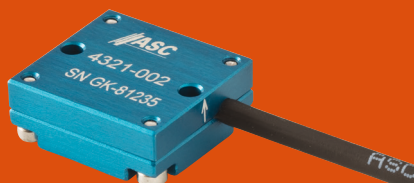




ASC SENSORS –

For Active and Passive Driving Safety

CAPACITIVE ACCELEROMETERS



PIEZORESISTIVE ACCELEROMETERS

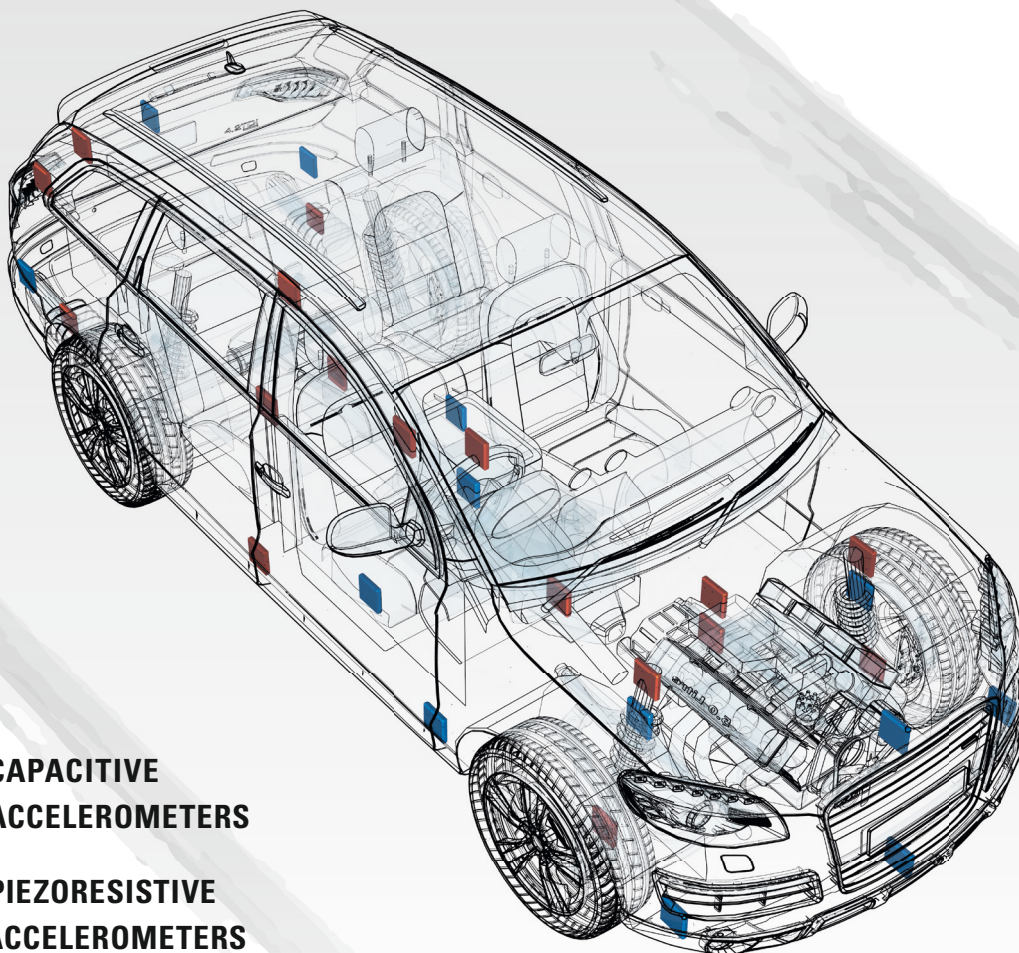


IEPE ACCELEROMETERS



ASC SENSORS – FOR ACTIVE AND PASSIVE DRIVING SAFETY

■ ACTIVE
■ PASSIVE



- ▶ **CAPACITIVE
ACCELEROMETERS**
- ▶ **PIEZORESISTIVE
ACCELEROMETERS**
- ▶ **IEPE
ACCELEROMETERS**

ASC SENSORS FOR PASSIVE DRIVING SAFETY

ASC CRASH TEST SENSORS FULFIL THE STANDARD SAE J211. THEY ARE PLACED IN CRITICAL POSITIONS IN ALL TYPES OF CRASH TESTS, AS SPECIFIED BY THE MOTOR MANUFACTURERS AND THE INTERNATIONAL ORGANISATION OF THE MOBILITY INDUSTRY, SAE:

