

Multi-stage lifting columns - Alpha Colonne

Square column in two sizes, optionally available with internal control



Features:

- Two sizes available: "medium" and "large"
- Suitable for both tensile and compressive loads push/pull forces
- Self-locking, even at max. load

- Pre-set slider units ensure zero play, even after many years of operation
- Integrated limit switches
- Optional internal control

Options:

- Special lengths

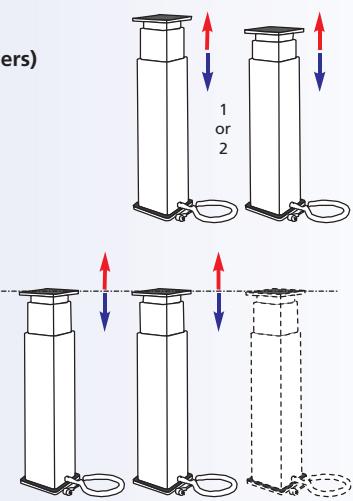
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(Dimensions, order numbers)



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Position determination

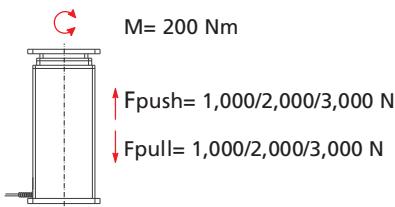
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Alpha Colonne – Technical data

General information/operating conditions

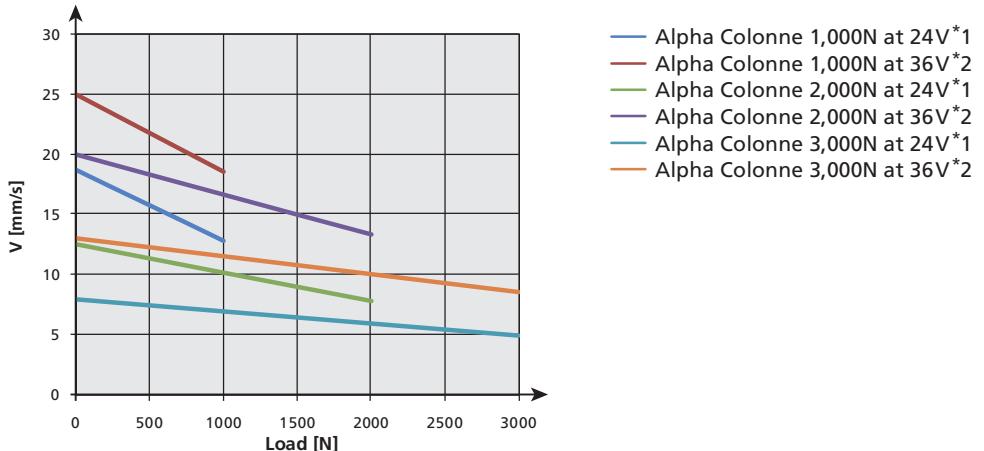
Type	Alpha Colonne for external control	Alpha Colonne with internal control
Design	Lifting column with integrated DC motor	
Guide	Slide guides made of POM	
Installation position	Any position/suspended with drop protection provided by the customer	
Push force/pull force	Up to 3,000 N	
Self-locking	Up to 3,000 N	
Ambient temperature	-20°C to +60°C	
Duty cycle (at max. load)	20% at nominal load (max. 2 mins operating time, 8 mins rest time)	
Displacement during synchronous operation	2-4 mm	
Voltage	24 V DC	230 V AC
Current output	Max. 5.5 A	according to drive
Power input	Max. 130 W	according to drive
Protection class	IP 30	IP 30

