



37 years of innovation and knowledge

# FLATLINER VS. DUCT

## PRICE COMPARISON





# BACKBONE/CITYRING

when using 3x50mm DUCT

## ● 50 MM DUCT

all prices per meter

Handling cost of 1 duct	€	1,50
DUCT	€	1,10
96 fiber standard cable	€	2,10
Blowing	€	0,65

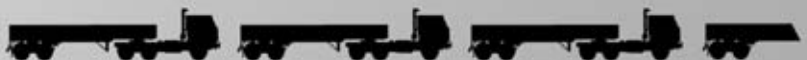
<b>3x50mm DUCT</b>	<b>€</b>	<b>3,30</b>
<b>Handling costs of 3 ducts</b>	<b>€</b>	<b>4,50</b>
<b>96 fibre standard cable</b>	<b>€</b>	<b>2,10</b>
<b>Blowing</b>	<b>€</b>	<b>0,65</b>

**TOTAL PRICE 3X50MM DUCT + HANDLING € 10,55**

**14.400 METERS SINGLE 50MM ON ONE TRUCK**



**The amount of 20mm on one truck = 6,5 trucks of 50mm**



### ADDITIONAL DISADVANTAGES:

- LARGER COMPRESSOR
- LARGER DRUMS
- HIGHER TRANSPORT COSTS
- RENT TO BE PAID ON DRUMS



# BACKBONE/CITYRING

when using 3x20mm FLATLINER

## ● 20 MM FLATLINER

all prices per meter

Handling cost of 1 duct	€	1,50
3x20 mm FLATLINER	€	1,80
96 fiber standard cable	€	1,40
Blowing	€	0,50

<b>3x20 mm FLATLINER</b>	<b>€</b>	<b>1,80</b>
<b>Handling</b>	<b>€</b>	<b>1,50</b>
<b>96 fibre standard cable</b>	<b>€</b>	<b>1,40</b>
<b>Blowing</b>	<b>€</b>	<b>0,50</b>



**TOTAL PRICE 3X20MM FLATLINER+ HANDLING €5,20**

**96.000 METERS SINGLE 20MM ON ONE TRUCK**



The amount of 20mm on one truck = 6,5 trucks of 50mm



### ADDITIONAL ADVANTAGES:

- SMALLER COMPRESSOR
- SMALLER DRUMS
- 6,5 TIMES MORE LENGTH ON DRUMS
- LOWER TRANSPORT COSTS
- ONE WAY DRUMS WITHOUT ADDITIONALCOSTS

# FLATLINER COMBINATIONS EXAMPLES

PIPE OD/ID in mm. 16/12 - 18/14 - 20/16

With the latest design **GM Plast** has build in a small profile as a "spacer" between the micro ducts, this gives the product a higher stability and therefore also better blowing performance.

The new spacer supports also the micro ducts in the case of cross or tensile.

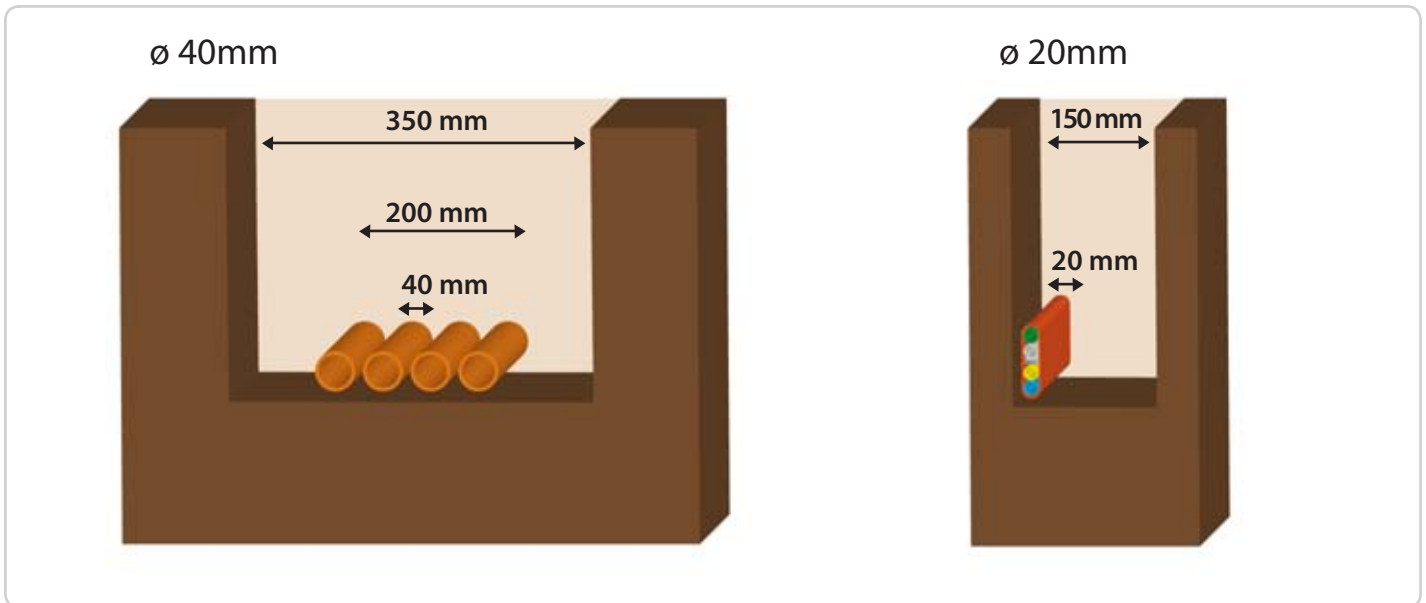
An extra topskin is applied onto the Flatliner . This secures a very flexible solution , that makes the folding easy .

