

### PRD 55 - Finixa pneumatic machine - 4.000 rpm

#### Description

Instruments	Type and manufacturer	Date of calibration
Vibration Analyser	Type: 3050-B-060 B & K	2010.06.23 B&K
Accelermoter / Converter	Type: 4393 / 2647C (0.1:1) B&K	2010.06.15/2010.07.15 B&K
Vibration calibrator	Type: 4294 B&K	2010.06.21 B&K

$$K = 1.65 \times \sigma R, \sigma R \text{ is estimated by } sR \text{ where } sR = \text{Max}\{\sqrt{s_{rec}^2 + s_{op}^2}, 0.06a_{hd} + 0.3\}$$

#### Summary of Testing

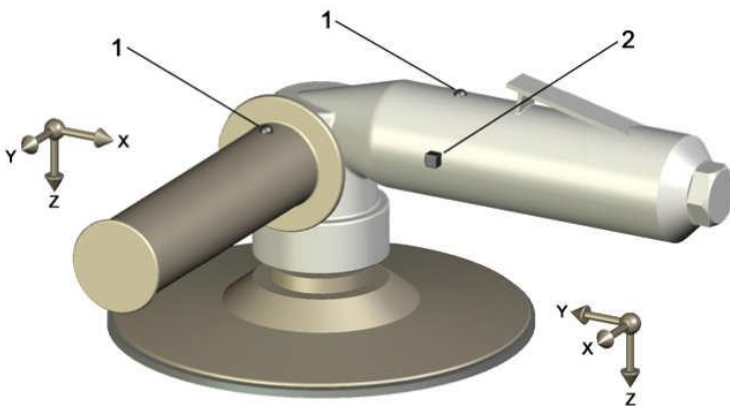
Description of the measurements, method, position etc.

Tested according to EN ISO 28927-3. Declared according to EN 12096

Test conditions: Running free with 4" wheel at 6.2 Bar

Accelerometer placement, see figure below.

Frequency band: HA (Hand-Arm) Frequency range: 6,3 Hz to 1,25 kHz.



Note:

- 1) The second location "2" can be used when the prescribed location "1" is not possible for the transducer.

#### Tool rating and loading condition

Type of tool	Rated Speed (rpm)	Orbital dia. (mm)	Tool weight (kg)	Feed force (approx. N)	Loading condition
4" Stripping off tool	4 000	-	1.42	-	Running free with a 4" wheel

**Summary of declared vibration value (ahd), measurement uncertainty (K), and measurement location:**

Declared vibration value ahd (m/s<sup>2</sup>) 0.5  
 uncertainty, K (m/s<sup>2</sup>) 0.55  
 location 1B

**Test results, weighted acceleration (m/s<sup>2</sup>):**

Model		Rated free (RPM)		4000		Weight (kg)		1.42		Loading device				
PRD 55		Test bar	Pressure	6.2		Feed force (N)			Running free with a 4" wheel					
Pos.	Operator	Run	a <sub>hw</sub> x	a <sub>hw</sub> y	a <sub>hw</sub> z	a <sub>hw</sub>	a <sub>hwrat</sub>	$\overline{a_{hw}}$	S <sub>n-1</sub>	Cv	a <sub>n</sub>	S <sub>R</sub>	K	a <sub>hd</sub>
1A	A	1	0.2	0.3	0.1	0.36	-	0.4	0.03	0.07	0.4	0.32	0.53	0.5
		2	0.2	0.2	0.1	0.34	-							
		3	0.2	0.3	0.1	0.35	-							
		4	0.2	0.3	0.1	0.35	-							
		5	0.2	0.3	0.1	0.41	-							
	B	1	0.2	0.3	0.1	0.36	-	0.4	0.03	0.08				
		2	0.2	0.3	0.1	0.39	-							
		3	0.2	0.3	0.1	0.37	-							
		4	0.2	0.3	0.1	0.41	-							
		5	0.2	0.4	0.1	0.43	-							
	C	1	0.2	0.3	0.1	0.38	-	0.4	0.02	0.05				
		2	0.2	0.3	0.1	0.35	-							
		3	0.2	0.3	0.1	0.34	-							
		4	0.2	0.3	0.1	0.37	-							
		5	0.2	0.3	0.1	0.38	-							
1B	A	1	0.23	0.31	0.3	0.46	-	0.5	0.05	0.10	0.5	0.33	0.55	0.5
		2	0.23	0.32	0.2	0.46	-							
		3	0.24	0.31	0.3	0.47	-							
		4	0.27	0.33	0.3	0.52	-							
		5	0.31	0.34	0.3	0.57	-							
	B	1	0.31	0.36	0.3	0.55	-	0.5	0.04	0.07				
		2	0.28	0.30	0.3	0.51	-							
		3	0.25	0.31	0.3	0.49	-							
		4	0.29	0.35	0.3	0.57	-							
		5	0.33	0.32	0.4	0.58	-							
	C	1	0.28	0.33	0.3	0.51	-	0.5	0.03	0.05				
		2	0.27	0.33	0.3	0.50	-							
		3	0.27	0.32	0.3	0.49	-							
		4	0.30	0.34	0.3	0.54	-							
		5	0.31	0.33	0.3	0.55	-							

