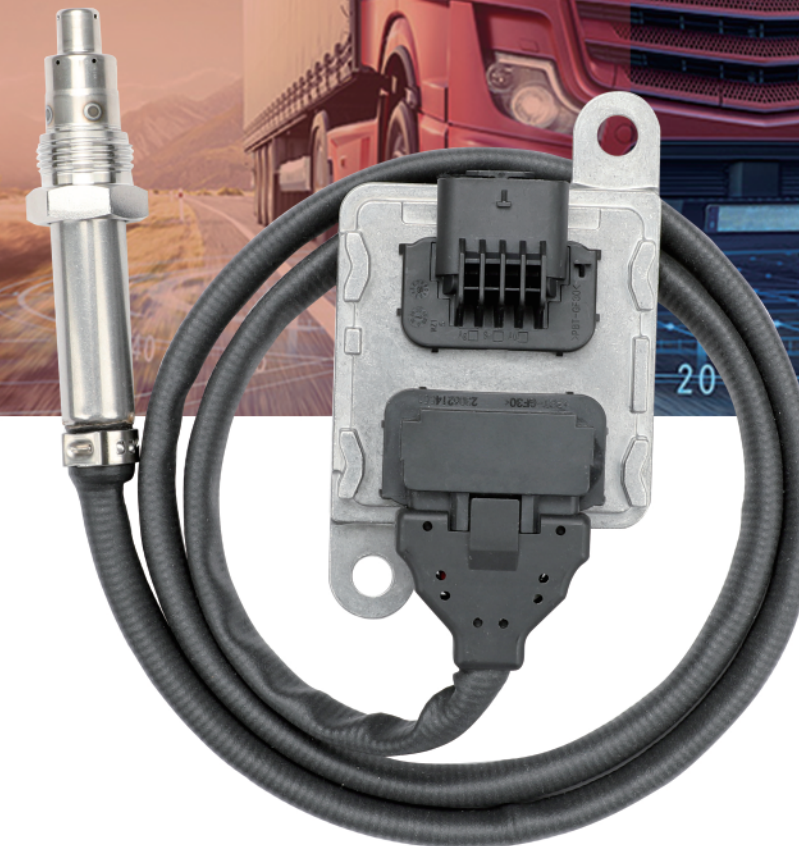




NOX SENSORS



- JIANGSU YUNYI ELECTRIC CO., LTD.
- WEBSITE: WWW.YUNYI-CHINA.NET
- TEL: 0086-516-83913580
- E-MAIL: SALES@YUNYI-CHINA.CN
- ADDRESS: 26# HUANGSHAN ROAD, TONGSHAN AREA, XUZHOU 221116



WWW.YUNYI-CHINA.NET

Tip: All the manufacturers names, product numbers and pictures referred are used for reference only.



NOx SENSORS

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CONTENTS



Jiangsu Yunyi Electric Co., Ltd
Xuzhou Xinyuan Chengda Sensor Technology Co., Ltd
Jiangsu Yunrui Automotive Electrical System Co., Ltd

Jiangsu Yuntai Precision Technology Co.,Ltd
Jiangsu Zhengxin Electronic Technology Co.,Ltd
Jiangsu Yunyi Electric Vehicle Drive System Co.,Ltd

01	COMPANY PROFILE / 03-04	C O N T E N T S	04	TECHNICAL PARAMETER / 09-10
02	PRODUCT INTRODUCTION / 05-06		05	PRODUCT SERIES / 11-23
03	CORE TECHNOLOGY / 07-08			



