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**SEINSA**

## ABS WHEEL SPEED SENSORS CATALOGUE 2020



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# ABS WHEEL SPEED SENSORS CATALOGUE 2020



ABS (Anti-lock Braking System) or Wheel speed sensors, are mounted in wheel hubs. Its function is to transfer the information about the speed of each wheel to the ABS control unit.

If the ABS control unit detects a significant reduction in speed on one or more wheels, it modifies the braking pressure to prevent the wheels from locking up. Otherwise, you can lose the control of the vehicle.

Not only the ABS system use the wheel speed sensors, other systems in the vehicle use its information (GPS, ASR, ESP, HAC...)

According to its functioning we can classify the sensors in two groups:

**1. Passive ABS sensors. For toothed wheels.**

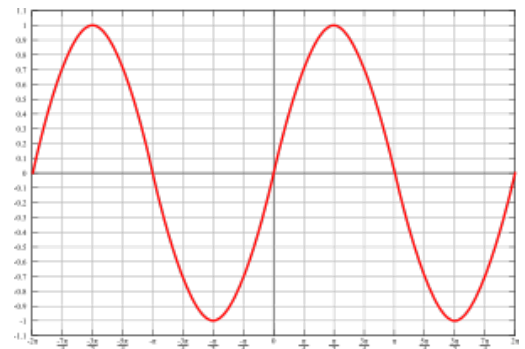
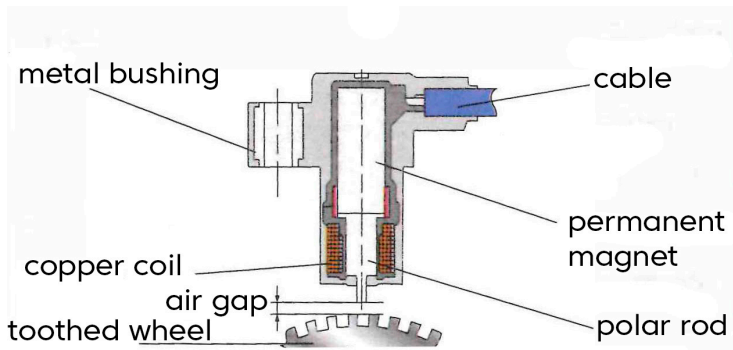
These types of sensors don't need external power to generate a signal.

They don't begin to function until the toothed wheel (also named phonic wheel) reaches 3-7 km/h of speed.

The sensor parts are: a permanent magnet, a polar rod and a copper coil around it. And it is situated in front of the toothed wheel at very little distance named an air gap.

The magnetic flow generated by the magnet is modified by the teeth and troughs of the wheel and it generates a sinusoidal signal.

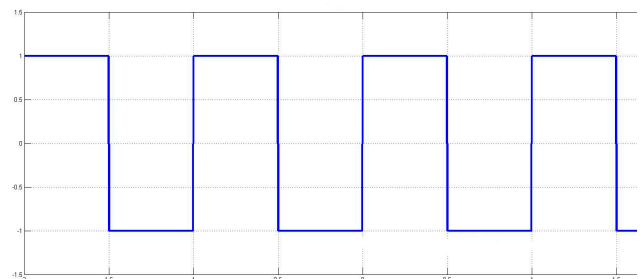
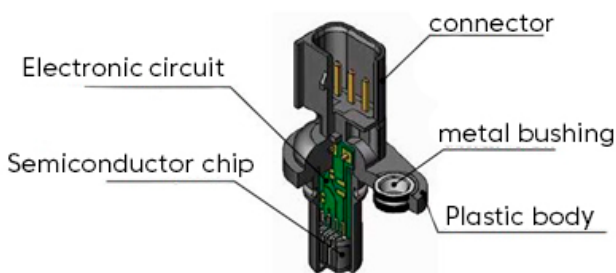
In these types of sensors, the air gap is very important because its variation modifies the signal.



**2. Active ABS sensors. For wheels with magnetic codign/toothed wheels.**

These types of sensors are based on the Hall effect and they need external power to generate signal. They can obtain measurements from 0 km/h.

