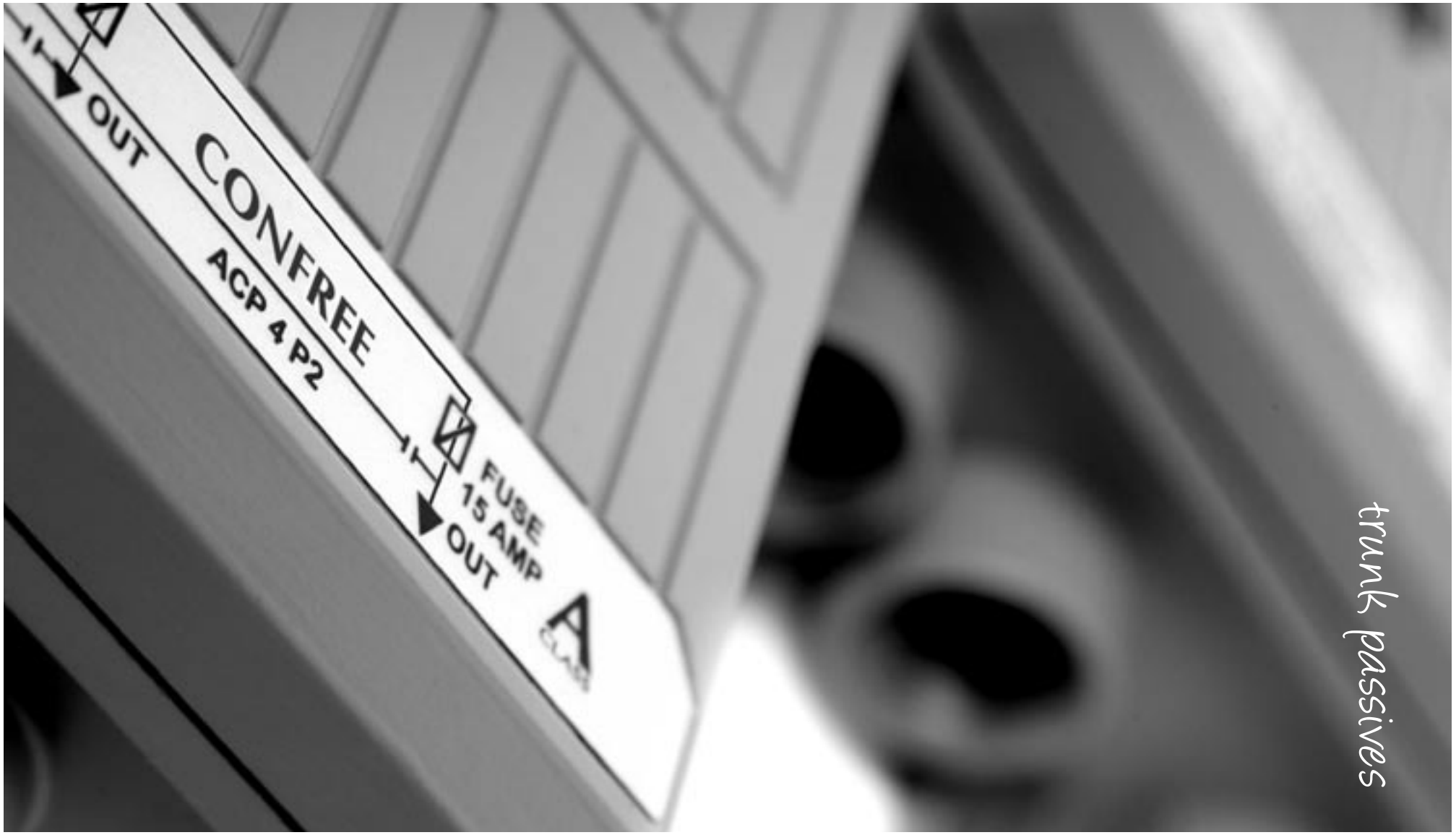
DKTCOMEGA



trunk passives

about dktcomega

DKTCOMEGA develops coaxial and optical products for professional broadband operators and solution providers. With thirty years of experience in broadband network, DKTCOMEGA offers a comprehensive product portfolio, making it a strong partner for the broadband industry.

The solid experience gained by DKTCOMEGA is reflected in its products; they being characterised by high quality, top performance and easy installation. As a result, customers turn to DKTCOMEGA for products and advice, when it comes to optical, coaxial and HFC broadband networks.