COMPANY PROFILE



ABOUT US

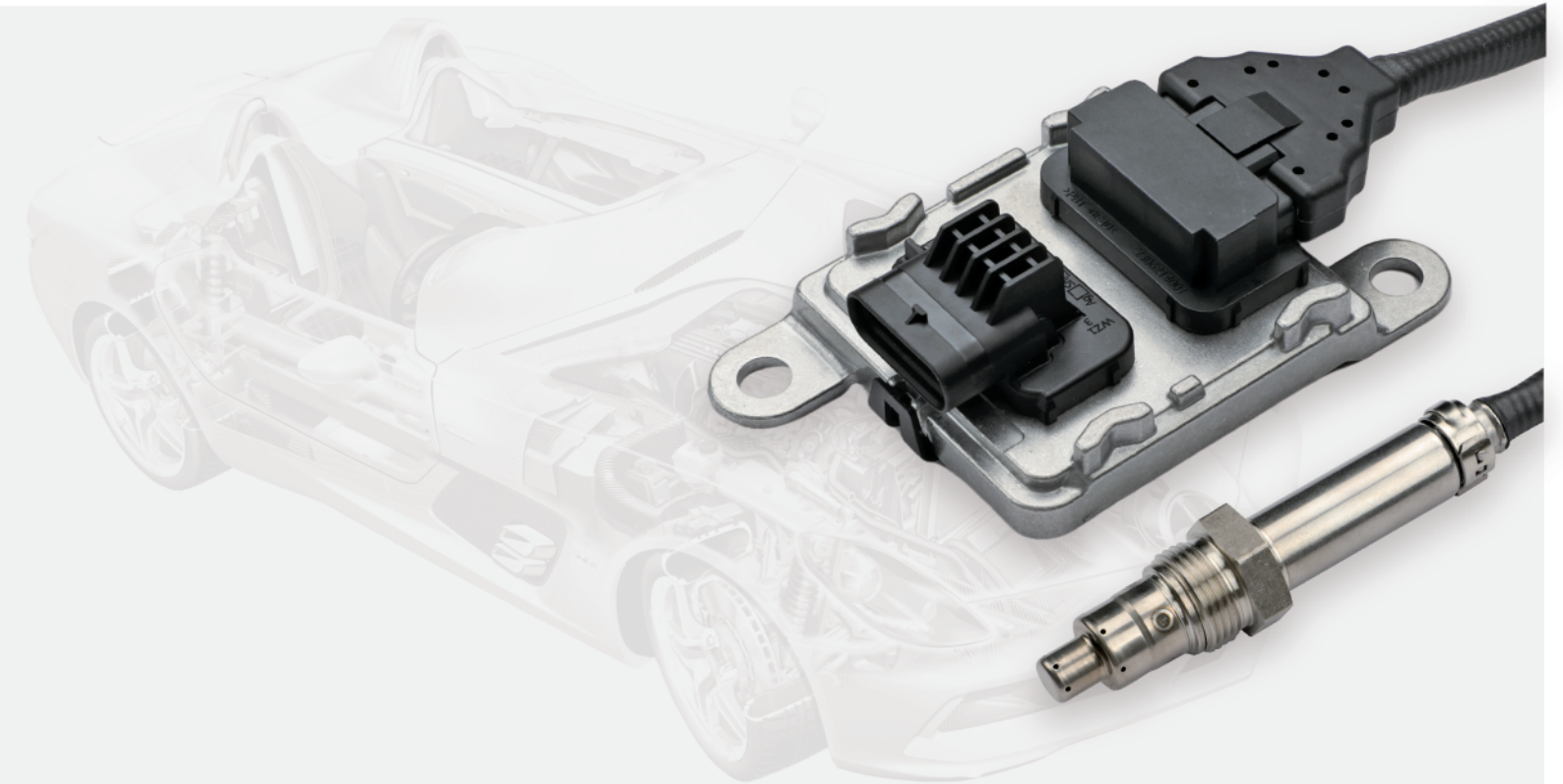
Jiangsu Yunyi Electric Co., Ltd. was founded in July 2001 and successfully listed on Shenzhen Stock Exchange on March 21, 2012. Headquartered in Xuzhou, China, the company has 2000 employees and 8 subsidiaries. It is committed to providing high-quality automobile supporting services and has accumulated 22 years of R & D and production experience in automobile parts industry, such as lambda sensor, NOx sensor Automotive alternator rectifier and voltage regulator, plastic parts, windshield wiper blade, slip ring, etc. It has a global professional industrial base to ensure the high-quality and efficient production of various auto parts.

- 
22
YEARS
Industry Experience
- 
1.2
BILLION
Annual Revenue
- 
6
BRANCHES
Clear Specialization
- 
1600
PEOPLE
Personnel
- 
3
CENTERS
R&D Laboratories
- 
498
PATENT
Strong Intelligence
- 
120
COUNTRIES
Worldwide Service

