

EWELLIX

EWELLIX Positioning Systems

CTU

Technical Product Information

We pioneer motion

SCHAEFFLER

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1 Units for vehicle positioning

The positioning systems are designed for automotive applications. They consist of a pair of profile rail guides, each with 2 guide carriages, and are characterized by high performance in terms of guiding accuracy and rigidity. The profile rail guide system is available with a wide range of ball screws to ensure high dynamics and positioning accuracy. The systems feature an integrated motor, a control unit, cables, a mechanical brake, a shock absorber, and a steel cover. The systems are available with lifting columns or linear modules for the vertical axis.

Features

- compact design with aluminum or steel as base material
- integrated motor, control unit, cables, mechanical brake, and shock absorber
- lifting column or linear module as an option for the vertical axis
- inline gear box and parallel gear box with customer-specific motor adapter

Benefits

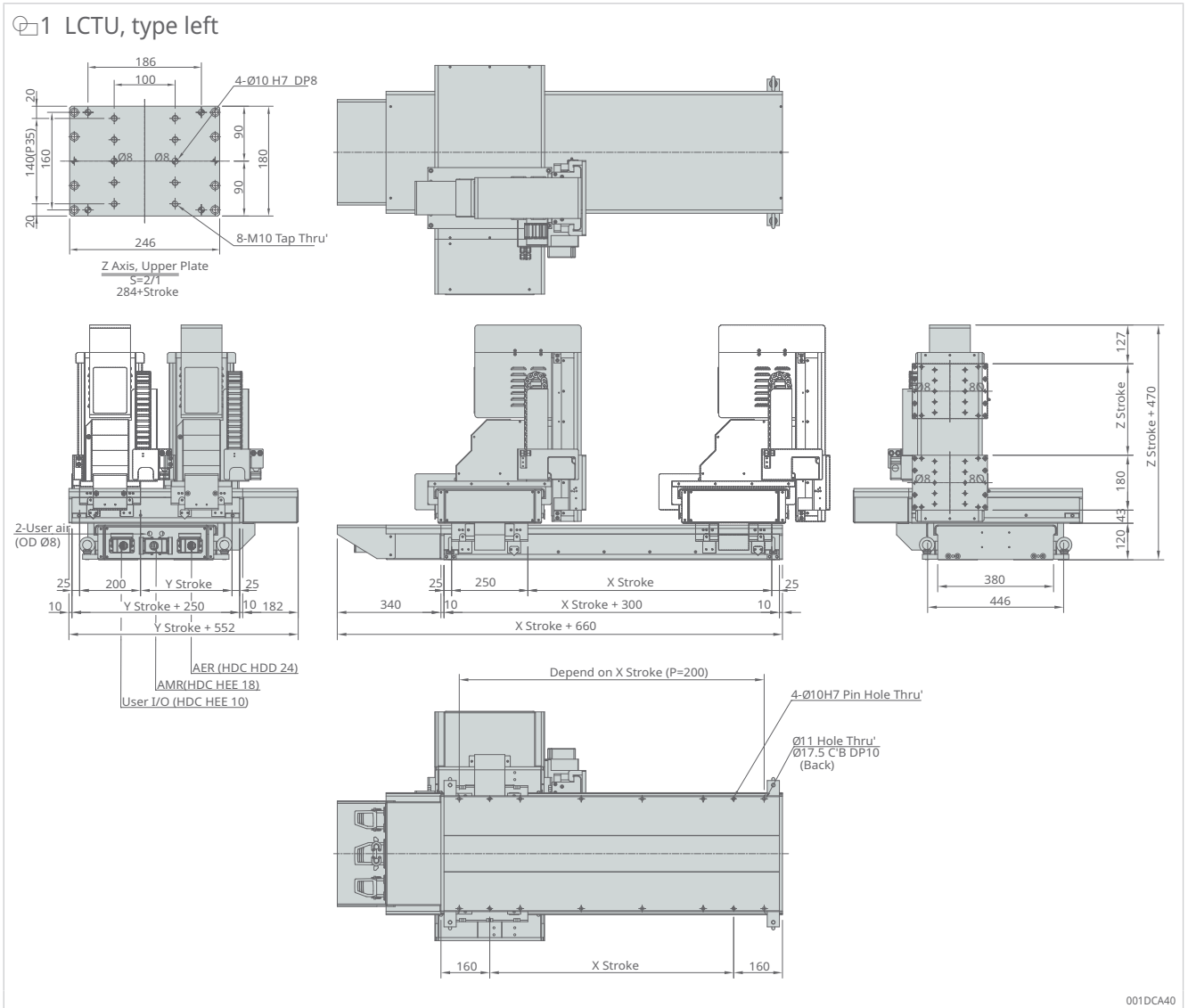
- designed for high loads and long service life
- easy maintenance via external lubrication port
- precise alignment and secure location
- high positioning accuracy and repeatability

