

CATALOGUE



**C\_FTTx**  
PASSIVE COMPONENTS FOR  
TELECOMS APPLICATIONS





## **C\_FTTx** METAL-FREE STRAIGHT PUSH-IN CONNECTORS, REDUCING CONNECTORS AND ENDSTOP CONNECTORS

The increasing demand for high data volumes and short latencies all over the world is driving the continuous expansion of passive infrastructure for telecommunications, to bring glass fibre to consumers.

The main requirements for infrastructure components are quality and reliability, which will ensure a long service life.

Camozzi's experience goes back more than 50 years and represents continuous innovation and success in many industry sectors.

It provides a guarantee for customers of the C\_FTTx Business Unit, which specialises in the production of passive technology components for telecommunications.

Camozzi's wide range of connectors and fittings along with its production expertise has enabled the development of a high-quality range of connectors, that meets all CEI EN50411-2-8 requirements. These connectors are distinguished by their long life and ease of use.

### **CAMOZZI'S CONNECTORS ARE CHARACTERISED BY:**

- **FULL PLASTIC DESIGN (METAL-FREE)**
- **TRANSPARENT BODY**
- **EASY 'PUSH-IN' CONNECTION**
- **SUITABLE FOR USE IN DIRECT BURIED (DB) APPLICATIONS**





## WORLDWIDE NETWORK TO RESPOND AND ACT QUICKLY

Established in 1964, the Camozzi Group is the leading Italian multinational enterprise, producing components and systems for **industrial automation**. It also operates in various other sectors, from advanced machine tools to textile machines, to the processing of raw materials.

The vision of the group is global with all product development being driven by customer requirements and international standards. Product certification for each target market is at the forefront of our minds throughout every stage of development.

All levels of assistance and technical support are designed to be efficient and fast across a network which is spread throughout the world.

### At a glance



5

Divisions

12

Companies



The 12 companies that make up the group specialise in different technical and production activities but have organisational, financial, logistical and commercial similarities.



Solutions for industrial automation, components and systems for the control of fluids - liquids and gases - and applications dedicated to the transportation industry



Production of machine tools for heavy machinery and aerospace, transportation and energy sectors



Production of textile machines and components for short-staple fibre processing



Mechanical processing of raw materials



Digital solutions for process automation



# Series V4000 microduct connectors

External diameters: 3, 4, 5, 7, 8, 8.5, 10, 12, 12.7, 14, 16, 18, 20 mm;  
Versions: Standard, Direct Buried (DB), Reducing, Endstop



SERIES V4000



These connectors were developed to connect microducts with each other. Our system enables an easy, fast connection and disconnection of the microduct.

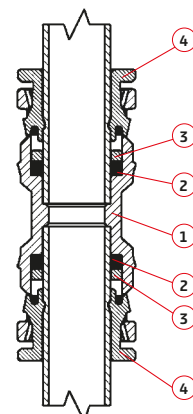
The connectors' robust construction includes IP68 water ingress protection and resistance to high pressure forces, allowing them to be used in direct buried (DB) applications. The transparent body enables easy visual inspection of the cable within the connector. The straight push-in and endstop connectors have a fully plastic design utilising non-conductive parts only and are also free from metal parts.

The connectors are made in accordance with Standard CEI EN 50411-2-8. In addition, the uniformity of production is ensured by an external, recognised quality assurance program, TÜV Süd. Besides production uniformity, TÜV Süd also tests the tightness, any pressure drop during tests, the tensile strength of the microduct as well as the (cyclic) temperature change, waterproofness and resistance to stress cracking solvents. Further, the connectors are subjected to visual inspection and a salt spray test.

## General data

<b>Materials</b>	1 = body Polyamide 2 = seal NBR 3 = washer Polyacetal 4 = collet Polyacetal
<b>Working pressure</b>	20 bar used for blowing system
<b>Working temperature</b>	from -20 to +50°C
<b>Fluid</b>	Compressed air with blowing system
<b>Microduct to connect</b>	Polyethylene HDPE
<b>Microduct outer diameters</b>	3, 4, 5, 7, 8, 8.5, 10, 12, 12.7, 14, 15, 16, 18, 20 mm
<b>Estimated life</b>	25 years
<b>Standards</b>	CEI EN 50411-2-8 Rohs CEI EN 61386-24
<b>Patent</b>	Connectors patent
<b>Protection class</b>	IP68

## Operating scheme



# Installation procedures

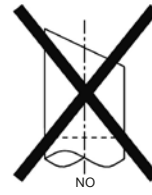
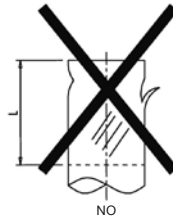
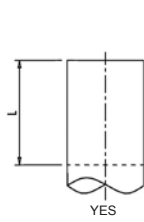
## Connecting the microduct

### 1. Cut the microduct

perpendicularly to its axis.  
We recommend Camozzi tube cutters (mod. PNZ-25 or PNZP-12).



