



# Atmospheric Linear Track

Hardware

## Description

Brooks Automation Inc. offers the most robust and versatile robot track system in the industry. The TRA series linear track, featuring a unique modular design can be easily integrated into any application where parallel 300mm load ports, 200mm SMIF modules, or process chambers are configured.

The TRA series track uses Brooks Automation's field proven, industry leading robot. The TRA series track provides the robot with an independent fourth axis that enables straight line wafer transfer motions. This simple Cartesian coordinate system can be quickly taught using Brook's advanced EQT software.

Brooks Automation's standard ESC series integrated controller offers high resolution DC servo control and true sine curve motion profiling for smooth motions and unmatched precision. In addition, all axes can perform parallel motions using Time Optimized Trajectories leading to even higher throughput times. As with every Brooks Automation product, the TRA linear track has been designed to offer unmatched reliability and performance. High capacity linear bearings, special flexible cables, and a heavy duty DC servo drive are used to produce trouble free operation. The drive mechanism and power supply are mounted between the linear rails minimizing the track's footprint.

## BENEFITS:

- Modular design
- Travel lengths to 76 inches
- Sine curve motion profiling
- Mechanically independent fourth axis
- Low profile compact design available
- Integrated power supply and amplifier
- Specially designed flex cables to robot
- Long life linear motion guide bearing system
- Small footprint
- CE Mark (standard) and SEMI S2Compliant

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TECHNICAL FEATURES

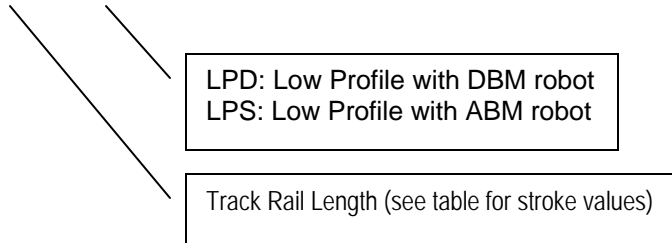
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## General Specifications:

<b>Range of Motion</b>	22" to 62"	
<b>Repeatability</b>	± 0.001" @ 3 sigma	
<b>Average Speed</b> (ABM-407 payload)	TRA-036-LPS	18"/sec
	TRA-076-LPS	32"/sec.
<b>MTBF</b>	>28,000 hours	

## Configuration Chart

**TRA-XXX-XXX**



### Low profile Track

TRA-xxx-LP(S,D)	Effective Stroke DBM robot (D)	Effective Stroke ABM robot (S)	Rail Length	Overall Length	Overall Width	Weight	E-15.1 PDO capacity
036	22	23.8	36.0	40.2	17.0	130lbs.	2
076	62	63.1	76.0	80.2	17.0	206lbs.	4

Note: all measurements in inches



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