1.1 Positioning unit LCTU

1.1.1 Product characteristics

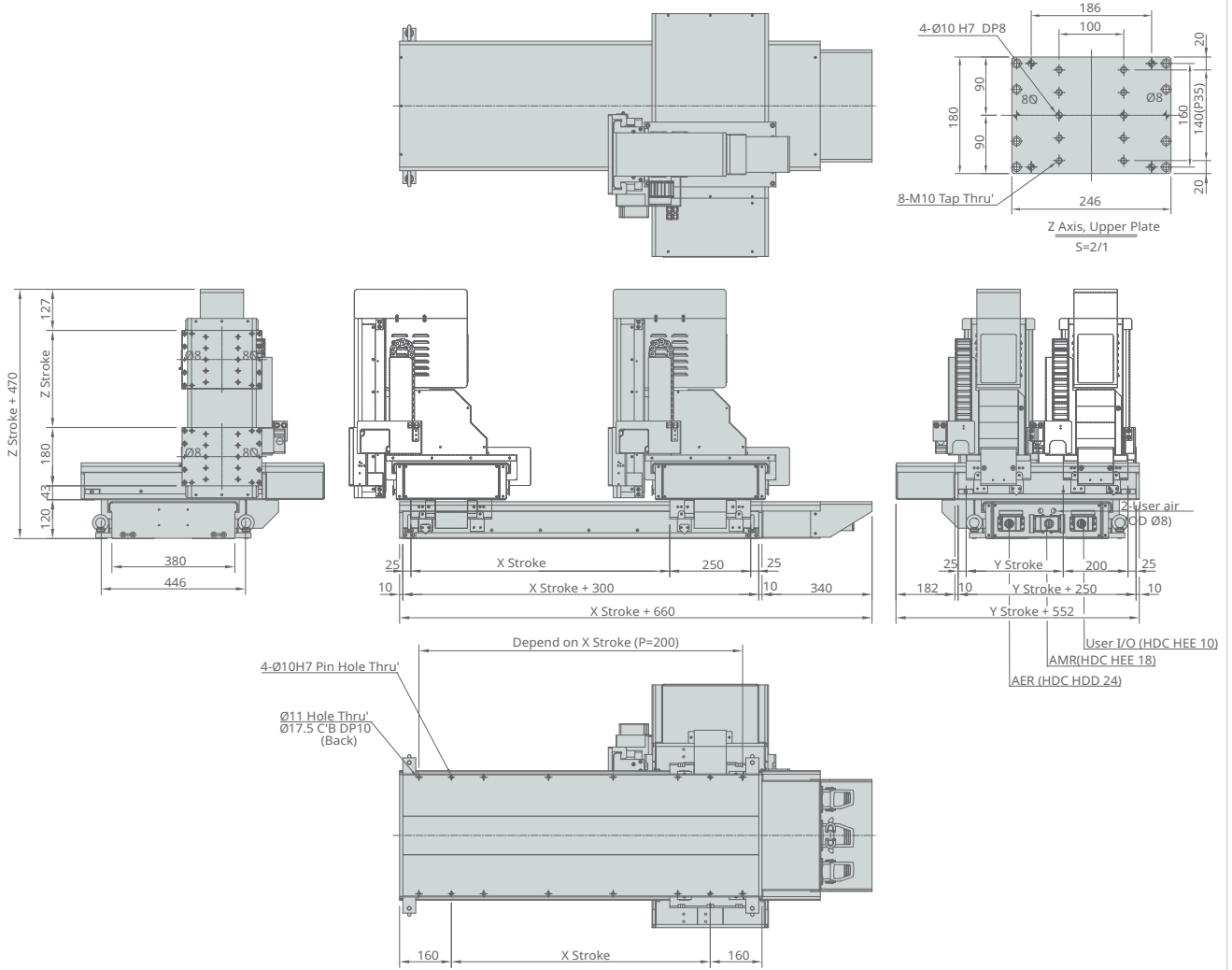
LCTU systems are high-performance multi-axis systems for production lines in automotive applications, featuring integrated linear guides as a ready-to-use solution for precise motion. The systems are available with a wide range of ball screws to ensure a high level of positioning accuracy.

