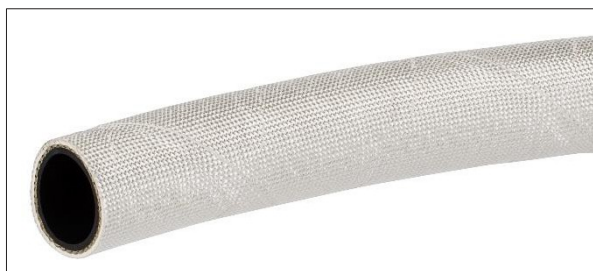


## Metallurgical cooling water hoses

In the metallurgical industry, many pieces of equipment and their components require intensive cooling. Flexible hoses made of steel hoses or rubber hoses are used in cooling systems. In addition to being resistant to hot water with additives (e.g. glycol) flowing inside the hose, rubber cooling water hoses must be resistant to the temperature prevailing in the smelter or foundry and the temperature generated on the surface of the hose by heat radiation. Resistance to hot metal splatter may also be important. An additional requirement associated with electrical equipment (electric arc furnaces, induction furnaces) may be electrical resistance - the hose should then be non-conductive and resistant to electrical breakdown.



*You will find heat-resistant hose and cable covers in the section "High-temperature covers" in the **DEVICES & ACCESSORIES** section.*



### ESSEN<sup>®</sup>

#### Delivery hose for cooling water in metallurgy

|                        |                                            |
|------------------------|--------------------------------------------|
| <b>Inner layer</b>     | Black EPDM rubber                          |
| <b>Reinforcement:</b>  | synthetic cord                             |
| <b>Outer layer</b>     | EPDM rubber / glass fibre                  |
| <b>Operating temp:</b> | -40°C to +120°C<br>(external up to +530°C) |

Delivery hose designed for cooling water in steel mills, foundries and in all applications where the rubber hose works close to a heat source. Glass fibre coating resistant to temperatures up to +530°C caused by heat radiation. Used in cooling systems. Particularly suitable for water systems at blast furnaces. Resistant to momentary exposure to splashes of glowing hot metal.

| index        | internal diameter [mm] | external diameter [mm] | wall thickness [mm] | working pressure [bar] | Bursting pressure [bar] | mass [kg/m] | Roll length [m] |
|--------------|------------------------|------------------------|---------------------|------------------------|-------------------------|-------------|-----------------|
| IV-ESSEN-013 | 13                     | 22                     | 4,5                 | 10                     | 30                      | 0,31        | 60 / 120        |
| IV-ESSEN-019 | 19                     | 30,5                   | 5,75                | 10                     | 30                      | 0,56        | 60 / 120        |
| IV-ESSEN-025 | 25                     | 36                     | 5,5                 | 10                     | 30                      | 0,65        | 60 / 120        |
| IV-ESSEN-032 | 32                     | 43                     | 5,5                 | 10                     | 30                      | 0,80        | 60 / 120        |
| IV-ESSEN-038 | 38                     | 52,5                   | 7,25                | 10                     | 30                      | 1,26        | 60 / 120        |
| IV-ESSEN-045 | 45                     | 61,5                   | 8,25                | 10                     | 30                      | 1,73        | 60 / 120        |
| IV-ESSEN-051 | 51                     | 67                     | 8                   | 10                     | 30                      | 1,82        | 60 / 120        |
| IV-ESSEN-063 | 63,5                   | 79                     | 7,75                | 10                     | 30                      | 2,20        | 60 / 120        |
| IV-ESSEN-065 | 65                     | 86,5                   | 10,75               | 10                     | 30                      | 3,11        | 60 / 120        |
| IV-ESSEN-076 | 76                     | 95,5                   | 9,75                | 10                     | 30                      | 3,17        | 60 / 120        |
| IV-ESSEN-080 | 80                     | 99,5                   | 9,75                | 10                     | 30                      | 3,32        | 60 / 120        |
| IV-ESSEN-085 | 85                     | 109,5                  | 12,25               | 10                     | 30                      | 4,63        | 60 / 120        |
| IV-ESSEN-090 | 90                     | 109,5                  | 9,75                | 10                     | 30                      | 3,69        | 60 / 120        |
| IV-ESSEN-102 | 102                    | 123,5                  | 10,75               | 10                     | 30                      | 4,60        | 60 / 120        |

Note: indexes highlighted in colour - most commonly used

ESSEN DN32 hose mounted to a popular nozzle (King Combination Nipple type, AC-CNP- 125) with 1.1/4" BSPT male thread, in galvanised carbon steel. Mounted with ASFA-L 9 mm worm ties (AB-03015812), in AISI 316 stainless steel (version W5).

