

product introduction

Introduction

The demand for improved signal quality in coaxial networks is increasing, especially as subscribers expect triple play in broadband services. With many years of experience, DKTOMEGA has a proven track record in the development and distribution of broadband passives. Operators are ensured a wide range of indoor and outdoor products.

Overview

The DKTOMEGA Basic series consists of high quality cost-attractive passives. It is based upon the renowned and established DKTOMEGA Master series and includes 1-way through to 8-way CATV digitalready taps and splitters. Built using environmentally-friendly components and materials, these passives satisfy the demands from professional CATV operators for signal quality and system functionality. The Basic series is fully compatible with DKTOMEGA's active products and CPEs (Customer Premises Equipment).

Special features

The DKTOMEGA Basic series incorporates special hardware designs. For example, each F-connector has an innovative 4-finger terminal. These ensure better connections by effectively doubling, and in some cases quadrupling, the number of signal cable contact points when compared with similar products. The DKTOMEGA Basic series also has optimal frequency tolerances and a solid mechanical construction. Operators and installers benefit from these features as they avoid problems arising from bad return loss, isolation and frequency response, all of which are extremely time consuming to identify and troubleshoot.

Benefits

Product portfolio

- Fully compatible with the DKTOMEGA Master series
- Protects investment by supporting high frequencies reserved for future use

Product performance

Stable performance from 5 MHz to 1 GHz satisfying CENELEC EN 50083 Class A - Optimized for DOCSIS 2.0 and 3.0

Product design

- Built-in AC/DC separators avoiding unwanted current on outputs
- Small, discrete and ergonomic form factor
- Environmentally-friendly zinc alloy and tin-plated enclosure *
- Non-corrosive materials for both indoor and outdoor use
- Fully sealed and screened according to CENELEC Class A for Radio Frequency Interference (RFI) **

- Negligible interference from other services and subscribers †
- Reliable connectivity via four contact points in each F-connector
- Effective grounding lugs +
- Optimal return loss specifications (> 20 dB at 5 - 40 MHz) ‡

* Compliant with RoHS (Restriction on the use of Hazardous Substances) and WEEE (Waste in Electrical and Electronic Equipment) directives.

** Tested and approved by p-k-m elektronik GmbH.

EN 50083-2 Class A and EMC screening effectiveness requires:
- minimum 85 dB attenuation for 5-470 MHz
- minimum 75 dB attenuation for 470-860 MHz.

EN 50083-2 Class B and EMC screening effectiveness requires:
- minimum 75 dB attenuation for 5-470 MHz
- minimum 65 dB attenuation for 470-860 MHz.

† Exceeding CENELEC EN 50083-4 Grade 1 for port isolation. Recommended 45 dB isolation (minimum 40 dB for VHF and 36 dB for UHF) including extension leads and other isolation factors.

+ According to CENELEC EN 50083-1 safety standard.

‡ Exceeding CENELEC EN 50083-4 Category B min. 18 dB @ 5 - 40 MHz 18 dB ÷ 1,5 dB/oct.

1 - way taps

Type	Tap loss IN-TAP (dB)				Insertion loss IN-OUT (dB)			Isolation OUT-TAP (dB)	Isolation TAP-TAP (dB)			Item no.
	Frequency range (MHz)				Frequency range (MHz)			Frequency range (MHz)	Frequency range (MHz)			
	5-65	65-470	470-862	862-1000	5-470	470-862	862-1000	5-1000	5-600	600-860	860-1000	
BTE 1-6	6,8	6,5	6,6	6,7	2,2	2,3	2,4	30	-	-	-	41450
BTE 1-9	9,0	8,9	9,0	9,0	1,1	1,3	1,5	31	-	-	-	41451
BTE 1-10	10,4	10,2	10,0	9,8	0,7	1,0	1,3	33	-	-	-	41453
BTE 1-12	12,3	12,2	12,1	12,4	0,5	0,6	0,9	32	-	-	-	41455
BTE 1-16	15,8	15,7	15,9	16,2	0,5	0,6	0,7	39	-	-	-	41458
BTE 1-20	20,0	20,0	19,9	20,1	0,6	0,7	0,9	39	-	-	-	41460
BTE 1-24	23,6	23,5	23,6	24,0	0,5	0,6	0,8	40	-	-	-	41462



Return loss: > 20 dB
Connectors: F-Female
Dimensions: 83 x 38 x 18 mm
Weight: 60 g

Screening effectiveness/RFI:

