



### SiWays<sup>®</sup> Spider D3-1100 (R)

- Higher weight capacity at higher speeds
- Siemens totally integrated automation
- ISO 9409 standard gripper attachment
- Highly cost effective
- Synchronisation
- Flexible solutions
- Fully customizable parts easily replaceable

Net Load

Version	Capacity
D3-1100	1500 g
D3-1100 R (with rotational axle)	1500 g

Protection Class

D3-1100	IP64
D3-1100 R	IP64

Electrical Data

Mains Voltage	400 VAC
Control System	Simotion

Weight

D3-1100 Construction incl. drives	25.67 kg
D3-1100 Moving parts	2500 gr
D3-1100 Complete	28.17 kg
D3-1100 R Construction incl. drives	29.97 kg
D3-1100 R Moving parts	3280 gr
D3-1100 R Complete	33.25 kg

Environment

Temperature in operation	-5°C/+50°C
Temperature in storage & transport	-20°C/+70°C
Humidity	Max. 80%
Noise level	< 72 dB
Emission	EMC/EMI shielded

Cycle times D3-1100 (R)

Cycle (mm)	Payload (g)	c/min.
25.4-101.6-25.4	1000	169
25.4-101.6-25.4	500	188
25.4-101.6-25.4	100	195
25.4-304.8-25.4	1000	83
25.4-304.8-25.4	500	94
25.4-304.8-25.4	100	135
25.4-711.2-25.4	1000	47
25.4-711.2-25.4	500	54
25.4-711.2-25.4	100	66

Options

Integrated vacuum supply	
Vision sytem application	
Siemens totally integrated automation	

Safety

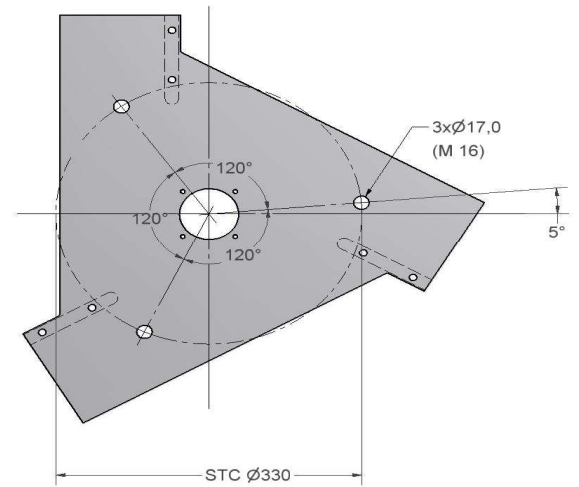
Safety Integrity Level (SIL)	2
According to EN 61508	
Performance Level (PL)	d
According to EN ISO 13849-1	
Category	3
According to EN-954-1 or EN ISO 13849-1	

### Mounting

Mounting	Inverted
D3-1100 and D3-1100 R	3*M16 8,8
Max. Force per fixing point Z direction	350 N

### Note:

Ensure Frame + Robot natural Frequency exceeds 15 Hz

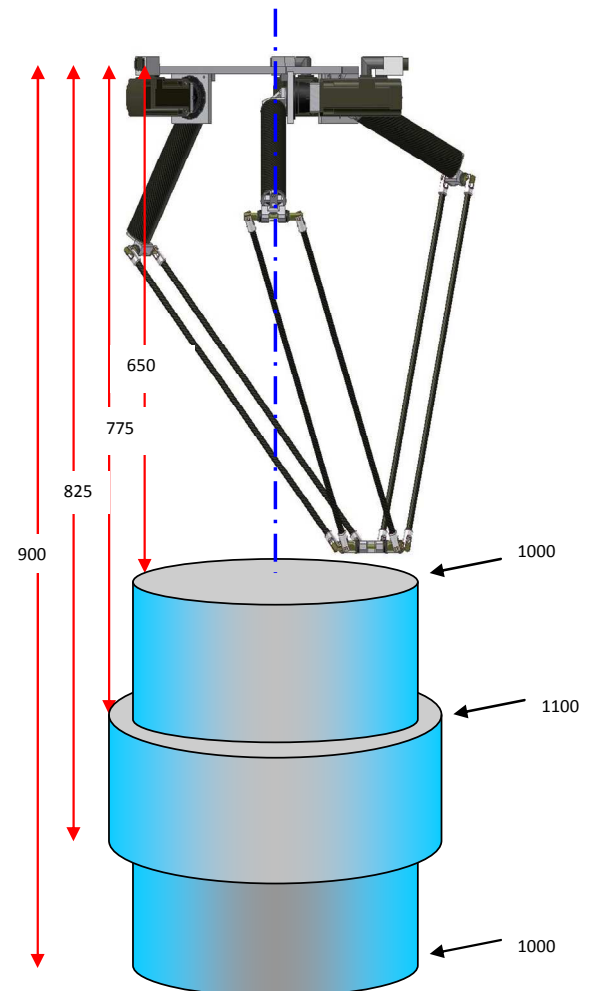


Mounting plate D3-1100 (R)

