

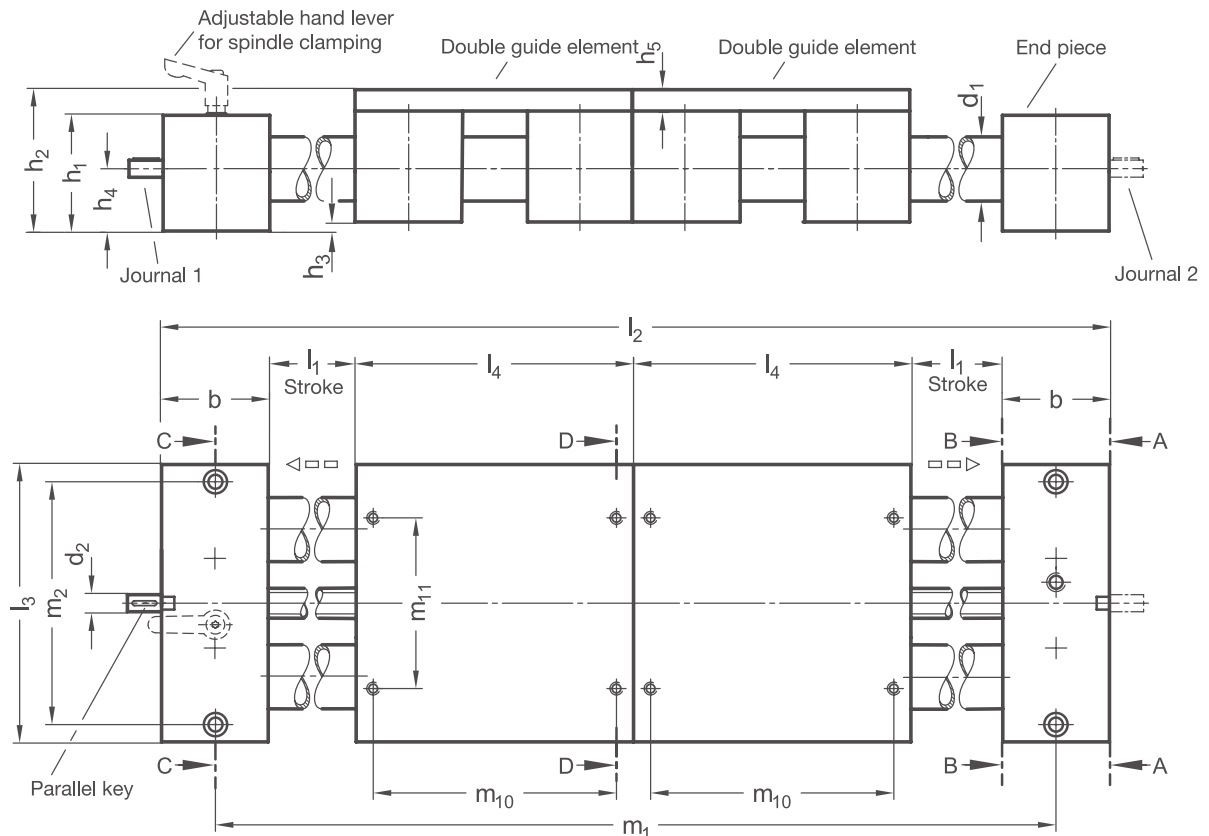
### PRODUCT INFO

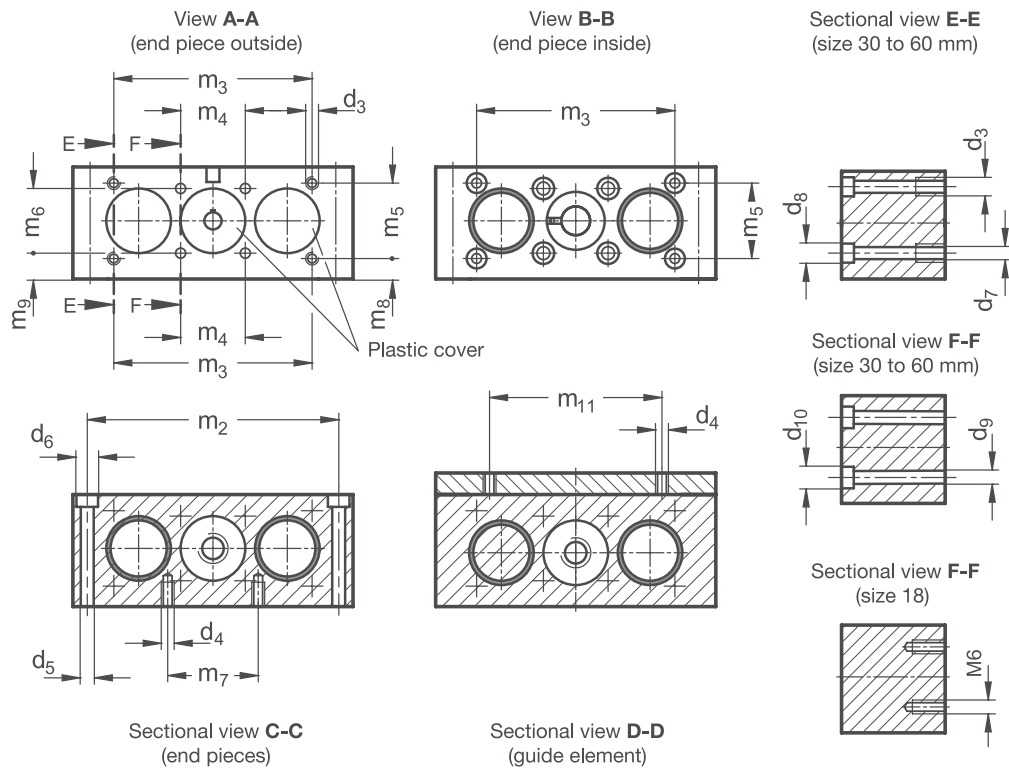
The guide tubes of the **precision double tube linear units PD2D** are made of chrome-plated steel or polished stainless steel precision tubes. The end pieces of aluminum connect the tubes and form a precise linear guide together with the guide elements. The centered continuous spindle has trapezoidal or fine thread and ball bearings on both sides. The spindle itself consists of one part with left-hand thread and one with right-hand thread. The slide-guided double guide elements are moved linearly along the spindle thread in opposite directions by the integrated spindle nuts.

