
- Customer specified flanges
- Ports for roughing (by-pass), venting or for gauges

¹⁾ Maximum values: depending on operating conditions and sealing materials.

SPARE PARTS

We can offer a wide variety of spare parts. Please contact us for details and an offer.

Thank you for specifying the fabrication number of the valve indicated on the identification tag when asking for spare parts.

ACCESSORIES

Flange connections for installation of the beam stopper: see series 33

ORDERING INFORMATION

FOR STANDARD BEAM STOPPERS

79.0

Beam stopper with pneumatic actuator
double acting

DN		Ordering numbers	
mm	inch	CF-F	
		without solenoid valve with position indicator 80 °C	with solenoid valve with position indicator 80 °C
63	2½	79036-CE24	79036-CE44 ¹⁾
100	4	79040-CE24	79040-CE44 ¹⁾
160	6	79044-CE24	79044-CE44 ¹⁾

¹⁾ specify control voltage

79.3

Beam stopper insert with pneumatic actuator
double acting

DN		Ordering numbers (based on bonnet dimension)	
mm	inch	CF-F	
		without solenoid valve with position indicator 80 °C	with solenoid valve with position indicator 80 °C
100	4	79340-CE24	79340-CE44 ¹⁾
160	6	79344-CE24	79344-CE44 ¹⁾
200	8	79346-CE24	79346-CE44 ¹⁾

¹⁾ specify control voltage

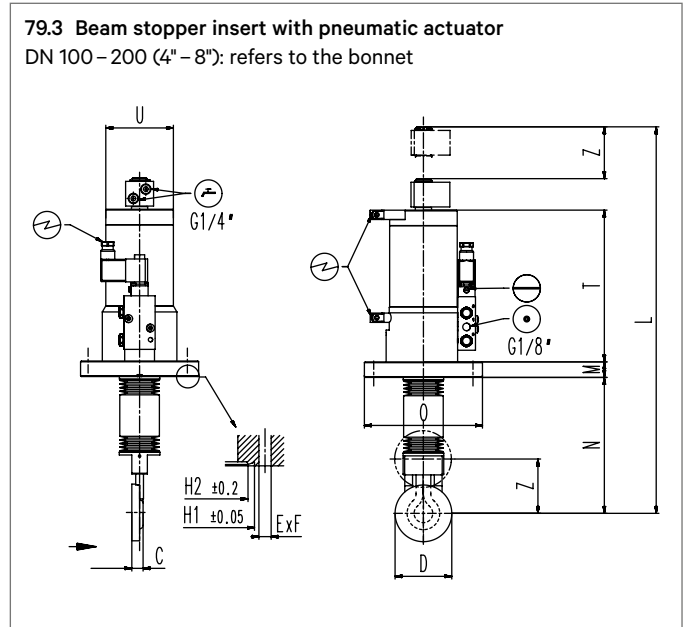
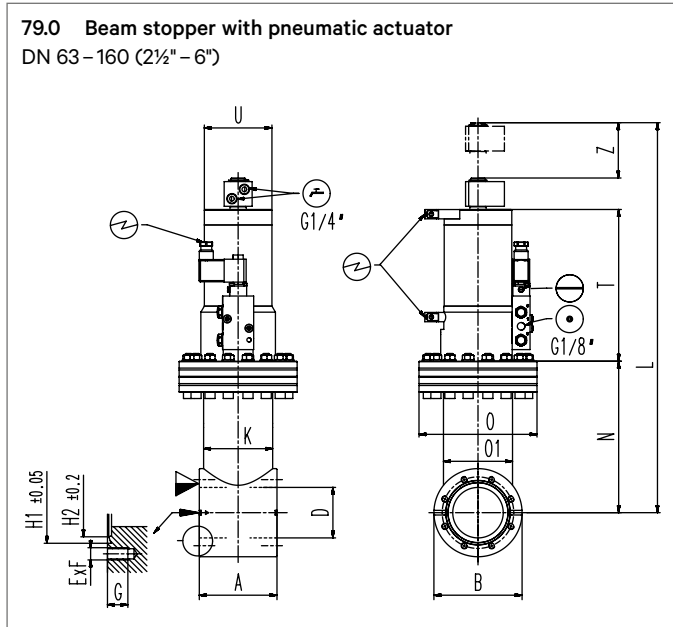
ORDERING INFORMATION

FOR BEAM STOPPERS WITH OPTIONS

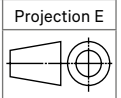
Basic ordering number plus «-X»: -X to be specified

Example: 79040-CE44-X, X = pneumatic actuator bakeable to 200 °C

MAIN DIMENSIONS



- ▼ Valve seat side
- Beam direction
- ⊙ Compressed air connection
- ⊗ Electrical connection
- ⊖ Emergency operation
- ⊕ Cooling water connection



DN	mm	63	100	160
	inch	2½	4	6
A	mm	100	100	100
	inch	3.94	3.94	3.94
B	mm	113.50	152	202.50
	inch	4.47	5.98	7.97
D	mm	65	100	150
	inch	2.56	3.94	6.91
E × F		8 × M8	16 × M8	20 × M8
G	mm	13	13	13
	inch	0.51	0.51	0.51
H1	mm	82.55	120.70	171.50
	inch	3.25	4.75	6.75
H2	mm	77.40	115.50	166
	inch	3.05	4.55	6.54
K	mm	88.90	80	80
	inch	3.50	3.15	3.15
L	mm	502	639	841
	inch	19.76	25.16	33.11
N	mm	195	262	364
	inch	7.68	10.31	14.33
O	mm	152	202.50	253
	inch	5.98	7.97	9.96
O1	mm	88.90	120	180
	inch	3.50	4.72	7.09
T	mm	195.50	230.50	280.50
	inch	7.70	9.07	11.04
U	mm	87	87	87
	inch	3.43	3.43	3.43
Z	mm	71	106	156
	inch	2.80	4.17	6.14

DN	mm	100	160	200
	inch	4	6	8
C	mm	14.50	14.50	14.50
	inch	0.57	0.57	0.57
D	mm	73	107.50	158
	inch	2.87	4.23	6.22
E × F	mm	16 × Ø8.40	20 × Ø8.40	24 × Ø8.40
	inch	16 × Ø0.33	20 × Ø0.33	24 × Ø0.33
H1	mm	120.65	171.50	222.35
	inch	4.75	6.75	8.75
H2	mm	115.50	166	217
	inch	4.55	6.54	8.54
L	mm	502	639	1018
	inch	19.76	25.16	40.01
M	mm	20	22	24.50
	inch	0.79	0.87	0.96
N	mm	175	240	416.50
	inch	6.89	9.45	16.40
O	mm	152	202.50	253
	inch	5.98	7.97	9.96
T	mm	195.50	230.50	330.50
	inch	7.70	9.07	13.01
U	mm	87	87	87
	inch	3.43	3.43	3.43
Z	mm	71	106	206
	inch	2.80	4.17	8.11