These sensors generate a square signal.

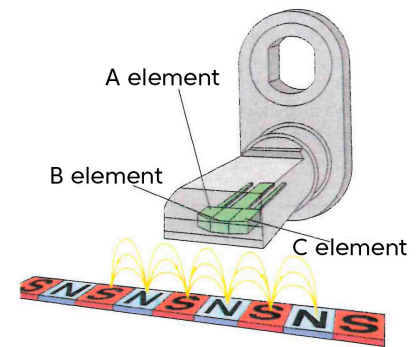


There are different types:

- ABS Hall with magnetic coding ring.
- Magneto-resistive ABS sensor.
- ABS Hall sensor with permanent magnet.

### ABS Hall with magnetic coding ring

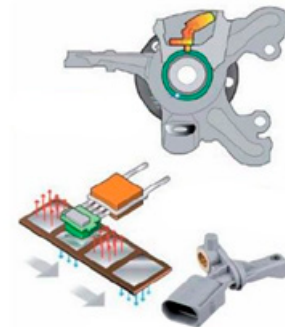
In this case, the toothed wheel is replaced by a coding ring with 48 pairs of magnets with alternating polarity (N/S). This magnetic ring is fitted within the wheel bearings. The sensor has three elements of measurement which give the final signal.



### Magneto-resistive ABS sensor (AMR)

Base on anisotropic magnetoresistance, that is a property of certain materials in which the electric resistance depends on the angle between the electric current and the direction of magnetization.

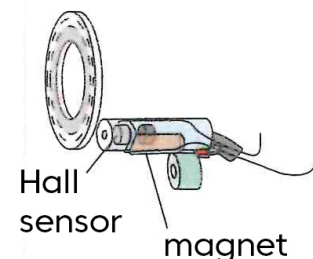
These sensors are very precise and can determine the rotation speed and the direction (this is very useful for the hill-start assist control, HAC).



### ABS Hall sensor with permanent magnet

This sensor use a permanent magnet and the magnetic coding ring is not necessary.

This magnet is located behind the semiconductor. This allows for the use these types of sensors in transmissions with toothed wheels.



## WHEN TO CHANGE THE ABS SENSOR?

If the ABS indicator lights up or if the wheels lock up in normal braking



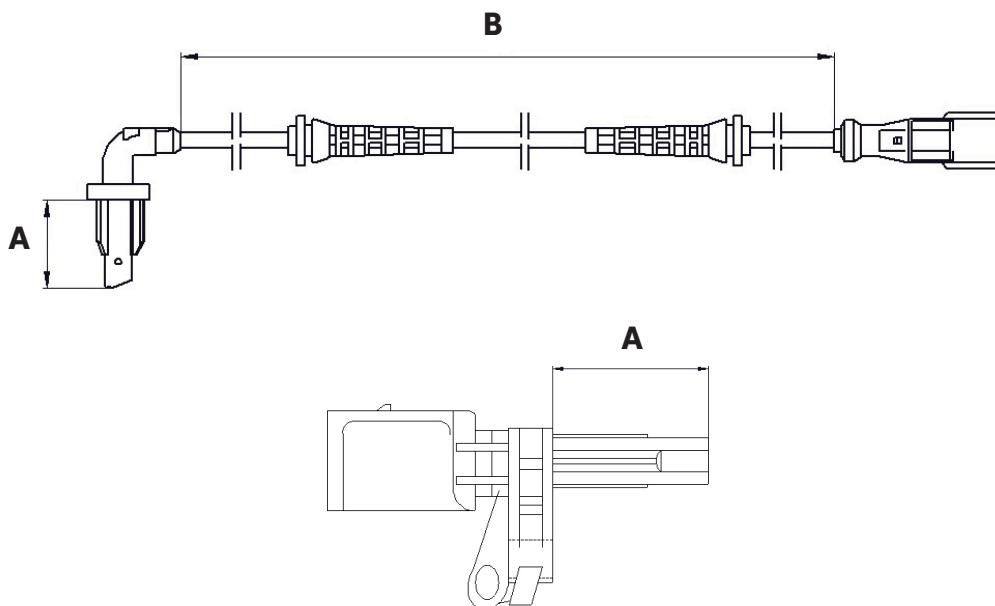
Causes:

- Signal loss caused by cable break.
- Cracks, breaks or tension caused by mechanical stress.
- Deformation and dents caused by impacts or overheating.
- Short-circuit or internal breakage by mechanical or thermal stress.

