

Belt Driven Linear Actuator with Profile Rail

- Available in custom lengths
- Up to 2850mm stroke
- Lead time: 1-2 weeks
- Shafted or Hollow bore input

Series: OW4

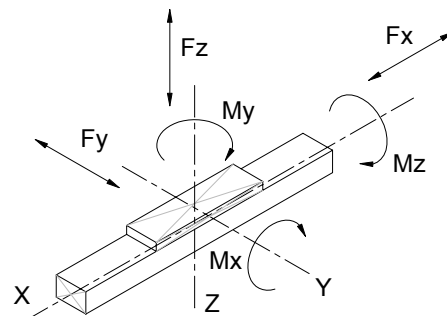


Technical data:

Type	OW4-WU-V42	OW4-WU-V42G
Maximum stroke [mm]	2850	2770
Repeatability [mm] (\pm)	0,1	0,1
Max. velocity [m/sec]	2	2
Max. acceleration [m/sec ²]	30	30
Belt type	16AT10	16AT10
Teeth per pulley	18	18
Pulley diameter [mm]	55,5	55,5
Maximum force on belt [N]	2100	2100
Profile Rail and recirculating bearing guide system	Type 20 / E-line	Type 20 / E-line
Travel per rotation [mm]	180	180
Idle torque [Nm]	1,1	1,4

Max. load rating and moment load rating:*

Type	OW4-WU-V42	OW4-WU-V42G
Fx [N]	2100	2100
Fy [N]	1700	3400
Fz [N]	1700	3400
Mx stat [Nm]	35	153
My stat [Nm]	35	153
Mz stat [Nm]	40	80

