

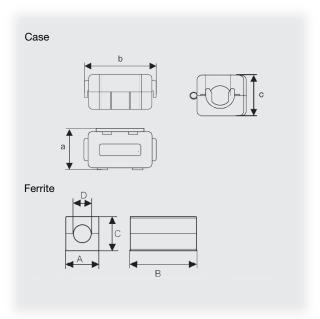


## **STAR-GAP**

Worldwide first split case ferrite with "defined air-gap" and with safety key technology purpose designed for high frequency applications

Cable Ferrites





Order Code	a (mm)	b (mm)	c (mm)	A (mm)	B (mm)	C (mm)	D (mm)
74271612S	21.5	35.5	18.36	15	28.5	15	6.6
74271632S	22.5	35	19.3	16	28.5	16	9
74271622S	31.5	35	28.3	25	28	25	13



- Worldwide first split case ferrite with "defined air-gap" (patent pending)
- Especially helpful for EMI problems in frequency range of 100 MHz up to 2.5 GHz
- Data signals up to 100 MHz will not be effected
- Best performance (impedance) especially with 2 windings Low magnetic saturation of the material in cases of high DC current applications which therefore gives a low reduction of impedance in comparison to other manufacturers
- Pre-fixing and cable protection system is time saving and makes it easier to assemble Not possible to remove from the cable without the WE key Non visible locking in closed conditions

- Unique and handy case design
- With each packing unit you get one WE key for free UL 94 V-0 plastic material for the case operating temperature: -25 °C to 105 °C
- With 0.8 mm air gap

- High speed data lines, especially LAN network CAT 5 and higher
- Less influence for your electronic by wireless mobile phone radiations, bluetooth and wireless LAN
- Reduce disturbance by USB 2.0 and other fast digital signals
- Minimize the interference by fast circuits and switching power supply
- Suppression of the harmonic waves and no damping for the signal below 100 MHz
- Better performance for high DC current applications with interference problems like power suply, motor & drives and more
- Medical devices due to new EMC regulations

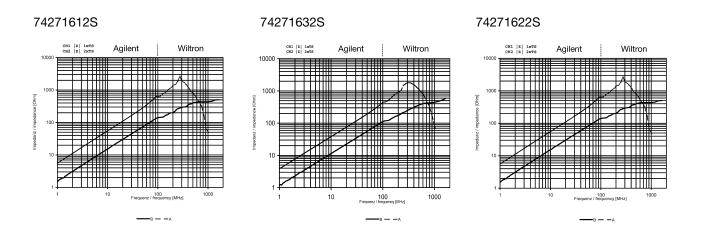


## **STAR-GAP**

Worldwide first split case ferrite with "defined air-gap" and with safety key technology – purpose designed for high frequency applications

Order Code	Impedance (Ω)										Material	Cable Ø
	(1 Turn)					(2 Turns)						(mm)
	25 MHz	100 MHz	200 MHz	300 MHz	500 MHz	25 MHz	100 MHz	200 MHz	300 MHz	500 MHz		
74271612S	30	120	190	280	420	110	560	1160	2200	900	4 W 620	4.5–6 mm
74271632S	28	100	190	250	345	90	400	900	1750	1100	4 W 620	7–8.5 mm
74271622S	35	140	200	300	400	135	640	1400	1900	830	4 W 620	10.5–12.5 mm

**Please note:** Our standard colour for these products is black. You can also order all products in "electronic grey". Simply leave out the "S" in the order code. These split case ferrites are also available with an air-gap of 0.0 or 0.5 or 1.2 mm



## Brief description of the new measurement method:

At higher frequencies, the measured impedance depends on the cable length. The influence of the cable length on the measurement result can only be neglected if the length is small compared to the wavelength. Therefore, Würth Elektronik eiSos has developed a suitable method to characterize ferrites for cable assemblies. The new designed measurement arrangement is created exactly with the method of moments based software FEKO. Thus, the measurement of the impedance at the 50  $\Omega$  – connection point is simulated. By means of the optimizer OPTFEKO, the impedance of the ferrite is calculated by using the measurement result. In that way, the impedance transformation caused by the cable length and the radiation of the transmission line at high frequencies is taken into account. Detailed information regarding this new measurement method is available on request.