Double tube linear units have high torsional stiffness and can handle high weights and torques. The double guide element distributes the load among four guide points, allowing for even higher loads.

Accessory parts are listed in the tables and are already taken into account when selecting the linear units. This ensures, for example, that the lengths of the journals  $z_1$  and  $z_2$  are correct for attachment of the accessories. The accessories are not included with the linear units.

### RoHS-compliant product





$d_1$	Stroke $l_1$	$b$	$d_2$	$d_3$	$d_4$	$d_5$	$d_6$	For screws DIN 912	$d_7$	$d_8$	For screws DIN 912	$d_9$	$d_{10}$	For screws DIN 912
18	...400	28	6	-	M 5	5,5	10	M 5	-	-	-	-	-	-
30	...750	50	8	M 6	M 6	6,6	11	M 6	5,5	10	M 5	6,6	11	M 6
40	...1100	60	12	M 8	M 8	9	15	M 8	6,6	11	M 6	8,6	13,5	M 8
50	...1165	72	12	M 10	M 8	9	15	M 8	9	13,5	M 8	9	13,5	M 8
60	...1170	80	14	M 10	M 10	10,5	16,5	M 10	9	13,5	M 8	11	16,5	M 10

$d_1$	$h_1$	$h_2$	$h_3$	$h_4$	$h_5$	$l_2$	$l_3$	$l_4$	$m_1$	$m_2$	$m_3$	$m_4$	$m_5$	$m_6$
18	28	37	1	14,5	8	$2xb+2xl_1+2xl_4$	81	81	$b+2xl_1+2xl_4$	68	-	20	-	20
30	52	64	2	27	10	$2xb+2xl_1+2xl_4$	130	130	$b+2xl_1+2xl_4$	114	92	30	35	30
40	60	75	3	31,5	12	$2xb+2xl_1+2xl_4$	180	180	$b+2xl_1+2xl_4$	160	132	39	38	39
50	72	92	4	38	16	$2xb+2xl_1+2xl_4$	206	206	$b+2xl_1+2xl_4$	184	150	46	50	46
60	86	106	4	45	16	$2xb+2xl_1+2xl_4$	240	240	$b+2xl_1+2xl_4$	216	185	55	60	55

$d_1$	$m_7$	$m_8$	$m_9$	$m_{10}$	$m_{11}$	Parallel key DIN 6885	Accessories: Torque support	Position indicator	Handwheel	
18	18	-	4,5	68	52	A2x2x12	VZDD	VZPM	-	VZH
30	42	9,5	12	114	80	A2x2x12	-	VZPM	VZPE	VZH
40	62	12,5	12	160	120	A4x4x12	-	VZPM	VZPE	VZH
50	62	13	15	184	134	A4x4x12	-	VZPM	VZPE	VZH
60	74	15	17,5	216	160	A5x5x16	-	VZPM (only for trapezoidal thread)	VZPE	VZH