## HOW TO REPAIR?

- Unscrew the sensor and release the bushings.
- Unplug the connector.
- Remove the old sensor.
- Clean the location of the sensor.
- Put the new sensor and screw it in.
- Plug the connector.
- Fit all the bushings in their specific location.

## MEASUREMENTS IN CATALOGUE



## DS0001

Active sensor



VAG  
VAG

7H0927803  
WHT003857

A = 27,7 mm B = mm

## DS0002

Active sensor



VAG  
VAG

7H0927804  
WHT003856

A = 27,7 mm B = mm

## DS0003

Active sensor



VAG  
VAG  
VAG

6Q0927804A  
6Q0927804B  
WHT003860

A = 21 mm B = mm

## DS0004

Active sensor



VAG  
VAG

6Q0927803B  
WHT003861

A = 21 mm B = mm

## DS0005

Active sensor



VAG  
VAG

1K0927807  
WHT003859

A = 39,7 mm B = mm

## DS0006

Active sensor



VAG  
VAG

6Q0927807B  
WHT003863

A = 23,8 mm B = mm

## DS0007

Active sensor



VAG  
VAG

6Q0927808B  
WHT003862

A = 24,2 mm B = mm

## DS0008

Active sensor



VAG  
VAG

1K0927808  
WHT003858

A = 30,7 mm B = mm

## DS0009

Active sensor



VAG 4E0927803D  
VAG 4E0927803F  
BENTLEY 4E0927803  
BENTLEY 4E0927803A

A = 37 mm B = mm

## DS0010

Active sensor



VAG 4E0927804D  
VAG 4E0927804F  
BENTLEY 4E0927804  
BENTLEY 4E0927804A

A = 37 mm B = mm

## DS0011

Active sensor

VAG

1J0927807B



A = 37,3 mm B = mm

## DS0012

Passive sensor

VAG

4B0927803C

VAG

8D0927803B

VAG

8D0927803C

VAG

8D0927803D



A = 39,8 mm B = 980mm

## DS0013 (coming soon)

Active sensor

VAG

WHT003864A

VAG

WHT003864B



A = 37,9 mm B = mm

## DS0014

Passive sensor

VAG

1H0927807

VAG

1J0927803



A = 27,7 mm B = mm

## DS0015

Passive sensor

VAG

1H0927808

VAG

1J0927804



A = mm B = mm

## DS0016

Passive sensor

VAG

8D0927803



A = 39,8 mm B = 1068mm

## DS0017

Active sensor

VAG

2K0927807

VAG

WHT003864



A = 37,9 mm B = mm

## DS0018

Active sensor

DACIA

479101292R

DACIA

8200195825

DACIA

8200419177

RENAULT

479101292R

RENAULT

8200195825

RENAULT

8200419177



A = 23,6 mm B = 585mm

## DS0020

Active sensor

FORD

1223622,1225843

FORD

1481190,1695086

FORD

1847905

FORD

3M5T2B372BC

FORD

3M5T2B372BD

FORD

BV6T2C190GA

FORD

BV6T2C190GB

MAZDA

BP4K43711A

MAZDA

BP4K43711B

VOLVO

30648986,

VOLVO

30793635

VOLVO

31274612



A = 14 mm B = mm

## DS0021

Active sensor

FORD

1223620

FORD

1690865

FORD

1847581

FORD

3M5T2B372AB

FORD

BV6T2C204FA

FORD

BV6T2C204FB

MAZDA

BP4K43701A

VOLVO

9475557



A = 24,8 mm B = mm

## DS0022

Active sensor



<b>DACIA</b>	479007380R
<b>DACIA</b>	8200752605
<b>LADA</b>	479007380R
<b>LADA</b>	8200752605
<b>RENAULT</b>	479007380R
<b>RENAULT</b>	8200752605

