

## SPARKSHIELD (metric)

### CYCLONE SPARK ARRESTER

The SparkShield provides highly effective removal of sparks and cigarette butts. Besides, it is a very effective in-line pre-separator reducing dust load in the connected filter system.

The SparkShield is to be mounted in horizontal position. Its divisible housing enables maintenance without duct disassembly.

The SparkShield comes with a dustbin of 13 and 27 litres. The distance between the spark arrester and dustbin can be enlarged by a duct of Ø 200 mm.



### APPLICATIONS

The SparkShield is part of Plymovent's *SHIELD fire safety solutions* and recommended to be used in applications with a high fire risk, such as:



- robotic welding of oily stamped products
- robotic and automatic welding of oily products
- manual welding of oily products
- cutting tables
- schools and other areas with risk of cigarette butts

### SPECIFICATIONS

#### Physical dimensions and properties

|           |   |   |
|-----------|---|---|
| Material: | <ul style="list-style-type: none"> <li>• inlet + outlet</li> <li>• SparkTwist</li> <li>• dustbin</li> <li>• hose</li> </ul> | <ul style="list-style-type: none"> <li>• powder-coated steel</li> <li>• galvanized steel</li> <li>• tin</li> <li>• glassfibre/kevlar/metal</li> </ul> |
|-----------|---|---|

|         |  |   |
|---------|--|---|
| Colour: | <ul style="list-style-type: none"> <li>• inlet</li> <li>• outlet</li> <li>• dustbin</li> <li>• hose</li> </ul> | <ul style="list-style-type: none"> <li>• grey RAL 7011</li> <li>• grey RAL 7035</li> <li>• natural</li> <li>• grey/black</li> </ul> |
|---------|--|---|

#### Product combinations

Refer to the application data sheet about *SHIELD fire safety solutions* of Plymovent for recommended product combinations

As separate spark arrester in the extraction duct of central filter systems

#### Scope of supply

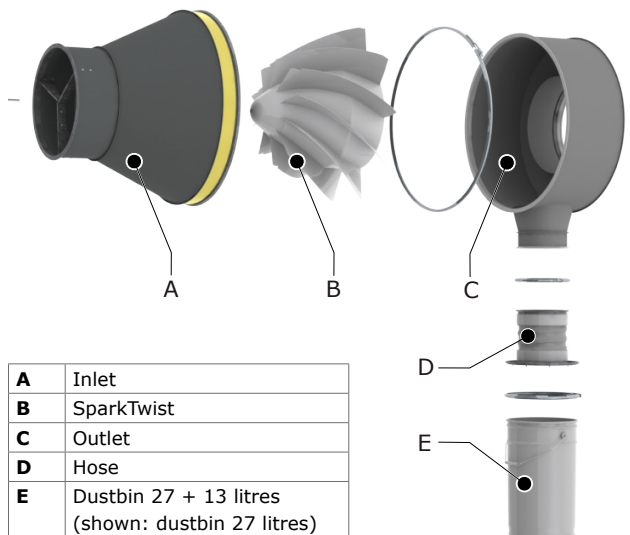
Spark arrester, consisting of inlet with SparkTwist and outlet, connected by duct clamp - Dustbin 13 litres + 27 litres - Dustbin cover incl. connection flange + hose - Duct connection material

#### Logistics data

|                        |             |
|------------------------|-------------|
| Harmonized Tariff Code | 84213925    |
| Country of origin      | Netherlands |

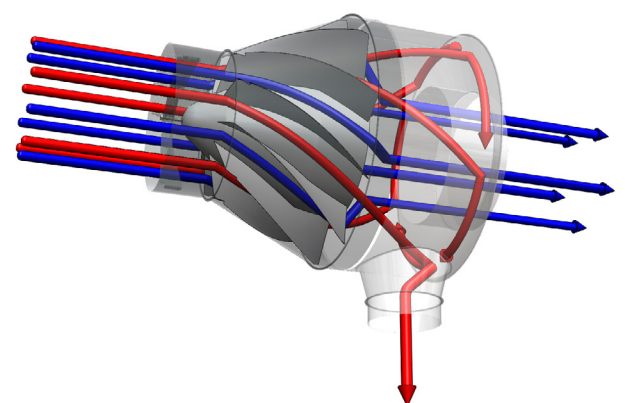
For more detailed specifications: refer to the table on page 2

### MAIN COMPONENTS



|   |  |
|---|--|
| A | Inlet  |
| B | SparkTwist   |
| C | Outlet   |
| D | Hose   |
| E | Dustbin 27 + 13 litres<br>(shown: dustbin 27 litres) |

