Technical DATA SHEET

VORTEX-TYPE SPARK ARRESTOR

GROUPE BOËT www.groupe-boet.com

Designed for the exhaust lines of internal combustion engines, the vortex-effect spark arrestor effectively eliminates incandescent particles from combustion gases without compromising engine performance. It captures 100% of incandescent particles in compliance with EN1834-1.

The spark arrestor employs a finned geometry that induces a controlled swirl in the exhaust stream. This rotational motion generates inertial separation, driving the denser incandescent particles toward the walls where they dissipate heat before being captured in a dedicated collector.

- Purely mechanical operation, with no moving parts.
- Simplified maintenance through direct access to the collector
- Engineered for harsh environments, including high temperatures and prolonged operating cycles
- Available as an integrated option within our engine exhaust silencers (SM) for a compact, all-in-one solution.

Contact us for specific requirements.

Technical specifications

	Standard	Custom-made
Material	Carbon Steel S235JR	304L, 316L or other stainless steels
Connection	Folded-Edge Flanges PN10 Reduced-Thickness Flanges PN10	On request (BW, BS10, WN...)
Orientation	Axial - Axial	

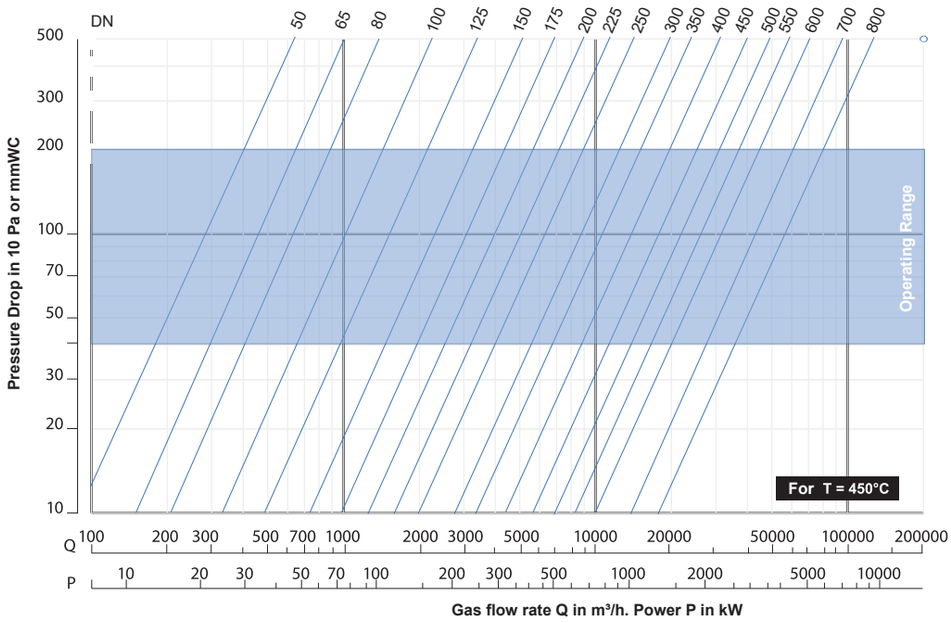
Note : A spark arrestor requires regular maintenance.
Failure to do so may lead to overheating and/or reduced engine performance

Spark arrestor acoustic performance

Octave Band Center Frequencies of Bands (Hz)	Typical Intrinsic Acoustic Attenuation (dB)
125	2
250	3
500	3
1000	3
2000	4
4000	10
8000	10

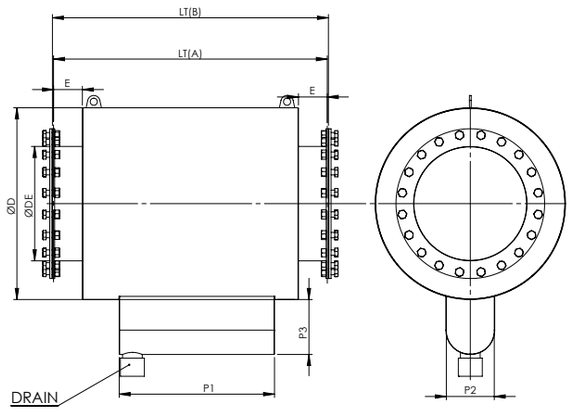
Nominal diameter selection

The selection of the nominal diameter (DN) depends on the gas flow rate and the permissible pressure drop. The chart below illustrates the recommended ranges for optimal operation, ensuring the best compromise between efficiency and engine performance.



Dimensional table (mm)

DN	50	65	80	100	125	150	175	200	225	250	300	350	400	450	500	550	600	700	800
D	158	158	209	208	260	300	304	360	400	456	500	550	655	758	858	958	1108'	1208	1308
E	75	75	75	75	75	75	100	110	110	110	110	120	120	130	130	140	150	150	150
LT (A)	268	277	316	333	373	449	591	634	720	768	861	944	1033	1169	1244	1315	1388	1644	1758
LT (B)	278	287	326	343	383	459	601	644	730	778	871	954	1043	1179	1254	1325	1398	1654	1768
DE	60	76	89	114	140	168	194	220	246	274	324	356	406	457	508	557	609	710	810
P1	80	80	120	120	160	160	300	300	300	300	500	500	500	783	783	783	783	1000	1000
P2	80	80	80	80	80	80	110	110	110	110	220	220	220	220	220	220	220	220	220
P3	100	100	100	100	100	100	154	154	154	154	260	260	260	260	260	260	260	260	260
DRAIN	1''	1''	1''	1''	1''	1''	2''	2''	2''	2''	3''	3''	3''	4''	4''	4''	4''	4''	4''
Weight (A) (kg)	3	3	5	5	8	10	15	21	25	31	46	54	69	121	153	181	238	317	472
Weight (B) (kg)	7	10	14	15	20	27	34	41	47	56	74	90	118	176	215	267	328	451	635



Available versions :

- (A) Without flanges
- (B) With flanges and counter-flanges, reduced-thickness, including gaskets and bolts (drilling according to EN 1092-1 PN10)

Certified quality management system

ISO 9001

ISO 19443

Certified company

EN 15085-2

GROUPE BOËT

23 rue d'Amsterdam,
59200 Tourcoing - France
contact@boet-stopson.com
www.groupe-boet.com
Head office : +33(0)6 14 98 41 00
UK : +44(0) 7564 052296