PRODUCT INSTRUCTION

ADAPTED TO PASSENGER CARS AND COMMERCIAL VEHICLES

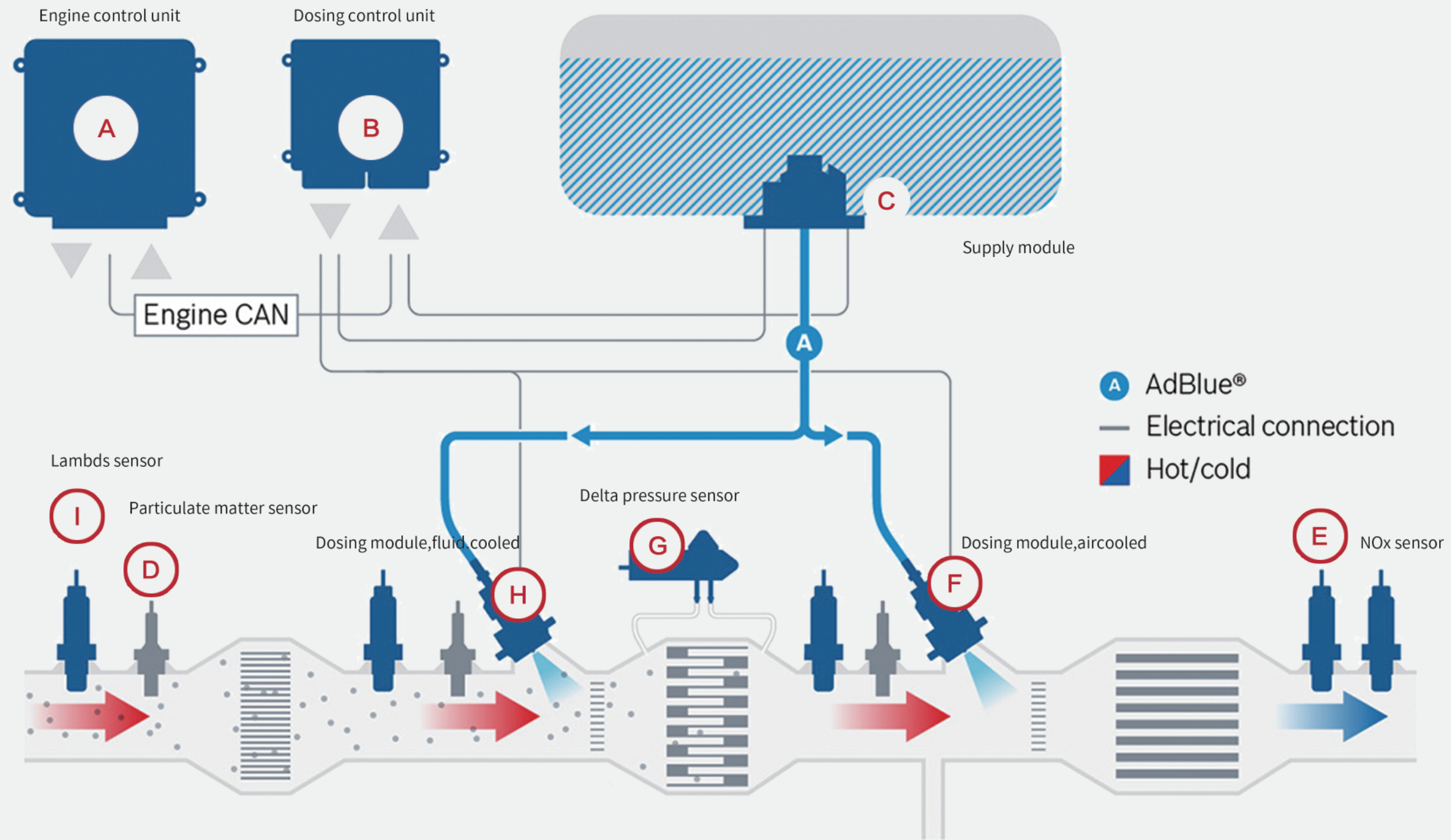
NOx sensors monitor the level of nitrogen oxide being emitted by a diesel vehicle to ensure compliance with emissions regulations. Most engines feature two NOx sensors: an upstream and downstream sensor. Common causes of failure include soot buildup on the sensor, ECU water intrusion, and/or damage to the cable, which will cause the check engine light to illuminate. To provide quality and coverage for this important and growing diesel category, we're proud to introduce a line of Diesel NOx Sensors.