### SEPARATION OF SPARKS



→ = sparks

→ = air

**Table:**  
specifications per type

|   | SparkShield-250  | SparkShield-400   | SparkShield-500    | SparkShield-630   | SparkShield-800 |
|---|------------------|-------------------|--------------------|-------------------|-----------------|
|   | Refer to image I |                   |                    | Refer to image II |                 |
| <b>Physical dimensions and properties</b> |                  |                   |                    |                   |                 |
| A   | Ø 500 mm         | Ø 710 mm          | Ø 900 mm           | Ø 1125 mm         | Ø 1250 mm       |
| B   | Ø 250 mm         | Ø 400 mm          | Ø 500 mm           | Ø 630 mm          | Ø 800 mm        |
| C   | min. 825 mm      | min. 970 mm       | min. 1095 mm       | min. 1200 mm      | min. 1246 mm    |
| D   | 778 mm           | 943 mm            | 1159 mm            | 1400 mm           |                 |
| E   | min. 1050 mm     | min. 1200 mm      | min. 1325 mm       | min. 1420 mm      | min. 1466 mm    |
| F   | Ø 200 mm         | Ø 200 mm          | Ø 200 mm           | Ø 200 mm          | Ø 200 mm        |
| G   | 616 mm           | 866 mm            | 1086 mm            | 1300 mm           | 1407 mm         |
| H   | n/a              | n/a               | n/a                | 1470 mm           | 1570 mm         |
| Inspection & service hatch (2)            | n/a              | n/a               | n/a                | 330 x 675 mm      | 330 x 675 mm    |
| Weight (net)                              |                  |                   |                    |                   |                 |
| • total                                   | • 29 kg          | • 50 kg           | • 56 kg            | • 112 kg          |                 |
| • spark arrester only                     | • 25 kg          | • 46 kg           | • 52 kg            | • 118 kg          |                 |
| Appropriate duct diameter                 | Ø 250 mm         | Ø 400 mm          | Ø 500 mm           | Ø 630 mm          | Ø 800 mm        |
| <b>Options and accessories</b>            |                  |                   |                    |                   |                 |
| Inspection hatch for:                     |                  |                   |                    |                   |                 |
| • vertical duct                           | • IH-200/8       | • IH-200/8        | • IH-200/8         | • IH-200/8        | • IH-200/8      |
| • horizontal duct                         | • IH-250/10 (2x) | • IH-400/16 (2x)  | • IH-500/20 (2x)   | • IH-630/24 (2x)  |                 |
| Shut-off valve for vertical duct          | MD-200           | MD-200            | MD-200             | MD-200            | MD-200          |
| Industrial detergent                      | EFC              | EFC               | EFC                | EFC               | EFC             |
| <b>Order information</b>                  |                  |                   |                    |                   |                 |
| Article number                            | 9760001010       | 9760001020        | 9760001030         | 0000111948        | 0000112554      |
| <b>Logistics data</b>                     |                  |                   |                    |                   |                 |
| Gross weight                              |                  |                   |                    |                   |                 |
| • excl. pallet                            | • 31 kg          | • 53 kg           | • 62 kg            | • 150 kg          |                 |
| • incl. pallet                            | • 40 kg          | • 66 kg           | • 87 kg            | • 168 kg          |                 |
| Packing dimensions                        | 80 x 60 x 80 cm  | 120 x 80 x 100 cm | 120 x 100 x 120 cm |                   |                 |

