

## ERGO/Ex – explosion proof extraction arms



### Purpose

The ERGO-L/Z/Ex extraction arms are designed for capturing the dust and gases arising during technological processes, especially in areas of explosion risk, where explosive atmosphere can occur, as a mixture of flammable substances in form of dust or gases with the air. ERGO-L/Z/Ex extraction arms have been classified as devices of group II, category 2, of gaseous risk G and dust risk D.

The devices guarantee high level of protection, therefore they can be applied in areas 1(G) or 21(D). Admissible temperature of the forwarded air is +70°C.

### Structure

ERGO-L/Z/Ex extraction arms consist of following elements:

- full-rotation swivel – stainless steel,
- circular hood – stainless steel,
- two pipe segments with joints – all elements are of stainless steel,
- frictional spacers – made of textolite,

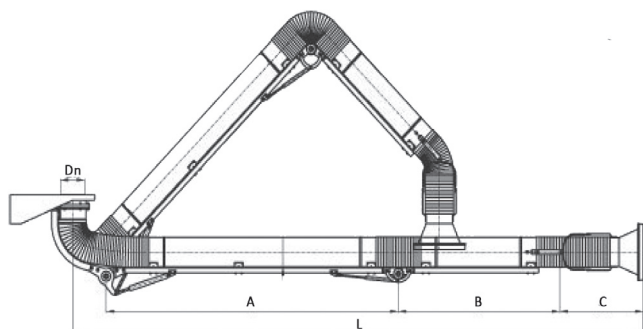
- gas springs of stainless steel,
- shut-off damper located in the pipe segment near above the hood – stainless steel,
- hose sections (joining the pipe segments) – made of polyurethane conducting electrical charges and a steel wire spiral.

Superficial resistance  $<10^6 \Omega$ . Elements of steel plate, pipes and stainless profiles are made of material 1.4301 according to PN-EN 10088, whereas screw materials, washers and rivets are of material A2 according to PN-EN ISO 7089.

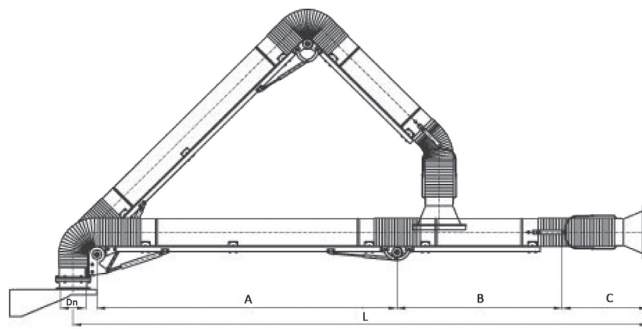
All constructional elements are joined together by copper cables to conduct the electrostatic charges to the grounding installation.

**ERGO-L/Z/Ex extraction arms are manufactured according to ATEX 95 (94/9/EC) Directive and carry the Type Research Certificate No 737/CW/001 issued by Technical Supervision Office.**

### Hanging version



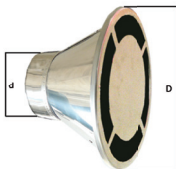
### Standing version



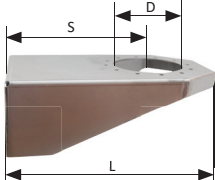
## Technical data

| Type            | Part no. | Dimensions |        |        |        |        | Weight [kg] |
|-----------------|----------|------------|--------|--------|--------|--------|-------------|
|                 |          | Dn [mm]    | L [mm] | A [mm] | B [mm] | C [mm] |             |
| ERGO-L/Z-2/Ex   | 814R21   | 160        | 2280   | 947    | 580    | 534    | 22,5        |
| ERGO-L/Z-3/Ex   | 814R22   | 160        | 3100   | 1527   | 820    | 534    | 25,5        |
| ERGO-L/Z-4/Ex   | 814R23   | 160        | 3710   | 1907   | 1050   | 534    | 28,0        |
| ERGO-L/Z-2-R/Ex | 814R24   | 160        | 3710   | 947    | 580    | 534    | 19,5        |
| ERGO-L/Z-3-R/Ex | 814R25   | 160        | 3033   | 1527   | 820    | 534    | 22,5        |
| ERGO-L/Z-4-R/Ex | 814R26   | 160        | 3643   | 1907   | 1050   | 534    | 25,0        |