LCTU systems are available with linear modules for the vertical axis.



2 LCTU, type right

1



001DCA43

1.1.2 Technical data

1 Technical information

	Symbol	Unit	X-axis	Y-axis	Z-axis
Performance data					
Max. linear speed at 3000 min ⁻¹	V _{max}	mm/s	250	250	250
Max. payload	P _{max}	kg	250	250	200
Max. acceleration	a _{max}	m/s ²	10	10	10
Load cycles	D _{unit}	%	100	100	100
Mechanical data					
Profile rail guide	-	-	25	25	25
Screw nut	-	-	Ball screw drive	Ball screw drive	Ball screw drive
Thread diameter	D _{screw}	mm	25	25	25
Screw pitch	P _{screw}	mm	5	5	10 (1/2)
Stroke	-	mm	100 ... 800	200 ... 600	100 ... 600
Repeatability	-	mm	±0.02	±0.02	±0.02
Base plate	-	-	Aluminum or steel	Aluminum or steel	Aluminum or steel
Cover	-	-	Steel	Steel	Steel
Ambient data					
Ambient temperature	T _{ambient}	°C	0 ... +50	0 ... +50	0 ... +50
Max. humidity	ϑ	%	95	95	95

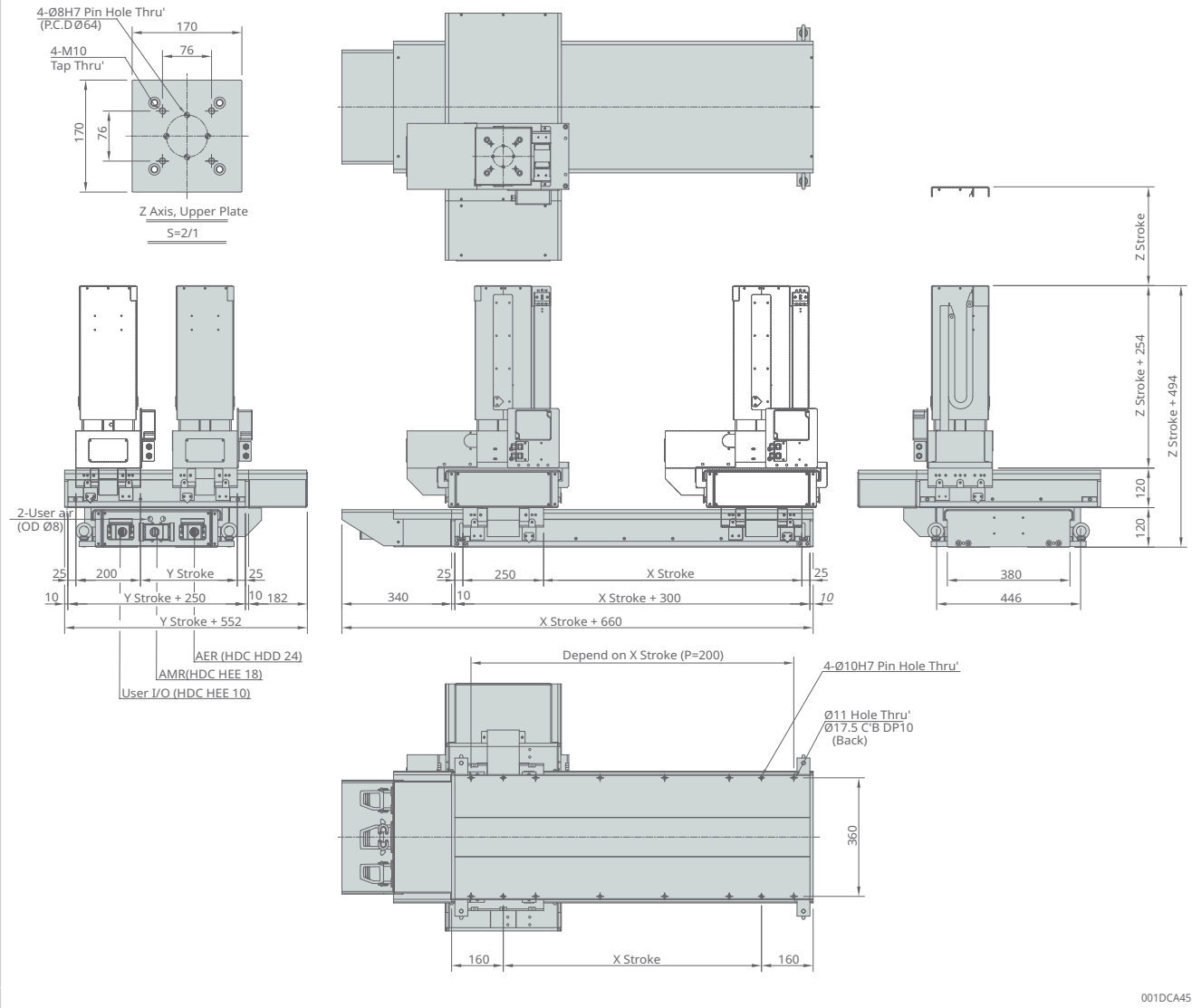
1.2 Positioning unit HCTU

1.2.1 Product characteristics

HCTU systems are high-performance multi-axis systems for production lines in automotive applications, featuring integrated linear guides as a ready-to-use solution for precise motion. The systems are available with a wide range of ball screws to ensure a high level of positioning accuracy.