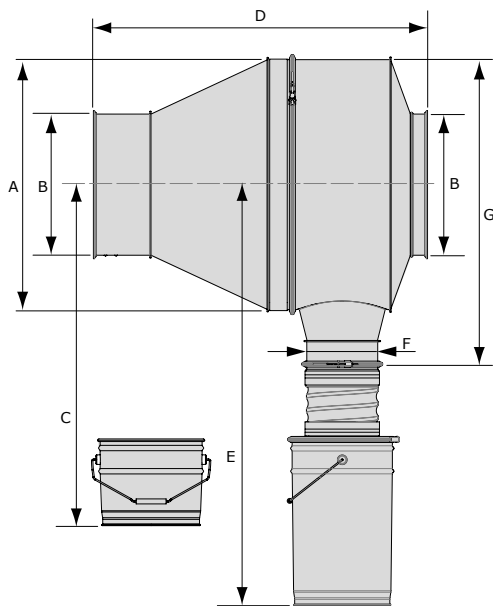


Image I: Sparkshield-250 | 400 | 500

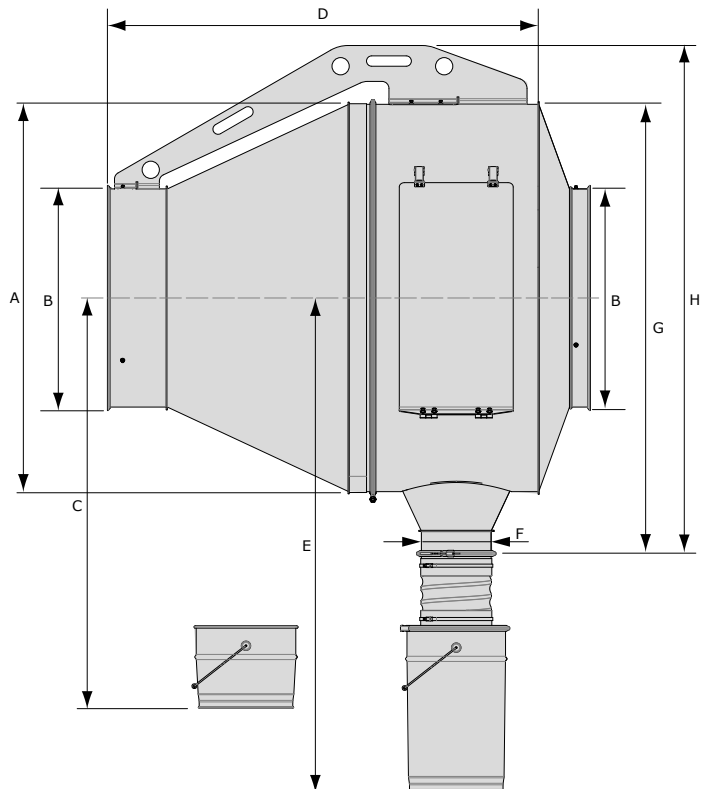
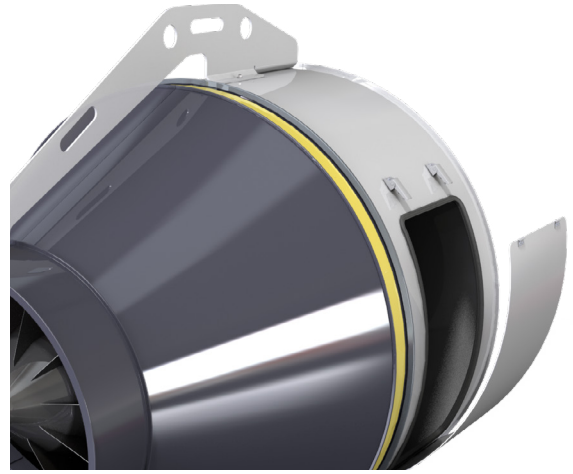


Image II: Sparkshield-630 | 800

**INSTALLATION POSSIBILITIES**

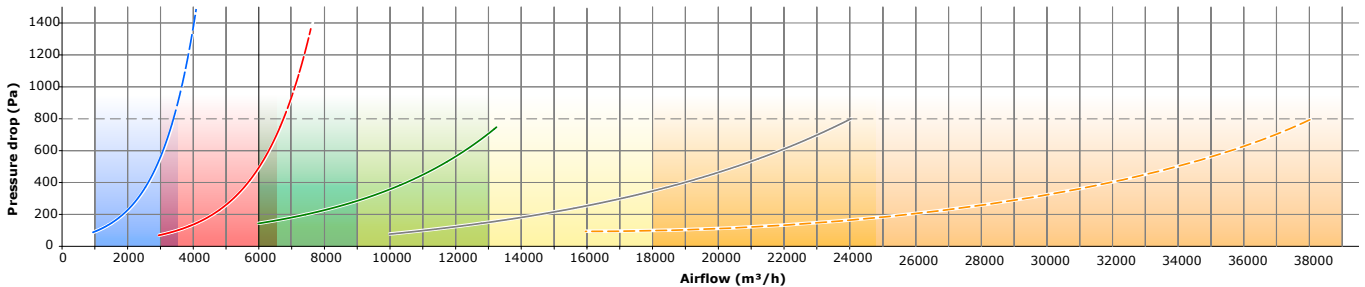


SparkShield-630 | 800:  
**two integrated inspection & service hatches**



**PRESSURE DROP & WORKING RANGE**

|                                | SparkShield |     |     |     |     |
|--------------------------------|-------------|-----|-----|-----|-----|
|                                | 250         | 400 | 500 | 630 | 800 |
| Pressure drop                  | —           | —   | —   | —   | —   |
| Working range<br>(max. 800 Pa) | —           | —   | —   | —   | —   |



**PATENT**

United States Patent and  
Trademark Office (2017)

*The installation of any product(s) not included in the initial design of an extraction system could add additional static pressure to the overall system design. By doing so, the result may be a reduction of airflow at the extraction point.*

|                  |                              |
|------------------|------------------------------|
| Product type     | <b>SparkShield (metric)</b>  |
| Article no.      | refer to order information   |
| Product category | SHIELD fire safety solutions |
| Version          | 120819/H                     |

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