

POROUS MEDIA™ AIR BUSHING

50mm Inside Diameter



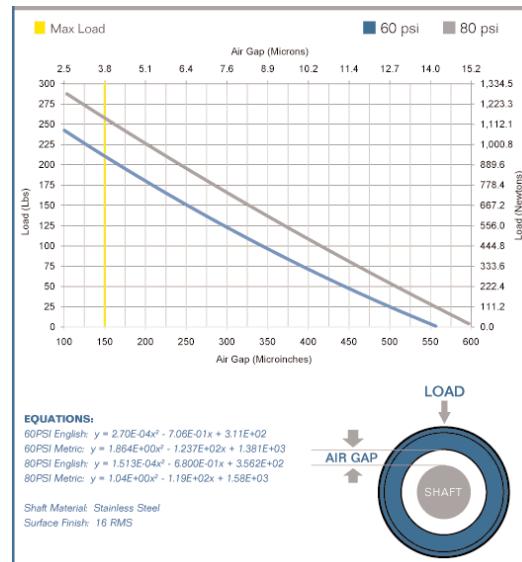
50mm ID Air Bushings

Second largest of the New Way metric air bushing line, the 50mm ID size provides the scale necessary for more significant load-carrying capability on metric shafting. These porous media bushings are an inexpensive way to achieve frictionless linear motion, and compare favorably with conventional rolling element bearings across virtually every performance characteristic. They are also easy to apply, replace or change.

SPECIFICATIONS: 50mm #S305002

Input Pressure	.41 MPa (60psi)
Radial Load Max N (lbs)	934 (210)
Radial Stiffness N/µm (lbs/µ in)	110 (0.63)
Pitch Moment Max N-m (lbs-in)	5.2 (46.0)
Pitch Stiffness N-m/mil rad (lbs-in/mil rad)	23.0 (202)
Flowrate on Shaft NLPm (SCFH)	8.97 - 11.89 (19.00 - 25.20)
Air Gap (at maximum recommended load) microns	4
Bushing Inside Diameter - ID mm	+0.0051, -0.0000
	50
Bushing Outside Diameter - OD mm (in)	74.1 (2.918)
Bushing Length mm (in)	89 (3.500)
Bushing Weight grams (oz.)	482 (17.0)
Housing Material/Finish	Aluminum/Anodized
Porous Media Material	Carbon
Recommended Shaft Outside Diameter - OD mm	50.0000
Recommended Shaft Tolerance (g6) µm	-9, -25
Pressure Port Threads	M5 x 0.8
Viable Pressure Range MPa (psi)	0.414 - 0.552 (60 - 80)
Maximum Allowable Pressure Supply MPa (psi)	0.689 (100)
Resolution	Infinite
Maximum Speed m/sec (ft/sec)	50 (164.04)
Common Shaft Materials	Anodized aluminum, stainless steel, nickel plated steel, ceramics, glass

TEST DATA – 50mm ID Air Bushing

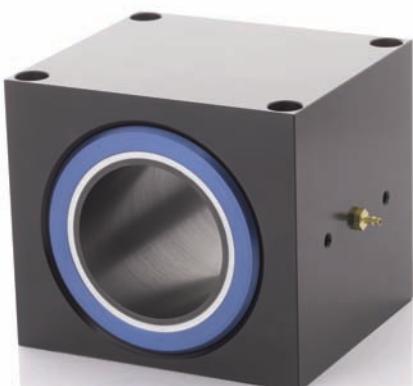
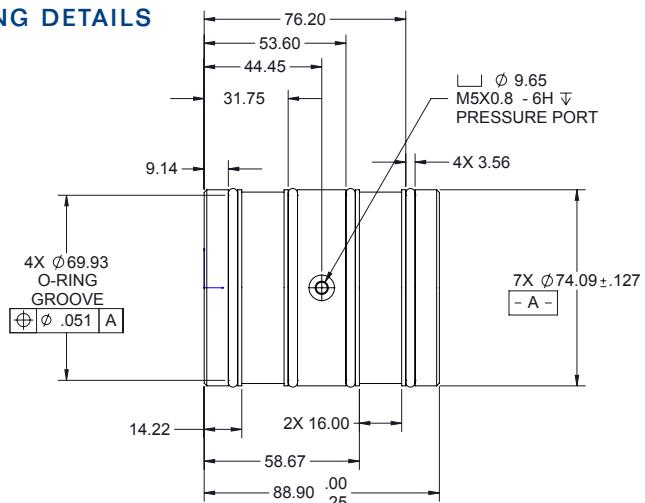
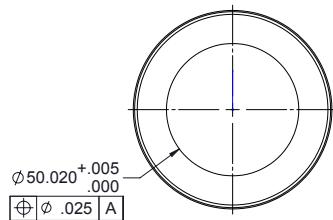


Lift/Load Data

POROUS MEDIA™ AIR BUSHING

50mm ID

ENGINEERING DRAWINGS AND MOUNTING DETAILS



COMPLETE NEW WAY METRIC AIR BUSHING PRODUCT LINE



NEWWAY®
air bearings

50 McDonald Blvd., Aston, PA 19014 USA • Phone: 610-494-6700 • Fax: 610-494-0911

www.newwayairbearings.com • info@newwayairbearings.com

