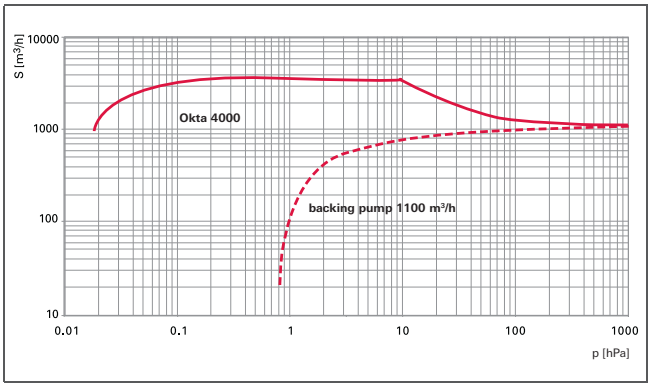
Okta 4000

Roots pump with a pumping speed of 2160 to 6490 m³/h:

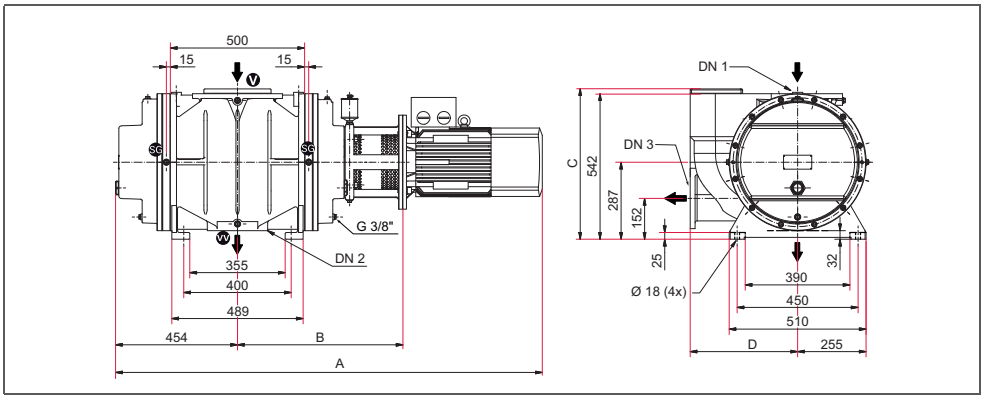
- High-performance Roots pump with a pumping speed of 2160 to 6490 m³/h
- For mains voltage: 400/690 V, 50 Hz respectively 460 V, 60 Hz
- No thermal overload thanks to integral overflow valve
- For applications in the low and medium vacuum

Okta = Standard pumps with radial shaft sealing rings, housing parts made of gray cast iron or nodular graphite cast iron, flange connection in accordance with ISO-F
Okta M = Standard pumps, hermetically sealed thanks to magnetic coupling, housing parts made of gray cast iron or nodular graphite cast iron, flange connection in accordance with ISO-F

Pumping speed



Dimensions (in mm)



	Okta 4000, Roots pump, 400/690 V, 50 Hz ; 460 V, 60 Hz	Okta 4000, Roots pump without motor	Okta 4000 M, Roots pump, 400/690 V, 50 Hz ; 460 V, 60 Hz
A	1589 mm	-	1651 mm
B	616 mm	616 mm	678 mm
C	560 mm	560 mm	560 mm
D	400 mm	400 mm	400 mm
Connections			
DN 1	DN 250 ISO-F	DN 250 ISO-F	DN 250 ISO-F
DN 2	DN 160 ISO-F	DN 160 ISO-F	DN 160 ISO-F
DN 3	DN 160 ISO-F	DN 160 ISO-F	DN 160 ISO-F