A = 27,8 mm B = 508mm

## DS0023 (coming soon)

Passive sensor



<b>VAG</b>	3B0927807B
<b>VAG</b>	3B0927807C
<b>VAG</b>	8E0927807

A = 43,8 mm B = 1035mm

## DS0024

Active sensor



<b>FORD</b>	1067210
<b>FORD</b>	1088606
<b>FORD</b>	98AG2B372CB
<b>FORD</b>	98AG2B372CC

A = 14 mm B = 515mm

## DS0025

Active sensor



<b>DACIA</b>	479000527R
<b>DACIA</b>	8200752604
<b>RENAULT</b>	479000527R
<b>RENAULT</b>	8200752604

A = 27,8 mm B = 461mm

## DS0026

Active sensor



<b>FORD</b>	1356184
<b>FORD</b>	3M5T2B372DA

A = 25 mm B = mm

## DS0027

Passive sensor



<b>VAG</b>	6N0927807A
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A = 35,5 mm B = 840mm

## DS0028

Active sensor



<b>PSA</b>	4545F5
<b>PSA</b>	4545K3

A = mm B = 617mm

## DS0029 (coming soon)

Active sensor



<b>VAG</b>	1K0927808A
<b>VAG</b>	WHT003858A
<b>VAG</b>	WHT003858B

A = 39,7 mm B = mm

## DS0030

Passive sensor



<b>VAG</b>	8E0927807G
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A = 28 mm B = 1372mm

## DS0031

Passive sensor



<b>VAG</b>	4B0927803B
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A = 27 mm B = 980mm



## DS0032 (coming soon)

Active sensor



VAG 1K0927807A  
VAG WHT003859A  
VAG WHT003859B

A = 39,7 mm B = mm

## DS0033 (coming soon)

Active sensor



VAG 7L0927807B  
VAG WHT003857B  
PORSCHE 95560640510  
PORSCHE 95560640511  
PORSCHE 95560640512

A = 27,7 mm B = mm

## DS0034

Passive sensor



RENAULT 7700411747

A = 28,1 mm B = 446mm

## DS0035 (coming soon)

Active sensor



VAG 7L0927808B  
VAG WHT003856A  
VAG WHT003856B  
PORSCHE 95560640610  
PORSCHE 95560640611  
PORSCHE 95560640612

A = 27,7 mm B = mm

## DS0036

Passive sensor



RENAULT 7700429113  
RENAULT 7700832768

A = 28,4 mm B = 605mm

## DS0037

Passive sensor



VAG 3B0927807G

A = 28 mm B = 1120mm

## DS0038

Passive sensor



OPEL 1238236  
OPEL 9115064

A = 28,5 mm B = 373mm

## DS0039

Active sensor



RENAULT 8200404460

A = 12,5 mm B = 720mm

## DS0040 (coming soon)

Active sensor



FORD 1682670  
FORD 1756081  
FORD 2070182  
FORD AV6T2B372EA  
FORD AV6T2B372EB  
FORD AV6T2B372EC

A = 14 mm B = mm

## DS0041

Active sensor



PSA 45450000  
PSA 4545J9

A = 34,4 mm B = 975mm

## DS0042

Active sensor

RENAULT 8200416683



A = 12,5 mm B = 817mm

## DS0043

Active sensor

ABARTH 55700425  
OPEL 1238399  
OPEL 1247506  
OPEL 13381153  
OPEL 6235742  
OPEL 93189275  
OPEL 93191478



A = 28,1 mm B = 770mm

## DS0044

Active sensor

PEUGEOT 454599  
PEUGEOT 4545F4



A = 26 mm B = 755mm

## DS0045

Active sensor

DACIA 479100004R  
DACIA 479109155R  
RENAULT 479100004R  
RENAULT 479109155R



A = 38,2 mm B = 620mm

## DS0046

Active sensor

RENAULT 8200186294



A = 28 mm B = 495mm

## DS0047

Active sensor

PEUGEOT 4545A3



A = 43,9 mm B = 775mm

## DS0048

Active sensor

ALFA ROMEO, 52012826  
ABARTH, FIAT 52070363  
55700426  
FIAT 55701387  
FIAT 55703974  
OPEL 1229098  
OPEL 13381328  
OPEL 6235747  
OPEL 93189276