The company was founded in 1977. Its headquarters are in Denmark, and it has subsidiaries in Sweden and Finland. As a dynamic and innovative company its ambition is to remain one of the most attractive suppliers in the broadband industry.

DKTCOMEGA's mission
DKTCOMEGA's mission is to be a strong partner in network products for European broadband operators and solution providers. Based on know-how and natural enthusiasm, good ideas are developed into successful products. This is done together with the customer, who furthermore can appreciate the broad product range, the attractive quality/price level and the unique customized products. DKTCOMEGA's flexibility and proactive attitude assists in optimizing broadband networks. For requests, please contact: sales@dktcomega.com.

DKTCOMEGA

product introduction

Introduction

There is still a very large installed base of subscribers connecting to coaxial lines and the increasing demand for broadband services and triple play results in large requirements for quality coaxial trunk passives. For many years DKTCOMEGA has been one of the top suppliers of advanced trunk passives. This position has been obtained through careful electrical and mechanical design, where innovation and modern R&D have resulted in the development of a complete portfolio, which cleverly combines effective installation with superb specifications and high flexibility.

Overview

The group consists of two different designs. Firstly, the DKTCOMEGA Power Splitters (PS line). This is a compact and flexible series of splitters and taps with specifications that meet the highest industry requirements. Their compact housing and a selection of accessories provides an installer-friendly product.

Secondly, the CONnector FREE (CONFREE) line. These are designed to meet demands for a cost-effective coaxial solution in modern trunk and distribution networks. The CONFREE design allows optional integrated cable shells as an alternative to connectors, but with the same high specifications. This significantly reduces network costs. The concept is especially unique, where networks with older shell systems are upgraded, as it provides very high efficiency and low CAPEX.

DKT COMEGA

Advantages

- High Screening, Class A
- AC ports selectable - removable fuses
- Efficient installation and maintenance with special design and PIM functionality decreasing OPEX
- 10A Power passing

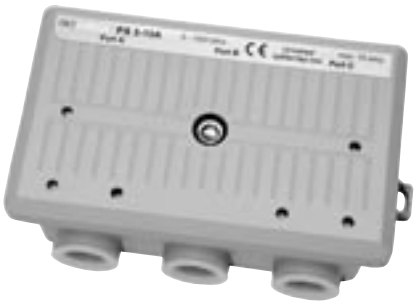
powersplitter - ps 3-10a

Product information

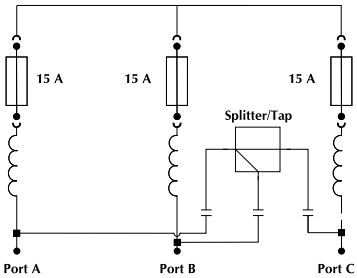
With the DKTCOMEGA PS3-10A we have focused on designing the most compact and flexible 2-way splitter/directional coupler on the market, which suits applications in Europe using street cabinets and underground cables. The compact size makes installation in even small street cabinets possible.

The electrical performance is according to CENELEC's highest standards just as the other DKTCOMEGA products.

PS3-10A exists in two versions - a flexible and a fixed - to give the most flexible choice for the specific network set-up and to save inventory costs. Additionally, the PS3-10A platform can be used as power inserter through insertion of bridge plug-in modules.



Fixed platform



Frequency range: 5-1000 MHz
Return loss: CENELEC Category B*
Power Pass: Max 10A
Connectors: PG11 thread - optional 5/8
Screening: Class A - min. 85/75 dB
Dimensions: 150 x 90 x 55mm
Weight: 0.5 Kg

Fixed versions

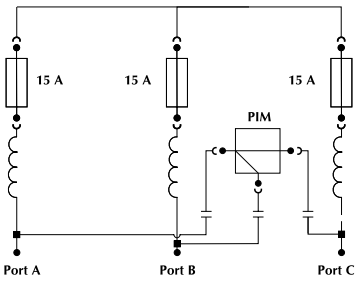
PS3-10A platform	Port A	Port B	Port C	Item no.
PS 3-10A - 02	In	3.9 ± 0.5 dB	3.9 ± 0.5 dB	40490
PS 3-10A - 1-7	In	7.3 ± 1.0 dB	2.6 ± 0.5 dB	40492
PS 3-10A - 1-11	In	10.5 ± 1.0 dB	1.8 ± 0.5 dB	40493
PS 3-10A - 1-16	In	15.5 ± 1.0 dB	1.0 ± 0.5 dB	40491

