



PRODUCT INFO

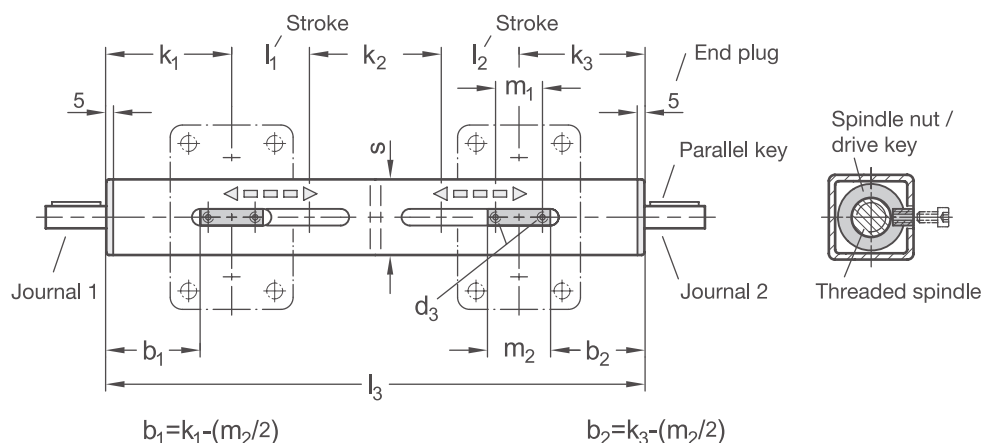
The guide tubes of the **linear units VE3V** are made of chrome-plated steel or bright stainless steel precision tubes. Two independent spindles with ball bearings on each side are installed in the guide tube. The thread direction of the spindles can be chosen as desired for each side. The spindle nuts positioned on each spindle transmit the linear movements to a linear unit connector via a drive key along the guide groove, independently of the opposite side.

Together with the guide tube, the guide element bores form solid linear square guide mechanisms that can receive large torsional forces. Multiple connector types are available for selection and can be adjusted or clamped for low play using the split bore. The parts to be moved are fastened to the guide element, such as for format adjustments, in which one side guide is moved independently from the opposite side to various widths.

Possible accessories are already taken into account in the selection of the linear units according to the options given in the tables. This ensures, for example, that the journal lengths z_1 and z_2 are appropriate for attachment of the accessories. The linear unit connectors and the accessories are not included with the linear units and must be ordered separately.

Adjustable hand levers are intended for repeated, tool-free clamping of the guide elements. Under the designation HSK, these are available separately for individual use and in other designs. Compared with the tool-operated hex socket cap screw, the clamping force achievable with an adjustable hand lever is lower due to the shorter lever length.

RoHS-compliant product



s	Stroke max. l₁	Stroke max. l₂	Edge distance 1 min. k₁	Spacing min. k₂	Edge distance 2 min. k₃	d₃	Total length max. (k ₁ + k ₂ + k ₃ + l ₁ + l ₂) l₃	m₁	m₂
30	601	601	59	50	59	M 4	1460	23	38
40	753	753	78	66	78	M 5	1810	42	54
50	748	748	82	70	82	M 6	1810	42	54

Material **W**

ST	Steel • Guide tube, DIN EN 10305-4: Steel, chrome-plated • Trapezoidal / fine thread spindle: Steel, with ball bearing • Spindle nut: Red brass / end plug: Plastic
ED	Stainless steel • Guide tubes, EN 10216-5: Stainless steel AISI 304 • Trapezoidal / fine thread spindle: Stainless steel AISI 303, with ball bearing • Spindle nut: Red brass / end plug: Plastic

Spindle 1 thread direction (on journal z₁) **r₁**

RH	Right-hand thread
LH	Left-hand thread

Spindle 2 thread direction (on journal z₂) **r₂**

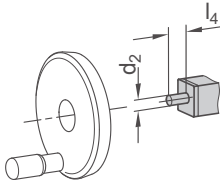
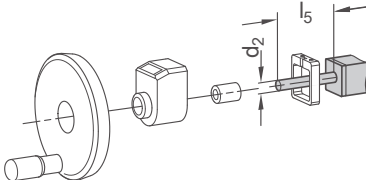
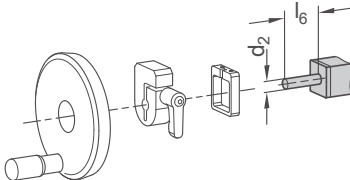
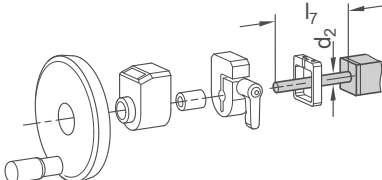
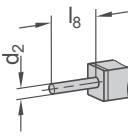
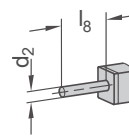
RH	Right-hand thread
LH	Left-hand thread

