

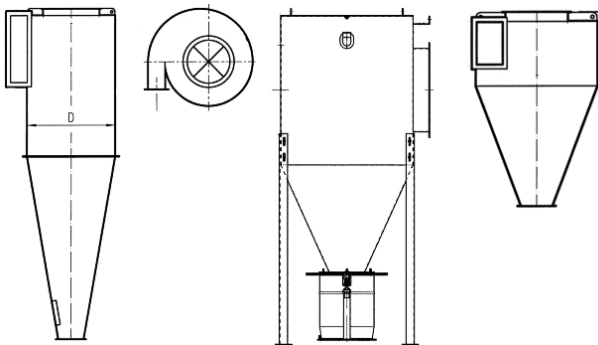
SPARK PRE-SEPARATORS



THE TASK

Keller spark pre-separators are used for capturing and discharging coarse and combustible particles, thereby protecting the dust collectors and extending their service life. In addition, they have a larger dust collection volume and also function as spark pre-separators to help minimize the risk of fire.

CHOICE OF MODELS



Cyclone separator AS

Impact separator PA

Material pre-separator MVA



Material pre-separator with Vario



Spark pre-separator on a Vario 5



Cyclone separator with Jet Set

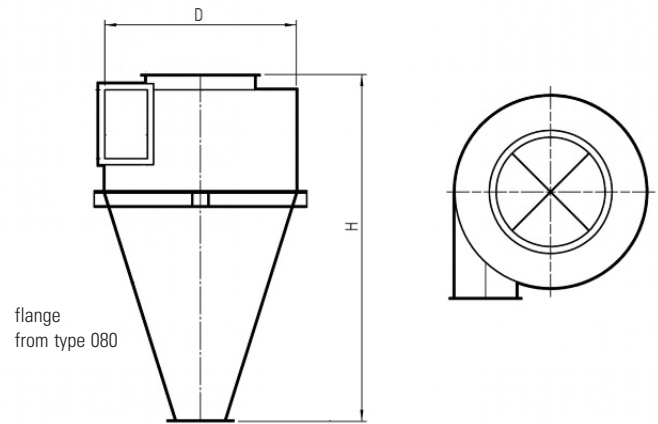
MATERIAL SEPARATOR MVA, MVAS



DESIGN

Material separator MVA of high-quality sheet steel construction, consists of:

- Cylindrical upper chamber with openings for dirty air and clean air
- Conical lower section spirals the material down to the bottom
- MVAS = reinforced exterior walls



FUNCTION

The mechanical separators operate according to the principle of centrifugal force. The dirty air enters the cylindrical chamber of the spark pre-separator through an external inlet. The dust particles are propelled against the outer wall and spiraled downward to the funnel-shaped discharge. The clean air exits the spark pre-separator through an upper exhaust air outlet.

ADVANTAGES

- Filter elements are protected
- Fire risk is reduced
- Compact, low profile

DIMENSION SHEET MATERIAL PRE-SEPARATOR

Type		045	050	056	063	071	080	090	100	112	125	140	160	180	200
Diameter	D	800	900	1000	1120	1250	1400	1600	1800	2000	2240	2500	2800	3150	3550
Height	H	1500	1670	1800	2010	2225	2500	2820	3190	3600	4010	4400	4960	5595	6275
kg (MVA)		75	95	120	135	180	235	300	355	410					
kg (MVAS)		145	180	225	260	350	450	470	608	900	1020	1960	2350	3190	3660

Differential	Airflow (thousand m3/h)														
	045	050	056	063	071	080	090	100	112	125	140	160	180	200	
$\Delta p = 90 \text{ daPa}$	3,2	4	5	6	8	10	12,5	16	20	25	32	40	50	63	

SPARK PRE-SEPARATOR PA

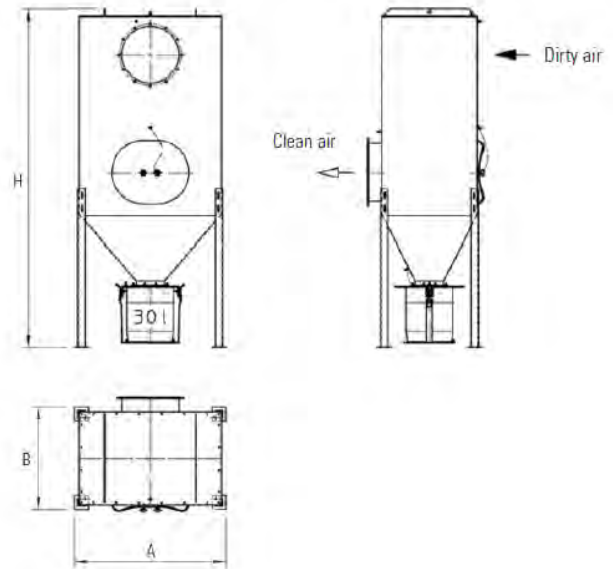


DESIGN

Compact impact separator in high-quality sheet steel design for direct installation on filter units VARIO 1 – 6, for the purpose of preventing sparks.