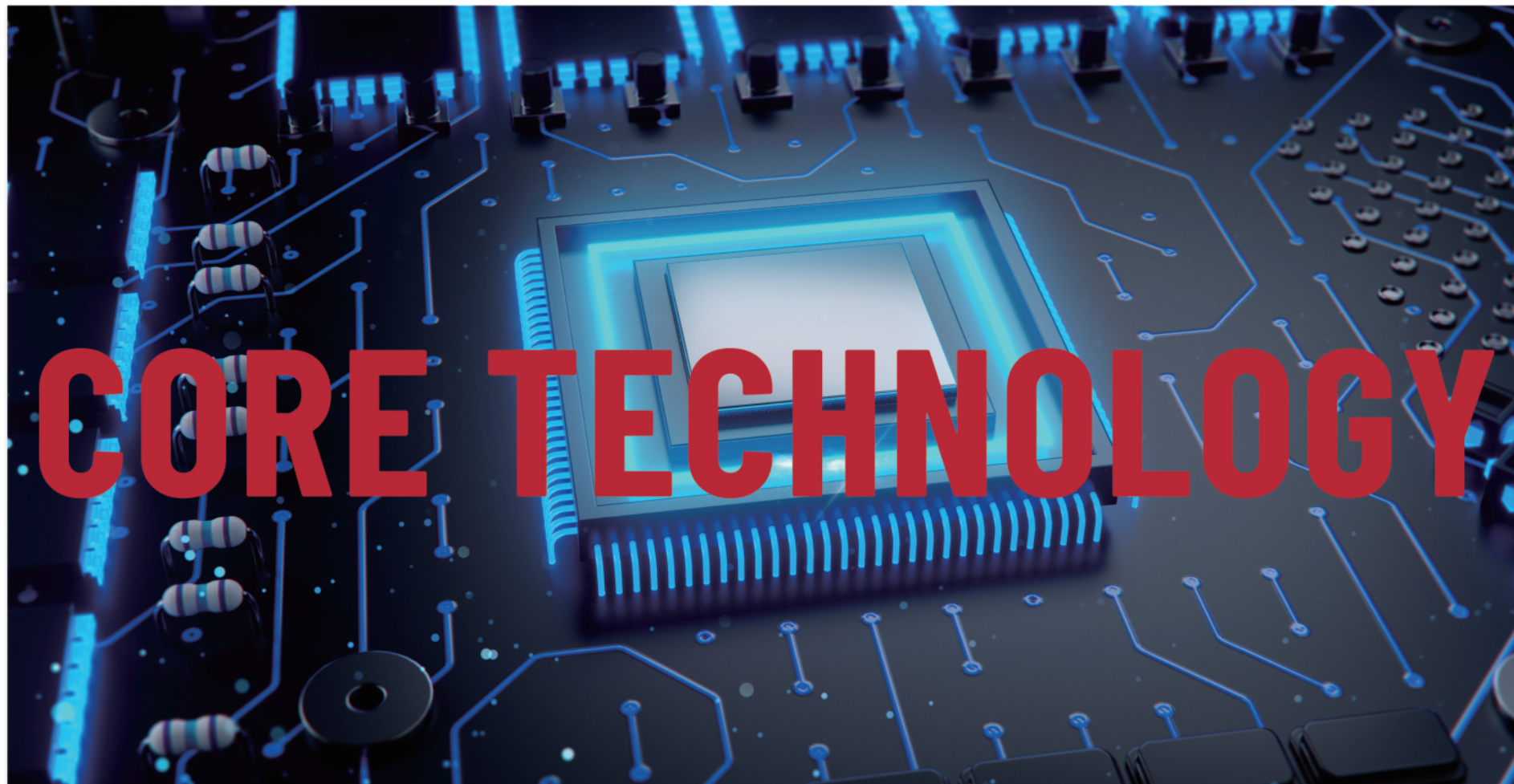


 Mercedes-Benz	 Ford	 BMW	 Audi
 ISUZU	 CITROËN	 PEUGEOT	 Vauxhall
 CHRYSLER	 HYUNDAI	 FUSO	 CHEVROLET
 Cummins	 IVECO	 MAN	 SCANIA
 CAT	 HINO	 VOLVO	 DAF

- 1 High accuracy real time measurement.
- 2 Structural optimization
Extended service life.
- 3 Special coating covers the components to resist external forces, such as thermal shock.
- 4 Sensor performance independent of catalyst or ECU supplier and engine management system.
- 5 Modular "Stand-alone" NOx sensor enabling EU/US/Japan emission standards compliancy.

PRODUCT DETAIL VIEW





CORE TECHNOLOGY

Independent R&D and design

Industrial chain vertical integration

Full automatic production

Total quality management

Industrial chain highly vertical integration
Offer the complete process flow product service from R&D, design, parts manufacturing, assembly to test.

Independent R&D and design

- Software architecture and program
- Ceramic chip
- Hardware circuit and layout
- Product structure

Industrial chain vertical integration

- Ceramic chip
- PCBA
- Model, Structural parts

Full automatic production

- Ceramic chip assembly
- NOx sensor assembly
- Calibration and test

Total quality management

- IATF 16949
- ISO 14001
- OHSAS 18001
- VDA 6.3 system
- ERP, PLM, WMS, MES, OA

TECHNICAL PARAMETER

VOLTAGE RANGE

Minimum voltage: DC 16V
 Maximum voltage: DC 36V
 Standard voltage: DC 28V

COMMUNICATION INTERFACE

CAN2.0B bus interface

POWER RANGE

Minimum power consumption: 0.7W (static or high gas temperature)
 Maximum power consumption: 17.5w (low-end conditions with very low gas temperature and very high flow rate)
 Normal power consumption: 12W (normal working current under normal mode)