The microduct should be clean and free from chips, cuts, scratches or any other damage before it is inserted into the connector.



### 2. The microduct is inserted

into the connector on the front side.  
This can be done either with or without the safety clip mounted.



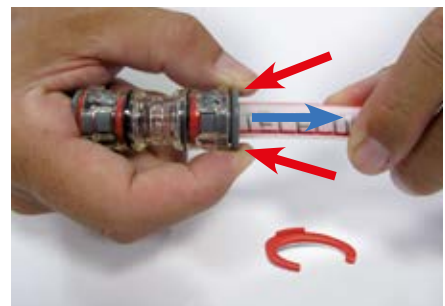
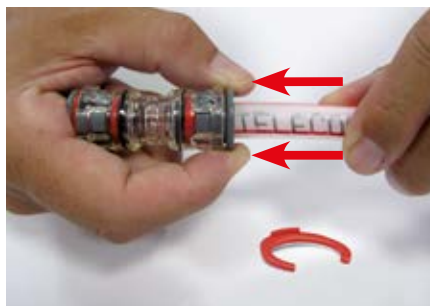
Ensure the microduct is pushed up to the inner stop of the connector.



**3. Release of the microduct** is done after removal of the mounted safety clip (if present), by pressing the holding device in the direction of the arrow, as shown in the picture.  
The microduct can then be pulled out.



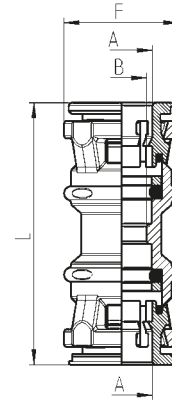
Make sure that the system is depressurised before you remove the microduct from the connector.



## Straight connector Mod. CV4580



Standard connector for DI (Direct Installation)  
sizes of microduct  
Compatible for eventual DB (Direct Buried) use

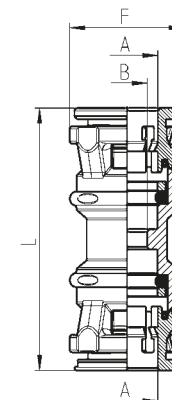


DIMENSIONS						
Mod.	A	B	F	L	Weight (g)	Package (pieces)
CV4580 3/2,1	3	2.1	10	30	2	100
CV4580 4/2,5	4	2.5	10	30	2	100
CV4580 5/3,5	5	3.5	12.5	39	4	100
CV4580 7/5,5	7	5.5	16.5	41.5	6.5	100
CV4580 8/6	8	6	17.5	43	7	100
CV4580 8,5/6	8.5	6	17.5	43	7	100
CV4580 10/8	10	8	20.5	48	9	100
CV4580 12/10	12	10	23	52	12	100
CV4580 12,7/10	12.7	10	23	52	12	100
CV4580 14/12	14	12	25.5	59	16	100
CV4580 16/14	16	14	30	66	26	50
CV4580 18/15	18	15	33.5	77	37	50

## Straight connector Mod. CV4581



Connector for DB (Direct Buried)  
sizes of microduct



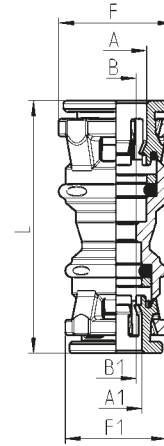
DIMENSIONS						
Mod.	A	B	F	L	Weight (g)	Package (pieces)
CV4581 5/2,1	5	2.1	12.5	39	4	100
CV4581 7/3,5	7	3.5	16.5	41.5	6.5	100
CV4581 7/4	7	4	16.5	41.5	6.5	100
CV4581 8/4	8	4	17.5	43	7.5	100
CV4581 8/4,5	8	4.5	17.5	43	7.5	100
CV4581 8/5	8	5	17.5	43	7.5	100
CV4581 10/5,5	10	5.5	20.5	48	10	100
CV4581 10/6	10	6	20.5	48	10	100
CV4581 10/7	10	7	20.5	48	10	100
CV4581 12/8	12	8	23	52	12	100
CV4581 14/10	14	10	25.5	59	16	100
CV4581 16/10	16	10	30	66	26	50
CV4581 16/12	16	12	30	66	26	50
CV4581 18/12	18	12	33.5	77	37	50
CV4581 18/14	18	14	33.5	77	37	50
CV4581 20/15	20	15	37.5	81.5	45	50
CV4581 20/16	20	16	37.5	81.5	45	50



