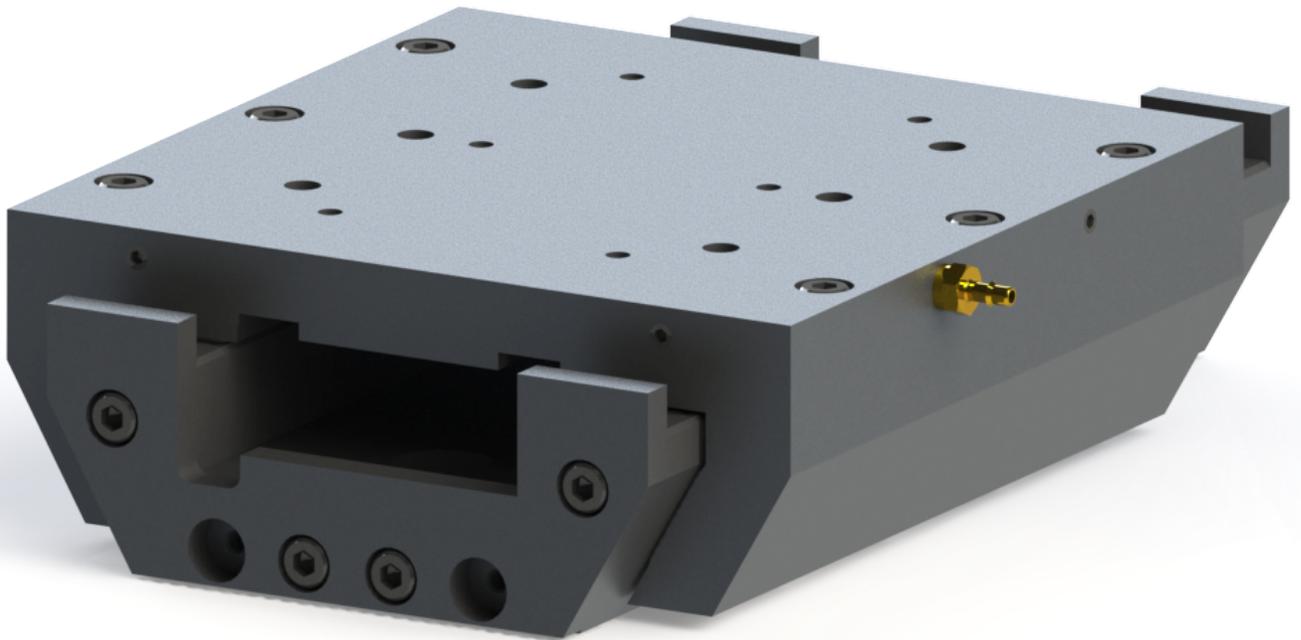




+1 609-454-5340

OAV[®] Linear Guide Assembly

Non-Contact Ultra Precision Motion



Made in 
USA

OAV Air Bearings

Carnegie Center PO BOX 7421 Princeton NJ 08543

email : support@oavco.com



About OAV Air bearings

OAV Air Bearings is the leading manufacturer of the recently advanced air bearing technology. We are committed to providing our customers with the most precise bearing system available spread over many existing and emerging markets around the world. Advanced technologies have led to major breakthroughs and have given way to new markets. These developments have increased the need for precision tools and equipment. We have combined our past experience with today's technologies and implemented military spec materials including aluminum, titanium, and graphite in producing our state of the art OAV Air Bearing products

OAV Air Bearings do not have mechanical contact between elements and benefit from an air-film averaging effect. Furthermore, due to an absence of mechanical contact, the OAV Air Bearing has virtually no friction to generate heat and cause wear.

Management System

Our commitment to the highest quality standards, not only for our products, but also our organizational processes, is reflected by our integrated management system. Our strategy and quality management system promote continuous quality improvement, while metrics quantify measurable results. To maintain continuous achievements we have adopted international quality standards and our quality system complies with ISO-9001-2008 and MIL-I-45208.

