

Fossa

Scroll Vacuum Pumps
FO 0015/0035 A



› Reliable

single-sided scroll design, dry compression, gas-tight, robust construction, high vapor handling capability

› High Performance

intelligent variable speed drive available for adjustment to changing demand and stable worldwide performance

› Quiet

low sound and vibration levels, can be installed at workstations

› Easy Servicing

minimal maintenance, lifetime-lubricated bearings

Fossa scroll vacuum pumps have been designed according to the latest single-sided scroll technology, combining dry compression with a fully hermetic construction. By adding the exceptionally low sound and vibration levels, these vacuum pumps are everything that is expected from modern medium vacuum generation systems for today's analytical and scientific applications, where they have proven themselves for years.

The extremely low sound and vibration levels make them suitable for direct installation at the workplace, for example in research laboratories.

The design of the Busch scroll vacuum pump provides completely dry and reliable compression. A metal bellows and static seals ensure tightness between the pumped medium and the ambient air, thus avoiding contamination or leakage of the process gases. This hermetic design makes Fossa scroll vacuum pumps ideally suited for gas recovery or noble gas pumping systems.

They are the perfect solution for helium leak detectors, coating systems or backing of turbomolecular pumps. Being fitted with a gas-ballast valve, these vacuum pumps

deliver unique vapor handling capabilities – the basic condition for drying processes.

Long service intervals and significant energy savings can be achieved through intelligent management of three frequency converter modes: "normal", "boost" for an unrivalled pumping speed, and "idle" for unbeatable low sound and vibration levels.

Having no shaft seals and coming with lifetime-lubricated bearings as standard, Fossa vacuum pumps require very little maintenance. Servicing tasks are limited to changing the scroll tip seals which can easily be done on-site by the user and without the need for special tools.

Applications

- Gas recovery and recirculation
- Analytical instruments
- Helium leak detectors
- Beam lines and high energy physics
- Coating
- Drying
- Vacuum furnaces
- Glove boxes
- Load lock and transfer chambers
- Backing of turbomolecular vacuum pumps

**Fossa – hermetically sealed.
Quiet and low vibration levels.**

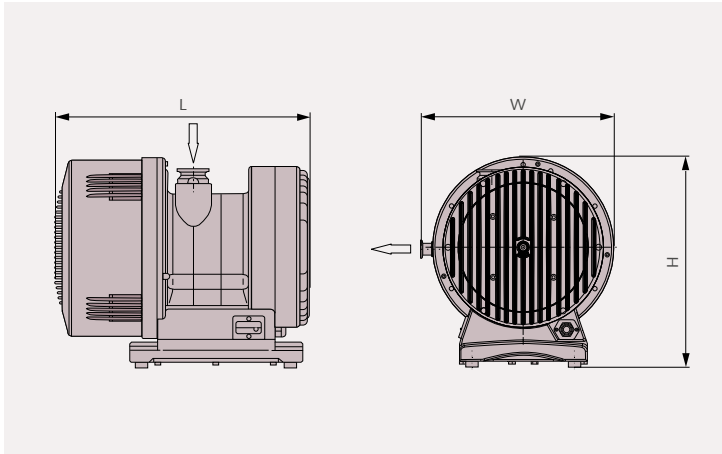


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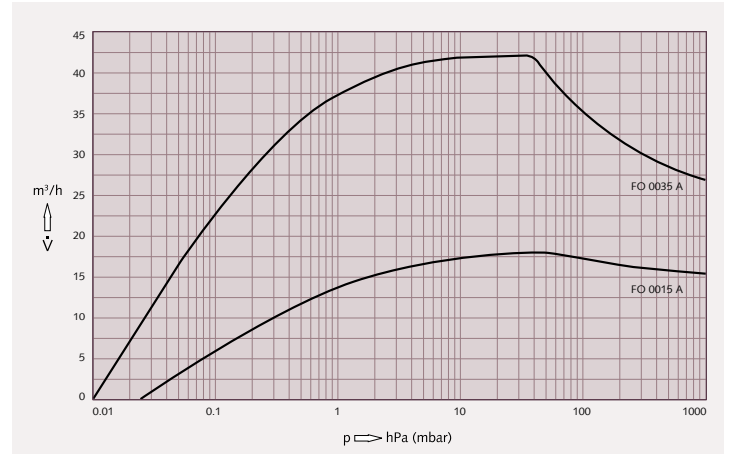
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Pumping speed Air at 70 °F. Tolerance: ± 10%



Technical data			FO 0015 A	FO 0035 A
Pumping speed*		m ³ /h	18	42
Pumping speed*		l/min	300	700
Ultimate total pressure	Gas-ballast valve closed	hPa (mbar)	0.025	0.01
Ultimate total pressure	Gas-ballast valve open	hPa (mbar)	0.09	
Max. continuous inlet pressure		hPa (mbar)	1000	100
Max. back pressure		hPa (mbar)	1500	1200
Water vapor capacity	Gas-ballast valve open	g/h	300	400
Leak rate, helium		mbar · L · s ⁻¹	< 1 · 10 ⁻⁶	

Motor data			FO 0015 A	FO 0035 A
Nominal motor rating		kW	0.4	0.75
Operating voltage	Single-phase**	V	100–240	
Operating voltage	Three-phase	V	200–240 / 380–480	

Physical data			FO 0015 A	FO 0035 A
Ambient temperature		°F	40–100	
Vibration level at inlet (ISO 10816-1)		mm · s ⁻¹	Class 1B, < 1.5 mm/sec	
Sound level (ISO 2151)	Idle speed**	dB(A)	42	43
	Max.	dB(A)	59	60
Approximate weight		kg	48	50
Dimensions (L x W x H)		mm	450 x 338 x 369	462 x 338 x 369
Gas inlet / outlet			KF 40 / KF 16	

Applicable standards			FO 0015 A	FO 0035 A
Emissions and immunity			EN 61236-1:2013 as a Class A device	
Safety			EN/IEC 61010 third edition certified	

All performance data is based on ambient conditions of 14.7 PSIA and 70 °F, and has a tolerance of ± 10%.
*normal / boost **frequency converter driven version only

Busch LLC

516 Viking Drive | Virginia Beach, VA 23452 | Phone 757-463-7800 | info@buschusa.com | www.buschusa.com

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Article Numbers, Genuine Accessories and Spare Parts	FO 0015 A	FO 0035 A
Inverter driven single-phase version, automatic protection		
100–240 V	1271203264	1271203265
Three-phase motor version, no motor protection		
200–240 / 380–480 V	1271557872	1271564068
Inlet accessories¹		
Inlet filter FIL 0080	0530566434	
Spare polyester filter element for FIL 0080	0532121862	
Special purpose filter element for FIL 0080	on request	
Outlet accessories²		
Exhaust filter and silencer	0562566435	
Spare filter element	0532566436	
Other accessories		
Wheels	0999569268	
Purge kit	0916566457	
Gas-ballast	included	
Maintenance kits		
Tip seal replacement kit	0990559196	0990563524
Single-phase cord sets		
NEMA 5/15, 2 meters	0659930583	
NEMA 6/15, 2 meters	0659930582	

¹All filters include housing, polyester filter element and mounting hardware
²The exhaust filter includes housing and filter element

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