

# Electrical Tripod EXPT

## 3D High Speed Pick & Place

**FESTO**



### High Speed Handling Solution

#### Product

Fast pick and place to move low masses within the working space, together with optimized motor-controller-combination and precise motion control.

#### Features

- 4 sizes(45, 70, 95, 120)
- Simple and stiff design
- Low moved dead weight:
  - high dynamical performance
- Standard components:
  - simple and fast maintenance/repairing
- Compact design, 50% saved space compared with standard machines

#### Benefits

- Cycle times 2-3 times faster than with cartesian Pick & Place systems
- Simple and well arranged design allows easy setup and operation
- Single supplier for all components of the solution

#### Optimized Movement

- Point-To-Point (PtP)
- Linear & circular interpolation
- Overlapping of positions (reduced cycle times)
- Constant path velocity

#### Applications

- Pick&Place of small pieces
- Glueing
- Labeling
- Pallet application
- Sorting
- Grouping
- Transferring
- Separating

# Electrical Tripod EXPT

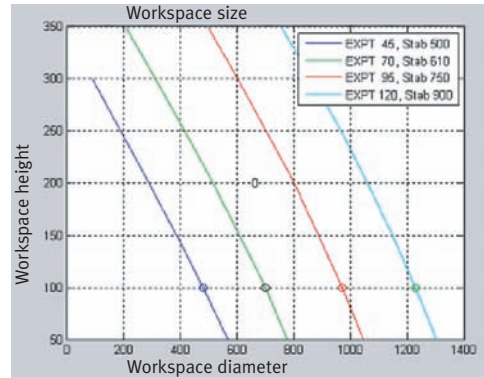
## 3D High Speed Pick & Place

### Technical Data

Performance	
Max. acceleration	100 m/s <sup>2</sup>
Max. velocity	4.5 m/s
Repeatability*	+/-0.1 mm
Absolute accuracy*	0.5 mm
Path accuracy (at max 0,3 m/s)	1 mm
Payload at max. acc. und velocity	1 kg
Max. Payload	5 kg
Environment	
Temperature range	-10°C...50°C
Protection class	IP40
Path control	
Number of axes	3 to 6 axes-robotic control (with CMXR)
Motor/Drive package	
Motor	3x Servo motor type EMMS-100-S
Drive	3x 5A servo controller CMMP-AS
Mechanics	
EXPT 45 und 70	3x DGE-25-ZR roller guided axis
EXPT 95 und 120	3x EGC-80-ZR linear guided axis

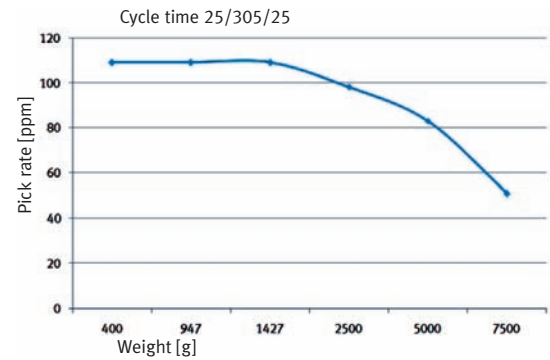
\* depends on size and load

### Workspace

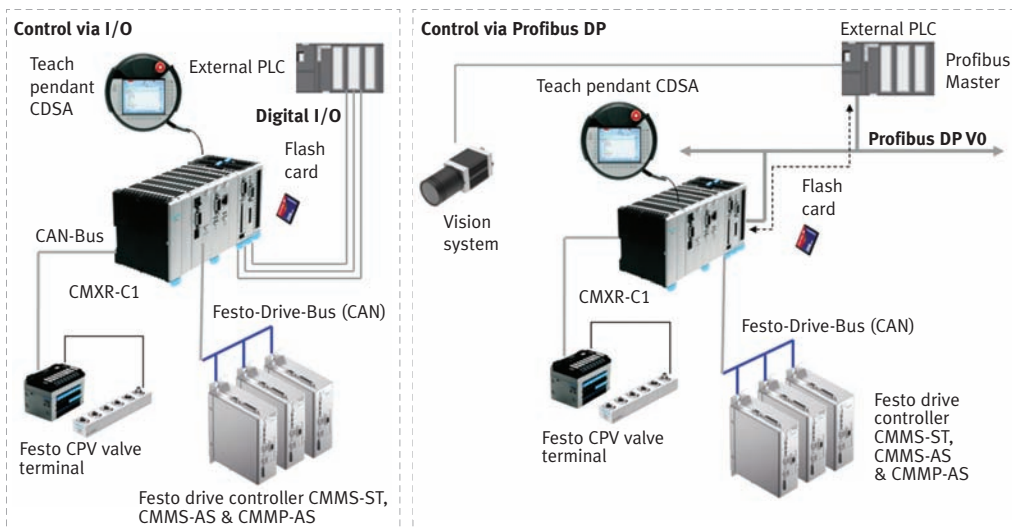


Each displayed point can be reached by the end effector.

### Typical Cycle Time (12" cycle)



### Control System Architecture



Conditions:  
h=25 mm, l= 305 mm  
plus gripping time and  
miscellaneous non-productive times



### Festo Corporation

For ordering assistance, or to find your nearest Festo Distributor,  
**Call:** 1.800.99.FESTO  
**Fax:** 1.800.96.FESTO  
**Email:** customer.service@us.festo.com  
**Visit:** www.festo.com/us

For technical support,  
**Call:** 1.866.G0.FESTO  
**Fax:** 1.800.96.FESTO  
**Email:** product.support@us.festo.com

### Optimized Movements