CURRENT RANGE

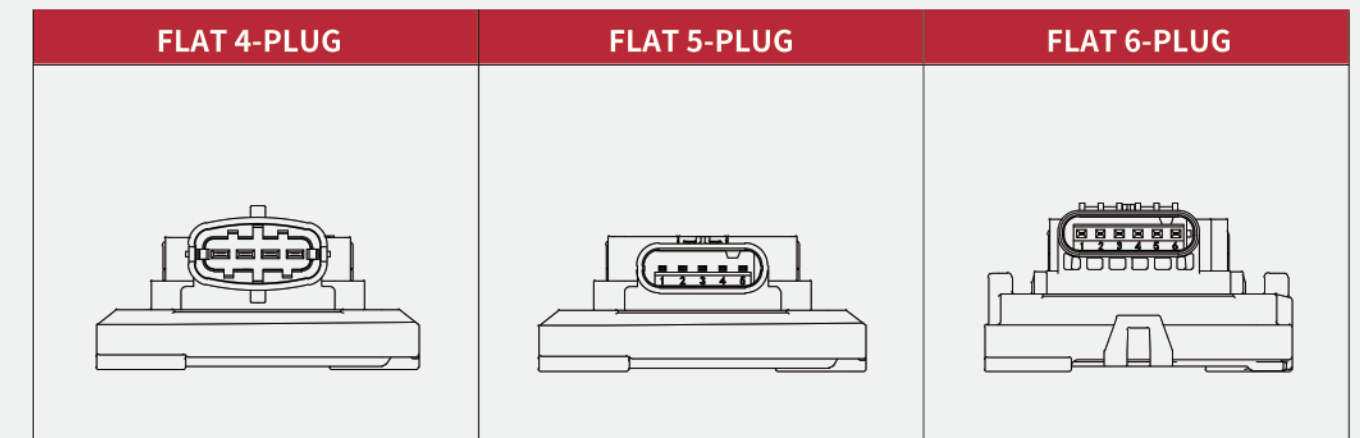
Minimum current: 30mA (static or high gas temperature)
 Maximum current: 1100ma (low end condition with very low gas temperature and extremely high flow rate)
 Normal current: 500mA (normal working current under normal mode)

*1. The sensor uses PWM to heat the sensor head, so the current described is the average circuit.

START TIME

Sensor heating start time: < 60s
 Effective O2 output time: < 80s
 Effective NOx output time: < 100s

PLUG TYPE

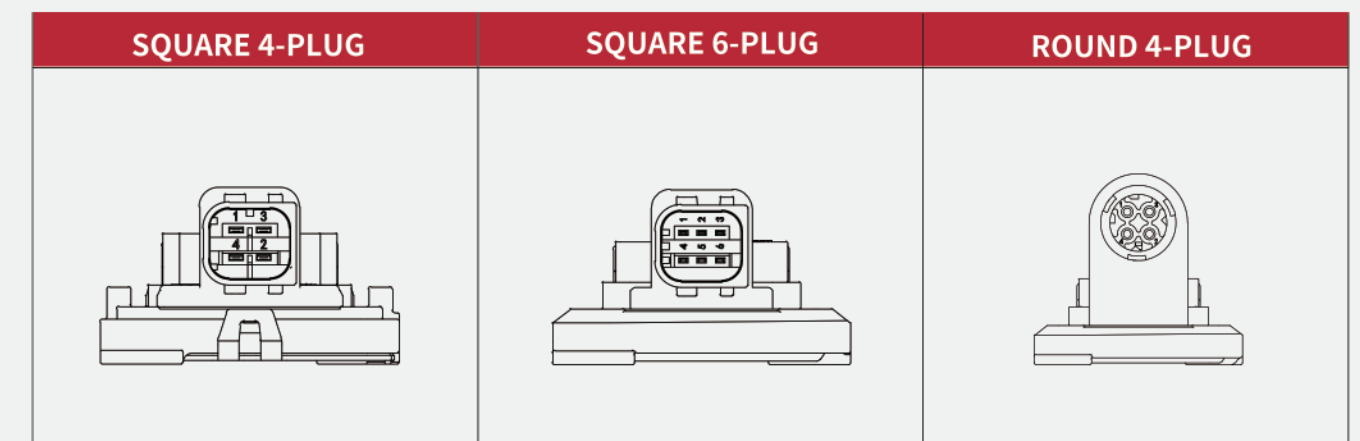


MONITORING RESPONSE TIME

PROJECT	MAX	UNIT
Nox response time ($\tau_{33\text{---}66\%}$)	1300	MS
O ₂ response time ($\tau_{33\text{---}66\%}$)	1000	MS
Oxygen enrichment to oxygen depletion	500	MS
Oxygen depletion to oxygen enrichment	500	MS