## Reducing straight connector Mod. CV4582



Reducing connector for DI (Direct Installation)  
and DB (Direct Buried) different sizes of microduct  
Compatible for DB (Direct Buried) use

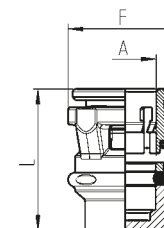


DIMENSIONS										
Mod.	A	A1	B	B1	F	F1	L	Weight (g)	Package (pieces)	
CV4582 5/3,5-3/2,1	5	3	3.5	2.1	16.5	10	35	4	100	
CV4582 7-5/3,5	7	5	3.5	3.5	16.5	12.5	40	4.5	100	
CV4582 10-7/5,5	10	7	5.5	5.5	20.5	16.5	44.5	6	100	
CV4582 10/5,5-8/5	10	8	5.5	5	20.5	17.5	45.5	5	100	
CV4582 12-10/8	12	10	8	8	23	20.5	50	10	100	
CV4582 14-12/10	14	12	10	10	25.5	23	55.5	14	100	
CV4582 16/12-14/10	16	12	14	10	25.5	23	55.5	15	50	

## Endstop connector Mod. CV4750



Endstop connector for DI (Direct Installation)  
and DB (Direct Buried) sizes of microduct  
Compatible for DB (Direct Buried) use



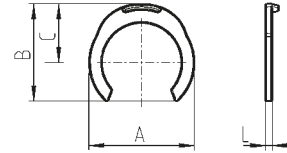
DIMENSIONS					
Mod.	A	F	L	Weight (g)	Package (pieces)
CV4750 3	3	10	16.5	1.5	100
CV4750 4	4	10	16.5	1.5	100
CV4750 5	5	12.5	21.5	2.5	100
CV4750 7	7	16.5	22.5	3.5	100
CV4750 8	8	17.5	23.5	3.5	100
CV4750 8,5	8.5	17.5	23.5	3.5	100
CV4750 10	10	20.5	26	5	100
CV4750 12	12	23	28	7	100
CV4750 12,7	12.7	23	28	7	100
CV4750 14	14	25.5	32.5	9	100
CV4750 16	16	30	36	13.5	50
CV4750 18	18	33.5	42	19	50
CV4750 20	20	37.5	45.5	25	50

## Accessories

### Safety clip Mod. 4702

This SAFETY CLIP is used to help prevent accidental disconnection between the microduct and the connector.

Material: polyacetal  
Colour: red



DIMENSIONS						
Mod.	A	B	F	L	Weight (g)	Package (pieces)
4702 3-4	9.6	9.2	5.5	1	0.1	100 *
4702 5	11.8	11.5	6.9	1.2	0.1	100
4702 7	15.3	14.4	8.8	1.2	0.15	100
4702 8	16.4	15.2	9.4	1.2	0.15	100 **
4702 10	18.5	17.2	10.5	1.3	0.2	100
4702 12	21	19.3	11.7	1.4	0.25	100 ***
4702 14	25.8	21.9	13.1	1.4	0.35	50
4702 15	25	23.2	13.7	1.4	0.35	50
4702 16	28	26.2	15.2	1.4	0.45	50
4702 18	30.5	29.5	17.2	1.6	0.7	50
4702 20	35	32.7	19.1	1.8	1	50

\* suitable for use with  $\varnothing$  3 and 4

\*\* also suitable for use with mod. V4580 8,5/6 and mod. V4750 8,5

\*\*\* also suitable for use with mod. V4580 12,7/10 and mod. V4750 12,7

### Tube cutter Mod. PNZ-25 Microducts cutter Mod. PNZP-12



CHARACTERISTICS		
Mod.		Package (pieces)
PNZ-12	for tubes $\varnothing$ up to 12 mm	1
PNZ-25	for tubes $\varnothing$ up to 25 mm	1
PNZP-12	for tubes $\varnothing$ up to 12 mm	1



## Contact

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