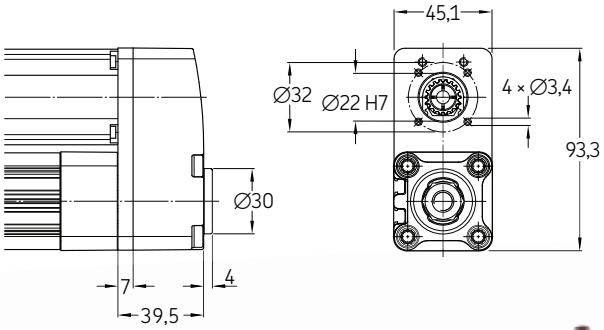
» CASM-32 | Brushless DC motor **BG 45** and adapters

CASM-32 linear units with brushless DC motors are perfectly suited to replace pneumatic cylinders in many applications.
It is a very simple system to set up. Connect the motor to a 24V DC power supply and program up to 14 motion profiles with your computer and the programming accessory kit.
After programming the motor, the motion profile can be activated by 2 – 4 binary signals (PLC outputs or switches) and the actuator will run to the defined position.
The brushless DC motor, BG 45x30 PI, comes with an internal encoder with 1024 counts per turn for high positioning accuracy.

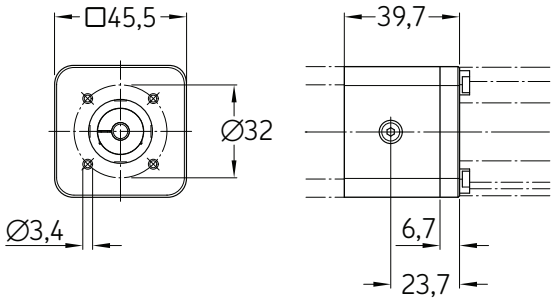
The internal brake is activated after each movement to secure the system in case of a power loss and to give the motor time to cool down when not in operation.
The brake also enables an increase in the power performance of a full motion cycle.

Combinations with other motors are possible.

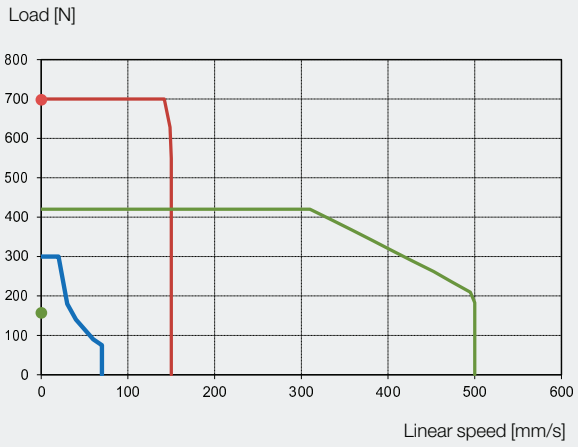
Parallel adapter kit



In-line adapter kit



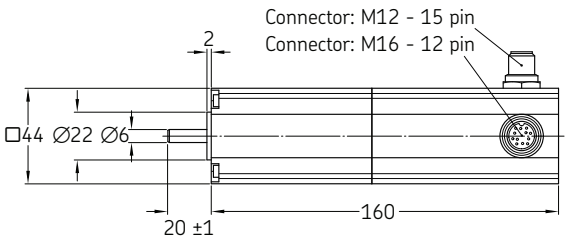
Load/ linear speed diagram



Load = force acting on the actuator
(gravity force + acceleration force + constant force)