Frequency	PKM ¹	Class A ²
5-30 MHz	> 91 dB	> 85 dB
30-300 MHz	> 92 dB	> 85 dB
300-470 MHz	> 84 dB	> 80 dB
470-950 MHz	> 75 dB	> 75 dB
950-1000 MHz	> 70 dB	> 55 dB

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2 - way taps

Type	Tap loss IN-TAP (dB)				Insertion loss IN-OUT (dB)			Isolation OUT-TAP (dB)	Isolation TAP-TAP (dB)			Item no.
	Frequency range (MHz)				Frequency range (MHz)			Frequency range (MHz)	Frequency range (MHz)			
	5-65	65-470	470-862	862-1000	5-470	470-862	862-1000	5-1000	5-600	600-860	860-1000	
BTE 2-8	8,5	8,5	8,5	8,5	3,2	3,5	3,7	35	44	46	41	41470
BTE 2-10	10,5	10,5	10,3	10,2	1,6	2,3	2,8	35	43	48	45	41472
BTE 2-12	12,5	12,4	12,3	12,4	1,1	1,4	1,6	35	43	50	47	41474
BTE 2-14	14,5	14,4	14,5	14,7	1,2	1,4	1,5	35	45	50	48	41475
BTE 2-16	16,5	16,4	16,4	16,4	1,0	1,2	1,3	38	54	54	50	41476
BTE 2-18	17,9	17,9	18,1	18,5	0,8	1,1	1,2	38	60	55	51	41477
BTE 2-20	20,0	20,0	19,9	20,0	0,8	1,1	1,3	40	60	62	61	41478
BTE 2-24	23,9	23,9	24,0	24,1	0,8	1,2	1,3	40	63	63	61	41480
BTE 2-26	26,4	26,1	25,8	26,1	0,8	1,2	1,3	40	67	63	61	41479



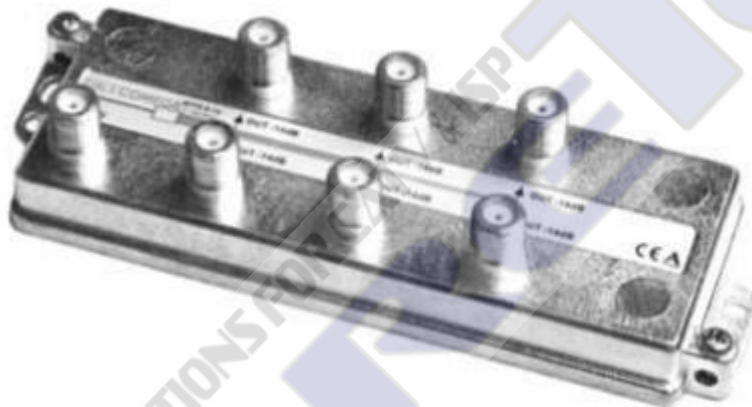
Return loss: > 20 dB
Connectors: F-Female
Dimensions: 133 x 38 x 18 mm
Weight: 90 g

Screening effectiveness/RFI:

Frequency	PKM ¹	Class A ²
5-30 MHz	> 91 dB	> 85 dB
30-300 MHz	> 92 dB	> 85 dB
300-470 MHz	> 84 dB	> 80 dB
470-950 MHz	> 75 dB	> 75 dB
950-1000 MHz	> 70 dB	> 55 dB

6 - way taps

Type	Tap loss IN-TAP (dB)				Insertion loss IN-OUT (dB)			Isolation OUT-TAP (dB)	Isolation TAP-TAP (dB)			Item no.
	Frequency range (MHz)				Frequency range (MHz)			Frequency range (MHz)	Frequency range (MHz)			
	5-65	65-470	470-862	862-1000	5-470	470-862	862-1000	5-1000	5-600	600-860	860-1000	
BTE 6-12	12,4	12,3	12,4	12,8	3,4	3,7	3,9	34	35	35	33	41491



* Internally terminated, no OUT port

Return loss: > 20 dB
 Connectors: F-Female
 Dimensions: 137 x 47 x 26 mm
 Weight: 150 g

Screening effectiveness/RFI:

Frequency	PKM ¹	Class A ²
5-30 MHz	> 91 dB	> 85 dB
30-300 MHz	> 92 dB	> 85 dB
300-470 MHz	> 84 dB	> 80 dB
470-950 MHz	> 75 dB	> 75 dB
950-1000 MHz	> 70 dB	> 55 dB