Technical data	Okta 4000, Roots pump, 400/690 V, 50 Hz ; 460 V, 60 Hz	Okta 4000, Roots pump without motor	Okta 4000 M, Roots pump, 400/690 V, 50 Hz ; 460 V, 60 Hz
Flange (out)	DN 160 ISO-F	DN 160 ISO-F	DN 160 ISO-F
Flange (in)	DN 250 ISO-F	DN 250 ISO-F	DN 250 ISO-F
Version	Standard with motor	Standard without motor	Standard with motor and magnetic coupling
Operating fluid	P3	P3	P3
Operating fluid filling	6.8 l	6.8 l	6.8 l
Differential pressure at the overflow valve	25 hPa	25 hPa	25 hPa
Rotation speed	from 1500 to 4500 min^{-1}	from 1500 to 4500 min^{-1}	from 1500 to 4500 min^{-1}
Rotation speed max.	4500 min^{-1}	4500 min^{-1}	4500 min^{-1}
Rotation speed min.	1500 min^{-1}	1500 min^{-1}	1500 min^{-1}
Emission sound pressure level (EN ISO 2151) at intake pressure 10 hPa	79 dB (A)	79 dB (A)	79 dB (A)
Emission sound pressure level (EN ISO 2151) at intake pressure 1 hPa	74 dB (A)	74 dB (A)	74 dB (A)
Weight: with motor	640 kg		655 kg
Weight: without motor		520 kg	
Cooling method, standard	Air	Air	Air
Leak rate	$1 \cdot 10^{-3}$ Pa m^3/s	$1 \cdot 10^{-3}$ Pa m^3/s	$1 \cdot 10^{-6}$ Pa m^3/s
Motor protection	3TF		3TF
Nominal rotation speed at 50 Hz	3000 min^{-1}	3000 min^{-1}	3000 min^{-1}
Nominal rotation speed at 60 Hz	3600 min^{-1}	3600 min^{-1}	3600 min^{-1}
Rated power 50 Hz	11 kW		11 kW
Rated power 60 Hz	13.2 kW		13.2 kW
Nominal pumping speed	2160-6490 m^3/h	2160-6490 m^3/h	2160-6490 m^3/h
Nominal pumping speed at 50 Hz	4325 m^3/h	4325 m^3/h	4325 m^3/h
Nominal pumping speed at 60 Hz	5190 m^3/h	5190 m^3/h	5190 m^3/h
Mains requirement: voltage 50 Hz	400/690 V		400/690 V
Mains requirement: voltage 60 Hz	460 V		460 V
Protection category	IP 55	IP 55	IP 55
Ambient temperature	5-40 °C	5-40 °C	5-40 °C

Order number			
Okta 4000	**PP W71 000**	**PP W71 001**	**PP W72 000**

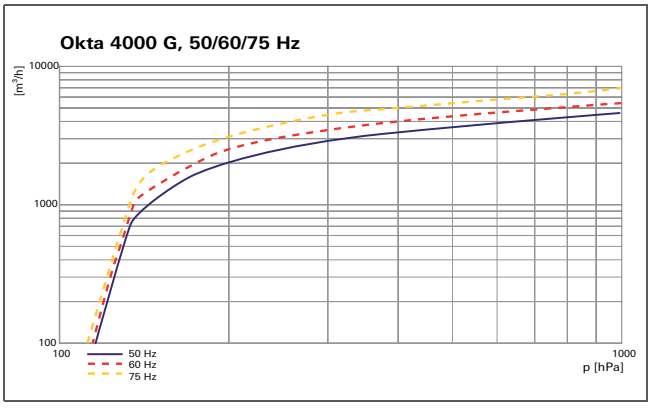
Accessories			
Splinter shield for Okta 4000 / 4000 M / 4000 G / 6000 / 6000 M	**PP 031 136 -X**	**PP 031 136 -X**	**PP 031 136 -X**

Okta 4000 G

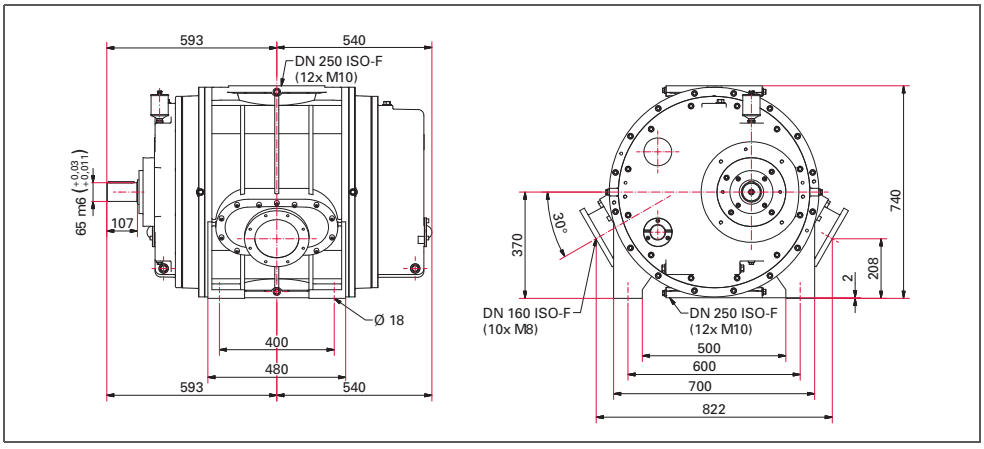
Gas-cooled Roots pump with a pumping speed range from 2300 to 6900 m³/h