Air Bearing Linear Guides

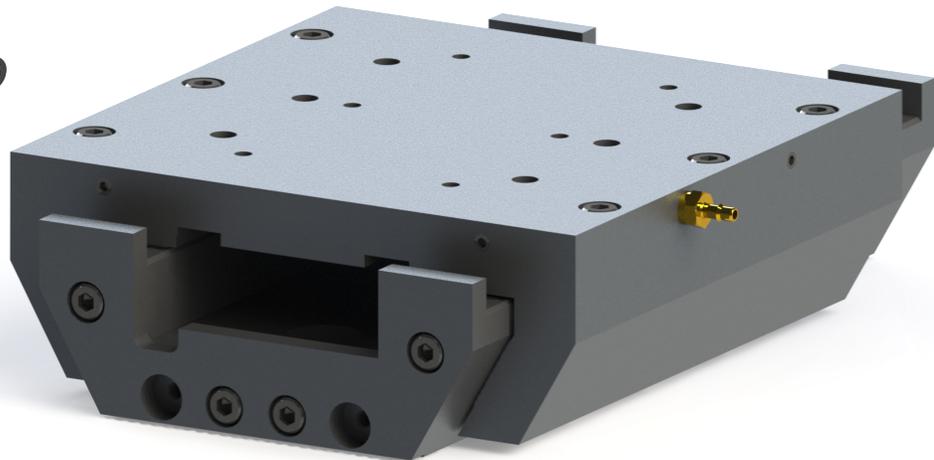
The manufacturing process for OAV Linear Air Bearing Guides ensure Ultra high precision and outstanding quality. We offer high-load capability, and Ultra High precision and performance to meet the needs of many industries.

OAV Profile Rail Guides consists of the next generation OAV Air Bearings and manufactured from Aircraft Quality lightweight linear guides, Box Series, T-Series , U-Series and Dovetail Series. It is a complete offering of Air Bearing slides in a wide range of styles, sizes and unique features produced for easy retrofitting into existing applications or designing into new applications.

Dovetail-Series



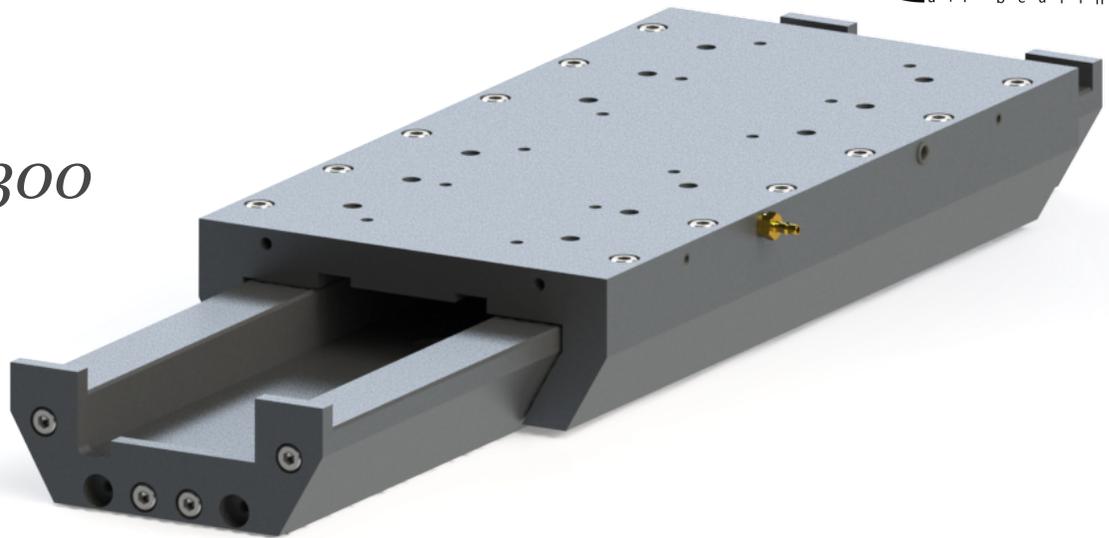
DOV150150



OAV Profile Dovetail Series Rail Guides consists of the next generation OAV Air Bearing® and manufactured from Aircraft Quality lightweight Aluminum 7075-T6 linear guides