**Noise rapport**

Instruments	Type and manufacturer	Date of calibration
Sound Analyser	Type: 3050-B-060 B & K	2010.06.23 B&K
Microphones	Type: 4189-A-021	2010.06.22 B&K
Calibrator	Type: 4231 B&K	2010.06.15 B&K

Measurement uncertainty, expressed as standard deviation of reproducibility  $\sigma_R$

KPA, KWA, or KpC = 3.0 dB

**Summary of testing**

Tested according to EN ISO 15744 and declared according to ISO 4871:1984(E)

Background noise measured in center of the measurement surface : 45.5 dB(A)

Corrections for background noise K<sub>1</sub> 0 dB, due to  $\Delta L > 15$  dB

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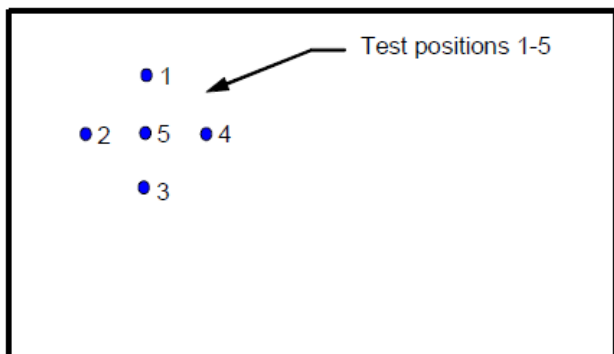
Environmental correction  $K_2$  : 3.8 dB ( $A = a \times S_v$  where  $a = 0.35$ )  
 Ambient room temperature  
 Test conditions: Running free with 4" wheel at 6.2 bar..  
 Test room and positions indicated on figure below

Test room

Length test room: 6.4m

Width test room: 3.6 m

Height ceiling: 2.8 m



Type of tool	Rated Speed (rpm)	Orbital dia. (mm)	Tool weight (kg)	Feed force (approx. N)	Loading condition
4" Stripping off tool	4 000	-	1.42	-	Running free with a 4" wheel

#### Supplementary values :

Machine		A-weighted Sound Pressure level (dB)					
Type	P <sub>smax</sub> (bar)	Mic. Pos. 1	Mic. Pos 2	Mic. Pos. 3	Mic. Pos. 4	Mic. Pos. 5	Leq. mean
-	-	47.2	45.6	44	45	45	45.5
4" Stripping off tool	6.2	89.4	92.3	92.9	90.2	89.1	91.1

Type	P <sub>smax</sub> (bar)	Mic. Pos. 1	Mic. Pos 2	Mic. Pos. 3	Mic. Pos. 4	Mic. Pos. 5	Peak value
-	-	47.2	45.6	44	45	45	45.5
4" Stripping off tool	6.2	89.4	92.3	92.9	90.2	89.1	91.1

#### Main value:

1	A-weighted sound pressure level in dB(A) (L <sub>pA</sub> )	87.2
2	A-weighted sound power level in dB(A) (L <sub>wA</sub> )	98.2
3	C-weighted sound pressure level at work station in dB(C) (L <sub>pC</sub> , peak)	103.6

The above information is given in good faith, but the user should assure himself that the performance of the product is sufficient for his application. The quoted values are average and should not be taken as maximum or minimum values for specific purposes. Chemicar Europe cannot be held responsible for product failure unless full testing has been carried out. The client has to decide on the products suitability for their own applications.