- High-performance gas cooled roots pump with a pumping speed from 2300 to 6900 m³/h
- For applications in the low and medium vacuum
- Single stage pressure range from 130 to 1013 hPa, in series with smaller final pressure
- Connection flange DN 250 ISO-F
- No thermal overload thanks to gas cooling
- With sealing gas connection
- Customized design and offer for motor, gas cooler, and coupling on request

Pumping speed



Dimensions (in mm)



Technical data	Okta 4000 G, gas-cooled Roots pump without motor, DN 250 ISO-F
Flange (out)	DN 250 ISO-F
Flange (in)	DN 250 ISO-F
Operating fluid	P3
Operating fluid filling	21 l
Rotation speed	from 750 to 2250 min^{-1}
Rotation speed max.	2250 min^{-1}
Rotation speed min.	750 min^{-1}
Ultimate pressure without gas ballast	130 hPa
Weight: without motor	1150 kg
Cooling method, standard	gas-cooled
Cooling gas connection	DN 160 ISO-F
Leak rate	$1 \cdot 10^{-3}$ Pa m^3/s
Motor rating	max. 132 kW
Nominal rotation speed at 50 Hz	1500 min^{-1}
Nominal rotation speed at 60 Hz	1800 min^{-1}
Nominal pumping speed	2300-6900 m^3/h
Nominal pumping speed at 50 Hz	4600 m^3/h
Nominal pumping speed at 60 Hz	5500 m^3/h
Noise level with connected exhaust line	75-105 dB (A)
Protection category	IP 55
Sealing gas	Yes
Ambient temperature	5-40 °C

Order number	
Okta 4000 G	**PP G70 001**

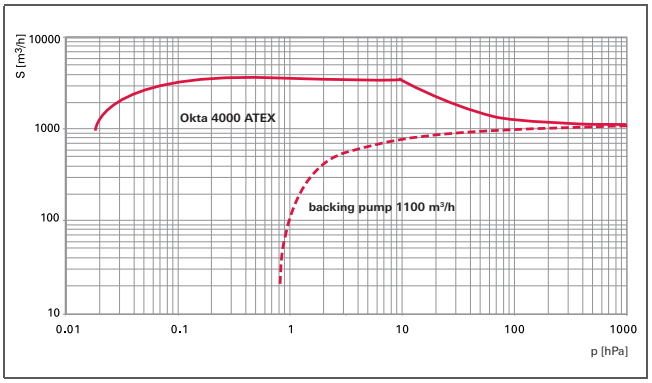
Accessories	
Splinter shield for Okta 4000 / 4000 M / 4000 G / 6000 / 6000 M	**PP 031 136 -X**

Okta 4000 ATEX

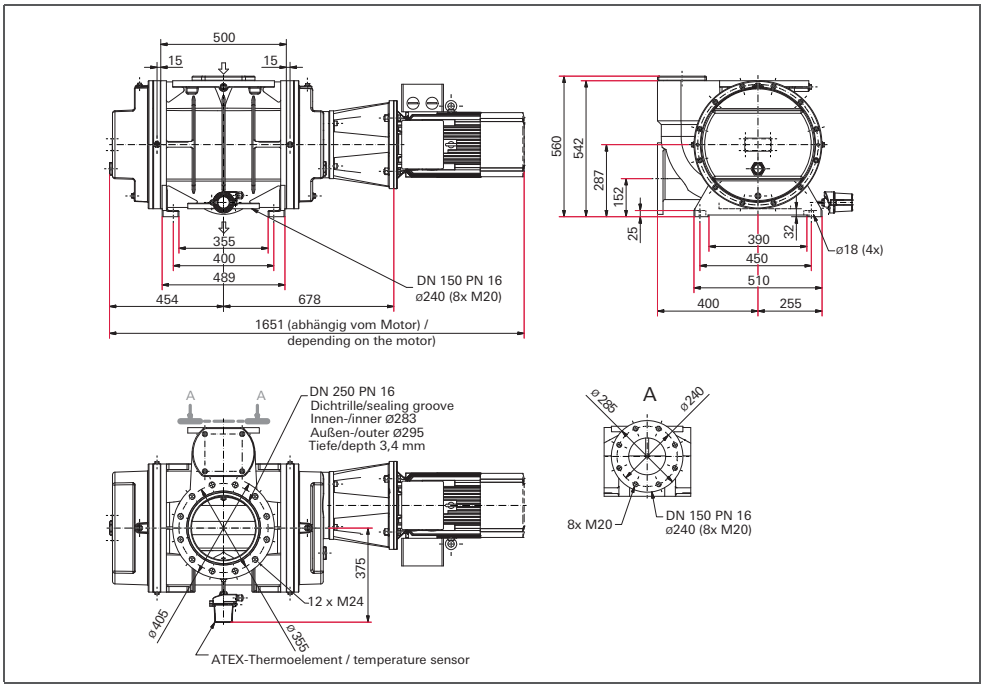
Roots pump with a pumping speed of 2160 to 5190 m³/h:

- High-performance Roots pump with a pumping speed of 2160 to 5190 m³/h
- With 3-phase ATEX motor
- Hermetically sealed, thanks to magnetic coupling, leakage rate < 1 · 10^{-5} hPa
- Pressure-surge resistant up to 1600 kPa
- No thermal overload thanks to integrated temperature sensor
- For ATEX applications (directive 94/9/EC)

Pumping speed



Dimensions (in mm)



Technical data	Okta 4000 ATEX, Roots pump, 230/ 400 V, 50 Hz
Flange (out)	DN 150 PN 16
Flange (in)	DN 250 PN 16
Version	ATEX with motor and magnetic coupling, blocked overflow-valve, ATEX according to directive 94/9/EC: group II, category 3G, equipment-group IIB, temperature class T3 X + 5 °C ≤ T_a ≤ +40 °C
Operating fluid	P3
Operating fluid filling	7 l
Rotation speed	from 1500 to 3600 min^{-1}
Rotation speed max.	3600 min^{-1}
Rotation speed min.	1500 min^{-1}
Emission sound pressure level (EN ISO 2151) at intake pressure 10 hPa	79 dB (A)
Emission sound pressure level (EN ISO 2151) at intake pressure 1 hPa	74 dB (A)
Weight: with motor	700 kg
Cooling method, standard	Air
Leak rate	$1 \cdot 10^{-6}$ Pa m^3/s
Motor protection	3TF
Nominal rotation speed at 50 Hz	3000 min^{-1}
Nominal rotation speed at 60 Hz	3600 min^{-1}
Rated power 50 Hz	11 kW
Rated power 60 Hz	13 kW
Nominal pumping speed	2160-5190 m^3/h
Nominal pumping speed at 50 Hz	4325 m^3/h
Nominal pumping speed at 60 Hz	5190 m^3/h
Mains requirement: voltage 50 Hz	230/400 V
Mains requirement: voltage 60 Hz	265/460 V
Protection category	IP 55
Ambient temperature	5-40 °C

Order number	
Okta 4000 ATEX	**PP W73 300**

Accessories

If there is a risk that solids (e.g. wealding beads, loose parts from within the pipeline) enter the pump during the operating phase, a suitable protective strainer should be used at the connection flange (inlet).

Splinter shield	
Splinter shield for Okta 250 / 250 M	**PK 300 010 -X**
Splinter shield for Okta 500 / 500 M / 500 G	**PP 030 149 AX**
Splinter shield for Okta 1000 / 1000 M / 1500 G / 2000 / 2000 M	**PP 031 114 -X**
Splinter shield for Okta 4000 / 4000 M / 4000 G / 6000 / 6000 M	**PP 031 136 -X**
Splinter shield for Okta 8000/Okta 8000 G	**PP 030 152 -X**
Splinter shield for Okta 18000	**PP 030 336 -T**
Splinter shield for Okta 8000 G	**PP 070 315 -U**

Operating fluid	
P3, mineral oil, 1 l	**PK 001 106 -T**
P3, mineral oil, 5 l	**PK 001 107 -T**
P3, mineral oil, 20 l	**PK 001 108 -T**
P3, mineral oil, 50 l	**PK 001 109 -T**
P3, mineral oil, 200 l	**PK 001 110 -T**