Part #	DOV150150
Local straightness	.25µm per 25mm travel
Maximum error	2µm per 1000mm travel
Flatness	.0005mm or .00002inc
Carriage Size	150mm x 150mm
Travel	100mm/200mm/300mm/ Custom
Guidebar Length	Custom
Assembly Height	55mm
Carriage Weight	1.3kg (2.8lb)
Total Weight	1.95 kg (4.2 lb) (100mm Travel)
Z direction Load	440 lb (1957 N)
Y direction Load	380 lb (1690 N)
Air Flow	17 nlpm
Pitch	356 N-m
Roll	406 N-m
Yaw	175 N-m
Y Stiffness	670N/micron
Z Stiffness	730 N/micron

DOV150300



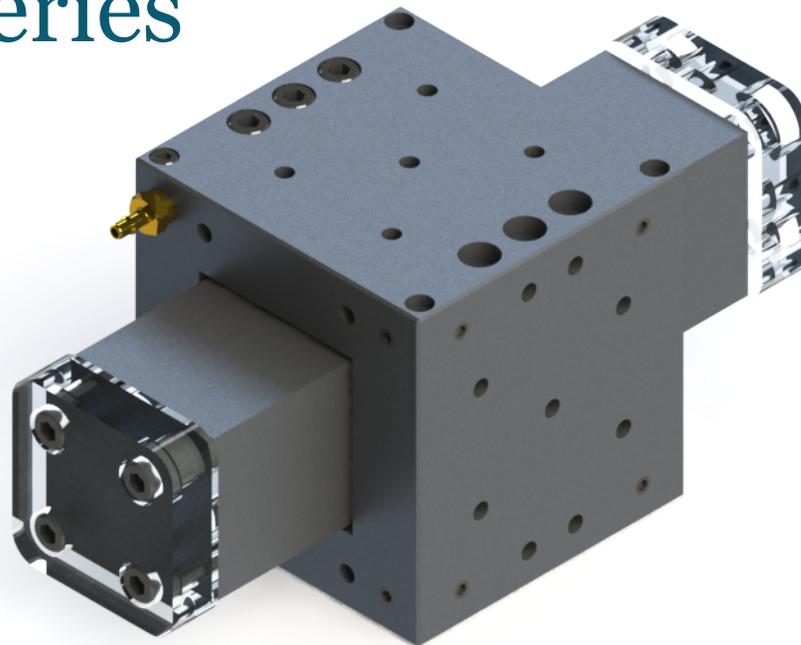
OAV Profile Dovetail Series Rail Guides consists of the next generation OAV Air Bearing® and manufactured from Aircraft Quality lightweight Aluminum 7075-T6 linear guides

Part #	DOV150300
Local straightness	.25µm per 25mm travel
Maximum error	2µm per 1000mm travel
Flatness	.0005mm or .00002inc
Carriage Size	150mm x 300mm
Travel	100mm/200mm/300mm/ Custom
Guidebar Length	Custom
Assembly Height	55mm
Carriage Weight	2.6 kg (2.7lb)
Total Weight	3.89kg (8.5lb)(200mm Travel)
Z direction Load	790 lb (3514N)
Y direction Load	620 lb (2757 N)
Air Flow	23 nlp
Pitch	1188 N-m
Roll	1237 N-m
Yaw	495 N-m
Y Stiffness	1609 N/micron
Z Stiffness	2176 N/micron

