

Fluidic muscle in cleanrooms

The recently introduced size DMSP-5 has already been tested in Singapore

The modular product system DMSP in sizes 10, 20 and 40 was already tested in Singapore in 2006 and categorised in the highest classification level for pneumatic drives at Festo. Cleanroom class ISO 4 to standard 14644-14 was also achieved with the addition of a size 5 to the modular system.

Some colleagues still use the old classification system, however the old US-FED Std. 209E classification has not been valid for many years. The “new” standard ISO 14644 has therefore been in use for a long time.

Cleanroom class

Current versus old class

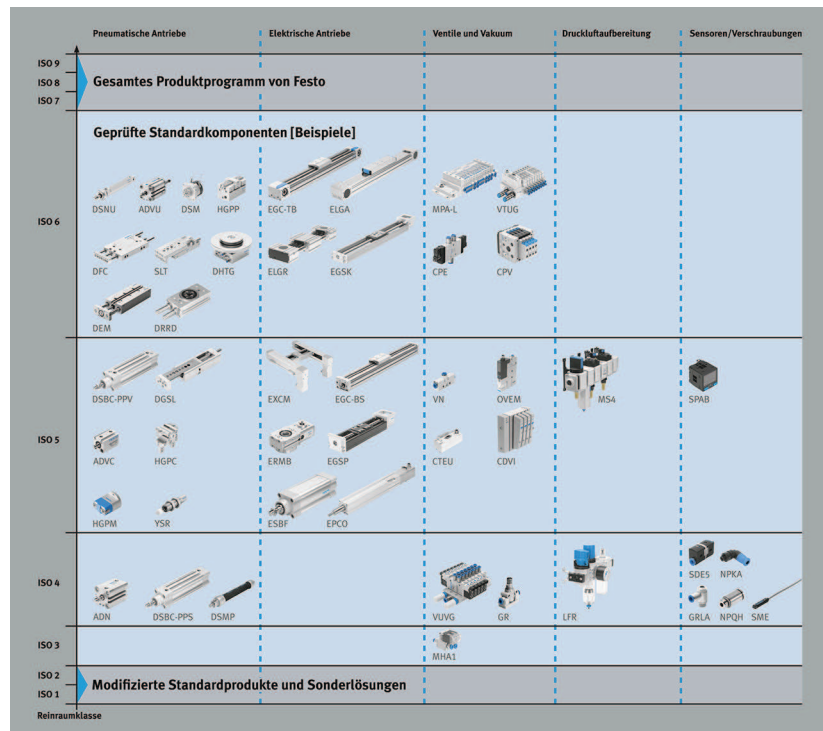
ISO 14644 US FED STD 209E
Class Class

ISO 1	n/a
ISO 2	n/a
ISO 3	1
ISO 4	10
ISO 5	100
ISO 6	1,000
ISO 7	10,000
ISO 8	100,000
ISO 9	n/a

We are looking for further applications in the cleanroom area. If you have specific proposals for applications, please send them to the contact address below. We will provide design and implementation support.



Laboratory technician in Singapore



Festo cleanroom-compliant products and their classification

ISO-Klassifizierungszahl (N)	Höchstwert der Partikelkonzentrationen (Partikel je Kubikmeter Luft)					
	0,1 µm	0,2 µm	0,3 µm	0,5 µm	1 µm	5 µm
ISO-Klasse 1	10	2		–	–	–
ISO-Klasse 2	100	24	10	4	–	–
ISO-Klasse 3	1000	237	102	35	8	–
ISO-Klasse 4	10000	2370	1020	352	83	–
ISO-Klasse 5	100000	23700	10200	3520	832	29
ISO-Klasse 6	1000000	237000	102000	35200	8320	293
ISO-Klasse 7	–	–	–	352000	83200	2930
ISO-Klasse 8	–	–	–	3520000	832000	29300
ISO-Klasse 9	–	–	–	35200000	8320000	293000



The fluidic muscle is hermetically tight, making it ideal for movement and clamping tasks in cleanrooms.



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