Flexible version - Item no 40500

Type	Plug-in modules	Port A	Port B	Port C	Item no
Bridge	PIM 0A	In	0.5	AC in	40510
	PIM 0B	In	AC in	0.5	40511
	PIM 0C	AC in	In	0.5	40512
Splitter	PIM 4	In	4.0	4.0	40520
Tap	PIM 1-7	In	7.0	2.5	40521
	PIM 1-10	In	10.0	1.7	40522
	PIM 1-13	In	13.0	1.2	40523
	PIM 1-16	In	16.0	1.0	40524
	PIM 1-19	In	19.0	1.0	40525
	PIM 1-22	In	22.0	1.0	40527
	PIM 1-26	In	26.0	1.0	40529
Stop-filter	PIM RPS 5-15	-	In	5-15 MHz > 45 dB 25-862 MHz < 1.2 dB	42008
	PIM RPS 5-30	-	In	5-30 MHz > 45 dB 47-862 MHz < 1.2 dB	42007
	PIM RPS 5-65		In	5-65 MHz > 45 dB 87-862 MHz < 1.2 dB	42005
Di-plexer	PIM 5-30/47-1000	In	5-30 MHz < 1.3 dB 47-862 MHz >30 dB	5-30 MHz > 40 dB 47-862 MHz < 1.2 dB	42009

Note: Insertion loss ± 0.3 dB
Tap loss ± 1.0 dB

Flexible platform - with PIM modules



Frequency range: 5-1000 MHz
Return loss: CENELEC Category B*
Power Pass: Max 10A
Connectors: PG11 thread - optional 5/8
Screening: Class A - min. 85/75 dB
Dimensions: 150 x 90 x 55mm
Weight: 0.5 kg

* According to CENELEC 50083-4:
B: 5-40 MHz ≥ 18 dB, 40-862 MHz min. 18 dB ÷ 1.5/oct.

DKT COMEGA

Advantages

- Compact splitter/tap system
- High Screening, Class A
- AC ports selectable – removable fuses
- PowerCom, DiSEqC compatible
- Grounding screw and 10A power passing
- Decreased OPEX

powersplitter - ps 5 - 10a

Product information

With the DKTCOMEGA PS5-10A we have expanded the line of compact power passing splitters and taps to incorporate two 3-way and a 4-way splitter as well as a 2 way tap with fixed platform with possible AC feed on every platform.

The compact size of the housing makes installation in even small street cabinets possible avoiding exchange of very expensive components like installation of new street cabinets.

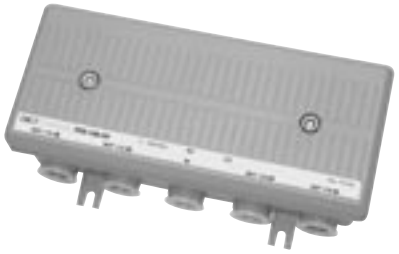
The extended distance between inputs makes use of heavy coaxial cables possible.

The electrical performance is according to CENELEC's highest standards just as the other DKTCOMEGA products.

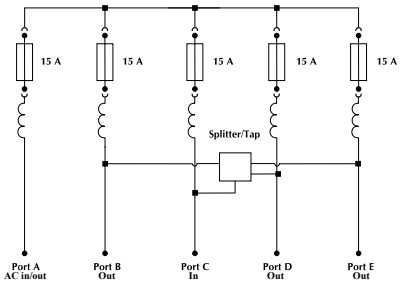
Additionally, all the PS5-10A platforms can be used as power inserter together with the PG11M-AC (see page 25).

Frequency range:	5-1000 MHz
Return loss:	CENELEC Category B*
Power Pass:	Max 10A
Connectors:	PG11 thread - optional 5/8
Screening:	Class A - min. 85/75 dB
Dimensions:	209 x 96 x 56mm
Weight:	0.7 Kg

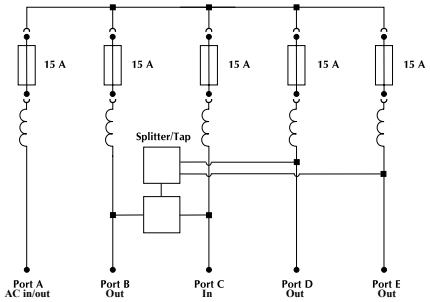
* According to CENELEC 50083-4:
B: 5-40 MHz ≥ 18 dB, 40-862 MHz min.
18 dB ÷ 1.5/oct.



