



AIR BLOWN CABLES

Cables for air blown installation are part of the KDP portfolio for more than 10 years. Since then our customers have successfully installed thousands kilometers of various cable constructions, with capacities from 2 fibers up to 432 fibers. The most frequently asked question, which we have received as a cable producer, is which minimum distance the cable can be blown in and also which are recommended dimensions of microducts.

It's not possible to clearly determine the minimal blown distances of certain cable constructions.

If the installer follows the recommended installation procedures, uses professional tools (e.g. compressor, air blown machine, calibration module) and the cable trace is suitable for blowing, smooth and without extreme bends, we can guarantee that you can achieve standard blown distances such as 1 000m.

As an experienced manufacturer with many satisfied customers and multiple references, we do not exclude reaching the blown distance of 2 000m. However, these distances are rare. All success depends on cable quality, microduct quality, used equipment and the experience of installation team. Any reduced quality leads to decreased blowing efficiency.

THE MOST IMPORTANT PARAMETERS OF MICROCABLES:

- Correct cable dimensions ratio of cable outer diameters against microduct inner diameter (fill rate)
- Cable outer sheath material The best friction have HDPE, LDPE and PA materials.
- Cable stiffness, but also flexibility, due to possible bends on the route
- Ovality and cable diameter stability
- Cable weight

THE MOST IMPORATANT PARAMETERS OF MICRODUCTS:

- Inner layer of microtube special layer with low coefficient of friction
- Ovality max 5%
- Inner and outer diameter stability

CABLE OD (OUTED DIAMETER) / MICRODUCT ID (INNER DIAMETER)

Theoretical calculated values by company duraline.cz

Practical test (500-1000m blown length)

ID duct [mm]	Ideal OD of cable [mm]	Fill rate [%]	Cable maximum OD [mm]	Fill rate [%]	Recommended max. OD of cable [mm]	Fill rate [%]
3,5	1,8	25%	3,0	75%	2,1	36%
5,5	2,8	25%	4,8	75%	3,9	50%
8	4,0	25%	6,9	75%	6,3	62%
10	5,0	25%	8,7	75%	7,6	58%
12	6,0	25%	10,4	75%	9,7	65%
14	7,0	25%	12,1	75%	10,5	56%



Z022

Microduct 16/14 104,33%



Z049

Microduct 16/12 72,25%



Z108

Microduct 12/10 64,00%



Z202

Microduct 10/8 78,77%



TMOI

Microduct 10/8 52,56%



QMOI

Microduct 10/8 66,02%



Z019

Microduct 7/5,5 89,39%



ALOO

Microduct 5/3,5 94,37%



Z339

Microduct 5/3,5 51,02%



Z238

Microduct 5/3,5 83,59%



Z008

Microduct 5/3,5 51,02%



Z044

Microduct 5/3,5 32,65%



Microduct Outer/Inner Diameter in mm













5/3,5

7/4,0

7/5,5

10/8,0

12/10,0

16/12,0

16/14,0

