



How to select the
right air filter
acc. to ISO 16890

Leadership in Filtration

**MANN +
HUMMEL**

Achieve the required air quality at the lowest possible energy cost

It's well known that making the right filter choice can substantially reduce your energy costs. The introduction of ISO 16890 has made it simple to choose the most appropriate filtration efficiency for your building. From the beginning of 2019, Eurovent's new energy rating system classifies all qualifying air filters from A+ to E - where A+ stands for the best energy performance and E represents the lowest. The new Eurovent energy rating scheme, based upon ISO 16890 rather than the outgoing EN 779 standard, creates a closer link between filtration efficiency and energy consumption. This makes it easier to balance the performance and cost of your filter system.

Don't miss out on the many benefits that the new schemes bring. We recommend that you base your selection on your required air quality and pollution levels in your local environment. This is the best way to reduce your energy costs to the bare minimum, while delivering the protection you need. These examples show what is possible. **MANN+HUMMEL will be happy to help you select the perfect filter configuration.**



SUPPLY AIR QUALITY REQUIREMENT

OUTDOOR AIR QUALITY		Supply Air 1	Supply Air 2	Supply Air 3	Supply Air 4	Supply Air 5
		Hospitals, pharmaceuticals, electronics	Offices, hotels, cinemas, schools, meeting rooms	Warehouses, shopping malls	Toilets, storage rooms, staircases	Garbage rooms, underground garages
 ODA 1	Example 1	ePM10 50% + ePM1 60%	ePM1 50%	ePM2,5 50%	ePM10 50%	ePM10 50%
	Example 2	ePM1 80%	ePM1 70%	ePM2,5 70%	ePM10 80%	-
 ODA 2	Example 1	ePM2,5 50% + ePM1 60%	ePM10 50% + ePM1 60%	ePM1 50%	ePM2,5 50%	ePM10 50%
	Example 2	ePM1 80%	ePM1 70%	ePM2,5 70%	ePM10 80%	-
 ODA 3	Example 1	ePM2,5 50% + ePM1 80%	ePM2,5 50% + ePM1 60%	ePM10 50% + ePM1 60%	ePM1 50%	ePM2,5 50%
	Example 2	ePM1 90%	ePM1 80%	ePM2,5 80%	ePM10 90%	ePM10 80%

Conversion from DIN EN 779:2012 to DIN EN ISO 16890?

There are better ways to select the most efficient air filter.

DIN EN 779:2012	ACC. TO DIN EN ISO 16890*				FILTER RANGE
	Coarse	ePM10	ePM2,5	ePM1	
G4	60-85%				Airmat, Airroll, Airpad, Airpanel, Airpocket
M5	80-95%	40-70%	10-45%	5-35%	Airmat, Airroll, Airpad, Airpanel, Airpocket
M6	> 90%	60-80%	20-50%	10-40%	Airpanel, Airsquare, Airpocket, Aircube
F7	> 95%	80-90%	65-75%	40-65%	Airpanel, Airsquare, Airpocket, Aircube
F8	> 95%	90-100%	75-95%	65-90%	Airpanel, Airsquare, Airpocket, Aircube
F9	> 95%	90-100%	85-95%	80-90%	Airpanel, Airsquare, Airpocket, Aircube

Eurovent 4/23 - 2018: Selection of EN ISO 16890 rated air filter classes - Second edition

CLEAN AIR SAVES LIVES

The latest study from the Max Planck Institute for Chemistry in Mainz estimates that every year there are 120,000 premature deaths in Germany as a result of fine dust pollution (German national television news, January, 2019).

But the danger is not only lurking outdoors. In enclosed areas, air quality is typically up to four times worse than outside. Particulate matter can cause cardiovascular diseases. An efficient filtration system is your first line of defense to protect the people in your buildings from airborne pollutants.