## CABLE IN PIPE

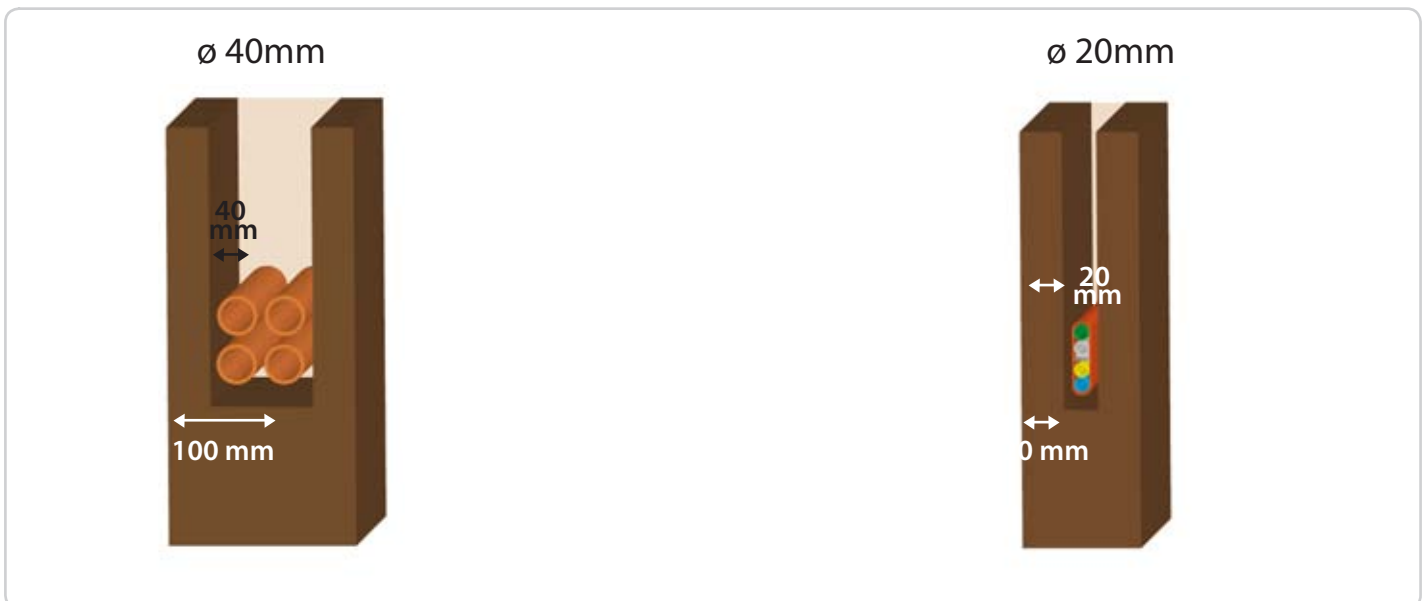
GM FLATLINER AND DL PIPE

	Pipe OD/ID (mm)	Cable size (mm)	Number of fibres
	16/12	6 - 8	96 - 144
	18/14	6 - 10	144 - 192
	20/16	6 - 12	192 - 288

## OPEN TRENCH (DUCT VS. FLATLINER)



## PLOW TRENCH (DUCT VS. FLATLINER)





# FLATLINER HANDLING IN URBAN ENVIRONMENTS



Rolling out an FTTH network within the narrow confines of an urban environment can be a time consuming challenge. Moving large heavy drums of multipipe or blown fibre takes precious time away from you getting the job done.

With intersecting streets, sidewalks, twists and turns, a city centre can be a real challenge when it comes to rolling out your FTTH network. When working in this environment, moving around large vehicles and trailers is both tedious and risky.

With the Flatliner you can simply cut off a length of Flatliner that fits your current needs, roll it up by hand and put it in the back of your car. When you reach your destination, roll it out inside the trench.

You're done within a matter of minutes!







# FLATLINER HANDLING IN URBAN ENVIRONMENTS

Building FTTH in rural areas is not that difficult. Going into the cities is more difficult though.

You don't want to block the roads and space is often very limited. In these situations, using HDD (Horizontal Directional Drilling) is a great solution. With HDD, you can pass under large roads or along vast stretches of inner city areas.

Using Flatliner you can roll out as much of the Flatliner you need, off of the main Flatliner drum and you can move the main drum onto its next location.

Roll the Flatliner onto any soft surface and start pulling. The wide, tough outer layer ensures that the Flatliner does not become tangled or damaged.

Flatliner is easier, faster and cheaper to handle. A fast and problem-free rollout is key to your project becoming a success and this is where the Flatliner really shines.





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