Version  
**a**

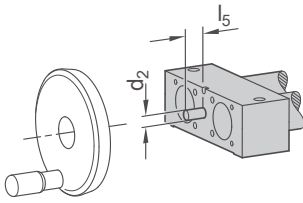
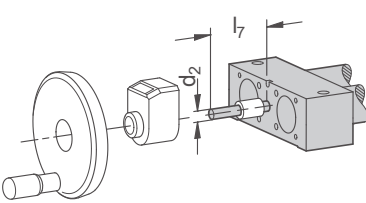
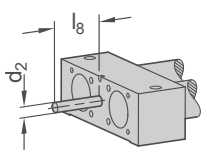
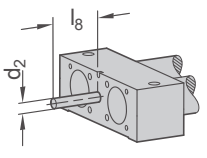
1ST	Double tube sliding guide / trapezoidal lead screw • Guide tubes: Steel, chrome-plated • End pieces / guide elements: Aluminum, bright. Assembly surfaces: Machined • Trapezoidal / fine thread spindle: Steel, with ball bearing
1ED	Double tube sliding guide / trapezoidal lead screw • Guide tubes: Stainless steel AISI 304, polished • End pieces / guide elements: Aluminum, bright. Assembly surfaces: Machined • Trapezoidal / fine thread spindle: Stainless steel AISI 303, with ball bearing

Spindle thread direction / clamping  
**r**

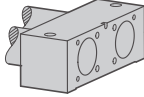
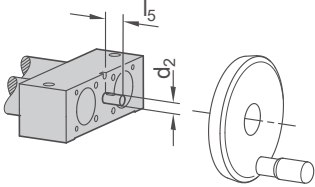
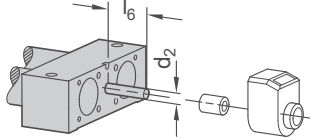
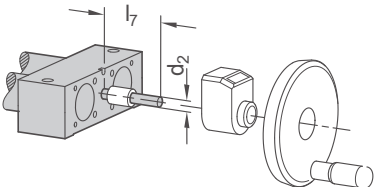
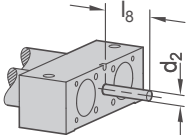
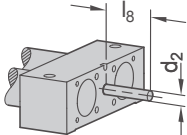
RH	Right-hand thread on journal 1, left-hand thread on journal 2
RHK	Right-hand thread on journal 1, left-hand thread on journal 2 with clamping ring and hand lever for spindle clamping
LH	Left-hand thread on journal 1, right-hand thread on journal 2
LHK	Left-hand thread on journal 1, right-hand thread on journal 2 with clamping ring and hand lever for spindle clamping

$d_1$	Spindle $\emptyset$	Spindle pitch $p$		Journal diameter $d_2$	Journal length B $l_5$	Journal length C $l_6$	Journal length D $l_7$	Individual journal length $l_8$
		Trapezoidal thread	Fine thread, metric					
18	10	3	1	6	16	30	46	16...46
30	14	4	1	8	16	36	52	16...67
40	20	4	1	12	17	42	59	17...74
50	20	4	1	12	18	42	60	18...75
60	24	5	1,5	14	19	42	61	19...76

Journal  
**Z<sub>1</sub>**

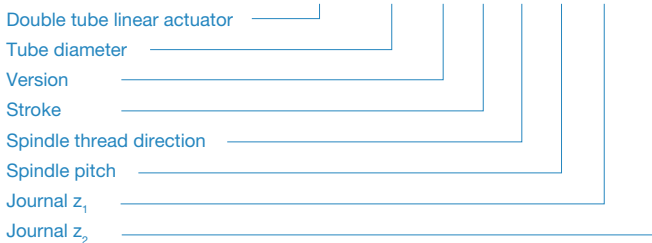
B	Journal for handwheel	D	Journal for position indicator and handwheel (torque support required for $d_1=18$ )	Gxx	Individual journal length with keyway (for xx, enter values from column $l_8$ )
 <p>Journal length <math>l_5</math></p>		 <p>Journal length <math>l_7</math></p>		 <p>Journal length <math>l_8</math></p>	
Hxx	Individual journal length without keyway (for xx, enter values from column $l_8$ )				
 <p>Journal length <math>l_8</math></p>					

Journal **Z<sub>2</sub>**

A	Without journal	B	Journal for handwheel	C	Journal for position indicator (torque support required for $d_1=18$ )
		 <p>Journal length <math>l_5</math></p>		 <p>Journal length <math>l_6</math></p>	
D	Journal for position indicator and handwheel (torque support required for $d_1=18$ )	Gxx	Individual journal length with keyway (for xx, enter values from column $l_8$ )	Hxx	Individual journal length without keyway (for xx, enter values from column $l_8$ )
 <p>Journal length <math>l_7</math></p>		 <p>Journal length <math>l_8</math></p>		 <p>Journal length <math>l_8</math></p>	

ORDER KEY

Name key      Supplemental key  
**PD2D - d<sub>1</sub> - a - l<sub>1</sub> - r - p - z<sub>1</sub> - z<sub>2</sub>**



ACCESSORIES

- Handwheels **VZH** → see page 356
- Position indicators **VZPM / VZPE** → see page 358 / 360
- Torque supports **VZDD** → see page 368
- Angle gears **YLD** → see page 378
- Transfer units **VA** → see page 370

ON REQUEST

- Additional following guide elements
- Guide element connector plates
- Multiple guide elements with scissors synchronization
- Bellows covers
- Complete linear unit of stainless steel