MEASURING RANGE

PROJECT	MAX	UNIT
NO _x	0ppm	500/3000ppm
O ₂	$\lambda=0.8$	Air



Customized service is available
 Email: sales@yunyi-china.cn

PRODUCT SERIES

COMMERCIAL VEHICLE SERIES

CUMMINS		
CONTI NO.	OE NO.	VOLTAGE
5WK96614J	/	24V
5WK96751C	4326862	24V
5WK96765B/5WK96765C	4326863	24V
5WK96750B/5WK96750C	4326864	24V
5WK96752C	4326868	24V
5WK96756A	/	24V
5WK96753	2872947	12V
5WK96672	2871974	12V
5WK96672A	2894943	12V
5WK96674	2871978	12V
5WK96673A	2894941	12V
5WK96764B	4326871	12V
5WK96741A/5WK96741B	4326874	12V
5WK96742A/5WK96742B	4326873	12V
5WK96740	2872944	12V
5WK96741	2872946	12V
5WK96749	2872942	12V
5WK96749A/5WK96749B	4326872	12V
5WK96754B/5WK96754C	4326867	24V
5WK96766C	4326861	24V
5WK96714B	/	24V
5WK96761/SNS0161B	4359309	24V
5WK96760A	4327153	24V
5WK96755A	/	24V
5WK96674A	2894939	12V
5WK96740A/5WK96740B	4326870	12V
5WK96742	2872948	12V
5WK96620B	4984577	24V
5WK96692	2872297	12V
5WK96676A	2894942	24V
5WK96693A	2894946	24V
5WK96691	2872236	12V
5WK96751	2897309	24V
5WK96614I	5801363754	24V
5WK96675A	2894940	24V
5WK97102	A2C93842800-01	12V

CUMMINS		
CONTI NO.	OE NO.	VOLTAGE
5WK97103A	A2C97451500-01	24V
5WK97104A	/	12V
5WK97105A	/	24V
5WK96673	2872081	12V
5WK96691A	2894944	12V
5WK96692A	2894945	12V
5WK96753A/5WK96753B	4326869	12V
SNS3510	/	Univolt
5WK96750	2897307	24V
5WK96750A	4326472	24V
SNS1061	5593951	24V
/	5593958	24V
SNS1093	5594572	24V
SNS1094	5594608	24V
5WK97109A	A2C14317400-01	24V
5WK97103B	/	24V
SNS3502	/	Univolt
5WK97348A	4326769	24V
SNS0348B	4326769	24V
SNS3501	/	Univolt

MAN		
CONTI NO.	OE NO.	VOLTAGE
5WK96618D	5115408-0015	24V
5WK96618B	5115408-0009	24V
5WK96783A	5115408-0011	24V
5WK96783B	5115408-0018	24V
5WK96721B	5115408-0016	24V
5WK96722B	5115408-0017	24V
5WK96790A	5115408-0012	24V
5WK96790B	5115408-0019	24V
SNS3060	5115408-0030	Univolt
SNS3058	5115408-0028	Univolt

PRODUCT SERIES

PASSENGER VEHICLE SERIES

BENZ		
CONTI NO.	OE NO.	VOLTAGE
5WK96681A	A0009056900	12V
5WK96681C/D	A0009053403	12V
/	A0009050008	12V
5WK96681E	A0009059603	12V
5WK96682	A0009053000	12V
5WK96682A	A0009057000	12V
/	A0009050108	12V
5WK96682B/C/D	A0009053503	12V
5WK96682E	A0009059703	12V
5WK96683	A0009052900	12V
5WK96683A	A0009057100	12V
5WK96683C/D	A0009053603	12V
5WK96683E	A0009059803	12V
5WK96683F	A0009053706	12V
5WK97248	A0009056104	12V
/	A0009051612	12V
/	A0009058611	12V
/	A0009058411	12V
SNS1006	A0009058111	12V
SNS1005	A0009058011	12V
/	A0009058511	12V
SNS381	A0009054704	12V
SNS424B	A0009053109	12V
/	A0009052709	12V
/	A0009052809	12V
/	A0009051512	12V
5WK96681F	A0009053506	12V
SNS1048A	A0009059112	12V
SNS381B	A0009053009	12V
5WK96677	A0065427218	12V
5WK96632	A0065420918	12V
5WK96681	A0009055100	12V
5WK96771B	A0009053903	12V
5WK96682F	A0009053606	12V
SNS381A	A0009057108	12V
/	A0009055612	12V

BENZ		
CONTI NO.	OE NO.	VOLTAGE
/	A0009055712	12V
/	A0009055812	12V
5WK96703	A0009050126	12V
/	A0009055006	12V
/	A0009055106	12V
/	A0009050208	12V
SNS424A	A0009057208	12V
/	A0009052909	12V
/	A0009051412	12V
/	A0009054410	12V
/	A0009058311	12V
/	A0009052012	12V

BMW		
CONTI NO.	OE NO.	VOLTAGE
5WK96621J	758713005	12V
5WK96640D	850972101	12V
5WK96697B	857646901	12V
5WK96697C	858984401	12V
5WK96699B	857647101	12V
5WK96699C	858984601	12V
5WK96610K	758712905	12V
5WK96698B	857647001	12V
5WK96699A	851879101	12V
5WK96650B	759040204	12V