Load data



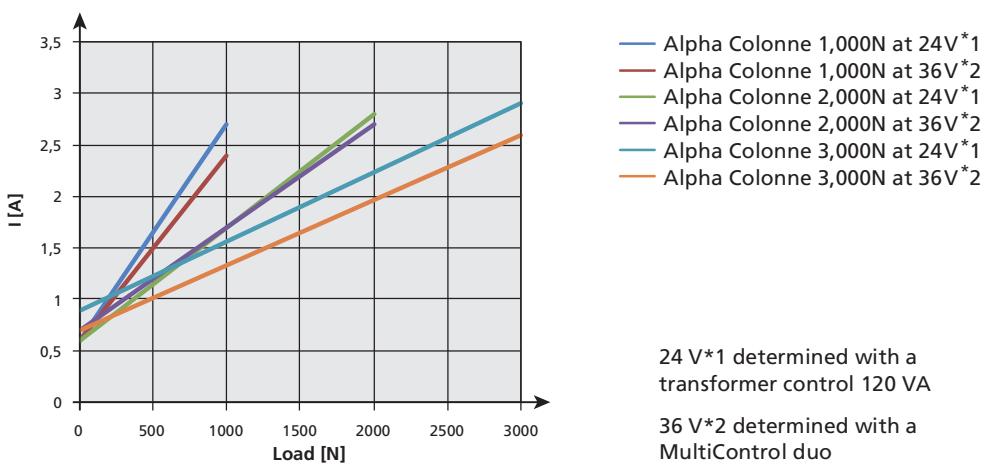
Speed/Force diagram

Alpha Colonne for external control



Current output/Force diagram

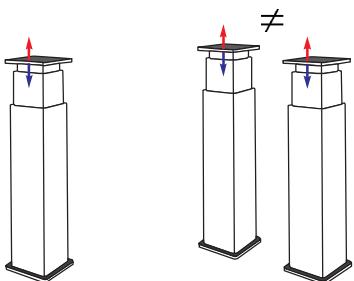
Alpha Colonne with external control



24 V*1 determined with a transformer control 120 VA

36 V*2 determined with a MultiControl duo

Alpha Colonne mono

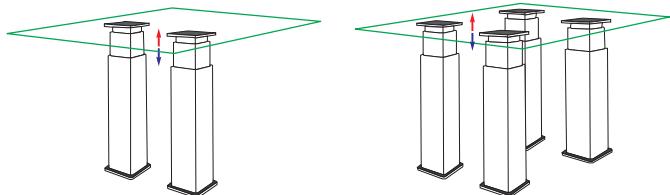


1-2 Alpha Colonnes in single or parallel operation

Parallel operation

The standard version also supports parallel operation of two Alpha Colonnes (no synchronisation). This may produce different lifting positions during operation, which can be levelled out by moving to the end positions.

Alpha Colonne synchro



2-4 Alpha Colonnes in synchronous operation

Synchronous operation

Synchronous operation of two or more columns. In conjunction with the integrated sensors, the control (see page 146) ensures synchronisation, and thus constant alignment of all the columns in both directions of travel, even if subject to different loads. The synchronous operation tolerance is max. 4 mm. A memory function is also available.

Alpha Colonne - Versions

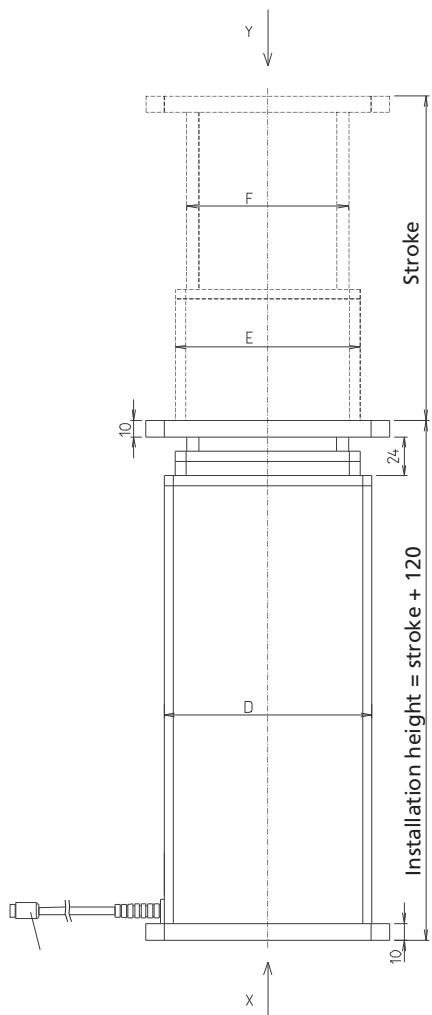
Dimensions

Dimension	ACM "Medium"	ACL "Large"
A	150	190
B	130	170
C	9	11
D	128	163
E	114	145
F	100	128