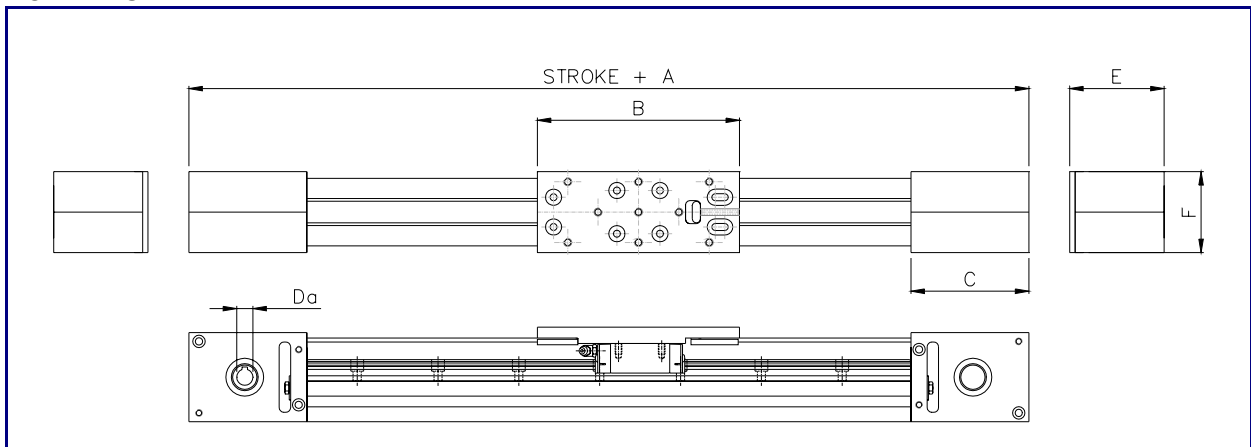


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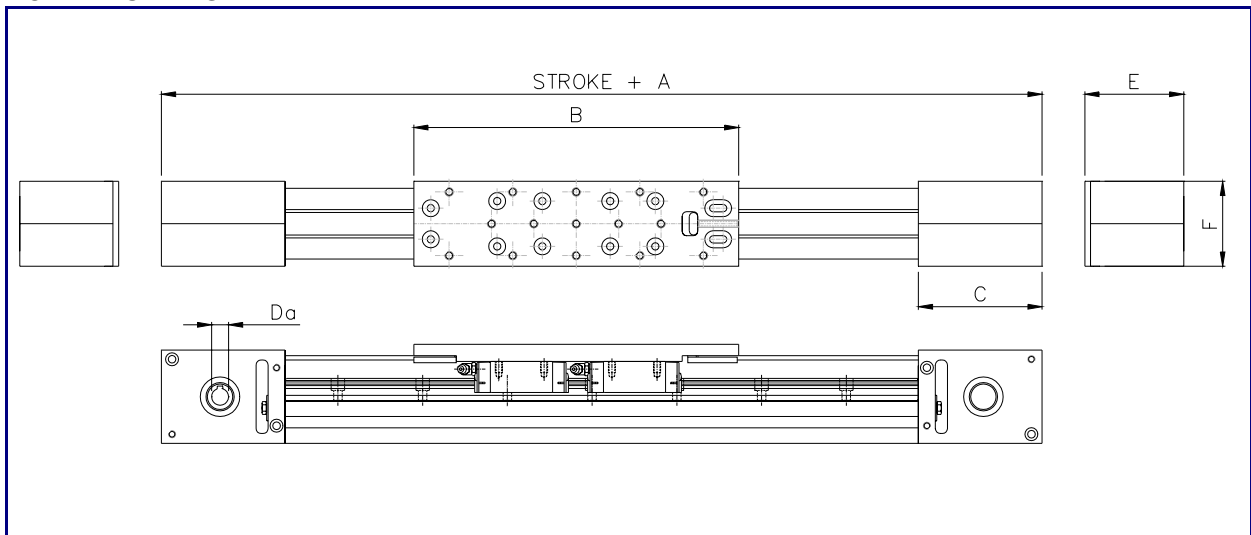
Dimensions:

[mm]	A	B	C	Da	E	F	Weight 0mm stroke	Weight / 100mm	Weight carriage
OW4-WU-V42	325	150	87,5	12 / 14 with Keyway	70	60	2,55	0,29	0,35
OW4-WU-V42G	405	250	87,5	12 / 14 with keyway	70	60	2,8	0,29	0,50

OW4-WU-V42



OW4-WU-V42G



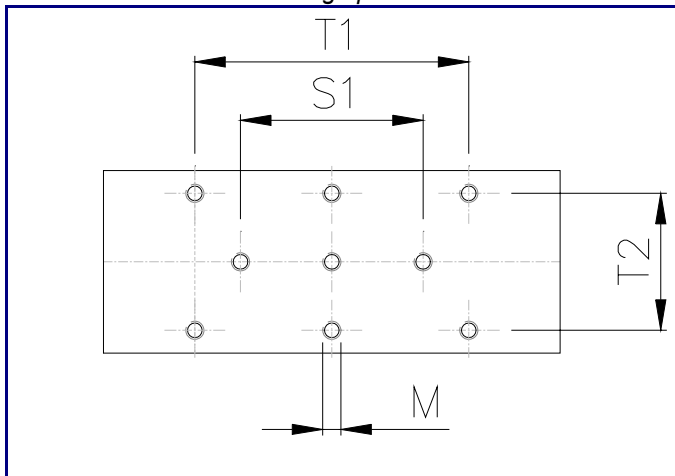
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Dimensions:

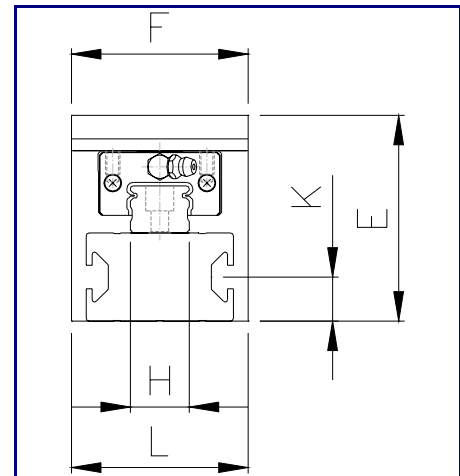
[mm]	E	F	H	K	L	M	S1	T1	T2	T3
OW4-WU-V42	70	60	20	10	60	M6	60	90	45	
OW4-WU-V42G	70	60	20	10	60	M6	45	55	45	7,5