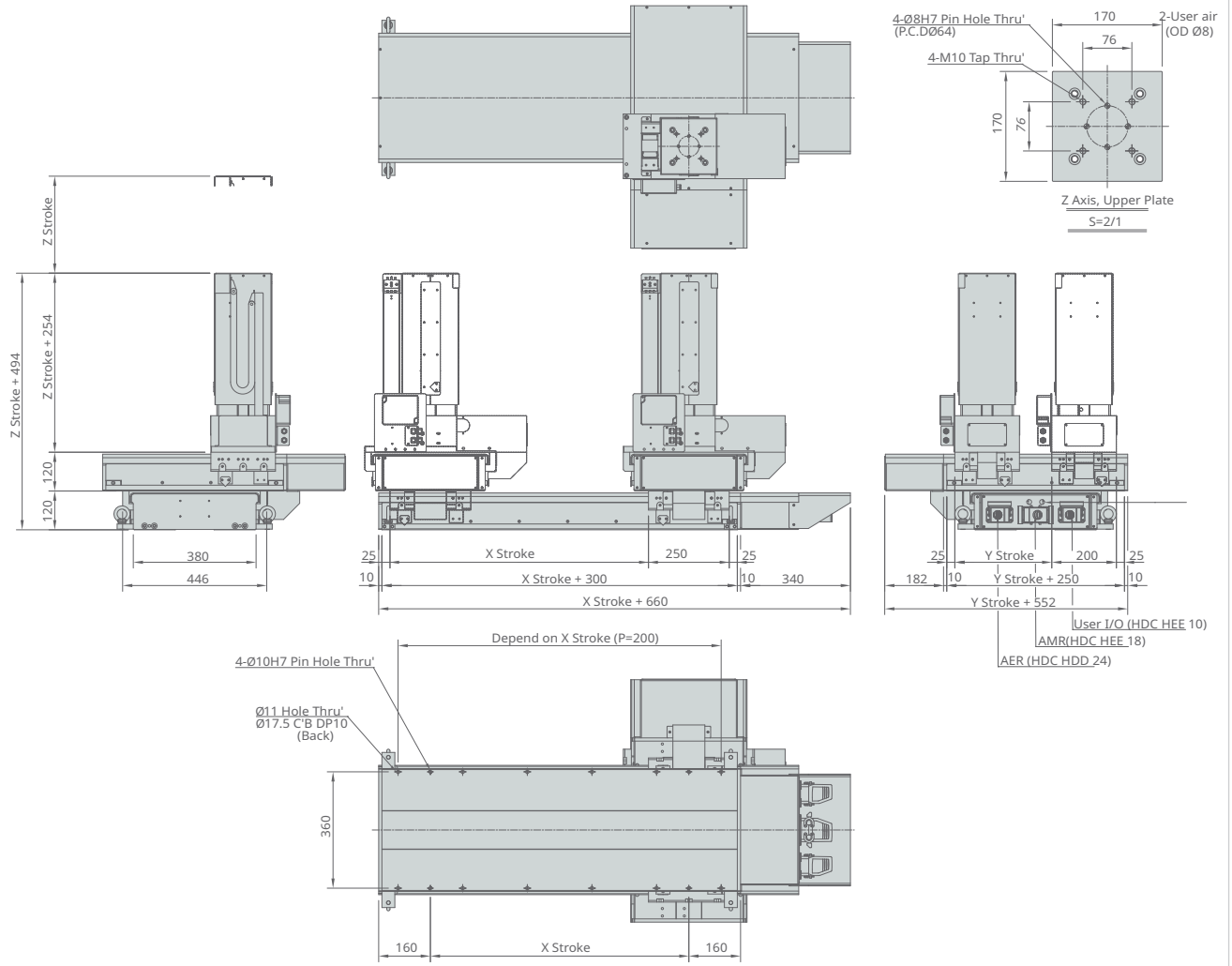
HCTU systems are available with lifting columns for the vertical axis.

3 HCTU, type left



001DCA45

4 HCTU, type right



001DCA46

1.2.2 Technical data

2 Technical information

	Symbol	Unit	X-axis	Y-axis	Z-axis
Performance data					
Max. linear speed at 3000 min ⁻¹	V _{max}	mm/s	250	250	200
Max. payload	P _{max}	kg	250	250	200
Max. acceleration	a _{max}	m/s ²	10	10	5
Load cycles	D _{unit}	%	100	100	90
Mechanical data					
Profile rail guide	-	-	25	25	25
Screw nut	-	-	Ball screw drive	Ball screw drive	Ball screw drive
Thread diameter	D _{screw}	mm	25	25	20
Screw pitch	P _{screw}	mm	5	5	10 or 20 (¹ / ₅ or ¹ / ₁₀)
Stroke	-	mm	100 ... 800	200 ... 600	100 ... 600
Repeatability	-	mm	±0.02	±0.02	±0.05
Base plate	-	-	Aluminum or steel	Aluminum or steel	Aluminum or steel
Cover	-	-	Steel	Steel	Steel
Ambient data					
Ambient temperature	T _{ambient}	°C	0 ... +50	0 ... +50	0 ... +50
Max. humidity	ϑ	%	95	95	95

2 Structure of the ordering key

5 Structure of the ordering designation, part 1



001DD68E

6 Structure of the ordering key



Option 2: Brake mounting

- O No
- B brake

Option 3: Motor mounting

- O None
- D Dyadic
- F Fastech
- Y Yaskawa
- M Mitsubishi
- P Panasonic
- S Siemens
- T Tamagawa
- L Lenze
- C Magnetic coupling
- K Komotec
- E Festo
- O Omron
- X Other

Connection electronics

- O None
- I Integrated connection electronics
- C External connection electronics

Cable routing

- O Cable routing, external
- I Cable routing, internal

Direction

- L Direction: left (LH)
- R Direction: right (RH)
- C Centered

001DD6AE

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