

Declaration on environmental compatibility in the field of EMC¹⁾, climate and mechanical stress

RE 29620-U/04.09

1/4

Type 4WSE3E 16 (25, 32)

Directional servo-valve of 4-way design

Produkt typs

- 4WSE3E 16...2X according to data sheet RE 29620
- 4WSE3E 25...3X according to data sheet RE 29621
- 4WSE3E 32...5X according to data sheet RE 29622

Description of the product family

- Valve for the closed-loop control of position, force or pressure and velocity
- 3-stage servo-valve with electrical position control of the control spool of the 3rd stage, position sensing of the control spool using an inductive position transducer
- On-board electronics (OBE)

¹⁾ as defined by EMC dated 30th August 1995 and Directive 89/336/EEC

The above products comply with the following standards:

1. EMC (electromagnetic compatibility)

Types with 15 V power supply

Testing according to specialized basic standard prEN 50082-2:1996, VDE 0839 part 82-2, Interference immunity

EN 61000-4-2:1995 IEC 1000-4-2	VDE 0847-4-2	ESD (electrostatic discharge)	Air discharge: Severity 4 / Assessment criterion A Contact discharge: Severity 4 / Assessment criterion A
EN 61000-4-4:1995 IEC 1000-4-4	VDE 0847-4-4	BURST (transient discharge)	Supply voltage: Severity 1 / Assessment criterion A Severity 3 / Assessment criterion B Data cable: Severity 1 / Assessment criterion A Severity 4 / Assessment criterion B

Types with 24 V power supply

Testing according to specialized basic standard prEN 50082-2:1996, VDE 0839 part 82-2, Interference immunity

EN 61000-4-2:1995 IEC 1000-4-2	VDE 0847-4-2	ESD (electrostatic discharge)	Air discharge: Severity 4 / Assessment criterion A Contact discharge: Severity 4 / Assessment criterion A
EN 61000-4-4:1995 IEC 1000-4-4	VDE 0847-4-4	BURST (transient discharge)	Supply voltage: Severity 3 / Assessment criterion B Data cable: Severity 1 / Assessment criterion A Severity 4 / Assessment criterion B

The above products comply with the following standards (continued):

2. Climate

Testing according to EN 60068-2 / IEC 68-2 (Environmental test)

EN 60068-2-1:1994		Cold test	2 cycles -20 °C Dwell time 2 hours
EN 60068-2-2:1993		Dry heat test	2 cycles +80 °C Dwell time 2 hours
EN 60068-2-1:1994 EN 60068-2-2:1993		Storage temperature	-20 °C, dwell time 16 hours +80 °C, dwell time 16 hours
	IEC 68-2-14:1986	Temperature cycles	2 cycles -20 °C to +60 °C Dwell time je 3 hours at min. / max. Temperatur
	IEC 68-2-30:1985	Damp heat, cyclical	Variant 2 +25 °C to +55 °C 93 % to 97 % relative humidity 2 Cycles á 24 hours

3. Mechanical stress

Vibration and shock test according to EN 60068-2 / IEC 68-2 (Environmental test)

Tests were carried out in three axes (X/Y/Z)

prEN 60068-2-6:1994		Vibration, sinusoidal	10 cycles, 5...2000 Hz...5 Hz at a logarithmic frequency change rate of 1 Oct./Min. 5 to 57 Hz, amplitude 1,5 mm (p-p) 57 to 2000 Hz, amplitude 10 g Dwell time per axis: 30 min at resonance frequency
	IEC 68-2-36:1973 DIN 40046-24:1977	Random vibration Broadband noise	20 to 2000 Hz, amplitude 0,05 g ² /Hz (10 g RMS) testing time 30 min per axis
EN 60068-2-27:1993		Shock	Half sine 15 g / 11 ms, 3 x in positive / 3 x in negative direction per axis, in total 18 individual shocks