### Performance D3-1100 (R)

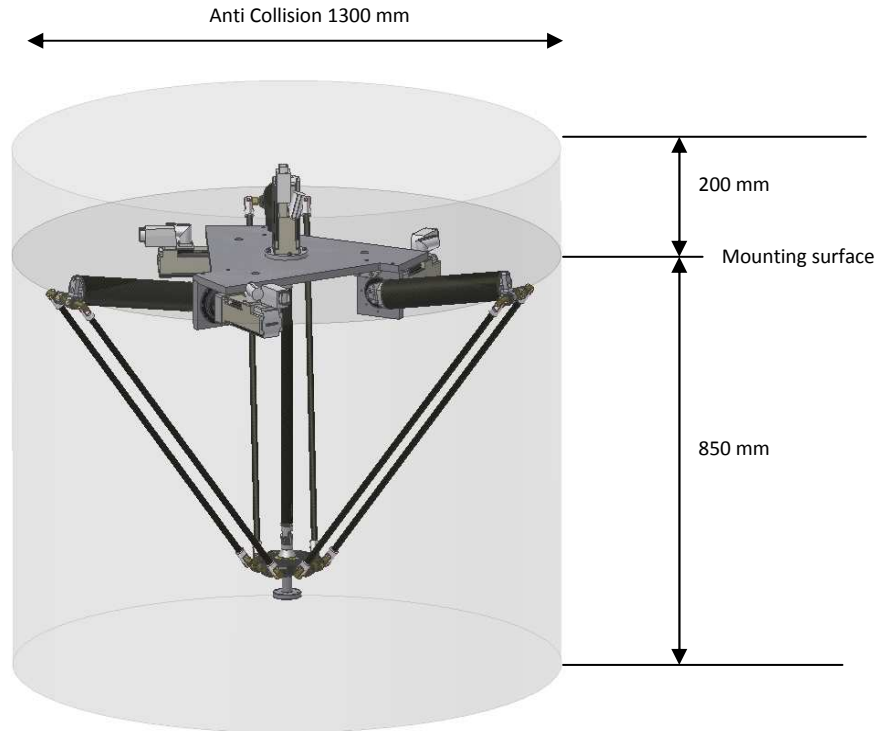
Position repeatability	0.05 mm
Angular repeatability	0.1 °
Working range	
Diameter	1100 mm
Height	250 mm
Length upper arm	343 mm
Length lower arm	785 mm
Rotation	Unlimited
Max. Torque axis 4	0.6 Nm

### Working area



#### Anti Collision Area

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The mounting of the extremely lightweight SiWays® Spider can be realized with three bolts through the mounting plate shown on the previous page. The R series Spider demands some space above the mounting plate as shown in the picture above. This space is needed for the fourth drive in case of an R-series including an rotational axle. The Collision area of the SiWays® Spider can be altered to specification through adaptive software and is always tailor made to the clients specifications.

The SiWays® Spider distinguishes itself through complete integration in the process. With the use of Simotion D the Delta Picker can be easily synchronized with any conveyor. A simple encoder that relays the position of the conveyor to the Simotion CPU is sufficient even with variable conveyor speeds. The movements of the Robot and the conveyor are exactly synchronous. This makes the integration of the SiWays® Spider in, for instance, packaging processes extremely feasible.

With the low-budget SiWays® Spider applications arise that previously were unfeasible because of high investments. Integration with 3D-vision systems with product- and position recognition is relatively easy. The control unit of the robot can be expanded to include full control of the related machine resulting in substantial savings on cost, hardware, space and installation. VSE and NedQuip conclude that with the introduction of the SiWays® Spider a highly cost effective and fully functional delta picker is introduced to the market.

SiWays® is a combined effort of VSE, NedQuip and Siemens. We Are Your Solution (Ways) is a result of VSE and NedQuip working as one to ensure the highest standard of mechanical- and software engineering.

VSE and NedQuip reserve the right to change specifications without notice and assume no responsibility for any errors that may appear in this document.

[www.vse.nl](http://www.vse.nl)

[www.nedquip.com](http://www.nedquip.com)

[www.ways.tc](http://www.ways.tc)