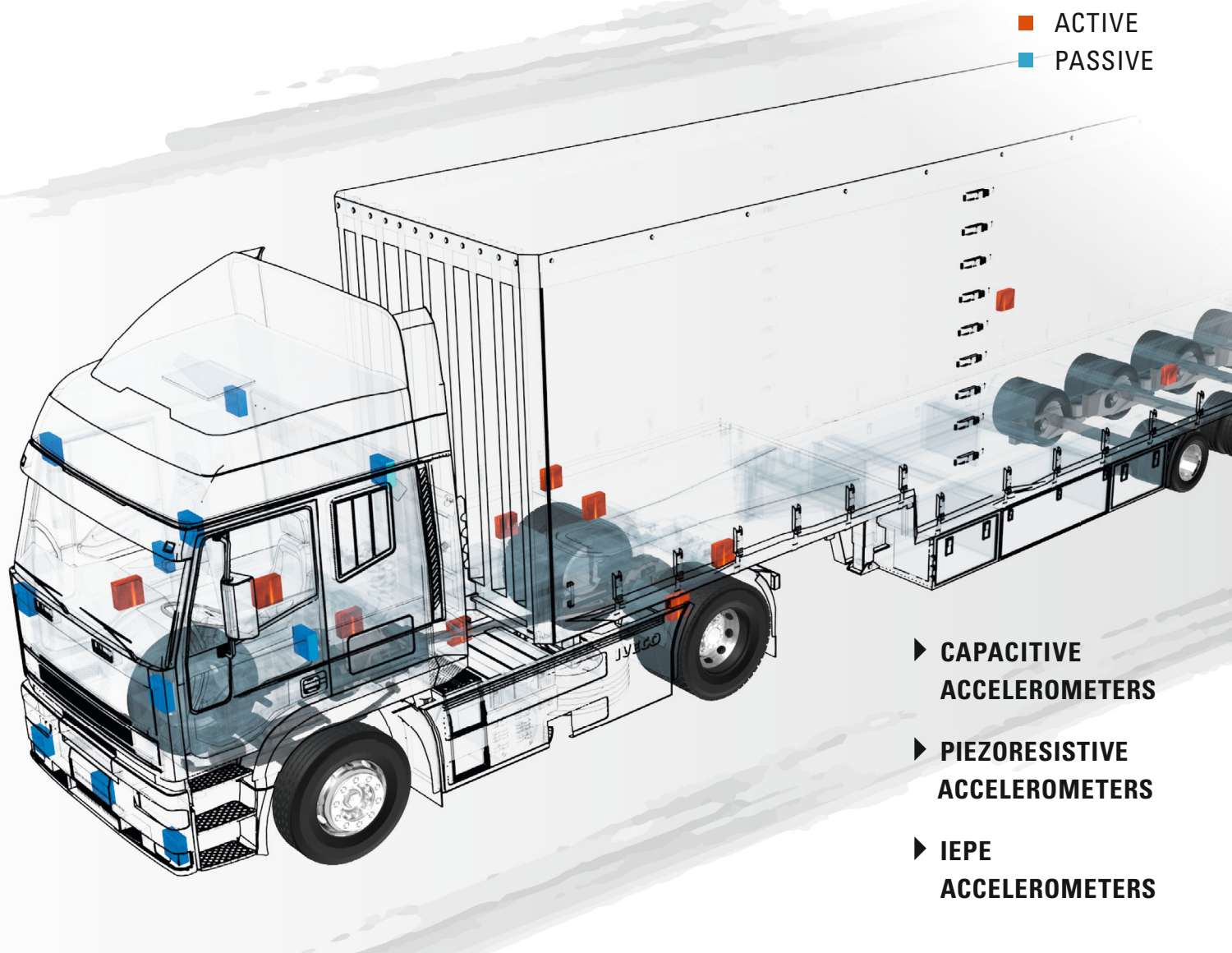
- Head-on collision
- Side impact
- Bollard impact
- Rear impact collision
- Pedestrian protection
- Crash sled simulation

ASC SENSORS FOR ACTIVE DRIVING SAFETY

ASC ACCELEROMETERS ARE ALSO USED IN ACTIVE DRIVING SAFETY AND PROVIDE VALUABLE MEASUREMENT DATA IN MANY TYPES OF TESTS OF MOVEMENT DYNAMICS AND OPERATIONAL STABILITY:

- Driving comfort tests
- Lane change tests
- Braking tests
- Driving manoeuvre tests according to defined ISO guidelines
- Endurance test rigs
- Human vibration also known as whole-body vibration

ASC SENSORS – FOR ACTIVE AND PASSIVE DRIVING SAFETY



ASC SENSORS FOR PASSIVE DRIVING SAFETY

ASC CRASH TEST SENSORS FULFIL THE STANDARD SAE J211. THEY ARE PLACED IN CRITICAL POSITIONS IN ALL TYPES OF CRASH TESTS, AS SPECIFIED BY THE MOTOR MANUFACTURERS AND THE INTERNATIONAL ORGANISATION OF THE MOBILITY INDUSTRY, SAE.

