

**VBC SERIES**

**DESCRIPTION**

The VBC series pneumatic cylinder is designed to meet the standards set in ISO 15552, with bore sizes ranging from 32 mm to 250 mm. The cylinder has been newly designed with a complete change of covers and piston, an entire PU sealing system, a magnet integrated into a wear ring slot, a double cushion structure, and a strengthened cushion needle and guider. E.MC has also improved every process that contributes to better quality, including material choice, die-casting technology, machining consistency, and testing style. The pneumatic cylinders are machined with high-precision CNC machines and automatically assembled and tested. Additionally, the VBC series offers Mickey Mouse and tie-rod-type pneumatic cylinders in its range.

**FEATURES**

- Highlighted products for process optimisation
- Adheres to ISO15552 standard
- All PU sealing system
- Strong guiding design with high concentricity
- Bronze bearing with much better lateral loading
- Strengthened cushion design, soft ending
- Double cushioning system

**SPECIFICATIONS**

Cylinder type	Double acting, magnetic positioning
Materials	Aluminium end caps. S45C hard chrome carbon steel piston rod. Hard anodised aluminium barrel. PU seals
Max. working pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Speed range	50 – 800 mm/s
Mounting	Foot, rear trunnion, 90° rear trunnion, front flange, rear flange.
Available bore sizes	ø32 – 250 mm
Available stroke length	0 – 1900 mm
Cushion type	Adjustable air cushion



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**VBC SERIES STANDARD PROFILE CYLINDER 32 MM BORE**

PART NUMBER	BORE	STROKE
EM-VBC32X25-S	32 mm	25 mm
EM-VBC32X50-S	32 mm	50 mm
EM-VBC32X80-S	32 mm	80 mm
EM-VBC32X100-S	32 mm	100 mm
EM-VBC32X125-S	32 mm	125 mm
EM-VBC32X160-S	32 mm	160 mm
EM-VBC32X200-S	32 mm	200 mm
EM-VBC32X250-S	32 mm	250 mm
EM-VBC32X320-S	32 mm	320 mm

**80 MM BORE**

PART NUMBER	BORE	STROKE
EM-VBC80X25-S	80 mm	25 mm
EM-VBC80X50-S	80 mm	50 mm
EM-VBC80X80-S	80 mm	80 mm
EM-VBC80X100-S	80 mm	100 mm
EM-VBC80X125-S	80 mm	125 mm
EM-VBC80X160-S	80 mm	160 mm
EM-VBC80X200-S	80 mm	200 mm
EM-VBC80X250-S	80 mm	250 mm
EM-VBC80X320-S	80 mm	320 mm
EM-VBC80X400-S	80 mm	400 mm
EM-VBC80X500-S	80 mm	500 mm

**40 MM BORE**

PART NUMBER	BORE	STROKE
EM-VBC40X25-S	40 mm	25 mm
EM-VBC40X50-S	40 mm	50 mm
EM-VBC40X80-S	40 mm	80 mm
EM-VBC40X100-S	40 mm	100 mm
EM-VBC40X125-S	40 mm	125 mm
EM-VBC40X160-S	40 mm	160 mm
EM-VBC40X200-S	40 mm	200 mm
EM-VBC40X250-S	40 mm	250 mm
EM-VBC40X320-S	40 mm	320 mm

**100 MM BORE**

PART NUMBER	BORE	STROKE
EM-VBC100X25-S	100 mm	25 mm
EM-VBC100X50-S	100 mm	50 mm
EM-VBC100X80-S	100 mm	80 mm
EM-VBC100X100-S	100 mm	100 mm
EM-VBC100X125-S	100 mm	125 mm
EM-VBC100X160-S	100 mm	160 mm
EM-VBC100X200-S	100 mm	200 mm
EM-VBC100X250-S	100 mm	250 mm
EM-VBC100X320-S	100 mm	320 mm
EM-VBC100X400-S	100 mm	400 mm
EM-VBC100X500-S	100 mm	500 mm

**50 MM BORE**

PART NUMBER	BORE	STROKE
EM-VBC50X25-S	50 mm	25 mm
EM-VBC50X50-S	50 mm	50 mm
EM-VBC50X80-S	50 mm	80 mm
EM-VBC50X100-S	50 mm	100 mm
EM-VBC50X125-S	50 mm	125 mm
EM-VBC50X160-S	50 mm	160 mm
EM-VBC50X200-S	50 mm	200 mm
EM-VBC50X250-S	50 mm	250 mm
EM-VBC50X320-S	50 mm	320 mm

**125 MM BORE**

PART NUMBER	BORE	STROKE
EM-VBC125X50-S	125 mm	50 mm
EM-VBC125X80-S	125 mm	80 mm
EM-VBC125X100-S	125 mm	100 mm
EM-VBC125X125-S	125 mm	125 mm
EM-VBC125X160-S	125 mm	160 mm
EM-VBC125X200-S	125 mm	200 mm
EM-VBC125X250-S	125 mm	250 mm
EM-VBC125X320-S	125 mm	320 mm
EM-VBC125X400-S	125 mm	400 mm
EM-VBC125X500-S	125 mm	500 mm

**63 MM BORE**

PART NUMBER	BORE	STROKE
EM-VBC63X25-S	63 mm	25 mm
EM-VBC63X50-S	63 mm	50 mm
EM-VBC63X80-S	63 mm	80 mm
EM-VBC63X100-S	63 mm	100 mm
EM-VBC63X125-S	63 mm	125 mm
EM-VBC63X160-S	63 mm	160 mm
EM-VBC63X200-S	63 mm	200 mm
EM-VBC63X250-S	63 mm	250 mm
EM-VBC63X320-S	63 mm	320 mm
EM-VBC63X400-S	63 mm	400 mm
EM-VBC63X500-S	63 mm	500 mm

For cylinder dimensional drawings please see page 347