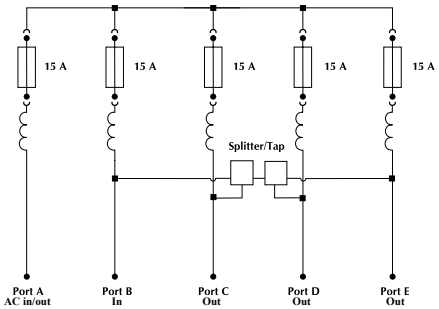
PS 5 - 10A - 03, three-way splitter



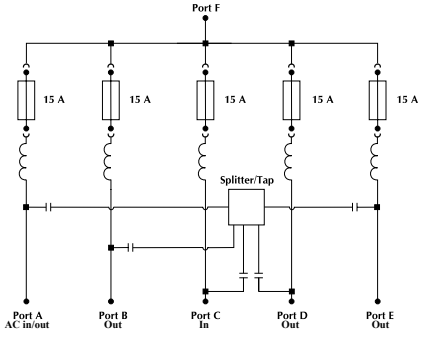
PS 5 - 10A - 03A, three-way splitter asynchronous



PS 5 - 10A - 2 - 12, two-way tap



PS 5 - 10A - 04, four-way splitter



Type	Port A	Port B	Port C	Port D	Port E	Port F	Item no
PS 5-10A - 03	AC	6.2 ±0.5 dB	IN	6.2 ±0.5 dB	6.2 ±0.5 dB	-	40503
PS 5-10A - 03A	AC	4.0 ±0.5 dB	IN	7.8 ±0.5 dB	7.8 ±0.5 dB	-	40504
PS 5-10A - 04	7.8 ±0.5 dB	7.8 ±0.5 dB	IN	7.8 ±0.5 dB	7.8 ±0.5 dB	AC	40505
PS 5-10A - 2-12	AC	IN	12.0 ±1.0 dB	12.0 ±1.0 dB	2.0 ±0.5 dB	-	40507

DKT COMEGA

Advantages

- The 5-1000MHz gives the option to expand the frequency area for broadband applications
- Flexibility through PIM modules
- Durability through component choice, solid diecast and Class A housing
- A professional delivery point for CATV networks

catv delivery point - ap 20 psf

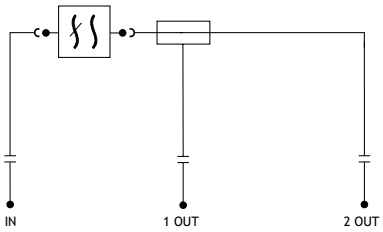
Product information

The AP20 PSF is a highly flexible delivery point between CATV and local networks. Through the many plug-in options this unit can be configured to suit most applications from ordinary test point to return path blocking of branches that are not yet upgraded for return path transmission.

This platform has optimized return loss for terminated return path applications.

AP20 PSF - Item no 50555

Plug-in modules	Port 1	Port 2	Item no
PIM 0B	20 ± 0.2	0.8 ± 0.2	40511
PIM 5-30/47-862	5-30 MHz > 65 dB 47-862 MHz < 21± 1dB	5-30 MHz > 45 dB 47-862 MHz < 1.2 dB	42009
PIM 5-65/87-862	5-65 MHz > 45 dB 87-862 MHz < 1.2 dB	5-65 MHz > 45 dB 87-862 MHz < 1.2 dB	42006



Frequency range:	5-1000 MHz
Return loss:	CENELEC Category B*
Power Pass:	no power passing
Connectors:	PG11 thread - optional 5/8
Screening:	Class A - min. 85/75 dB
Dimensions:	150 x 90 x 55mm
Weight:	0.5 Kg

* According to CENELEC 50083-4:
B: 5-40 MHz ≥ 18 dB, 40-862 MHz
min. 18 dB ÷ 1.5/oct.

