

SYZAX HEAVY linear modules are the most robust of the SYZAX range. Designed for **applications requiring high forces and stiffness in limited footprint**, **SYZAX HEAVY** modules are available in 6 versions of carriages and performance.

DYNAMIC : ideal for «Pick & Place» cycles below the second.

RIGID : high tolerance to off-center loads.

COMPACT : the best in its class for a given range of performances.

MODULAR : easy mechanical and electrical integration, compatible with a wide range of market drives.

Electromechanical Data

Carriage type	Unit	H1	H2	H3	H4	H5	H6
Peak force	N	450	675	900	1125	1350	1800
Continuous force	N	210	315	420	525	630	840
Maximum speed	m/s	3.5	2.5	3.5	3.5	3.5	3.5

Guidance Features

Carriage type	Unit	H1	H2	H3	H4	H5	H6
Load rating Fy	N	22000	22000	22000	22000	22000	22000
Load rating Fz	N	73500	73500	73500	73500	73500	73500
Moment rating Mx	Nm	2330	2330	2330	2330	2330	2330
Moment rating My	Nm	3710	3710	3710	3990	4830	7260
Moment rating Mz	Nm	2630	2630	2630	2770	3220	4570

SYZAX HEAVY is available with 3 different types of encoders:

Encoders	Standard	High performance	Ultra high performance
Resolution	1 μm	0.25 μm	0.1 μm
Short range accuracy	$\pm 10 \mu\text{m}/10 \text{ mm}$	$\pm 2 \mu\text{m}/\text{mm}$	$\pm 0.5 \mu\text{m}/\text{mm}$
Accuracy before compensation	$\pm 40 \mu\text{m}/\text{m}$	$\pm 50 \mu\text{m}/\text{m}$	$\pm 20 \mu\text{m}/\text{m}$
Accuracy after compensation	$\pm 20 \mu\text{m}/\text{m}$	$\pm 10 \mu\text{m}/\text{m}$	$\pm 3 \mu\text{m}/\text{m}$

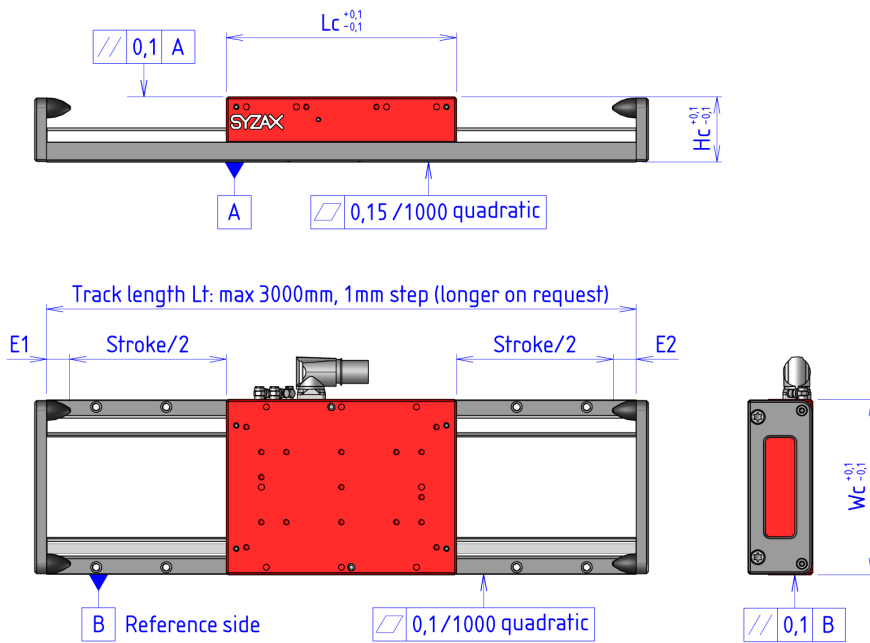


The modular axis system

Data sheet

Modular linear axis system

SYZAX HEAVY



The maximum length of the module is 3 meters. The stroke selection is free, modulo 1 mm.

The effective stroke corresponds to the track length minus the carriage length and the thickness of the 2 end stops (standard stops E1 = E2 = 24 mm).



Dimensions SYZAX HEAVY

Carriage Type	Unit	H1	H2	H3	H4	H5	H6
Carriage Length Lc	mm	300	300	300	330	376	508
Carriage Width Wc	mm	190	190	190	190	190	190
Carriage Height Hc	mm	80	80	80	80	80	80

Other standard features

- Liquid cooling circuit
- Over/under pressure circuit
- 3-point lubrication

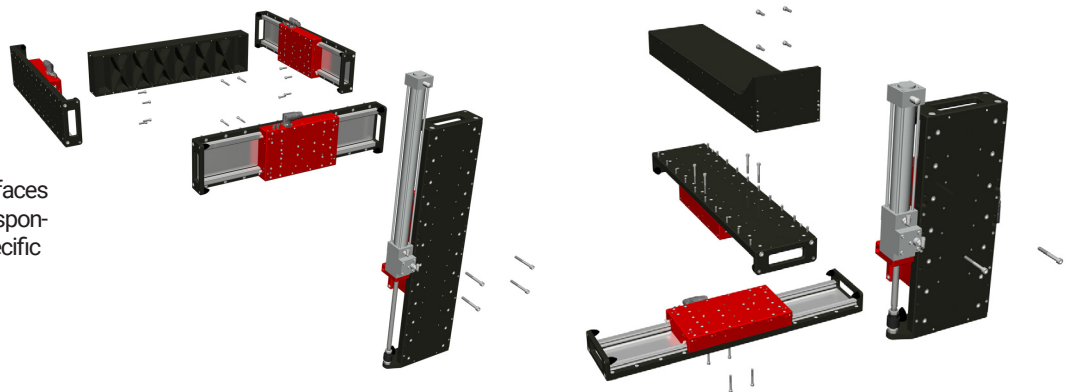
Available Options



- Protective bellows
- Pneumatic weight compensation
- Mechanical brake
- UL® certified motor

Multiple and easy modules combinations

The modules have native interfaces to build cartesian robots corresponding to the actual needs of specific targeted applications.



Direct marketing in:

- France
- Belgium

OPUS

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