ASC SENSORS FOR ACTIVE DRIVING SAFETY

ASC ACCELEROMETERS ARE ALSO USED IN ACTIVE DRIVING SAFETY AND PROVIDE VALUABLE MEASUREMENT DATA IN MANY TYPES OF TESTS OF MOVEMENT DYNAMICS AND OPERATIONAL STABILITY:

- Driving comfort tests
- Lane change tests
- Braking tests
- Driving manoeuvre tests according to defined ISO guidelines
- Endurance test rigs
- Human vibration also known as whole-body vibration
- Test & Measurement (modal analysis, NVH, powertrain, component testing)

PIEZORESISTIVE TRIAXIAL

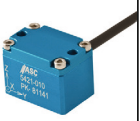
			
TYPE ALUMINIUM HOUSING	ASC 74C1	ASC 75C1	ASC 76C1
AXES	TRIAXIAL		
R: RANGE S: SENSITIVITY * F: FREQUENCY (±5% TYP.)	R 500 g S 0.4 mV/g F 2500 Hz		
	R 1000 g S 0.15 mV/g F 2500 Hz		
	R 2000 g S 0.13 mV/g F 2500 Hz		
* CALIBRATED AT 10 VDC			
OPERATING TEMPERATURE	-20°C to 80°C		
SUPPLY VOLTAGE	3 to 10 VDC		

PIEZORESISTIVE UNIAXIAL

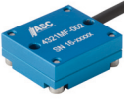
			
TYPE ALUMINIUM HOUSING	ASC 61C1	ASC 62C1	ASC 66C1
AXES	UNIAXIAL		
R: RANGE S: SENSITIVITY * F: FREQUENCY (±5% TYP.)	R 500 g S 0.4 mV/g F 2500 Hz		
	R 1000 g S 0.15 mV/g F 2500 Hz		
	R 2000 g S 0.13 mV/g F 2500 Hz		
* CALIBRATED AT 10 VDC			
OPERATING TEMPERATURE	-20°C to 80°C		
SUPPLY VOLTAGE	3 to 10 VDC		

ASC SENSORS –
PRODUCTS MADE IN GERMANY

CAPACITIVE TRIAXIAL

						
TYPE ALUMINIUM HOUSING	ASC 5411 LN	ASC 5421	ASC 5421-MF	ASC 5511 LN	ASC 5521	ASC 5521-MF
TYPE STAINLESS STEEL HOUSING	ASC 5415 LN	ASC 5425	ASC 5425-MF	ASC 5515 LN	ASC 5525	ASC 5525-MF
LOW NOISE / LN	X			X		
MEDIUM FREQUENCY / MF			X			X
AXES	TRIAXIAL					
R: RANGE S: SENSITIVITY F: FREQUENCY (±5% TYP.)		R 1 g S 2000 mV/g F 70 Hz			R 1 g S 2000 mV/g F 70 Hz	
	R 2 g S 2000 mV/g F 100 Hz	R 2 g S 1000 mV/g F 100 Hz	R 2 g S 1350 mV/g F 700 Hz	R 2 g S 2000 mV/g F 100 Hz	R 2 g S 1000 mV/g F 100 Hz	R 2 g S 1350 mV/g F 700 Hz
	R 5 g S 800 mV/g F 100 Hz	R 5 g S 400 mV/g F 100 Hz	R 5 g S 540 mV/g F 700 Hz	R 5 g S 800 mV/g F 100 Hz	R 5 g S 400 mV/g F 100 Hz	R 5 g S 540 mV/g F 700 Hz
	R 10 g S 400 mV/g F 300 Hz	R 10 g S 200 mV/g F 800 Hz	R 10 g S 270 mV/g F 1400 Hz	R 10 g S 400 mV/g F 300 Hz	R 10 g S 200 mV/g F 800 Hz	R 10 g S 270 mV/g F 1400 Hz
	R 25 g S 160 mV/g F 500 Hz	R 30 g S 66 mV/g F 1000 Hz	R 30 g S 90 mV/g F 1600 Hz	R 25 g S 160 mV/g F 500 Hz	R 30 g S 66 mV/g F 1000 Hz	R 30 g S 90 mV/g F 1600 Hz
	R 50 g S 80 mV/g F 650 Hz	R 50 g S 40 mV/g F 1000 Hz	R 50 g S 54 mV/g F 1800 Hz	R 50 g S 80 mV/g F 650 Hz	R 50 g S 40 mV/g F 1000 Hz	R 50 g S 54 mV/g F 1800 Hz
	R 100 g S 40 mV/g F 650 Hz	R 100 g S 20 mV/g F 1000 Hz	R 100 g S 27 mV/g F 1800 Hz	R 100 g S 40 mV/g F 650 Hz	R 100 g S 20 mV/g F 1000 Hz	R 100 g S 27 mV/g F 1800 Hz
	R 200 g S 20 mV/g F 1000 Hz	R 200 g S 10 mV/g F 1000 Hz	R 200 g S 13.5 mV/g F 1800 Hz	R 200 g S 20 mV/g F 1000 Hz	R 200 g S 10 mV/g F 1000 Hz	R 200 g S 13.5 mV/g F 1800 Hz
	R 400 g S 10 mV/g F 1000 Hz			R 400 g S 10 mV/g F 1000 Hz		
OPERATING TEMPERATURE	-40°C to 100°C	-40°C to 100°C	-40°C to 125°C	-40°C to 100°C	-40°C to 100°C	-40°C to 125°C
SUPPLY VOLTAGE	8 to 30 VDC		7 to 40 VDC	8 to 30 VDC		7 to 40 VDC

