



## **DUAL VP SERIES**

*International name: KDVP*

- **Ball screw drive**
- **Double profile rail guide with 4 carriages for high capacity load**
  - **Profile made of anodised extruded aluminium**
  - **Bearing for the ball screw:**
    - **2 pre-loaded angular ball bearing**
    - **1 deep groove ball bearing**
  - **T-slots for fixing**
  - **Exchangeable with belt drive module, DUAL CP series and with linear motor drive module, DUAL ML series**



**DIMENSIONS (mm)**

Series	A	A1	A2	B	B1	B2	C	D	D1	D3	D4	E
<b>DUAL VP 165</b>	165	32	71	62	26	18	85	160	70	M6	12	150
<b>DUAL VP 200</b>	200	40	80	80	30	25	105	180	78	M8	15	200
<b>DUAL VP 240</b>	240	50	100	85	60	12.5	115	230	100	M8	15	220

Series	E1	F	G	H	I	J	J1	J2	J3	K	M	N
<b>DUAL VP 165</b>	65	70	70	38.5	77	52	35	M6	15	10	42	3
<b>DUAL VP 200</b>	90	85	85	52	94	60	40	M8	15	12	50	3
<b>DUAL VP 240</b>	95	115	110	42.5	110.5	55	70	M8	15	15	56	3

Series	P	Q	R	R1	R2	R3	R4	T1	T2	T3	T4	U
<b>DUAL VP 165</b>	3 x 3	M3 x 10	6	10.5	3.5	5.5	1 x 1	7	2.5	5.6	48	25
<b>DUAL VP 200</b>	4 x 4	M4 x 12	6	10.5	4	6.5	1 x 1	10	3	9.2	60	30
<b>DUAL VP 240</b>	5 x 5	M5 x 15	6	10.5	4	6	2 x 2	-	-	-	-	31

**LONG CARRIAGE (ref. XXL)**

<b>DUAL VP 165</b> E = 220 E1 = 95	<b>DUAL VP 200</b> E = 300 E1 = 130	<b>DUAL VP 240</b> E + 350 E1 = 150
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**TECHNICAL DATA**

Series	Ball screw	Max. L	Total weight	Weight of carriage
	Ø x screw lead (mm)	mm	Kg	Kg
<b>DUAL VP 165</b>	16 x 5 (option 16x20)	1,950	Stroke x 0.015 + 14	3.9
<b>DUAL VP 200</b>	20 x 5 (option 20x20 or 20x50)	5,700	Stroke x 0.022 + 18.5	5.8
<b>DUAL VP 240</b>	25 x 5 (option 25x10 or 25x25)	3,550	Stroke x 0.03 + 22.7	7.4

Series	Moment of inertia		Module of elasticity
	lyy (mm <sup>4</sup> )	lzz (mm <sup>4</sup> )	N/mm <sup>2</sup>
<b>DUAL VP 165</b>	148 x 10 <sup>4</sup>	1,153 x 10 <sup>4</sup>	70,000
<b>DUAL VP 200</b>	381 x 10 <sup>4</sup>	2,725 x 10 <sup>4</sup>	70,000
<b>DUAL VP 240</b>	668 x 10 <sup>4</sup>	4,578 x 10 <sup>4</sup>	70,000

**GUIDING DATA (Guiding carriage)**

Series	Guiding carriage		Load capacity		Static moment (Nm)	
	Quantity	Size	C (N)	Co (N)	Mox	Moy/Moz
<b>DUAL VP 165</b>	4	15	16,600	18,000	920	840
<b>DUAL VP 200</b>	4	15	27,000	48,000	2,880	2,400
<b>DUAL VP 240</b>	4	20	36,000	72,000	5,023	4,075

**REPEATABILITY:**

± 0.05mm with a ball screw

**ACCELERATION:**

15m/s<sup>2</sup>

**SPEED:**

The speed is limited by the critical speed of the screw shaft and depends on its length and the quantity of screw supports. Maximum speed: 1800rpm. Higher speeds on request.

**LUBRICATION:**

The drive is to be re-lubricated at least twice a year by using the NLGI2 roller bearing grease fitted with lithium based soap.

**TEMPERATURE:**

From -10°C to +80°C

For other temperatures, please contact us.

**SEE "OPTION SAND ACCESSORIES" FOR:**

- Double carriage
- Second driving shaft piece
- Encoder shaft
- Flange
- Coupling
- Stroke ends
- Fixing parts
- Motor
- Motion control

REFERENCES						
	DUAL VP 240	2510 VB	2000/2445	OSI	A10	A15
Series						
Ø / screw lead / screw						
Stroke / total length (mm)						
Quantity of internal supports						
Options and accessories (ex. A10: flange; A15: coupling)						