



JUNCTION BOXES

0.1 to 400 MHz
DVS



DVS

The attenuators used for decoupling when measurements are carried out with several signal generators normally require a high output voltage from the generators. This requirement is avoided when using the **Power Splitter/Combiner DVS** which exhibits a high attenuation between inputs with a low transmission loss (typical value: 3 dB), so that no additional attenuators are necessary.

0 to 1000 MHz
DVU 3



DVU 3, DVU 4

Uses

The Junction Boxes DVU 3 and DVU 4 serve for splitting up into or combining two (three) channels with correct impedance matching (e.g. for measurements on radio-telephone equipment with several signal generators).

0 to 1000 MHz
DVU 4



Description

The Junction Boxes are of coaxial design and equipped with adaptable N or Dezifix B connectors. Matching is achieved by Z/2 or Z/3 impedances in a star-shaped configuration. These features open up a wide range of applications.

Specifications¹⁾

Frequency range
Usable up to
Characteristic impedance
VSWR: 0 to 1 GHz

1 to 1.5 GHz
Attenuation³⁾
Frequency response of attenuation
Attenuation between inputs³⁾

Maximum continuous load

Maximum pulse peak voltage
Connectors

Operating temperature range
Overall dimensions (W x H x D)

Weight
Engravings

Order designations

50-Ω model (Dezifix B)
50-Ω model (N female)
60-Ω model (Dezifix B)
75-Ω model (Dezifix B)

Recommended extras

Termination RMC (50 Ω, Dezifix B)
Termination RMC (60 Ω, Dezifix B)
Termination RMC (75 Ω, Dezifix B)
Termination RNB (50 Ω, N male)

DVU 3

0 to 1000 MHz²⁾
1500 MHz
50, 60 or 75 Ω
< 1.1

1.2 typ.
6 dB
see diagram
6 dB

1 W \triangleq 7 V into 50 Ω
per input
300 V
3 x Dezifix B⁴⁾ or
3 x N connectors⁴⁾

-40 to +50 °C
120 mm x 120 mm
x 35 mm

0.5 kg
German + English
▶ 3-port Junction Box
DVU 3
100.5203.50
100.5203.03
100.5203.60
100.5203.70

100.2940.50
100.2940.60
100.2940.70
272.4910.50

DVU 4

0 to 1000 MHz²⁾
1500 MHz
50 Ω
< 1.1

1.2 typ.
9.54 dB
see diagram
9.54 dB

0.25 W \triangleq 3.5 V into 50 Ω
per input
300 V
4 x Dezifix B⁴⁾ or
4 x N connectors⁴⁾

-40 to +50 °C
120 mm x 120 mm
x 35 mm

0.5 kg
German + English
▶ 4-port Junction Box
DVU 4
201.4018.02
201.4018.03
—
—

DVS

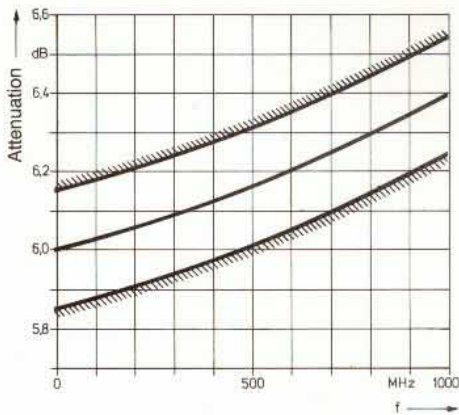
0.1 to 400 MHz
—
50 Ω
1.2 typ.
(0.1 to 400 MHz)

approx. 3 dB
see diagram
20 to 40 dB
(see diagram)

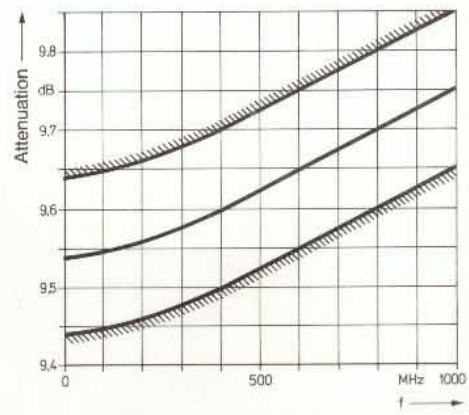
1 W \triangleq 7 V into 50 Ω
total
—
BNC female

-40 to +70 °C
57 mm x 36 mm
x 41 mm

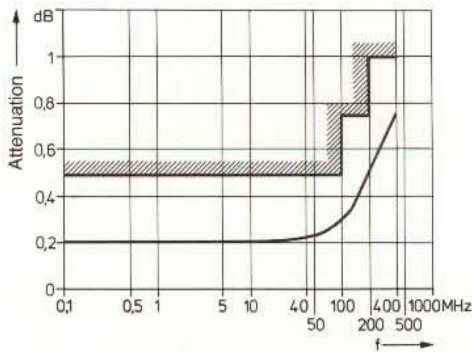
75 g
German + English
▶ Power Splitter/
Combiner DVS
342.1014.50 (BNC)
—
—



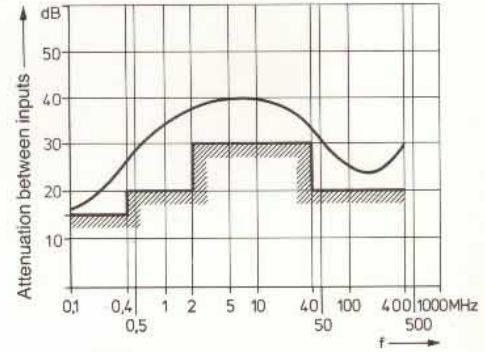
Characteristic curve and spread of the attenuation between two inputs of the DVU 3 as a function of frequency.



Characteristic curve and spread of the attenuation above the frequency between any of the four inputs with correct impedance matching of the DVU 4.



Frequency dependence of the attenuation of the DVS (in addition to the 3-dB power splitting).



Attenuation between the inputs of the DVS as a function of frequency.

¹⁾ The specifications only apply if Dezifix B or N connectors are used.
²⁾ The Junction Boxes DVU 3 and DVU 4 can also be used at frequencies above 1000 MHz; in this case, however, the specified data cannot be guaranteed.

³⁾ With correct impedance matching of all connections.
⁴⁾ When using screw-in assemblies the user can easily adapt these connectors to many other systems; see data sheet 902 100.