BOX-Series



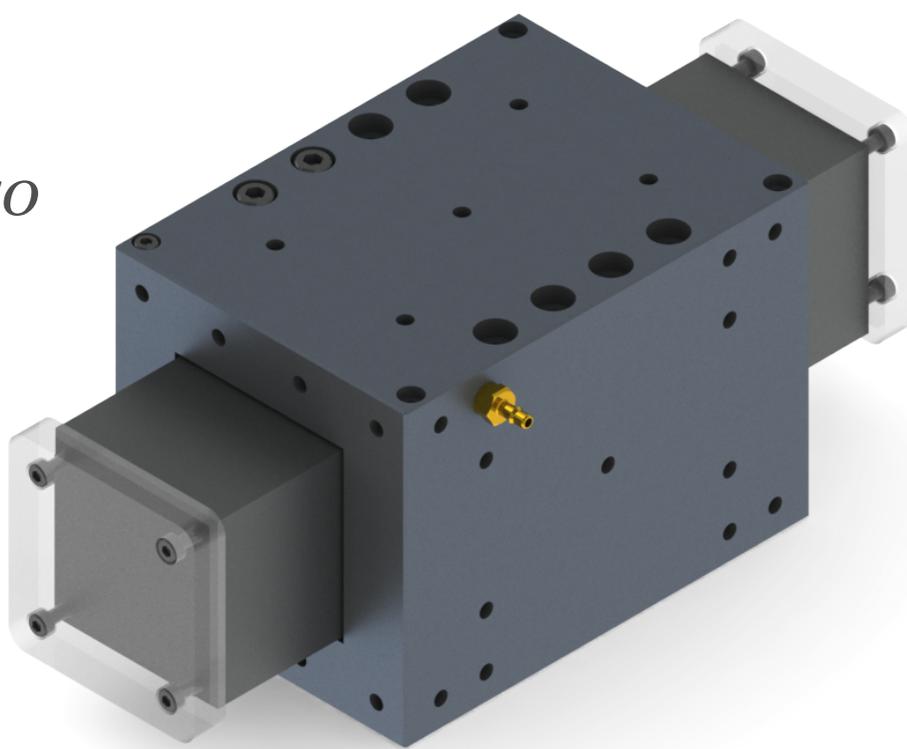
BX4040



OAV Profile Box-series Rail Guides manufactured from Aircraft Quality lightweight Material, Ultra precise linear straightness and flatness vibration-free, maintenance-free motion. Ready to install, Integrated locking brake function, through pre-tensioning of the air bearing, for ultimate accuracy positioning.

Part #	BX4040
Local straightness	.25 μ m per 25mm travel
Maximum error	2 μ m per 1000mm travel
Flatness	.0005mm or .00002inc
Carriage Size	80mm x 80 mm and 75mm Length
Travel	100mm/200mm/300mm/ Custom
Guidebar Size	40mm X40mm
Assembly Height	80mm
Carriage Weight	.86 kg (1.89lb)
Total Weight	2.8 kg (6.1lb) (100mm Travel)
Guide Bar length	Custom
Z direction Load	124 lb (551N)
Y direction Load	124 lb (551N)
Air Flow	4.6 nlpm
Pitch	78 N-m
Roll	78 N-m
Yaw	78 N-m
Y Stiffness	183N/micron
Z Stiffness	183N/ micron

