

CIRCULAR SILENCERS

OPTIMUM 100 XL RANGE

1.3.3B

ACOUSTIC

The OPTIMUM 100 XL range circular silencers are equipped with a central attenuator (bulb type) and offer high acoustic and aerodynamic performances.

Designed for industrial process and smoke exhaust, the OPTIMUM 100 XL silencers are available in 400°C/2h version.

Their performances have been tested and approved by an independent laboratory.

CODIFICATION

Optimum ← X
Y
100 XL - Thickness of the sound proofing

Available in
400°C/2h version



CONSTRUCTION

		Characteristics	Options
Casing	Material	Spiral galvanized steel duct	Stainless steel, painted steel or aluminium
	Connection	Smooth fittings	Threaded flanges, revolving flanges
Soundproofing	Material	Mineral wool with anti-erosion fiberglass layer on the surface Euroclasse A1 fire classification	Fiberglass fabric protection
	Protection	Perforated steel sheet in the air flow	
Accessories			Protective guards Support legs

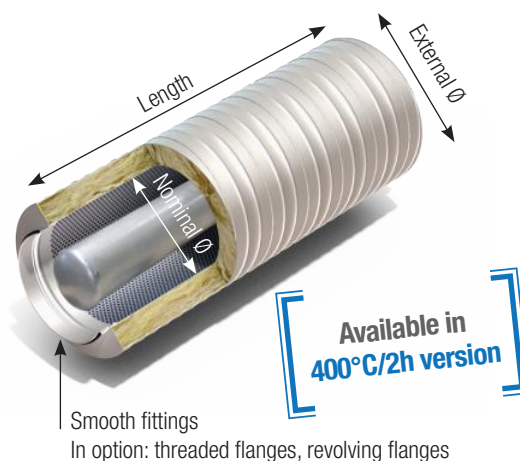
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DIMENSIONS

OPTIMUM 100 XL			
Nominal Ø (mm)	External Ø (mm)	Length (mm)	Bulb Ø (mm)
560	710	1000	250
600	800	1000	315
630	800	1000	315
710	900	1500	355
800	1000	1500	400
900	1120	1500	450
1000	1250	2000	500
1120	1400	2000	560
1250	1400	2000	630

Other diameters and lengths on request



ACOUSTIC PERFORMANCES

OPTIMUM 100 XL

Soundproofing casing thickness = 100 mm

Nominal Ø (mm)	Length (mm)	Static attenuations (dB)							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
630	1000	2	4	10	16	22	24	15	7
800	1500	3	6	17	26	29	25	18	16
1000	2000	4	11	23	26	37	31	19	16
1250	2000	4	9	13	24	31	25	17	15

Tests carried out by an independent laboratory according to ISO 7235 standard.

Diameter and length (mm)	Regenerations and Pressure losses										
	Air velocity*	63	125	250	500	1000	2000	4000	8000	Hz	Pressure losses (Pa)
Ø630 L1000	3m/s	39	37	14	11	12	15	19	24	dB	<5
	5m/s	50	40	35	25	16	15	19	24	dB	5
	8m/s	58	46	43	42	36	26	21	24	dB	10
	11m/s	64	52	48	47	43	37	30	25	dB	19
	13m/s	68	57	53	52	51	44	35	30	dB	32
Ø800 L1500	3m/s	37	26	<10	<10	<10	<10	<10	13	dB	<5
	5m/s	51	38	27	23	17	10	10	13	dB	5
	8m/s	61	50	37	35	32	26	18	13	dB	11
Ø1000 L2000	3m/s	45	32	20	16	11	10	10	13	dB	<5
	6m/s	63	51	40	38	34	29	22	16	dB	10
	7m/s	65	54	43	42	38	33	28	20	dB	15
Ø1250 L2000	3m/s	56	47	33	30	26	19	12	13	dB	<5
	5m/s	66	59	43	41	37	33	27	20	dB	11

*Air velocity in air sections

Tests carried out by an independent laboratory according to ISO 7235 standard.

SPECIFICATIONS

Circular silencers composed of:

- a 100 mm-thick soundproofing casing protected by perforated steel sheet in the airflow,
- a central attenuator of bulb type.

The acoustic performances must have been tested by an independent laboratory.

OPTIMUM 100 XL type, F2A brand.