

Zired-Motor configurator

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Vane useful area		Zired-motor dimensions		
Wide (mm) =	300	H mm	W mm	D mm
height (mm) =	20	402	388	360
Vane useful area in m ²				
A (m ²) =	0,006			
Pressure on the vane useful area				
Bar =	3			
(Gauge pressure)				
P Pa (Pascal) =	300000			
force on the vane				
F (N) ≈	1800			
Diameter rotor				
L Ø(mm) =	300			
Distance force couple				
d(m) =	0,32			
theoretical shaft torque				
T(Nm) ≈	576			
efficient torque				
T(Nm*n) ≈	518,4			

Air consumption	
radius (m)	0,160
Peripherie (m)	1,005
Chamber volume in liter ≈	1,508
Liter/revolutions * bar ≈	18,096

revolutions/min =	24
Air consumption in Atm Liter/min ≈	434,293

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Air consumption in Atm Liter/h ≈	26057,604
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Tank (L) =	500
Tank pressure (bar) =	300
Tank pressure (bar) effective =	294,000
Air for consumption in Atm liter ≈	147000,000

Operating hours with the maximum 518,4 torque and D41 revolutions ≈	5,641
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maximum speed with 518,4 torque, 24 revolutions and 80:1 transmission ≈	218,880
Kilometers with one tankful ≈	1235

If you find any errors or you want the original Excel file please contact us: info@optimetron.com