BX5050



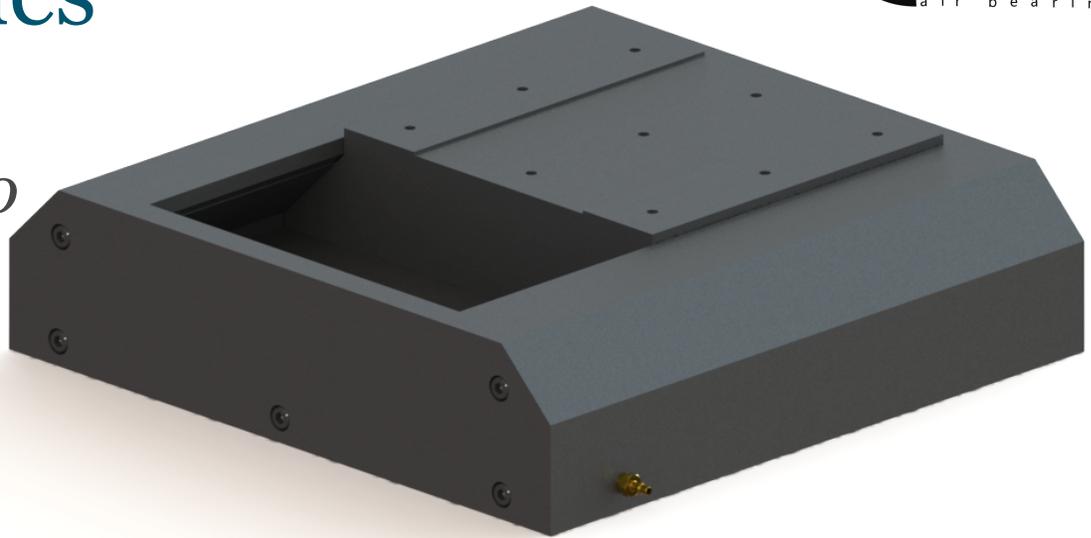
OAV Profile Box-series Rail Guides manufactured from Aircraft Quality lightweight Material, Ultra precise linear straightness and flatness vibration-free, friction free, maintenance-free motion. Ready to install, Integrated locking brake function, through pretensioning of the air bearing, for ultimate accuracy positioning and flexibility.

Part #	BX5050
Local straightness	.25µm per 25mm travel
Maximum error	2µm per 1000mm travel
Flatness	.0005mm or .00002inc
Carriage Size	90mm x 90 mm and 125mm Length
Travel	100mm/200mm/300mm/ Custom
Guidebar Size	50mmX50mm
Assembly Height	90mm
Carriage Weight	1.6 kg (3.5lb)
Total Weight	5.76 kg (12.6lb) (100mm Travel)
Guide Bar length	Custom
Z direction Load	356 lb (1583N)
Y direction Load	356 lb (1583N)
Air Flow	5.1 nlpm
Pitch	160 N-m
Roll	144 N-m
Yaw	160 N-m
Y Stiffness	353N/micron
Z Stiffness	353N/ micron

U-Series



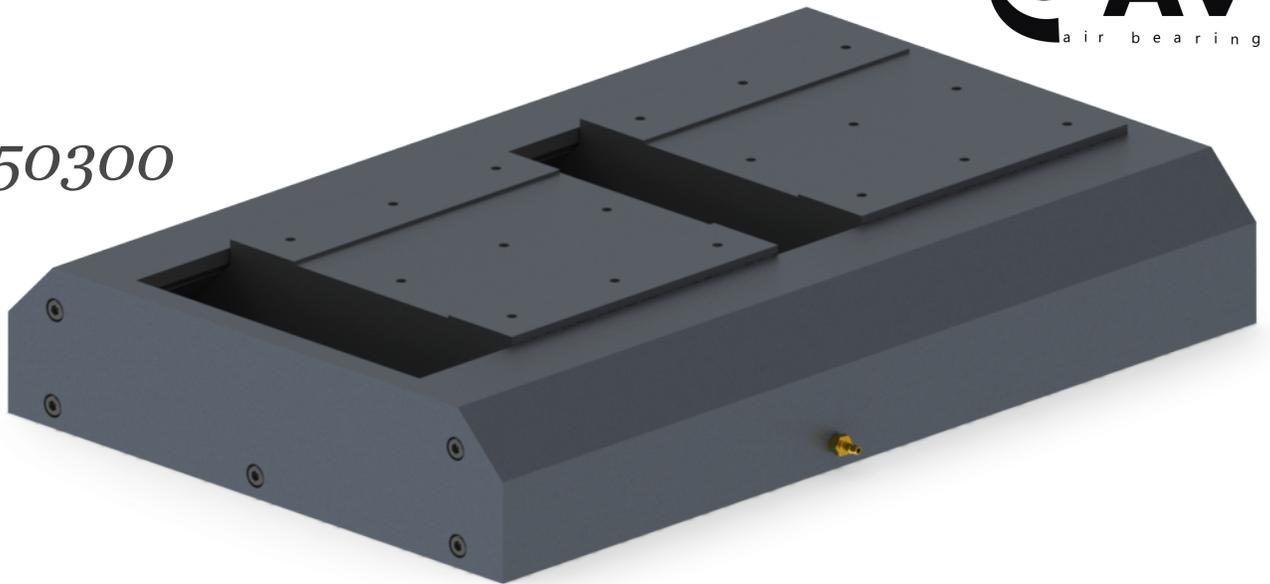
US150150



OAV Profile U-series Rail Guides manufactured from Aircraft Quality lightweight Material. Air supply port located in base guide with couple location options for ultimate accuracy positioning and flexibility.

