

INTAKE VALVE RBC200 - RBC240

SHAPED BY AIR DESIGNED FOR EFFICIENCY

Progressive flow geometry inspired by naturally
optimized airflow.



THE ORIGINAL ONE



VMC WORLD
ALWAYS AT A STATE OF THE ART



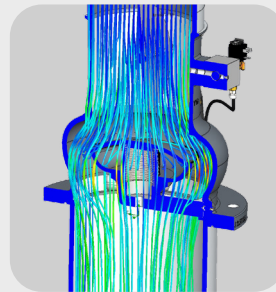
VMC'S R&D: THE EFFICIENCY IMPROVEMENT FROM AERODYNAMICS FOR COMPRESSED AIR SYSTEMS.

Inspired by nature, mankind has always used aerodynamic principles to minimize energy losses by optimizing the geometric body. The new VMC intake valve models, **RBC 200** and **RBC 240**, apply the same principles upon compressed air systems.

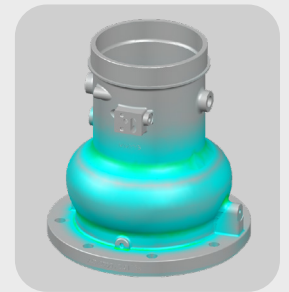
Their valve bodies feature a progressive converging-diverging flow profile designed to guide compressed air smoothly: minimizing pressure losses and increasing compressor efficiency.

KEY FEATURES:

- Progressive flow-driven geometry.
- Sinuous vortex profile.
- Reduced turbulence and pressure losses.
- Improved mechanical stress distribution.
- Butterfly valve with an integrated check valve available with multiple control methods.



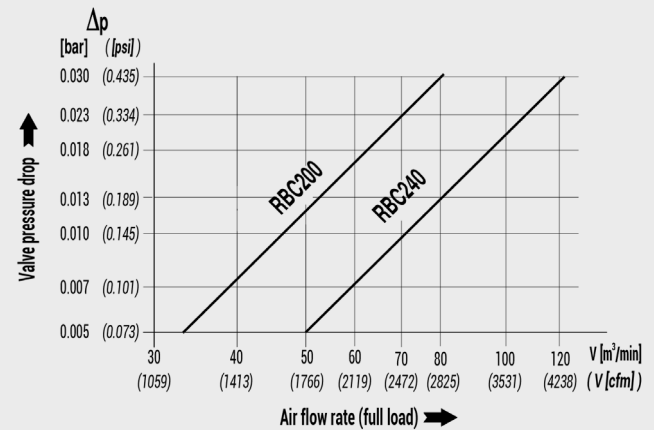
Example of airflow through RBC200, smooth velocity profile and minimized turbulence.



FEM analysis showing improvement stress distribution due to smooth flow-driven geometry.

PERFORMANCE BENEFITS:

- Reduced pressure drop across the valve.
- Improved airflow stability during load/unloading.
- Lower turbulence and flow separation.
- Reduced mechanical stress on internal components.
- Improved overall compressor efficiency.



DIMENSION		RBC200			RBC240	
Bolt holes	Nr.	8	12	12	12	
Y	mm-inch	Ø400 - Ø15.75		Ø460 - Ø18.1	Ø470 - Ø18.5	Ø560 - Ø22
Z-V	mm-inch	427 - 16.8		457 - 18	492 - 19.4	537 - 21.1
K	mm-inch	405 - 16			470 - 18.5	
V	mm-inch	Ø230 - Ø9.1			Ø254 - Ø10	
I1	mm-inch	Ø350 - Ø13.8		Ø410 - Ø16.1	Ø410 - Ø16.14	Ø510 - Ø20.1
I2	mm-inch	-			-	
I3	mm-inch	Ø22 Ø0.87	Ø18 Ø0.7	Ø25 - Ø1	Ø25 - Ø1	
O1	mm-inch	Ø304.5 - Ø12		Ø329.5 - Ø13	Ø329.5 - Ø13	Ø431 - Ø17
O2	mm-inch	Ø313.5 - Ø12.3		Ø341.5 - Ø13.4	Ø341.5 - Ø13.4	Ø443 - Ø17.4

