

# FAQ Documentation

## Nullifinder

**Nullifire**  
Smart Protection

**Q: Why am I getting some strange looking results from my search?**

**If you've worked through the three questions on the Nullifinder tool and reached a solution that doesn't look like what you're expecting...don't worry!**

We've utilised a couple of EXAP rules:

1. If you test a copper pipe, this can be applied to Steel and to Cast Iron Pipes of the same dimensions.
2. If you test in a flexible wall, this is also applicable to rigid walls of the same thickness.

### Cable Types:

The below is taken directly from the standard and may help in relating what you have on site and what is quoted within our tested details.

### Please note:

If you cannot find the data you require, please bear in mind that as per the EXAP standard and the EN1366 the following is also permitted (but does not feature in the pathways of the Nullifinder) :

- If you have a test with a PE pipe, this will also be applicable to ABS And PVC pipes
- If you have a test for PP or PE, this will be applicable to HDPE pipe
- If you have a test for a PE or a PP, this will be applicable to a PVC pipe

### Technical Service

Nullifire have a team of experienced Sales and Technical Service Representatives who can provide assistance in the selection and specification of products. For more detailed information and technical advice, please call our technical hub on +44 (0)1942 251 400.

Table A.4 — Cables for the standard configuration

Cable	Cable type	Service group	Number of cables	Cable Dimension	Designation	Standard	Insulation / sheath material	Diameter range [mm]	Nominal weight [kg/km] <sup>a, b</sup>
A1	small sheathed	1	3 <sup>c</sup>	5 × 1,5	see Table A.6	HD 603.3	PVC / PVC	14 <sup>a, b</sup>	300
A3	small sheathed	1	3 <sup>c</sup>	5 × 1,5	see Table A.6	HD 604.5	PE-X / EVAC	13 <sup>a, e</sup> (≤14,0 <sup>e</sup> )	230
B	small sheathed	1	2	1 × 95	see Table A.6	HD 603.3	PVC / PVC	18—21 <sup>a, f</sup>	1150
C1	medium sheathed	2	1	4 × 95	see Table A.6	HD 603.3	PVC / PVC	40—47 <sup>a, f</sup>	5300
C3	medium sheathed	2	1	4 × 95	see Table A.6	HD 604.5	PE-X / EVAC	42 <sup>a, d</sup> (≤45,5 <sup>e</sup> )	4050
D1	large sheathed	3	1	4 × 185	see Table A.6	HD 603.3	PVC / PVC	52 <sup>a, g</sup>	9900
D3	large sheathed	3	1	4 × 185	see Table A.6	HD 604.5	PE-X / EVAC	58 <sup>a, d</sup> (≤62,5 <sup>e</sup> )	7750
E	medium sheathed	2	2	1 × 185	see Table A.6	HD 603.3	PVC / PVC	23—27 <sup>a, f</sup>	2050
F	cable bundle, (telecommunication cable, optional)	4	1 tied bundle of 100 mm diameter <sup>h</sup>	20 × 2 × 0,6 screened <sup>k</sup>		—	PE / PE <sup>m</sup>	15—17 <sup>a, n, o</sup>	275 to 320 <sup>o</sup>
G	non-sheathed (wire, optional)	5	2	1 × 185	H07V-R	EN 50525-2-31	PVC / —	19,3—23,3 <sup>a, p</sup>	1890

NOTE For an illustration of the construction of the cables see Figure H.1

<sup>a</sup> For information only

<sup>b</sup> Average value from technical data sheets of manufacturers

<sup>c</sup> For penetration seals with a width smaller than 600 mm the number of cables shall be reduced to 6

<sup>d</sup> Nominal diameter of HD 604.5C

<sup>e</sup> Maximum diameter of HD 604.5C

<sup>f</sup> Values for minimum and maximum diameter from HD 603.3G

<sup>g</sup> Nominal diameter from HD 603.3L

<sup>h</sup> Depending on the actual diameter of the single cables 30 to 43 cables may be necessary to produce a tied bundle of 100 mm diameter

<sup>k</sup> Construction: solid bare copper conductors of 0,6 mm diameter, core insulation of polyethylene, cores stranded to quads and the quads stranded to bundles, one layer of plastic foil, static screen of plastic-laminated aluminium tape, polyethylene outer sheath. See also H.4.1.2.

<sup>m</sup> PE = Polyethylene, solid or cellular

<sup>n</sup> Values from technical data sheets of manufacturers; actual values shall be used to calculate the number of cables necessary to form a tied bundle of 100 mm diameter

<sup>o</sup> The given value relates to the single cable, not the cable bundle, and depends on the construction details of the cable (solid-PE or cellular-PE)

<sup>p</sup> Values for minimum and maximum diameter from EN 50525-2-31