Part #	US150150
Local straightness	.25µm per 25mm travel
Maximum error	2µm per 1000mm travel
Flatness	.0005mm or .00002inc
Carriage Size	150mm x 150mm
Travel	100mm
Guide Base Length	250mm / Custom
Assembly Height	68mm
Assembly width	280mm
Carriage Weight	7 Lb
Total Weight	19 lb
Z direction Load	918 lb (4083N)
Y direction Load	230 lb (1023 N)
Air Flow	38 nlpm @100mm Travel
Pitch	356 N-m
Roll	406 N-m
Yaw	210 N-m
Y Stiffness	3801 N/micron
Z Stiffness	4106N/micron

US150300



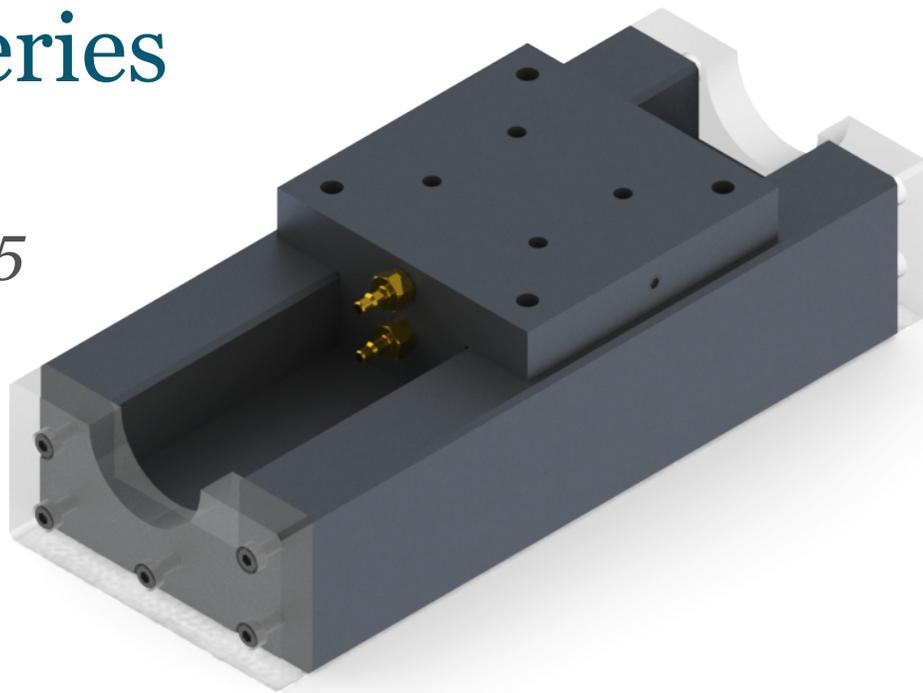
OAV Profile U-series Rail Guides with Double Carriage can use separate or attached each other, manufactured from Aircraft Quality lightweight Aluminum Material. Air supply port located in the guide with couple location option for ultimate accuracy positioning and flexibility.