A = 28 mm B = 615mm

## DS0049

Passive sensor

PEUGEOT 454576



A = 25,5 mm B = 765mm

## DS0050

Passive sensor

PEUGEOT 454577  
PEUGEOT 454579



A = 40,5 mm B = 782mm

## DS0051

Active sensor

PSA 4545C1



A = 12,6 mm B = 630mm

## DS0052

Active sensor

PSA

4545C4



A =       mm B = 720mm

## DS0053

Active sensor

PEUGEOT 4545A0



A = 32 mm B = 773mm

## DS0054

Active sensor

FORD

1064227

FORD

1093743

FORD

98AG2B372AE

FORD

98AG2B372AF



A = 25 mm B = 507mm

## DS0055

Active sensor

FORD

1067208

FORD

1088635

FORD

98AG2B372BE

FORD

98AG2B372BF



A = 14 mm B = 630mm

## DS0056

Active sensor

RENAULT

8200043136

RENAULT

8200296571



A = 12,5 mm B = 835mm

## DS0057

Active sensor

RENAULT

8200446282



A = 12,5 mm B = 758mm

## DS0058

Passive sensor

RENAULT

6000073527



A = 40,5 mm B = 761mm

## DS0059

Passive sensor

RENAULT

6000073528



A = 40,5 mm B = 1638mm

## DS0060

Active sensor

LEXUS

8954360050

TOYOTA

8954360050



A = 27,6 mm B =       mm

## DS0061

Active sensor

PSA

4545C2

PSA

96526967



A =       mm B = 708mm

## DS0062

Active sensor



**JAGUAR** C2S17482  
**JAGUAR** C2S2340  
**JAGUAR** C2S43216  
**FORD** 1115018  
**FORD** 1146400  
**FORD** 1386268  
**FORD** 1S7T2B372AB  
**FORD** 1S7T2B372AC  
**FORD** 1S7T2B372AD