PSA		
CONTI NO.	OE NO.	VOLTAGE
5WK96745A	9675358480	12V
5WK96746A	9678570780	12V
SNS164A	9678570780	12V
SNS404	9817839480	12V
SNS405	9817841080	12V
SNS465	9817454580	12V

PRODUCT SERIES

COMMERCIAL VEHICLE SERIES

VOLVO		
CONTI NO.	OE NO.	VOLTAGE
5WK96664D	21473997	24V
5WK96605C	20873395	24V
5WK96665	21040930	24V
5WK96717A	21984358	24V
5WK96717B	22219283	24V
5WK96718A	22219281	24V
5WK96718B	22219281	24V
5WK97368	22827991	24V
5WK97371	22827993	24V
5WK97372	22827995	24V
5WK97373	22827992	24V
5WK96732B	22219284	24V
5WK96643C	21567763	12V
5WK96643D	21636088	12V
5WK96643E	22014032	12V
5WK96644B	21479638	12V
5WK96644C	21567764	12V
5WK96644E	21636091	12V
5WK97364	22303383	12V
5WK97365	22303384	12V
5WK97366	22303391	12V
5WK97367	22303390	12V

HYUNDAI		
CONTI NO.	OE NO.	VOLTAGE
5WK97302	29650-84320	24V
5WK97304	29650-84340	24V
5WK97301	29650-84310	24V
5WK97306	29655-84300	24V
5WK97307	29655-84320	24V

DAF		
CONTI NO.	OE NO.	VOLTAGE
5WK96660C	1889126	12V
5WK96759	1932604	12V
5WK96759B	1973528	12V
5WK96759C	2006246	12V
SNS0159E	2236409	12V
5WK96619D	2011648	24V
5WK96626B	1836061	24V
5WK96626C	2011650	24V
5WK96628B	1836060	24V
5WK96628C	2011649	24V
5WK96661D	2006245	24V
SNS0061F	2236408	24V
SNS0061G	2293965	24V
5WK97344B	2006243	24V
SNS0344D	2236406	24V
SNS0344E	2293964	24V

Others			
MANUFACTURER	BOSCH NO.	OE NO.1	VOLTAGE
VOLVO	0281007929/921	3615710-TL100	24V
SINOTRUCK	0281007156/105	WG9925545201/1	24V
WEICHAI	0281008876	1002095903	24V
Yunnei	0281008942	X10008787	24V
JiangLing	0281008120	/	12V
JiangLing	0281008497	/	12V
JiangLing	0281007517	/	12V
JiangLing	0281007630	/	12V
JiangLing	0281008432	/	12V
JiangLing	0281008358	/	12V

PRODUCT SERIES

PASSENGER VEHICLE SERIES

AUDI		
CONTI NO.	OE NO.	VOLTAGE
5WK96685A	059907807G	12V
5WK96688	8K0907807E	12V
5WK96690B	03L907807AB	12V
5WK96728B	8R0907807G	12V
5WK96637B	059907807C	12V
SNS451	4G0907807S	12V
5WK96737	03L907807AF	12V
5WK96737A	03L907807AE	12V
SNS458	4G0907807AB	12V
5WK97235	04L907805M	12V
5WK96795	4H0907807E	12V
5WK97226	04L907805G	12V
5WK97239	04L907805P	12V
5WK97229	059907807J	12V
5WK97230	059907807L	12V
5WK97223	4M0907807B	12V
5WK96638B	8K0907807C	12V
5WK97258	8W0907807C	12V
5WK97259	8W0907807A	12V
5WK97257	8W0907807B	12V
5WK97267	04G907807M	12V
SNS441	059907807N	12V
5WK96689	8K0907807F	12V
SNS436A	04L907805AK	12V
SNS472	04L907805AS	12V
/	04L907807AR	12V
SNS462	4G0907807AA	12V
SNS787	04L907807ER	12V
SNS313	04L907807AD	12V
SNS316B	04L907807AE	12V
/	04L907807AM	12V
SNS471	04L907805AT	12V
/	04L907807S	12V
5WK97233	04L907805L	12V
5WK97226	04L907805G	12V
5WK97434	8W0907807E	12V

AUDI		
CONTI NO.	OE NO.	VOLTAGE
5WK97252	03N907807B	12V
5WK96688A	03L907807AD	12V
/	059907807S	12V
5WK97240	4M0907807C	12V
SNS770	4K0907807G	12V
SNS484	8K0907807Q	12V
SNS705C	04L907805EF	12V
SNS731A	80A907807L	12V
SNS0751C	04L907805CF	12V