CAPACITIVE UNIAXIAL

							
TYPE ALUMINIUM HOUSING	ASC 4221	ASC 4311 LN	ASC 4321	ASC 4321-MF	ASC 4411 LN	ASC 4421	ASC 4421-MF
TYPE STAINLESS STEEL HOUSING		ASC 4315 LN	ASC 4325	ASC 4325-MF	ASC 4415 LN	ASC 4425	ASC 4425-MF
LOW NOISE / LN		X			X		
MEDIUM FREQUENCY / MF				X			X
AXES	UNIAXIAL						
R: RANGE S: SENSITIVITY F: FREQUENCY (±5% TYP.)	R 1 g S 2000 mV/g F 70 Hz		R 1 g S 2000 mV/g F 70 Hz			R 1 g S 2000 mV/g F 70 Hz	
	R 2 g S 1000 mV/g F 100 Hz	R 2 g S 2000 mV/g F 100 Hz	R 2 g S 1000 mV/g F 100 Hz	R 2 g S 1350 mV/g F 700 Hz	R 2 g S 2000 mV/g F 100 Hz	R 2 g S 1000 mV/g F 100 Hz	R 2 g S 1350 mV/g F 700 Hz
	R 5 g S 400 mV/g F 100 Hz	R 5 g S 800 mV/g F 100 Hz	R 5 g S 400 mV/g F 100 Hz	R 5 g S 540 mV/g F 700 Hz	R 5 g S 800 mV/g F 100 Hz	R 5 g S 400 mV/g F 100 Hz	R 5 g S 540 mV/g F 700 Hz
	R 10 g S 200 mV/g F 800 Hz	R 10 g S 400 mV/g F 300 Hz	R 10 g S 200 mV/g F 800 Hz	R 10 g S 270 mV/g F 1400 Hz	R 10 g S 400 mV/g F 300 Hz	R 10 g S 200 mV/g F 800 Hz	R 10 g S 270 mV/g F 1400 Hz
	R 30 g S 66 mV/g F 1000 Hz	R 25 g S 160 mV/g F 500 Hz	R 30 g S 66 mV/g F 1000 Hz	R 30 g S 90 mV/g F 1600 Hz	R 25 g S 160 mV/g F 500 Hz	R 30 g S 66 mV/g F 1000 Hz	R 30 g S 90 mV/g F 1600 Hz
	R 50 g S 40 mV/g F 1000 Hz	R 50 g S 80 mV/g F 650 Hz	R 50 g S 40 mV/g F 1000 Hz	R 50 g S 54 mV/g F 1800 Hz	R 50 g S 80 mV/g F 650 Hz	R 50 g S 40 mV/g F 1000 Hz	R 50 g S 54 mV/g F 1800 Hz
	R 100 g S 20 mV/g F 1000 Hz	R 100 g S 40 mV/g F 650 Hz	R 100 g S 20 mV/g F 1000 Hz	R 100 g S 27 mV/g F 1800 Hz	R 100 g S 40 mV/g F 650 Hz	R 100 g S 20 mV/g F 1000 Hz	R 100 g S 27 mV/g F 1800 Hz
	R 200 g S 10 mV/g F 1000 Hz	R 200 g S 20 mV/g F 1000 Hz	R 200 g S 10 mV/g F 1000 Hz	R 200 g S 13.5 mV/g F 1800 Hz	R 200 g S 20 mV/g F 1000 Hz	R 200 g S 10 mV/g F 1000 Hz	R 200 g S 13.5 mV/g F 1800 Hz
		R 400 g S 10 mV/g F 1000 Hz			R 400 g S 10 mV/g F 1000 Hz		
OPERATING TEMPERATURE	-20°C to 80°C	-40°C to 100°C	-40°C to 100°C	-40°C to 125°C	-40°C to 100°C	-40°C to 100°C	-40°C to 125°C
SUPPLY VOLTAGE	8 to 30 VDC			7 to 40 VDC	8 to 30 VDC		7 to 40 VDC