DKT COMEGA

Advantages

- Allows extensive cost reductions via the connector option
- Optional power passing
- High flexibility via Plug-In Modules (PIM)
- Return path management via PIMs
- Installation friendly mechanical design

confree - mechanics

A CLASS

Confree - the shell system

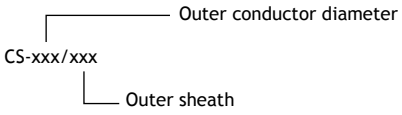
With the construction of the CONFREE cable shells, we ensure you the best possible RF performance using no traditional connectors. The use of ConFree products is the most economical way to upgrade and expand the trunk network.

The design ensures high performance Class A screening efficiency with the incorporated special designed brackets, which push the shells towards the bottom of the housing. The result is a smaller space requirement.

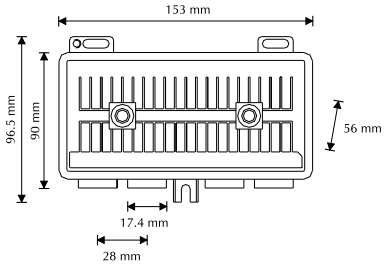
The cable shells or ”cable brackets” are designed to fit all types of coaxial cables with the outer sheath diameter of Ø5.0 – 17.3 mm. Every cable within these dimensions have the same stripping dimensions – 8.5/8.5 mm. Cables with an outer sheath dimension less or more than Ø5.0 – 17.3 mm can also be applied through the standard PG11 thread inside every port on the CONFREE.

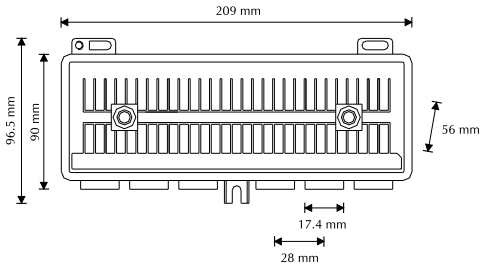
The Cable Shells (CS) are ordered separately. Upon ordering, the important measures are the size of the outer conductor and the diameter of the outer sheath. If you inform us of these measures upon placement of your order, we will make sure you get the right size of shells for your specific cable types.

All types within outher sheath Ø5.0 - 17.3 mm can be made according to your request.
Order details:



Example: For bamboo cable type 75D 2.2/8.8 use Cable Shell type CS 9.35/12.4





DKT COMEGA

Advantages

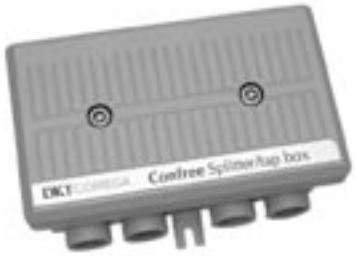
- The 5-1000MHz gives the option to expand the frequency area for super broadband applications
- Flexibility through PIM modules
- Power inserter option
- Durability through component choice, solid diecast and Class A housing

confree - two-way splitter with trunk or ac feed

Product information

The ACP3 P1 is a two-way splitter or one-way tap with external AC feed. It has a power pass for possible line extended amps.

The ACP4 P2 is a three-way splitter or two way tap, which has many combination possibilities by plug-in modules. It has a power pass for possible line extended amps.

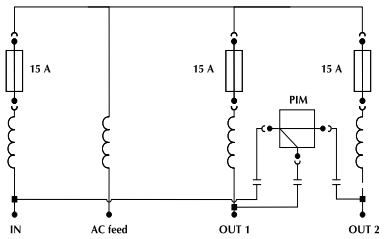


ACP3 P1 - Item no 41603

PIM type	Out 1 ±1.0 dB	Out 2 ±0.5 dB	Order no
PIM 0A	0.6	-	40510
PIM 0B	-	0.6	40511
PIM 4	4.4	4.4	40520
PIM 1-7	7.9	3.0	40521
PIM 1-10	10.9	2.4	40522
PIM 1-13	13.4	1.7	40523
PIM 1-16	15.9	1.4	40524
PIM 1-19	18.9	1.3	40525

Frequency range: 5-1000 MHz
Return loss: 20 dB (40-1000 MHz ÷1.5dB/oct.)
Power Pass: Max 10 A
Screening: Class A - min 85/75 dB
Connector: PG11 thread - optional 5/8 or cable shells
HUM modulation: 70 dB
Weight: 0.8 kg