Part #	US150300
Local straightness	.25µm per 25mm travel
Maximum error	2µm per 1000mm travel
Flatness	.0005mm or .00002inc
Carriage Size	150mm x 150mm / 150mm X 150mm Double Carriage or Attach
Travel	100mm
Guide Base Length	400mm/Custom
Assembly Height	68mm
Assembly width	280mm
Carriage Weight	7 Lb Each Carriage
Total Weight	35 lb
Z direction Load	1830 lb (8140N)
Y direction Load	380 lb (1690)
Air Flow	42 NLPM @ 100mm Travel
Pitch	356 N-m
Roll	406 N-m
Yaw	210 N-m
Y Stiffness	3801 N/micron
Z Stiffness	4106N/micron

T-Series



TS7575



OAV Profile T-series Rail Guides manufactured from Aircraft Quality lightweight Material. OAV Vacuum Preloaded Air Bearing combination of air pressure and vacuum, air bearings hold it down while simultaneously lifting from the surface for ultimate precision.

Part #	TS7575
Local straightness	.25 μ m per 25mm travel
Maximum error	2 μ m per 1000mm travel
Flatness	.0005mm or .00002inc
Carriage Size	75mm x 75mm
Travel	100mm/200mm/300mm/ Custom
Guide Length	190mm/ Custom
Assembly Height	55mm
Carriage Weight	.24 lb (.11kg)
Total Weight	1.37 lb (.62kg) 100mm travel
Z direction Load	90 lb (400N)
Y direction Load	20 lb (88N)
Air Flow	1.3 NLPM
Pitch	11 N-m
Roll	19 N-m
Yaw	33N-m
Y Stiffness	28 N/micron
Z Stiffness	30N/micron

OAV® Air Bearing Authorized Distributors

OAV® Air Bearings



OAV Air Bearing
Toll Free: 1(844)761-1995
Int:+1(609)454-5340
Fax:+1(609)454-5394
Email: sales@oavco.com
<http://www.oavco.com>
Carnegie Center PO Box 7421 Princeton NJ 08543 USA

OAV®Hamilton Facility



OAV Air Bearing Hamilton Facility
Int:+1(609)858-0641
Fax:+1(609)454-5394
Email: support@oavco.com
<http://www.oavco.com>
Hamilton NJ 08609
USA

US-East



ISOTECH, INC
Toll Free:(800) 314-3332
Int: 267-663-5555
Fax:215-631-9148
Email: info@isotechinc.com
<http://www.isotechinc.com>
1517 Gehman Rd. Harleysville, PA 19438
USA

OAV®Philly



OAV Air Bearing Philadelphia
Toll Free: 1(844)761-1995
Email: sales@oavco.com
<http://www.oavco.com>
N Columbus Blvd
Philadelphia PA 19106
USA

Europe



OAV Air Bearings Germany
Most product Ship within three business days
Tel : +491632594874
Email : eu@oav.co
<http://www.oav.co>
Butzweiler Str.13 50829 Cologne,
GERMANY

Australia/ New Zealand



CGB Precision Products P/L
Tel: +61 3 9584 5311
Fax:+61 3 9584 778
Email: info@cgb.com.au
www.cgb.com.au
Unit 9, 32 Silkwood Rise
Carrum Downs, Victoria, 3201
Australia

Singapore



Plant & Mill Supplies Pte Ltd
Tel: +(65) 6542 4211 1
Fax:+(65) 6542 1318
Email: sales@pmsupplies.com
www.pmsupplies.com
4, Loyang Lane, #05-02
Singapore 508914
Singapore

Malaysia



Plant & Mill Motion Control Sdn Bhd
Tel: +(604) 645 1861, +(604) 644 8369
Fax:+(604) 644 8543
Email: penang.sales@pmsupplies.com
www.pmsupplies.com
Wisma Malvest, Room 2, 20C, Jalan Tun Dr.
Awang, 11900 Bayan Lepas, Penang,
Malaysia

Thailand



PMC Technology Co.
Tel: +(662) 667 4501
Fax:+(662) 667 4506
Email: bangkok.sales@pmsupplies.com
www.pmsupplies.com
10, Ruam Chitt Road,
Dusit, Bangkok 10300,
Thailand

China



Shanghai Winer Motion Co., Ltd.
Tel:+862168188672
Email: sales@winmot.com
Fax:+862168188673
www.winmot.com
Rm. 1603,Bd.47, No. 129 East Nianjiabang Road, 201315 Shanghai,
China