IEPE
TRIAXIAL

		
TYPE TITANIUM HOUSING	ASC P203A12	
TYPE ANODISED ALUMINIUM HOUSING		ASC P203A11
CASE ISOLATED		X
AXES	TRIAXIAL	
R: RANGE S: SENSITIVITY F: FREQUENCY (±10% TYP.)	R 50 g S 100 mV/g F 2.5 Hz to 8 kHz	
	R 100 g S 50 mV/g F 1.5 Hz to 8 kHz	
	R 500 g S 10 mV/g F 1 Hz to 8 kHz	
	R 2000 g S 2.5 mV/g F 1 Hz to 9 kHz	
OPERATING TEMPERATURE	-55°C to 125°C	
EXCITATION SUPPLY CURRENT	18 to 30 VDC 2 to 10 mA	

IEPE
UNIAXIAL

			
TYPE STAINLESS STEEL HOUSING	ASC P311A15 ASC P311A25	ASC P101A15 ASC P101A25	ASC P401A15
CASE ISOLATED	X		X
AXES	UNIAXIAL		
R: RANGE S: SENSITIVITY F: FREQUENCY (±1 dB TYP.)	R 32 g S 250 mV/g F 0.5 Hz to 6 kHz	R 50 g S 100 mV/g F 0.3 Hz to 10 kHz	R 50 g S 100 mV/g F 0.5 Hz to 10 kHz
	R 80 g S 100 mV/g F 0.5 Hz to 6 kHz	R 100 g S 50 mV/g F 0.3 Hz to 10 kHz	R 100 g S 50 mV/g F 0.5 Hz to 10 kHz
	R 160 g S 50 mV/g F 0.5 Hz to 6 kHz	R 500 g S 10 mV/g F 0.3 Hz to 10 kHz	R 500 g S 10 mV/g F 0.5 Hz to 15 kHz
		R 1000 g S 5 mV/g F 0.3 Hz to 10 kHz	
OPERATING TEMPERATURE	-55°C to 140°C	-55°C to 125°C	-55°C to 150°C
EXCITATION SUPPLY CURRENT	20 to 26 VDC 0.5 to 8 mA	18 to 30 VDC 2 to 10 mA	18 to 30 VDC 2 to 20 mA

WE FACE UP TO YOUR CHALLENGES

Our customers all over the world are advancing the development of technology with great energy and intensive research. With our highly specialised expertise, uncompromising product quality and outstanding service we help them to be ideally equipped for challenges in their innovative work. We have sales partners all over the world, so we are ready to help our customers wherever they are.

WHY NOT TEST US? WE LOVE CHALLENGES!

RELIABLE AND PERSONAL: OUR CUSTOMER SERVICE

- Fast order processing
- Short delivery periods
- Compliance with delivery dates
- Correct deliveries
- Personal communication

FLEXIBLE AND PRECISE: OUR PRODUCTION "MADE IN GERMANY"

- Customised solutions
- Implementation of individual customer requirements
- Production of large and small quantities
- Highest product quality
- Technical consulting

FAST AND REASONABLE: OUR REPAIR, MAINTENANCE AND CALIBRATION SERVICE

- Repair and recalibration of accelerometers, also of other brands
- Connection of sensors to existing cables
- Replacement of cables and connectors
- Detailed failure analysis
- High-quality spare parts



The Deutsche Akkreditierungsstelle GmbH (DAkkS) granted the calibration laboratory of ASC GmbH the authority to execute calibrations according to DIN EN ISO/IEC 17025:2005 for the following mechanical measurand: Acceleration. Certificate registration No.: D-K-18110-01-00



ASC is certified under the quality management standard 9001:2008. The preservation of this high standard was officially confirmed in March 2013.



ASC GmbH · Advanced Sensors & Calibration

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