Confree ACP3 P1, two-way splitter

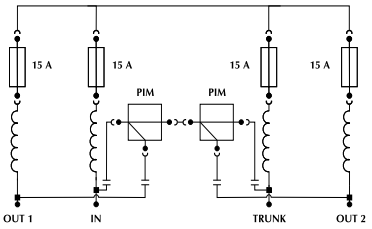


ACP4 P2 - Item no 41604

PIM type	Out 1 ±1.0 dB	Out 2 ±1.0 dB	Trunk output ±0.5 dB	Order no
PIM 4 + PIM 4	4.5	8.5	8.5	40520/40520
PIM 1-7 + PIM 4	8	8	8	40521/40520
PIM 1-10 + PIM 1-7	11	13	4	40522/40521
PIM 1-13 + PIM 1-13	13.5	14.5	3	40523/40523
PIM 1-16 + PIM 1-16	16	17	2.2	40524/40524
PIM 1-19 + PIM 1-19	19	19.5	2	40525/40525

Frequency range: 5-1000 MHz
Return loss: 20 dB (40-1000 MHz ÷1.5dB/oct.)
Power Pass: Max 10 A
Screening: Class A - min 85/75 dB
Connector: PG11 thread - optional 5/8 or cable shells
HUM modulation: 70 dB
Weight: 0.8 kg

Confree ACP4 P2, three-way splitter



DKT COMEGA

Advantages

- Option for return path management (PIM)
- A flexible platform with many tap options
- Super broadband, 5-1000 MHz
- Optional power passing

confree - two-way tap with trunk passives & optional filters

Built-in attenuators in combination with 1 PIM option

Product information

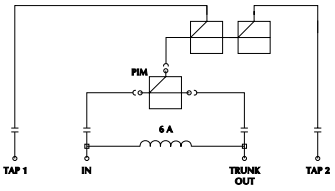
The ACT 2-10 P1 is a fixed two-way tap with plug-in trunk modules with high isolation between taps. It has a power pass for possible line extended amps.

The ACT 2-10 P1 F1 is similar to the ACT 2-10 P1 but it has plug-in filters/bridges to the subscriber.

ACT 2-10 P1 - Item no 41600

PIM type	In	Tap 1 ±1.0 dB	Tap 2 ±1.0 dB	Trunk output ± 0.3 dB	Item no
PIM 0A	5-1000 MHz	10.5	10.5	-	40510
PIM 4	5-1000 MHz	14.5	14.5	5	40520
PIM 1-7	5-1000 MHz	19.5	18.5	3.5	40521
PIM 1-10	5-1000 MHz	22.5	29.5	2.8	40522
PIM 1-13	5-1000 MHz	24.5	26	2.1	40523
PIM 1-16	5-1000 MHz	27.5	26.5	1.7	40524
PIM 1-19	5-1000 MHz	30.5	29.5	1.6	40525

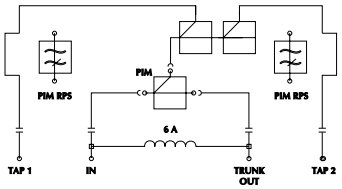
Confree ACT 2-10 P1, two-way tap



ACT 2-10 P1 F2 - Item no 41605

PIM type	In	Tap 1 + 2 ±1.0 dB	Item no
PIM RPS 5-65	5-1000 MHz	5-65 MHz > 45 dB 87-862 MHz < 1.2 dB	42005
PIM RPS 5-30	5-1000 MHz	5-30 MHz > 45 dB 47-862 MHz < 1.2 dB	42007
PIM RPS 5-15	5-1000 MHz	5-15 > 25 dB 25-862 MHz < 1.2 dB	42008
PIM 0C	5-1000 MHz	+ 0.2 dB	40512

Confree ACT 2-10 P1 F2, two-way tap



Frequency range: 5-1000 MHz
Tap/tap isolation: 40 dB VHF, 36 dB UHF
Return loss: 20 dB (40-1000 MHz ÷1.5dB/oct.)
Power Pass: Max 6 A
HUM modulation: 70 dB
Screening: Class A - min 85/75 dB
Connector: PG11 thread - optional 5/8 or cable shells
HUM modulation: 70 dB
Weight: 0.8 kg

Note: Utilizing PIM 0C in the tap outputs on platform ACT 2-10 P1 F2, enables pass in the full frequency area. PIM RPS is optional for attenuating the return path frequencies.