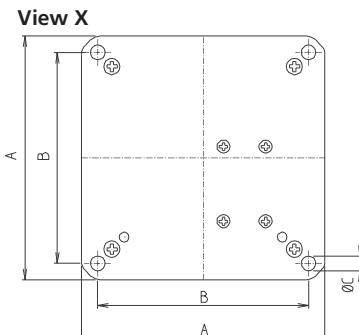
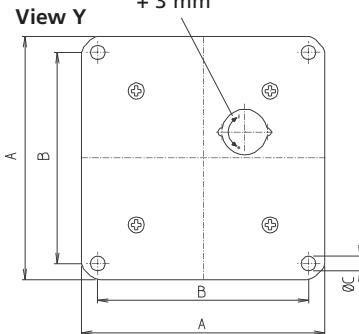
Weight

Standard [mm]	Alpha Colonne Medium	Alpha Colonne Large
Stroke 200	6.5	10.0
Stroke 300	8.0	12.5
Stroke 400	9.5	15.0
Stroke 500	11.0	17.5
Stroke 600	12.5	20.0
Stroke 700	14.0	22.5

In the case of the version with internal control; additional weight = 1kg



Fine adjustment of installation dimension + 3 mm



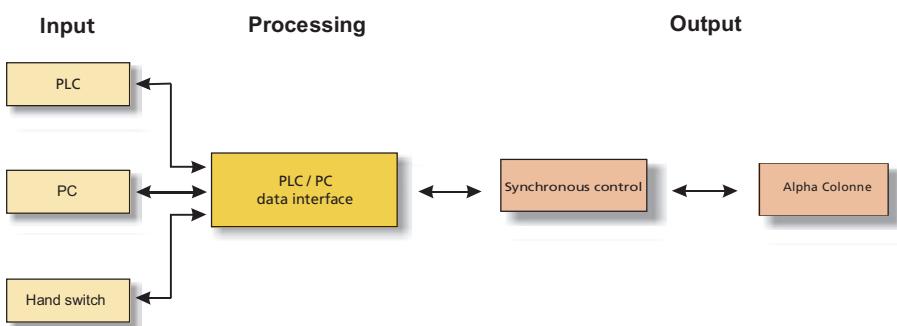
Connecting cable

- Mono column 1.2m helix cable
- Synchro column 2.5m cable

PLC/PC data interface

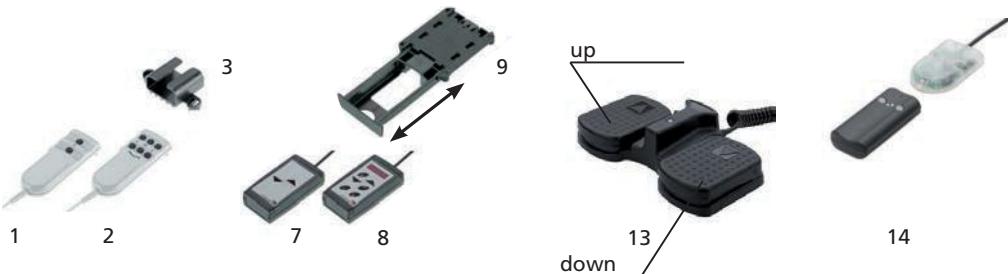
- This interface enables actuation of the synchronous control system via different input devices (PLC, PC and hand switch)

You will find further product information on page 182



Code No.	Type
QZD100108	PLC/PC data interface
QZD100110	Fixing plate for mounting in a control cabinet

Hand switches/accessories



Code No.	Version	Fig.
Hand switch for transformer control/internal control		
QZB02C03AD031	Hand switch with 1 m spiral cable – 6 function keys	2
Hand switch for transformer or synchronous control		
QZB02C03AB031	Hand switch with 1 m spiral cable – 2 function keys	1
QZB00D04AB041	Hand switch with 1 m spiral cable – 2 function keys	7
QZB02C01AE114	Foot switch – 2 function keys	13
QZB00D07BK141	Wireless hand switch – 2 function keys	14
Hand switch for synchronous control		
QZB00D04AD041	Hand switch with 1 m spiral cable – 6 function keys	8
Accessories for hand switches		
QZD000072	Bracket for hand switch: Fig. 1 + 2	3
QZD000074	Hand switch drawer: Fig. 7 + 8	9

Note:

For further hand switch versions, please refer to the chapter "Controls" on page 146