A = 25,2 mm B = mm

## DS0063

Active sensor



**LEXUS** 8954260050  
**TOYOTA** 8954260050

A = 27,6 mm B = mm

## DS0064 (coming soon)

Active sensor



**HYUNDAI** 956701R000

A = 15,2 mm B = 890mm

## DS0065

Active sensor



**PSA** 454508  
**PSA** 4545L0

A = mm B = 725mm

## DS0067 (coming soon)

Active sensor



**HYUNDAI** 956801R000

A = 21,2 mm B = 870mm

## DS0068 (coming soon)

Active sensor



**HYUNDAI** 956811R000

A = 21,5 mm B = 845mm

## DS0069

Active sensor



**BMW** 34526762466

A = 30,9 mm B = 870mm

## DS0070

Passive sensor



**OPEL** 1238917  
**OPEL** 90386505

A = 48,5 mm B = 1050mm

## DS0071

Passive sensor



**OPEL** 1238918  
**OPEL** 6238429  
**OPEL** 9012161  
**OPEL** 90386504  
**OPEL** 90483637  
**OPEL** 93169315

A = 28,1 mm B = 507mm

## DS0072

Active sensor



**BMW** 34526762465

A = 31 mm B = 585mm

## DS0073

Active sensor

TOYOTA 8954302060  
TOYOTA 8954302061



A = 29 mm B = 100mm

## DS0074

Active sensor

TOYOTA 8954202060  
TOYOTA 8954202061



A = 29 mm B = 104mm

## DS0075

Passive sensor

CITROËN 454578



A = 30,6 mm B = 962mm

## DS0076

Active sensor

PSA 45450000  
PSA 4545J8



A = 27,2 mm B = 690mm

## DS0077

Passive sensor

RENAULT 7700411745



A = 28,1 mm B = 708mm

## DS0078

Passive sensor

RENAULT 7700411746



A = 28,1 mm B = 1580mm

## DS0079

Active sensor

FORD 1151023  
FORD 2S612B372BD  
MAZDA D3514371YA



A = 14 mm B = 1200mm

## DS0080 (coming soon)

Passive sensor

HYUNDAI 956701R100



A = 15 mm B = 900mm

## DS0081 (coming soon)

Active sensor

HYUNDAI 956711R000



A = 15,35mm B = 890mm

## DS0082

Active sensor

OPEL 1238265  
OPEL 12842287  
OPEL 13470636  
OPEL 23483147  
OPEL 6238265  
OPEL 6238613



A = 36,7 mm B = 300mm

## DS0083

Passive sensor

TOYOTA 8954202040



A = 20,9 mm B = 1030mm

## DS0084

Active sensor

PSA 9805066080



A = 27,3 mm B = 680,8mm

## DS0086

Passive sensor

VAG 8E0927803B



A = 28,1 mm B = 957mm

## DS0087

Active sensor

RENAULT 8200043135  
RENAULT 8200296570  
RENAULT 8200346992



A = 12,5 mm B = 490mm

## DS0088

Active sensor

RENAULT 479001745R  
RENAULT 6040004527  
RENAULT 8200254685



A = 28 mm B = 1585mm

## DS0089

Active sensor

RENAULT 479006554R  
RENAULT 6040004524  
RENAULT 8200254681



A = 28 mm B = 716mm

## DS0090

Active sensor

PSA 4545F6



A = mm B = 718mm

## DS0091

Active sensor

FORD 1516502, 1526034  
FORD 1560622, 1678466  
FORD 1761079, 1766843  
FORD 1771552  
FORD 8V512C204AB  
FORD 8V512C204AC  
FORD 8V512C204AD  
FORD 8V512C204AE  
FORD 8V512C204AF  
FORD 8V512C204BA  
FORD 8V512C204BB



A = 28 mm B = 650mm

## DS0092

Active sensor

FORD 1514205  
FORD 1525681  
FORD 1761113  
FORD 2094988  
FORD 8V512B372AB  
FORD 8V512B372AC  
FORD 8V512C190AA  
FORD 8V512C190AB