*=T-slots can be used for special nuts M3, M4, M5, M6 and M8

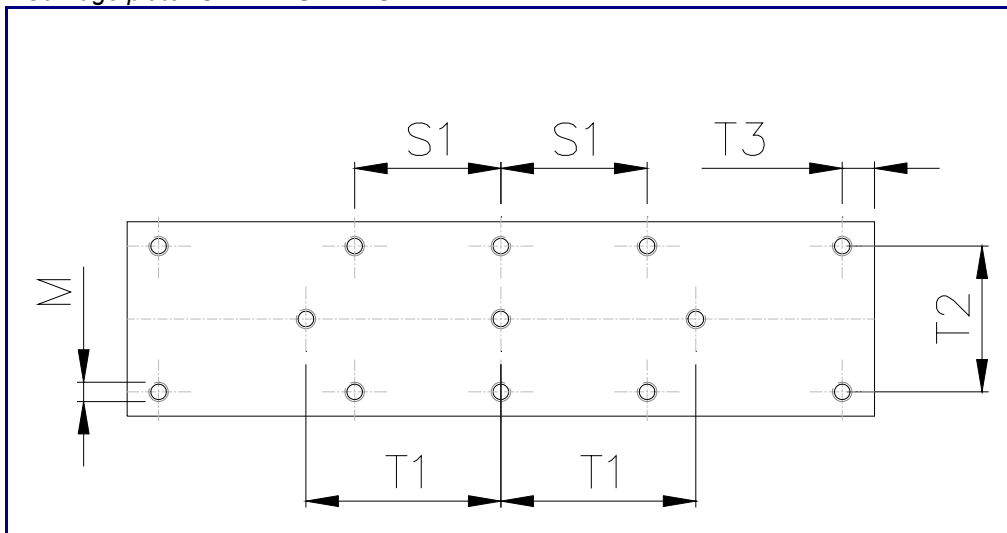
OW4-WU-V42 Carriage plate



Cross-section



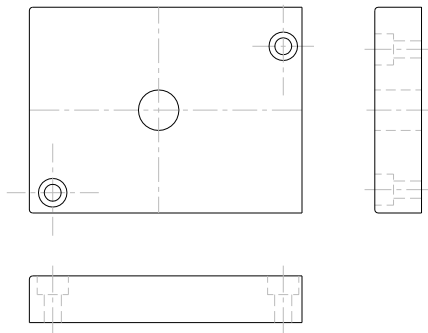
Carriage plate OW4-WU-V42G



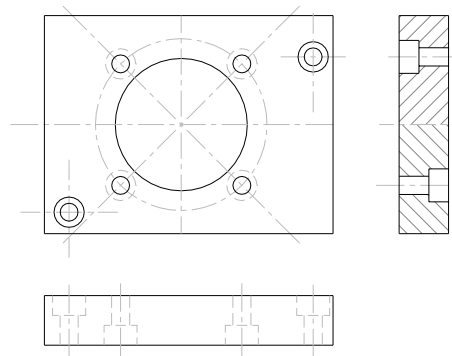
Mounting accessories

For mounting the motor there are adapter plates which can be machined for different type motors or gearboxes.

Aluminum adapter plate with single hole;



Aluminum adapter plate for 60mm pilot



P/N	Adapter plate
9292-ES	Plate: 2mm for closing end caps
9292-IO-PS75	For gearbox MP53
9292-FL-PS82	For gearbox MP60
	Parallelshaft
9292-YD-36	Incl. Rotex GS couplings max length 2m

* adapter plates for other motor / gearbox types on request.

Switches

Switches can be mounted to the T slots in the profile.
The limit switches can detect on a steel block (inductive) or on V-shaped detection plates.
We can provide mounting brackets with or without a limit switch.

Brackets	Part Number.
Mounting bracket for proximity sensor	9292-VK-AV
Detecting block for inductive sensor	9292-GE6-LQ
Detecting block for mechanical roller switch	9292-VG-PH



T nuts from M4 to M8 are available for mounting the unit and accessories.



Partnr.	Description
D33532	Square nut M4
D33542	Square nut M5
D33552	Square nut M6
D33573	Square nut M8
D335324	Square nut M4 fix
D335424	Square nut M5 fix
D335524	Square nut M6 fix
D335734	Square nut M8 fix

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Shock absorbers

In the exceptional case the carriage runs against the end the endcaps will be damaged. There can be emergency shock absorbers mounted on the linear units.

The "one stop emergency stops" are specially designed to provide a cost effective energy absorption. The light weight inner metal core is surrounded by a high grade polymer material allowing high damping.

Unlike hydraulic absorbers these one shot absorbers will crush after impact. The absorber is then deformed and can easily be replaced.



Partnr.	Energy capacity (max Nm)	Thread	Length without thread (mm)
RV-20-9	7	M8	22
RV-32-30	18	M10	34,5
RV-34-67	45	M12	44,6
RV-34-02	80	M12	49,8
RV-38-382	160	M16	60,3

Spare parts for linear units belt type:

P/N	Description	For unit
38DW32	PU belt type AT10 per meter	OW4-WU-V42
8226	Bearing for end cap	OW4-WU-V42
U425401732	Profile Bearing	OW4-WU-V42
U425702753	Profile Rail per meter	OW4-WU-V42

Applications

Example of a three axis's X, Y and Z configuration.