FUNCTION

The dirty air flows into the pre-separator, is deflected by the baffle plate, and continues into the hopper area. Hot embers are removed and large particles are separated from the airflow. Disposal occurs via a bucket mounted underneath.



ADVANTAGES

Fire risk is reduced by the removal of glowing embers, which effectively protects the filter elements

DIMENSION SHEET MATERIAL PRE-SEPARATOR

Type		045	050	056	063	071	080	090	100	112	125	140	160	180	200
Diameter	D	800	900	1000	1120	1250	1400	1600	1800	2000	2240	2500	2800	3150	3550
Height	H	1500	1670	1800	2010	2225	2500	2820	3190	3600	4010	4400	4960	5595	6275
kg (MVA)		75	95	120	135	180	235	300	355	410					
kg (MVAS)		145	180	225	260	350	450	470	608	900	1020	1960	2350	3190	3660

Differential	Airflow (thousand m3/h)														
	045	050	056	063	071	080	090	100	112	125	140	160	180	200	
$\Delta p = 90 \text{ daPa}$	3,2	4	5	6	8	10	12,5	16	20	25	32	40	50	63	

CYCLONE SEPARATOR AS, ASS



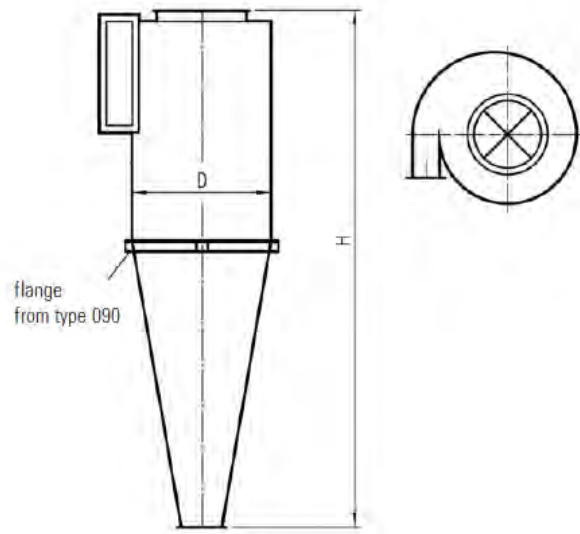
DESIGN

High performance cyclone separator in high-quality sheet steel design, consists of:

- Cylindrical upper chamber with openings for dirty and clean air
- Conical bottom section which spirals the material down to the discharge
- ASS = reinforced exterior walls

FUNCTION

The mechanical separators operate according to the centrifugal forces principle. The dirty air enters the cylindrical chamber of the spark pre-separator through an external inlet. The dust particles are propelled against the outer wall and separated downwards through the funnel-shaped discharge. The clean air exits the pre-separator through an upper, central exhaust air outlet.



ADVANTAGES

- Protection of filter elements
- High efficiency
- For airflows up to 100.000 m³/hr

DIMENSION SHEET CYCLONE PRE-SEPARATOR

Type		40	45	50	56	63	71	80	90	100
Diameter	D	630	710	800	900	1000	1120	1250	1400	1600
Height	H	2275	2875	2975	3380	3735	4310	4700	5210	5580
kg (AS)		100	140	158	190	246	315	377	480	545
kg (ASS)		142	183	221	265	450	660	760	823	1037

Differential	Air flow [m ³ /h]									
	40	45	50	56	63	71	80	90	100	
Δp = 63 daPa	2500	3150	4000	5000	6300	8000	10000	12500	16000	
Δp = 80 daPa	2800	3550	4500	5600	7100	9000	11000	14000	18000	
Δp = 100 daPa	3150	4000	5000	6300	8000	10000	12500	16000	20000	



Keller USA, Inc.
 2168 Carolina Place Drive
 Fort Mill, SC 29708 USA
 Phone (803) 396-2000 Fax (803) 396-290E
 E-mail info@kellerusa.com
www.kellerusa.com