A = 9,6 mm B = 585mm

## DS0093 (coming soon)

Active sensor

HYUNDAI 956802B000



A = 37,18 mm B = 1180mm

## DS0094 (coming soon)

Active sensor

HYUNDAI 956812B000



A = 37,14mm B = 1160mm

## DS0095

Active sensor

MERCEDES 2035400417



A = 31 mm B = 580mm

## DS0096

Passive sensor

VAG 8E0927807B



A = 28 mm B = 1330mm

## DS0097

Active sensor

MERCEDES 1695400417  
MERCEDES 1695401117  
MERCEDES 1695401417



A = 28,1 mm B = 610mm

## DS0098

Active sensor

MERCEDES 1695400817  
MERCEDES 1695401217  
MERCEDES 1695401517



A = 17,1 mm B = 470mm

## DS0099

Active sensor

NISSAN 47910JD000



A = 39,2 mm B = 711mm

## DS0100

Active sensor

BMW 34526764610



A = 39,2 mm B = 880mm

## DS0101

Active sensor

OPEL 1247003  
OPEL 1247166  
OPEL 13324530  
OPEL 13346945  
OPEL 13470643  
OPEL 6238643



A = 36,7 mm B = 570mm

## DS0102

Active sensor

PSA 4545C9



A = 34,1 mm B = 933mm

## DS0103 (coming soon)

Active sensor

HYUNDAI 956702B200



A = 19,7 mm B = 1070mm

## DS0104 (coming soon)

Active sensor

HYUNDAI 956702B210



A = 19,7 mm B = 1075mm

## DS0105 (coming soon)

Passive sensor

VAG

3B0927807H



A = 28,05mm B = 1220mm

## DS0106

Active sensor

RENAULT 479000010R  
RENAULT 479006271R



A = 23,6 mm B = 805mm

## DS0107

Active sensor

DACIA 479104225R  
DACIA 479104991R  
RENAULT 479104225R  
RENAULT 479104991R



A = 38 mm B = 600mm

## DS0108

Active sensor

MITSUBISHI 4670A575



A = 41,7 mm B = 869mm

## DS0109

Active sensor

MITSUBISHI 4670A576



A = 41,7 mm B = 890mm

## DS0110

Active sensor

MERCEDES 2035401317



A = 31 mm B = 1115mm

## DS0111

Active sensor

MERCEDES 2035401417



A = 31 mm B = 960mm

## DS0112 (coming soon)

Passive sensor

VAG 6U0927807



A = 34 mm B = 1240mm

## DS0113

Active sensor

BMW 34526791225  
BMW 34526884421



A = 38,7 mm B = 790mm



## DS0114

Passive sensor



**CITROËN** 454533  
**CITROËN** 454536  
**CITROËN** 454546  
**CITROËN** 96089629  
**CITROËN** 96217753

A = 30,6 mm B = 750mm

## DS0115

Active sensor



**RENAULT** 8200254687

A = 28,3 mm B = 441,5mm

## DS0116

Active sensor



**DACIA** 8200254688  
**RENAULT** 8200254688

A = 24,8 mm B = 445mm

## DS0117

Active sensor



**PSA** 454588

A = mm B = 628mm

## DS0120

Active sensor



**PSA** 4545H7  
**PEUGEOT** 454589  
**PEUGEOT** 96353848  
**PEUGEOT** 96436605  
**PEUGEOT** 96436808  
**PEUGEOT** 96449668

A = mm B = 740mm

## DS0122

Active sensor



**OPEL** 1247004  
**OPEL** 13329258  
**OPEL** 13470637  
**OPEL** 6238636

A = 36,7 mm B = 800mm

## DS0134 (coming soon)

Active sensor



**FIAT** 51737851

A = 44,5 mm B = 1430mm

## DS0166

Active sensor



**MERCEDES** 2045400117  
**MERCEDES** 2049050000

A = 31 mm B = 633mm

## DS0169

Active sensor



**NISSAN** 47910AX600  
**NISSAN** 47910AX610

A = 23,6 mm B = 1110mm

## DS0171 (coming soon)

Active sensor



**PSA** 4545H2

A = 38 mm B = 950mm

## DS0177 (coming soon)

Passive sensor



VAG	2D0927807
MERCEDES	9015420118
MERCEDES	9015420817
MERCEDES	9015421717

A = 77 mm B = 2230mm

## DS0178 (coming soon)

Passive sensor



VAG	2D0927807A
MERCEDES	9015421117
MERCEDES	9015421817

A = 77 mm B = 1740mm

## DS0180

Active sensor



CITROËN	1627162680
CITROËN	4545H1
FIAT	51725100
FIAT	51787753
FIAT	52057984
FIAT	52091139

A = 38,2 mm B = 950mm

## DS0181

Active sensor



PSA 4545C3

A = mm B = 725mm

## DS0183

Passive sensor



DAEWOO	96455870
DAEWOO	96549713
CHEVROLET	96455870
CHEVROLET	96549713

A = 28 mm B = 715mm

## DS0184

Active sensor



FORD	1151951
FORD	1207357
FORD	1698686
FORD	2N112B372AA
FORD	2N112B372AB
FORD	2S612B372AD

A = 25 mm B = 710mm

## DS0191

Passive sensor



DAEWOO	96455869
DAEWOO	96549712
CHEVROLET	96455869
CHEVROLET	96549712

A = 28 mm B = 715mm

## DS0195

Passive sensor



SUZUKI	5621062J00
SUZUKI	5621062J01
SUZUKI	5621062J02

A = 28 mm B = 735mm

## DS0196

Passive sensor



SUZUKI	5622062J00
SUZUKI	5622062J01
SUZUKI	5622062J02

A = 28 mm B = 755mm

## DS0222

Passive sensor



DAEWOO	96316715
DAEWOO	96569341

A = 19,1 mm B = 645mm



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