s	Spindle Ø	Spindle pitch spindle 1 p₁		Spindle pitch spindle 2 p₂		Journal diameter d₂	Journal length B l₄	Journal length D l₅	Journal length E l₆	Journal length F l₇	individual journal length l₈
		Trapezoidal thread	Fine thread, metric	Trapezoidal thread	Fine thread, metric						
30	14	4	1	4	1	8	16	52	31	67	16...67
40	20	4	1	4	1	12	17	59	32	74	17...74
50	20	4	1	4	1	12	18	60	33	75	18...75

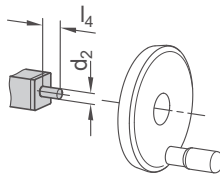
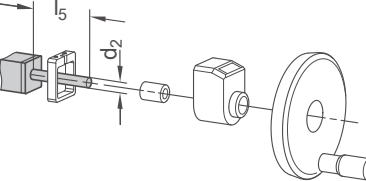
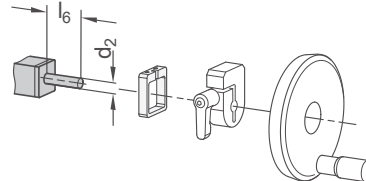
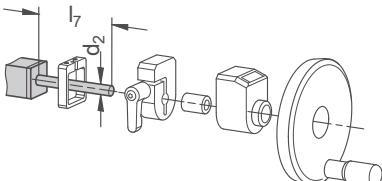
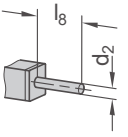
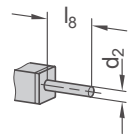
Accessories:

s	Torque support	Clamping plate	Position indicator		Handwheel
30	VZDV	VZK	VZPM	VZPE	VZH
40	VZDV	VZK	VZPM	VZPE	VZH
50	VZDV	VZK	VZPM	VZPE	VZH

Journal
Z₁

B	Journal for handwheel	D	Journal for position indicator and handwheel	E	Journal for spacer plate and handwheel (only for $d_1 \geq 30$)
 <p>Journal length l_4</p>		 <p>Journal length l_5</p>		 <p>Journal length l_6</p>	
F	Journal for spacer plate, position indicator and handwheel (only for $d_1 \geq 30$)	Gxx	Individual length with keyway (for xx enter value from column l_8)	Hxx	Individual length without keyway (for xx enter value from column l_8)
 <p>Journal length l_7</p>		 <p>Journal length l_8</p>		 <p>Journal length l_8</p>	

Journal
Z₂

B	Journal for handwheel	D	Journal for position indicator and handwheel	E	Journal for spacer plate and handwheel (only for $d_1 \geq 30$)
 <p>Journal length l_4</p>		 <p>Journal length l_5</p>		 <p>Journal length l_6</p>	
F	Journal for spacer plate, position indicator and handwheel (only for $d_1 \geq 30$)	Gxx	Individual length with keyway (for xx enter value from column l_8)	Hxx	Individual length without keyway (for xx enter value from column l_8)
 <p>Journal length l_7</p>		 <p>Journal length l_8</p>		 <p>Journal length l_8</p>	

ACCESSORIES

- Handwheels **VZH** → see page 356
- Position indicator **VZPM / VZPE** → see page 358 / 360
- Clamping plates **VZK** → see page 362
- Torque supports **VZDV** → see page 366
- Angle gears → on request
- Transfer units **VA** → see page 370

ORDER KEY

	Name key	Supplemental key
	VE3V - s - w - l ₁ - l ₂ - k ₁ - k ₂ - k ₃ - r ₁ - p ₁ - z ₁ - r ₂ - p ₂ - z ₂	
Single tube linear unit		
Outer diameter		
Material		
Stroke 1		
Stroke 2		
Edge distance 1		
Spacing		
Edge distance 2		
Spindle 1 thread direction		
Spindle 1 thread pitch		
Journal z ₁		
Spindle 2 thread direction		
Spindle 2 thread pitch		
Journal z ₂		

LINEAR UNIT CONNECTORS

The single tube linear unit VE3V only becomes a functional axis after attachment of a linear unit connector. Linear unit connectors are available in a variety of designs for different applications. To simplify the selection process, an overview is provided on page 238.