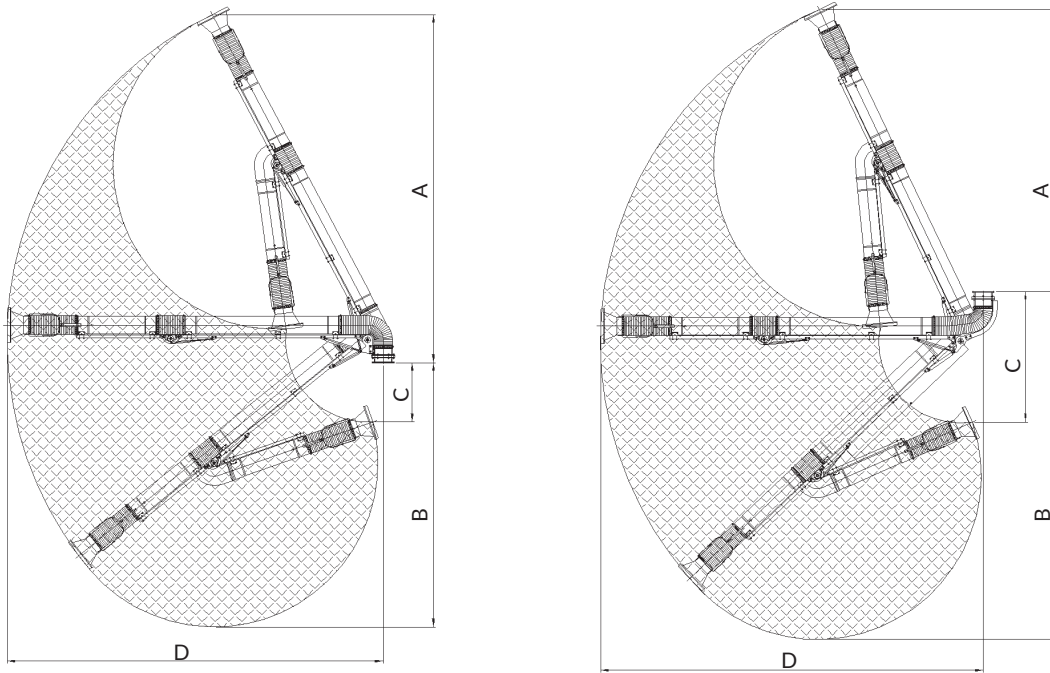
## Hood

| Sort of hood  | Material        | Type | Part no. | d [mm] | D [mm] | Weight [kg] |
|---|-----------------|------|----------|--------|--------|-------------|
|  | stainless steel | LS   | 810H35   | 160    | 336    | 1,3         |

## Wall bracket

|  | Type       | Part no. | Dn [mm] | S [mm] | L [mm] | Weight [kg] |
|---|------------|----------|---------|--------|--------|-------------|
|   | WBN-160/Ex | 817W45   | 160     | 320    | 445    | 3,9         |

## Work ranges of the ERGO/Ex extraction arms



| Type            | A [mm] | B [mm] | C [mm] | D [mm] |
|-----------------|--------|--------|--------|--------|
| ERGO-L/Z-2-R/Ex | 2110   | 1487   | 122    | 2213   |
| ERGO-L/Z-3-R/Ex | 2835   | 2092   | 409    | 3033   |
| ERGO-L/Z-4-R/Ex | 3374   | 2561   | 573    | 3643   |

| Type          | A [mm] | B [mm] | C [mm] | D [mm] |
|---------------|--------|--------|--------|--------|
| ERGO-L/Z-2/Ex | 1440   | 1650   | 800    | 2280   |
| ERGO-L/Z-3/Ex | 2195   | 2888   | 922    | 3100   |
| ERGO-L/Z-4/Ex | 2732   | 3372   | 1266   | 3710   |

## Flow charts of the ERGO/Ex extraction arms

