

# Positioning drive

- Features:**
- CANopen
  - Integrated 1Q controller
  - Integrated power electronics
  - DC permanent magnet motor
  - Absolute multi-turn encoder
  - Life time: 2,000 h
  - Isolation class: B, optional F
  - Protection class: IP 42, optional up to IP 65
  - Ambient temperature: -15°...40°C



Type	Description	U	V <sub>DC</sub>	PSA 4520			
	Nominal voltage			24			
<b>Technical data</b>	Nominal power output	P <sub>2</sub>	W	22.5			
	Nominal speed	n <sub>nom</sub>	rpm	3250			
	Nominal torque	M <sub>nom</sub>	cNm	6.6			
	Nominal current	I	A	1.50			
	Stall torque	M	cNm	38.0			
	No load speed	n	rpm	4050			
	No load current	I	A	0.20			
	Positioning resolution			45°			
Ascertainable revolutions			500 Mio				
<b>Characteristics</b>	Gradient speed-torque	1 / K	mNm / rpm	0.1			
	Speed constant	k <sub>n</sub>	rpm / V	136			
	Torque constant	k <sub>t</sub>	cNm / A	4.34			
	Nominal efficiency	η		0.62			
<b>Dynamics</b>	Weight	m	kg	0.4			
	Moment of inertia	J	gcm <sup>2</sup>	120			
<b>Thermal conditions</b>	Ambient temperature	T <sub>a</sub>	°C	-20 to +40			
	Max stator temperature	T <sub>max</sub>	°C	+120			
<b>Mechanical data</b>	Shaft diameter	d	mm	6			
	Max. axial force	F <sub>a</sub>	N	8			
	Max. radial force	F <sub>r</sub>	N	100			
<b>Communication</b>	Fieldbus Profile	CANopen v. 2.0B DS-301 v. 4.02 DSP-305 v. 1.0					
	Max. baud rate	1 Mbit/s					
<b>Dimensions</b>	Type	L / mm					
	PSA 4520	65.5					

<b>Gear - combinations</b>	Worm gear	S 345
	Spur gear	upon request
other gears and extensions upon request	Planetary gear	PM 40