GM		
CONTI NO.	OE NO.	VOLTAGE
5WK96709	55570097	12V
5WK96631C	12642310	12V
5WK96735A	12662658	12V
SNS168B	55500320	12V
SNS167B	55500319	12V
5WK96645H	12669595	12V
SNS317A	12680215	12V
SNS318	12676706	12V
5WK97418	55589456	12V
5WK96645D	12648631	12V
SNS390B	55496922	12V
SNS391B	55496923	12V
SNS157A	55503927	12V
SNS430	55495830	12V
5WK97390A	55495040	12V
5WK97419	55589458	12V
5WK96758	55498413	12V
SNS771	55500841	12V
SNS429A	55502092	12V
SNS720	55497261	12V
SNS499	55495632	12V

PRODUCT SERIES

PASSENGER VEHICLE SERIES

Hyundai		
CONTI NO.	OE NO.	VOLTAGE
SNS0399A	29650-4A200	12V
SNS0305A	29655-84330	24V
SNS0816A	29650-2U200	12V
SNS0811A	29640-2F140	12V
SNS0303A	29650-84300	24V
SNS0812A	29640-2FRD0	12V
SNS0803A	29650-4A880	12V
SNS0813A	29650-4A870	12V
SNS0801A	29640-2F150	12V
SNS497	29650-4A850	12V
SNS0804A/SNS0804B	29650-2U100	12V
SNS0819A	29660-2U250	12V
SNS0817A	29660-2U200	12V
SNS0818A	29650-2U250	12V
SNS0820A	29650-2U150	12V
SNS0833A	29650-4C100	12V
SNS0834A	29650-4C200	12V
SNS0847A	29640-2F170	12V

DS		
CONTI NO.	OE NO.	VOLTAGE
SNS0736	9821120980	12V
SNS0735	9821121180	12V
SNS0732A	9821120780	12V
SNS0732	9821120780	12V
SNS0733	9817308880	12V

FORD		
CONTI NO.	OE NO.	VOLTAGE
SNS361	HC3A-5L248-CB	12V
SNS3031	LC3A-5L248-AB	12V
SNS449	JL3A-5L248-BB	12V
SNS977A	LK21-5L248-AC	12V

Renault		
CONTI NO.	OE NO.	VOLTAGE
5WK96747	227908539R	12V
5WK96748	227905444R	12V
SNS148A	227905444R	12V
5WK97377	2279035572	12V
SNS1015	227905433R	12V
SNS1014	227902682R	12V

DODGECHRYSLER		
CONTI NO.	OE NO.	VOLTAGE
5WK96651	05149216AB	12V
5WK96651A	05149216AB	12V
5WK96684	68067521AA	12V
5WK96684A	68067521AA	12V
5WK96730	68085740AA	12V
5WK96799	68197109AA	12V
5WK97360_	68227486AA	12V

ChangCheng		
CONTI NO.	OE NO.	VOLTAGE
5WK97124	/	Univolt

Others			
MANUFACTURER	BOSCH NO.	OE NO.1	VOLTAGE
BMW	0281008498/499	8580408-04	12V
BMW	0281008500/501	8580409-04	12V
BMW	0281008043/044	8580410-05	12V
AUDI	0281007143/144	04L907805BK	12V
AUDI	0281007147/148	04L907805CG	12V
AUDI	0281007133/134	04L907805CD	12V
AUDI	0281007272/273	04L907805BT	12V
AUDI	0281007152/153	04L907805CH	12V
AUDI	0281007863/864	80A907807R	12V
AUDI	0281007884/885	04L907805FH	12V
DS	0281006851	9816276480	12V
DS	0281006853	9811207180	12V

PRODUCT SERIES

OFF-ROAD VEHICLE SERIES

off-road vehicle			
MANUFACTURER	BOSCH NO.	OE NO.1	VOLTAGE
CaterPillar	5WK97357_	441-5130-03	12V
CaterPillar	5WK96725A	359-9171-02	24V
CaterPillar	5WK96726A	359-9172-02	24V
CaterPillar	/	441-5127-03	24V
CaterPillar	/	441-5128-04	24V
CaterPillar	SNS3034_	539-0117-02	Univolt
CaterPillar	SNS3035_	539-0118-02	Univolt
JohnDeere	5WK96784	RE553440	12V
JohnDeere	5WK96785	RE553441	24V
JohnDeere	5WK96773	RE552182	12V
JohnDeere	5WK96774	RE552183	24V
JohnDeere	5WK97351_	RE575063	12V
JohnDeere	5WK97352_	RE575062	24V
JohnDeere	SNS350	DZ109689	12V
JohnDeere	SNS352_	DZ109125	24V
JohnDeere	SNS353_	DZ109126	24V
Doosan	SNS3073A	301308-01130	12V
Doosan	SNS3074A	301308-01131	12V
LIEBHERR	5WK96716	11008787	24V
LIEBHERR	SNS 0910	12412151	24V
Germban	5WK9 6622	/	12V
DEUTZ	5WK9 7422	02937841	24V