» Motor data

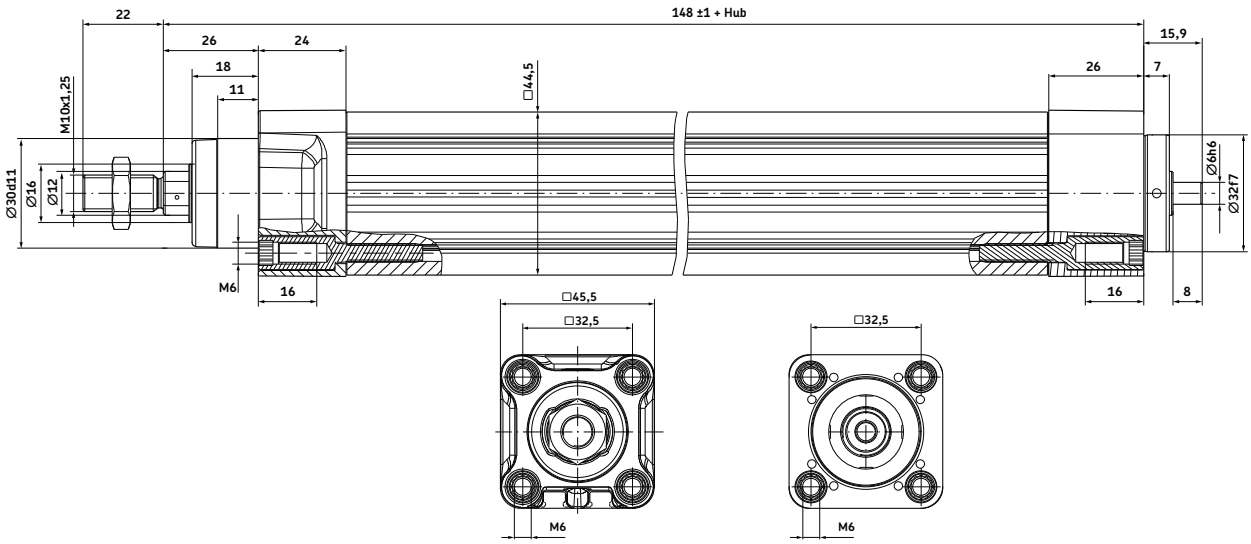
BLDC motor BG 45x30 | with PI interface and brake



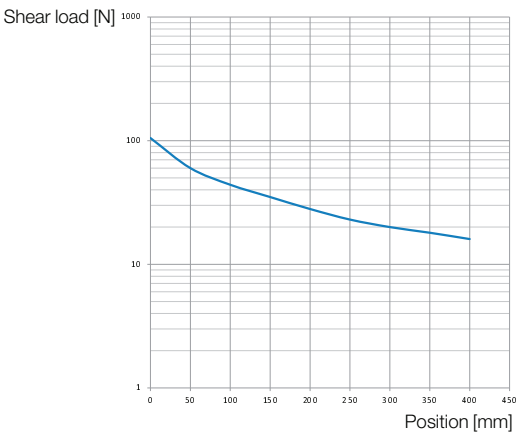
Motor data | BG 45x30 PI			
Nominal torque (100 K)	M	Nm	0.25
Stall torque (20°C)	M_0	Nm	0.942
Nominal rotational speed	ω	1/min	3360
Nominal voltage	U	V DC	24
Nominal current (100 K)	I	A	4.87
Peak current (2 s)	I_{peak}	A	15
Max. output power (20°C)	P_{out}	kW	0.159
Inertia with brake	J	kgm^2	0.0044
Weight with brake	m	kg	0.74

» Cylinder data

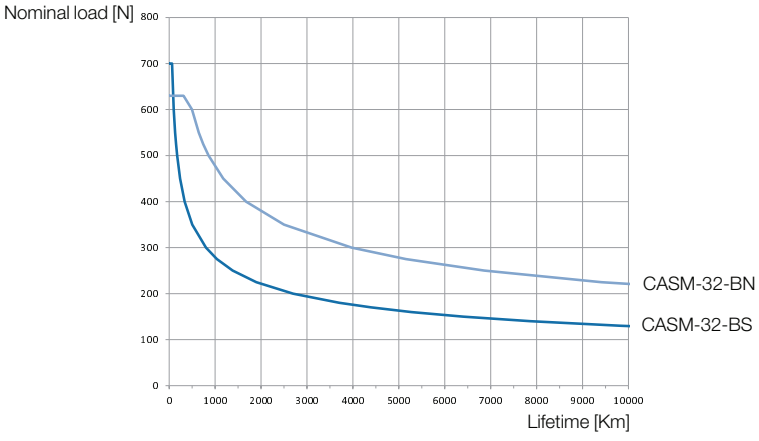
Dimensions



Characteristic Diagrams



Shear load diagram
The shear load acts at right angles to the movement direction.



Lifetime diagram

Screw type		
Lead screw	9x1.5 mm	LS
Ball screw	10x3 mm	BS
Ball screw	10x10 mm	BN

Stroke
50 mm
100 mm
150 mm
200 mm
300 mm
400 mm